Alliance TECHNICAL GROUP

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

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LAB CHRONICLE

OrderID:	Q3420	**OrderDate:**	10/22/2025 11:07:00 AM
Client:	Dal-Tile	**Project:**	Waste Water
Contact:	MIchel Gil	**Location:**	J22

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3420-05	**COMPOSITE**	**Water**			**10/21/25**			**10/22/25**
			Mercury	7470A		10/23/25	10/24/25	
			Metals ICP-Group1	6010D		10/23/25	10/29/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3420 **Order ID:** Q3420

Client: Dal-Tile **Project ID:** Waste Water

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : COMPOSITE								
Q3420-05	COMPOSITE	Water	Arsenic	51.5		2.56	10.0	ug/L
Q3420-05	COMPOSITE	Water	Chromium	15.9		1.06	5.00	ug/L
Q3420-05	COMPOSITE	Water	Copper	7.37	J	2.30	10.0	ug/L
Q3420-05	COMPOSITE	Water	Lead	1.84	J	1.15	6.00	ug/L
Q3420-05	COMPOSITE	Water	Mercury	1.86		0.076	0.20	ug/L
Q3420-05	COMPOSITE	Water	Nickel	15.0	J	1.53	20.0	ug/L
Q3420-05	COMPOSITE	Water	Selenium	492		4.82	10.0	ug/L
Q3420-05	COMPOSITE	Water	Zinc	266		8.33	20.0	ug/L

SAMPLE DATA

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Report of Analysis

Client:	Dal-Tile	Date Collected:	10/21/25
Project:	Waste Water	Date Received:	10/22/25
Client Sample ID:	COMPOSITE	SDG No.:	Q3420
Lab Sample ID:	Q3420-05	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.
7440-38-2	Arsenic	51.5	N	1	2.56	10.0	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7440-43-9	Cadmium	0.25	U	1	0.25	3.00	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7440-47-3	Chromium	15.9		1	1.06	5.00	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7440-50-8	Copper	7.37	J	1	2.30	10.0	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7439-92-1	Lead	1.84	J	1	1.15	6.00	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7439-97-6	Mercury	1.86		1	0.076	0.20	ug/L	10/23/25 09:32	10/24/25 10:57	7470A	
7440-02-0	Nickel	15.0	J	1	1.53	20.0	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7782-49-2	Selenium	492	N	1	4.82	10.0	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	
7440-66-6	Zinc	266	N	1	8.33	20.0	ug/L	10/23/25 10:35	10/29/25 18:12	6010D	

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

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile

SDG No.: Q3420

Contract: DALT01

Lab Code: ACE

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
ICV86	Mercury	4.16	4.0	104	90 - 110	CV	10/24/2025	09:20	LB137632

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

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
CCV83	Mercury	4.66	5.0	93	90 - 110	CV	10/24/2025	09:25	LB137632
CCV84	Mercury	5.06	5.0	101	90 - 110	CV	10/24/2025	10:09	LB137632
CCV85	Mercury	5.05	5.0	101	90 - 110	CV	10/24/2025	10:40	LB137632
CCV86	Mercury	5.01	5.0	100	90 - 110	CV	10/24/2025	11:12	LB137632
CCV87	Mercury	4.70	5.0	94	90 - 110	CV	10/24/2025	11:33	LB137632

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	3950	4000	99	90 - 110	P	10/24/2025	14:33	LB137662
	Cadmium	1950	2000	98	90 - 110	P	10/24/2025	14:33	LB137662
	Chromium	812	800	101	90 - 110	P	10/24/2025	14:33	LB137662
	Copper	1010	1000	101	90 - 110	P	10/24/2025	14:33	LB137662
	Lead	3830	4000	96	90 - 110	P	10/24/2025	14:33	LB137662
	Nickel	1970	2000	98	90 - 110	P	10/24/2025	14:33	LB137662
	Selenium	3970	4000	99	90 - 110	P	10/24/2025	14:33	LB137662
	Zinc	1980	2000	99	90 - 110	P	10/24/2025	14:33	LB137662

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	23.0	20.0	115	80 - 120	P	10/24/2025	14:38	LB137662
	Cadmium	6.05	6.0	101	80 - 120	P	10/24/2025	14:38	LB137662
	Chromium	10.4	10.0	104	80 - 120	P	10/24/2025	14:38	LB137662
	Copper	22.9	20.0	114	80 - 120	P	10/24/2025	14:38	LB137662
	Lead	12.9	12.0	107	80 - 120	P	10/24/2025	14:38	LB137662
	Nickel	40.7	40.0	102	80 - 120	P	10/24/2025	14:38	LB137662
	Selenium	20.8	20.0	104	80 - 120	P	10/24/2025	14:38	LB137662
	Zinc	43.9	40.0	110	80 - 120	P	10/24/2025	14:38	LB137662

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	5130	5000	102	90 - 110	P	10/24/2025	15:12	LB137662
	Cadmium	2550	2500	102	90 - 110	P	10/24/2025	15:12	LB137662
	Chromium	1030	1000	103	90 - 110	P	10/24/2025	15:12	LB137662
	Copper	1280	1250	102	90 - 110	P	10/24/2025	15:12	LB137662
	Lead	5060	5000	101	90 - 110	P	10/24/2025	15:12	LB137662
	Nickel	2540	2500	102	90 - 110	P	10/24/2025	15:12	LB137662
	Selenium	5140	5000	103	90 - 110	P	10/24/2025	15:12	LB137662
	Zinc	2580	2500	103	90 - 110	P	10/24/2025	15:12	LB137662
CCV02	Arsenic	5130	5000	103	90 - 110	P	10/24/2025	16:32	LB137662
	Cadmium	2580	2500	103	90 - 110	P	10/24/2025	16:32	LB137662
	Chromium	1050	1000	105	90 - 110	P	10/24/2025	16:32	LB137662
	Copper	1290	1250	103	90 - 110	P	10/24/2025	16:32	LB137662
	Lead	5110	5000	102	90 - 110	P	10/24/2025	16:32	LB137662
	Nickel	2570	2500	103	90 - 110	P	10/24/2025	16:32	LB137662
	Selenium	5120	5000	102	90 - 110	P	10/24/2025	16:32	LB137662
	Zinc	2610	2500	104	90 - 110	P	10/24/2025	16:32	LB137662
CCV03	Arsenic	4980	5000	100	90 - 110	P	10/24/2025	18:29	LB137662
	Cadmium	2530	2500	101	90 - 110	P	10/24/2025	18:29	LB137662
	Chromium	1040	1000	104	90 - 110	P	10/24/2025	18:29	LB137662
	Copper	1250	1250	100	90 - 110	P	10/24/2025	18:29	LB137662
	Lead	5010	5000	100	90 - 110	P	10/24/2025	18:29	LB137662
	Nickel	2510	2500	100	90 - 110	P	10/24/2025	18:29	LB137662
	Selenium	4940	5000	99	90 - 110	P	10/24/2025	18:29	LB137662
	Zinc	2490	2500	100	90 - 110	P	10/24/2025	18:29	LB137662
CCV04	Arsenic	4830	5000	97	90 - 110	P	10/24/2025	19:19	LB137662
	Cadmium	2490	2500	100	90 - 110	P	10/24/2025	19:19	LB137662
	Chromium	1010	1000	101	90 - 110	P	10/24/2025	19:19	LB137662
	Copper	1240	1250	99	90 - 110	P	10/24/2025	19:19	LB137662
	Lead	4940	5000	99	90 - 110	P	10/24/2025	19:19	LB137662
	Nickel	2480	2500	99	90 - 110	P	10/24/2025	19:19	LB137662
	Selenium	4770	5000	95	90 - 110	P	10/24/2025	19:19	LB137662
	Zinc	2430	2500	97	90 - 110	P	10/24/2025	19:19	LB137662
CCV05	Arsenic	4800	5000	96	90 - 110	P	10/24/2025	20:06	LB137662
	Cadmium	2480	2500	99	90 - 110	P	10/24/2025	20:06	LB137662

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Chromium	1010	1000	101	90 - 110	P	10/24/2025	20:06	LB137662
	Copper	1230	1250	98	90 - 110	P	10/24/2025	20:06	LB137662
	Lead	4890	5000	98	90 - 110	P	10/24/2025	20:06	LB137662
	Nickel	2460	2500	98	90 - 110	P	10/24/2025	20:06	LB137662
	Selenium	4730	5000	94	90 - 110	P	10/24/2025	20:06	LB137662
	Zinc	2420	2500	97	90 - 110	P	10/24/2025	20:06	LB137662

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	3760	4000	94	90 - 110	P	10/29/2025	14:01	LB137697
	Cadmium	1860	2000	93	90 - 110	P	10/29/2025	14:01	LB137697
	Chromium	770	800	96	90 - 110	P	10/29/2025	14:01	LB137697
	Copper	961	1000	96	90 - 110	P	10/29/2025	14:01	LB137697
	Lead	3650	4000	91	90 - 110	P	10/29/2025	14:01	LB137697
	Nickel	1880	2000	94	90 - 110	P	10/29/2025	14:01	LB137697
	Selenium	3780	4000	94	90 - 110	P	10/29/2025	14:01	LB137697
	Zinc	1900	2000	95	90 - 110	P	10/29/2025	14:01	LB137697

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	21.1	20.0	105	80 - 120	P	10/29/2025	14:07	LB137697
	Cadmium	5.83	6.0	97	80 - 120	P	10/29/2025	14:07	LB137697
	Chromium	10.3	10.0	102	80 - 120	P	10/29/2025	14:07	LB137697
	Copper	22.0	20.0	110	80 - 120	P	10/29/2025	14:07	LB137697
	Lead	11.7	12.0	98	80 - 120	P	10/29/2025	14:07	LB137697
	Nickel	40.4	40.0	101	80 - 120	P	10/29/2025	14:07	LB137697
	Selenium	23.1	20.0	115	80 - 120	P	10/29/2025	14:07	LB137697
	Zinc	43.3	40.0	108	80 - 120	P	10/29/2025	14:07	LB137697

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4960	5000	99	90 - 110	P	10/29/2025	14:37	LB137697
	Cadmium	2460	2500	99	90 - 110	P	10/29/2025	14:37	LB137697
	Chromium	1010	1000	100	90 - 110	P	10/29/2025	14:37	LB137697
	Copper	1240	1250	99	90 - 110	P	10/29/2025	14:37	LB137697
	Lead	4900	5000	98	90 - 110	P	10/29/2025	14:37	LB137697
	Nickel	2460	2500	98	90 - 110	P	10/29/2025	14:37	LB137697
	Selenium	4930	5000	99	90 - 110	P	10/29/2025	14:37	LB137697
	Zinc	2490	2500	100	90 - 110	P	10/29/2025	14:37	LB137697
CCV02	Arsenic	4840	5000	97	90 - 110	P	10/29/2025	15:43	LB137697
	Cadmium	2420	2500	97	90 - 110	P	10/29/2025	15:43	LB137697
	Chromium	988	1000	99	90 - 110	P	10/29/2025	15:43	LB137697
	Copper	1220	1250	98	90 - 110	P	10/29/2025	15:43	LB137697
	Lead	4820	5000	96	90 - 110	P	10/29/2025	15:43	LB137697
	Nickel	2430	2500	97	90 - 110	P	10/29/2025	15:43	LB137697
	Selenium	4790	5000	96	90 - 110	P	10/29/2025	15:43	LB137697
	Zinc	2440	2500	98	90 - 110	P	10/29/2025	15:43	LB137697
CCV03	Arsenic	5080	5000	102	90 - 110	P	10/29/2025	16:37	LB137697
	Cadmium	2510	2500	100	90 - 110	P	10/29/2025	16:37	LB137697
	Chromium	1030	1000	103	90 - 110	P	10/29/2025	16:37	LB137697
	Copper	1270	1250	102	90 - 110	P	10/29/2025	16:37	LB137697
	Lead	5020	5000	100	90 - 110	P	10/29/2025	16:37	LB137697
	Nickel	2510	2500	101	90 - 110	P	10/29/2025	16:37	LB137697
	Selenium	5070	5000	101	90 - 110	P	10/29/2025	16:37	LB137697
	Zinc	2560	2500	102	90 - 110	P	10/29/2025	16:37	LB137697
CCV04	Arsenic	4980	5000	100	90 - 110	P	10/29/2025	17:27	LB137697
	Cadmium	2500	2500	100	90 - 110	P	10/29/2025	17:27	LB137697
	Chromium	1020	1000	102	90 - 110	P	10/29/2025	17:27	LB137697
	Copper	1250	1250	100	90 - 110	P	10/29/2025	17:27	LB137697
	Lead	4950	5000	99	90 - 110	P	10/29/2025	17:27	LB137697
	Nickel	2490	2500	100	90 - 110	P	10/29/2025	17:27	LB137697
	Selenium	4940	5000	99	90 - 110	P	10/29/2025	17:27	LB137697
	Zinc	2490	2500	100	90 - 110	P	10/29/2025	17:27	LB137697
CCV05	Arsenic	4850	5000	97	90 - 110	P	10/29/2025	18:03	LB137697
	Cadmium	2440	2500	98	90 - 110	P	10/29/2025	18:03	LB137697

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Chromium	998	1000	100	90 - 110	P	10/29/2025	18:03	LB137697
	Copper	1220	1250	98	90 - 110	P	10/29/2025	18:03	LB137697
	Lead	4840	5000	97	90 - 110	P	10/29/2025	18:03	LB137697
	Nickel	2430	2500	97	90 - 110	P	10/29/2025	18:03	LB137697
	Selenium	4830	5000	96	90 - 110	P	10/29/2025	18:03	LB137697
	Zinc	2450	2500	98	90 - 110	P	10/29/2025	18:03	LB137697
CCV06	Arsenic	4790	5000	96	90 - 110	P	10/29/2025	18:55	LB137697
	Cadmium	2470	2500	99	90 - 110	P	10/29/2025	18:55	LB137697
	Chromium	1010	1000	101	90 - 110	P	10/29/2025	18:55	LB137697
	Copper	1190	1250	95	90 - 110	P	10/29/2025	18:55	LB137697
	Lead	4920	5000	98	90 - 110	P	10/29/2025	18:55	LB137697
	Nickel	2470	2500	99	90 - 110	P	10/29/2025	18:55	LB137697
	Selenium	4770	5000	95	90 - 110	P	10/29/2025	18:55	LB137697
	Zinc	2250	2500	90	90 - 110	P	10/29/2025	18:55	LB137697

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Metals

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CRDL STANDARD FOR AA & ICP

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

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	0.17	0.2	83	70 - 130	CV	10/24/2025	09:32	LB137632
CRI01	Arsenic	22.7	20.0	114	65 - 135	P	10/24/2025	14:48	LB137662
	Cadmium	5.93	6.0	99	65 - 135	P	10/24/2025	14:48	LB137662
	Chromium	10.6	10.0	106	65 - 135	P	10/24/2025	14:48	LB137662
	Copper	23.2	20.0	116	65 - 135	P	10/24/2025	14:48	LB137662
	Lead	12.1	12.0	101	65 - 135	P	10/24/2025	14:48	LB137662
	Nickel	40.8	40.0	102	65 - 135	P	10/24/2025	14:48	LB137662
	Selenium	21.3	20.0	107	65 - 135	P	10/24/2025	14:48	LB137662
	Zinc	44.5	40.0	111	65 - 135	P	10/24/2025	14:48	LB137662
CRI01	Arsenic	19.9	20.0	99	65 - 135	P	10/29/2025	14:16	LB137697
	Cadmium	5.84	6.0	97	65 - 135	P	10/29/2025	14:16	LB137697
	Chromium	10.3	10.0	103	65 - 135	P	10/29/2025	14:16	LB137697
	Copper	21.6	20.0	108	65 - 135	P	10/29/2025	14:16	LB137697
	Lead	11.6	12.0	97	65 - 135	P	10/29/2025	14:16	LB137697
	Nickel	40.3	40.0	101	65 - 135	P	10/29/2025	14:16	LB137697
	Selenium	23.0	20.0	115	65 - 135	P	10/29/2025	14:16	LB137697
	Zinc	42.4	40.0	106	65 - 135	P	10/29/2025	14:16	LB137697

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB86	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	09:23	LB137632

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB83	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	09:30	LB137632
CCB84	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	10:11	LB137632
CCB85	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	10:43	LB137632
CCB86	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	11:14	LB137632
CCB87	Mercury	0.076	+/-0.2	U	0.20	CV	10/24/2025	11:38	LB137632

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	14:43	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	14:43	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	14:43	LB137662
	Copper	4.60	+/-10	U	20.0	P	10/24/2025	14:43	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	14:43	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	14:43	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	14:43	LB137662
	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	14:43	LB137662

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	15:16	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	15:16	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	15:16	LB137662
	Copper	4.60	+/-10	U	20.0	P	10/24/2025	15:16	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	15:16	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	15:16	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	15:16	LB137662
	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	15:16	LB137662
CCB02	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	16:47	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	16:47	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	16:47	LB137662
	Copper	4.60	+/-10	U	20.0	P	10/24/2025	16:47	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	16:47	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	16:47	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	16:47	LB137662
	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	16:47	LB137662
CCB03	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	18:33	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	18:33	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	18:33	LB137662
	Copper	4.60	+/-10	U	20.0	P	10/24/2025	18:33	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	18:33	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	18:33	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	18:33	LB137662
	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	18:33	LB137662
CCB04	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	19:23	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	19:23	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	19:23	LB137662
	Copper	4.60	+/-10	U	20.0	P	10/24/2025	19:23	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	19:23	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	19:23	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	19:23	LB137662
	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	19:23	LB137662
CCB05	Arsenic	5.12	+/-10	U	20.0	P	10/24/2025	20:10	LB137662
	Cadmium	0.50	+/-3	U	6.00	P	10/24/2025	20:10	LB137662
	Chromium	2.12	+/-5	U	10.0	P	10/24/2025	20:10	LB137662
	Copper	4.82	+/-10	J	20.0	P	10/24/2025	20:10	LB137662
	Lead	2.30	+/-6	U	12.0	P	10/24/2025	20:10	LB137662
	Nickel	3.06	+/-20	U	40.0	P	10/24/2025	20:10	LB137662
	Selenium	9.64	+/-10	U	20.0	P	10/24/2025	20:10	LB137662

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Zinc	16.7	+/-20	U	40.0	P	10/24/2025	20:10	LB137662

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	14:12	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	14:12	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	14:12	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	14:12	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	14:12	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	14:12	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	14:12	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	14:12	LB137697

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	14:41	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	14:41	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	14:41	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	14:41	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	14:41	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	14:41	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	14:41	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	14:41	LB137697
CCB02	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	15:48	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	15:48	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	15:48	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	15:48	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	15:48	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	15:48	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	15:48	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	15:48	LB137697
CCB03	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	16:41	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	16:41	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	16:41	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	16:41	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	16:41	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	16:41	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	16:41	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	16:41	LB137697
CCB04	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	17:31	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	17:31	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	17:31	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	17:31	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	17:31	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	17:31	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	17:31	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	17:31	LB137697
CCB05	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	18:07	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	18:07	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	18:07	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	18:07	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	18:07	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	18:07	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	18:07	LB137697

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	18:07	LB137697
CCB06	Arsenic	5.12	+/-10	U	20.0	P	10/29/2025	19:04	LB137697
	Cadmium	0.50	+/-3	U	6.00	P	10/29/2025	19:04	LB137697
	Chromium	2.12	+/-5	U	10.0	P	10/29/2025	19:04	LB137697
	Copper	4.60	+/-10	U	20.0	P	10/29/2025	19:04	LB137697
	Lead	2.30	+/-6	U	12.0	P	10/29/2025	19:04	LB137697
	Nickel	3.06	+/-20	U	40.0	P	10/29/2025	19:04	LB137697
	Selenium	9.64	+/-10	U	20.0	P	10/29/2025	19:04	LB137697
	Zinc	16.7	+/-20	U	40.0	P	10/29/2025	19:04	LB137697

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB170232BL		**WATER**		**Batch Number:**	**PB170232**		**Prep Date:**	**10/23/2025**	
	Mercury	0.076	<0.2	U	0.20	CV	10/24/2025	10:50	LB137632

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB170225BL		**WATER**		**Batch Number:**	**PB170225**		**Prep Date:**	**10/23/2025**	
	Arsenic	2.56	<5	U	10.0	P	10/24/2025	15:20	LB137662
	Cadmium	0.25	<1.5	U	3.00	P	10/24/2025	15:20	LB137662
	Chromium	1.06	<2.5	U	5.00	P	10/24/2025	15:20	LB137662
	Copper	2.30	<5	U	10.0	P	10/24/2025	15:20	LB137662
	Lead	1.15	<3	U	6.00	P	10/24/2025	15:20	LB137662
	Nickel	1.53	<10	U	20.0	P	10/24/2025	15:20	LB137662
	Selenium	4.82	<5	U	10.0	P	10/24/2025	15:20	LB137662
	Zinc	8.33	<10	U	20.0	P	10/24/2025	15:20	LB137662

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Metals
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INTERFERENCE CHECK SAMPLE

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

ICS Source: EPA **Instrument ID:** P4

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	Arsenic	8.44			-20	20	10/24/2025	14:52	LB137662
	Cadmium	2.28	1.0	228	-5	7	10/24/2025	14:52	LB137662
	Chromium	50.0	52.0	96	42	62	10/24/2025	14:52	LB137662
	Copper	9.81	2.0	490	-18	22	10/24/2025	14:52	LB137662
	Lead	3.20			-12	12	10/24/2025	14:52	LB137662
	Nickel	4.35	2.0	218	-38	42	10/24/2025	14:52	LB137662
	Selenium	7.23			-20	20	10/24/2025	14:52	LB137662
	Zinc	4.78			-40	40	10/24/2025	14:52	LB137662
ICSAB01	Arsenic	110	104	106	88.4	120	10/24/2025	14:56	LB137662
	Cadmium	1030	972	106	826	1120	10/24/2025	14:56	LB137662
	Chromium	566	542	104	460	624	10/24/2025	14:56	LB137662
	Copper	499	511	98	434	588	10/24/2025	14:56	LB137662
	Lead	51.7	49.0	106	37	61	10/24/2025	14:56	LB137662
	Nickel	1030	954	108	810	1100	10/24/2025	14:56	LB137662
	Selenium	54.0	46.0	117	26	66	10/24/2025	14:56	LB137662
	Zinc	1050	952	110	809	1095	10/24/2025	14:56	LB137662
ICSA01	Arsenic	4.77			-20	20	10/29/2025	14:21	LB137697
	Cadmium	0.66	1.0	66	-5	7	10/29/2025	14:21	LB137697
	Chromium	48.9	52.0	94	42	62	10/29/2025	14:21	LB137697
	Copper	14.1	2.0	705	-18	22	10/29/2025	14:21	LB137697
	Lead	0.038			-12	12	10/29/2025	14:21	LB137697
	Nickel	4.85	2.0	242	-38	42	10/29/2025	14:21	LB137697
	Selenium	1.76			-20	20	10/29/2025	14:21	LB137697
	Zinc	3.72			-40	40	10/29/2025	14:21	LB137697
ICSAB01	Arsenic	105	104	101	88.4	120	10/29/2025	14:25	LB137697
	Cadmium	963	972	99	826	1120	10/29/2025	14:25	LB137697
	Chromium	538	542	99	460	624	10/29/2025	14:25	LB137697
	Copper	474	511	93	434	588	10/29/2025	14:25	LB137697
	Lead	47.4	49.0	97	37	61	10/29/2025	14:25	LB137697
	Nickel	968	954	102	810	1100	10/29/2025	14:25	LB137697
	Selenium	51.1	46.0	111	26	66	10/29/2025	14:25	LB137697
	Zinc	999	952	105	809	1095	10/29/2025	14:25	LB137697

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metals
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MATRIX SPIKE SUMMARY

client: Dal-Tile **level:** low **sdg no.:** Q3420

contract: DALT01 **lab code:** ACE

matrix: Water **sample id:** Q3420-05 **client id:** COMPOSITEMS

Percent Solids for Sample: NA **Spiked ID:** Q3420-05MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	563		51.5		400	128	N	P
Cadmium	ug/L	75 - 125	108		3.00	U	100	108		P
Chromium	ug/L	75 - 125	221		15.9		200	103		P
Copper	ug/L	75 - 125	149		7.37	J	150	94		P
Lead	ug/L	75 - 125	492		1.84	J	500	98		P
Nickel	ug/L	75 - 125	282		15.0	J	250	107		P
Selenium	ug/L	75 - 125	1880		492		1000	139	N	P
Zinc	ug/L	75 - 125	413		266		100	146	N	P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Dal-Tile **level:** low **sdg no.:** Q3420

contract: DALT01 **lab code:** ACE

matrix: Water **sample id:** Q3420-05 **client id:** COMPOSITEMSD

Percent Solids for Sample: NA **Spiked ID:** Q3420-05MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	513		51.5		400	115		P
Cadmium	ug/L	75 - 125	97.2		3.00	U	100	97		P
Chromium	ug/L	75 - 125	200		15.9		200	92		P
Copper	ug/L	75 - 125	135		7.37	J	150	85		P
Lead	ug/L	75 - 125	441		1.84	J	500	88		P
Nickel	ug/L	75 - 125	255		15.0	J	250	96		P
Selenium	ug/L	75 - 125	1760		492		1000	127	N	P
Zinc	ug/L	75 - 125	401		266		100	134	N	P

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metals
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MATRIX SPIKE SUMMARY

client: Dal-Tile **level:** low **sdg no.:** Q3420

contract: DALT01 **lab code:** ACE

matrix: Water **sample id:** Q3434-02 **client id:** PR132-WC2-20251022MS

Percent Solids for Sample: NA **Spiked ID:** Q3434-02MS **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	4.65		1.03		4.0	91		CV

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: Dal-Tile **level:** low **sdg no.:** Q3420

contract: DALT01 **lab code:** ACE

matrix: Water **sample id:** Q3434-02 **client id:** PR132-WC2-20251022MSD

Percent Solids for Sample: NA **Spiked ID:** Q3434-02MSD **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	4.62		1.03		4.0	90		CV

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Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Matrix: Water **Level:** LOW **Client ID:** COMPOSITEA

Sample ID: Q3420-05 **Spiked ID:** Q3420-05A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	505		51.5		400	113		P
Selenium	ug/L	75 - 125	1690		492		1000	120		P
Zinc	ug/L	75 - 125	376		266		100	110		P

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Dal-Tile **Level:** LOW **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3420-05 **Client ID:** COMPOSITEDUP

Percent Solids for Sample: NA **Duplicate ID** Q3420-05DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	51.5		52.1		1		P
Cadmium	ug/L	20	3.00	U	3.00	U			P
Chromium	ug/L	20	15.9		16.1		1		P
Copper	ug/L	20	7.37	J	7.41	J	1		P
Lead	ug/L	20	1.84	J	2.17	J	16		P
Nickel	ug/L	20	15.0	J	14.8	J	1		P
Selenium	ug/L	20	492		491		0		P
Zinc	ug/L	20	266		271		2		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Dal-Tile **Level:** LOW **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3420-05MS **Client ID:** COMPOSITEMSD

Percent Solids for Sample: NA **Duplicate ID** Q3420-05MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	563		513		9		P
Cadmium	ug/L	20	108		97.2		11		P
Chromium	ug/L	20	221		200		10		P
Copper	ug/L	20	149		135		10		P
Lead	ug/L	20	492		441		11		P
Nickel	ug/L	20	282		255		10		P
Selenium	ug/L	20	1880		1760		7		P
Zinc	ug/L	20	413		401		3		P

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Dal-Tile **Level:** LOW **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3434-02 **Client ID:** PR132-WC2-20251022DUP

Percent Solids for Sample: NA **Duplicate ID** Q3434-02DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	1.03		1.04		1		CV

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

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: Dal-Tile **Level:** LOW **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Matrix: Water **Sample ID:** Q3434-02MS **Client ID:** PR132-WC2-20251022MSD

Percent Solids for Sample: NA **Duplicate ID** Q3434-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	4.65		4.62		1		CV

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

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170225BS							
Arsenic	ug/L	400	393		98	80 - 120	P
Cadmium	ug/L	100	95.9		96	80 - 120	P
Chromium	ug/L	200	202		101	80 - 120	P
Copper	ug/L	150	159		106	80 - 120	P
Lead	ug/L	500	481		96	80 - 120	P
Nickel	ug/L	250	248		99	80 - 120	P
Selenium	ug/L	1000	997		100	80 - 120	P
Zinc	ug/L	100	104		104	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170232BS							
Mercury	ug/L	4.0	3.75		94	80 - 120	CV

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

COMPOSITEL

Lab Name: Alliance **Contract:** DALT01

Lab Code: ACE **Lb No.:** lb137697 **Lab Sample ID :** Q3420-05L **SDG No.:** Q3420

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
Arsenic	51.5		55.6		8		P
Cadmium	3.00	U	15.0	U			P
Chromium	15.9		19.1	J	20		P
Copper	7.37	J	50.0	U	100.0		P
Lead	1.84	J	30.0	U	100.0		P
Nickel	15.0	J	17.2	J	15		P
Selenium	492		468		5		P
Zinc	266		272		2		P

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

PR132-WC2-20251022L

Lab Name: Alliance **Contract:** DALT01

Lab Code: ACE **Lb No.:** lb137632 **Lab Sample ID :** Q3434-02L **SDG No.:** Q3420

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	1.03		0.78	J	24		CV

METAL PREPARATION & INSTRUMENT DATA

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB170225**						
PB170225BL	PB170225BL	MB	WATER	10/23/2025	50.0	25.0	
PB170225BS	PB170225BS	LCS	WATER	10/23/2025	50.0	25.0	
Q3420-05	COMPOSITE	SAM	WATER	10/23/2025	50.0	25.0	
Q3420-05DUP	COMPOSITEDUP	DUP	WATER	10/23/2025	50.0	25.0	
Q3420-05MS	COMPOSITEMS	MS	WATER	10/23/2025	50.0	25.0	
Q3420-05MSD	COMPOSITEMSD	MSD	WATER	10/23/2025	50.0	25.0	

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Metals
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SAMPLE PREPARATION SUMMARY

Client: Dal-Tile **SDG No.:** Q3420

Contract: DALT01 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB170232**						
PB170232BL	PB170232BL	MB	WATER	10/23/2025	30.0	30.0	
PB170232BS	PB170232BS	LCS	WATER	10/23/2025	30.0	30.0	
Q3420-05	COMPOSITE	SAM	WATER	10/23/2025	30.0	30.0	
Q3434-02DUP	PR132-WC2-20251022DUP	DUP	WATER	10/23/2025	30.0	30.0	
Q3434-02MS	PR132-WC2-20251022MS	MS	WATER	10/23/2025	30.0	30.0	
Q3434-02MSD	PR132-WC2-20251022MSD	MSD	WATER	10/23/2025	30.0	30.0	

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metals
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ANALYSIS RUN LOG

Client: Dal-Tile **Contract:** DALT01

Lab code: ACE **Sdg no.:** Q3420

Instrument id number: **Method:** **Run number:** LB137632

Start date: 10/24/2025 **End date:** 10/24/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	0858	HG
S0.2	S0.2	1	0901	HG
S2.5	S2.5	1	0903	HG
S5	S5	1	0905	HG
S7.5	S7.5	1	0908	HG
S10	S10	1	0910	HG
ICV86	ICV86	1	0920	HG
ICB86	ICB86	1	0923	HG
CCV83	CCV83	1	0925	HG
CCB83	CCB83	1	0930	HG
CRA	CRA	1	0932	HG
CCV84	CCV84	1	1009	HG
CCB84	CCB84	1	1011	HG
CCV85	CCV85	1	1040	HG
CCB85	CCB85	1	1043	HG
PB170232BL	PB170232BL	1	1050	HG
PB170232BS	PB170232BS	1	1052	HG
Q3420-05	COMPOSITE	1	1057	HG
Q3434-02DUP	PR132-WC2-20251022DUP	1	1104	HG
Q3434-02MS	PR132-WC2-20251022MS	1	1106	HG
CCV86	CCV86	1	1112	HG
CCB86	CCB86	1	1114	HG
Q3434-02MSD	PR132-WC2-20251022MSD	1	1117	HG
Q3434-02L	PR132-WC2-20251022L	5	1129	HG
CCV87	CCV87	1	1133	HG
CCB87	CCB87	1	1138	HG

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metals
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ANALYSIS RUN LOG

Client: Dal-Tile **Contract:** DALT01

Lab code: ACE **Sdg no.:** Q3420

Instrument id number: **Method:** **Run number:** LB137662

Start date: 10/24/2025 **End date:** 10/24/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1407	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S1	S1	1	1412	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S2	S2	1	1416	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S3	S3	1	1420	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S4	S4	1	1424	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S5	S5	1	1429	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICV01	ICV01	1	1433	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1438	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICB01	ICB01	1	1443	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CRI01	CRI01	1	1448	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1452	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1456	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV01	CCV01	1	1512	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB01	CCB01	1	1516	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB170225BL	PB170225BL	1	1520	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB170225BS	PB170225BS	1	1524	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV02	CCV02	1	1632	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB02	CCB02	1	1647	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV03	CCV03	1	1829	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB03	CCB03	1	1833	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV04	CCV04	1	1919	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB04	CCB04	1	1923	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV05	CCV05	1	2006	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB05	CCB05	1	2010	As,Cd,Cr,Cu,Ni,Pb,Se,Zn

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metals
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ANALYSIS RUN LOG

Client: Dal-Tile **Contract:** DALT01

Lab code: ACE **Sdg no.:** Q3420

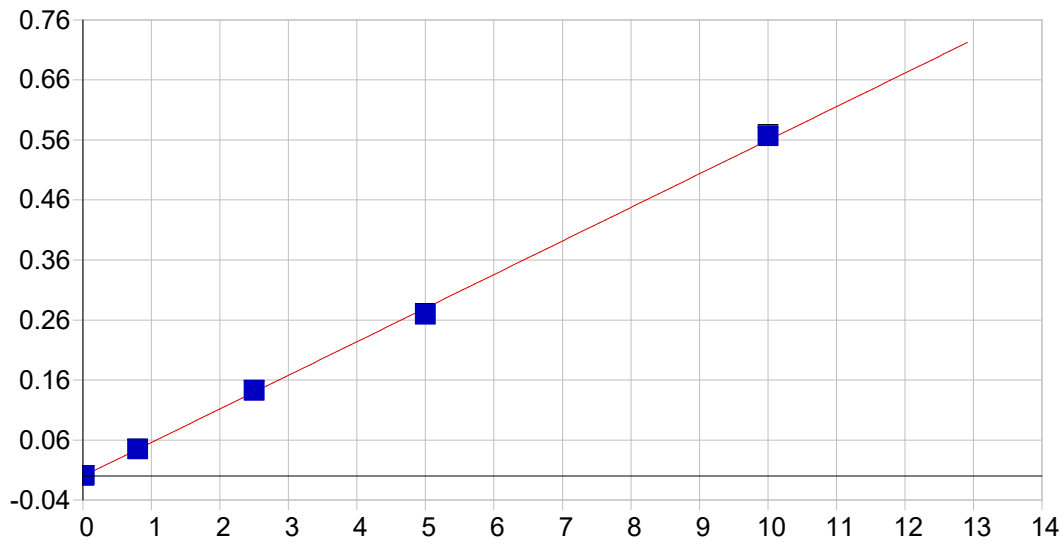
Instrument id number: **Method:** **Run number:** LB137697

Start date: 10/29/2025 **End date:** 10/29/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1336	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S1	S1	1	1340	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S2	S2	1	1344	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S3	S3	1	1349	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S4	S4	1	1353	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
S5	S5	1	1357	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICV01	ICV01	1	1401	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1407	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICB01	ICB01	1	1412	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CRI01	CRI01	1	1416	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1421	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1425	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV01	CCV01	1	1437	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB01	CCB01	1	1441	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV02	CCV02	1	1543	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB02	CCB02	1	1548	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV03	CCV03	1	1637	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB03	CCB03	1	1641	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV04	CCV04	1	1727	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB04	CCB04	1	1731	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV05	CCV05	1	1803	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB05	CCB05	1	1807	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05	COMPOSITE	1	1812	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05DUP	COMPOSITEDUP	1	1816	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05L	COMPOSITEL	5	1820	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05MS	COMPOSITEMS	1	1825	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05MSD	COMPOSITEMSD	1	1829	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q3420-05A	COMPOSITEA	1	1833	As,Se,Zn
CCV06	CCV06	1	1855	As,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB06	CCB06	1	1904	As,Cd,Cr,Cu,Ni,Pb,Se,Zn

METAL
RAW DATA

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



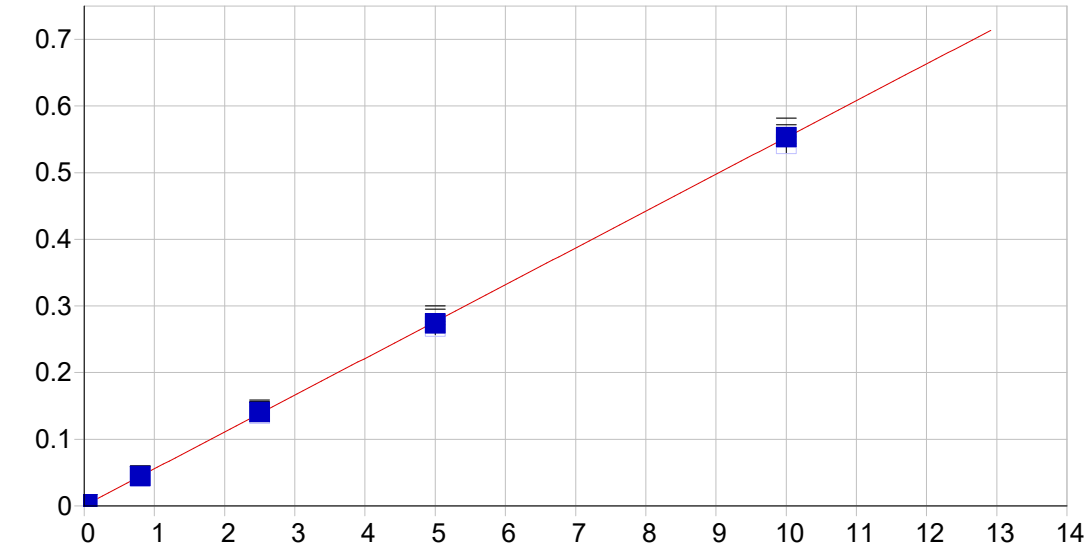
As 189.042 {479}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000140	Re-Slope:	1.000000
A1 (Gain):	0.055969	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999703	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.002100		
Predicted MQL:	0.007001		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00014	.000	1
S1	.02000	.02487	.005	24.4	.00125	.000	1
S3	2.5000	2.5476	.048	1.90	.14230	.001	1
S4	5.0000	4.8135	-.186	-3.73	.26898	.002	1
S5	10.000	10.135	.135	1.35	.56652	.002	1
S2	.80000	.79916	-.001	-.105	.04454	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



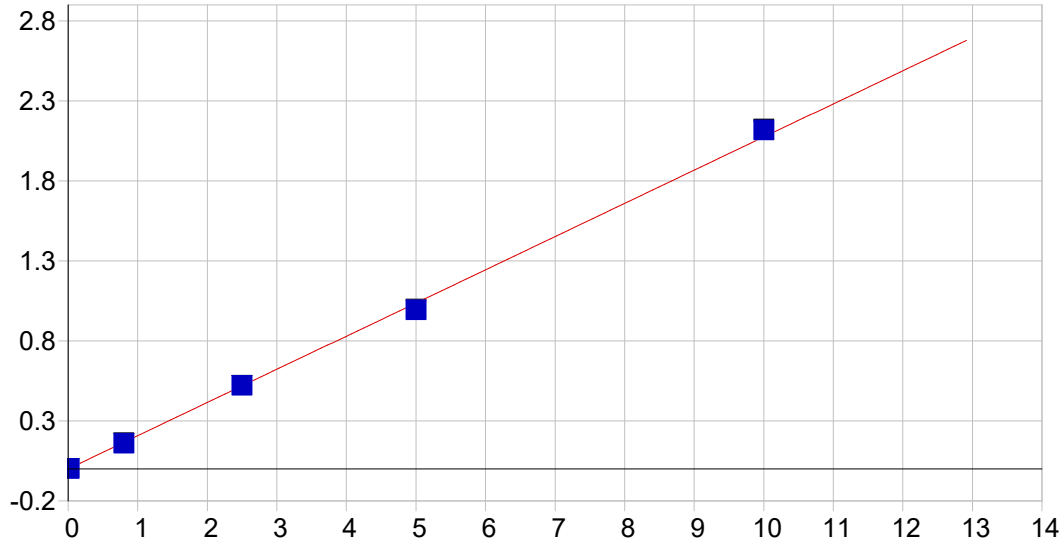
Tl 190.856 {477}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000434	Re-Slope:	1.000000
A1 (Gain):	0.055231	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999956	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.002774		
Predicted MQL:	0.009247		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00043	.000	1
S1	.04000	.04329	.003	8.23	.00268	.000	1
S3	2.5000	2.5424	.042	1.70	.13833	.003	1
S4	5.0000	4.9480	-.052	-1.04	.26868	.012	1
S5	10.000	10.004	.004	.039	.54289	.014	1
S2	.80000	.80259	.003	.324	.04396	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



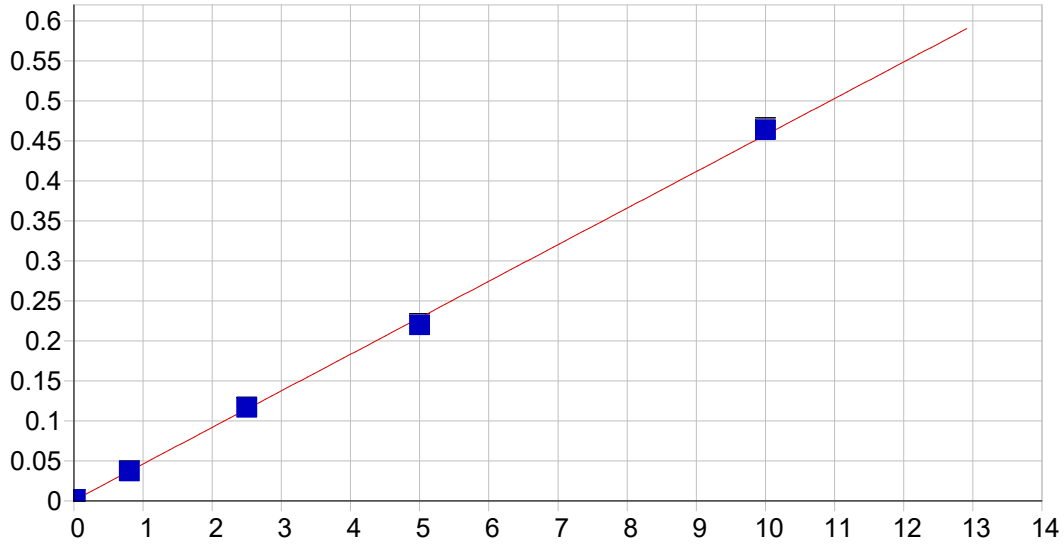
Pb 220.353 {453}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000088	Re-Slope:	1.000000
A1 (Gain):	0.207404	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999615	Status:	OK.
Std Error of Est:	0.000104		
Predicted MDL:	0.001242		
Predicted MQL:	0.004140		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00009	.000	1
S1	.01200	.01327	.001	10.6	.00279	.000	1
S3	2.5000	2.5192	.019	.769	.52201	.000	1
S4	5.0000	4.7926	-.207	-4.15	.99295	.004	1
S5	10.000	10.211	.211	2.11	2.1156	.005	1
S2	.80000	.77565	-.024	-3.04	.16078	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



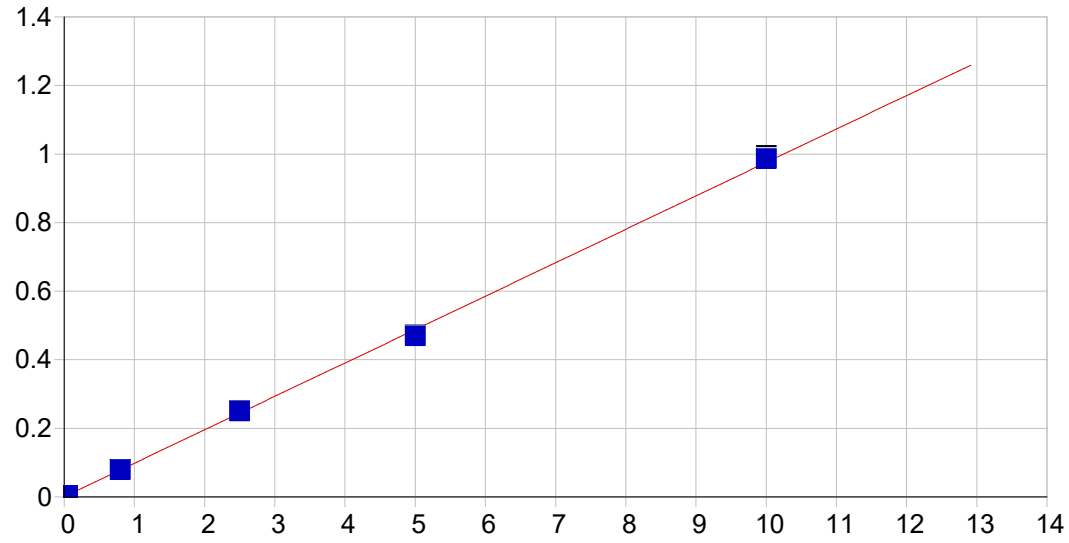
Se 196.090 {472}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000551	Re-Slope:	1.000000
A1 (Gain):	0.045672	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999685	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.003094		
Predicted MQL:	0.010313		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00055	.000	1
S1	.02000	.02387	.004	19.3	.00164	.000	1
S3	2.5000	2.5457	.046	1.83	.11679	.000	1
S4	5.0000	4.8018	-.198	-3.96	.21980	.002	1
S5	10.000	10.144	.144	1.44	.46373	.003	1
S2	.80000	.80457	.005	.572	.03729	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



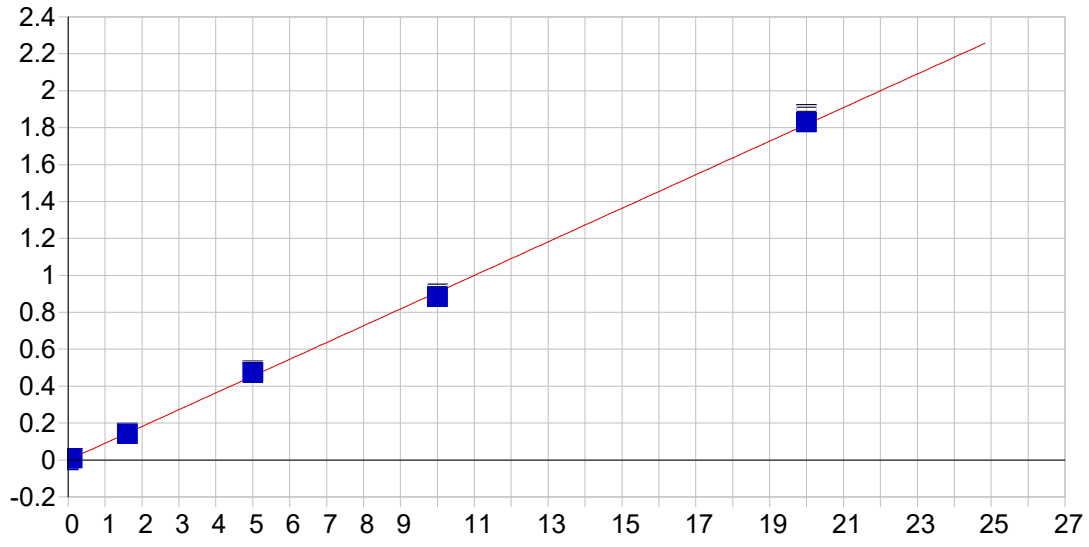
Sb 206.833 {463}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000754	Re-Slope:	1.000000
A1 (Gain):	0.097467	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999726	Status:	OK.
Std Error of Est:	0.000085		
Predicted MDL:	0.001854		
Predicted MQL:	0.006181		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00075	.000	1
S1	.05000	.05289	.003	5.79	.00592	.000	1
S3	2.5000	2.5624	.062	2.49	.25116	.001	1
S4	5.0000	4.8128	-.187	-3.74	.47116	.002	1
S5	10.000	10.117	.117	1.17	.98943	.007	1
S2	.80000	.80539	.005	.673	.07946	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



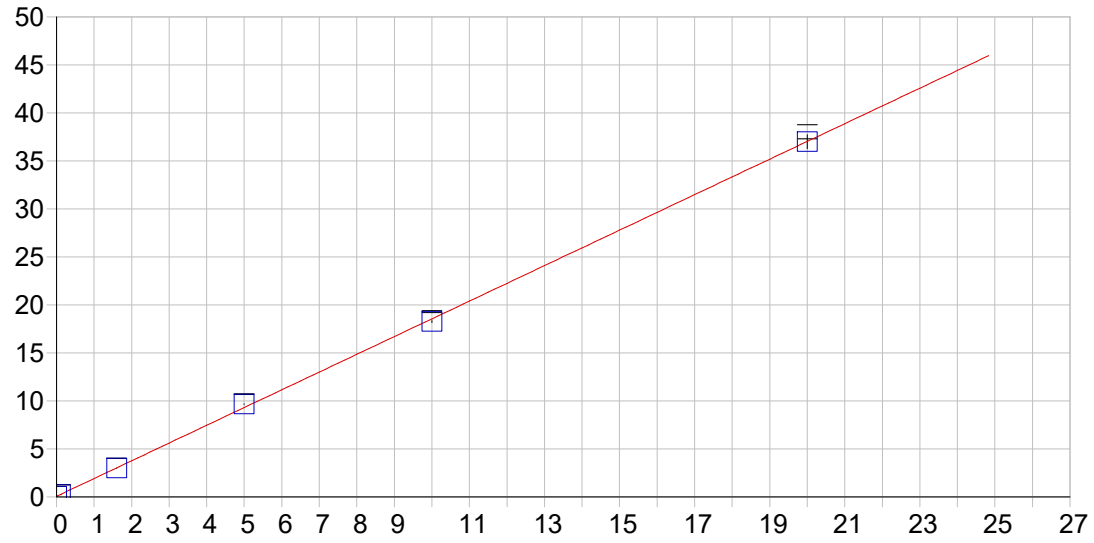
Al 396.152 { 85}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000038	Re-Slope:	1.000000
A1 (Gain):	0.090899	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999766	Status:	OK.
Std Error of Est:	0.000149		
Predicted MDL:	0.011545		
Predicted MQL:	0.038483		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00004	.000	1
S1	.10000	.10029	.000	.286	.00978	.000	1
S3	5.0000	5.1988	.199	3.98	.48134	.001	1
S4	10.000	9.7096	-.290	-2.90	.90019	.003	1
S5	20.000	20.126	.126	.628	1.8646	.006	1
S2	1.6000	1.5658	-.034	-2.14	.14511	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



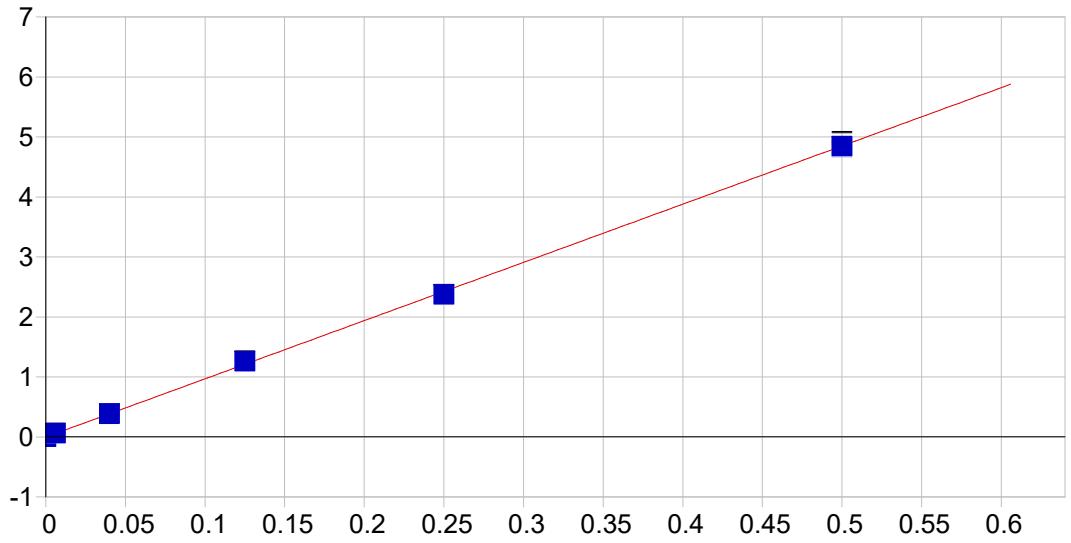
Ba 493.409 { 68}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.068210	Re-Slope:	1.000000
A1 (Gain):	1.848121	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999859	Status:	OK.
Std Error of Est:	0.002299		
Predicted MDL:	0.001573		
Predicted MQL:	0.005242		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.06821	.004	1
S1	.10000	.09696	-.003	-3.04	.24741	.002	1
S3	5.0000	5.1947	.195	3.89	9.6687	.021	1
S4	10.000	9.8467	-.153	-1.53	18.266	.089	1
S5	20.000	19.983	-.017	-.084	37.000	.743	1
S2	1.6000	1.5784	-.022	-1.35	2.9852	.014	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



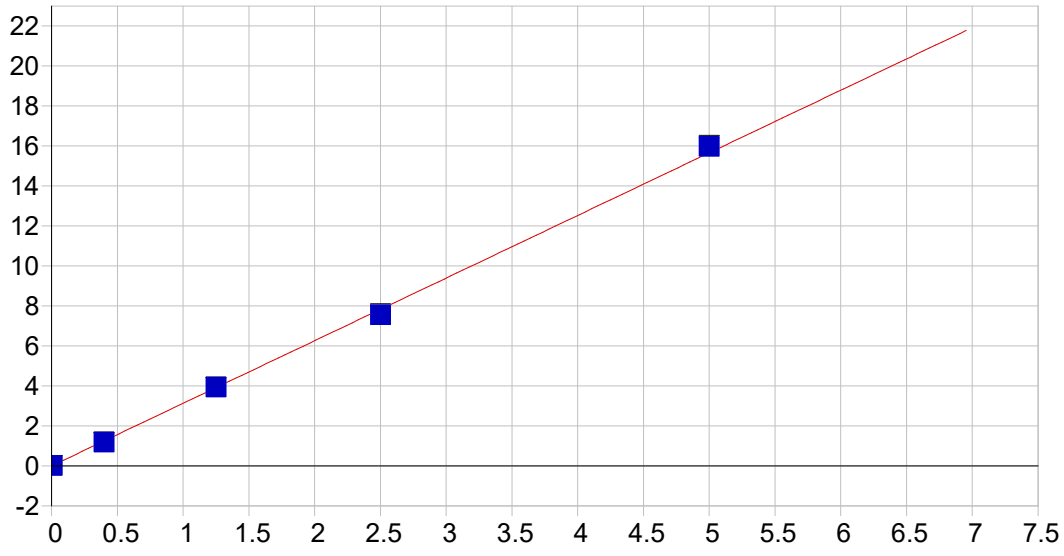
Be 234.861 {144}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002262	Re-Slope:	1.000000
A1 (Gain):	9.704089	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999817	Status:	OK.
Std Error of Est:	0.000532		
Predicted MDL:	0.000066		
Predicted MQL:	0.000219		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00227	.000	1
S1	.00600	.00637	.000	6.11	.05908	.001	1
S3	.12500	.13011	.005	4.09	1.2549	.005	1
S4	.25000	.24494	-.005	-2.02	2.3638	.002	1
S5	.50000	.49973	-.000	-.055	4.8254	.080	1
S2	.04000	.03985	-.000	-.369	.38273	.002	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



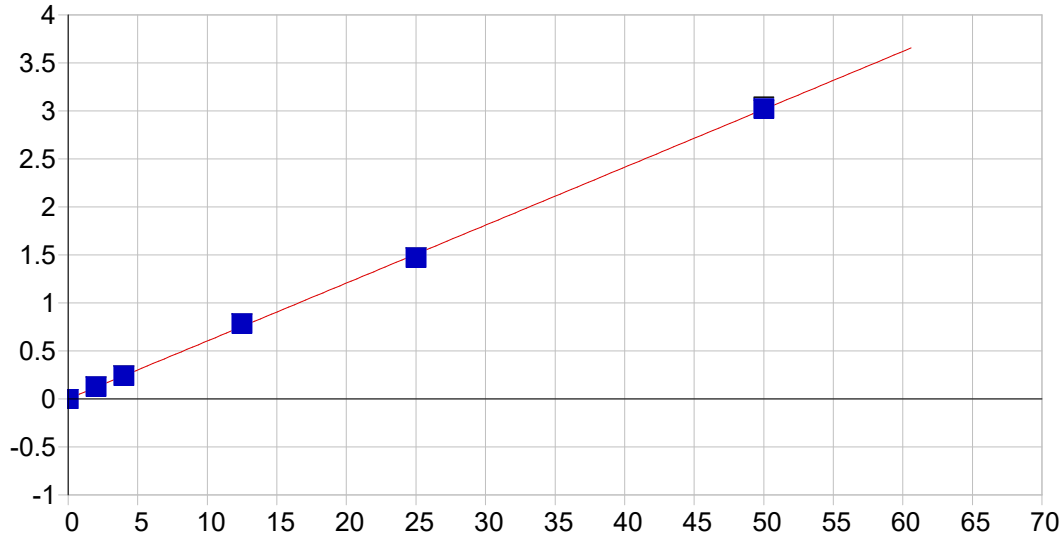
Cd 226.502 {449}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000507	Re-Slope:	1.000000
A1 (Gain):	3.131963	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999660	Status:	OK.
Std Error of Est:	0.000741		
Predicted MDL:	0.000070		
Predicted MQL:	0.000233		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00051	.000	1
S1	.00600	.00594	-.000	-1.06	.01815	.000	1
S3	1.2500	1.2555	.006	.442	3.9343	.003	1
S4	2.5000	2.4131	-.087	-3.47	7.5625	.043	1
S5	5.0000	5.1023	.102	2.05	15.990	.048	1
S2	.40000	.37905	-.021	-5.24	1.1875	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



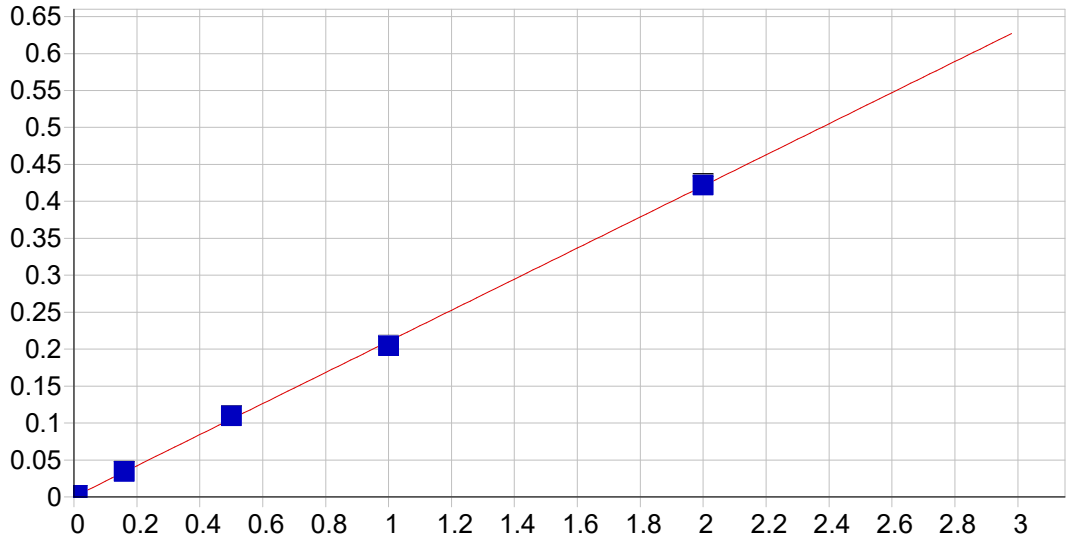
Ca 373.690 { 90}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000400	Re-Slope:	1.000000
A1 (Gain):	0.060318	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999803	Status:	OK.
Std Error of Est:	0.000633		
Predicted MDL:	0.013645		
Predicted MQL:	0.045483		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00010	-.000	.000	.00039	.000	1
S2	4.0000	3.9739	-.026	-.653	.24010	.000	1
S3	12.500	12.960	.460	3.68	.78212	.001	1
S4	25.000	24.366	-.634	-2.54	1.4701	.004	1
S5	50.000	50.119	.119	.239	3.0235	.015	1
S1	2.0000	2.0812	.081	4.06	.12593	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



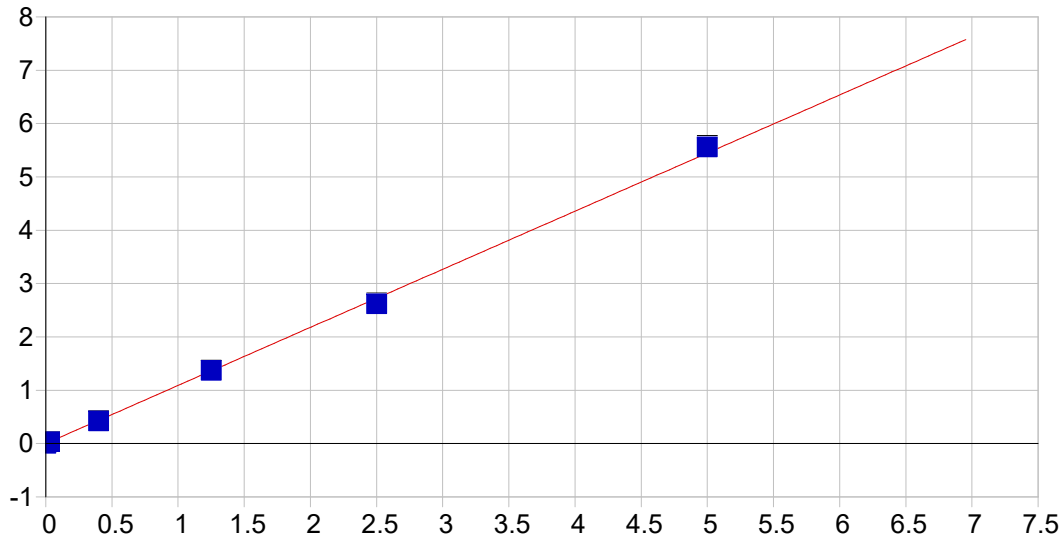
Cr 267.716 {126}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000114	Re-Slope:	1.000000
A1 (Gain):	0.210391	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999767	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.000333		
Predicted MQL:	0.001109		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00011	.000	1
S1	.01000	.01078	.001	7.80	.00238	.000	1
S3	.50000	.52015	.020	4.03	.10963	.000	1
S4	1.0000	.97198	-.028	-2.80	.20478	.000	1
S5	2.0000	2.0044	.004	.221	.42216	.002	1
S2	.16000	.16266	.003	1.67	.03436	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



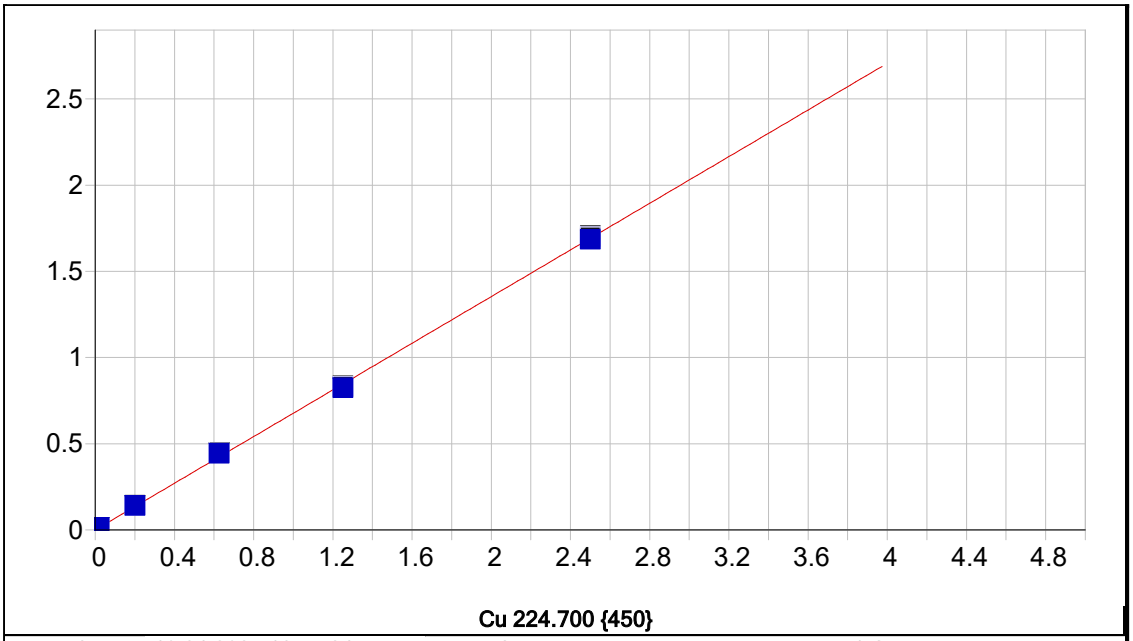
Co 228.616 {448}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000006	Re-Slope:	1.000000
A1 (Gain):	1.089455	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999650	Status:	OK.
Std Error of Est:	0.000587		
Predicted MDL:	0.000178		
Predicted MQL:	0.000594		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00000	.000	1
S1	.03000	.03000	-.000	-.004	.03254	.000	1
S3	1.2500	1.2574	.007	.588	1.3721	.001	1
S4	2.5000	2.4037	-.096	-3.85	2.6234	.013	1
S5	5.0000	5.1038	.104	2.08	5.5696	.019	1
S2	.40000	.38513	-.015	-3.72	.42031	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



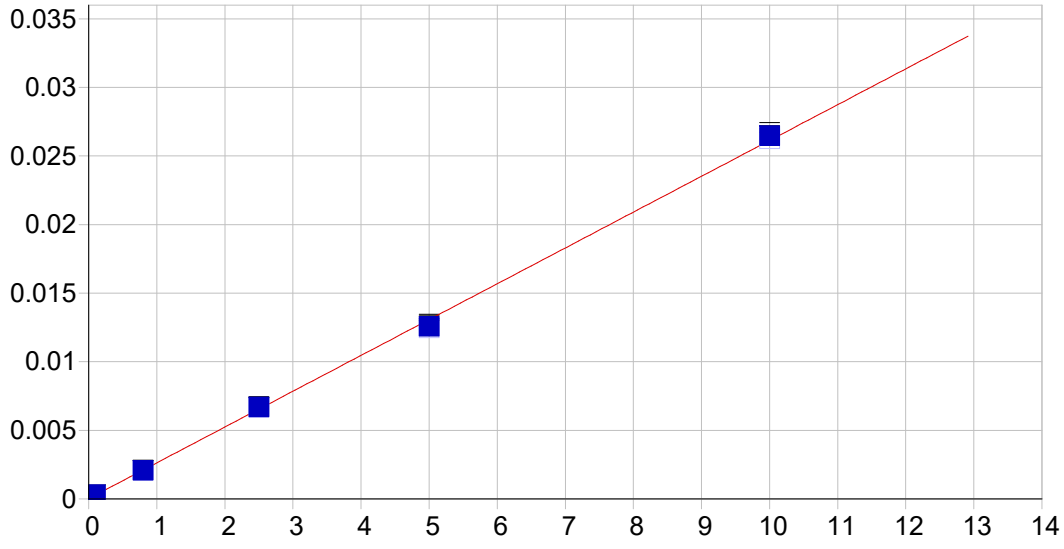
Cu 224.700 {450}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000244	Re-Slope:	1.000000
A1 (Gain):	0.676741	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999652	Status:	OK.
Std Error of Est:	0.000211		
Predicted MDL:	0.000406		
Predicted MQL:	0.001355		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00024	.000	1
S1	.02000	.02307	.003	15.4	.01601	.000	1
S3	.62500	.65653	.032	5.05	.44807	.001	1
S4	1.2500	1.2170	-.033	-2.64	.83085	.004	1
S5	2.5000	2.4910	-.009	-.361	1.7001	.007	1
S2	.20000	.20746	.007	3.73	.14177	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



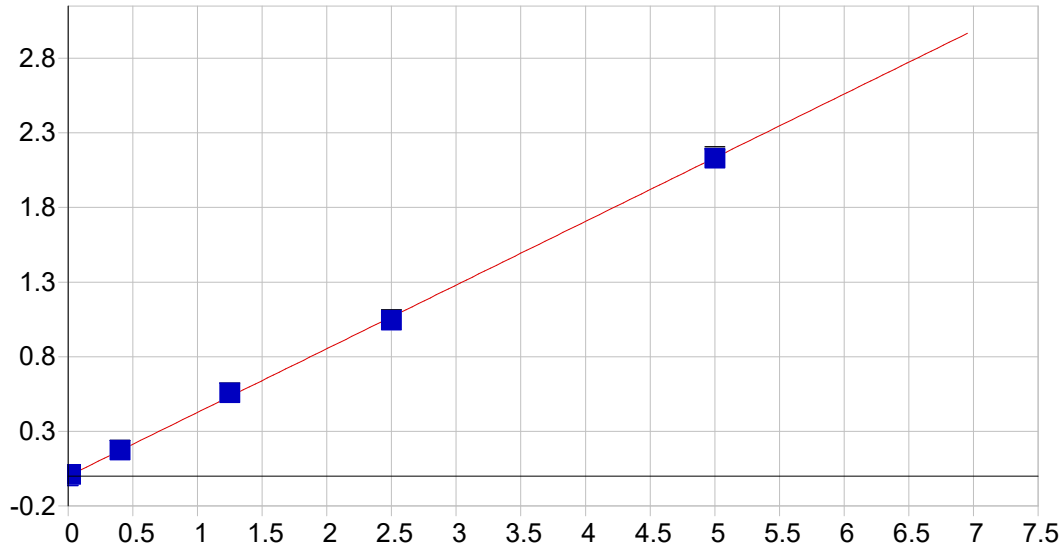
Fe 240.488 {140}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000018	Re-Slope:	1.000000
A1 (Gain):	0.002611	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999689	Status:	OK.
Std Error of Est:	0.000003		
Predicted MDL:	0.008390		
Predicted MQL:	0.027967		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00002	.000	1
S1	.10000	.10846	.008	8.46	.00030	.000	1
S3	2.5000	2.5608	.061	2.43	.00665	.000	1
S4	5.0000	4.8086	-.191	-3.83	.01246	.000	1
S5	10.000	10.130	.130	1.30	.02625	.000	1
S2	.80000	.79259	-.007	-.926	.00207	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



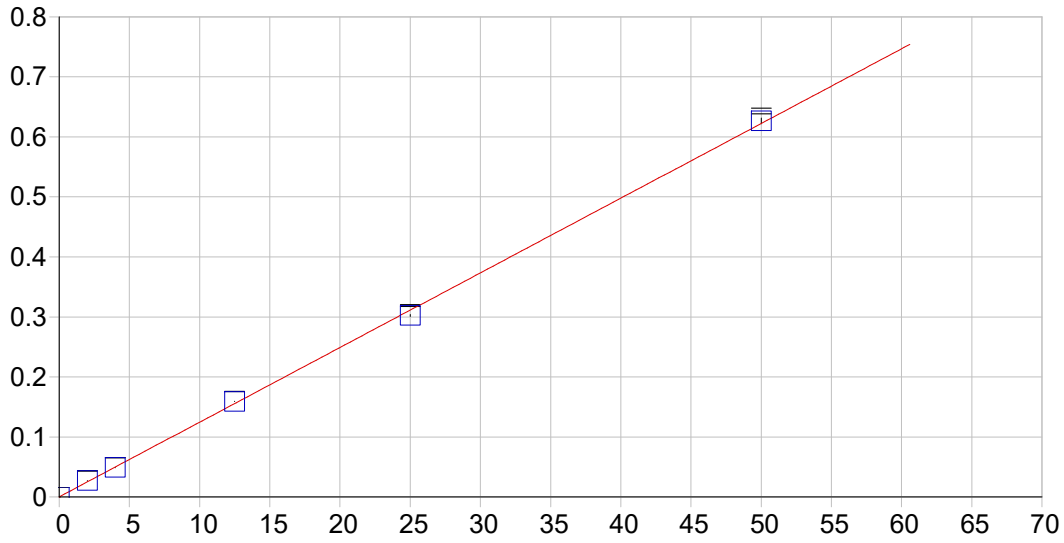
Mn 257.610 {131}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000071	Re-Slope:	1.000000
A1 (Gain):	0.426682	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999795	Status:	OK.
Std Error of Est:	0.000143		
Predicted MDL:	0.000703		
Predicted MQL:	0.002344		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00007	.000	1
S1	.02000	.02184	.002	9.22	.00939	.000	1
S3	1.2500	1.3052	.055	4.41	.55708	.001	1
S4	2.5000	2.4475	-.052	-2.10	1.0446	.004	1
S5	5.0000	4.9917	-.008	-.165	2.1304	.009	1
S2	.40000	.40373	.004	.932	.17237	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



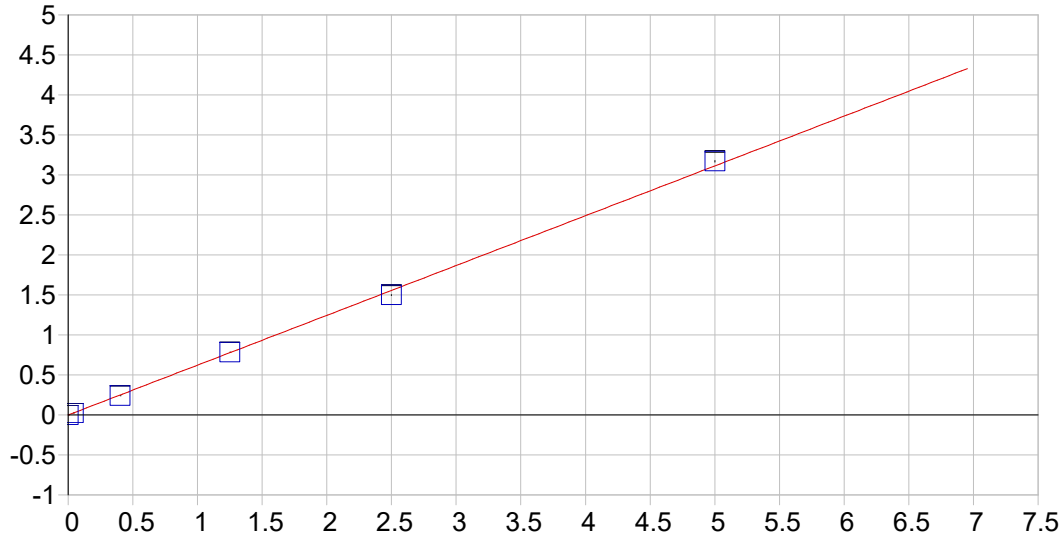
Mg 279.079 {121}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000117	Re-Slope:	1.000000
A1 (Gain):	0.012444	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999772	Status:	OK.
Std Error of Est:	0.000141		
Predicted MDL:	0.031376		
Predicted MQL:	0.104585		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	.00012	.000	1
S2	4.0000	3.9279	-.072	-1.80	.04900	.000	1
S3	12.500	12.773	.273	2.18	.15906	.000	1
S4	25.000	24.288	-.712	-2.85	.30235	.001	1
S5	50.000	50.353	.353	.705	.62670	.005	1
S1	2.0000	2.1591	.159	7.95	.02698	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



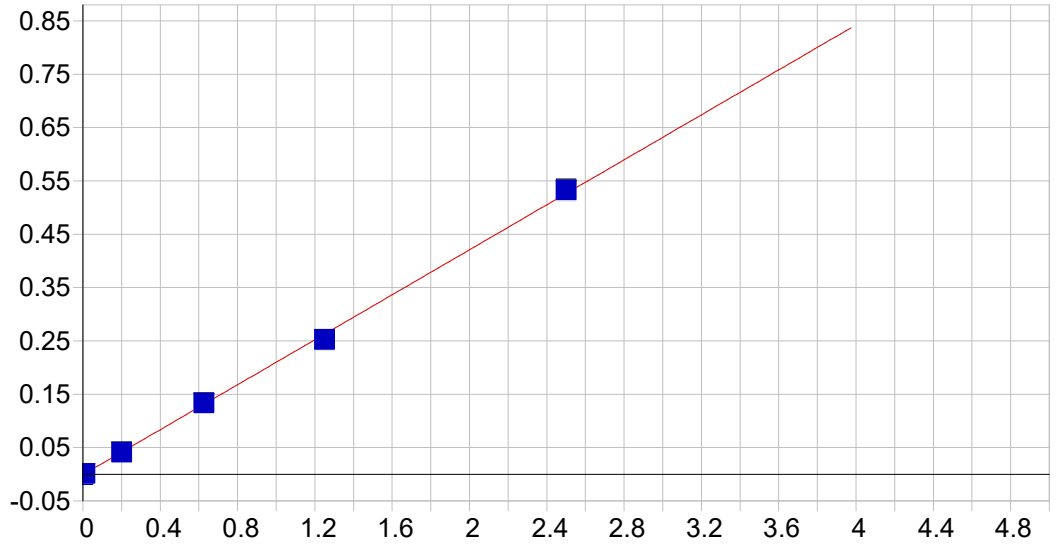
Ni 231.604 {446}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000670	Re-Slope:	1.000000
A1 (Gain):	0.622609	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999690	Status:	OK.
Std Error of Est:	0.000364		
Predicted MDL:	0.000333		
Predicted MQL:	0.001108		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00067	.000	1
S1	.04000	.04051	.001	1.28	.02455	.000	1
S3	1.2500	1.2619	.012	.951	.78499	.000	1
S4	2.5000	2.4072	-.093	-3.71	1.4981	.007	1
S5	5.0000	5.0931	.093	1.86	3.1704	.011	1
S2	.40000	.38728	-.013	-3.18	.24045	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



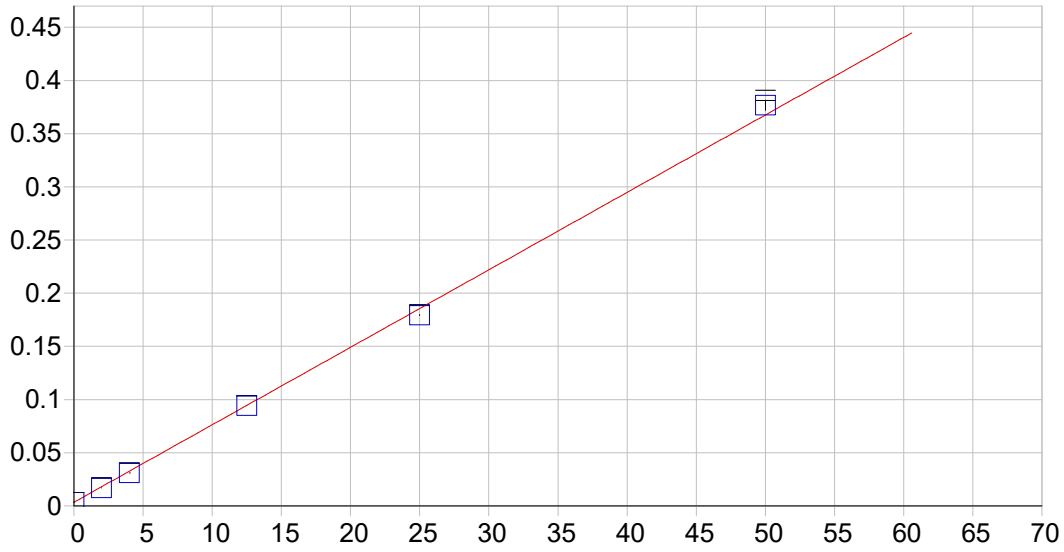
Ag 328.068 {103}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000871	Re-Slope:	1.000000
A1 (Gain):	0.210848	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999691	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.000520		
Predicted MQL:	0.001734		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00087	.000	1
S1	.01000	.01161	.002	16.1	.00156	.000	1
S3	.62500	.63806	.013	2.09	.13302	.000	1
S4	1.2500	1.2020	-.048	-3.84	.25130	.000	1
S5	2.5000	2.5331	.033	1.32	.53067	.001	1
S2	.20000	.20018	.000	.091	.04113	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



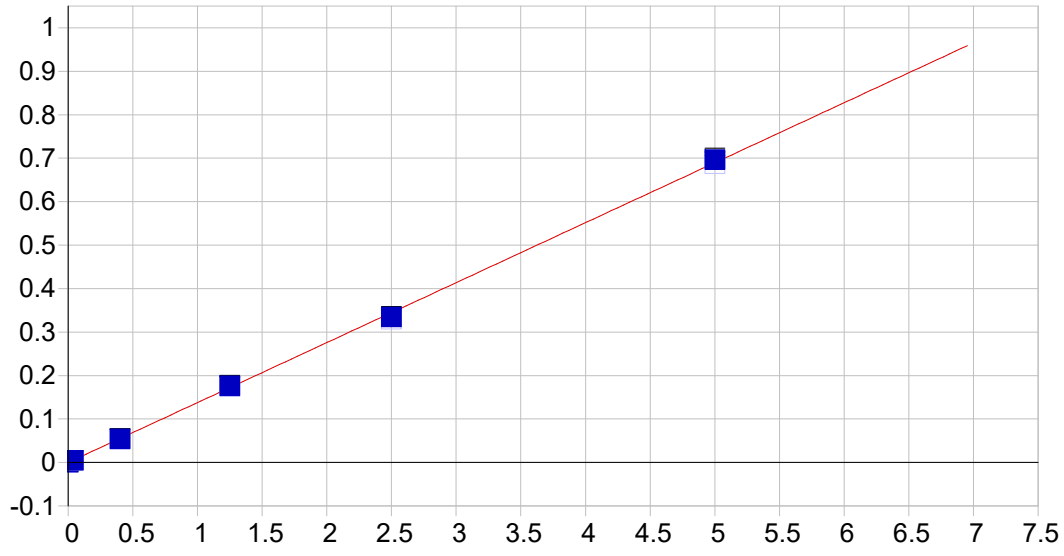
Na 589.592 { 57}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003471	Re-Slope:	1.000000
A1 (Gain):	0.007283	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999558	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.021067		
Predicted MQL:	0.070224		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00028	.000	.000	.00347	.000	1
S2	4.0000	3.7825	-.218	-5.44	.03102	.000	1
S3	12.500	12.470	-.030	-.236	.09430	.000	1
S4	25.000	24.157	-.843	-3.37	.17941	.001	1
S5	50.000	51.242	1.24	2.48	.37668	.005	1
S1	2.0000	1.8489	-.151	-7.55	.01694	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



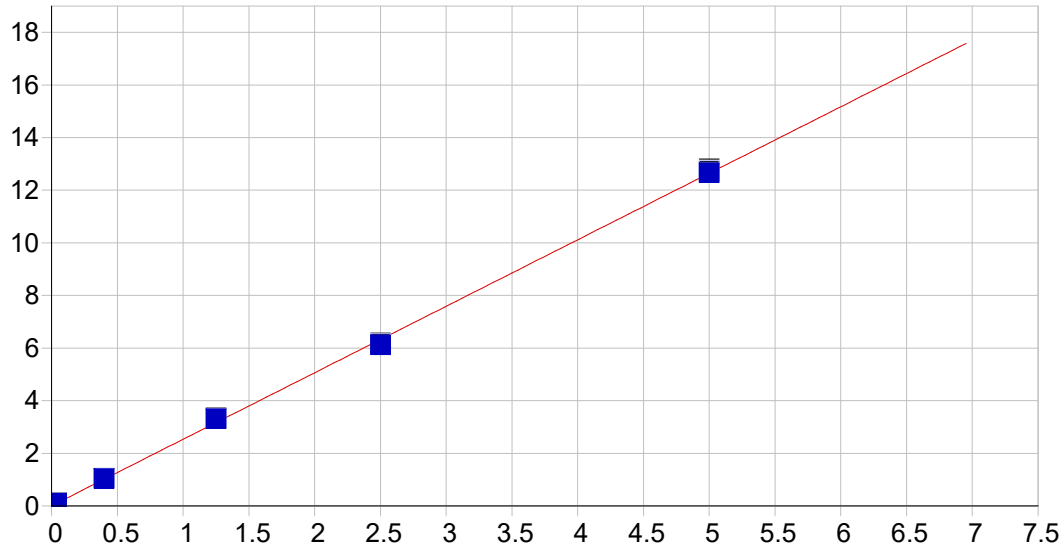
V 292.402 {115}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000201	Re-Slope:	1.000000
A1 (Gain):	0.137954	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999787	Status:	OK.
Std Error of Est:	0.000066		
Predicted MDL:	0.003317		
Predicted MQL:	0.011057		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00020	.001	1
S1	.04000	.03650	-.004	-8.76	.00463	.000	1
S3	1.2500	1.2803	.030	2.42	.17391	.001	1
S4	2.5000	2.4269	-.073	-2.92	.32958	.001	1
S5	5.0000	5.0519	.052	1.04	.68668	.004	1
S2	.40000	.39423	-.006	-1.44	.05338	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



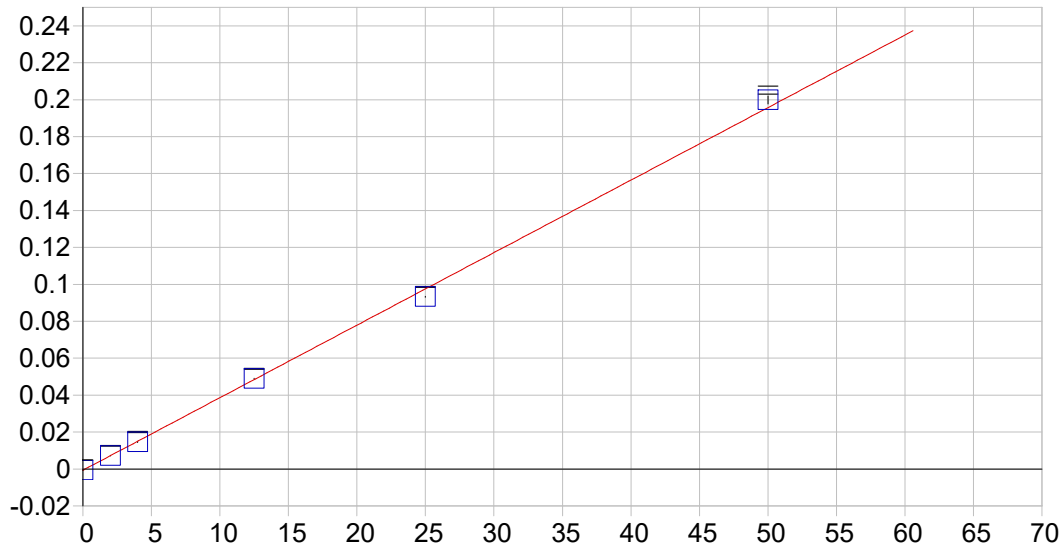
Zn 213.856 {158}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004419	Re-Slope:	1.000000
A1 (Gain):	2.528011	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999684	Status:	OK.
Std Error of Est:	0.001502		
Predicted MDL:	0.000240		
Predicted MQL:	0.000800		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00441	.000	1
S1	.04000	.04382	.004	9.56	.11591	.001	1
S3	1.2500	1.3084	.058	4.68	3.3341	.008	1
S4	2.5000	2.4201	-.080	-3.20	6.1663	.022	1
S5	5.0000	5.0083	.008	.166	12.753	.052	1
S2	.40000	.40937	.009	2.34	1.0463	.002	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



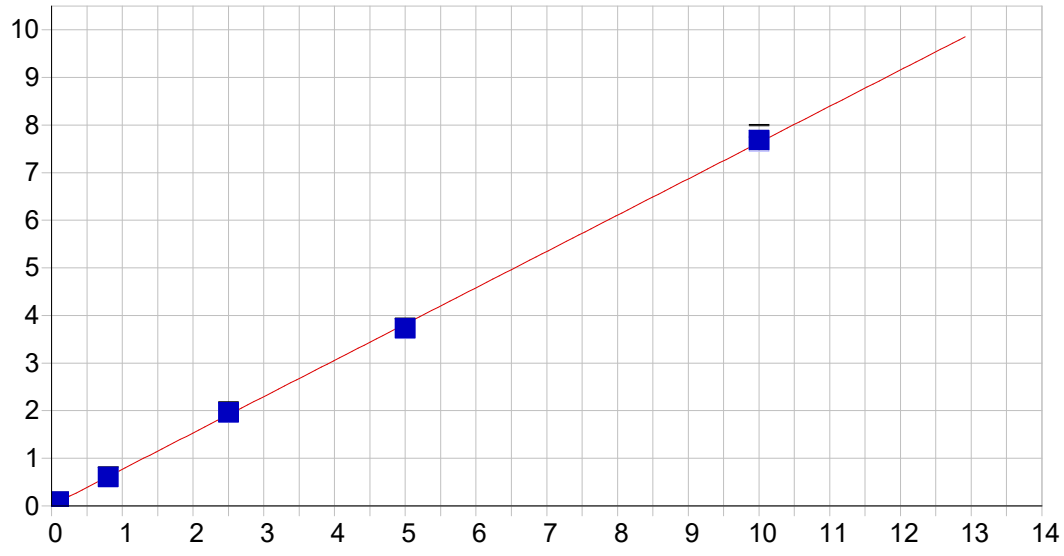
K 766.490 { 44}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000670	Re-Slope:	1.000000
A1 (Gain):	0.003928	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999611	Status:	OK.
Std Error of Est:	0.000058		
Predicted MDL:	0.047131		
Predicted MQL:	0.157102		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00007	.000	.000	-.00067	.000	1
S2	4.0000	3.8913	-.109	-2.72	.01461	.000	1
S3	12.500	12.625	.125	1.00	.04892	.000	1
S4	25.000	23.922	-1.08	-4.31	.09329	.000	1
S5	50.000	51.048	1.05	2.10	.19983	.002	1
S1	2.0000	2.0133	.013	.667	.00724	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



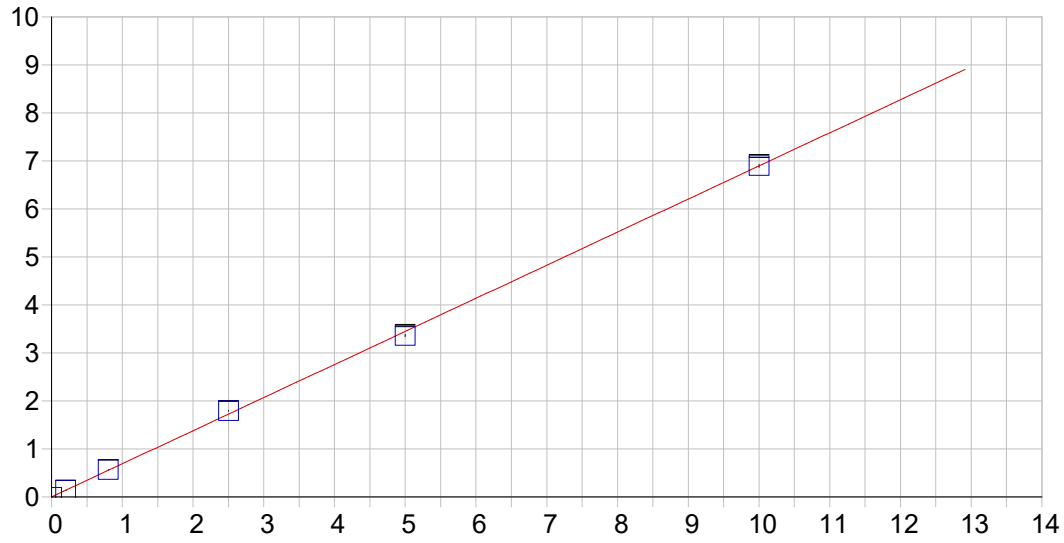
B 249.678 {135}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007553	Re-Slope:	1.000000
A1 (Gain):	0.762477	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999858	Status:	OK.
Std Error of Est:	0.000671		
Predicted MDL:	0.000834		
Predicted MQL:	0.002781		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00755	.000	1
S1	.10000	.10154	.002	1.54	.08453	.002	1
S3	2.5000	2.5664	.066	2.65	1.9575	.009	1
S4	5.0000	4.8821	-.118	-2.36	3.7163	.007	1
S5	10.000	10.063	.063	.630	7.6528	.126	1
S2	.80000	.78702	-.013	-1.62	.60543	.003	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



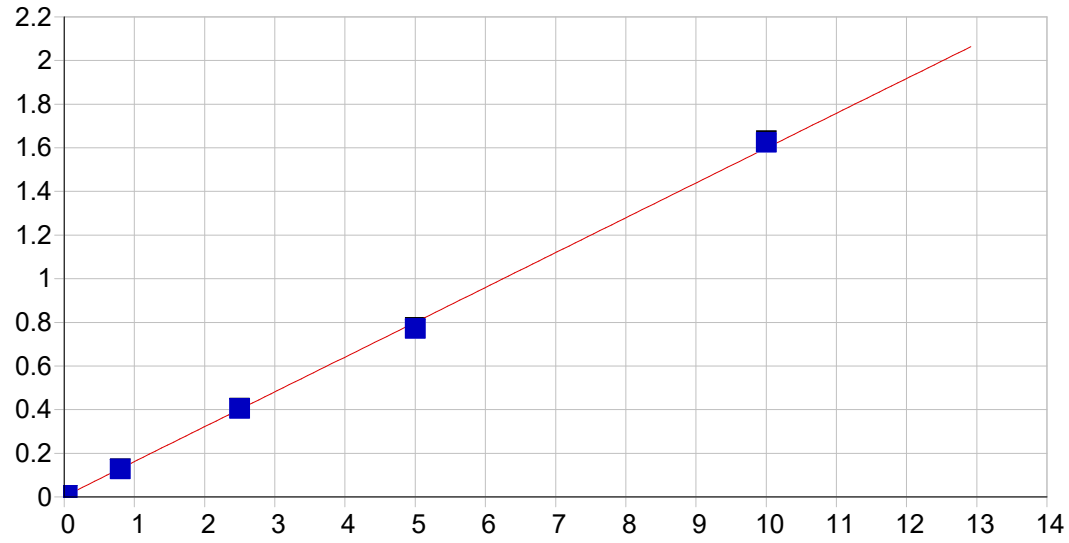
Mo 202.030 {467}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000548	Re-Slope:	1.000000
A1 (Gain):	0.689527	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999793	Status:	OK.
Std Error of Est:	0.001045		
Predicted MDL:	0.000250		
Predicted MQL:	0.000834		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00054	.000	1
S1	.20000	.20542	.005	2.71	.14219	.000	1
S3	2.5000	2.5992	.099	3.97	1.7928	.006	1
S4	5.0000	4.8751	-.125	-2.50	3.3620	.022	1
S5	10.000	10.001	.001	.012	6.8967	.032	1
S2	.80000	.81904	.019	2.38	.56530	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



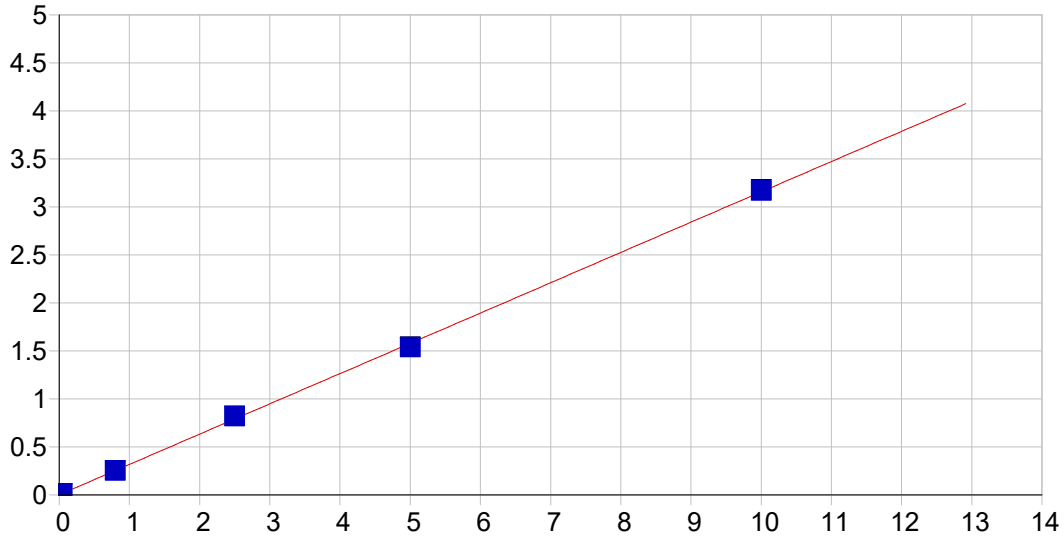
Sn 189.989 {478}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002383	Re-Slope:	1.000000
A1 (Gain):	0.159598	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999734	Status:	OK.
Std Error of Est:	0.000122		
Predicted MDL:	0.000587		
Predicted MQL:	0.001958		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00238	.000	1
S1	.04000	.03824	-.002	-4.41	.00848	.000	1
S3	2.5000	2.5224	.022	.896	.40454	.001	1
S4	5.0000	4.8225	-.178	-3.55	.77122	.004	1
S5	10.000	10.171	.171	1.71	1.6240	.006	1
S2	.80000	.78621	-.014	-1.72	.12773	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



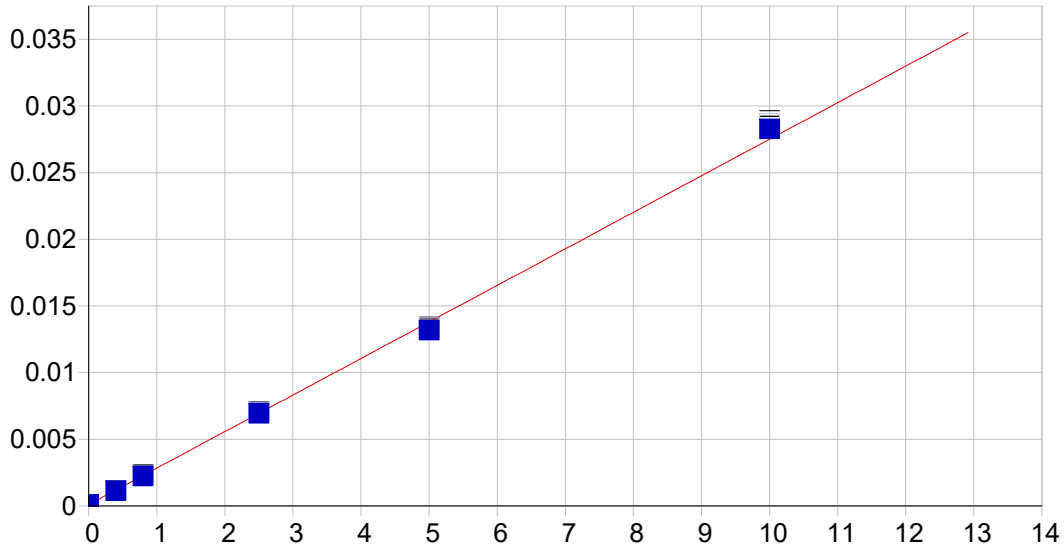
Ti 336.121 {100}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001603	Re-Slope:	1.000000
A1 (Gain):	0.315488	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999811	Status:	OK.
Std Error of Est:	0.000203		
Predicted MDL:	0.001878		
Predicted MQL:	0.006259		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00160	.001	1
S1	.04000	.03954	-.000	-1.16	.01407	.000	1
S3	2.5000	2.5918	.092	3.67	.81900	.001	1
S4	5.0000	4.8711	-.129	-2.58	1.5378	.003	1
S5	10.000	10.043	.043	.429	3.1689	.010	1
S2	.80000	.79463	-.005	-.671	.25221	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



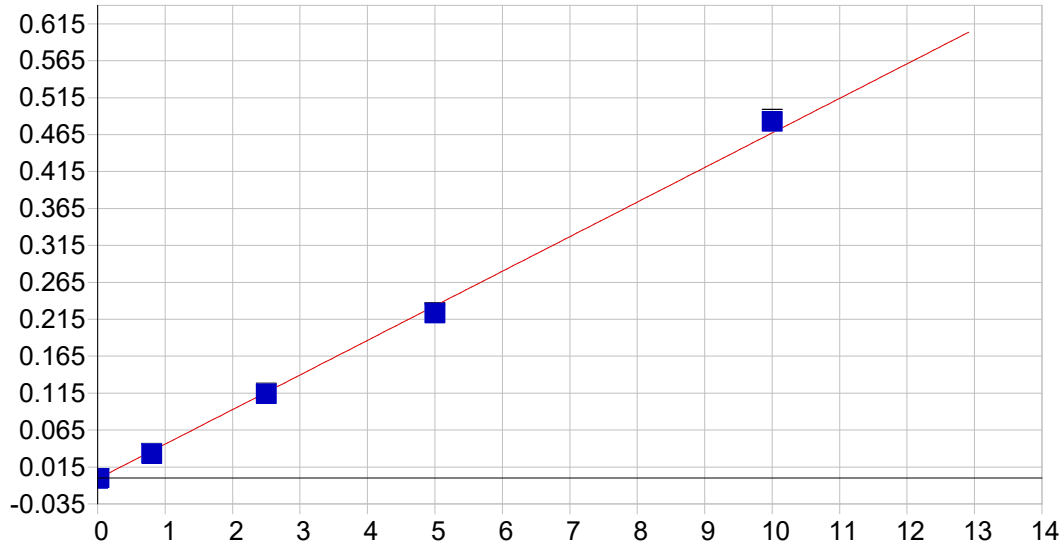
Si 288.158 {117}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000093	Re-Slope:	1.000000
A1 (Gain):	0.002742	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999471	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.014545		
Predicted MQL:	0.048483		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00004	.000	.000	.00009	.000	1
S1	.40000	.37588	-.024	-6.03	.00113	.000	1
S3	2.5000	2.4939	-.006	-.246	.00703	.000	1
S4	5.0000	4.7712	-.229	-4.58	.01338	.000	1
S5	10.000	10.280	.280	2.80	.02869	.000	1
S2	.80000	.77858	-.021	-2.68	.00226	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



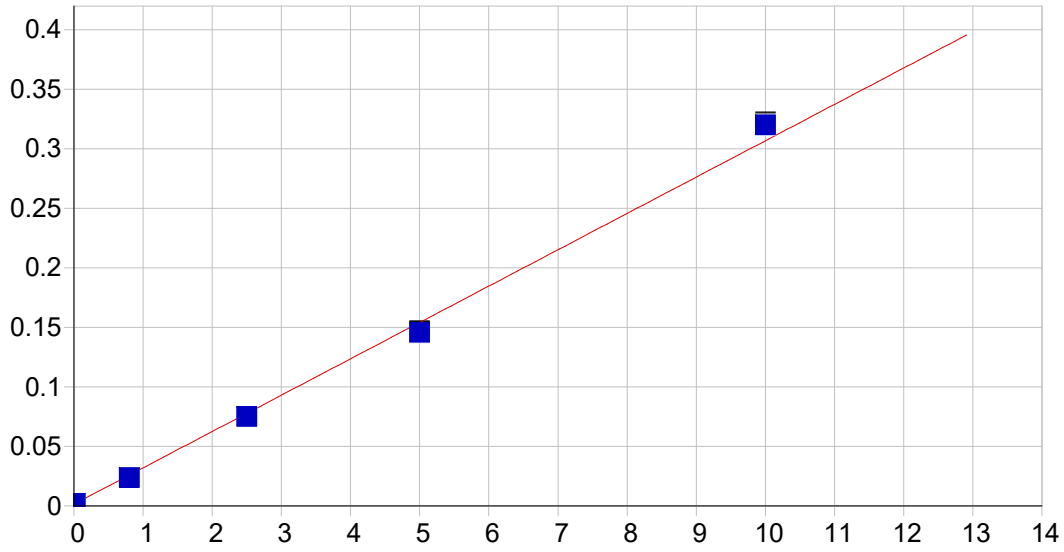
P 177.495 {490}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000936	Re-Slope:	1.000000
A1 (Gain):	0.046817	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999260	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.001637		
Predicted MQL:	0.005455		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00094	.000	1
S1	.02000	.01931	-.001	-3.46	-.00003	.000	1
S3	2.5000	2.4573	-.043	-1.71	.11409	.001	1
S4	5.0000	4.7847	-.215	-4.31	.22303	.001	1
S5	10.000	10.329	.329	3.29	.48258	.003	1
S2	.80000	.72925	-.071	-8.84	.03320	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



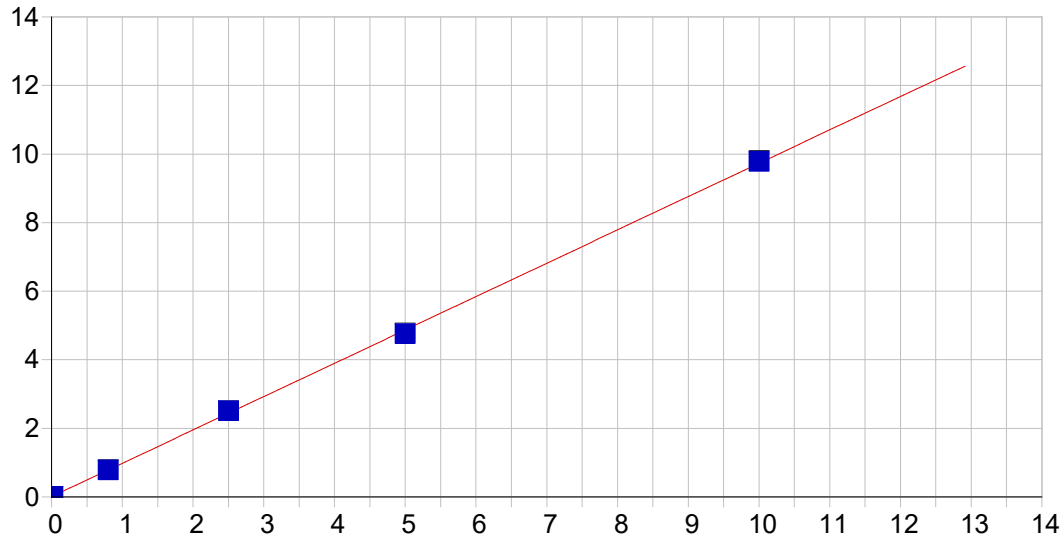
S 182.034 {485}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001437	Re-Slope:	1.000000
A1 (Gain):	0.030538	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998786	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.002763		
Predicted MQL:	0.009209		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00144	.000	1
S1	.02000	.02212	.002	10.6	.00209	.000	1
S3	2.5000	2.4098	-.090	-3.61	.07483	.000	1
S4	5.0000	4.7225	-.278	-5.55	.14525	.001	1
S5	10.000	10.437	.437	4.37	.31937	.002	1
S2	.80000	.72868	-.071	-8.92	.02363	.000	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



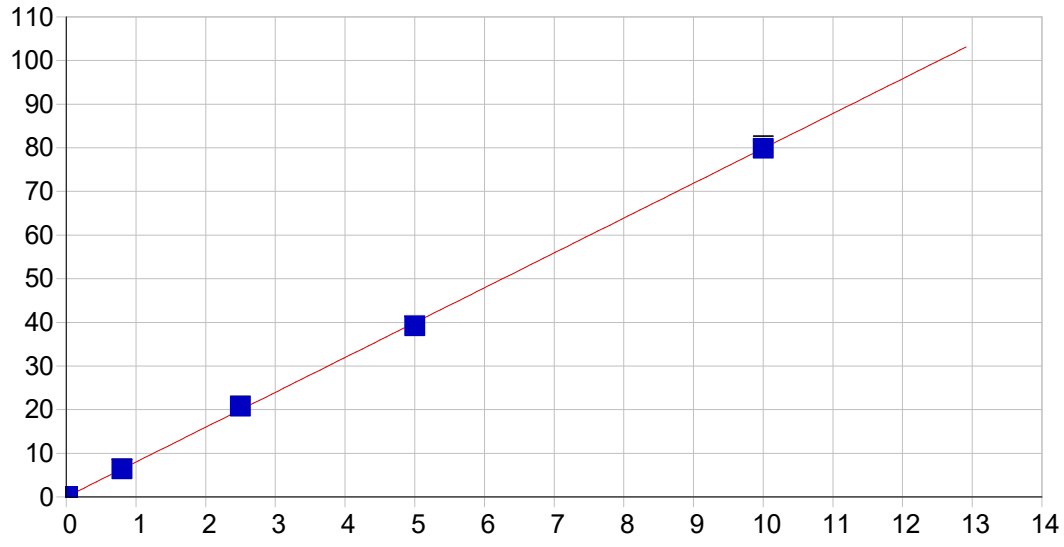
Li 670.784 { 50}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008433	Re-Slope:	1.000000
A1 (Gain):	0.972397	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999857	Status:	OK.
Std Error of Est:	0.000386		
Predicted MDL:	0.001967		
Predicted MQL:	0.006557		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00843	.002	1
S5	10.000	10.052	.052	.519	9.7906	.019	1
S4	5.0000	4.8837	-.116	-2.33	4.7612	.016	1
S3	2.5000	2.5721	.072	2.88	2.5115	.002	1
S1	.02000	.01825	-.002	-8.74	.02652	.001	1
S2	.80000	.79408	-.006	-.740	.78122	.001	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662



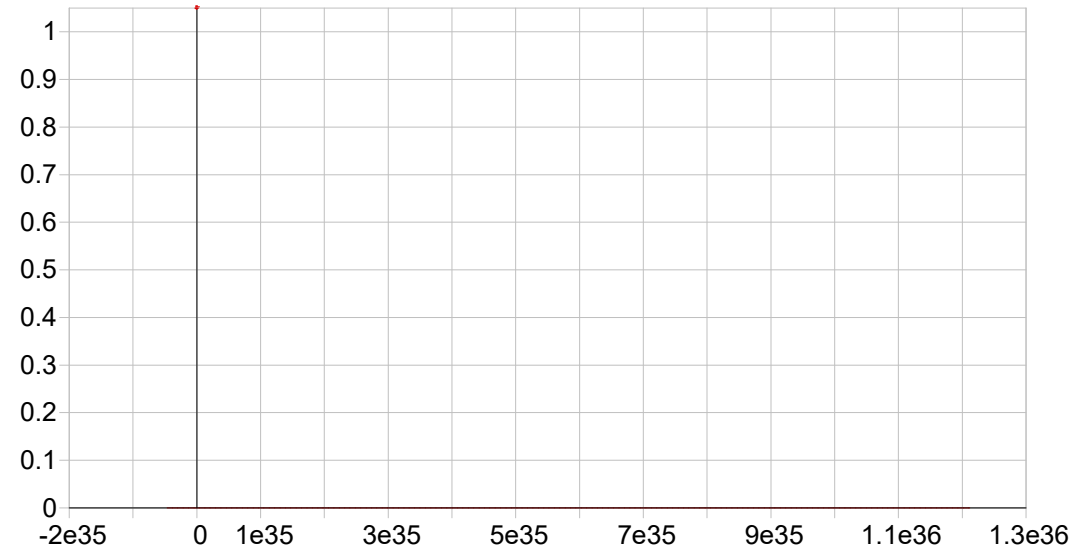
Sr 407.771 { 83}

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000742	Re-Slope:	1.000000
A1 (Gain):	7.986233	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999844	Status:	OK.
Std Error of Est:	0.003312		
Predicted MDL:	0.000125		
Predicted MQL:	0.000418		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00073	.001	1
S1	.02000	.02080	.001	3.99	.16761	.001	1
S3	2.5000	2.5991	.099	3.96	20.777	.016	1
S4	5.0000	4.9061	-.094	-1.88	39.220	.115	1
S5	10.000	9.9974	-.003	-.026	79.919	.537	1
S2	.80000	.79658	-.003	-.428	6.3685	.016	1

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

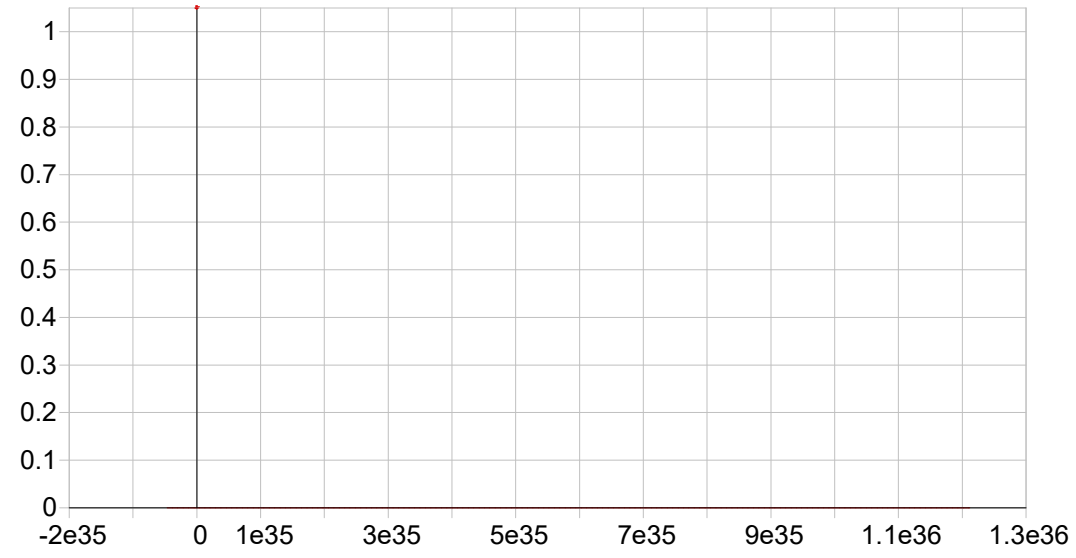


Y 224.306 {450}*

Date of Fit:	10/24/2025 16:57:24	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 360.073 { 94}*

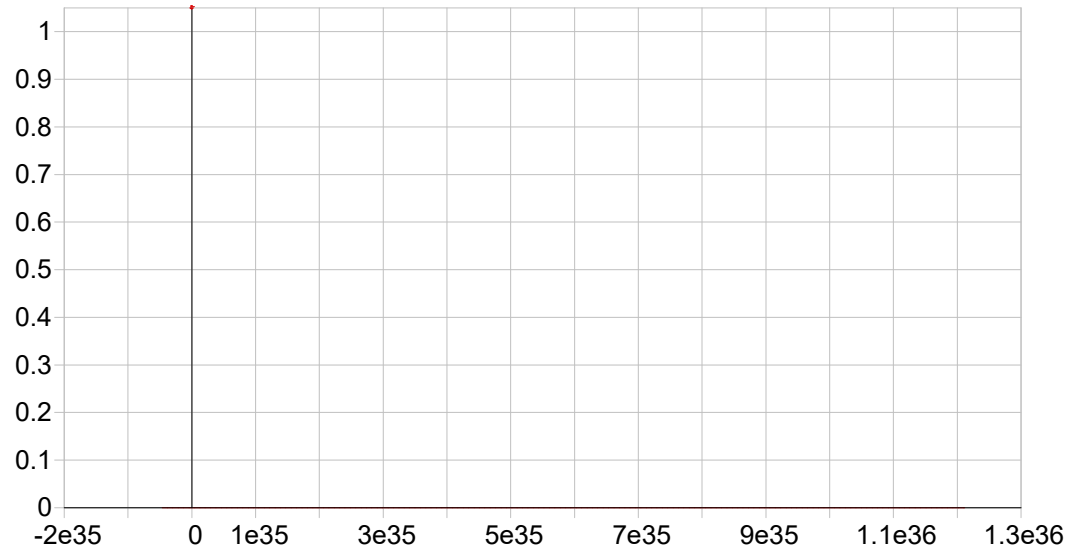
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000	Status:	Warning	Zero Gain	
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



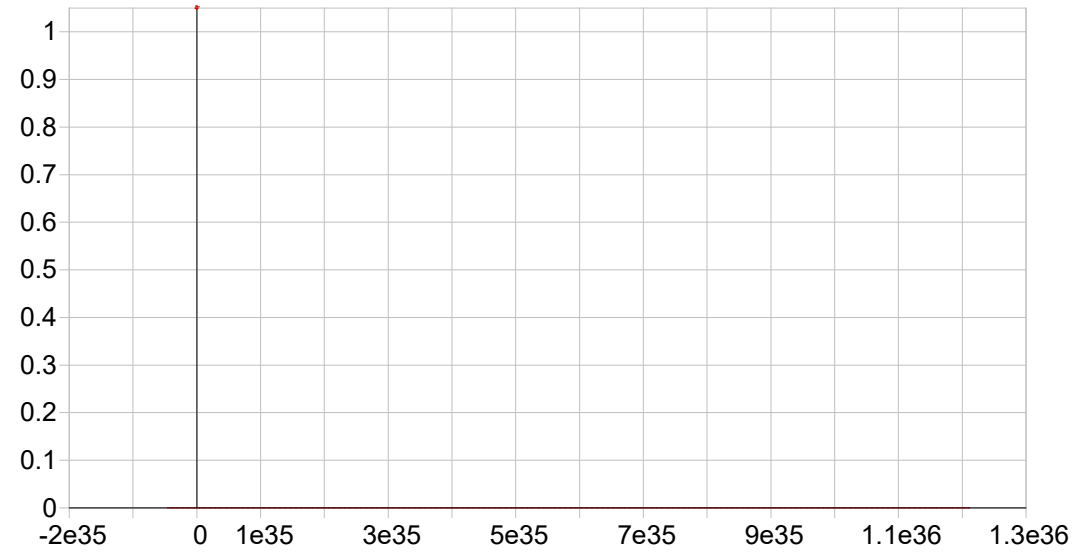
Y 371.030 { 91}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

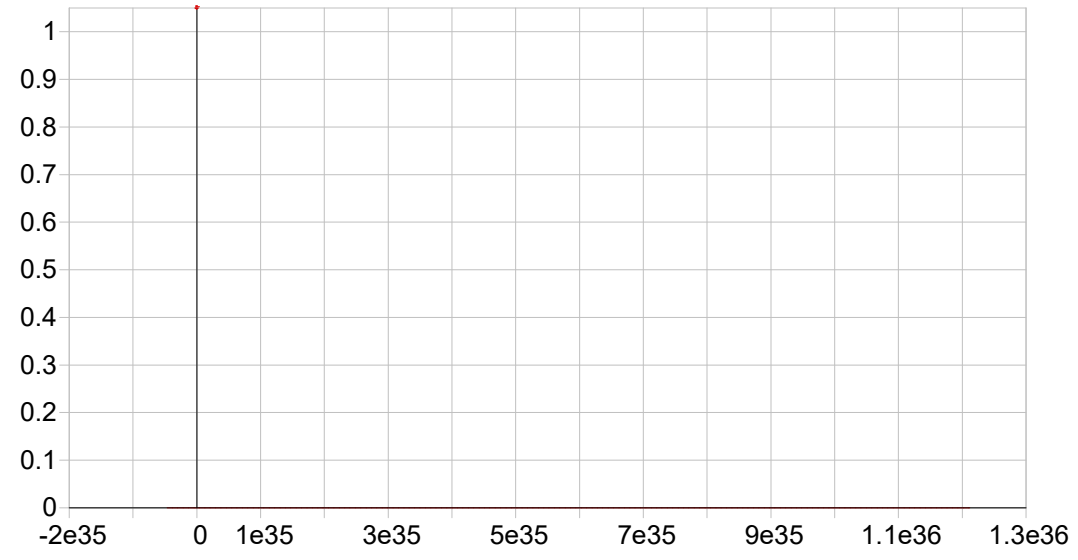


Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.000000		Status:	Warning	Zero Gain	
Std Error of Est:		0.000000					
Predicted MDL:		n/a					
Predicted MQL:		n/a					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S0 Acquired: 10/24/2025 14:07:51 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00014**	**.00043**	**.00009**	**.00055**	**.00075**	**-.00004**	**.06821**	**-.00227**
Stddev	.00012	.00008	.00018	.00007	.00008	.00024	.00384	.00024
%RSD	84.510	18.862	203.06	13.253	10.280	642.09	5.6231	10.542
#1	-.00000	.00052	-.00011	.00063	.00073	-.00008	.07181	-.00215
#2	-.00022	.00043	.00014	.00052	.00069	-.00026	.06418	-.00211
#3	-.00019	.00035	.00023	.00050	.00084	.00022	.06866	-.00254

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00051**	**.00039**	**.00011**	**-.00000**	**.00024**	**.00002**	**.00007**	**.00012**
Stddev	.00009	.00047	.00005	.00013	.00018	.00002	.00015	.00005
%RSD	17.368	120.59	44.245	2816.7	73.448	89.457	210.08	43.717
#1	-.00043	.00078	.00006	.00011	.00008	.00004	.00003	.00015
#2	-.00049	.00054	.00012	.00002	.00043	.00001	-.00005	.00006
#3	-.00060	-.00014	.00016	-.00015	.00022	.00001	.00023	.00014

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00067**	**-.00087**	**.00347**	**-.00020**	**.00441**	**-.00067**	**.00755**	**.00054**
Stddev	.00005	.00016	.00016	.00056	.00012	.00018	.00045	.00012
%RSD	6.8022	18.470	4.5705	277.61	2.7288	26.425	5.9263	21.597
#1	-.00070	-.00069	.00351	.00041	.00432	-.00064	.00704	.00042
#2	-.00062	-.00093	.00330	-.00069	.00454	-.00086	.00788	.00065
#3	-.00070	-.00100	.00361	-.00032	.00435	-.00051	.00774	.00055

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00238**	**.00160**	**.00009**	**-.00094**	**.00144**	**.00843**	**.00073**
Stddev	.00004	.00054	.00002	.00003	.00003	.00152	.00054
%RSD	1.7207	33.543	25.332	3.4427	1.7749	17.997	73.152
#1	.00234	.00099	.00012	-.00092	.00142	.00987	.00118
#2	.00242	.00201	.00008	-.00091	.00147	.00858	.00014
#3	.00239	.00181	.00008	-.00097	.00143	.00685	.00089

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S0 Acquired: 10/24/2025 14:07:51 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5494.8**	**91758.**	**7265.4**	**4138.4**	**7152.7**
Stddev	10.0	350.	54.5	19.5	14.5
%RSD	.18250	.38196	.74949	.47048	.20243
#1	5484.5	92157.	7207.5	4159.8	7136.6
#2	5495.5	91622.	7315.5	4121.8	7156.6
#3	5504.5	91497.	7273.2	4133.5	7164.7

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S1 Acquired: 10/24/2025 14:12:13 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00125**	**.00268**	**.00279**	**.00164**	**.00592**	**.00978**	**.24741**	**.05908**
Stddev	.00010	.00008	.00005	.00005	.00011	.00049	.00241	.00087
%RSD	7.7162	3.0999	1.8535	3.3229	1.8682	5.0144	.97249	1.4705
#1	.00131	.00262	.00278	.00170	.00605	.00922	.24681	.05935
#2	.00114	.00278	.00275	.00160	.00586	.01011	.25006	.05979
#3	.00129	.00265	.00285	.00163	.00585	.01003	.24536	.05811

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01815**	**.12593**	**.00238**	**.03254**	**.01601**	**.00030**	**.00939**	**.02698**
Stddev	.00007	.00113	.00002	.00016	.00017	.00002	.00020	.00030
%RSD	.36663	.89706	.92876	.50453	1.0854	5.9524	2.1565	1.1301
#1	.01822	.12465	.00236	.03235	.01607	.00028	.00919	.02667
#2	.01809	.12679	.00238	.03267	.01582	.00031	.00959	.02728
#3	.01814	.12635	.00241	.03259	.01615	.00031	.00940	.02700

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02455**	**.00156**	**.01694**	**.00463**	**.11591**	**.00724**	**.08453**	**.14219**
Stddev	.00013	.00005	.00012	.00043	.00068	.00013	.00160	.00042
%RSD	.54614	3.0201	.71729	9.3705	.59020	1.7680	1.8963	.29748
#1	.02462	.00159	.01692	.00419	.11626	.00716	.08394	.14251
#2	.02440	.00150	.01707	.00463	.11512	.00739	.08634	.14235
#3	.02465	.00158	.01683	.00506	.11635	.00717	.08330	.14171

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00848**	**.01407**	**.00113**	**-.00003**	**.00209**	**.02652**	**.16761**
Stddev	.00004	.00045	.00003	.00004	.00008	.00065	.00138
%RSD	.47794	3.1921	2.3432	113.64	3.9547	2.4381	.82417
#1	.00847	.01356	.00115	-.00007	.00217	.02619	.16835
#2	.00852	.01441	.00110	-.00001	.00201	.02727	.16847
#3	.00844	.01423	.00113	-.00001	.00208	.02611	.16602

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S1 Acquired: 10/24/2025 14:12:13 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5486.8**	**91337.**	**7439.4**	**4179.9**	**6963.8**
Stddev	3.9	352.	62.1	20.1	12.2
%RSD	.07041	.38496	.83532	.48120	.17475
#1	5483.2	91141.	7436.4	4156.7	6973.1
#2	5486.3	91127.	7378.7	4190.8	6968.3
#3	5490.9	91743.	7502.9	4192.1	6950.0

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S2 Acquired: 10/24/2025 14:16:36 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.04454**	**.04396**	**.16078**	**.03729**	**.07946**	**.14511**	**2.9852**	**.38273**	**1.1875**
Stddev	.00015	.00048	.00030	.00016	.00022	.00044	.0135	.00156	.0001
%RSD	.33648	1.1032	.18548	.44091	.27271	.30337	.45313	.40700	.01272
#1	.04440	.04439	.16043	.03710	.07932	.14480	2.9696	.38448	1.1873
#2	.04470	.04404	.16094	.03739	.07935	.14561	2.9935	.38149	1.1875
#3	.04453	.04343	.16096	.03738	.07971	.14491	2.9926	.38223	1.1876

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.24010**	**.03436**	**.42031**	**.14177**	**.00207**	**.17237**	**.04900**	**.24045**	**.04113**
Stddev	.00027	.00012	.00041	.00050	.00001	.00032	.00030	.00056	.00019
%RSD	.11202	.34789	.09701	.35367	.54364	.18375	.60328	.23403	.46947
#1	.23997	.03433	.41989	.14130	.00208	.17245	.04888	.24006	.04100
#2	.24041	.03426	.42070	.14230	.00206	.17202	.04877	.24020	.04104
#3	.23992	.03450	.42034	.14171	.00207	.17264	.04933	.24110	.04135

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03102**	**.05338**	**1.0463**	**.01461**	**.60543**	**.56530**	**.12773**	**.25221**	**.00226**
Stddev	.00010	.00030	.0019	.00034	.00258	.00072	.00021	.00085	.00006
%RSD	.31083	.55511	.18442	2.3325	.42595	.12789	.16722	.33717	2.7422
#1	.03091	.05372	1.0445	.01424	.60831	.56452	.12776	.25128	.00221
#2	.03105	.05324	1.0462	.01469	.60468	.56594	.12750	.25239	.00224
#3	.03110	.05318	1.0483	.01491	.60331	.56545	.12792	.25295	.00233

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03320**	**.02363**	**.78122**	**6.3685**
Stddev	.00007	.00008	.00066	.0160
%RSD	.21341	.32611	.08509	.25182
#1	.03324	.02370	.78045	6.3531
#2	.03325	.02364	.78161	6.3673
#3	.03312	.02354	.78160	6.3851

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S2 Acquired: 10/24/2025 14:16:36 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5560.1	92125.	7445.1	4258.9	6871.4
Stddev	15.2	189.	33.2	17.9	13.3
%RSD	.27275	.20568	.44549	.42012	.19318
#1	5576.3	92268.	7406.9	4279.5	6873.8
#2	5557.7	92197.	7461.4	4248.4	6883.4
#3	5546.2	91910.	7466.9	4248.7	6857.2

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S3 Acquired: 10/24/2025 14:20:43 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.14230**	**.13833**	**.52201**	**.11679**	**.25116**	**.48134**	**9.6687**	**1.2549**	**3.9343**
Stddev	.00052	.00333	.00037	.00032	.00069	.00141	.0208	.0051	.0032
%RSD	.36773	2.4091	.07170	.27727	.27483	.29265	.21488	.40606	.08053
#1	.14242	.14218	.52158	.11692	.25192	.48216	9.6500	1.2491	3.9307
#2	.14276	.13645	.52222	.11702	.25098	.47971	9.6650	1.2582	3.9366
#3	.14173	.13638	.52223	.11642	.25058	.48214	9.6910	1.2576	3.9357

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.78212**	**.10963**	**1.3721**	**.44807**	**.00665**	**.55708**	**.15906**	**.78499**	**.13302**
Stddev	.00058	.00031	.0010	.00087	.00001	.00086	.00018	.00007	.00007
%RSD	.07452	.28239	.07467	.19445	.15799	.15377	.11469	.00883	.05074
#1	.78196	.10999	1.3712	.44877	.00664	.55609	.15885	.78491	.13310
#2	.78163	.10948	1.3732	.44835	.00666	.55758	.15913	.78500	.13298
#3	.78276	.10943	1.3719	.44709	.00665	.55756	.15920	.78505	.13298

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.09430**	**.17391**	**3.3341**	**.04892**	**1.9575**	**1.7928**	**.40454**	**.81900**	**.00703**
Stddev	.00025	.00089	.0083	.00024	.0088	.0055	.00102	.00086	.00002
%RSD	.26157	.51319	.24942	.49908	.44899	.30720	.25232	.10507	.30590
#1	.09425	.17298	3.3381	.04918	1.9474	1.7975	.40367	.81831	.00701
#2	.09408	.17476	3.3246	.04869	1.9615	1.7942	.40566	.81997	.00703
#3	.09457	.17398	3.3397	.04889	1.9635	1.7867	.40430	.81874	.00706

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.11409**	**.07483**	**2.5115**	**20.777**
Stddev	.00071	.00012	.0016	.016
%RSD	.62370	.16337	.06532	.07921
#1	.11328	.07473	2.5107	20.759
#2	.11463	.07479	2.5104	20.781
#3	.11436	.07497	2.5134	20.791

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S3 Acquired: 10/24/2025 14:20:43 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5502.9	90119.	7258.0	4222.6	6536.0
Stddev	14.5	295.	16.4	20.7	5.7
%RSD	.26370	.32733	.22635	.48908	.08698
#1	5493.2	89836.	7268.4	4201.2	6538.6
#2	5495.9	90424.	7266.6	4224.0	6529.5
#3	5519.6	90098.	7239.1	4242.4	6539.9

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S4 Acquired: 10/24/2025 14:24:54 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.26898**	**.26868**	**.99295**	**.21980**	**.47116**	**.90019**	**18.266**	**2.3638**	**7.5625**
Stddev	.00189	.01166	.00427	.00193	.00152	.00275	.089	.0022	.0433
%RSD	.70313	4.3395	.42977	.87680	.32250	.30525	.48847	.09158	.57283
#1	.26695	.25530	.98920	.21780	.46985	.89708	18.312	2.3623	7.5207
#2	.26929	.27410	.99205	.21995	.47081	.90231	18.323	2.3629	7.5596
#3	.27069	.27665	.99760	.22165	.47283	.90118	18.163	2.3663	7.6072

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.4701**	**.20478**	**2.6234**	**.83085**	**.01246**	**1.0446**	**.30235**	**1.4981**	**.25130**
Stddev	.0037	.00029	.0126	.00408	.00016	.0045	.00144	.0075	.00017
%RSD	.25009	.14103	.48123	.49083	1.2732	.42573	.47497	.50050	.06902
#1	1.4699	.20454	2.6122	.82754	.01239	1.0439	.30216	1.4917	.25112
#2	1.4739	.20469	2.6209	.82961	.01265	1.0493	.30387	1.4961	.25131
#3	1.4665	.20510	2.6370	.83541	.01235	1.0405	.30102	1.5063	.25147

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.17941**	**.32958**	**6.1663**	**.09329**	**3.7163**	**3.3620**	**.77122**	**1.5378**	**.01338**
Stddev	.00051	.00146	.0216	.00029	.0071	.0224	.00432	.0027	.00003
%RSD	.28419	.44181	.35093	.31275	.19224	.66524	.56051	.17418	.24695
#1	.17917	.32941	6.1417	.09296	3.7193	3.3396	.76680	1.5367	.01336
#2	.18000	.33111	6.1747	.09350	3.7214	3.3622	.77142	1.5409	.01342
#3	.17907	.32821	6.1825	.09341	3.7081	3.3843	.77544	1.5359	.01337

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.22303**	**.14525**	**4.7612**	**39.220**
Stddev	.00115	.00131	.0161	.115
%RSD	.51569	.90271	.33798	.29314
#1	.22208	.14374	4.7518	39.256
#2	.22431	.14593	4.7798	39.313
#3	.22271	.14609	4.7521	39.092

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S4 Acquired: 10/24/2025 14:24:54 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5528.4	90347.	7277.1	4229.5	6388.2
Stddev	23.8	128.	27.5	19.4	25.0
%RSD	.43116	.14155	.37753	.45889	.39063
#1	5543.8	90229.	7252.6	4244.8	6402.5
#2	5540.5	90328.	7271.9	4236.0	6402.7
#3	5501.0	90483.	7306.8	4207.7	6359.4

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S5 Acquired: 10/24/2025 14:29:06 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.56652**	**.54289**	**2.1156**	**.46373**	**.98943**	**1.8646**	**37.000**	**4.8254**	**15.990**
Stddev	.00219	.01417	.0055	.00273	.00673	.0063	.743	.0796	.048
%RSD	.38609	2.6098	.25759	.58765	.68067	.33900	2.0092	1.6496	.30023
#1	.56812	.54546	2.1184	.46574	.99609	1.8574	36.186	4.7336	15.998
#2	.56403	.52761	2.1094	.46063	.98262	1.8673	37.643	4.8756	15.939
#3	.56742	.55559	2.1191	.46482	.98959	1.8691	37.171	4.8669	16.034

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.0235**	**.42216**	**5.5696**	**1.7001**	**.02625**	**2.1304**	**.62670**	**3.1704**	**.53067**
Stddev	.0152	.00172	.0190	.0070	.00023	.0095	.00465	.0106	.00147
%RSD	.50243	.40763	.34055	.40916	.88944	.44553	.74234	.33380	.27760
#1	3.0060	.42059	5.5802	1.7056	.02652	2.1198	.62153	3.1748	.52899
#2	3.0334	.42400	5.5477	1.6922	.02610	2.1382	.63055	3.1583	.53172
#3	3.0311	.42189	5.5809	1.7024	.02612	2.1331	.62802	3.1780	.53132

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.37668**	**.68668**	**12.753**	**.19983**	**7.6528**	**6.8967**	**1.6240**	**3.1689**	**.02869**
Stddev	.00475	.00357	.052	.00210	.1261	.0317	.0062	.0095	.00020
%RSD	1.2604	.52016	.40596	1.0512	1.6474	.45997	.38240	.30046	.70599
#1	.38216	.68321	12.694	.20226	7.5073	6.9195	1.6227	3.1580	.02892
#2	.37417	.69034	12.783	.19857	7.7246	6.8605	1.6185	3.1754	.02854
#3	.37371	.68648	12.783	.19867	7.7267	6.9101	1.6307	3.1733	.02862

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.48258**	**.31937**	**9.7906**	**79.919**
Stddev	.00301	.00240	.0195	.537
%RSD	.62468	.75195	.19891	.67150
#1	.48380	.32014	9.7681	79.332
#2	.47915	.31667	9.8021	80.384
#3	.48480	.32129	9.8016	80.042

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: S5 Acquired: 10/24/2025 14:29:06 Type: Cal
Method: 6010-200.7 NEW(v308) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5220.4	85882.	7115.7	3925.3	5831.7
Stddev	20.2	250.	106.7	23.1	18.9
%RSD	.38651	.29063	1.4989	.58808	.32427
#1	5206.7	85942.	7236.6	3944.6	5823.9
#2	5243.6	85608.	7035.1	3899.7	5853.2
#3	5211.1	86096.	7075.3	3931.5	5817.9

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICV01 Acquired: 10/24/2025 14:33:21 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.946691**	**4.010212**	**3.831660**	**3.965162**	**4.014583**	**7.816199**
Stddev	.003566	.081410	.002335	.003670	.008871	.004257
%RSD	.0903617	2.030078	.0609414	.0925503	.2209599	.0544584
#1	3.950626	3.966747	3.830546	3.964406	4.008383	7.820606
#2	3.943672	4.104130	3.834343	3.961929	4.010622	7.815879
#3	3.945775	3.959758	3.830090	3.969150	4.024744	7.812111

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.702571**	**.1983100**	**1.952729**	**19.42713**	**.8115328**	**1.962817**
Stddev	.017753	.0003871	.001409	.07504	.0003949	.000917
%RSD	.2304874	.1952037	.0721363	.3862544	.0486594	.0467048
#1	7.722992	.1978869	1.952495	19.48766	.8118204	1.963850
#2	7.690799	.1986464	1.954240	19.34317	.8116953	1.962501
#3	7.693923	.1983969	1.951452	19.45055	.8110825	1.962100

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.012453**	**3.912338**	**1.921927**	**19.46911**	**1.965889**	**.9856361**
Stddev	.001261	.002069	.006290	.07794	.001104	.0013845
%RSD	.1245402	.0528748	.3272622	.4003079	.0561444	.1404647
#1	1.012859	3.914223	1.927268	19.44407	1.964655	.9849200
#2	1.011039	3.910125	1.914994	19.40678	1.966783	.9847564
#3	1.013461	3.912668	1.923518	19.55649	1.966228	.9872320

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.64352**	**1.945296**	**1.979441**	**19.09814**	**3.855170**	**4.013535**
Stddev	.09440	.009262	.002814	.05092	.000592	.002614
%RSD	.5063254	.4761228	.1421364	.2665983	.0153513	.0651355
#1	18.75102	1.948206	1.978580	19.14952	3.854640	4.014360
#2	18.57418	1.934928	1.982585	19.09719	3.855060	4.015638
#3	18.60536	1.952753	1.977159	19.04771	3.855809	4.010608

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICV01 Acquired: 10/24/2025 14:33:21 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.922953	3.857162	3.676229	F .0071298	F .0290161	F -.002264
Stddev	.009169	.011704	.011102	.0001877	.0029254	.001362
%RSD	.2337282	.3034411	.3019838	2.632663	10.08205	60.16693
#1	3.918080	3.867409	3.683940	.0071621	.0261337	-.003290
#2	3.933529	3.844407	3.663505	.0069281	.0319827	-.002783
#3	3.917249	3.859671	3.681242	.0072993	.0289320	-.000719

Elem	Sr4077
Units	ppm
Avg	F -.003075
Stddev	.000054
%RSD	1.759297
#1	-.003013
#2	-.003114
#3	-.003098

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5534.913	89862.66	7393.435	4167.904	6516.334
Stddev	8.972	15.04	7.200	22.623	8.424
%RSD	.1620999	.0167412	.0973813	.5427825	.1292767
#1	5525.335	89874.19	7398.823	4189.377	6506.974
#2	5543.121	89845.64	7396.224	4144.285	6518.724
#3	5536.284	89868.14	7385.258	4170.049	6523.306

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LLICV01 Acquired: 10/24/2025 14:38:12 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0230168**	**.0458710**	**.0128885**	**.0208044**	**.0526278**	**.1084305**	**.1002582**
Stddev	.0007296	.0047728	.0006909	.0014244	.0005584	.0051273	.0011701
%RSD	3.170052	10.40488	5.360935	6.846369	1.061019	4.728674	1.167045
#1	.0226950	.0419721	.0134452	.0221059	.0531028	.1132212	.0996451
#2	.0225034	.0444473	.0121152	.0192828	.0527678	.1090479	.0995222
#3	.0238521	.0511937	.0131051	.0210244	.0520127	.1030224	.1016075

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063973**	**.0060545**	**2.103756**	**.0104385**	**.0304928**	**.0228792**	**.1037907**
Stddev	.0000734	.0001474	.009377	.0002648	.0000944	.0002551	.0069870
%RSD	1.146939	2.435058	.4457264	2.536753	.3096614	1.115090	6.731806
#1	.0064801	.0060662	2.114080	.0107057	.0305047	.0228149	.0981017
#2	.0063717	.0059015	2.095766	.0104336	.0305807	.0226624	.1115894
#3	.0063402	.0061957	2.101423	.0101761	.0303930	.0231604	.1016809

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0219910**	**2.174898**	**.0407468**	**.0111786**	**1.897983**	**.0406001**	**.0439213**
Stddev	.0004552	.043402	.0002080	.0003432	.032906	.0020577	.0000561
%RSD	2.069965	1.995609	.5103670	3.069905	1.733725	5.068243	.1277586
#1	.0221440	2.125044	.0406696	.0109203	1.864870	.0420259	.0438828
#2	.0214790	2.204267	.0405885	.0110474	1.930678	.0415333	.0439857
#3	.0223499	2.195382	.0409823	.0115680	1.898401	.0382412	.0438953

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012117**	**.1138557**	**.2071809**	**.0397022**	**.0398994**	**.3772939**	**.0192105**
Stddev	.033027	.0007200	.0003198	.0003578	.0005414	.0074121	.0005806
%RSD	1.641415	.6323540	.1543563	.9011106	1.356823	1.964545	3.022413
#1	1.975993	.1143741	.2070291	.0393113	.0395026	.3795095	.0194582
#2	2.040766	.1130337	.2075484	.0397819	.0405161	.3833455	.0196262
#3	2.019593	.1141594	.2069654	.0400134	.0396794	.3690266	.0185471

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LLICV01 Acquired: 10/24/2025 14:38:12 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0221505	.0203854	.0215004
Stddev	.0022177	.0007304	.0002276
%RSD	10.01178	3.582923	1.058451
#1	.0235722	.0198725	.0215229
#2	.0232841	.0200620	.0212623
#3	.0195952	.0212216	.0217158

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5507.172	90880.30	7265.641	4222.454	6942.727
Stddev	6.517	392.62	22.902	18.538	14.330
%RSD	.1183369	.4320157	.3152030	.4390416	.2063967
#1	5511.907	91053.97	7240.133	4224.498	6952.862
#2	5499.739	90430.79	7284.436	4202.978	6926.332
#3	5509.869	91156.12	7272.353	4239.885	6948.986

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICB01 Acquired: 10/24/2025 14:43:40 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005225**	**-.003204**	**.0002466**	**-.000715**	**-.001053**	**.0101780**	**-.002863**
Stddev	.0011738	.000630	.0006352	.002236	.002184	.0103907	.000780
%RSD	224.6391	19.64643	257.5715	312.6031	207.3710	102.0896	27.24183
#1	.0017616	-.003744	.0002255	.001864	-.003429	.0048647	-.003344
#2	.0003788	-.002513	.0008920	-.002107	.000866	.0035183	-.003281
#3	-.000573	-.003357	-.000378	-.001902	-.000596	.0221509	-.001963

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000163**	**.0000375**	**-.003347**	**.0002131**	**-.000092**	**.0003341**	**.0034940**
Stddev	.000046	.0000579	.002865	.0002462	.000157	.0002433	.0040340
%RSD	28.42265	154.2898	85.59781	115.5647	169.8853	72.81843	115.4537
#1	-.000110	.0000476	-.006503	-.000069	.000046	.0002628	-.001153
#2	-.000194	.0000897	-.000910	.000386	-.000061	.0001344	.005546
#3	-.000186	-.000025	-.002628	.000322	-.000263	.0006050	.006090

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002037**	**.0070993**	**.0000607**	**.0006944**	**-.433441**	**-.000081**	**.0003571**
Stddev	.0003484	.0229095	.0003001	.0001548	.011972	.003211	.0003106
%RSD	171.0146	322.6994	494.2694	22.29169	2.762123	3948.961	86.96246
#1	.0005123	-.014899	-.000192	.0007334	-.445158	.003118	.0006259
#2	-.000174	.005374	.000392	.0008259	-.421229	-.003304	.0004284
#3	.000273	.030823	-.000019	.0005238	-.433937	-.000058	.0000171

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.120180**	**.0040337**	**.0002623**	**-.013337**	**-.000677**	**-.001790**	**.0004393**
Stddev	.038640	.0004331	.0000755	.000206	.000603	.006168	.0005228
%RSD	32.15143	10.73782	28.76233	1.542992	89.09059	344.5625	118.9880
#1	-.107566	.0045191	.0003325	-.013366	-.000652	-.006547	.0000490
#2	-.163550	.0038956	.0002720	-.013527	-.000086	.005178	.0010333
#3	-.089424	.0036865	.0001825	-.013119	-.001292	-.004001	.0002358

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICB01 Acquired: 10/24/2025 14:43:40 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0074630	-.006422	.0000231
Stddev	.0014755	.000465	.0000954
%RSD	19.77066	7.234619	413.5049
#1	.0091643	-.006538	.0001061
#2	.0065349	-.006818	.0000442
#3	.0066897	-.005911	-.000081

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5757.502	96256.73	7317.398	4489.925	7459.945
Stddev	2.763	282.27	12.723	19.364	2.118
%RSD	.0479918	.2932452	.1738751	.4312858	.0283899
#1	5760.531	96262.05	7325.039	4512.148	7462.125
#2	5756.855	95971.84	7302.710	4480.960	7459.816
#3	5755.120	96536.30	7324.443	4476.668	7457.895

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CRI01 Acquired: 10/24/2025 14:48:00 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0227144**	**.0462293**	**.0121151**	**.0213113**	**.0541965**	**.0973350**	**.1014896**
Stddev	.0007710	.0010342	.0007200	.0015837	.0007509	.0063655	.0003266
%RSD	3.394487	2.236992	5.943108	7.431169	1.385577	6.539819	.3218075
#1	.0218699	.0463701	.0127939	.0221456	.0546571	.0915435	.1018537
#2	.0228924	.0471858	.0113600	.0194849	.0546024	.0963111	.1012224
#3	.0233809	.0451319	.0121915	.0223035	.0533300	.1041505	.1013928

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065705**	**.0059319**	**2.125558**	**.0106194**	**.0305693**	**.0232312**	**.1116665**
Stddev	.0000671	.0000645	.025863	.0001799	.0000739	.0004913	.0056095
%RSD	1.020544	1.088097	1.216750	1.693579	.2418731	2.115005	5.023468
#1	.0065709	.0059901	2.139922	.0108115	.0305537	.0237276	.1179035
#2	.0066373	.0059431	2.141051	.0104549	.0305044	.0227450	.1070343
#3	.0065032	.0058625	2.095702	.0105918	.0306498	.0232210	.1100617

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0223423**	**2.131416**	**.0407587**	**.0114004**	**1.937661**	**.0413538**	**.0445026**
Stddev	.0003001	.027170	.0002675	.0003512	.012250	.0019377	.0003371
%RSD	1.343296	1.274759	.6562893	3.080477	.6322275	4.685604	.7574009
#1	.0223026	2.138654	.0406809	.0115787	1.926409	.0412269	.0447187
#2	.0220639	2.154235	.0405388	.0116267	1.935863	.0433517	.0441142
#3	.0226602	2.101360	.0410565	.0109958	1.950711	.0394826	.0446748

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024896**	**.1108460**	**.2067866**	**.0392653**	**.0406808**	**.3716379**	**.0194841**
Stddev	.025689	.0005107	.0005717	.0003665	.0027079	.0116959	.0010433
%RSD	1.268648	.4607157	.2764643	.9334485	6.656357	3.147118	5.354800
#1	1.995876	.1104136	.2069303	.0393236	.0416305	.3595984	.0206881
#2	2.034085	.1114094	.2061568	.0388732	.0427858	.3723584	.0188449
#3	2.044726	.1107149	.2072728	.0395993	.0376259	.3829569	.0189193

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CRI01 Acquired: 10/24/2025 14:48:00 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0247494	.0213720	.0212631
Stddev	.0013213	.0005759	.0001856
%RSD	5.338732	2.694857	.8728541
#1	.0257415	.0207284	.0211904
#2	.0252572	.0215486	.0214740
#3	.0232495	.0218389	.0211248

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5367.911	89942.83	7200.092	4143.453	6823.767
Stddev	5.156	234.36	29.162	14.828	7.498
%RSD	.0960518	.2605673	.4050264	.3578732	.1098805
#1	5363.104	89759.35	7218.889	4130.898	6817.652
#2	5373.357	90206.84	7166.498	4159.813	6821.516
#3	5367.273	89862.29	7214.889	4139.649	6832.132

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSA01 Acquired: 10/24/2025 14:52:18 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084422	.0152877	.0031965	.0072332	-.003328	249.9961	-.000701
Stddev	.0020177	.0041524	.0015847	.0036175	.003617	.3663	.000719
%RSD	23.90038	27.16145	49.57665	50.01172	108.6969	.1465096	102.6740
#1	.0073333	.0152253	.0018419	.0114012	-.001153	250.1627	-.001529
#2	.0072221	.0111670	.0049393	.0049112	-.001327	250.2494	-.000336
#3	.0107711	.0194710	.0028084	.0053872	-.007503	249.5761	-.000236

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015984	.0022829	237.0336	.0500113	.0020420	.0098105	99.15595
Stddev	.0000427	.0001465	.3023	.0002720	.0003308	.0015423	1.45278
%RSD	2.672720	6.418429	.1275149	.5438831	16.20018	15.72063	1.465145
#1	.0016270	.0023699	237.0346	.0497705	.0022927	.0100430	98.56035
#2	.0016190	.0021138	237.3354	.0503064	.0016670	.0081652	100.8119
#3	.0015493	.0023651	236.7309	.0499572	.0021662	.0112233	98.0956

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078694	251.2314	.0043536	.0021130	.1178018	.0032856	.0047838
Stddev	.0007552	.3514	.0001711	.0005198	.0092385	.0018261	.0005604
%RSD	9.596383	.1398594	3.930399	24.60172	7.842416	55.57827	11.71488
#1	.0072417	251.6305	.0041591	.0015490	.1071363	.0013861	.0054233
#2	.0087074	251.0949	.0044209	.0025729	.1229441	.0050281	.0043782
#3	.0076590	250.9688	.0044808	.0022172	.1233249	.0034424	.0045500

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1109515	.0152533	.0007827	.0059793	-.004261	.0158876	.0035249
Stddev	.0606753	.0068499	.0004466	.0006195	.001277	.0136744	.0013520
%RSD	54.68636	44.90733	57.05543	10.36137	29.96615	86.06986	38.35463
#1	.0535669	.0123103	.0012971	.0066755	-.003543	.0041793	.0024762
#2	.1744540	.0230829	.0005576	.0054887	-.003505	.0125669	.0050507
#3	.1048337	.0103668	.0004935	.0057735	-.005735	.0309165	.0030478

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSA01 Acquired: 10/24/2025 14:52:18 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0072068	F -.027863	.0032117
Stddev	.0043567	.000730	.0011160
%RSD	60.45185	2.619445	34.74852
#1	.0119772	-.028618	.0036761
#2	.0034384	-.027161	.0019384
#3	.0062049	-.027811	.0040205

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5107.228	82024.30	7156.944	3835.885	5578.651
Stddev	7.068	311.48	49.885	8.797	11.972
%RSD	.1383837	.3797402	.6970121	.2293231	.2145968
#1	5105.274	82155.06	7130.688	3844.810	5577.756
#2	5101.343	81668.76	7214.473	3827.223	5567.151
#3	5115.067	82249.09	7125.670	3835.622	5591.044

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSAB01 Acquired: 10/24/2025 14:56:31 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1103160**	**.1285914**	**.0516550**	**.0540033**	**.6101858**	**256.9169**
Stddev	.0002570	.0054818	.0024701	.0072307	.0027279	1.0381
%RSD	.2330037	4.262980	4.781957	13.38928	.4470549	.4040625
#1	.1105404	.1223212	.0500282	.0616158	.6122301	256.5158
#2	.1103721	.1324773	.0544973	.0472272	.6070883	258.0958
#3	.1100355	.1309758	.0504394	.0531669	.6112389	256.1393

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5064363**	**.5252553**	**1.027757**	**242.8299**	**.5659798**	**.5168173**
Stddev	.0036285	.0070164	.001559	1.2077	.0020674	.0001302
%RSD	.7164742	1.335816	.1517363	.4973279	.3652831	.0252006
#1	.5040869	.5216053	1.026383	242.3637	.5673940	.5167015
#2	.5106153	.5333444	1.029452	244.2012	.5669384	.5167920
#3	.5046066	.5208162	1.027435	241.9248	.5636071	.5169583

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4987869**	**100.7446**	**.5073479**	**257.6382**	**1.026031**	**.2127207**
Stddev	.0011692	.5762	.0022013	1.5727	.000552	.0009475
%RSD	.2344130	.5719686	.4338875	.6104120	.0537610	.4454249
#1	.4993634	100.9160	.5056830	256.8948	1.025402	.2116784
#2	.4995559	100.1021	.5098438	259.4447	1.026262	.2135299
#3	.4974413	101.2157	.5065170	256.5750	1.026431	.2129537

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0893248**	**.4994049**	**1.054608**	**.0461103**	**.9643674**	**.9951021**
Stddev	.0289962	.0050418	.004680	.0127049	.0097697	.0029586
%RSD	32.46153	1.009559	.4437206	27.55320	1.013068	.2973197
#1	.0741623	.4952645	1.059950	.0355416	.9611567	.9920423
#2	.0710535	.5050195	1.052640	.0602060	.9753384	.9979480
#3	.1227586	.4979308	1.051234	.0425833	.9566071	.9953159

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSAB01 Acquired: 10/24/2025 14:56:31 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.014136	.9839186	1.014443	F .0087032	F .0072220	F -.028888
Stddev	.003673	.0057467	.022553	.0006489	.0019394	.001264
%RSD	.3621881	.5840634	2.223170	7.456311	26.85388	4.376907
#1	1.010321	.9832166	1.037805	.0094524	.0093332	-.030295
#2	1.017648	.9899841	.992798	.0083176	.0068134	-.028522
#3	1.014438	.9785552	1.012726	.0083395	.0055195	-.027847

Elem	Sr4077
Units	ppm
Avg	F .0045453
Stddev	.0008502
%RSD	18.70389
#1	.0043529
#2	.0054752
#3	.0038079

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5080.918	81867.33	7069.408	3845.130	5530.127
Stddev	4.000	96.85	82.634	23.434	4.132
%RSD	.0787316	.1183005	1.168899	.6094415	.0747107
#1	5078.128	81756.27	7110.026	3818.085	5534.773
#2	5079.124	81911.49	6974.325	3859.407	5526.864
#3	5085.501	81934.23	7123.872	3857.898	5528.744

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSA01DLX20 Acquired: 10/24/2025 15:01:33 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036116**	**.0005457**	**.0011018**	**-.000728**	**.0013259**	**12.18624**	**-.003549**
Stddev	.0027236	.0013491	.0003267	.001178	.0002866	.02043	.001234
%RSD	75.41235	247.2432	29.65282	161.7603	21.61332	.1676580	34.76695
#1	.0049985	-.000002	.0009478	.000565	.0014284	12.20502	-.002314
#2	.0004737	-.000444	.0014771	-.001740	.0010022	12.18922	-.004782
#3	.0053625	.002082	.0008806	-.001009	.0015471	12.16448	-.003550

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000681**	**.0000685**	**12.17480**	**.0022942**	**.0001468**	**.0007715**	**4.873201**
Stddev	.0000764	.0000280	.06553	.0003031	.0001529	.0001789	.049445
%RSD	112.2341	40.91692	.5382640	13.21001	104.1881	23.18725	1.014637
#1	.0001563	.0000463	12.21870	.0026400	.0002630	.0008539	4.827107
#2	.0000218	.0001000	12.20624	.0021673	.0002038	.0008943	4.925426
#3	.0000261	.0000592	12.09947	.0020752	-.000026	.0005662	4.867069

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007497**	**12.49671**	**.0000490**	**.0007342**	**-.097477**	**-.000053**	**.0003496**
Stddev	.0005115	.04241	.0001221	.0002806	.026652	.002819	.0000386
%RSD	68.23697	.3393554	249.4505	38.22112	27.34179	5271.197	11.03566
#1	.0013383	12.52708	.0001335	.0006505	-.114564	-.002972	.0003938
#2	.0004972	12.51480	.0001044	.0005049	-.066767	.002655	.0003324
#3	.0004134	12.44826	-.000091	.0010471	-.111100	.000156	.0003226

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.059978**	**.0023429**	**-.000082**	**.0082491**	**.0003827**	**-.013025**	**-.001439**
Stddev	.009316	.0004508	.000081	.0008567	.0011727	.012943	.000474
%RSD	15.53271	19.24335	98.69405	10.38481	306.4663	99.37444	32.90188
#1	-.063922	.0027653	-.000065	.0072974	.0008148	-.000977	-.001015
#2	-.049338	.0023951	-.000169	.0089586	.0012780	-.011389	-.001951
#3	-.066672	.0018682	-.000011	.0084913	-.000945	-.026709	-.001352

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSA01DLX20 Acquired: 10/24/2025 15:01:33 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0050642	-.002498	.0004494
Stddev	.0009966	.000494	.0000935
%RSD	19.67979	19.78045	20.81591
#1	.0045778	-.002366	.0004203
#2	.0044041	-.002083	.0005540
#3	.0062106	-.003044	.0003738

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5455.096	89536.79	7226.108	4237.384	6677.525
Stddev	12.507	40.61	35.039	13.549	21.453
%RSD	.2292750	.0453565	.4848957	.3197514	.3212708
#1	5469.492	89583.41	7192.211	4248.066	6700.516
#2	5446.896	89517.87	7223.926	4222.144	6658.042
#3	5448.900	89509.10	7262.187	4241.944	6674.015

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSAB01DLX20 Acquired: 10/24/2025 15:07:53 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093749**	**.0088558**	**.0028420**	**.0014569**	**.0288357**	**12.50927**	**.0212085**
Stddev	.0014250	.0010327	.0002187	.0022287	.0011029	.02668	.0012994
%RSD	15.20043	11.66117	7.696321	152.9766	3.824864	.2132426	6.126759
#1	.0078891	.0080542	.0027998	.0011945	.0287715	12.48065	.0203725
#2	.0107302	.0100211	.0030787	.0038052	.0299693	12.53344	.0205476
#3	.0095054	.0084920	.0026474	-.000629	.0277663	12.51371	.0227056

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0263637**	**.0488434**	**12.45536**	**.0283595**	**.0248110**	**.0271495**	**4.976195**
Stddev	.0003443	.0000151	.03181	.0002521	.0000585	.0002217	.081988
%RSD	1.305858	.0309820	.2554126	.8891304	.2358852	.8165108	1.647598
#1	.0261211	.0488345	12.42088	.0280816	.0248546	.0273559	5.031086
#2	.0262123	.0488608	12.46161	.0285736	.0247445	.0269152	5.015550
#3	.0267578	.0488348	12.48358	.0284234	.0248338	.0271774	4.881950

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0263837**	**12.86582**	**.0494602**	**.0107287**	**-.112254**	**.0257116**	**.0523342**
Stddev	.0004834	.09287	.0003569	.0003339	.008986	.0019392	.0003390
%RSD	1.832209	.7218331	.7216100	3.111828	8.005477	7.541955	.6477922
#1	.0260425	12.79108	.0490644	.0106233	-.122262	.0260953	.0521543
#2	.0261718	12.83659	.0497575	.0104603	-.104877	.0236093	.0521232
#3	.0269369	12.96979	.0495588	.0111026	-.109621	.0274302	.0527253

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0109347**	**.0501676**	**.0521557**	**.0568901**	**.0507771**	**.0453219**	**-.000701**
Stddev	.0260305	.0007177	.0001432	.0002582	.0010485	.0065968	.001670
%RSD	238.0550	1.430587	.2746287	.4538520	2.064978	14.55548	238.2701
#1	-.018128	.0499800	.0520917	.0568517	.0508528	.0518040	.001223
#2	.018824	.0495624	.0523197	.0566533	.0517857	.0386160	-.001779
#3	.032108	.0509605	.0520556	.0571654	.0496928	.0455458	-.001546

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: ICSAB01DLX20 Acquired: 10/24/2025 15:07:53 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0046021	-.004976	.0003131
Stddev	.0021870	.002221	.0000981
%RSD	47.52159	44.62635	31.33917
#1	.0021735	-.006028	.0003442
#2	.0064160	-.002425	.0002032
#3	.0052168	-.006475	.0003920

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5489.305	89887.71	7209.106	4233.766	6727.542
Stddev	3.765	87.97	53.075	16.864	11.860
%RSD	.0685959	.0978720	.7362154	.3983211	.1762957
#1	5485.043	89932.08	7238.459	4244.387	6715.422
#2	5492.180	89786.38	7241.020	4242.591	6728.078
#3	5490.691	89944.66	7147.838	4214.321	6739.125

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV01 Acquired: 10/24/2025 15:12:04 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.126538**	**5.219710**	**5.060322**	**5.143939**	**5.105430**	**10.14501**	**9.805675**
Stddev	.016967	.292566	.009568	.024536	.009364	.01499	.055639
%RSD	.3309600	5.605018	.1890719	.4769882	.1834210	.1477722	.5674186
#1	5.107079	4.894404	5.052951	5.116752	5.105505	10.16129	9.772325
#2	5.138238	5.303453	5.056882	5.150627	5.096029	10.13177	9.869906
#3	5.134297	5.461273	5.071134	5.164437	5.114757	10.14198	9.774794

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2533747**	**2.545050**	**25.06948**	**1.025928**	**2.532754**	**1.280827**	**5.072505**
Stddev	.0008594	.006399	.04385	.000463	.004331	.001647	.033594
%RSD	.3391700	.2514180	.1749261	.0451284	.1710134	.1286159	.6622670
#1	.2542274	2.539376	25.08829	1.026451	2.529945	1.280831	5.085662
#2	.2533881	2.543787	25.01936	1.025572	2.530575	1.279177	5.097529
#3	.2525088	2.551985	25.10079	1.025760	2.537742	1.282472	5.034325

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.475556**	**25.06573**	**2.536820**	**1.271186**	**24.30114**	**2.497645**	**2.584606**
Stddev	.009890	.06594	.004375	.002684	.06647	.012069	.002137
%RSD	.3995139	.2630593	.1724613	.2111395	.2735226	.4832112	.0826908
#1	2.486356	25.10811	2.533369	1.269302	24.28214	2.510231	2.587054
#2	2.466941	25.09932	2.535349	1.274259	24.24625	2.486169	2.583652
#3	2.473372	24.98976	2.541740	1.269996	24.37505	2.496536	2.583111

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.90974**	**5.037678**	**5.119442**	**5.095399**	**4.969143**	**5.040832**	**5.091665**
Stddev	.06171	.015025	.013972	.017711	.012482	.002956	.046981
%RSD	.2477368	.2982468	.2729222	.3475802	.2511997	.0586421	.9226952
#1	24.85404	5.044115	5.104915	5.075041	4.983497	5.038335	5.037543
#2	24.89910	5.048412	5.120627	5.103896	4.960839	5.040067	5.115519
#3	24.97608	5.020507	5.132784	5.107260	4.963092	5.044096	5.121932

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV01 Acquired: 10/24/2025 15:12:04 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.058024**	**4.829790**	**4.997226**
Stddev	.055776	.003481	.010080
%RSD	1.102717	.0720729	.2017075
#1	4.994416	4.830656	4.999941
#2	5.081088	4.825958	5.005671
#3	5.098569	4.832757	4.986067

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5353.791**	**87700.59**	**7298.298**	**4053.702**	**6182.728**
Stddev	14.526	100.11	32.600	23.009	12.420
%RSD	.2713276	.1141469	.4466831	.5676067	.2008814
#1	5337.780	87664.33	7269.478	4027.529	6168.409
#2	5366.128	87623.66	7291.736	4070.744	6190.583
#3	5357.464	87813.77	7333.681	4062.833	6189.192

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB01 Acquired: 10/24/2025 15:16:15 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006303**	**.0026764**	**.0013323**	**-.001569**	**-.000915**	**.0162529**	**-.003382**
Stddev	.0010504	.0012776	.0003480	.001376	.000600	.0065148	.001272
%RSD	166.6397	47.73702	26.11827	87.67547	65.53607	40.08385	37.60709
#1	-.000049	.0019905	.0015839	-.000909	-.001555	.0236146	-.002604
#2	.001840	.0041505	.0014778	-.000647	-.000826	.0112317	-.004850
#3	.000100	.0018882	.0009352	-.003150	-.000365	.0139125	-.002693

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000030**	**.0000425**	**.0199988**	**-.000024**	**.0001544**	**.0002883**	**.0033002**
Stddev	.000056	.0000129	.0136779	.000045	.0000253	.0001630	.0093913
%RSD	188.3633	30.25515	68.39346	186.3056	16.39736	56.54208	284.5694
#1	-.000070	.0000492	.0099295	-.000002	.0001327	.0003817	-.002001
#2	-.000053	.0000506	.0355710	-.000076	.0001483	.0003831	.014143
#3	.000034	.0000277	.0144958	.000005	.0001822	.0001001	-.002242

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001959**	**-.013485**	**-.000202**	**.0006834**	**-.146623**	**.0013919**	**.0006187**
Stddev	.0003203	.018848	.000351	.0003205	.005702	.0005261	.0001196
%RSD	163.5178	139.7669	174.0016	46.89731	3.888859	37.79610	19.33903
#1	.0004656	-.033308	-.000129	.0004899	-.148209	.0007955	.0007383
#2	-.000158	-.011355	-.000583	.0005070	-.140295	.0017901	.0006186
#3	.000280	.004207	.000107	.0010534	-.151363	.0015901	.0004991

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.034013**	**.0062345**	**.0004763**	**.0022827**	**.0005563**	**.0061448**	**.0002546**
Stddev	.029278	.0007310	.0002525	.0003719	.0003328	.0095642	.0008411
%RSD	86.07887	11.72430	53.00895	16.29322	59.82424	155.6488	330.3734
#1	-.042294	.0059358	.0005015	.0024086	.0009080	.0114928	-.000081
#2	-.058259	.0070676	.0002122	.0025753	.0002464	.0118388	-.000367
#3	-.001487	.0057003	.0007152	.0018641	.0005145	-.004897	.001212

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB01 Acquired: 10/24/2025 15:16:15 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.001026	-.002723	.0002509
Stddev	.002333	.001347	.0000431
%RSD	227.3400	49.46889	17.16705
#1	-.003653	-.004129	.0002848
#2	.000805	-.001444	.0002024
#3	-.000230	-.002595	.0002656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5440.790	90655.60	7234.082	4200.402	7030.418
Stddev	15.073	438.68	26.466	28.045	28.396
%RSD	.2770448	.4838990	.3658449	.6676716	.4039056
#1	5438.066	91110.86	7232.950	4204.653	7022.957
#2	5427.265	90620.31	7261.096	4226.079	7006.498
#3	5457.040	90235.63	7208.201	4170.475	7061.800

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170225BL Acquired: 10/24/2025 15:20:34 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008791	.0000467	.0003020	.0006051	-.000033	-.004318	-.000796
Stddev	.0015065	.0019820	.0004373	.0010410	.001252	.006745	.002569
%RSD	171.3553	4241.082	144.7705	172.0292	3785.348	156.2199	322.7385
#1	.0022797	.0012813	.0000366	.0008145	-.000909	-.000437	-.003459
#2	.0010723	-.002239	.0000628	-.000525	.001401	-.000410	-.000597
#3	-.000715	.001098	.0008067	.001526	-.000592	-.012107	.001667

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000050	.0000145	.0063186	-.000182	.0000315	.0002249	-.001120
Stddev	.000038	.0000324	.0050284	.000097	.0000183	.0001263	.004682
%RSD	75.14884	223.6922	79.58114	53.28451	58.25044	56.16340	418.2322
#1	-.000093	.0000286	.0097235	-.000115	.0000475	.0001806	.004076
#2	-.000021	.0000374	.0005431	-.000293	.0000115	.0003675	-.002421
#3	-.000037	-.000023	.0086891	-.000138	.0000355	.0001268	-.005013

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001964	-.027636	-.000058	.0006195	-.145862	-.001755	.0005706
Stddev	.0003351	.017473	.000081	.0005131	.020909	.002254	.0000825
%RSD	170.5959	63.22522	140.0235	82.81983	14.33466	128.4519	14.46605
#1	.0005499	-.008297	-.000129	.0001884	-.122215	-.003344	.0006617
#2	-.000117	-.032327	.000030	.0011871	-.153468	-.002746	.0005009
#3	.000156	-.042286	-.000073	.0004832	-.161904	.000825	.0005491

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.082120	.0019035	.0001913	.0004773	-.000077	-.004521	.0002781
Stddev	.030582	.0007119	.0002546	.0004125	.000569	.012775	.0004332
%RSD	37.24050	37.39974	133.0832	86.42829	734.3390	282.5992	155.7838
#1	-.046813	.0010913	.0004525	.0000021	.000505	-.012421	.0007453
#2	-.100322	.0024194	.0001777	.0007434	-.000105	.010218	-.000110
#3	-.099225	.0021999	-.000056	.0006865	-.000632	-.011359	.000199

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170225BL Acquired: 10/24/2025 15:20:34 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.002050	-.001813	.0000443
Stddev	.001197	.000506	.0001124
%RSD	58.40951	27.90403	253.6276
#1	-.002822	-.001229	-.000027
#2	-.002656	-.002125	.000174
#3	-.000671	-.002084	-.000014

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5456.027	90681.48	7087.459	4262.913	7012.222
Stddev	2.441	46.11	27.528	13.501	2.236
%RSD	.0447408	.0508433	.3884051	.3167171	.0318923
#1	5458.241	90661.10	7118.249	4250.023	7011.921
#2	5453.409	90734.26	7078.903	4276.952	7010.151
#3	5456.430	90649.07	7065.225	4261.764	7014.593

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170225BS Acquired: 10/24/2025 15:24:53 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7869132**	**1.961928**	**.9620576**	**1.993697**	**.8226908**	**1.999504**	**.2033171**
Stddev	.0035227	.069225	.0047146	.006161	.0037990	.005752	.0015007
%RSD	.4476617	3.528421	.4900520	.3090461	.4617826	.2876530	.7380847
#1	.7835828	1.925940	.9566138	1.986901	.8227451	2.003239	.2021759
#2	.7906010	2.041734	.9648020	1.998919	.8188649	1.992881	.2050170
#3	.7865557	1.918109	.9647571	1.995271	.8264624	2.002393	.2027585

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2057894**	**.1918200**	**1.033285**	**.4033428**	**.1972125**	**.3170857**	**3.037094**
Stddev	.0012295	.0003139	.010294	.0016360	.0003888	.0005405	.025505
%RSD	.5974739	.1636481	.9962834	.4056061	.1971377	.1704532	.8397805
#1	.2048877	.1916288	1.024206	.4052210	.1969777	.3165213	3.056984
#2	.2052905	.1921823	1.031181	.4022287	.1976613	.3171372	3.045957
#3	.2071900	.1916489	1.044469	.4025787	.1969985	.3175985	3.008340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2101410**	**2.022804**	**.4955252**	**.0768999**	**2.785781**	**.3035373**	**.2076388**
Stddev	.0005191	.026131	.0007517	.0004124	.032714	.0021144	.0008554
%RSD	.2470152	1.291818	.1516956	.5362272	1.174320	.6965812	.4119544
#1	.2095706	2.029251	.4948332	.0771366	2.774819	.3028940	.2073484
#2	.2102665	2.045107	.4963249	.0771394	2.822568	.3018192	.2069664
#3	.2105858	1.994053	.4954173	.0764238	2.759956	.3058986	.2086015

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.709140**	**.3049189**	**.4123853**	**.6806292**	**.2017141**	**.8710858**	**5.621405**
Stddev	.124988	.0015780	.0011243	.0017861	.0010307	.0087055	.020395
%RSD	1.287322	.5175238	.2726405	.2624129	.5109674	.9993813	.3628012
#1	9.837261	.3034270	.4111426	.6787732	.2011422	.8790949	5.627453
#2	9.702618	.3047588	.4133320	.6823359	.2010962	.8723421	5.638091
#3	9.587540	.3065708	.4126814	.6807784	.2029040	.8618204	5.598671

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170225BS Acquired: 10/24/2025 15:24:53 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.004225	.2033037	.2012867
Stddev	.000476	.0017942	.0002785
%RSD	11.27515	.8825367	.1383364
#1	-.003921	.2029328	.2009830
#2	-.003980	.2017239	.2013473
#3	-.004774	.2052544	.2015300

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5485.230	91121.59	7185.384	4336.675	6773.543
Stddev	6.192	426.99	36.594	13.932	5.928
%RSD	.1128909	.4685892	.5092864	.3212513	.0875108
#1	5480.073	90631.63	7207.804	4322.573	6769.975
#2	5492.098	91318.92	7205.192	4350.430	6770.269
#3	5483.520	91414.22	7143.155	4337.021	6780.386

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-2 Acquired: 10/24/2025 15:33:22 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1219988**	**-.067989**	**.1157756**	**.0153529**	**-.136715**	**1932.128**	**.0227106**
Stddev	.0076860	.004170	.0066818	.0045857	.002787	35.553	.0015712
%RSD	6.300034	6.133351	5.771323	29.86873	2.038851	1.840089	6.918361
#1	.1308204	-.072609	.1089547	.0204867	-.137463	1898.445	.0210849
#2	.1167468	-.064505	.1160633	.0139091	-.139053	1928.644	.0228258
#3	.1184291	-.066853	.1223090	.0116628	-.133630	1969.294	.0242210

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0422068**	**.0277407**	**10.93894**	**-.255040**	**.0654177**	**.1756525**	**2661.815**
Stddev	.0005231	.0007932	.21610	.000677	.0000789	.0037947	5.593
%RSD	1.239448	2.859478	1.975502	.2654775	.1205297	2.160363	.2101100
#1	.0418176	.0286411	10.81342	-.254581	.0653869	.1758618	2657.797
#2	.0420013	.0271448	10.81494	-.255817	.0655073	.1717575	2668.203
#3	.0428015	.0274362	11.18847	-.254721	.0653589	.1793383	2659.446

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.202580**	**1.092358**	**.0474187**	**^ *****	**3.814174**	**.0503225**	**.0722893**
Stddev	.000869	.006920	.0014959	-----	.075790	.0017217	.0020450
%RSD	.4291944	.6334508	3.154589	-----	1.987072	3.421360	2.828914
#1	-.202545	1.090572	.0462370	^ -----	3.796910	.0490210	.0738969
#2	-.203467	1.099995	.0469185	^ -----	3.897106	.0522748	.0729834
#3	-.201729	1.086506	.0491006	^ -----	3.748504	.0496718	.0699875

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1902.213**	**^ *****	**-.015275**	**.0230955**	**.0044883**	**.4879168**	**.0852635**
Stddev	4.153	-----	.001127	.0004712	.0009943	.0032797	.0064231
%RSD	.2183004	-----	7.376296	2.040219	22.15222	.6721927	7.533282
#1	1897.511	^ -----	-.014351	.0236228	.0055723	.4849823	.0793274
#2	1903.750	^ -----	-.014945	.0227157	.0042738	.4914573	.0920824
#3	1905.378	^ -----	-.016530	.0229480	.0036188	.4873108	.0843808

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-2 Acquired: 10/24/2025 15:33:22 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.465130	.2676922	-2.55159
Stddev	.003356	.0024612	.00537
%RSD	.7215499	.9194341	.2105519
#1	-.466589	.2662781	-2.54782
#2	-.467511	.2705341	-2.55774
#3	-.461292	.2662642	-2.54922

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4642.282	71757.38	6777.908	3450.909	4753.675
Stddev	3.565	32.60	56.278	19.073	9.331
%RSD	.0768048	.0454372	.8303220	.5526839	.1962811
#1	4638.657	71781.20	6809.229	3469.757	4755.185
#2	4642.405	71770.72	6811.559	3431.620	4743.681
#3	4645.785	71720.22	6712.938	3451.349	4762.158

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-3 Acquired: 10/24/2025 15:37:51 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1009421	.0287872	233.0419	.0036065	.1287433	.0836622	.0015717
Stddev	.0002788	.0033135	.6443	.0010547	.0041011	.0019525	.0012732
%RSD	.2761658	11.51022	.2764645	29.24517	3.185453	2.333836	81.00902
#1	.1012027	.0273690	233.7827	.0043649	.1309114	.0842812	.0013585
#2	.1006482	.0325737	232.7310	.0024020	.1240133	.0814752	.0004185
#3	.1009753	.0264189	232.6120	.0040526	.1313053	.0852302	.0029380

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005489	-.001405	.2474917	24.51025	.0066759	54.51720	.1583551
Stddev	.000120	.000032	.0080765	.08531	.0001010	.20658	.0042646
%RSD	2.186343	2.284209	3.263355	.3480648	1.513223	.3789264	2.693058
#1	-.005397	-.001405	.2407205	24.48481	.0066378	54.71081	.1614373
#2	-.005446	-.001373	.2453236	24.60538	.0067905	54.29972	.1534880
#3	-.005625	-.001437	.2564310	24.44054	.0065995	54.54105	.1601399

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.64631	-.049728	23.96344	.0047699	.6733729	-.031196	30.10355
Stddev	1.02971	.018291	.09519	.0004314	.0183232	.003950	.11049
%RSD	1.884323	36.78197	.3972096	9.044751	2.721107	12.66050	.3670228
#1	53.67648	-.061408	24.06683	.0050617	.6807176	-.033731	30.16963
#2	54.53549	-.028648	23.87944	.0042743	.6868842	-.026646	30.16502
#3	55.72695	-.059127	23.94405	.0049737	.6525167	-.033212	29.97600

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5344005	.0011894	-.015023	-.005321	-.044733	-.109551	.1592619
Stddev	.0653540	.0005839	.000170	.000516	.001879	.004448	.0022750
%RSD	12.22941	49.09668	1.129769	9.705043	4.199967	4.060192	1.428461
#1	.5875455	.0010884	-.015022	-.005578	-.045187	-.114525	.1566487
#2	.5542268	.0006625	-.015193	-.005658	-.046343	-.105954	.1603367
#3	.4614292	.0018172	-.014854	-.004726	-.042669	-.108174	.1608004

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-3 Acquired: 10/24/2025 15:37:51 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0636138	.0030895	.0005751
Stddev	.0069047	.0025832	.0000260
%RSD	10.85409	83.61146	4.524537
#1	.0677410	.0060370	.0005600
#2	.0674577	.0020118	.0005601
#3	.0556426	.0012197	.0006051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5112.097	89660.09	7151.830	4015.769	6695.378
Stddev	15.466	402.62	93.785	30.551	15.324
%RSD	.3025337	.4490560	1.311343	.7607819	.2288730
#1	5104.033	89478.31	7260.053	3986.666	6683.085
#2	5129.928	89380.41	7101.110	4013.053	6712.546
#3	5102.329	90121.55	7094.327	4047.588	6690.503

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-1 Acquired: 10/24/2025 15:42:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0112401**	**.0131373**	**.0256447**	**-.014824**	**.0239525**	**.4707634**	**.0161795**
Stddev	.0041321	.0021770	.0010549	.003309	.0005941	.0088300	.0016157
%RSD	36.76180	16.57144	4.113641	22.32380	2.480483	1.875686	9.985956
#1	.0144733	.0148431	.0265508	-.011384	.0237218	.4692581	.0171347
#2	.0126621	.0106853	.0258967	-.015105	.0235084	.4627827	.0143141
#3	.0065848	.0138835	.0244866	-.017985	.0246274	.4802493	.0170899

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010281**	**.0012374**	**2237.636**	**.0648217**	**.0072506**	**.0121609**	**.9455519**
Stddev	.0000903	.0000345	20.907	.0002947	.0000817	.0006635	.0061645
%RSD	8.781276	2.786825	.9343370	.4545728	1.127287	5.456091	.6519516
#1	.0010626	.0012461	2221.930	.0645349	.0071563	.0128698	.9447804
#2	.0009257	.0012667	2261.367	.0651236	.0072949	.0120580	.9398095
#3	.0010961	.0011994	2229.613	.0648067	.0073007	.0115549	.9520659

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0329476**	**2174.363**	**.0489029**	**.0032955**	**2527.614**	**.0119280**	**.0850173**
Stddev	.0005484	7.016	.0002512	.0002134	33.861	.0051501	.0002089
%RSD	1.664557	.3226765	.5135587	6.475283	1.339638	43.17634	.2457266
#1	.0330838	2170.126	.0486840	.0032431	2495.409	.0142305	.0850396
#2	.0334151	2182.462	.0491771	.0031131	2562.918	.0155251	.0852142
#3	.0323439	2170.502	.0488476	.0035302	2524.516	.0060284	.0847982

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.120679**	**.0097970**	**.0135198**	**-.007384**	**-.100075**	**-.010519**	**.0163822**
Stddev	.540368	.0011524	.0002602	.000941	.002806	.024298	.0013654
%RSD	13.11357	11.76305	1.924353	12.74350	2.803901	230.9796	8.334590
#1	3.543269	.0089617	.0134602	-.006788	-.100735	.006937	.0179570
#2	4.204576	.0093175	.0138046	-.006894	-.096998	-.038270	.0156607
#3	4.614192	.0111117	.0132946	-.008468	-.102492	-.000225	.0155289

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: LR-1 Acquired: 10/24/2025 15:42:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2598571	-.345857	.0587404
Stddev	.0118985	.004275	.0002699
%RSD	4.578862	1.235918	.4595178
#1	.2630341	-.344399	.0589191
#2	.2698446	-.350670	.0584299
#3	.2466926	-.342503	.0588723

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3579.338	60454.98	6172.740	2804.747	3780.202
Stddev	19.482	229.38	37.382	10.389	9.427
%RSD	.5442949	.3794309	.6056013	.3704094	.2493881
#1	3600.557	60698.43	6205.373	2815.479	3787.132
#2	3562.258	60242.88	6131.954	2794.739	3769.466
#3	3575.201	60423.62	6180.894	2804.023	3784.007

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3422-02 Acquired: 10/24/2025 15:51:14 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011368**	**-.002619**	**.0010518**	**.0240300**	**.0024111**	**.0056040**	**-.001118**
Stddev	.0018766	.002195	.0007722	.0034313	.0004408	.0030312	.000337
%RSD	165.0832	83.82730	73.41368	14.27929	18.28362	54.08955	30.14849
#1	.0026045	-.000512	.0014234	.0274848	.0021559	.0063835	-.000965
#2	-.000978	-.002451	.0015679	.0239824	.0029201	.0081694	-.001505
#3	.001783	-.004893	.0001641	.0206227	.0021572	.0022592	-.000885

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000144**	**-.000018**	**.0470118**	**.0053107**	**-.000139**	**.0007511**	**.0275015**
Stddev	.000011	.000036	.0062356	.0003318	.000061	.0003354	.0076127
%RSD	7.860993	197.8737	13.26386	6.247722	43.97719	44.65728	27.68113
#1	-.000133	-.000041	.0418568	.0049289	-.000069	.0011108	.0265674
#2	-.000144	-.000036	.0539427	.0055290	-.000162	.0006956	.0203989
#3	-.000155	.000023	.0452359	.0054742	-.000185	.0004468	.0355381

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023340**	**.0415975**	**.0011019**	**.0004334**	**.1294906**	**.0015566**	**.0021828**
Stddev	.0001980	.0194145	.0000918	.0007726	.0217661	.0030799	.0001522
%RSD	8.484142	46.67218	8.330207	178.2709	16.80902	197.8653	6.974388
#1	.0023992	.0559822	.0011615	.0013193	.1446357	.0050848	.0020070
#2	.0021116	.0492960	.0009962	-.000101	.1392886	.0001790	.0022732
#3	.0024912	.0195145	.0011479	.000082	.1045476	-.000594	.0022681

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.055884**	**-.000481**	**.0004333**	**-.010010**	**.0011339**	**.0075231**	**.0067388**
Stddev	.027139	.000595	.0002266	.000377	.0006711	.0049083	.0016576
%RSD	48.56376	123.6536	52.28186	3.762250	59.18148	65.24283	24.59807
#1	-.047576	-.000407	.0001742	-.010327	.0014762	.0024196	.0067313
#2	-.086207	-.001111	.0005318	-.009593	.0015649	.0079403	.0084001
#3	-.033870	.000073	.0005940	-.010108	.0003607	.0122096	.0050849

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3422-02 Acquired: 10/24/2025 15:51:14 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0766234	-.007775	.0002472
Stddev	.0018465	.002037	.0000641
%RSD	2.409846	26.20281	25.94433
#1	.0786380	-.006617	.0002110
#2	.0750114	-.006581	.0002094
#3	.0762207	-.010128	.0003213

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5515.612	92152.39	7017.464	4200.867	7216.186
Stddev	17.674	254.45	18.170	9.732	14.704
%RSD	.3204443	.2761183	.2589187	.2316612	.2037631
#1	5502.378	91891.64	7018.381	4211.114	7199.342
#2	5508.773	92400.03	7035.158	4199.738	7222.756
#3	5535.684	92165.49	6998.854	4191.749	7226.459

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3434-02 Acquired: 10/24/2025 15:55:50 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0172709	-.005306	.1419183	.0166100	.0094242	8.424387
Stddev	.0007564	.000722	.0014075	.0040153	.0013000	.010770
%RSD	4.379534	13.60038	.9917308	24.17375	13.79455	.1278444
#1	.0169298	-.005474	.1435272	.0131388	.0079266	8.431051
#2	.0181378	-.005930	.1413125	.0156837	.0102616	8.430149
#3	.0167451	-.004516	.1409151	.0210075	.0100845	8.411962

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4651355	.0004151	.0024898	155.7241	.0908376	.0067397
Stddev	.0021946	.0000848	.0000421	.2705	.0005562	.0002081
%RSD	.4718103	20.42403	1.691267	.1736735	.6122708	3.088221
#1	.4631374	.0003621	.0025050	155.8395	.0902278	.0066902
#2	.4674843	.0003704	.0025222	155.9177	.0913170	.0069682
#3	.4647849	.0005129	.0024422	155.4151	.0909678	.0065608

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1019672	22.52155	1.127798	477.7935	.0312257	.0041524
Stddev	.0004439	.26849	.002106	1.9608	.0005881	.0004363
%RSD	.4353891	1.192164	.1867144	.4103780	1.883425	10.50686
#1	.1015362	22.21157	1.125599	479.2127	.0319016	.0036637
#2	.1019423	22.67176	1.129796	478.6117	.0308304	.0042906
#3	.1024230	22.68133	1.128001	475.5562	.0309451	.0045028

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 4042.644	.0274166	.6334742	238.6260	1.495136	.0246476
Stddev	19.918	.0017598	.0008482	3.5143	.013194	.0001390
%RSD	.4927093	6.418619	.1339034	1.472712	.8824731	.5641109
#1	4024.774	.0255776	.6344516	234.8113	1.508898	.0245179
#2	4064.119	.0275877	.6329306	239.3349	1.493914	.0246306
#3	4039.040	.0290846	.6330404	241.7318	1.482595	.0247944

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3434-02 Acquired: 10/24/2025 15:55:50 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050028	.2345427	F 23.43294	3.709824	F 395.4251	.0811164
Stddev	.0007119	.0031404	.19416	.024430	2.9936	.0015497
%RSD	14.23085	1.338933	.8285917	.6585117	.7570552	1.910508
#1	.0045211	.2312196	23.24001	3.684245	392.5632	.0799103
#2	.0046668	.2374612	23.43050	3.712313	395.1772	.0805745
#3	.0058206	.2349474	23.62831	3.732914	398.5349	.0828643

Elem	Sr4077
Units	ppm
Avg	2.713181
Stddev	.020071
%RSD	.7397624
#1	2.711234
#2	2.694155
#3	2.734155

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4105.840	67307.69	6927.056	3143.711	4272.563
Stddev	9.276	180.38	82.884	8.592	10.030
%RSD	.2259218	.2679931	1.196528	.2733026	.2347461
#1	4112.281	67110.18	6839.767	3135.122	4283.207
#2	4095.208	67349.19	6936.711	3152.306	4271.194
#3	4110.031	67463.71	7004.689	3143.705	4263.289

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3417-01 Acquired: 10/24/2025 16:00:15 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5533084**	F **-1.26531**	**-.057338**	**1.328961**	**.3112514**	**.6027663**	**-.011628**
Stddev	.0056735	.01680	.001050	.021072	.0046916	.0040210	.000876
%RSD	1.025378	1.327443	1.830955	1.585591	1.507330	.6670938	7.530948
#1	.5473741	-1.25092	-.058422	1.307602	.3119898	.6066760	-.012411
#2	.5586790	-1.26124	-.057265	1.349734	.3155299	.6029803	-.010682
#3	.5538722	-1.28377	-.056327	1.329547	.3062343	.5986426	-.011791

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018939**	**-.000087**	**3.172242**	**.0012474**	**.0144253**	**.0466009**	**36.75744**
Stddev	.0000234	.000138	.040850	.0004346	.0000489	.0012520	.21234
%RSD	1.234907	157.8794	1.287730	34.83979	.3392356	2.686683	.5776847
#1	.0019051	-.000119	3.135627	.0017419	.0144816	.0451621	36.52044
#2	.0019095	-.000206	3.216303	.0009266	.0143934	.0474429	36.93039
#3	.0018670	.000064	3.164797	.0010736	.0144008	.0471976	36.82148

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6882365**	**.5202777**	**.0245347**	**.0033521**	**17.48902**	**-.000571**	**.1905582**
Stddev	.0072216	.0257345	.0000977	.0005504	.13391	.000615	.0010192
%RSD	1.049290	4.946295	.3981444	16.41825	.7657023	107.7025	.5348442
#1	.6812027	.5107267	.0244589	.0028589	17.38742	-.000518	.1916708
#2	.6956323	.5494221	.0245003	.0039458	17.64077	.000016	.1903341
#3	.6878743	.5006841	.0246450	.0032516	17.43887	-.001211	.1896697

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.38727**	**.1600088**	**.0057043**	**.4942441**	**.0041825**	**.7168486**	**3.345184**
Stddev	.22321	.0023891	.0000913	.0037339	.0004845	.0021571	.031800
%RSD	.4710371	1.493086	1.601067	.7554798	11.58377	.3009179	.9506105
#1	47.15116	.1573593	.0057382	.4899338	.0037787	.7160122	3.312354
#2	47.59483	.1606681	.0057739	.4964888	.0047198	.7152349	3.375842
#3	47.41582	.1619989	.0056009	.4963097	.0040491	.7192986	3.347356

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3417-01 Acquired: 10/24/2025 16:00:15 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**9.312178**	**-.001148**	**-.024197**
Stddev	.115514	.000664	.000054
%RSD	1.240457	57.83766	.2211421
#1	9.179067	-.001802	-.024137
#2	9.386114	-.000475	-.024214
#3	9.371353	-.001167	-.024240

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4976.285**	**79144.95**	**7436.594**	**3850.564**	**6293.803**
Stddev	39.229	175.93	75.763	18.078	43.110
%RSD	.7883284	.2222876	1.018788	.4694946	.6849659
#1	5007.399	79058.45	7406.860	3835.278	6327.385
#2	4932.217	79029.01	7380.208	3845.895	6245.189
#3	4989.240	79347.38	7522.714	3870.519	6308.834

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV02 Acquired: 10/24/2025 16:32:12 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.130229**	**5.187898**	**5.113869**	**5.122566**	**5.068437**	**10.33686**
Stddev	.004951	.147450	.023383	.002148	.020154	.05968
%RSD	.0964998	2.842189	.4572407	.0419349	.3976281	.5773221
#1	5.135187	5.184692	5.140233	5.125042	5.088838	10.34476
#2	5.125285	5.042077	5.095644	5.121441	5.067932	10.39219
#3	5.130215	5.336925	5.105728	5.121213	5.048540	10.27362

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.14209**	**.2675559**	**2.581096**	**25.66293**	**1.047568**	**2.564152**
Stddev	.06606	.0005523	.013158	.09172	.000384	.012172
%RSD	.6513117	.2064244	.5097649	.3574215	.0366833	.4746979
#1	10.19627	.2679848	2.595452	25.71684	1.047265	2.577761
#2	10.16149	.2677502	2.569612	25.71493	1.047439	2.554306
#3	10.06850	.2669327	2.578223	25.55702	1.048000	2.560388

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.288183**	**5.075015**	**2.555098**	**25.90813**	**2.566213**	**1.302603**
Stddev	.005335	.018637	.010254	.07621	.012559	.002352
%RSD	.4141233	.3672207	.4013075	.2941397	.4894039	.1805686
#1	1.294148	5.087538	2.561903	25.94526	2.580324	1.303481
#2	1.286535	5.053598	2.560086	25.95866	2.556261	1.299938
#3	1.283868	5.083909	2.543304	25.82048	2.562052	1.304389

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.22903**	**2.551100**	**2.606210**	**25.96189**	**5.356281**	**5.152479**
Stddev	.23015	.021139	.005488	.08870	.009409	.012627
%RSD	.8452264	.8286298	.2105618	.3416546	.1756584	.2450583
#1	27.41619	2.554983	2.611632	26.05240	5.361437	5.167021
#2	27.29884	2.570029	2.600659	25.87511	5.361985	5.144293
#3	26.97206	2.528289	2.606338	25.95817	5.345421	5.146125

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV02 Acquired: 10/24/2025 16:32:12 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.151359**	**5.084536**	F **5.622870**	**5.138682**	**5.105444**	**5.063326**
Stddev	.021201	.026402	.029052	.016660	.027045	.030383
%RSD	.4115517	.5192629	.5166829	.3242130	.5297192	.6000536
#1	5.171509	5.107494	5.589746	5.157828	5.120092	5.087286
#2	5.129245	5.090429	5.634833	5.127485	5.074235	5.073540
#3	5.153322	5.055686	5.644031	5.130734	5.122005	5.029152

Elem	Sr4077
Units	ppm
Avg	**5.019290**
Stddev	.065504
%RSD	1.305037
#1	5.015062
#2	5.086806
#3	4.956003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5283.114**	**84639.07**	**6893.647**	**3917.469**	**6091.855**
Stddev	14.363	198.82	43.376	5.625	21.478
%RSD	.2718664	.2349073	.6292147	.1435939	.3525636
#1	5268.460	84713.61	6888.741	3923.964	6067.172
#2	5283.714	84413.74	6852.932	3914.312	6106.279
#3	5297.168	84789.84	6939.267	3914.131	6102.116

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB02 Acquired: 10/24/2025 16:47:26 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014543**	**-.001522**	**.0009109**	**.0021860**	**.0002958**	**-.007683**
Stddev	.0002898	.000361	.0002925	.0027724	.0006943	.015184
%RSD	19.92714	23.71665	32.11013	126.8258	234.7328	197.6380
#1	.0012782	-.001757	.0007497	.0045469	.0006632	.005132
#2	.0017888	-.001703	.0007345	-.000867	.0007292	-.024454
#3	.0012958	-.001107	.0012485	.002878	-.000505	-.003727

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010715**	**-.000084**	**.0000103**	**.0122912**	**-.000051**	**.0002109**
Stddev	.0006243	.000030	.0000398	.0067098	.000244	.0000766
%RSD	58.26674	35.41706	386.3434	54.59060	479.9916	36.31240
#1	.0009513	-.000050	-.000036	.0146095	.000144	.0002051
#2	.0017472	-.000099	.000036	.0175346	-.000325	.0001374
#3	.0005160	-.000104	.000030	.0047297	.000028	.0002903

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005108**	**-.002626**	**.0003340**	**-.018233**	**-.000107**	**.0002219**
Stddev	.0001885	.001468	.0003106	.043729	.000215	.0003464
%RSD	36.90227	55.89798	93.01568	239.8342	201.4485	156.1438
#1	.0005134	-.001200	.0001209	.029661	-.000171	.0004704
#2	.0006980	-.004132	.0006904	-.028330	.000133	.0003690
#3	.0003210	-.002546	.0001906	-.056030	-.000282	-.000174

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8385219**	**-.000623**	**.0003527**	**.6187587**	**.0234984**	**.0001775**
Stddev	.0227915	.003825	.0001178	.0095098	.0010046	.0003028
%RSD	2.718060	614.3555	33.38189	1.536919	4.275375	170.6454
#1	.8132755	-.000968	.0004368	.6252270	.0223383	-.000138
#2	.8447093	.003363	.0002182	.6232094	.0240737	.000204
#3	.8575808	-.004263	.0004032	.6078396	.0240831	.000466

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB02 Acquired: 10/24/2025 16:47:26 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007477	-.000069	.0535595	.0008364	F .0389714	.0026414
Stddev	.0008286	.001556	.0020357	.0006151	.0033590	.0007557
%RSD	110.8171	2243.314	3.800728	73.54855	8.619093	28.60863
#1	.0016843	-.000840	.0520473	.0005615	.0360627	.0031473
#2	.0004487	-.001090	.0558741	.0004066	.0382038	.0030042
#3	.0001101	.001721	.0527572	.0015410	.0426478	.0017728

Elem	Sr4077
Units	ppm
Avg	.0000349
Stddev	.0001334
%RSD	382.0328
#1	.0001886
#2	-.000033
#3	-.000051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5435.430	89387.12	6901.680	4160.103	6978.699
Stddev	8.584	219.18	20.868	21.140	19.005
%RSD	.1579283	.2452011	.3023637	.5081701	.2723337
#1	5427.243	89304.00	6925.011	4155.851	6959.527
#2	5434.685	89635.70	6895.234	4183.046	6979.037
#3	5444.362	89221.66	6884.795	4141.411	6997.533

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3440-01 Acquired: 10/24/2025 17:55:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3540642**	**-.010606**	**19.55639**	**.0056803**	**.3480377**	**104.7045**
Stddev	.0021118	.003978	.05498	.0052388	.0033632	.7730
%RSD	.5964397	37.50537	.2811111	92.22874	.9663363	.7382803
#1	.3561955	-.014855	19.60242	.0095777	.3509449	103.8126
#2	.3540246	-.009992	19.49552	.0077382	.3488140	105.1816
#3	.3519725	-.006971	19.57124	-.000275	.3443542	105.1193

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.793956**	**.0196814**	**.0262636**	**99.26233**	**.2859864**	**.2940172**
Stddev	.013571	.0002097	.0004011	.66231	.0012564	.0013309
%RSD	.7564924	1.065333	1.527089	.6672309	.4393087	.4526493
#1	1.778410	.0196030	.0267221	98.50116	.2856042	.2951014
#2	1.803435	.0199190	.0259777	99.70713	.2873894	.2925319
#3	1.800024	.0195222	.0260911	99.57869	.2849655	.2944184

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.94842**	**382.9283**	**5.371101**	**53.65942**	**.6099446**	**-.051000**
Stddev	.06784	2.9147	.029055	.39944	.0027544	.000570
%RSD	.3091097	.7611499	.5409594	.7443967	.4515776	1.117816
#1	21.99314	379.5711	5.338121	53.20176	.6114378	-.051469
#2	21.87035	384.8125	5.392927	53.93787	.6067661	-.051166
#3	21.98175	384.4013	5.382253	53.83864	.6116300	-.050366

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.827763**	**.4301370**	**14.13704**	**16.67508**	**.1417061**	**.0130130**
Stddev	.035846	.0043114	.06857	.16773	.0185680	.0001518
%RSD	.4579359	1.002326	.4850443	1.005858	13.10317	1.166523
#1	7.795319	.4252069	14.07506	16.48896	.1211216	.0131780
#2	7.866245	.4332010	14.21070	16.72175	.1468044	.0128793
#3	7.821727	.4320031	14.12535	16.81454	.1571924	.0129818

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3440-01 Acquired: 10/24/2025 17:55:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.261367	7.708787	7.765214	F 14.01328	F 12.66069	.1535943
Stddev	.004163	.044934	.108435	.02498	.07565	.0021720
%RSD	.1840958	.5828942	1.396417	.1782238	.5975263	1.414142
#1	2.264791	7.659273	7.875119	13.99060	12.60987	.1513584
#2	2.256733	7.746974	7.762212	14.04005	12.74763	.1537282
#3	2.262576	7.720113	7.658311	14.00919	12.62457	.1556963

Elem	Sr4077
Units	ppm
Avg	.2437034
Stddev	.0010788
%RSD	.4426661
#1	.2424583
#2	.2443580
#3	.2442939

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6372.716	103534.2	8603.654	4910.659	5922.184
Stddev	17.905	310.8	20.912	12.285	15.536
%RSD	.2809705	.3002241	.2430577	.2501761	.2623327
#1	6363.357	103841.1	8606.024	4922.101	5911.721
#2	6393.361	103219.6	8581.658	4897.676	5940.035
#3	6361.429	103541.8	8623.280	4912.202	5914.796

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-01 Acquired: 10/24/2025 17:59:16 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5391144**	**-.162738**	**10.93966**	**-.027503**	**.2830233**	**11.39935**
Stddev	.0015924	.003401	.02089	.004989	.0011634	.18917
%RSD	.2953668	2.089589	.1909747	18.13868	.4110772	1.659442
#1	.5379379	-.165082	10.95355	-.027111	.2837478	11.61125
#2	.5384788	-.164294	10.91563	-.032677	.2816813	11.24749
#3	.5409264	-.158838	10.94979	-.022722	.2836409	11.33930

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7342871**	**.0381855**	**.0502081**	**53.62915**	**.0499186**	**.2631668**
Stddev	.0150120	.0006922	.0016933	.96877	.0021105	.0006262
%RSD	2.044429	1.812805	3.372577	1.806421	4.227808	.2379619
#1	.7488169	.0386350	.0482669	54.66961	.0475562	.2626642
#2	.7188354	.0373884	.0509758	52.75311	.0505818	.2638684
#3	.7352091	.0385332	.0513815	53.46474	.0516178	.2629679

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.516851**	**1979.739**	**11.44725**	**9.710947**	**.4821893**	**^ *******
Stddev	.033660	18.489	.20315	.178503	.0016534	-----
%RSD	.4477998	.9338986	1.774645	1.838163	.3428960	-----
#1	7.486341	2000.700	11.64948	9.895936	.4833040	^ -----
#2	7.511252	1972.765	11.24320	9.539727	.4802896	^ -----
#3	7.552960	1965.751	11.44908	9.697180	.4829743	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**42.97609**	**.2291475**	**6.492662**	**2.007351**	**^ *******	**.0114548**
Stddev	.43017	.0062673	.016823	.056147	-----	.0001418
%RSD	1.000945	2.735053	.2591137	2.797047	-----	1.237529
#1	43.43663	.2363414	6.508406	1.986344	^ -----	.0112978
#2	42.58466	.2248692	6.474935	1.964738	^ -----	.0115735
#3	42.90698	.2262317	6.494645	2.070972	^ -----	.0114931

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-01 Acquired: 10/24/2025 17:59:16 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4941316	.5224100	5.768023	3.006362	F 78.58411	.2138898
Stddev	.0002707	.0093191	.021804	.011001	.25952	.0039368
%RSD	.0547824	1.783859	.3780186	.3659304	.3302448	1.840585
#1	.4939175	.5303195	5.793194	3.009634	78.42567	.2183728
#2	.4940414	.5121366	5.754972	2.994096	78.44305	.2123006
#3	.4944359	.5247738	5.755902	3.015356	78.88361	.2109960

Elem	Sr4077
Units	ppm
Avg	F -1.39653
Stddev	.01235
%RSD	.8842998
#1	-1.40707
#2	-1.39959
#3	-1.38294

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5154.551	86131.45	7044.114	3980.581	6157.532
Stddev	13.340	51.28	88.998	8.092	4.638
%RSD	.2588067	.0595379	1.263435	.2032763	.0753193
#1	5165.589	86104.89	6963.334	3972.509	6156.307
#2	5158.338	86190.57	7139.518	3988.692	6162.659
#3	5139.727	86098.91	7029.490	3980.541	6153.629

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-03 Acquired: 10/24/2025 18:03:23 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.884126**	**-.098821**	**200.1867**	**.3868004**	**8.538133**	**155.9449**
Stddev	.005405	.005310	.0841	.0076016	.013720	.2976
%RSD	.1391455	5.373117	.0420331	1.965260	.1606852	.1908246
#1	3.881235	-.092744	200.1767	.3787139	8.537425	155.6210
#2	3.880782	-.102566	200.2755	.3878873	8.552193	156.0075
#3	3.890362	-.101153	200.1081	.3938001	8.524782	156.2062

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.65579**	**.0389907**	**.3867653**	**349.3323**	**1.297913**	**.5440942**
Stddev	.20055	.0000612	.0011435	.6704	.006127	.0003552
%RSD	1.584632	.1570249	.2956560	.1919180	.4720781	.0652802
#1	12.72199	.0390556	.3880763	348.8471	1.304491	.5441923
#2	12.81486	.0389825	.3862458	349.0525	1.292368	.5443900
#3	12.43051	.0389339	.3859737	350.0973	1.296879	.5437003

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.28774**	**1603.593**	**10.29017**	**56.70904**	**2.780506**	^ *****
Stddev	.04329	16.392	.04405	.07834	.001380	-----
%RSD	.1048478	1.022214	.4281144	.1381512	.0496342	-----
#1	41.30675	1584.915	10.29195	56.63472	2.779479	^ -----
#2	41.31827	1615.589	10.24525	56.70153	2.782075	^ -----
#3	41.23820	1610.275	10.33330	56.79087	2.779964	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.726782**	**.9370325**	**25.37047**	**15.83885**	^ *****	**.0961410**
Stddev	.081191	.0031318	.19956	.11448	-----	.0004444
%RSD	.9303607	.3342199	.7865930	.7227606	-----	.4622104
#1	8.687789	.9353441	25.14702	15.74200	^ -----	.0956376
#2	8.672443	.9351073	25.53094	15.80936	^ -----	.0964787
#3	8.820113	.9406462	25.43346	15.96519	^ -----	.0963066

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-03 Acquired: 10/24/2025 18:03:23 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.303977	5.268423	8.038822	F 30.60947	F 71.00193	.3064063
Stddev	.009690	.013592	.040797	.05654	.39643	.0016474
%RSD	.1166915	.2579854	.5075044	.1847087	.5583366	.5376559
#1	8.298209	5.273327	7.991779	30.66414	70.70042	.3046323
#2	8.315164	5.253060	8.064492	30.61303	71.45097	.3066987
#3	8.298557	5.278883	8.060196	30.55123	70.85439	.3078880

Elem	Sr4077
Units	ppm
Avg	.7169989
Stddev	.0263618
%RSD	3.676680
#1	.7173410
#2	.7431879
#3	.6904678

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5614.231	95568.53	8170.514	4286.134	5510.122
Stddev	8.823	188.85	30.818	11.484	5.724
%RSD	.1571543	.1976118	.3771911	.2679241	.1038793
#1	5608.364	95422.69	8136.034	4274.096	5504.787
#2	5609.951	95781.85	8180.129	4296.968	5509.412
#3	5624.378	95501.04	8195.379	4287.338	5516.168

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-05 Acquired: 10/24/2025 18:08:01 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8305624	.0467462	F 1145.057	.0133128	F 23.18494	26.67059
Stddev	.0543552	.0097421	62.600	.0058698	1.79826	1.04556
%RSD	6.544385	20.84050	5.466990	44.09158	7.756163	3.920267
#1	.7680487	.0542887	1204.189	.0151001	21.12090	27.85184
#2	.8666689	.0502029	1151.495	.0180811	24.41330	26.29602
#3	.8569696	.0357471	1079.487	.0067570	24.02063	25.86391

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.362862	.0096380	.1795062	30.63991	.1822746	.1617317
Stddev	.033492	.0012114	.0081666	1.41307	.0048373	.0071953
%RSD	2.457450	12.56886	4.549469	4.611859	2.653871	4.448938
#1	1.398972	.0110281	.1701225	32.21399	.1830318	.1542612
#2	1.356798	.0090784	.1833896	30.22496	.1771033	.1623179
#3	1.332818	.0088077	.1850064	29.48077	.1866887	.1686160

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 452.7759	587.2732	2.739358	6.466081	1.579138	.1697121
Stddev	20.9679	36.8467	.136433	.376772	.064232	.0055597
%RSD	4.630970	6.274209	4.980482	5.826899	4.067514	3.275945
#1	438.5147	562.1639	2.890075	6.885540	1.520749	.1658643
#2	476.8510	570.0819	2.703717	6.356344	1.568724	.1671857
#3	442.9620	629.5739	2.624283	6.156361	1.647940	.1760864

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.921185	1.738531	16.64226	5.795486	^ *****	.0507592
Stddev	.591525	.062091	.81336	.564899	-----	.0036878
%RSD	9.989976	3.571471	4.887320	9.747230	-----	7.265355
#1	5.348353	1.806375	16.01530	5.247545	^ -----	.0465544
#2	5.885423	1.724689	16.35014	5.762974	^ -----	.0522788
#3	6.529780	1.684530	17.56134	6.375940	^ -----	.0534445

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-05 Acquired: 10/24/2025 18:08:01 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 286.7953	.6637014	2.778532	1.783865	F 93.46327	.0810309
Stddev	20.0965	.0185501	.194641	.117980	3.89671	.0032020
%RSD	7.007276	2.794949	7.005174	6.613755	4.169240	3.951608
#1	294.9557	.6818085	2.592950	1.825000	89.68986	.0798624
#2	263.9022	.6645577	2.761531	1.650824	93.22739	.0785772
#3	301.5281	.6447380	2.981116	1.875770	97.47256	.0846530

Elem	Sr4077
Units	ppm
Avg	-.387240
Stddev	.038264
%RSD	9.881196
#1	-.359163
#2	-.371733
#3	-.430823

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4540.355	109254.3	9028.389	3992.630	6468.588
Stddev	240.136	3542.2	957.574	56.596	218.306
%RSD	5.288923	3.242193	10.60625	1.417500	3.374861
#1	4816.195	109955.3	7954.337	4043.773	6720.253
#2	4377.951	112393.5	9337.915	4002.293	6355.237
#3	4426.918	105413.9	9792.915	3931.826	6330.273

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-07 Acquired: 10/24/2025 18:12:40 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0263881	-.001336	6.814924	.0023726	-.234015	3.153905
Stddev	.0013635	.001232	.016866	.0035820	.000941	.006314
%RSD	5.166925	92.21972	.2474913	150.9725	.4019540	.2001945
#1	.0248151	-.000770	6.831955	.0052098	-.234443	3.151234
#2	.0271165	-.002749	6.814591	.0035605	-.234667	3.161116
#3	.0272326	-.000488	6.798227	-.001652	-.232937	3.149365

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0605689	.0016907	.0323098	4.409227	.0566872	.0305202
Stddev	.0002821	.0001146	.0001098	.002946	.0005300	.0002112
%RSD	.4656838	6.778716	.3399526	.0668171	.9348814	.6918781
#1	.0604489	.0016930	.0323795	4.412607	.0564086	.0307634
#2	.0608911	.0018041	.0323667	4.407868	.0572983	.0303837
#3	.0603667	.0015749	.0321832	4.407205	.0563546	.0304134

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.43708	86.54650	1.230397	2.930437	.7418209	-.013676
Stddev	.06497	.66604	.003812	.009416	.0022319	.000742
%RSD	.2368040	.7695749	.3098151	.3213176	.3008687	5.422299
#1	27.50309	86.43976	1.233122	2.921328	.7442673	-.013459
#2	27.43494	85.94028	1.226041	2.940133	.7412996	-.014502
#3	27.37320	87.25947	1.232027	2.929849	.7398958	-.013068

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.388373	.8984121	13.44776	1.341262	.0056286	.0040996
Stddev	.052536	.0030158	.02382	.042550	.0029274	.0005664
%RSD	1.550479	.3356798	.1771548	3.172362	52.00855	13.81554
#1	3.351008	.9018923	13.43575	1.366364	.0043467	.0047368
#2	3.365668	.8965662	13.47520	1.292134	.0035609	.0039084
#3	3.448443	.8967777	13.43233	1.365288	.0089783	.0036535

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3447-07 Acquired: 10/24/2025 18:12:40 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 23.97596	.0426568	.3498037	.1793629	F 24.82000	.0188310
Stddev	.02304	.0005295	.0043735	.0011640	.16298	.0022129
%RSD	.0961122	1.241242	1.250275	.6489452	.6566358	11.75152
#1	23.97319	.0422162	.3538612	.1801066	24.63188	.0182604
#2	24.00026	.0425099	.3451711	.1780215	24.90974	.0212734
#3	23.95443	.0432442	.3503790	.1799606	24.91839	.0169593

Elem	Sr4077
Units	ppm
Avg	-.071640
Stddev	.000584
%RSD	.8154266
#1	-.071509
#2	-.071132
#3	-.072278

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5381.785	89738.30	6755.363	4179.118	6826.396
Stddev	11.630	224.49	31.606	12.284	15.852
%RSD	.2160982	.2501616	.4678721	.2939268	.2322099
#1	5374.091	89980.01	6760.625	4191.472	6814.404
#2	5376.100	89698.54	6721.456	4166.906	6820.417
#3	5395.164	89536.34	6784.008	4178.977	6844.368

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3449-01 Acquired: 10/24/2025 18:16:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0600190**	**-.000304**	**1.329723**	**.0031593**	**-.007018**	**114.9983**	**.5994365**
Stddev	.0008987	.000712	.001567	.0017590	.000362	.8201	.0051450
%RSD	1.497382	234.0865	.1178492	55.67586	5.156031	.7131478	.8583005
#1	.0606246	-.001089	1.329578	.0016517	-.007056	115.7928	.6015624
#2	.0604459	-.000122	1.328233	.0027344	-.007359	115.0473	.6031778
#3	.0589864	.000299	1.331357	.0050918	-.006638	114.1548	.5935693

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0085273**	**.0067803**	**32.93807**	**.2099912**	**.0755879**	**.2587193**	**187.5907**
Stddev	.0000446	.0002242	.19671	.0007671	.0001244	.0007876	1.4018
%RSD	.5226483	3.307139	.5972025	.3653230	.1645203	.3044103	.7472537
#1	.0084976	.0069341	33.08258	.2092620	.0755211	.2594581	186.4883
#2	.0085058	.0068839	33.01758	.2107914	.0757314	.2588092	187.1155
#3	.0085786	.0065230	32.71405	.2099202	.0755112	.2578907	189.1683

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.345484**	**24.73872**	**.1675755**	**-.033238**	**3.522160**	**.3227923**	**.7892310**
Stddev	.020537	.16983	.0005548	.000780	.026907	.0053553	.0023151
%RSD	.6138637	.6865001	.3310948	2.345277	.7639459	1.659067	.2933356
#1	3.357929	24.87730	.1681441	-.033964	3.496609	.3261666	.7917789
#2	3.356743	24.78960	.1670355	-.033336	3.519627	.3255930	.7872565
#3	3.321780	24.54927	.1675468	-.032414	3.550245	.3166174	.7886575

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.071498**	**.0091974**	**.0063208**	**.0298386**	**2.834194**	**7.107347**	**9.696399**
Stddev	.062451	.0081664	.0002090	.0005187	.020060	.171115	.042895
%RSD	.8831383	88.79114	3.306679	1.738451	.7077811	2.407576	.4423758
#1	7.050180	.0091473	.0061333	.0298166	2.853163	7.304509	9.735188
#2	7.022498	.0010561	.0062829	.0293312	2.836222	6.997562	9.703678
#3	7.141817	.0173887	.0065462	.0303679	2.813197	7.019969	9.650330

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3449-01 Acquired: 10/24/2025 18:16:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.529482**	**.1045228**	**-.038757**
Stddev	.034184	.0015672	.002200
%RSD	.7547109	1.499365	5.677602
#1	4.555298	.1029074	-.037006
#2	4.542433	.1046239	-.038038
#3	4.490714	.1060369	-.041227

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6323.046**	**101598.0**	**7862.235**	**4971.829**	**6332.733**
Stddev	10.922	248.3	85.598	12.811	12.084
%RSD	.1727336	.2444145	1.088719	.2576813	.1908104
#1	6315.879	101784.0	7804.346	4986.216	6322.663
#2	6335.616	101693.9	7821.801	4961.653	6346.132
#3	6317.642	101316.0	7960.560	4967.619	6329.406

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170252BL Acquired: 10/24/2025 18:20:46 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021974	.0000511	.0023015	.0012672	.0010243	.0031655
Stddev	.0013676	.0019399	.0003061	.0026165	.0011772	.0071195
%RSD	62.23884	3797.475	13.29981	206.4804	114.9289	224.9058
#1	.0006267	.0022616	.0025835	.0036417	.0010038	.0075338
#2	.0028412	-.000741	.0019759	-.001538	-.000143	-.005050
#3	.0031243	-.001368	.0023452	.001698	.002212	.007013

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000240	-.000033	.0000064	.0027153	.0000533	.0000533
Stddev	.000918	.000012	.0000015	.0064456	.0001288	.0001895
%RSD	383.0298	35.70467	23.20759	237.3771	241.4315	355.7056
#1	.000627	-.000020	.0000050	-.004670	.0001764	.0002361
#2	-.000144	-.000043	.0000064	.005611	-.000081	-.000142
#3	-.001202	-.000035	.0000079	.007205	.000064	.000066

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009658	.0217966	.0005595	.0137784	.0000105	.0003970
Stddev	.0001755	.0071791	.0004362	.0125314	.0001323	.0003092
%RSD	18.16924	32.93667	77.96291	90.94924	1255.404	77.86183
#1	.0011649	.0135134	.0002688	.0102758	-.000047	.0004197
#2	.0008991	.0256549	.0003486	.0276885	.000162	.0006942
#3	.0008335	.0262214	.0010611	.0033710	-.000083	.0000772

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9559862	-.002391	.0002526	.5735233	.0201819	.0000899
Stddev	.0455009	.004174	.0004066	.0628118	.0012322	.0000388
%RSD	4.759577	174.5728	161.0006	10.95192	6.105335	43.10153
#1	.9046112	.001668	.0002058	.5165082	.0207918	.0000711
#2	.9721454	-.002170	.0006805	.5632071	.0209901	.0001345
#3	.9912020	-.006672	-.000129	.6408546	.0187637	.0000641

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170252BL Acquired: 10/24/2025 18:20:46 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138319	.0015832	.0054363	-.001206	F .0308096	.0014295
Stddev	.0006875	.0021943	.0098371	.001702	.0028996	.0037361
%RSD	4.970285	138.6057	180.9512	141.1884	9.411357	261.3510
#1	.0143151	.0033599	.0086405	-.002919	.0335792	.0057171
#2	.0141357	.0022593	-.005603	.000485	.0310541	-.001128
#3	.0130448	-.000870	.013272	-.001183	.0277955	-.000300

Elem	Sr4077
Units	ppm
Avg	.0000650
Stddev	.0001454
%RSD	223.7390
#1	-.000101
#2	.000124
#3	.000172

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5700.322	92924.96	6810.857	4421.081	7250.213
Stddev	13.355	187.34	198.191	34.677	9.127
%RSD	.2342904	.2016014	2.909927	.7843537	.1258808
#1	5702.575	93079.17	6703.480	4446.935	7245.462
#2	5685.984	92979.24	6689.525	4434.633	7244.442
#3	5712.408	92716.48	7039.567	4381.674	7260.735

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170252BS Acquired: 10/24/2025 18:25:04 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7606418**	**1.942612**	**.9360105**	**1.893714**	**.7701252**	**1.938582**
Stddev	.0021793	.052558	.0014964	.006594	.0013245	.047601
%RSD	.2865097	2.705520	.1598721	.3482159	.1719810	2.455457
#1	.7607221	1.931060	.9345586	1.886130	.7700826	1.907321
#2	.7627798	1.999985	.9359251	1.896922	.7688225	1.915061
#3	.7584234	1.896791	.9375478	1.898090	.7714705	1.993365

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1925651**	**.2152081**	**.1879286**	**1.014787**	**.4067695**	**.1906910**
Stddev	.0039279	.0010926	.0000997	.021321	.0008556	.0004112
%RSD	2.039777	.5076936	.0530412	2.101081	.2103352	.2156575
#1	.1912748	.2147759	.1879017	.998890	.4062811	.1907065
#2	.1894448	.2143978	.1878452	1.006455	.4077575	.1902722
#3	.1969759	.2164507	.1880390	1.039017	.4062700	.1910943

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3042366**	**2.759997**	**.2002846**	**2.009629**	**.4805457**	**.0735012**
Stddev	.0002071	.028736	.0040457	.047000	.0002487	.0005992
%RSD	.0680669	1.041174	2.019959	2.338738	.0517593	.8152825
#1	.3040436	2.743964	.1982774	1.970443	.4802948	.0738639
#2	.3044554	2.742855	.1976351	1.996706	.4807922	.0728095
#3	.3042108	2.793173	.2049414	2.061739	.4805502	.0738302

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.309370**	**.2904358**	**.1954928**	**9.243754**	**.3319467**	**.3986244**
Stddev	.044026	.0084172	.0007305	.136241	.0011710	.0007167
%RSD	1.330339	2.898111	.3736441	1.473866	.3527795	.1797974
#1	3.283175	.2876093	.1949866	9.131547	.3332375	.3981413
#2	3.284736	.2837958	.1963302	9.204365	.3309524	.3994479
#3	3.360198	.2999025	.1951616	9.395349	.3316503	.3982841

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: PB170252BS Acquired: 10/24/2025 18:25:04 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6776417	.1920291	.8132965	5.503556	F .0269768	.1912701
Stddev	.0008551	.0045564	.0294878	.012345	.0014094	.0028529
%RSD	.1261819	2.372769	3.625707	.2243105	5.224487	1.491581
#1	.6774453	.1879342	.8221662	5.515856	.0266627	.1902657
#2	.6785779	.1912157	.7803919	5.503644	.0285167	.1890552
#3	.6769020	.1969374	.8373313	5.491166	.0257509	.1944894

Elem	Sr4077
Units	ppm
Avg	.1880738
Stddev	.0041425
%RSD	2.202602
#1	.1861058
#2	.1852821
#3	.1928334

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5544.147	89517.95	6680.190	4222.777	6828.251
Stddev	4.877	83.77	46.802	26.181	4.535
%RSD	.0879614	.0935774	.7006055	.6199969	.0664081
#1	5545.333	89608.15	6711.870	4240.909	6833.072
#2	5548.322	89442.60	6702.265	4192.761	6827.611
#3	5538.787	89503.10	6626.433	4234.659	6824.070

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV03 Acquired: 10/24/2025 18:29:06 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.977248**	**5.064179**	**5.010155**	**4.936229**	**4.884780**	**10.31114**	**10.11292**
Stddev	.044979	.093889	.034984	.036176	.042468	.06473	.08592
%RSD	.9036913	1.853981	.6982548	.7328648	.8693942	.6277486	.8496029
#1	4.934065	5.148284	4.975153	4.906355	4.845401	10.30372	10.06991
#2	5.023831	5.081373	5.045120	4.976451	4.929778	10.37926	10.21185
#3	4.973849	4.962882	5.010193	4.925879	4.879163	10.25044	10.05700

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2736783**	**2.531328**	**25.79513**	**1.040236**	**2.498219**	**1.249537**	**5.167231**
Stddev	.0024692	.018482	.18001	.004768	.018542	.009860	.040701
%RSD	.9022400	.7301499	.6978341	.4583798	.7422147	.7891075	.7876709
#1	.2731445	2.514140	25.77705	1.034874	2.480287	1.239946	5.120556
#2	.2763708	2.550878	25.98350	1.043999	2.517316	1.259646	5.185813
#3	.2715196	2.528966	25.62485	1.041836	2.497055	1.249019	5.195325

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.562361**	**26.06534**	**2.505207**	**1.272909**	**24.45580**	**2.545960**	**2.494776**
Stddev	.022530	.21441	.019247	.003074	.12217	.017417	.012005
%RSD	.8792692	.8225934	.7682642	.2415231	.4995576	.6841145	.4812197
#1	2.547539	26.11113	2.486860	1.269639	24.32002	2.547702	2.482664
#2	2.588288	26.25316	2.525242	1.273345	24.55684	2.562441	2.494993
#3	2.551257	25.83174	2.503519	1.275742	24.49055	2.527738	2.506672

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.50398**	**5.422170**	**5.009423**	**5.062916**	**5.077379**	**5.046399**	**5.080480**
Stddev	.08423	.045685	.038805	.037659	.040215	.049651	.020906
%RSD	.3437263	.8425540	.7746352	.7438150	.7920348	.9838854	.4115059
#1	24.40762	5.408567	4.973885	5.025749	5.068917	4.990328	5.071049
#2	24.56356	5.473111	5.050826	5.101048	5.121151	5.084788	5.104441
#3	24.54077	5.384832	5.003557	5.061950	5.042069	5.064082	5.065951

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV03 Acquired: 10/24/2025 18:29:06 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.902153**	**4.997382**	**5.015117**
Stddev	.029390	.038284	.024040
%RSD	.5995244	.7660795	.4793441
#1	4.889270	4.984652	5.002204
#2	4.935784	5.040410	5.042854
#3	4.881406	4.967085	5.000294

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5444.314**	**85378.72**	**6679.845**	**4021.354**	**6248.227**
Stddev	29.433	187.02	67.858	13.683	30.679
%RSD	.5406121	.2190476	1.015864	.3402611	.4910103
#1	5472.120	85435.69	6674.174	4036.884	6275.482
#2	5413.488	85169.84	6615.000	4011.070	6215.001
#3	5447.333	85530.62	6750.361	4016.109	6254.197

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB03 Acquired: 10/24/2025 18:33:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021085**	**.0034151**	**.0013671**	**.0005722**	**.0011862**	**-.003295**
Stddev	.0011217	.0011684	.0006112	.0016544	.0022952	.008718
%RSD	53.19676	34.21331	44.70871	289.1295	193.4847	264.5753
#1	.0009729	.0031584	.0010899	.0005971	-.000813	-.013240
#2	.0021370	.0023964	.0020679	-.001095	.003693	.003027
#3	.0032157	.0046905	.0009437	.002214	.000679	.000328

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015285**	**-.000009**	**.0000196**	**.0128991**	**-.000042**	**.0001797**
Stddev	.0012123	.000053	.0000174	.0144367	.000250	.0001386
%RSD	79.31549	591.2791	88.51075	111.9201	595.8182	77.10473
#1	.0006149	.000043	.0000001	.0278831	-.000002	.0003354
#2	.0029038	-.000063	.0000333	.0117337	-.000309	.0001338
#3	.0010667	-.000007	.0000255	-.000920	.000186	.0000699

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004190**	**.0011000**	**.0003378**	**-.012861**	**.0001036**	**.0005337**
Stddev	.0002171	.0059669	.0002325	.028054	.0001071	.0000962
%RSD	51.82176	542.4267	68.83014	218.1316	103.3673	18.02587
#1	.0005219	.0070668	.0003786	-.012344	.0000081	.0004408
#2	.0005654	-.004867	.0005472	-.041170	.0000833	.0005274
#3	.0001695	.001100	.0000876	.014931	.0002193	.0006328

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7451984**	**-.002015**	**.0001982**	**.5047702**	**.0287533**	**.0003774**
Stddev	.0623228	.003206	.0002018	.0315247	.0011550	.0000228
%RSD	8.363245	159.0829	101.7852	6.245364	4.016937	6.047436
#1	.6803067	.000687	-.000031	.4685407	.0300829	.0003810
#2	.7507014	-.005557	.000350	.5198225	.0281779	.0003982
#3	.8045872	-.001175	.000276	.5259474	.0279989	.0003530

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB03 Acquired: 10/24/2025 18:33:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067509	.0016597	.0136451	-.001683	F .0229733	.0014360
Stddev	.0002737	.0011123	.0148617	.001453	.0004203	.0017760
%RSD	4.054715	67.01570	108.9167	86.37088	1.829659	123.6791
#1	.0064369	.0015873	.0267071	-.003129	.0225273	-.000334
#2	.0068772	.0028065	-.002525	-.000223	.0233621	.001424
#3	.0069387	.0005855	.016753	-.001696	.0230305	.003218

Elem	Sr4077
Units	ppm
Avg	.0000290
Stddev	.0000149
%RSD	51.40815
#1	.0000436
#2	.0000138
#3	.0000297

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5518.858	87605.53	6878.600	4147.454	6999.342
Stddev	5.912	207.68	24.982	15.569	3.519
%RSD	.1071204	.2370612	.3631879	.3753949	.0502713
#1	5514.012	87837.62	6855.635	4129.521	7001.159
#2	5517.116	87541.77	6874.965	4157.521	6995.286
#3	5525.445	87437.21	6905.201	4155.321	7001.581

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-01 Acquired: 10/24/2025 18:37:28 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003117**	**-.000588**	**.0058180**	**-.002551**	**.0020746**	**.0321887**
Stddev	.002129	.002284	.0012244	.001269	.0016021	.0123566
%RSD	68.29552	388.1776	21.04517	49.74009	77.22575	38.38795
#1	-.001895	.000489	.0071958	-.001207	.0015469	.0209481
#2	-.001881	.000958	.0048544	-.002718	.0008029	.0454197
#3	-.005575	-.003212	.0054038	-.003729	.0038740	.0301983

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0869594**	**-.000172**	**.0000214**	**152.9359**	**.0009769**	**.0002976**
Stddev	.0000873	.000048	.0000979	.9149	.0003893	.0000395
%RSD	.1003883	27.82322	456.9536	.5982045	39.85405	13.26420
#1	.0869162	-.000143	.0000947	151.8959	.0013728	.0002525
#2	.0869022	-.000145	-.000090	153.2954	.0009634	.0003261
#3	.0870599	-.000227	.000059	153.6163	.0005945	.0003141

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0197135**	**.0401324**	**.0797162**	**56.19623**	**.0019160**	**.0002380**
Stddev	.0001597	.0120308	.0003906	.40589	.0000752	.0001681
%RSD	.8100557	29.97785	.4899985	.7222677	3.923744	70.63533
#1	.0198063	.0465266	.0798247	55.72923	.0018316	.0001678
#2	.0198050	.0476161	.0792828	56.39545	.0019758	.0004299
#3	.0195291	.0262547	.0800411	56.46402	.0019407	.0001164

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**243.5460**	**.0000439**	**.0856481**	**5.527222**	**.0758238**	**.0048440**
Stddev	2.7842	.0037709	.0006702	.024498	.0007413	.0001666
%RSD	1.143207	8581.203	.7825241	.4432262	.9776413	3.438854
#1	243.9381	-.003552	.0850193	5.505533	.0753049	.0046807
#2	246.1134	.003968	.0855720	5.553794	.0766728	.0048376
#3	240.5866	-.000284	.0863532	5.522339	.0754937	.0050137

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-01 Acquired: 10/24/2025 18:37:28 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012032	-.005238	F 12.74862	.0090415	F 13.68232	-.021832
Stddev	.000451	.002783	.08197	.0002335	.02933	.002240
%RSD	3.745424	53.13966	.6429607	2.582781	.2143628	10.25921
#1	-.012397	-.003249	12.65513	.0092995	13.65980	-.020290
#2	-.011528	-.008419	12.78259	.0088445	13.67167	-.020805
#3	-.012172	-.004046	12.80814	.0089806	13.71548	-.024401

Elem	Sr4077
Units	ppm
Avg	.2907519
Stddev	.0005953
%RSD	.2047331
#1	.2900665
#2	.2911391
#3	.2910502

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5079.235	81779.08	6599.184	3952.202	5831.707
Stddev	3.690	138.78	17.361	16.977	10.505
%RSD	.0726509	.1696985	.2630845	.4295645	.1801358
#1	5077.420	81939.30	6619.108	3955.595	5821.168
#2	5083.481	81701.20	6591.148	3933.785	5842.178
#3	5076.804	81696.73	6587.297	3967.227	5831.776

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-02 Acquired: 10/24/2025 18:41:49 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010562	-.002055	.0139417	-.004066	.0044209	.0615986
Stddev	.0006168	.004567	.0017362	.002488	.0010325	.0082275
%RSD	58.40089	222.2180	12.45300	61.18851	23.35553	13.35664
#1	.0016925	-.003227	.0159360	-.006812	.0044772	.0691654
#2	.0010151	.002983	.0127670	-.003423	.0033614	.0528403
#3	.0004610	-.005921	.0131222	-.001963	.0054241	.0627899

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2527473	-.000288	.0001970	468.6895	.0065422	.0023729
Stddev	.0024454	.000041	.0001185	.8080	.0010404	.0000158
%RSD	.9675345	14.16739	60.15129	.1723969	15.90265	.6649574
#1	.2526581	-.000331	.0001766	467.9082	.0077370	.0023888
#2	.2552361	-.000250	.0000901	468.6384	.0060529	.0023727
#3	.2503477	-.000282	.0003245	469.5218	.0058367	.0023572

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0365028	.1033822	1.265488	140.4246	.0148292	-.000490
Stddev	.0002986	.0064990	.005762	.0551	.0002097	.000302
%RSD	.8181173	6.286371	.4553508	.0392383	1.413999	61.58432
#1	.0362557	.1104365	1.261443	140.3632	.0148176	-.000584
#2	.0368347	.0976383	1.272086	140.4410	.0150444	-.000152
#3	.0364180	.1020718	1.262935	140.4697	.0146255	-.000734

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1006.183	.0008222	.0938580	15.52974	.1060978	.0022264
Stddev	8.019	.0015945	.0001196	.11190	.0009337	.0000544
%RSD	.7969535	193.9237	.1274830	.7205326	.8800546	2.442462
#1	1011.261	-.000188	.0939726	15.50593	.1053283	.0021669
#2	1010.349	-.000006	.0938675	15.65163	.1071366	.0022734
#3	996.938	.002660	.0937338	15.43167	.1058286	.0022390

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-02 Acquired: 10/24/2025 18:41:49 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.010944	-.017115	F 23.24867	.0083739	F 18.42607	-.049787
Stddev	.001078	.001498	.07788	.0000694	.06644	.000348
%RSD	9.853066	8.755206	.3350003	.8283219	.3605858	.6988542
#1	-.010219	-.015948	23.19400	.0083015	18.42691	-.050167
#2	-.010429	-.018804	23.33785	.0084397	18.49208	-.049484
#3	-.012183	-.016592	23.21417	.0083806	18.35920	-.049710

Elem	Sr4077
Units	ppm
Avg	1.266642
Stddev	.003619
%RSD	.2857286
#1	1.264257
#2	1.270807
#3	1.264863

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4636.689	74326.68	6431.415	3568.571	5104.803
Stddev	6.450	198.04	18.955	17.027	2.535
%RSD	.1390979	.2664399	.2947324	.4771290	.0496631
#1	4642.909	74469.20	6426.123	3563.033	5106.187
#2	4630.032	74100.55	6452.454	3587.678	5101.877
#3	4637.125	74410.29	6415.668	3555.003	5106.344

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-03 Acquired: 10/24/2025 18:46:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001613**	**-.000565**	**.0050740**	**.0049734**	**.0024062**	**.0493062**	**.0019525**
Stddev	.001154	.000905	.0009196	.0013673	.0023890	.0030350	.0018099
%RSD	71.54235	160.2381	18.12362	27.49324	99.28385	6.155421	92.69461
#1	-.000345	-.000931	.0057386	.0065519	.0028078	.0527842	.0002984
#2	-.002603	-.001228	.0040245	.0042121	.0045690	.0471946	.0016735
#3	-.001892	.000466	.0054591	.0041562	-.000158	.0479397	.0038857

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000258**	**-.000039**	**.0399289**	**.0033537**	**-.000112**	**.0335704**	**.0404214**
Stddev	.000019	.000066	.0148573	.0001229	.000165	.0003365	.0101299
%RSD	7.374363	169.1708	37.20931	3.662976	147.8492	1.002477	25.06069
#1	-.000272	.000025	.0530053	.0032386	-.000027	.0335623	.0298483
#2	-.000236	-.000036	.0237733	.0034831	-.000007	.0332379	.0413755
#3	-.000266	-.000107	.0430083	.0033395	-.000302	.0339109	.0500405

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011952**	**-.025808**	**.0013957**	**.0002425**	**40.14529**	**.0016836**	**.0260214**
Stddev	.0009291	.005348	.0002394	.0008094	.11596	.0033303	.0002853
%RSD	77.73955	20.72160	17.15025	333.7678	.2888542	197.8120	1.096412
#1	.0021896	-.026558	.0015273	.0007309	40.17142	-.001539	.0257226
#2	.0010468	-.030742	.0015403	-.000692	40.24596	.001479	.0260507
#3	.0003492	-.020125	.0011194	.000688	40.01849	.005112	.0262909

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.077224**	**.0945626**	**.0007220**	**-.007875**	**.0009295**	**.6526481**	**.0049766**
Stddev	.014304	.0011031	.0002345	.000386	.0008714	.0134281	.0017901
%RSD	18.52248	1.166527	32.48139	4.905167	93.75136	2.057486	35.97044
#1	-.084996	.0933010	.0005587	-.008305	.0017759	.6448371	.0031173
#2	-.085959	.0950420	.0006166	-.007762	.0009776	.6681534	.0051242
#3	-.060717	.0953449	.0009907	-.007557	.0000350	.6449537	.0066884

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-03 Acquired: 10/24/2025 18:46:09 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0358113	-.004562	.0000691
Stddev	.0016157	.001177	.0000506
%RSD	4.511816	25.80081	73.20262
#1	.0353255	-.003607	.0001272
#2	.0376141	-.004202	.0000346
#3	.0344941	-.005877	.0000456

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5290.167	86134.09	6772.640	4028.768	6542.792
Stddev	5.675	117.14	16.231	10.669	9.179
%RSD	.1072709	.1359928	.2396619	.2648309	.1402856
#1	5285.764	86253.13	6782.409	4017.077	6534.911
#2	5296.571	86018.95	6781.607	4031.246	6552.870
#3	5288.166	86130.20	6753.903	4037.980	6540.594

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-04 Acquired: 10/24/2025 18:50:28 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003789**	**-.001561**	**.0065273**	**-.002783**	**.0040762**	**.0427558**
Stddev	.0006650	.001446	.0013253	.001250	.0026558	.0164296
%RSD	175.5173	92.68089	20.30326	44.90946	65.15505	38.42668
#1	-.000352	-.002603	.0074724	-.002606	.0038599	.0410467
#2	.000540	.000091	.0050124	-.001631	.0015351	.0599732
#3	.000949	-.002169	.0070970	-.004111	.0068335	.0272475

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2266143**	**.0003628**	**-.000006**	**250.0858**	**.0022778**	**-.000157**
Stddev	.0014411	.0000283	.000071	1.1138	.0002798	.000175
%RSD	.6359338	7.804114	1150.179	.4453547	12.28160	111.7145
#1	.2256159	.0003949	.000072	249.2769	.0019624	-.000323
#2	.2282665	.0003521	-.000024	251.3562	.0023750	.000026
#3	.2259606	.0003413	-.000067	249.6245	.0024960	-.000173

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065361**	**.3304824**	**.8654379**	**52.14242**	**.0007793**	**.0002258**
Stddev	.0004494	.0033507	.0090358	.30016	.0001879	.0005002
%RSD	6.875477	1.013869	1.044075	.5756500	24.11186	221.5556
#1	.0065779	.3327952	.8553757	51.85631	.0006750	-.000336
#2	.0060672	.3320122	.8728587	52.45488	.0006667	.000390
#3	.0069631	.3266399	.8680793	52.11606	.0009963	.000623

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**197.2479**	**.0013267**	**.0256284**	**4.480134**	**.0795847**	**.0088689**
Stddev	1.0448	.0013427	.0003097	.077932	.0005445	.0002671
%RSD	.5296818	101.2038	1.208541	1.739497	.6842237	3.012081
#1	197.0910	.0000885	.0252712	4.564662	.0798715	.0091709
#2	196.2905	.0027539	.0258221	4.411138	.0799258	.0087728
#3	198.3623	.0011377	.0257920	4.464601	.0789567	.0086632

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-04 Acquired: 10/24/2025 18:50:28 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011107	-.007896	F 18.04154	.0058710	F 14.59026	-.030236
Stddev	.001085	.001179	.10948	.0020757	.16687	.000999
%RSD	9.770013	14.92768	.6068102	35.35576	1.143699	3.303300
#1	-.010552	-.007989	18.16782	.0071228	14.40362	-.029502
#2	-.010412	-.009026	17.97334	.0034750	14.64215	-.031374
#3	-.012358	-.006674	17.98346	.0070153	14.72503	-.029833

Elem	Sr4077
Units	ppm
Avg	.4961093
Stddev	.0021942
%RSD	.4422734
#1	.4935785
#2	.4974781
#3	.4972712

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5077.409	82640.92	6858.529	3861.964	5847.844
Stddev	7.805	219.70	46.275	5.544	8.884
%RSD	.1537297	.2658451	.6747044	.1435588	.1519125
#1	5071.474	82387.72	6876.952	3862.157	5857.957
#2	5086.251	82753.86	6805.880	3867.408	5841.297
#3	5074.501	82781.17	6892.754	3856.325	5844.279

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-05 Acquired: 10/24/2025 18:54:42 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001797**	**.0004199**	**.0022847**	**-.000124**	**.0041921**	**.0477031**
Stddev	.001972	.0009687	.0013472	.003243	.0005558	.0119928
%RSD	109.7632	230.7108	58.96476	2614.999	13.25713	25.14055
#1	-.002475	-.000600	.0007454	.000397	.0035559	.0606999
#2	.000425	.000533	.0032485	.002827	.0044370	.0370646
#3	-.003340	.001327	.0028602	-.003597	.0045833	.0453448

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0718297**	**-.000171**	**-.000023**	**193.4748**	**.0023080**	**.0003238**
Stddev	.0019376	.000071	.000080	.2353	.0003596	.0000963
%RSD	2.697481	41.47819	343.0403	.1215960	15.58163	29.74804
#1	.0740482	-.000093	-.000092	193.2298	.0019673	.0002868
#2	.0704692	-.000232	-.000042	193.4956	.0022727	.0002515
#3	.0709719	-.000189	.000064	193.6989	.0026839	.0004331

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0356660**	**.0208319**	**.0010183**	**78.17697**	**.0017617**	**.0001463**
Stddev	.0005127	.0014449	.0006133	.16236	.0004433	.0002719
%RSD	1.437473	6.935917	60.22583	.2076869	25.16126	185.7865
#1	.0358528	.0223361	.0010450	78.18802	.0014154	-.000110
#2	.0360591	.0194547	.0003921	78.00937	.0022613	.000118
#3	.0350861	.0207049	.0016178	78.33353	.0016085	.000431

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**288.1139**	**.0017775**	**.0494025**	**6.458928**	**.0809357**	**.0049802**
Stddev	2.4373	.0017300	.0001253	.034287	.0008787	.0000912
%RSD	.8459476	97.32509	.2536290	.5308494	1.085627	1.831170
#1	285.9810	.0035496	.0494712	6.472620	.0800318	.0049151
#2	287.5903	.0000930	.0492579	6.419911	.0817867	.0050844
#3	290.7705	.0016898	.0494785	6.484254	.0809886	.0049411

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-05 Acquired: 10/24/2025 18:54:42 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.014310	-.005433	F 15.78098	.0105427	F 16.10525	-.027840
Stddev	.000766	.001357	.03008	.0004016	.09075	.000784
%RSD	5.351748	24.98312	.1905968	3.809112	.5634661	2.814880
#1	-.013469	-.006819	15.81474	.0103932	16.15678	-.028724
#2	-.014967	-.005373	15.77117	.0102374	16.00047	-.027564
#3	-.014494	-.004106	15.75703	.0109976	16.15850	-.027231

Elem	Sr4077
Units	ppm
Avg	.3170361
Stddev	.0009252
%RSD	.2918180
#1	.3161770
#2	.3180156
#3	.3169158

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4910.724	79120.72	6461.511	3781.025	5627.120
Stddev	6.307	162.92	23.776	11.132	2.670
%RSD	.1284361	.2059148	.3679604	.2944084	.0474401
#1	4907.109	78943.37	6488.661	3784.331	5624.701
#2	4918.007	79263.75	6444.410	3790.129	5629.984
#3	4907.056	79155.03	6451.461	3768.615	5626.675

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06 Acquired: 10/24/2025 18:59:05 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001233**	**-.004718**	**.0051168**	**.0014693**	**.0047147**	**.0332250**
Stddev	.001604	.002932	.0008019	.0008674	.0011187	.0021876
%RSD	130.0868	62.14002	15.67244	59.03871	23.72854	6.584105
#1	-.003075	-.001333	.0042854	.0017832	.0051508	.0310014
#2	-.000146	-.006465	.0058856	.0021360	.0055496	.0332989
#3	-.000478	-.006357	.0051794	.0004886	.0034436	.0353746

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0559987**	**-.000212**	**.0000475**	**204.5107**	**.0046387**	**.0001383**
Stddev	.0009287	.000010	.0001051	1.5808	.0001620	.0001600
%RSD	1.658426	4.515000	221.4212	.7729458	3.491964	115.6591
#1	.0559792	-.000223	-.000070	206.3292	.0047715	.0000249
#2	.0550799	-.000205	.000132	203.4649	.0046865	.0003212
#3	.0569370	-.000207	.000081	203.7380	.0044582	.0000688

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0245288**	**.2847855**	**.0030524**	**91.59095**	**.0035431**	**-.000386**
Stddev	.0004437	.0042951	.0004705	.83200	.0004336	.000081
%RSD	1.809013	1.508200	15.41311	.9083813	12.23904	20.85019
#1	.0250238	.2838749	.0034316	92.54164	.0033137	-.000479
#2	.0243958	.2894630	.0031996	90.99575	.0032723	-.000347
#3	.0241668	.2810188	.0025259	91.23547	.0040433	-.000332

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**203.5053**	**.0024812**	**.1147621**	**4.515785**	**.0589241**	**.0080433**
Stddev	1.2913	.0046840	.0003987	.035803	.0003264	.0001149
%RSD	.6345303	188.7764	.3473791	.7928498	.5539717	1.428236
#1	203.3211	.0074066	.1152164	4.533432	.0591056	.0080986
#2	204.8788	.0019538	.1144709	4.539339	.0585472	.0081200
#3	202.3159	-.001917	.1145989	4.474584	.0591193	.0079112

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06 Acquired: 10/24/2025 18:59:05 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.013676	-.007797	F 15.56957	.0186599	F 15.72164	-.031291
Stddev	.000315	.001397	.04798	.0003705	.16402	.000461
%RSD	2.299635	17.92045	.3081430	1.985588	1.043244	1.471899
#1	-.013538	-.006270	15.61394	.0190698	15.79052	-.030838
#2	-.013454	-.009011	15.57611	.0183488	15.83999	-.031758
#3	-.014036	-.008110	15.51866	.0185610	15.53442	-.031276

Elem	Sr4077
Units	ppm
Avg	.3114643
Stddev	.0021165
%RSD	.6795220
#1	.3138378
#2	.3107818
#3	.3097733

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5025.958	81285.62	6581.851	3903.419	5793.236
Stddev	43.373	219.97	69.305	33.346	47.441
%RSD	.8629755	.2706141	1.052968	.8542801	.8189028
#1	4988.265	81055.61	6508.098	3864.960	5754.286
#2	5016.247	81493.94	6645.627	3921.018	5779.351
#3	5073.364	81307.30	6591.827	3924.279	5846.070

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06DUP Acquired: 10/24/2025 19:03:17 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000351**	**.0005742**	**.0044446**	**.0007572**	**.0035191**	**.0402438**
Stddev	.002961	.0016448	.0009913	.0020296	.0015551	.0132062
%RSD	842.5969	286.4430	22.30396	268.0420	44.19119	32.81538
#1	-.003710	.0003015	.0033853	-.001174	.0030753	.0514963
#2	.000775	-.000917	.0045987	.000573	.0022341	.0257047
#3	.001881	.002338	.0053499	.002873	.0052479	.0435305

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0601293**	**-.000167**	**.0000620**	**209.0772**	**.0046760**	**.0002765**
Stddev	.0003826	.000024	.0000251	.2707	.0001470	.0000623
%RSD	.6363510	14.55967	40.44272	.1294527	3.143692	22.51854
#1	.0605661	-.000195	.0000895	208.8243	.0045144	.0002236
#2	.0598536	-.000154	.0000404	209.0446	.0048019	.0003451
#3	.0599681	-.000152	.0000560	209.3626	.0047117	.0002608

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0255573**	**.2841186**	**.0028913**	**94.44897**	**.0035426**	**.0005516**
Stddev	.0002802	.0092657	.0006010	.42816	.0003939	.0003188
%RSD	1.096493	3.261222	20.78469	.4533233	11.11875	57.79264
#1	.0253017	.2738746	.0035622	94.14006	.0039938	.0004197
#2	.0255133	.2865666	.0027094	94.93772	.0033665	.0009151
#3	.0258570	.2919144	.0024024	94.26914	.0032675	.0003200

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**205.9360**	**.0011497**	**.1172150**	**4.505817**	**.0590321**	**.0085717**
Stddev	.8613	.0026583	.0004284	.014024	.0008184	.0003438
%RSD	.4182307	231.2232	.3655001	.3112477	1.386379	4.010508
#1	205.5091	.0027368	.1167281	4.502392	.0584457	.0089663
#2	205.3715	-.001919	.1173828	4.521237	.0599671	.0083372
#3	206.9274	.002632	.1175341	4.493823	.0586834	.0084115

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06DUP Acquired: 10/24/2025 19:03:17 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012964	-.007669	F 15.95011	.0206350	F 16.08827	-.033601
Stddev	.000573	.000253	.15250	.0025291	.07272	.001580
%RSD	4.422624	3.302348	.9561156	12.25629	.4520153	4.703287
#1	-.012305	-.007936	15.77804	.0177493	16.13846	-.032179
#2	-.013346	-.007432	16.00371	.0224659	16.00487	-.035303
#3	-.013241	-.007639	16.06857	.0216899	16.12147	-.033320

Elem	Sr4077
Units	ppm
Avg	.3140380
Stddev	.0009352
%RSD	.2978023
#1	.3147732
#2	.3129854
#3	.3143555

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4902.609	79437.52	6430.186	3773.048	5673.239
Stddev	13.914	490.56	25.277	16.452	17.393
%RSD	.2838022	.6175412	.3931020	.4360531	.3065742
#1	4897.759	80001.85	6436.745	3786.031	5659.450
#2	4891.769	79112.95	6402.276	3754.546	5667.489
#3	4918.299	79197.77	6451.537	3778.567	5692.779

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06LX5 Acquired: 10/24/2025 19:07:30 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006009**	**.0015063**	**.0021898**	**.0030279**	**.0007028**	**.0000974**	**.0186004**
Stddev	.0013555	.0026463	.0011087	.0013588	.0007893	.0035785	.0019719
%RSD	225.5995	175.6793	50.63135	44.87558	112.3036	3673.890	10.60143
#1	.0017619	.0005971	.0034091	.0036868	.0005313	.0008719	.0165135
#2	-.000889	.0044873	.0012422	.0014653	.0000134	.0032253	.0188551
#3	.000929	-.000565	.0019180	.0039315	.0015638	-.003805	.0204326

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000080**	**.0000386**	**42.81041**	**.0008060**	**.0002487**	**.0071584**	**.0561413**
Stddev	.000045	.0000540	.18264	.0000651	.0002433	.0002044	.0087131
%RSD	56.20844	139.9933	.4266249	8.071893	97.82619	2.855712	15.51994
#1	-.000065	.0000034	42.60284	.0007310	.0001180	.0069233	.0466969
#2	-.000044	.0001008	42.94649	.0008399	.0000987	.0072943	.0638670
#3	-.000130	.0000115	42.88191	.0008471	.0005294	.0072576	.0578601

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006439**	**19.34747**	**.0013229**	**.0005615**	**40.09644**	**-.002156**	**.0249387**
Stddev	.0003949	.07374	.0007830	.0004310	.23631	.002089	.0002374
%RSD	61.33150	.3811511	59.19152	76.75314	.5893430	96.88876	.9517518
#1	.0002358	19.26332	.0005354	.0004954	40.35724	-.004135	.0248367
#2	.0006716	19.37826	.0013319	.0010217	39.89655	.000028	.0247694
#3	.0010242	19.40082	.0021013	.0001674	40.03553	-.002362	.0252100

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.438353**	**.0182198**	**.0020168**	**-.000933**	**-.001020**	**3.112780**	**.0015319**
Stddev	.057095	.0004531	.0002538	.000684	.001075	.028342	.0009574
%RSD	3.969499	2.487048	12.58283	73.38749	105.4420	.9104965	62.49973
#1	1.372641	.0179430	.0019938	-.000152	-.002202	3.139762	.0005286
#2	1.475825	.0179735	.0022813	-.001217	-.000758	3.083251	.0024356
#3	1.466594	.0187427	.0017754	-.001429	-.000100	3.115328	.0016315

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06LX5 Acquired: 10/24/2025 19:07:30 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**3.208370**	**.0031200**	**.0637821**
Stddev	.021691	.0033843	.0004876
%RSD	.6760635	108.4720	.7644622
#1	3.233350	-.000624	.0633379
#2	3.194311	.004023	.0637047
#3	3.197448	.005961	.0643038

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5220.688**	**83699.63**	**6564.719**	**3947.476**	**6262.842**
Stddev	46.725	440.22	62.300	29.135	59.014
%RSD	.8949979	.5259487	.9490175	.7380577	.9422913
#1	5167.150	83770.04	6635.503	3948.783	6195.206
#2	5241.667	84100.39	6540.442	3975.935	6289.471
#3	5253.246	83228.44	6518.212	3917.710	6303.849

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06MS Acquired: 10/24/2025 19:11:46 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8073792**	**1.804923**	**.9318763**	**1.960095**	**.8033421**	**2.012663**
Stddev	.0033273	.009177	.0012150	.006622	.0025084	.012606
%RSD	.4121141	.5084305	.1303853	.3378584	.3122480	.6263389
#1	.8086192	1.794973	.9317113	1.964246	.8020149	1.998465
#2	.8099085	1.813054	.9331654	1.963581	.8017762	2.016983
#3	.8036099	1.806742	.9307522	1.952458	.8062354	2.022541

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2481488**	**.2069834**	**.1945851**	**204.6301**	**.4202618**	**.1954002**
Stddev	.0026370	.0009053	.0001755	.5475	.0021817	.0003417
%RSD	1.062656	.4373596	.0901884	.2675790	.5191295	.1748683
#1	.2452149	.2065691	.1946045	204.1052	.4178648	.1952674
#2	.2503213	.2080217	.1947502	205.1978	.4207892	.1957884
#3	.2489102	.2063594	.1944008	204.5874	.4221315	.1951449

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3164557**	**3.214832**	**.1997746**	**94.01019**	**.4899315**	**.0752873**
Stddev	.0070565	.025266	.0014029	.26283	.0013901	.0005042
%RSD	2.229850	.7859320	.7022477	.2795729	.2837389	.6697324
#1	.3246036	3.186100	.1982913	93.71013	.4912714	.0758191
#2	.3123221	3.224811	.2010803	94.19960	.4884960	.0748161
#3	.3124416	3.233586	.1999520	94.12085	.4900270	.0752267

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**198.1261**	**.2975924**	**.3223885**	**14.51426**	**.3284044**	**.4309781**
Stddev	1.4180	.0009050	.0012668	.10106	.0019241	.0009641
%RSD	.7157304	.3041220	.3929562	.6962761	.5858961	.2237068
#1	196.4894	.2965483	.3233409	14.41211	.3284036	.4320617
#2	198.9878	.2981541	.3209508	14.51648	.3303289	.4306573
#3	198.9010	.2980747	.3228739	14.61419	.3264807	.4302152

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06MS Acquired: 10/24/2025 19:11:46 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6940536	.1834096	F 16.63322	6.108118	F 16.02518	.1633693
Stddev	.0016345	.0013618	.05572	.018518	.03095	.0008359
%RSD	.2354944	.7425068	.3350022	.3031773	.1931604	.5116728
#1	.6947202	.1818620	16.57241	6.099268	16.03108	.1627245
#2	.6952495	.1839423	16.64544	6.129401	16.05276	.1643138
#3	.6921913	.1844246	16.68182	6.095686	15.99170	.1630697

Elem	Sr4077
Units	ppm
Avg	.4902689
Stddev	.0021590
%RSD	.4403625
#1	.4880335
#2	.4923422
#3	.4904311

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4960.153	79897.29	6548.467	3754.519	5676.972
Stddev	13.960	484.44	35.844	22.053	7.446
%RSD	.2814472	.6063283	.5473574	.5873764	.1311608
#1	4945.790	80454.68	6582.367	3774.741	5670.341
#2	4960.994	79659.44	6510.954	3757.812	5675.548
#3	4973.673	79577.75	6552.080	3731.005	5685.027

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06MSD Acquired: 10/24/2025 19:15:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7936357**	**1.765966**	**.9235916**	**1.935744**	**.8300407**	**1.987215**
Stddev	.0038852	.020285	.0002112	.006112	.0007689	.016861
%RSD	.4895456	1.148653	.0228682	.3157412	.0926298	.8484739
#1	.7980618	1.766673	.9238349	1.942245	.8299774	2.005788
#2	.7907883	1.785888	.9234845	1.934871	.8293055	1.972872
#3	.7920571	1.745337	.9234553	1.930115	.8308393	1.982986

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2497157**	**.2054946**	**.1921882**	**211.1591**	**.4062251**	**.1932867**
Stddev	.0005300	.0008442	.0001756	.7065	.0007928	.0003535
%RSD	.2122530	.4108253	.0913717	.3345908	.1951583	.1828939
#1	.2500809	.2059873	.1920732	211.9180	.4064120	.1931230
#2	.2491078	.2045198	.1923903	211.0390	.4053555	.1936924
#3	.2499584	.2059768	.1921011	210.5203	.4069077	.1930448

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3107683**	**3.193687**	**.2003720**	**96.09102**	**.4844558**	**.0736750**
Stddev	.0001216	.006632	.0011851	.34041	.0006691	.0003584
%RSD	.0391155	.2076466	.5914496	.3542535	.1381056	.4864026
#1	.3108760	3.201253	.2001165	96.47260	.4850675	.0735874
#2	.3107924	3.190927	.2016641	95.98195	.4845586	.0740690
#3	.3106365	3.188881	.1993356	95.81852	.4837413	.0733685

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**203.8846**	**.2936485**	**.3195849**	**14.43039**	**.3303761**	**.4437102**
Stddev	.5920	.0036520	.0003342	.04596	.0024007	.0004198
%RSD	.2903456	1.243660	.1045813	.3184801	.7266639	.0946089
#1	203.8741	.2941460	.3193433	14.43958	.3325130	.4439457
#2	204.4817	.2897733	.3194450	14.47106	.3277784	.4432255
#3	203.2979	.2970262	.3199663	14.38053	.3308368	.4439593

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06MSD Acquired: 10/24/2025 19:15:44 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7158923	.1939549	F 16.67158	6.143677	F 16.49152	.1637503
Stddev	.0004712	.0009378	.03938	.008413	.02642	.0003302
%RSD	.0658215	.4835139	.2362056	.1369444	.1601932	.2016737
#1	.7164257	.1934040	16.66866	6.136364	16.47222	.1637875
#2	.7155326	.1950377	16.71234	6.141796	16.48072	.1640604
#3	.7157186	.1934230	16.63375	6.152872	16.52163	.1634031

Elem	Sr4077
Units	ppm
Avg	.5079320
Stddev	.0015103
%RSD	.2973475
#1	.5095377
#2	.5077185
#3	.5065397

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4959.496	81474.91	6522.079	3902.141	5652.789
Stddev	4.747	218.65	44.164	8.921	5.727
%RSD	.0957150	.2683684	.6771395	.2286053	.1013087
#1	4955.547	81401.93	6501.298	3892.598	5655.639
#2	4958.177	81720.71	6572.799	3910.269	5646.196
#3	4964.763	81302.07	6492.138	3903.557	5656.532

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV04 Acquired: 10/24/2025 19:19:43 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.828514**	**4.750388**	**4.938443**	**4.766302**	**4.814072**	**9.946799**	**10.20860**
Stddev	.007232	.158339	.006070	.016422	.005602	.042115	.05430
%RSD	.1497857	3.333178	.1229049	.3445445	.1163618	.4233982	.5318605
#1	4.835995	4.924646	4.936762	4.778369	4.807718	9.898410	10.18485
#2	4.827988	4.615333	4.945176	4.747600	4.816201	9.966803	10.17023
#3	4.821559	4.711186	4.933391	4.772936	4.818298	9.975183	10.27073

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2651833**	**2.490958**	**25.17372**	**1.008111**	**2.468042**	**1.239960**	**4.844027**
Stddev	.0019538	.002092	.06135	.001422	.003491	.000277	.050183
%RSD	.7367855	.0839648	.2437201	.1410488	.1414563	.0223721	1.035970
#1	.2629550	2.492146	25.18418	1.007401	2.465972	1.239707	4.896636
#2	.2659915	2.492186	25.22916	1.007183	2.472073	1.239917	4.838757
#3	.2666034	2.488543	25.10780	1.009748	2.466081	1.240256	4.796687

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.557878**	**25.23483**	**2.478975**	**1.229997**	**24.53539**	**2.482911**	**2.430686**
Stddev	.018738	.04782	.002998	.002937	.38163	.003878	.000998
%RSD	.7325673	.1895126	.1209564	.2388173	1.555438	.1562010	.0410772
#1	2.557263	25.24874	2.477880	1.227317	24.92441	2.478564	2.431463
#2	2.576915	25.18160	2.482367	1.229535	24.52017	2.484149	2.431034
#3	2.539454	25.27416	2.476678	1.233138	24.16160	2.486018	2.429560

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.83875**	**5.235551**	**4.953983**	**4.966324**	**4.997779**	**4.723850**	**5.044567**
Stddev	.21448	.044666	.007865	.011780	.022795	.012907	.027583
%RSD	.8997131	.8531342	.1587657	.2371893	.4560967	.2732291	.5467908
#1	24.06249	5.184281	4.960078	4.979855	5.009548	4.714931	5.076313
#2	23.81883	5.256322	4.945104	4.958363	5.012285	4.717968	5.030927
#3	23.63492	5.266049	4.956766	4.960752	4.971506	4.738650	5.026462

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV04 Acquired: 10/24/2025 19:19:43 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.753641**	**4.836717**	**4.990343**
Stddev	.031675	.024774	.056495
%RSD	.6663411	.5122135	1.132093
#1	4.789952	4.851510	5.032005
#2	4.731681	4.850526	5.012984
#3	4.739291	4.808116	4.926039

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5435.166**	**86990.19**	**6671.045**	**4244.243**	**6231.846**
Stddev	2.899	144.04	34.636	11.146	9.216
%RSD	.0533446	.1655768	.5191935	.2626159	.1478898
#1	5438.465	86848.86	6710.264	4234.895	6233.452
#2	5434.009	86984.92	6644.651	4241.256	6221.932
#3	5433.024	87136.78	6658.220	4256.578	6240.154

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB04 Acquired: 10/24/2025 19:23:48 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001199**	**.0017453**	**.0009205**	**.0031934**	**-.000882**	**-.001590**
Stddev	.0017243	.0018086	.0008891	.0018849	.001013	.004552
%RSD	1437.865	103.6233	96.59241	59.02279	114.7930	286.3411
#1	-.001722	.0030059	-.000103	.0039067	-.001836	-.006843
#2	.001696	.0025570	.001498	.0010561	.000181	.000871
#3	.000386	-.000327	.001367	.0046176	-.000991	.001202

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000092**	**-.000044**	**.0000469**	**.0104980**	**-.000024**	**.0000198**
Stddev	.002384	.000029	.0000210	.0170868	.000265	.0001482
%RSD	2598.758	65.09510	44.77807	162.7621	1094.407	749.8539
#1	.002085	-.000012	.0000231	-.005135	.000116	.0001697
#2	-.002641	-.000052	.0000548	.028739	.000141	-.000127
#3	.000281	-.000068	.0000629	.007890	-.000330	.000016

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005588**	**.0077050**	**.0006101**	**-.017484**	**.0000640**	**.0007768**
Stddev	.0001966	.0018398	.0004898	.026395	.0000660	.0004799
%RSD	35.17529	23.87795	80.28308	150.9686	103.0431	61.78083
#1	.0007067	.0060322	.0004301	-.031603	.0000649	.0010057
#2	.0003358	.0074072	.0002357	.012968	.0001296	.0002253
#3	.0006338	.0096755	.0011644	-.033816	-.000002	.0010996

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9990747**	**-.001305**	**.0007525**	**.5228735**	**.0114579**	**.0005188**
Stddev	.0386958	.002279	.0000456	.0479356	.0005658	.0001186
%RSD	3.873169	174.5898	6.059519	9.167722	4.938271	22.86032
#1	.9551381	.000470	.0007128	.4831682	.0114712	.0006508
#2	1.014004	-.000511	.0008023	.5093280	.0120170	.0004847
#3	1.028082	-.003875	.0007424	.5761243	.0108856	.0004210

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB04 Acquired: 10/24/2025 19:23:48 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016598	-.000621	.0009437	-.000856	F .0220219	.0023389
Stddev	.0006057	.002320	.0046995	.000271	.0018657	.0020499
%RSD	36.49105	373.8206	497.9875	31.60823	8.472180	87.64124
#1	.0010128	.000858	.0036307	-.001051	.0220798	.0040226
#2	.0017535	.000575	-.004483	-.000547	.0201279	.0029378
#3	.0022132	-.003295	.003683	-.000971	.0238580	.0000563

Elem	Sr4077
Units	ppm
Avg	.0001554
Stddev	.0001530
%RSD	98.46254
#1	.0002444
#2	-.000021
#3	.000243

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5622.608	90702.10	6965.928	4294.594	7213.211
Stddev	58.404	201.63	15.927	28.282	64.913
%RSD	1.038735	.2222983	.2286400	.6585572	.8999205
#1	5689.761	90919.66	6947.573	4302.555	7288.103
#2	5583.656	90665.11	6974.106	4263.185	7178.421
#3	5594.408	90521.53	6976.104	4318.043	7173.109

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06A Acquired: 10/24/2025 19:28:06 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7961882	1.772508	.9233347	1.928586	.7881599	2.005789
Stddev	.0007070	.016170	.0034737	.003797	.0027650	.026418
%RSD	.0888049	.9122467	.3762070	.1968924	.3508207	1.317102
#1	.7962523	1.790336	.9262796	1.925934	.7913490	1.997434
#2	.7968611	1.758790	.9195039	1.932936	.7864315	2.035375
#3	.7954513	1.768397	.9242207	1.926889	.7866993	1.984558

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2411675	.2047490	.1923100	198.5694	.4101553	.1929716
Stddev	.0015192	.0005965	.0003420	.4354	.0027200	.0004707
%RSD	.6299183	.2913340	.1778158	.2192932	.6631588	.2439061
#1	.2425537	.2044352	.1926376	198.3034	.4122843	.1934284
#2	.2395434	.2054369	.1919553	198.3330	.4110906	.1929984
#3	.2414055	.2043749	.1923371	199.0719	.4070911	.1924882

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3087915	3.170998	.1948583	91.61139	.4841452	.0720075
Stddev	.0004713	.026794	.0011152	.29652	.0016791	.0002097
%RSD	.1526352	.8449813	.5723183	.3236768	.3468069	.2911683
#1	.3089582	3.180889	.1942776	91.26900	.4839306	.0718203
#2	.3082594	3.140664	.1941532	91.78094	.4825838	.0722340
#3	.3091568	3.191440	.1961440	91.78424	.4859212	.0719681

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	191.1895	.2962079	.3149041	14.15638	.3292968	.4250507
Stddev	1.7005	.0007691	.0018456	.12121	.0024693	.0004101
%RSD	.8894296	.2596446	.5860919	.8562262	.7498783	.0964914
#1	192.2311	.2961608	.3168075	14.29515	.3266294	.4249585
#2	189.2271	.2969994	.3147825	14.07123	.3315030	.4246945
#3	192.1101	.2954634	.3131222	14.10275	.3297578	.4254991

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3444-06A Acquired: 10/24/2025 19:28:06 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6791029	.1825981	F 16.16690	6.005328	F 15.44684	.1632982
Stddev	.0013929	.0011454	.07434	.006867	.02129	.0016478
%RSD	.2051115	.6272632	.4598253	.1143477	.1378323	1.009084
#1	.6774952	.1827053	16.25239	6.012477	15.42720	.1638628
#2	.6798658	.1814029	16.13079	5.998783	15.46946	.1614423
#3	.6799477	.1836861	16.11751	6.004724	15.44384	.1645895

Elem	Sr4077
Units	ppm
Avg	.4779312
Stddev	.0034058
%RSD	.7126067
#1	.4770962
#2	.4750205
#3	.4816768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5069.402	81881.71	6692.406	3833.273	5827.608
Stddev	9.670	299.70	21.913	16.890	13.160
%RSD	.1907476	.3660121	.3274355	.4406082	.2258200
#1	5061.312	81672.33	6714.720	3817.288	5814.596
#2	5080.112	81747.79	6670.917	3831.588	5840.911
#3	5066.782	82225.02	6691.580	3850.941	5827.316

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3434-02DLX5 Acquired: 10/24/2025 19:32:05 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053039	.0016235	.0320040	-.001297	.0027075	2.001209
Stddev	.0036102	.0020231	.0006685	.000994	.0016634	.086007
%RSD	68.06690	124.6190	2.088829	76.62729	61.43531	4.297731
#1	.0076276	.0039246	.0318233	-.000489	.0010461	2.082439
#2	.0011447	.0001243	.0314444	-.002407	.0027037	1.911113
#3	.0071394	.0008214	.0327443	-.000995	.0043728	2.010074

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1023888	.0001021	.0004167	34.86450	.0212751	.0013710
Stddev	.0029980	.0000766	.0000887	.97977	.0001661	.0000949
%RSD	2.928055	75.04320	21.28977	2.810231	.7808689	6.920769
#1	.1056949	.0000155	.0003569	35.80892	.0213128	.0014223
#2	.0998467	.0001299	.0005186	33.85284	.0210934	.0014292
#3	.1016247	.0001610	.0003745	34.93175	.0214192	.0012615

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0227059	4.463706	.2499274	105.7928	.0061203	-.000334
Stddev	.0008767	.038084	.0080010	3.1097	.0001383	.000558
%RSD	3.860963	.8531871	3.201316	2.939431	2.259726	167.2677
#1	.0235814	4.477030	.2581471	108.6887	.0061005	.000208
#2	.0227081	4.420751	.2421647	102.5062	.0059930	-.000303
#3	.0218281	4.493338	.2494704	106.1836	.0062674	-.000906

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	994.7661	.0094019	.1231646	41.31491	.3858058	.0051552
Stddev	18.5897	.0001068	.0008329	.36639	.0061334	.0000899
%RSD	1.868750	1.136102	.6762357	.8868144	1.589766	1.743491
#1	1015.636	.0092790	.1222325	41.33048	.3912349	.0052334
#2	979.983	.0094541	.1234254	40.94099	.3791527	.0050570
#3	988.679	.0094726	.1238359	41.67327	.3870300	.0051753

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3434-02DLX5 Acquired: 10/24/2025 19:32:05 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018964	.0643248	5.293469	.7076888	F 78.59658	.0249903
Stddev	.0002927	.0030399	.098908	.0028064	.69632	.0020907
%RSD	15.43232	4.725822	1.868485	.3965527	.8859413	8.366012
#1	.0018097	.0653198	5.345039	.7108397	79.39718	.0258268
#2	.0016569	.0609121	5.179434	.7067686	78.13193	.0226109
#3	.0022227	.0667425	5.355935	.7054580	78.26064	.0265332

Elem	Sr4077
Units	ppm
Avg	.5693889
Stddev	.0166767
%RSD	2.928879
#1	.5861510
#2	.5527989
#3	.5692168

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4979.513	73976.15	6721.366	3546.414	5471.357
Stddev	35.009	560.94	174.345	24.635	41.453
%RSD	.7030619	.7582718	2.593885	.6946519	.7576325
#1	4940.937	74040.98	6557.402	3552.733	5426.957
#2	5009.268	74501.87	6904.506	3567.273	5509.043
#3	4988.334	73385.62	6702.191	3519.234	5478.071

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3417-01DLX5 Acquired: 10/24/2025 19:36:26 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1368794	-.178682	-.003867	.5636205	.1235169	.1296048	-.014735
Stddev	.0002259	.003055	.000897	.0137253	.0015878	.0090992	.002028
%RSD	.1650742	1.709491	23.20204	2.435199	1.285526	7.020686	13.76379
#1	.1370613	-.176877	-.003751	.5778394	.1238622	.1399403	-.012666
#2	.1369503	-.182209	-.004817	.5625732	.1217848	.1228006	-.014819
#3	.1366265	-.176961	-.003033	.5504488	.1249037	.1260736	-.016719

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003466	-.000177	.7509003	.0009020	.0025336	.0088821	8.300406
Stddev	.0000550	.000048	.0104825	.0001803	.0000373	.0002463	.047496
%RSD	15.86819	27.05767	1.395987	19.98566	1.471200	2.772741	.5722075
#1	.0002835	-.000187	.7600575	.0009170	.0025090	.0087869	8.299589
#2	.0003843	-.000219	.7531768	.0007147	.0025765	.0086976	8.348305
#3	.0003719	-.000125	.7394667	.0010743	.0025154	.0091618	8.253324

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1605433	.1466273	.0072898	.0000990	4.858064	-.001437	.0390894
Stddev	.0006416	.0283169	.0001023	.0002776	.022622	.000486	.0003790
%RSD	.3996399	19.31213	1.403781	280.5325	.4656652	33.80653	.9695393
#1	.1609184	.1155230	.0071832	.0003854	4.833655	-.001915	.0394321
#2	.1598025	.1709107	.0073872	-.000169	4.878326	-.001451	.0386824
#3	.1609090	.1534482	.0072991	.000080	4.862209	-.000944	.0391537

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.61658	.0331383	.0017325	.0773008	-.000377	.1733349	.5601521
Stddev	.01722	.0012226	.0003680	.0007059	.000588	.0107928	.0058752
%RSD	.1622420	3.689264	21.23954	.9132296	156.0915	6.226546	1.048864
#1	10.63332	.0325956	.0018929	.0777900	.000007	.1845111	.5587227
#2	10.61750	.0345383	.0019931	.0764916	-.000084	.1725223	.5551235
#3	10.59891	.0322811	.0013116	.0776209	-.001054	.1629714	.5666102

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: Q3417-01DLX5 Acquired: 10/24/2025 19:36:26 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**1.535133**	**.0030446**	**-.005449**
Stddev	.008293	.0012643	.000121
%RSD	.5402310	41.52572	2.214066
#1	1.526183	.0038638	-.005318
#2	1.536658	.0015885	-.005474
#3	1.542558	.0036814	-.005555

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4966.096**	**82296.50**	**7359.528**	**3883.076**	**7047.890**
Stddev	8.240	314.96	13.264	17.439	8.695
%RSD	.1659193	.3827097	.1802288	.4491109	.1233644
#1	4971.649	82184.29	7366.778	3865.070	7052.113
#2	4970.010	82053.01	7367.587	3884.271	7053.667
#3	4956.628	82652.19	7344.219	3899.887	7037.891

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV05 Acquired: 10/24/2025 20:06:47 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.800875**	**4.906092**	**4.892214**	**4.725940**	**4.737067**	**9.875027**	**9.904050**
Stddev	.015103	.033061	.002802	.010145	.004933	.021093	.020131
%RSD	.3145823	.6738682	.0572817	.2146753	.1041446	.2136043	.2032642
#1	4.810987	4.892767	4.895013	4.729345	4.739836	9.885089	9.926953
#2	4.783514	4.881774	4.892220	4.714530	4.731371	9.889207	9.896043
#3	4.808123	4.943736	4.889408	4.733944	4.739994	9.850787	9.889154

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2649608**	**2.478119**	**24.94405**	**1.008985**	**2.446994**	**1.230494**	**4.679831**
Stddev	.0007756	.001694	.06493	.001497	.001676	.002598	.018484
%RSD	.2927062	.0683466	.2602924	.1483770	.0685110	.2110941	.3949696
#1	.2656655	2.479258	25.01498	1.009200	2.447660	1.228475	4.700856
#2	.2650870	2.478927	24.92961	1.010363	2.448236	1.229583	4.672502
#3	.2641298	2.476173	24.88756	1.007392	2.445087	1.233424	4.666136

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.512790**	**25.20127**	**2.459421**	**1.213132**	**24.88221**	**2.450834**	**2.420643**
Stddev	.007741	.08821	.001952	.000341	.17804	.005484	.003180
%RSD	.3080712	.3500209	.0793856	.0280968	.7155508	.2237551	.1313710
#1	2.521617	25.23822	2.460247	1.213005	25.08760	2.447420	2.424031
#2	2.509594	25.26501	2.460825	1.213519	24.77153	2.457160	2.420175
#3	2.507158	25.10060	2.457192	1.212874	24.78752	2.447923	2.417723

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.90181**	**5.198637**	**4.913067**	**4.952394**	**4.936694**	**5.219615**	**5.053957**
Stddev	.12455	.007592	.007895	.005272	.017711	.028351	.010909
%RSD	.5210895	.1460304	.1606906	.1064521	.3587671	.5431563	.2158564
#1	24.02183	5.205984	4.918723	4.949705	4.955066	5.212672	5.057561
#2	23.91044	5.190822	4.904048	4.949009	4.935291	5.250792	5.062607
#3	23.77318	5.199106	4.916431	4.958468	4.919727	5.195380	5.041701

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCV05 Acquired: 10/24/2025 20:06:47 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.748359**	**4.851021**	**4.914556**
Stddev	.014554	.016845	.033429
%RSD	.3064955	.3472540	.6801945
#1	4.762935	4.870433	4.952802
#2	4.733828	4.842391	4.899947
#3	4.748313	4.840239	4.890919

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5337.535**	**84828.57**	**6453.770**	**4103.958**	**6117.794**
Stddev	9.450	309.75	28.741	21.435	7.269
%RSD	.1770551	.3651450	.4453331	.5223114	.1188208
#1	5328.049	84848.34	6435.919	4097.668	6109.801
#2	5346.949	84509.41	6438.466	4086.370	6119.572
#3	5337.608	85127.96	6486.924	4127.834	6124.009

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

Sample Name: CCB05 Acquired: 10/24/2025 20:10:50 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017168	.0005289	.0014671	.0011169	.0004427	-.008326
Stddev	.0003539	.0006921	.0002708	.0013347	.0021480	.004370
%RSD	20.61393	130.8510	18.46065	119.5009	485.1742	52.48264
#1	.0020719	.0013208	.0013143	.0013380	.0016390	-.003714
#2	.0017144	.0000400	.0013071	-.000315	-.002037	-.012405
#3	.0013641	.0002259	.0017798	.002327	.001726	-.008860

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011458	-.000032	.0000110	.0068094	.0000167	.0001121
Stddev	.0014516	.000056	.0000496	.0050521	.0001129	.0000313
%RSD	126.6956	177.4032	452.1980	74.19255	675.5180	27.96151
#1	.0001190	-.000019	-.000039	.0072238	.0000434	.0001168
#2	.0005117	-.000093	.000012	.0116414	-.000107	.0001408
#3	.0028065	.000017	.000060	.0015629	.000114	.0000787

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048181	.0029978	.0006277	-.022368	-.000137	.0005301
Stddev	.0002366	.0113401	.0009238	.034256	.000297	.0004185
%RSD	4.911043	378.2788	147.1790	153.1508	217.3311	78.95207
#1	.0045830	-.009130	-.000398	-.009425	.000134	.0003189
#2	.0050562	.004786	.001393	-.061210	-.000090	.0010121
#3	.0048152	.013338	.000888	.003532	-.000454	.0002592

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.263720	-.000945	.0002712	.6051534	.0215364	.0006406
Stddev	.041464	.002613	.0003116	.0240948	.0011177	.0001606
%RSD	3.281087	276.4822	114.8821	3.981600	5.189971	25.06450
#1	1.218376	-.001602	.0003163	.5773365	.0225449	.0007917
#2	1.273082	.001934	-.000060	.6185870	.0203346	.0006580
#3	1.299702	-.003167	.000558	.6195366	.0217296	.0004720

Reviewed By:jaswal
On:10/28/2025 3:16:27 PM
Inst Id :P4
LB :LB137662

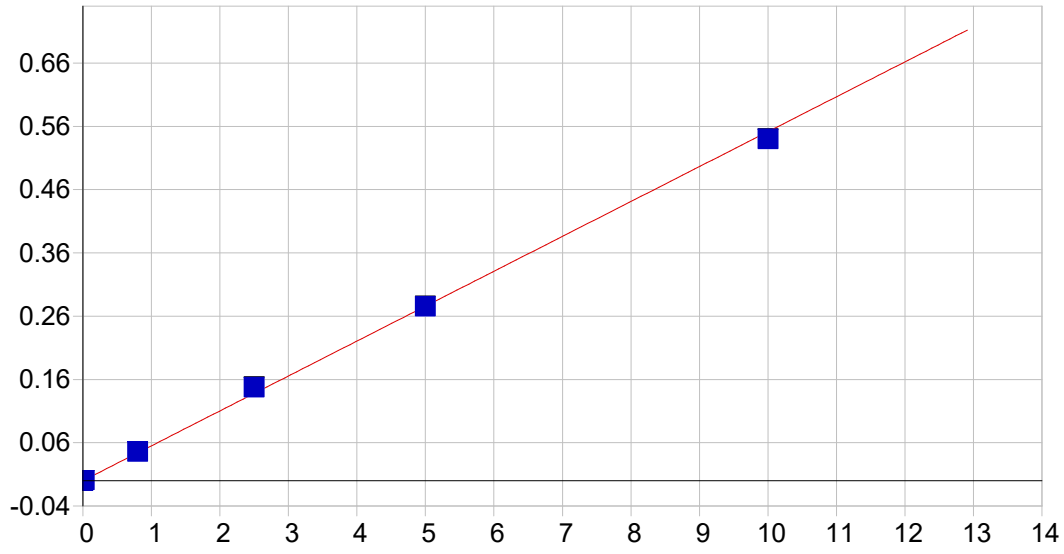
Sample Name: CCB05 Acquired: 10/24/2025 20:10:50 Type: Unk
Method: 6010-200.7 NEW(v308) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001630	.0018790	.0956398	-.001818	F .0322131	.0044047
Stddev	.0007929	.0016160	.0077018	.000576	.0014983	.0020896
%RSD	486.3576	86.00657	8.052960	31.70465	4.651133	47.44065
#1	-.000614	.0001604	.0896194	-.001404	.0339385	.0027401
#2	.000971	.0033679	.1043187	-.002476	.0314599	.0037242
#3	.000133	.0021087	.0929813	-.001575	.0312409	.0067497

Elem	Sr4077
Units	ppm
Avg	.0001213
Stddev	.0001119
%RSD	92.22468
#1	.0002486
#2	.0000384
#3	.0000770

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5582.750	90854.45	6842.333	4282.939	7122.873
Stddev	10.664	541.35	43.960	17.340	20.976
%RSD	.1910159	.5958450	.6424764	.4048570	.2944854
#1	5589.204	91317.04	6832.054	4297.824	7141.362
#2	5570.441	90987.25	6890.523	4287.093	7100.079
#3	5588.605	90259.06	6804.424	4263.899	7127.179

Reviewed By:
On:
Inst Id :P4
LB :LB137697



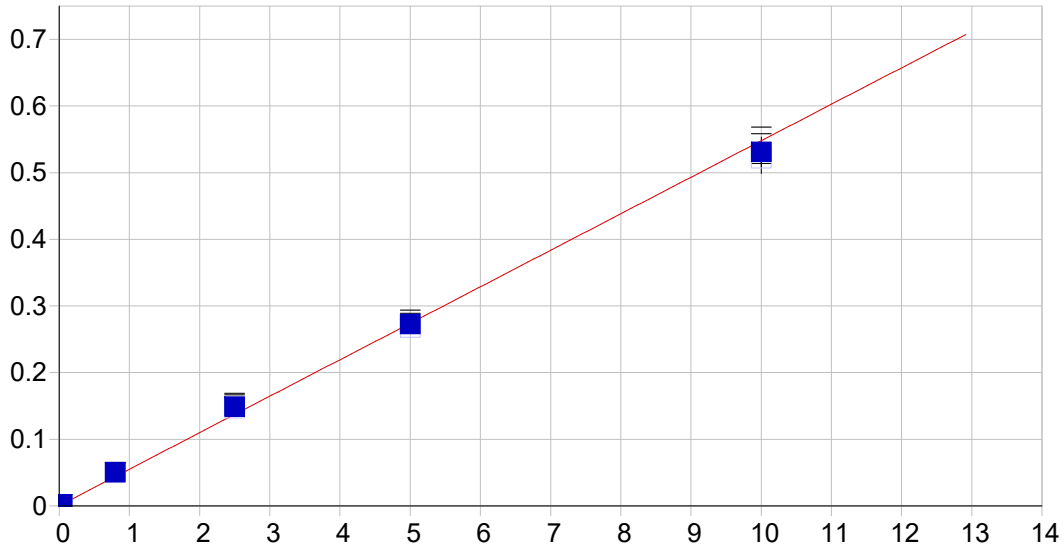
As 189.042 {479}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000009	Re-Slope:	1.000000
A1 (Gain):	0.055160	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999483	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.002032		
Predicted MQL:	0.006774		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00001	.000	1
S1	.02000	.02050	.000	2.48	.00112	.000	1
S3	2.5000	2.6805	.180	7.22	.14771	.001	1
S4	5.0000	4.9947	-.005	-.106	.27522	.001	1
S5	10.000	9.7900	-.210	-2.10	.53944	.001	1
S2	.80000	.83436	.034	4.29	.04597	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



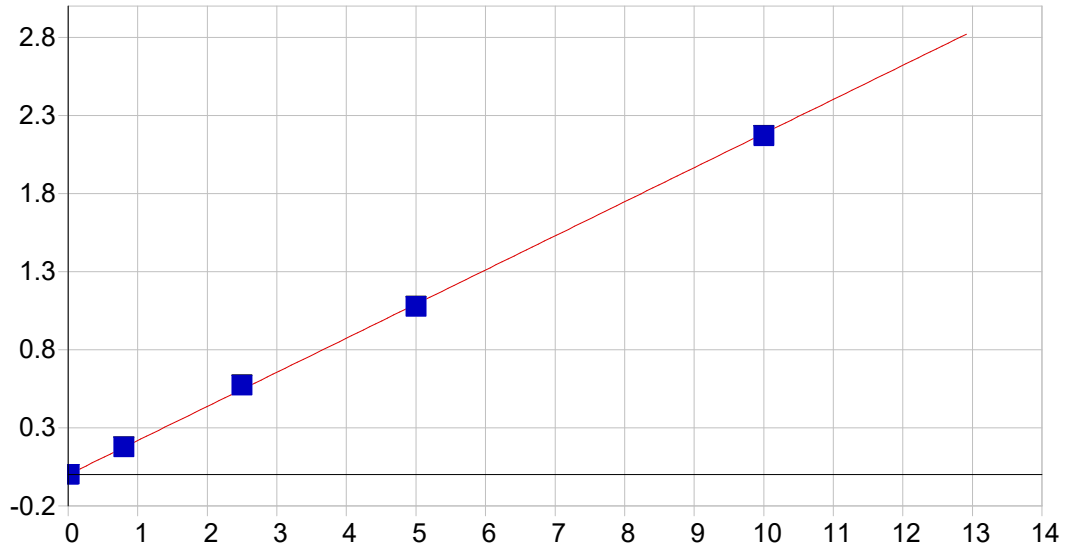
Tl 190.856 {477}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000337	Re-Slope:	1.000000
A1 (Gain):	0.054751	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998755	Status:	OK.
Std Error of Est:	0.000089		
Predicted MDL:	0.002850		
Predicted MQL:	0.009501		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00034	.000	1
S1	.04000	.04366	.004	9.16	.00259	.000	1
S3	2.5000	2.7163	.216	8.65	.14656	.005	1
S4	5.0000	4.9723	-.028	-.553	.26758	.006	1
S5	10.000	9.6960	-.304	-3.04	.52121	.022	1
S2	.80000	.91194	.112	14.0	.04947	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



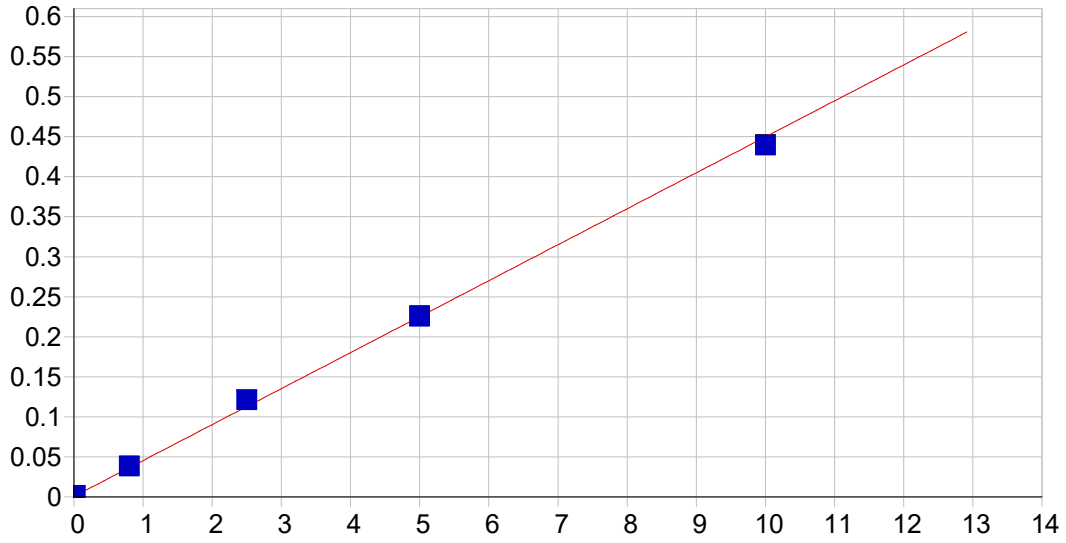
Pb 220.353 {453}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000199	Re-Slope:	1.000000
A1 (Gain):	0.218369	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999788	Status:	OK.
Std Error of Est:	0.000081		
Predicted MDL:	0.001219		
Predicted MQL:	0.004062		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00020	.000	1
S1	.01200	.01107	-.001	-7.71	.00256	.000	1
S3	2.5000	2.6229	.123	4.92	.57235	.002	1
S4	5.0000	4.9307	-.069	-1.39	1.0757	.002	1
S5	10.000	9.9337	-.066	-.663	2.1670	.003	1
S2	.80000	.81361	.014	1.70	.17767	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



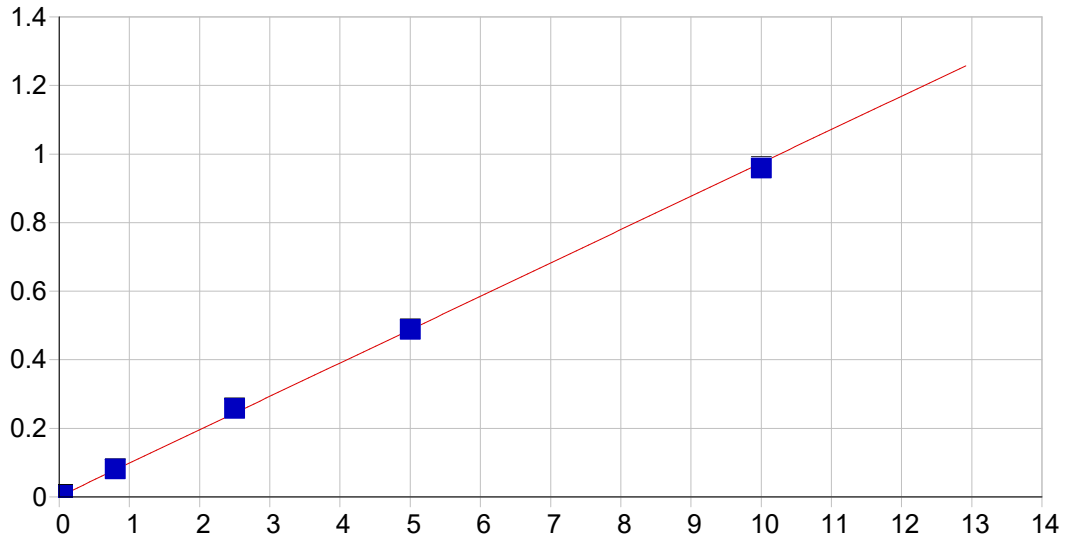
Se 196.090 {472}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000535	Re-Slope:	1.000000
A1 (Gain):	0.044922	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999429	Status:	OK.
Std Error of Est:	0.000036		
Predicted MDL:	0.003067		
Predicted MQL:	0.010223		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00054	.000	1
S1	.02000	.02251	.003	12.6	.00155	.000	1
S3	2.5000	2.6807	.181	7.23	.12093	.001	1
S4	5.0000	5.0101	.010	.203	.22554	.000	1
S5	10.000	9.7661	-.234	-2.34	.43913	.001	1
S2	.80000	.84053	.041	5.07	.03828	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



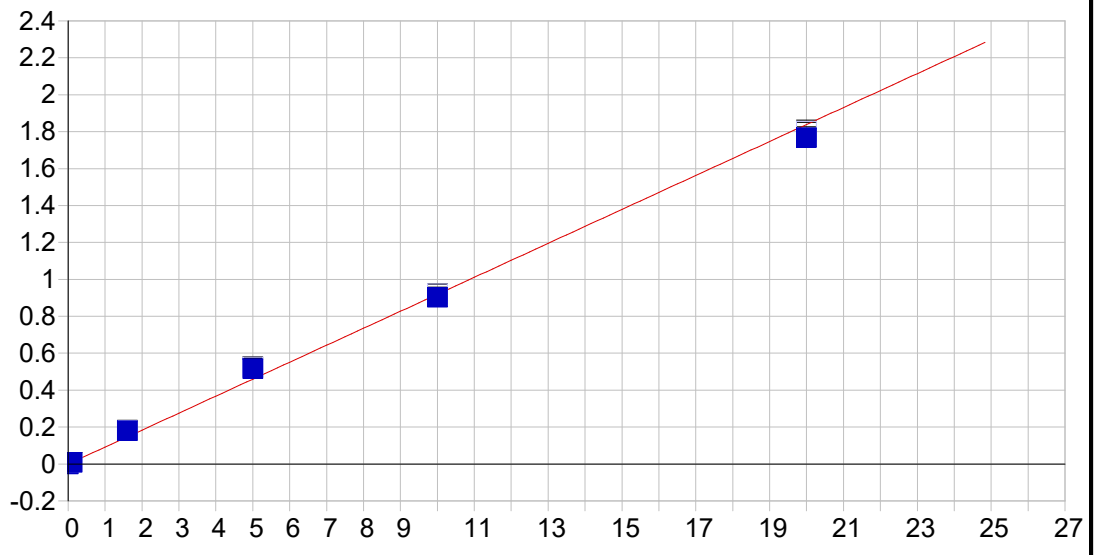
Sb 206.833 {463}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001257	Re-Slope:	1.000000
A1 (Gain):	0.097294	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999718	Status:	OK.
Std Error of Est:	0.000086		
Predicted MDL:	0.001868		
Predicted MQL:	0.006228		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00126	.000	1
S1	.05000	.04926	-.001	-1.47	.00606	.000	1
S3	2.5000	2.6363	.136	5.45	.25841	.001	1
S4	5.0000	5.0025	.002	.050	.48929	.000	1
S5	10.000	9.8425	-.158	-1.58	.96152	.001	1
S2	.80000	.81948	.019	2.43	.08120	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



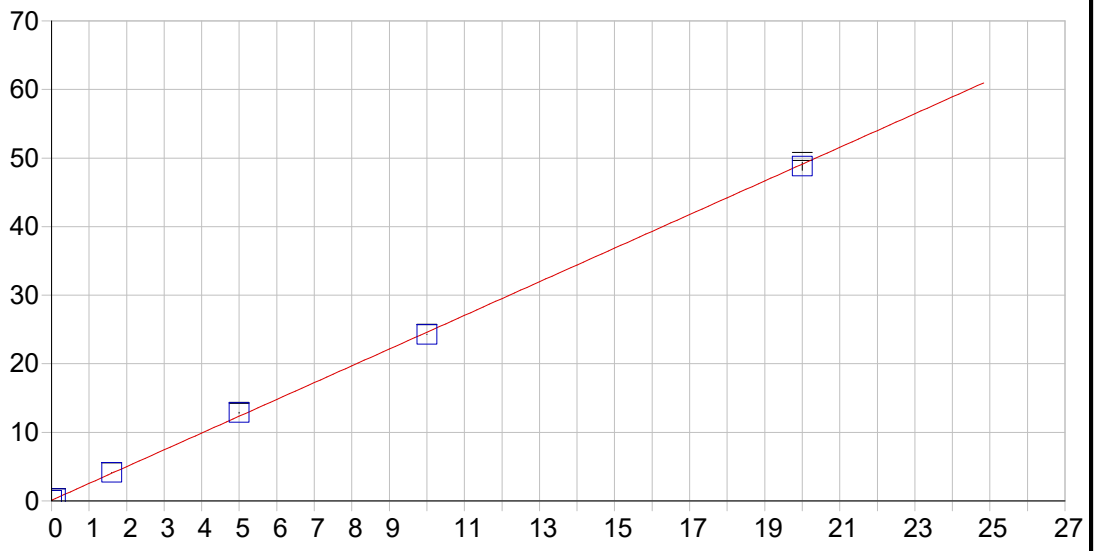
Al 396.152 { 85}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000426	Re-Slope:	1.000000
A1 (Gain):	0.091961	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997589	Status:	OK.
Std Error of Est:	0.000484		
Predicted MDL:	0.011819		
Predicted MQL:	0.039396		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00043	.001	1
S1	.10000	.09543	-.005	-4.57	.00906	.000	1
S3	5.0000	5.6116	.612	12.2	.52454	.001	1
S4	10.000	9.8250	-.175	-1.75	.92093	.001	1
S5	20.000	19.219	-.781	-3.90	1.8027	.005	1
S2	1.6000	1.9489	.349	21.8	.18165	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



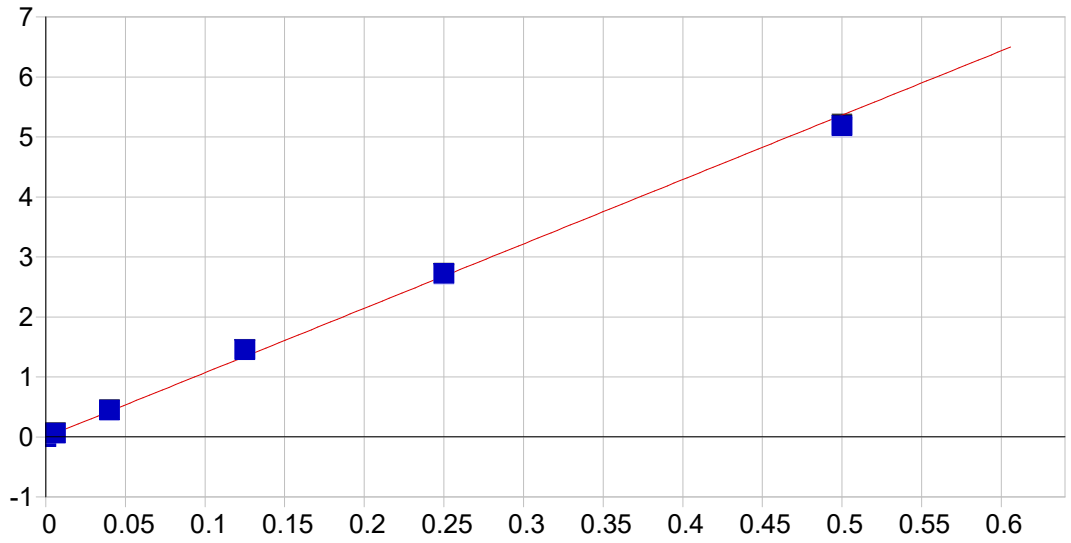
Ba 493.409 { 68}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.094729	Re-Slope:	1.000000
A1 (Gain):	2.450915	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999826	Status:	OK.
Std Error of Est:	0.003389		
Predicted MDL:	0.001240		
Predicted MQL:	0.004134		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.09471	.004	1
S1	.10000	.10266	.003	2.66	.34635	.007	1
S3	5.0000	5.2077	.208	4.15	12.858	.081	1
S4	10.000	9.8708	-.129	-1.29	24.287	.039	1
S5	20.000	19.869	-.131	-.654	48.792	.583	1
S2	1.6000	1.6497	.050	3.10	4.1379	.022	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



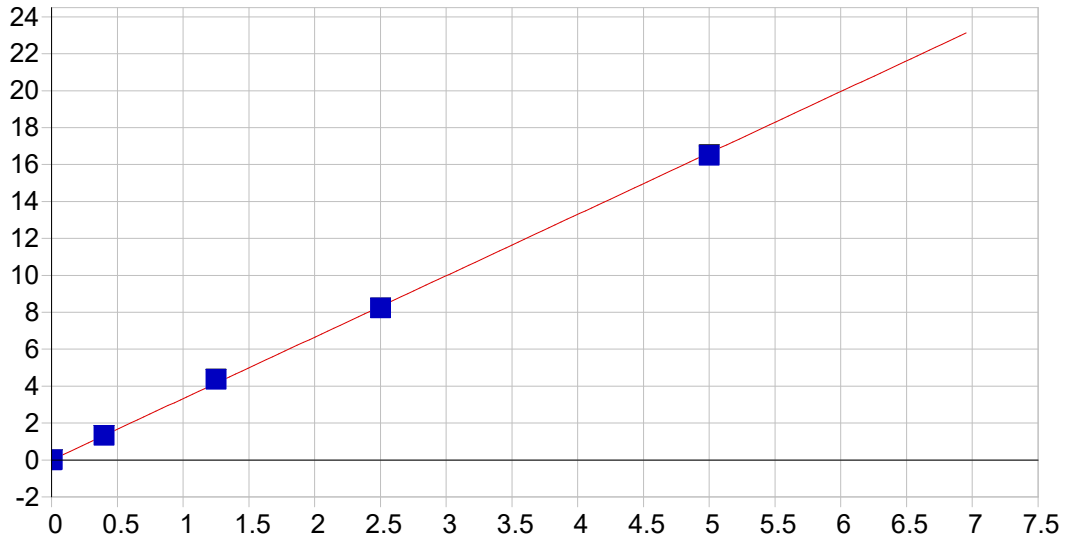
Be 234.861 {144}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002648	Re-Slope:	1.000000
A1 (Gain):	10.729807	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999108	Status:	OK.
Std Error of Est:	0.001299		
Predicted MDL:	0.000067		
Predicted MQL:	0.000222		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00266	.000	1
S1	.00600	.00614	.000	2.36	.06277	.001	1
S3	.12500	.13582	.011	8.66	1.4487	.005	1
S4	.25000	.25381	.004	1.52	2.7087	.006	1
S5	.50000	.48342	-.017	-3.32	5.1603	.029	1
S2	.04000	.04181	.002	4.52	.44403	.003	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



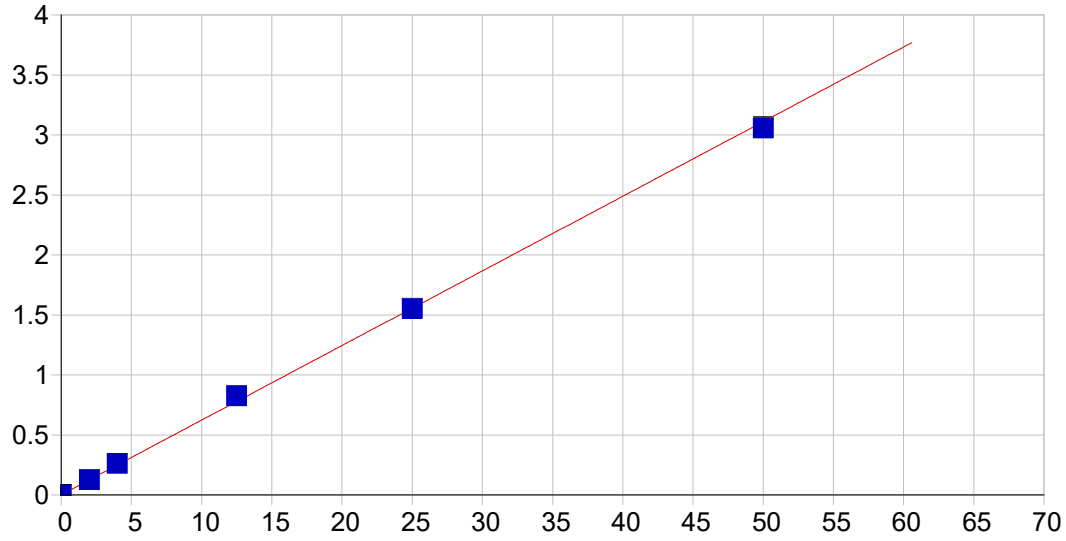
Cd 226.502 {449}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000620	Re-Slope:	1.000000
A1 (Gain):	3.325994	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999791	Status:	OK.
Std Error of Est:	0.000617		
Predicted MDL:	0.000068		
Predicted MQL:	0.000227		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00062	.000	1
S1	.00600	.00569	-.000	-5.23	.01836	.000	1
S3	1.2500	1.3138	.064	5.10	4.3717	.005	1
S4	2.5000	2.4759	-.024	-.965	8.2396	.007	1
S5	5.0000	4.9600	-.040	-.800	16.507	.038	1
S2	.40000	.40068	.001	.169	1.3329	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



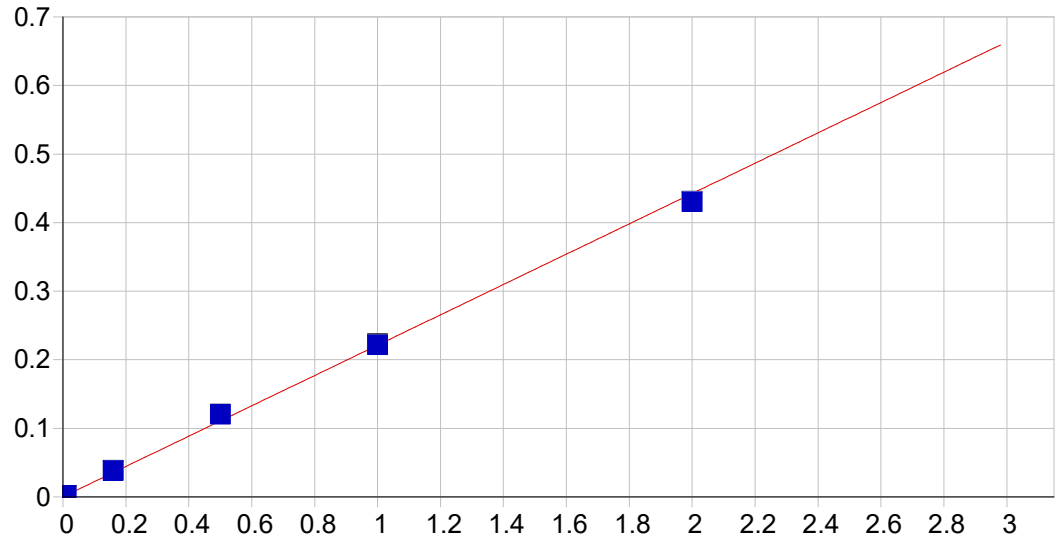
Ca 373.690 { 90}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001269	Re-Slope:	1.000000
A1 (Gain):	0.062184	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999646	Status:	OK.
Std Error of Est:	0.000875		
Predicted MDL:	0.013754		
Predicted MQL:	0.045845		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00018	-.000	.000	.00126	.001	1
S2	4.0000	4.1812	.181	4.53	.26127	.001	1
S3	12.500	13.233	.733	5.87	.82418	.002	1
S4	25.000	24.933	-.067	-.267	1.5517	.002	1
S5	50.000	49.144	-.856	-1.71	3.0573	.009	1
S1	2.0000	2.0080	.008	.401	.12614	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



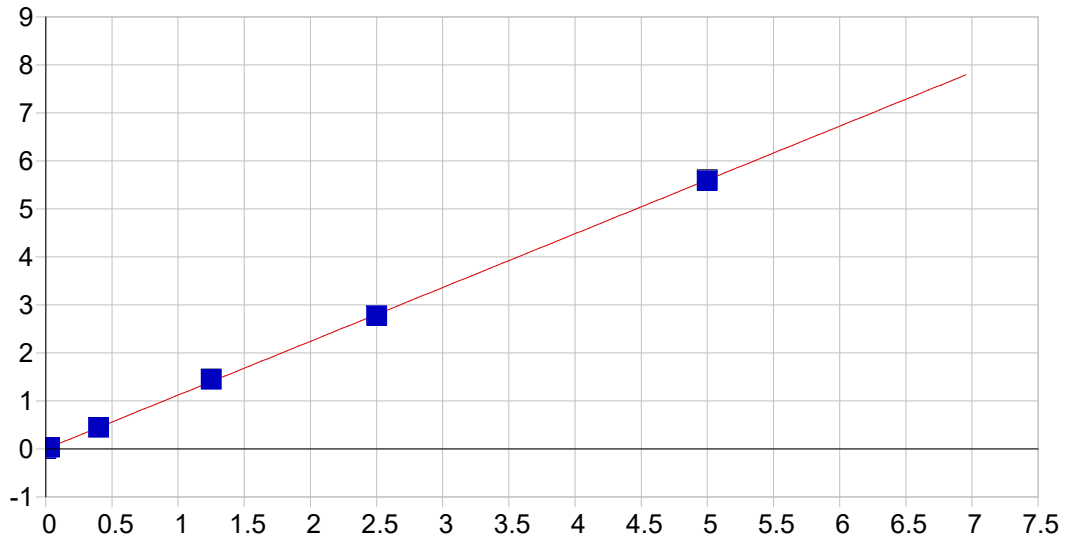
Cr 267.716 {126}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000148	Re-Slope:	1.000000
A1 (Gain):	0.221143	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999170	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.000330		
Predicted MQL:	0.001099		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00015	.000	1
S1	.01000	.00981	-.000	-1.89	.00232	.000	1
S3	.50000	.54332	.043	8.66	.12039	.000	1
S4	1.0000	1.0007	.001	.070	.22162	.001	1
S5	2.0000	1.9447	-.055	-2.76	.43056	.001	1
S2	.16000	.17146	.011	7.16	.03809	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



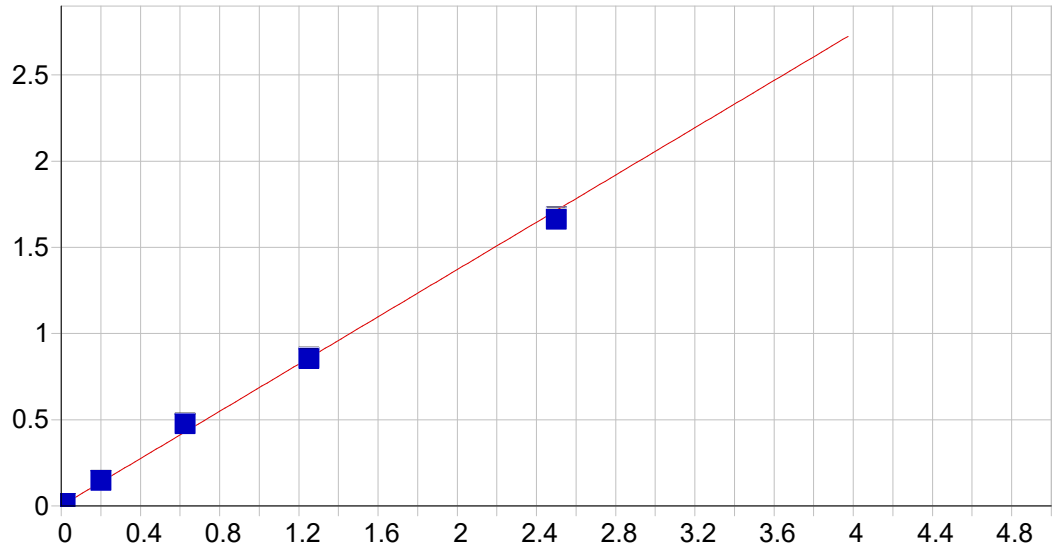
Co 228.616 {448}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000080	Re-Slope:	1.000000
A1 (Gain):	1.120655	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.000321		
Predicted MDL:	0.000179		
Predicted MQL:	0.000596		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00008	.000	1
S1	.03000	.02916	-.001	-2.80	.03262	.000	1
S3	1.2500	1.2931	.043	3.45	1.4516	.003	1
S4	2.5000	2.4742	-.026	-1.03	2.7776	.005	1
S5	5.0000	4.9847	-.015	-.307	5.5957	.009	1
S2	.40000	.39880	-.001	-.299	.44776	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



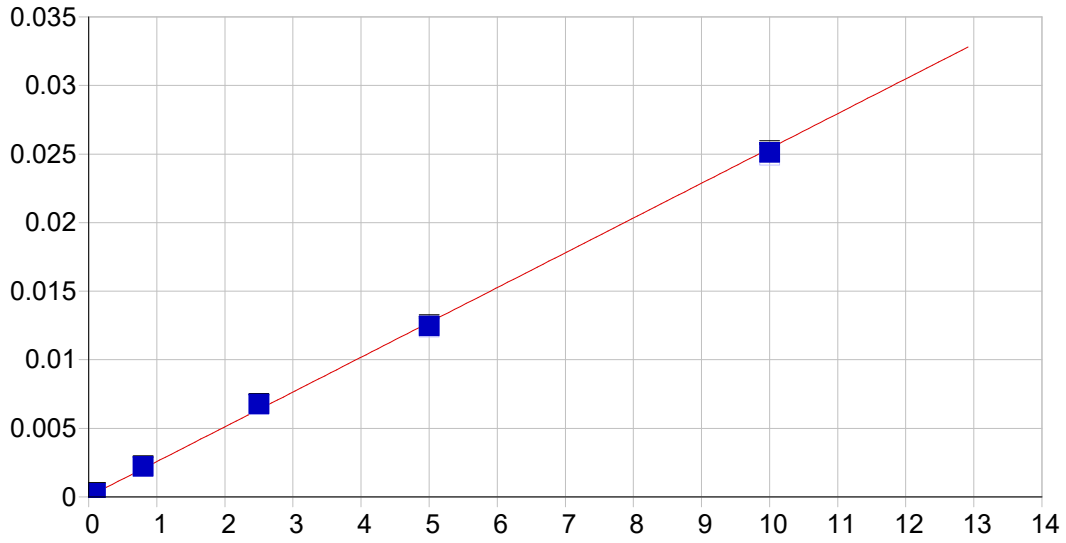
Cu 224.700 {450}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000682	Re-Slope:	1.000000
A1 (Gain):	0.685476	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998881	Status:	OK.
Std Error of Est:	0.000384		
Predicted MDL:	0.000399		
Predicted MQL:	0.001330		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00068	.000	1
S1	.02000	.02135	.001	6.77	.01547	.000	1
S3	.62500	.69212	.067	10.7	.47869	.002	1
S4	1.2500	1.2454	-.005	-.367	.86152	.002	1
S5	2.5000	2.4234	-.077	-3.06	1.6761	.002	1
S2	.20000	.21273	.013	6.36	.14765	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



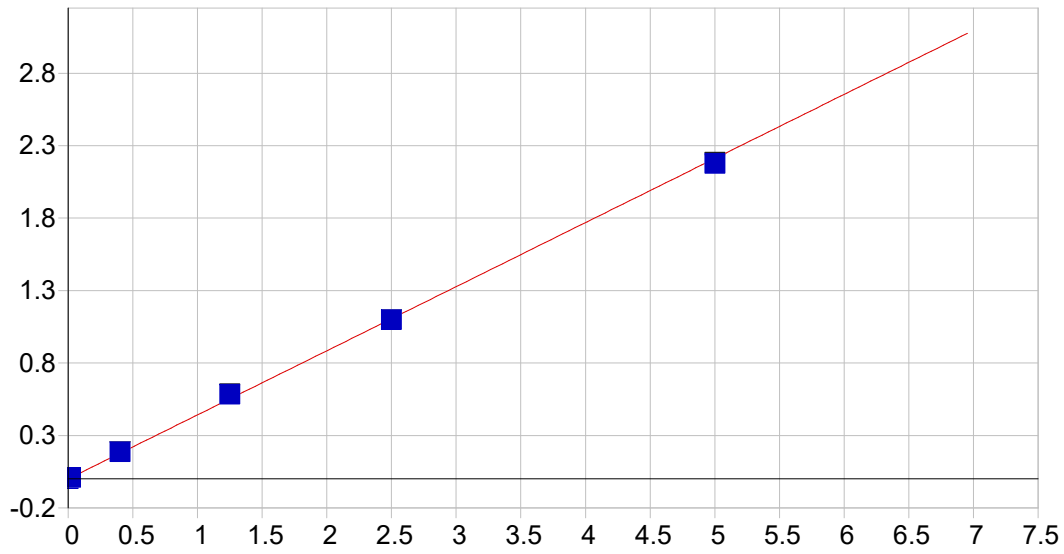
Fe 240.488 {140}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000034	Re-Slope:	1.000000
A1 (Gain):	0.002537	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999516	Status:	OK.
Std Error of Est:	0.000004		
Predicted MDL:	0.008376		
Predicted MQL:	0.027921		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00003	.000	1
S1	.10000	.10103	.001	1.03	.00029	.000	1
S3	2.5000	2.6566	.157	6.27	.00672	.000	1
S4	5.0000	4.9007	-.099	-1.99	.01236	.000	1
S5	10.000	9.8827	-.117	-1.17	.02489	.000	1
S2	.80000	.85894	.059	7.37	.00220	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



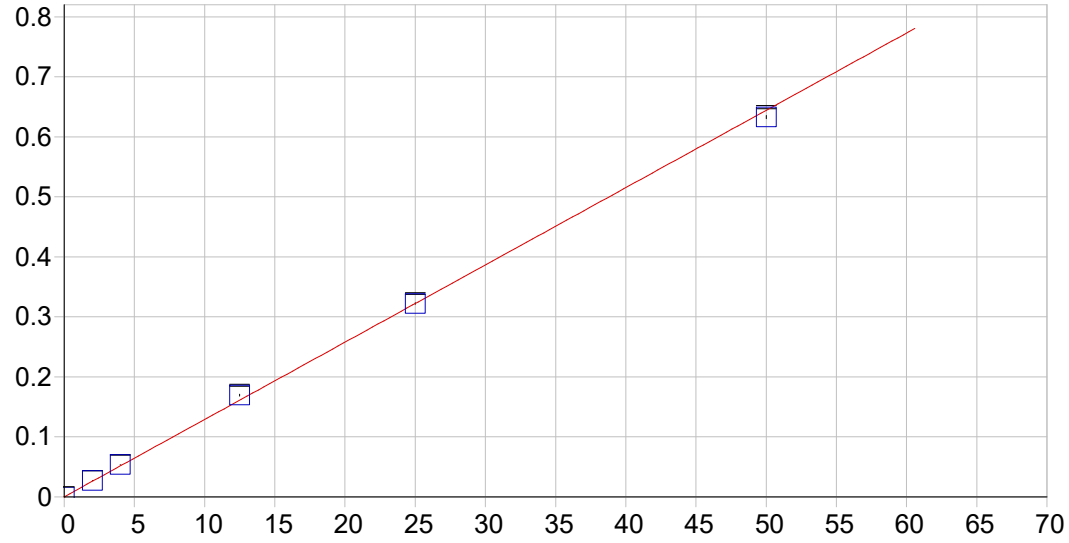
Mn 257.610 {131}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000103	Re-Slope:	1.000000
A1 (Gain):	0.442361	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999638	Status:	OK.
Std Error of Est:	0.000197		
Predicted MDL:	0.000711		
Predicted MQL:	0.002369		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00010	.000	1
S1	.02000	.02196	.002	9.79	.00961	.000	1
S3	1.2500	1.3192	.069	5.54	.58359	.003	1
S4	2.5000	2.4837	-.016	-.651	1.0988	.002	1
S5	5.0000	4.9223	-.078	-1.55	2.1778	.009	1
S2	.40000	.42275	.023	5.69	.18694	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



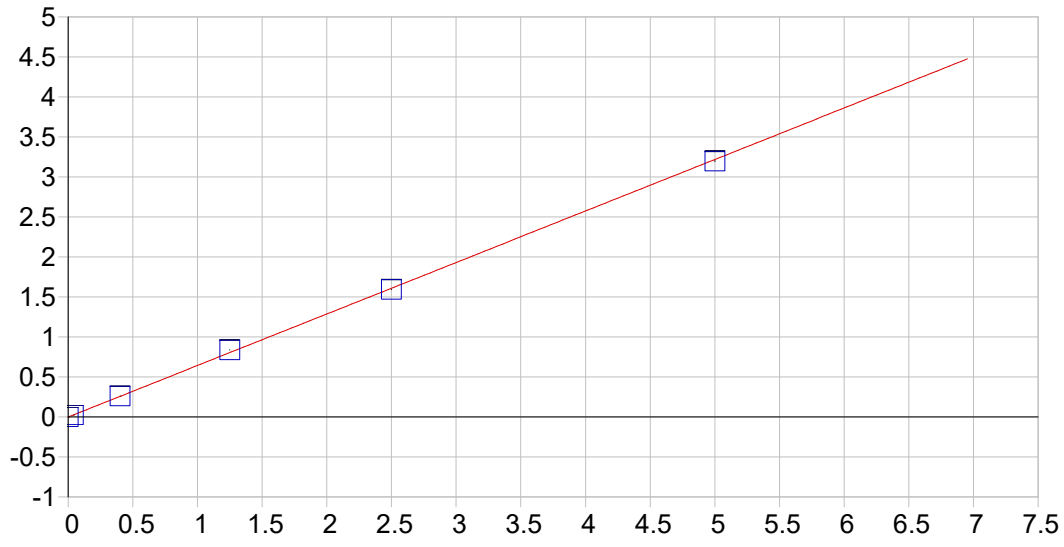
Mg 279.079 {121}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000226	Re-Slope:	1.000000
A1 (Gain):	0.012877	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999688	Status:	OK.
Std Error of Est:	0.000170		
Predicted MDL:	0.031253		
Predicted MQL:	0.104177		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00023	-.000	.000	.00022	.000	1
S2	4.0000	4.1465	.147	3.66	.05362	.000	1
S3	12.500	13.150	.650	5.20	.16956	.002	1
S4	25.000	24.996	-.004	-.016	.32209	.001	1
S5	50.000	49.122	-.878	-1.76	.63275	.003	1
S1	2.0000	2.0851	.085	4.25	.02707	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



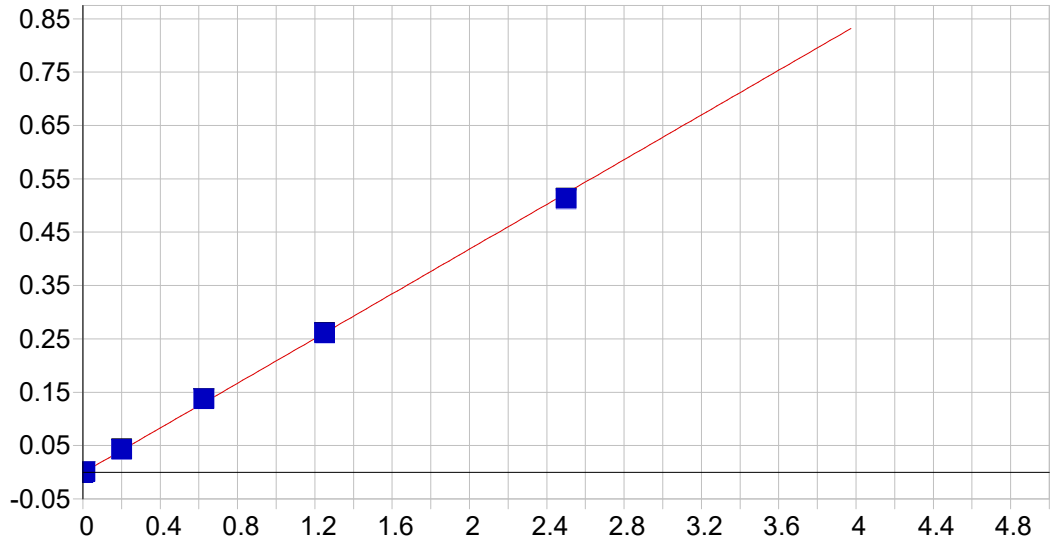
Ni 231.604 {446}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000808	Re-Slope:	1.000000
A1 (Gain):	0.643686	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999851	Status:	OK.
Std Error of Est:	0.000261		
Predicted MDL:	0.000332		
Predicted MQL:	0.001107		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00081	.000	1
S1	.04000	.03913	-.001	-2.18	.02438	.000	1
S3	1.2500	1.3023	.052	4.19	.83749	.001	1
S4	2.5000	2.4749	-.025	-1.00	1.5922	.002	1
S5	5.0000	4.9680	-.032	-.639	3.1970	.006	1
S2	.40000	.40563	.006	1.41	.26029	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



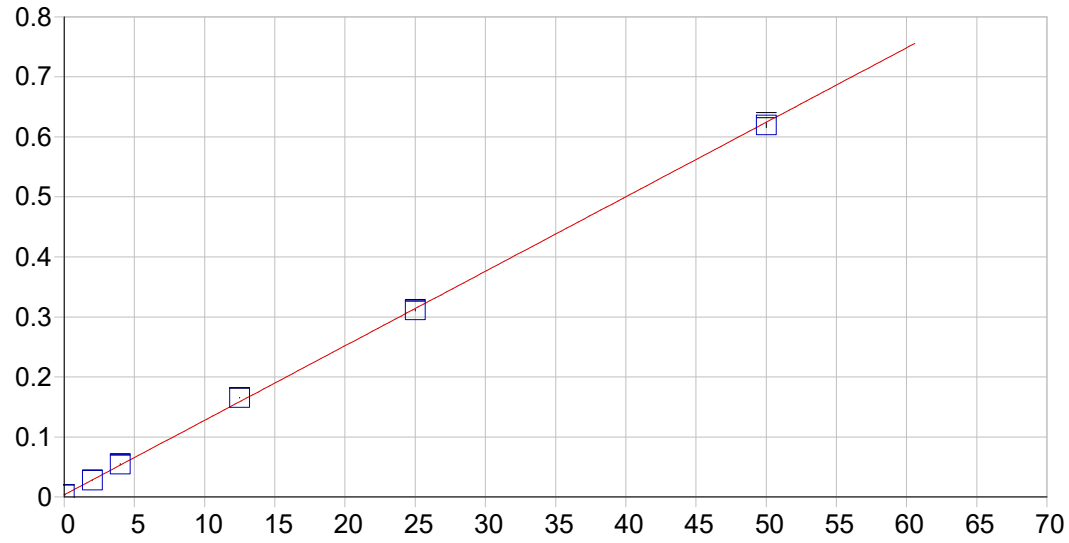
Ag 328.068 {103}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000920	Re-Slope:	1.000000
A1 (Gain):	0.209580	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999612	Status:	OK.
Std Error of Est:	0.000048		
Predicted MDL:	0.000549		
Predicted MQL:	0.001828		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00092	.000	1
S1	.01000	.01029	.000	2.89	.00122	.000	1
S3	.62500	.66296	.038	6.07	.13739	.000	1
S4	1.2500	1.2501	.000	.011	.25981	.001	1
S5	2.5000	2.4534	-.047	-1.86	.51072	.001	1
S2	.20000	.20822	.008	4.11	.04252	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



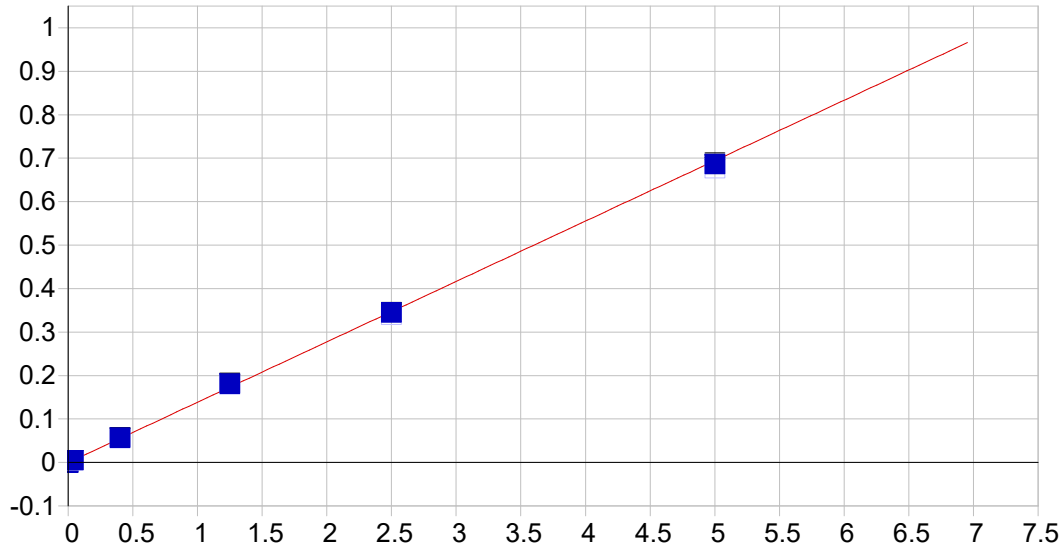
Na 589.592 { 57}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003530	Re-Slope:	1.000000
A1 (Gain):	0.012416	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999849	Status:	OK.
Std Error of Est:	0.000114		
Predicted MDL:	0.012520		
Predicted MQL:	0.041735		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00006	-.000	.000	.00353	.000	1
S2	4.0000	4.0773	.077	1.93	.05415	.001	1
S3	12.500	13.024	.524	4.19	.16523	.000	1
S4	25.000	24.791	-.209	-.834	.31133	.001	1
S5	50.000	49.640	-.360	-.719	.61985	.004	1
S1	2.0000	1.9671	-.033	-1.65	.02795	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



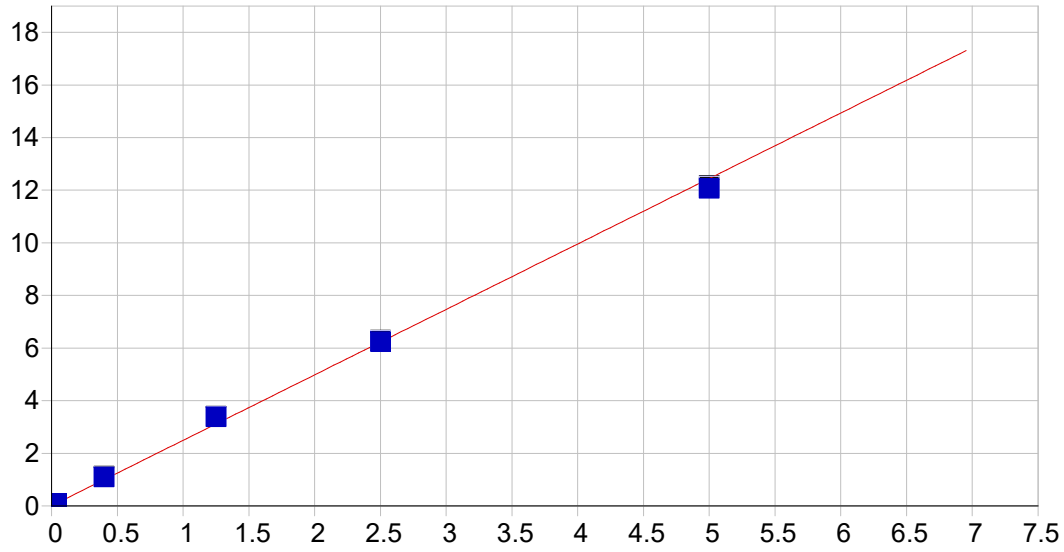
V 292.402 {115}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000497	Re-Slope:	1.000000
A1 (Gain):	0.138965	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999783	Status:	OK.
Std Error of Est:	0.000067		
Predicted MDL:	0.003420		
Predicted MQL:	0.011399		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00050	.000	1
S1	.04000	.04000	.000	.012	.00485	.000	1
S3	1.2500	1.3104	.060	4.83	.17907	.001	1
S4	2.5000	2.4857	-.014	-.572	.33986	.001	1
S5	5.0000	4.9440	-.056	-1.12	.67641	.003	1
S2	.40000	.40992	.010	2.48	.05566	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



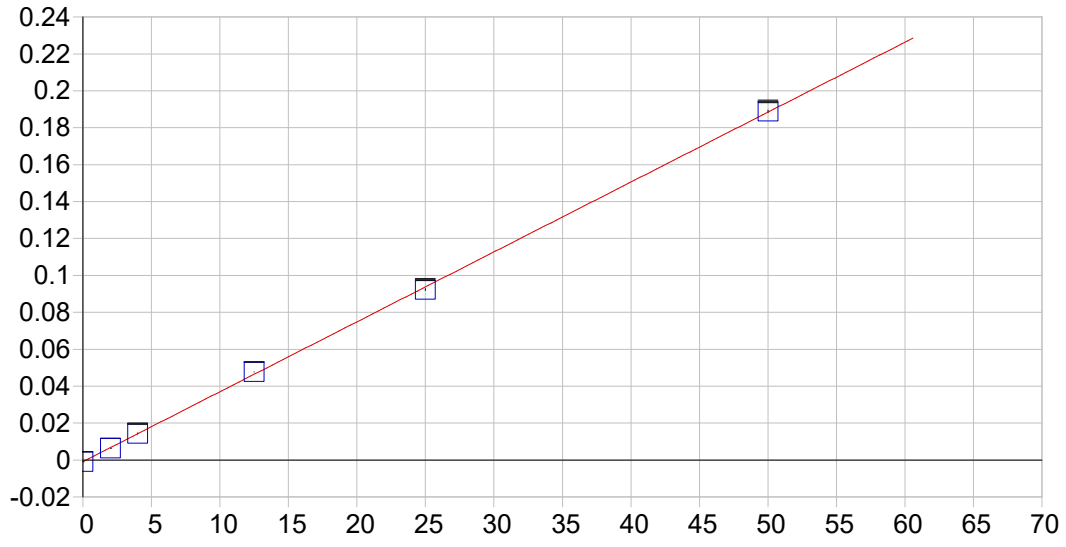
Zn 213.856 {158}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004495	Re-Slope:	1.000000
A1 (Gain):	2.488353	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999041	Status:	OK.
Std Error of Est:	0.002577		
Predicted MDL:	0.000232		
Predicted MQL:	0.000774		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00448	.001	1
S1	.04000	.04119	.001	2.98	.10769	.000	1
S3	1.2500	1.3566	.107	8.53	3.4019	.002	1
S4	2.5000	2.5071	.007	.283	6.2863	.011	1
S5	5.0000	4.8453	-.155	-3.09	12.148	.029	1
S2	.40000	.43978	.040	9.94	1.1057	.024	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



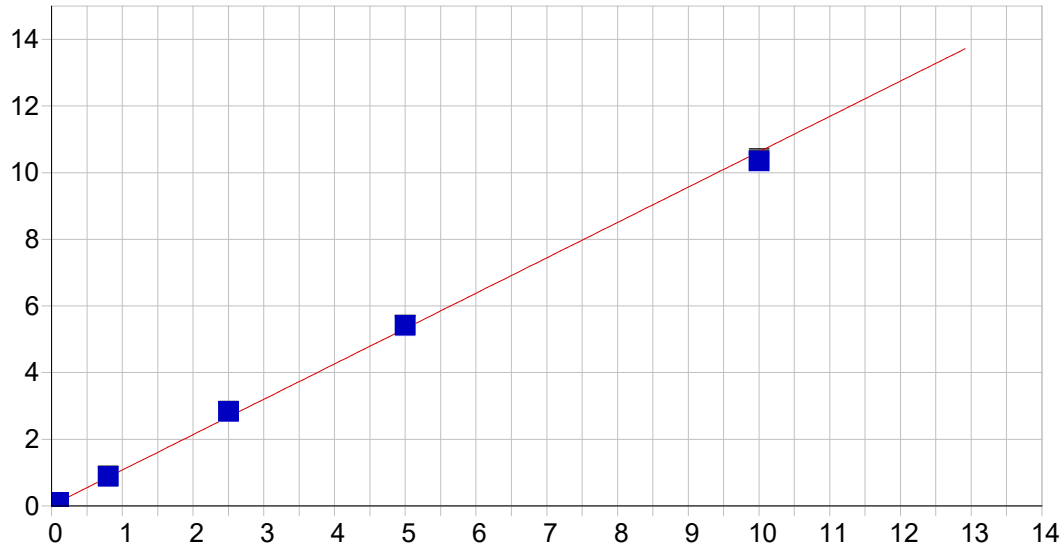
K 766.490 { 44}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000899	Re-Slope:	1.000000
A1 (Gain):	0.003787	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999901	Status:	OK.
Std Error of Est:	0.000028		
Predicted MDL:	0.048042		
Predicted MQL:	0.160141		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00005	.000	.000	-.00090	.000	1
S2	4.0000	4.0035	.004	.088	.01426	.000	1
S3	12.500	12.839	.339	2.71	.04772	.000	1
S4	25.000	24.623	-.377	-1.51	.09235	.001	1
S5	50.000	50.117	.117	.233	.18889	.001	1
S1	2.0000	1.9182	-.082	-4.09	.00637	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



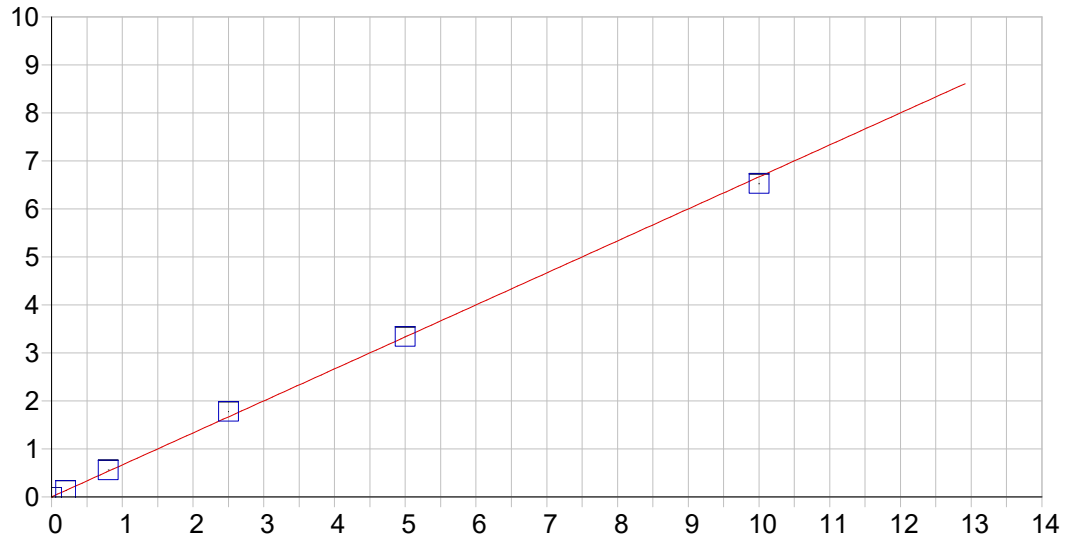
B 249.678 {135}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.016152	Re-Slope:	1.000000
A1 (Gain):	1.061122	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999486	Status:	OK.
Std Error of Est:	0.001781		
Predicted MDL:	0.000720		
Predicted MQL:	0.002399		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.01615	.001	1
S1	.10000	.09401	-.006	-5.99	.11528	.001	1
S3	2.5000	2.6558	.156	6.23	2.8247	.004	1
S4	5.0000	5.0880	.088	1.76	5.3960	.010	1
S5	10.000	9.7418	-.258	-2.58	10.315	.063	1
S2	.80000	.82038	.020	2.55	.88361	.006	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



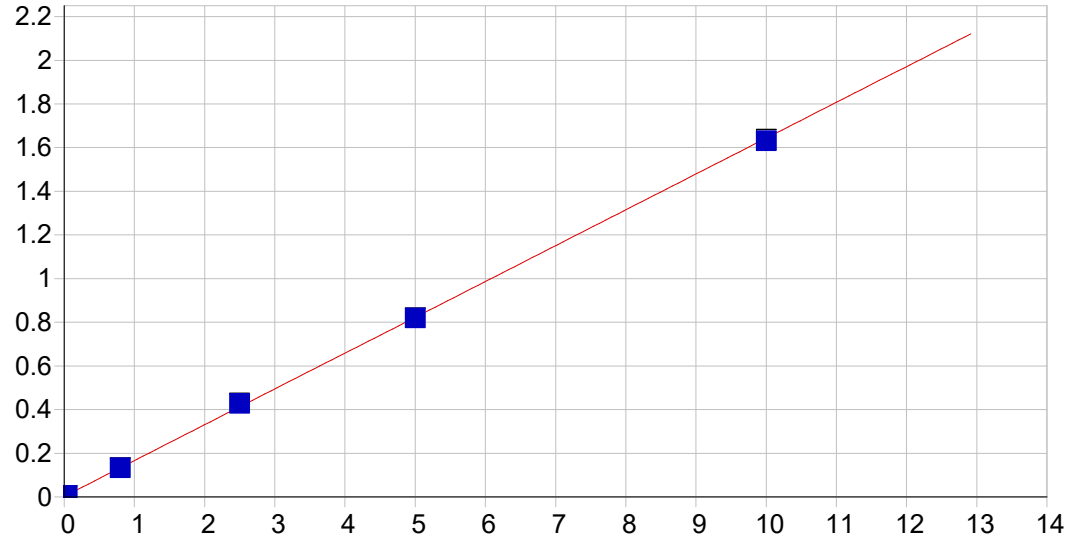
Mo 202.030 {467}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000769	Re-Slope:	1.000000
A1 (Gain):	0.666534	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999523	Status:	OK.
Std Error of Est:	0.001532		
Predicted MDL:	0.000253		
Predicted MQL:	0.000845		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00076	.000	1
S1	.20000	.19794	-.002	-1.03	.13271	.000	1
S3	2.5000	2.6662	.166	6.65	1.7779	.004	1
S4	5.0000	5.0071	.007	.142	3.3382	.003	1
S5	10.000	9.7881	-.212	-2.12	6.5249	.007	1
S2	.80000	.84074	.041	5.09	.56115	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



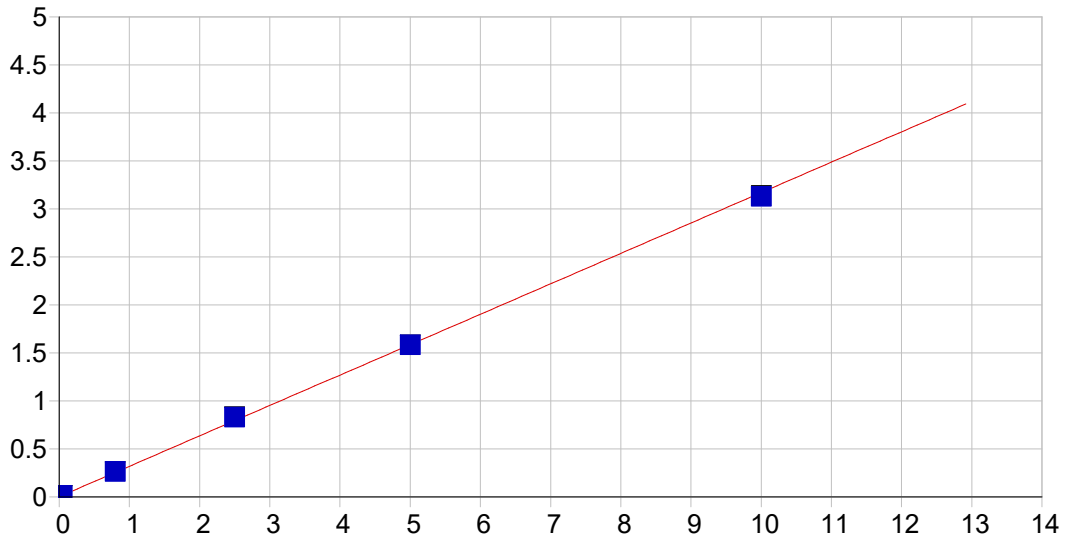
Sn 189.989 {478}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002422	Re-Slope:	1.000000
A1 (Gain):	0.164066	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999887	Status:	OK.
Std Error of Est:	0.000082		
Predicted MDL:	0.000575		
Predicted MQL:	0.001918		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00242	.000	1
S1	.04000	.03819	-.002	-4.52	.00868	.000	1
S3	2.5000	2.5933	.093	3.73	.42748	.001	1
S4	5.0000	4.9818	-.018	-.364	.81893	.002	1
S5	10.000	9.9328	-.067	-.672	1.6304	.007	1
S2	.80000	.79392	-.006	-.760	.13254	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



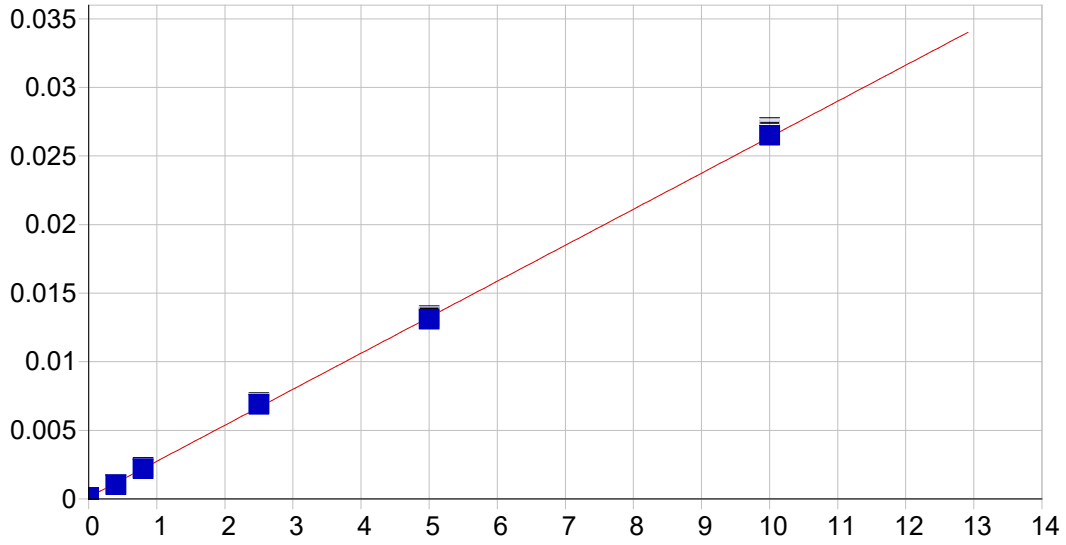
Ti 336.121 {100}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002176	Re-Slope:	1.000000
A1 (Gain):	0.316757	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999786	Status:	OK.
Std Error of Est:	0.000217		
Predicted MDL:	0.001951		
Predicted MQL:	0.006503		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00218	.000	1
S1	.04000	.03580	-.004	-10.5	.01351	.000	1
S3	2.5000	2.6162	.116	4.65	.83058	.001	1
S4	5.0000	4.9896	-.010	-.209	1.5821	.002	1
S5	10.000	9.8784	-.122	-1.22	3.1301	.005	1
S2	.80000	.82008	.020	2.51	.26185	.001	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



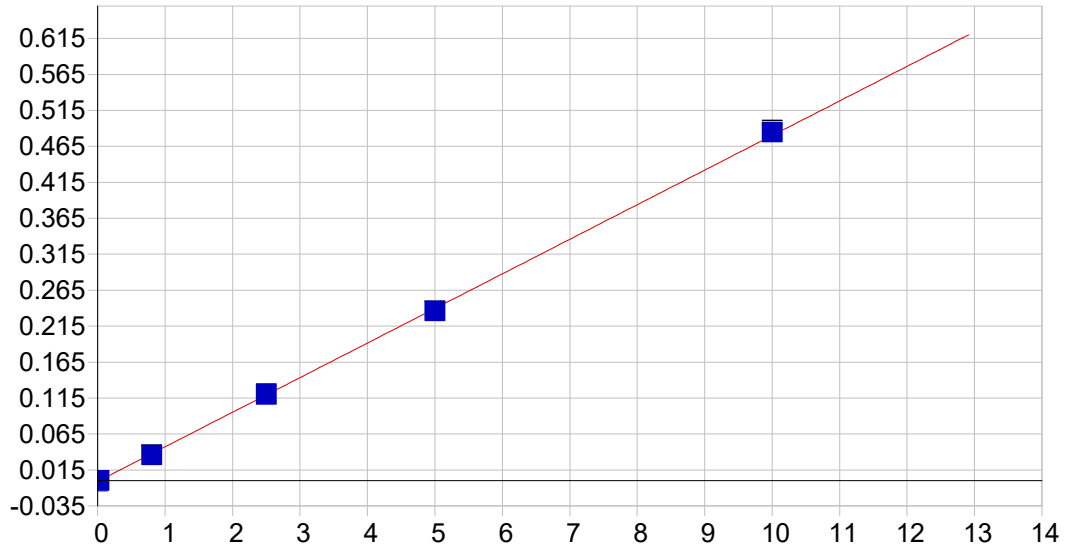
Si 288.158 {117}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000117	Re-Slope:	1.000000
A1 (Gain):	0.002625	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999743	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.014646		
Predicted MQL:	0.048820		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00005	.000	.000	.00012	.000	1
S1	.40000	.34875	-.051	-12.8	.00103	.000	1
S3	2.5000	2.5728	.073	2.91	.00697	.000	1
S4	5.0000	4.9372	-.063	-1.26	.01328	.000	1
S5	10.000	10.051	.051	.514	.02690	.000	1
S2	.80000	.78918	-.011	-1.35	.00222	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



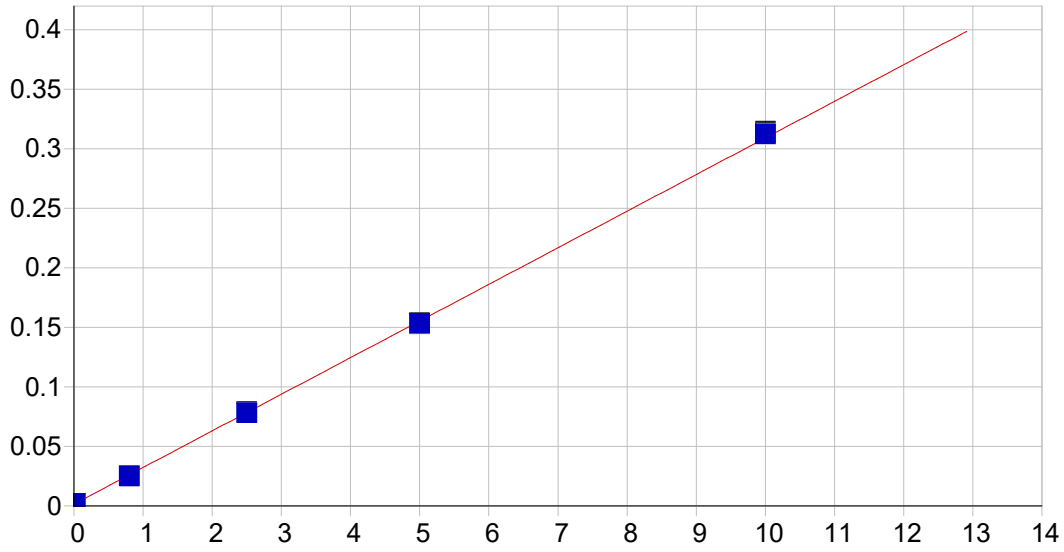
P 177.495 {490}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000933	Re-Slope:	1.000000
A1 (Gain):	0.048091	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999891	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.001585		
Predicted MQL:	0.005284		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00093	.000	1
S1	.02000	.01854	-.001	-7.29	-.00004	.000	1
S3	2.5000	2.5158	.016	.632	.12004	.001	1
S4	5.0000	4.9229	-.077	-1.54	.23577	.000	1
S5	10.000	10.099	.099	.989	.48466	.003	1
S2	.80000	.76389	-.036	-4.51	.03580	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



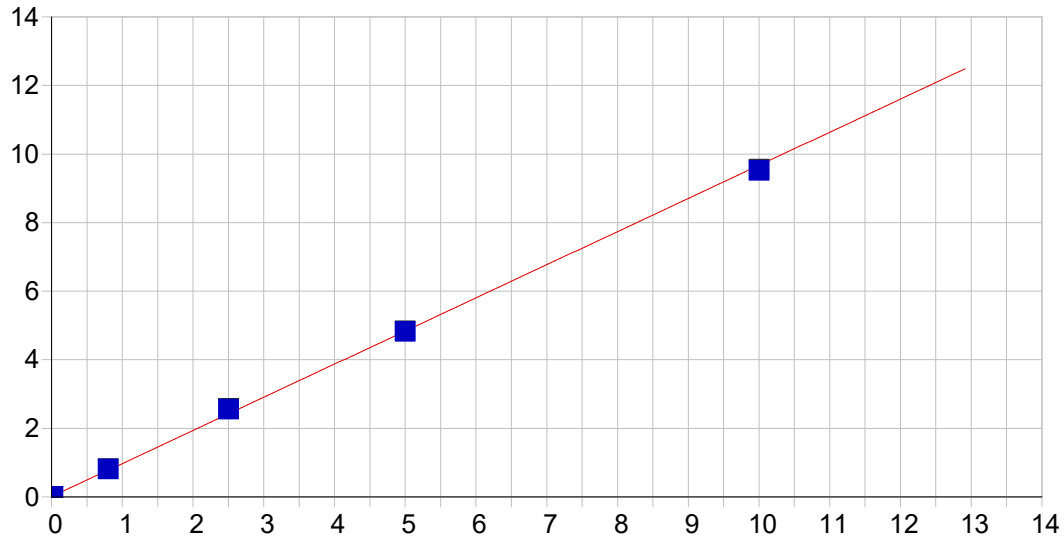
S 182.034 {485}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001521	Re-Slope:	1.000000
A1 (Gain):	0.030765	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999887	Status:	OK.
Std Error of Est:	0.000011		
Predicted MDL:	0.002748		
Predicted MQL:	0.009158		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00152	.000	1
S1	.02000	.01850	-.002	-7.52	.00206	.000	1
S3	2.5000	2.4966	-.003	-.134	.07813	.001	1
S4	5.0000	4.9288	-.071	-1.42	.15276	.001	1
S5	10.000	10.113	.113	1.13	.31185	.002	1
S2	.80000	.76291	-.037	-4.64	.02493	.000	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



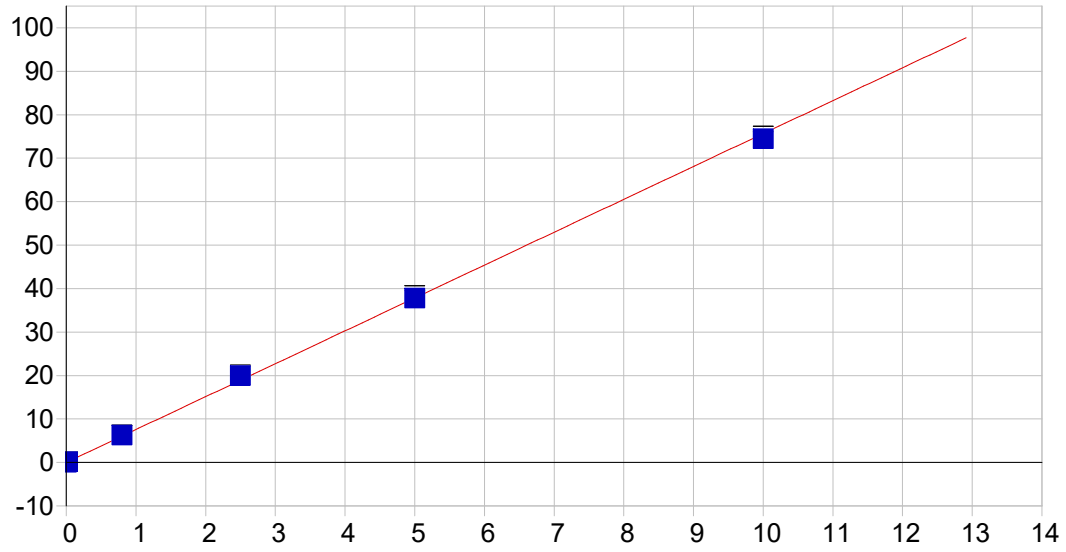
Li 670.784 { 50}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006936	Re-Slope:	1.000000
A1 (Gain):	0.966393	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999671	Status:	OK.
Std Error of Est:	0.000582		
Predicted MDL:	0.002094		
Predicted MQL:	0.006981		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00694	.002	1
S5	10.000	9.8448	-.155	-1.55	9.5286	.029	1
S4	5.0000	4.9811	-.019	-.377	4.8245	.014	1
S3	2.5000	2.6410	.141	5.64	2.5611	.019	1
S1	.02000	.01830	-.002	-8.52	.02496	.002	1
S2	.80000	.83481	.035	4.35	.81430	.002	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697



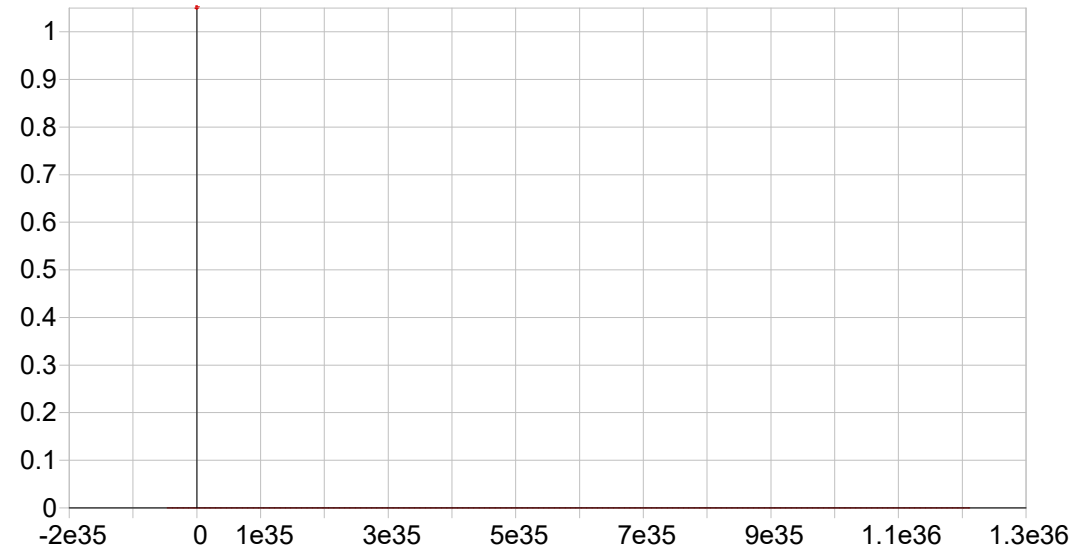
Sr 407.771 { 83}

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000158	Re-Slope:	1.000000
A1 (Gain):	7.566255	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999688	Status:	OK.
Std Error of Est:	0.004436		
Predicted MDL:	0.000139		
Predicted MQL:	0.000464		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00017	.001	1
S1	.02000	.02029	.000	1.44	.15407	.001	1
S3	2.5000	2.6401	.140	5.60	19.994	.113	1
S4	5.0000	4.9963	-.004	-.074	37.839	.562	1
S5	10.000	9.8361	-.164	-1.64	74.495	.603	1
S2	.80000	.82723	.027	3.40	6.2647	.008	1

Reviewed By:
On:
Inst Id :P4
LB :LB137697

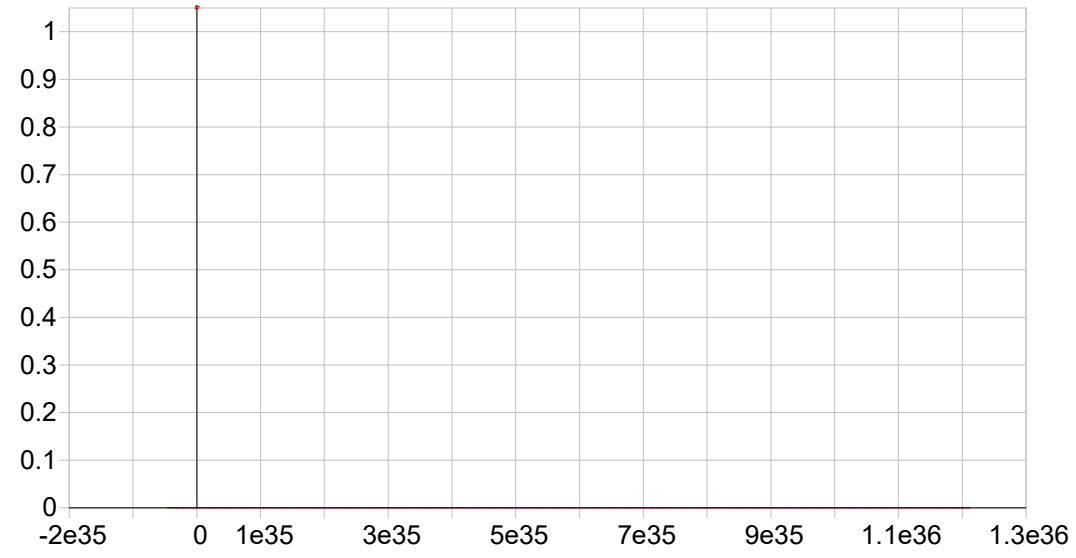


Y 224.306 {450}*

Date of Fit:	10/29/2025 15:52:14	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Y 360.073 { 94}*

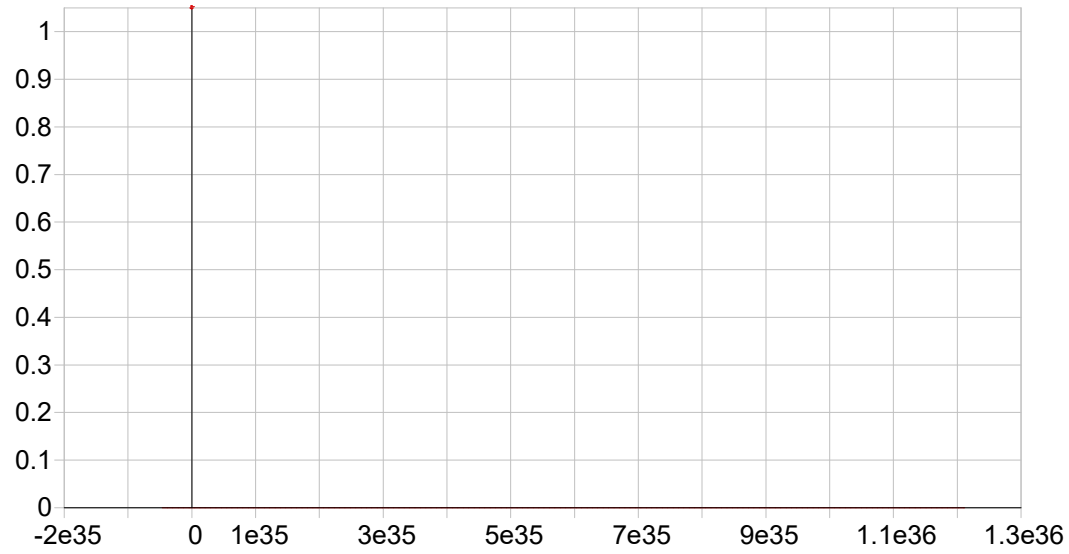
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

Reviewed By:
On:
Inst Id :P4
LB :LB137697

A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000	Status:	Warning	Zero Gain	
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

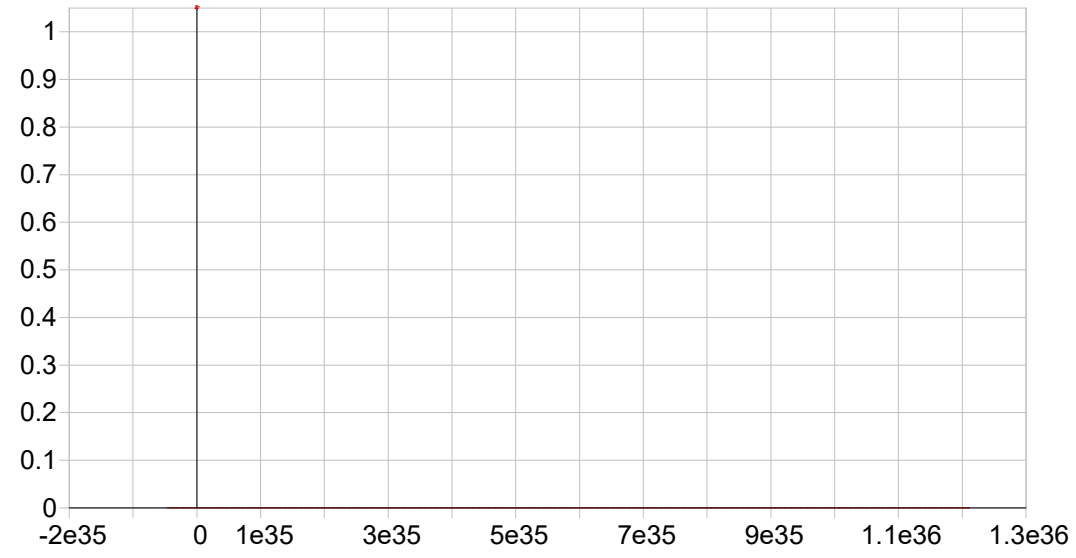


Y 371.030 { 91}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000	Status:	Warning	Zero Gain	
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis

Reviewed By:
On:
Inst Id :P4
LB :LB137697

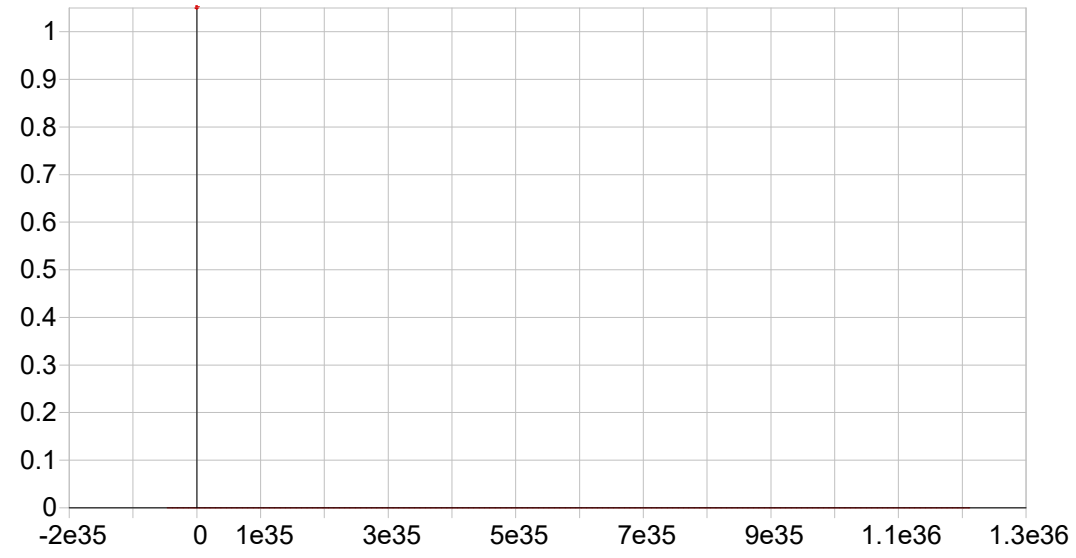


Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000

Reviewed By:
On:
Inst Id :P4
LB :LB137697

A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.000000		Status:	Warning	Zero Gain	
Std Error of Est:		0.000000					
Predicted MDL:		n/a					
Predicted MQL:		n/a					
Std. Name	**Stated Conc.**	**Found Conc.**	**Difference**	**% Diff.**	**(S)IR**	**Std Dev**	**Emphasis**

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S0 Acquired: 10/29/2025 13:36:14 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00001**	**.00034**	**.00020**	**.00054**	**.00126**	**-.00043**	**.09471**	**-.00266**
Stddev	.00013	.00007	.00028	.00008	.00016	.00070	.00367	.00050
%RSD	1479.1	22.231	140.93	14.783	12.447	162.31	3.8712	18.702
#1	.00007	.00034	-.00004	.00060	.00118	.00037	.09873	-.00320
#2	.00007	.00041	.00012	.00056	.00115	-.00076	.09384	-.00222
#3	-.00016	.00026	.00051	.00045	.00144	-.00089	.09155	-.00256

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00062**	**.00126**	**.00015**	**.00008**	**.00068**	**.00003**	**-.00010**	**.00022**
Stddev	.00016	.00071	.00006	.00012	.00028	.00001	.00022	.00020
%RSD	26.619	56.076	43.194	153.23	41.932	39.679	209.10	89.365
#1	-.00072	.00206	.00007	.00001	.00044	.00004	-.00003	.00022
#2	-.00043	.00076	.00019	.00000	.00100	.00002	-.00035	.00042
#3	-.00071	.00095	.00018	.00022	.00060	.00004	.00007	.00002

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00081**	**-.00092**	**.00353**	**-.00050**	**.00448**	**-.00090**	**.01615**	**.00076**
Stddev	.00002	.00005	.00002	.00026	.00074	.00002	.00107	.00007
%RSD	1.8862	5.0510	.52916	51.384	16.582	1.6935	6.6317	9.0802
#1	-.00080	-.00087	.00352	-.00079	.00464	-.00090	.01730	.00076
#2	-.00080	-.00092	.00351	-.00040	.00367	-.00091	.01519	.00083
#3	-.00083	-.00097	.00355	-.00030	.00513	-.00088	.01596	.00069

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00242**	**.00218**	**.00012**	**-.00093**	**.00152**	**.00694**	**-.00017**
Stddev	.00009	.00011	.00003	.00006	.00008	.00159	.00095
%RSD	3.6371	5.2838	28.266	6.9618	5.4496	22.885	556.65
#1	.00232	.00223	.00008	-.00098	.00161	.00780	.00092
#2	.00245	.00204	.00013	-.00095	.00145	.00790	-.00082
#3	.00249	.00225	.00014	-.00086	.00150	.00510	-.00062

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S0 Acquired: 10/29/2025 13:36:14 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6261.7**	**98570.**	**7232.0**	**4986.8**	**7788.7**
Stddev	2.2	1272.	55.7	64.5	3.7
%RSD	.03481	1.2906	.77048	1.2930	.04744
#1	6259.7	98029.	7178.6	4943.9	7792.7
#2	6261.4	100020.	7289.8	5060.9	7787.9
#3	6264.0	97658.	7227.6	4955.5	7785.5

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S1 Acquired: 10/29/2025 13:40:38 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00112**	**.00259**	**.00256**	**.00155**	**.00606**	**.00906**	**.34635**	**.06277**
Stddev	.00005	.00012	.00022	.00003	.00007	.00036	.00694	.00081
%RSD	4.4177	4.6992	8.6155	2.0844	1.2217	3.9836	2.0038	1.2873
#1	.00115	.00263	.00233	.00158	.00602	.00867	.34115	.06295
#2	.00106	.00245	.00260	.00155	.00615	.00913	.34367	.06347
#3	.00113	.00268	.00277	.00151	.00602	.00939	.35423	.06189

Elem	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01836**	**.12614**	**.00232**	**.03262**	**.01547**	**.00029**	**.00961**	**.02707**
Stddev	.00015	.00050	.00005	.00028	.00035	.00002	.00024	.00009
%RSD	.82614	.39612	2.1344	.84426	2.2527	6.6332	2.4721	.34171
#1	.01824	.12646	.00227	.03270	.01508	.00028	.00981	.02718
#2	.01830	.12556	.00237	.03285	.01559	.00031	.00968	.02705
#3	.01853	.12638	.00232	.03231	.01575	.00027	.00935	.02700

Elem	Ni2316	Ag3280	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02438**	**.00122**	**.02795**	**.00485**	**.10769**	**.00637**	**.11528**	**.13271**
Stddev	.00013	.00006	.00017	.00014	.00009	.00006	.00101	.00039
%RSD	.54780	5.1416	.60941	2.8107	.08174	.96727	.87953	.29144
#1	.02453	.00129	.02803	.00501	.10760	.00634	.11411	.13266
#2	.02430	.00121	.02807	.00482	.10770	.00644	.11583	.13234
#3	.02430	.00116	.02776	.00474	.10778	.00632	.11591	.13311

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00868**	**.01351**	**.00103**	**-.00004**	**.00206**	**.02496**	**.15407**
Stddev	.00012	.00027	.00002	.00006	.00004	.00184	.00099
%RSD	1.3589	2.0073	1.8909	139.86	2.0965	7.3888	.64436
#1	.00873	.01369	.00105	.00000	.00211	.02511	.15307
#2	.00877	.01319	.00101	-.00002	.00202	.02304	.15408
#3	.00855	.01364	.00105	-.00010	.00206	.02672	.15506

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S1 Acquired: 10/29/2025 13:40:38 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6155.7	96062.	7188.0	4869.7	7568.9
Stddev	12.7	167.	33.2	18.9	8.7
%RSD	.20607	.17424	.46169	.38810	.11535
#1	6166.7	95967.	7196.7	4856.5	7577.4
#2	6158.5	96255.	7216.0	4891.3	7569.2
#3	6141.8	95964.	7151.4	4861.2	7559.9

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S2 Acquired: 10/29/2025 13:44:57 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.04597**	**.04947**	**.17767**	**.03828**	**.08120**	**.18165**	**4.1379**	**.44403**	**1.3329**
Stddev	.00010	.00029	.00024	.00011	.00018	.00079	.0222	.00350	.0019
%RSD	.21916	.57693	.13566	.28871	.22691	.43698	.53644	.78772	.14206
#1	.04601	.04953	.17747	.03816	.08109	.18092	4.1509	.44766	1.3311
#2	.04585	.04971	.17794	.03838	.08109	.18250	4.1506	.44374	1.3328
#3	.04605	.04915	.17761	.03832	.08141	.18154	4.1123	.44068	1.3349

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.26127**	**.03809**	**.44776**	**.14765**	**.00220**	**.18694**	**.05362**	**.26029**	**.04252**
Stddev	.00114	.00084	.00088	.00035	.00005	.00143	.00029	.00033	.00098
%RSD	.43779	2.1971	.19659	.23383	2.0599	.76570	.54532	.12674	2.3129
#1	.26224	.03842	.44703	.14725	.00221	.18831	.05383	.25998	.04295
#2	.26156	.03714	.44752	.14779	.00215	.18705	.05374	.26025	.04139
#3	.26001	.03872	.44874	.14790	.00224	.18546	.05329	.26064	.04321

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.05415**	**.05566**	**1.1057**	**.01426**	**.88361**	**.56115**	**.13254**	**.26185**	**.00222**
Stddev	.00106	.00057	.0239	.00036	.00572	.00088	.00029	.00057	.00006
%RSD	1.9512	1.0163	2.1565	2.5306	.64734	.15659	.21547	.21733	2.7087
#1	.05430	.05631	1.1212	.01434	.89016	.56156	.13235	.26228	.00221
#2	.05303	.05541	1.0783	.01387	.88107	.56015	.13287	.26206	.00217
#3	.05513	.05526	1.1177	.01458	.87960	.56176	.13241	.26120	.00228

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03580**	**.02493**	**.81430**	**6.2647**
Stddev	.00009	.00005	.00223	.0079
%RSD	.24339	.21859	.27390	.12605
#1	.03570	.02496	.81658	6.2580
#2	.03586	.02487	.81420	6.2734
#3	.03583	.02496	.81212	6.2627

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S2 Acquired: 10/29/2025 13:44:57 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6203.2	96049.	7166.8	4845.7	7438.5
Stddev	8.0	1863.	52.6	100.5	6.6
%RSD	.12952	1.9394	.73453	2.0745	.08815
#1	6209.3	95316.	7110.8	4789.3	7443.5
#2	6206.1	98167.	7174.3	4961.7	7441.0
#3	6194.1	94664.	7215.3	4786.0	7431.1

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S3 Acquired: 10/29/2025 13:49:02 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.14771	.14656	.57235	.12093	.25841	.52454	12.858	1.4487	4.3717
Stddev	.00068	.00518	.00152	.00069	.00080	.00129	.081	.0052	.0052
%RSD	.46012	3.5348	.26543	.56766	.30817	.24670	.63031	.36193	.11887
#1	.14780	.15254	.57091	.12108	.25778	.52307	12.884	1.4466	4.3689
#2	.14698	.14361	.57221	.12018	.25815	.52551	12.923	1.4546	4.3686
#3	.14833	.14353	.57393	.12153	.25931	.52504	12.767	1.4448	4.3777

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.82418	.12039	1.4516	.47869	.00672	.58359	.16956	.83749	.13739
Stddev	.00228	.00009	.0027	.00188	.00003	.00281	.00159	.00133	.00012
%RSD	.27653	.07213	.18871	.39263	.40544	.48099	.93659	.15915	.08484
#1	.82267	.12029	1.4503	.47708	.00669	.58392	.16773	.83605	.13743
#2	.82680	.12045	1.4498	.47822	.00673	.58622	.17059	.83773	.13748
#3	.82306	.12042	1.4548	.48075	.00674	.58064	.17036	.83868	.13726

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.16523	.17907	3.4019	.04772	2.8247	1.7779	.42748	.83058	.00697
Stddev	.00042	.00081	.0020	.00012	.0043	.0035	.00136	.00140	.00005
%RSD	.25337	.45452	.05819	.24435	.15158	.19735	.31799	.16915	.75744
#1	.16480	.17839	3.4014	.04785	2.8225	1.7765	.42801	.82967	.00692
#2	.16564	.17886	3.4041	.04770	2.8297	1.7752	.42593	.83220	.00703
#3	.16524	.17997	3.4003	.04761	2.8220	1.7818	.42849	.82988	.00696

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.12004	.07813	2.5611	19.994
Stddev	.00073	.00068	.0193	.113
%RSD	.61196	.87374	.75495	.56718
#1	.12077	.07876	2.5618	19.999
#2	.11931	.07741	2.5801	20.105
#3	.12003	.07822	2.5414	19.878

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S3 Acquired: 10/29/2025 13:49:02 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5884.9	90456.	6762.3	4527.6	6846.5
Stddev	6.0	327.	24.7	21.0	2.9
%RSD	.10274	.36177	.36574	.46484	.04249
#1	5891.1	90834.	6786.4	4551.5	6848.0
#2	5884.7	90281.	6737.0	4511.8	6848.4
#3	5879.0	90254.	6763.6	4519.6	6843.2

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S4 Acquired: 10/29/2025 13:53:02 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.27522	.26758	1.0757	.22554	.48929	.92093	24.287	2.7087	8.2396
Stddev	.00054	.00645	.0021	.00047	.00044	.00111	.039	.0061	.0071
%RSD	.19554	2.4111	.19013	.20722	.09009	.12048	.16240	.22362	.08629
#1	.27565	.27075	1.0750	.22608	.48978	.92120	24.259	2.7087	8.2365
#2	.27461	.27184	1.0741	.22525	.48893	.91971	24.270	2.7026	8.2346
#3	.27539	.26016	1.0780	.22529	.48916	.92188	24.332	2.7148	8.2477

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.5517	.22162	2.7776	.86152	.01236	1.0988	.32209	1.5922	.25981
Stddev	.0019	.00148	.0051	.00173	.00008	.0020	.00137	.0022	.00056
%RSD	.12188	.66610	.18438	.20076	.61183	.18603	.42678	.13639	.21376
#1	1.5495	.21998	2.7756	.85999	.01231	1.0984	.32099	1.5923	.25918
#2	1.5528	.22204	2.7737	.86117	.01245	1.0970	.32166	1.5900	.26021
#3	1.5529	.22285	2.7834	.86339	.01233	1.1010	.32363	1.5944	.26005

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.31133	.33986	6.2863	.09235	5.3960	3.3382	.81893	1.5821	.01328
Stddev	.00140	.00062	.0110	.00056	.0101	.0025	.00169	.0021	.00007
%RSD	.44968	.18214	.17566	.60803	.18795	.07551	.20661	.13188	.52793
#1	.30974	.33926	6.2736	.09172	5.3921	3.3383	.82035	1.5800	.01320
#2	.31192	.34050	6.2915	.09280	5.3885	3.3356	.81706	1.5821	.01329
#3	.31235	.33983	6.2937	.09253	5.4076	3.3406	.81937	1.5841	.01334

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.23577	.15276	4.8245	37.839
Stddev	.00024	.00052	.0141	.562
%RSD	.10159	.33985	.29227	1.4855
#1	.23587	.15336	4.8090	37.396
#2	.23595	.15246	4.8281	37.650
#3	.23550	.15245	4.8365	38.472

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S4 Acquired: 10/29/2025 13:53:02 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6043.2	92917.	6979.1	4633.1	6838.9
Stddev	8.9	623.	39.9	35.3	8.8
%RSD	.14745	.67085	.57170	.76186	.12935
#1	6053.4	93557.	7001.2	4665.8	6848.8
#2	6036.8	92883.	7003.0	4637.8	6836.1
#3	6039.5	92311.	6933.0	4595.7	6831.8

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S5 Acquired: 10/29/2025 13:57:06 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348	Cd2265
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.53944	.52121	2.1670	.43913	.96152	1.8027	48.792	5.1603	16.507
Stddev	.00053	.02243	.0033	.00095	.00127	.0055	.583	.0291	.038
%RSD	.09871	4.3032	.15282	.21556	.13235	.30490	1.1953	.56319	.23123
#1	.53934	.54710	2.1708	.44020	.96121	1.8000	49.342	5.1522	16.551
#2	.54001	.50905	2.1651	.43883	.96042	1.7990	48.180	5.1361	16.481
#3	.53896	.50749	2.1651	.43838	.96291	1.8090	48.855	5.1925	16.490

Elem	Ca3736	Cr2677	Co2286	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.0573	.43056	5.5957	1.6761	.02489	2.1778	.63275	3.1970	.51072
Stddev	.0086	.00066	.0091	.0024	.00013	.0087	.00274	.0056	.00054
%RSD	.27959	.15279	.16263	.14054	.50644	.39914	.43230	.17516	.10571
#1	3.0487	.43006	5.6061	1.6740	.02478	2.1680	.62972	3.2033	.51104
#2	3.0573	.43131	5.5895	1.6758	.02503	2.1807	.63349	3.1925	.51102
#3	3.0658	.43032	5.5914	1.6786	.02488	2.1846	.63504	3.1953	.51010

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.61985	.67641	12.148	.18889	10.315	6.5249	1.6304	3.1301	.02690
Stddev	.00418	.00272	.029	.00074	.063	.0074	.0071	.0049	.00016
%RSD	.67431	.40207	.23975	.38946	.60704	.11358	.43697	.15736	.58849
#1	.61924	.67478	12.177	.18890	10.316	6.5329	1.6384	3.1267	.02676
#2	.62431	.67489	12.119	.18962	10.252	6.5184	1.6278	3.1278	.02707
#3	.61601	.67955	12.148	.18815	10.377	6.5233	1.6249	3.1357	.02688

Elem	P_1774	S_1820	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.48466	.31185	9.5286	74.495
Stddev	.00271	.00214	.0287	.603
%RSD	.55824	.68641	.30135	.81003
#1	.48745	.31432	9.5000	73.807
#2	.48205	.31059	9.5283	74.937
#3	.48446	.31065	9.5575	74.740

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: S5 Acquired: 10/29/2025 13:57:06 Type: Cal
Method: 6010-200.7 NEW(v324) Mode: IR Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5875.5	91326.	6979.0	4568.2	6441.5
Stddev	6.0	114.	34.8	16.2	15.8
%RSD	.10261	.12473	.49834	.35397	.24512
#1	5874.4	91323.	6983.6	4550.8	6423.7
#2	5882.0	91215.	7011.2	4571.0	6453.7
#3	5870.1	91442.	6942.1	4582.8	6447.2

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICV01 Acquired: 10/29/2025 14:01:20 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.764472**	**3.970815**	**3.650856**	**3.778692**	**3.849122**	**7.263235**
Stddev	.011409	.180168	.002956	.011344	.008908	.017926
%RSD	.3030705	4.537303	.0809774	.3002040	.2314306	.2467982
#1	3.777515	4.175769	3.651200	3.791645	3.840079	7.247701
#2	3.756346	3.899256	3.647743	3.770529	3.849397	7.282849
#3	3.759554	3.837421	3.653625	3.773902	3.857889	7.259155

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.487683**	**.1881639**	**1.862307**	**18.70695**	**.7699359**	**1.875550**
Stddev	.049400	.0009678	.000434	.04867	.0030423	.001489
%RSD	.6597489	.5143534	.0233292	.2601712	.3951424	.0793711
#1	7.542885	.1892763	1.862761	18.68787	.7716792	1.874476
#2	7.472526	.1876998	1.862264	18.67071	.7717055	1.874925
#3	7.447637	.1875155	1.861896	18.76227	.7664229	1.877250

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9610564**	**3.786311**	**1.868415**	**18.73602**	**1.878021**	**.9692426**
Stddev	.0016789	.016832	.010398	.05769	.002945	.0021427
%RSD	.1746968	.4445517	.5564882	.3078932	.1567929	.2210650
#1	.9594709	3.802844	1.880413	18.71298	1.876160	.9716508
#2	.9608829	3.786895	1.862794	18.69341	1.876487	.9685301
#3	.9628153	3.769195	1.862038	18.80166	1.881416	.9675470

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.81848**	**1.857929**	**1.895587**	**18.67690**	**3.681743**	**3.830986**
Stddev	.03370	.000942	.004979	.08402	.013962	.005317
%RSD	.1791032	.0507016	.2626650	.4498493	.3792102	.1387798
#1	18.80498	1.857032	1.899038	18.76565	3.697722	3.835078
#2	18.85684	1.857844	1.897843	18.66645	3.671900	3.824976
#3	18.79361	1.858911	1.889879	18.59859	3.675607	3.832903

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICV01 Acquired: 10/29/2025 14:01:20 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.785073	3.739621	F 3.519975	F .0046740	F .0237317	F -.003574
Stddev	.009537	.010622	.014784	.0005223	.0040319	.000801
%RSD	.2519527	.2840317	.4199964	11.17563	16.98936	22.41756
#1	3.795718	3.751374	3.518672	.0044311	.0218097	-.002802
#2	3.777309	3.736783	3.535367	.0052735	.0210205	-.004401
#3	3.782194	3.730707	3.505885	.0043173	.0283650	-.003519

Elem	Sr4077
Units	ppm
Avg	F -.003012
Stddev	.000039
%RSD	1.297532
#1	-.002992
#2	-.003057
#3	-.002986

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6160.555	94534.31	7292.244	4753.560	7075.244
Stddev	13.466	452.47	24.421	32.183	14.889
%RSD	.2185893	.4786252	.3348928	.6770307	.2104437
#1	6150.465	94377.41	7271.953	4738.281	7064.475
#2	6175.846	94181.18	7285.432	4731.862	7092.235
#3	6155.354	95044.34	7319.348	4790.536	7069.022

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LLICV01 Acquired: 10/29/2025 14:07:40 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0210553**	**.0463144**	**.0117190**	**.0230825**	**.0515223**	**.1029837**
Stddev	.0014325	.0025064	.0008309	.0013781	.0024293	.0123891
%RSD	6.803670	5.411758	7.089969	5.970439	4.715092	12.03014
#1	.0204275	.0484053	.0122790	.0216436	.0487232	.1079356
#2	.0226946	.0435359	.0107644	.0243905	.0530810	.1121309
#3	.0200439	.0470019	.0121137	.0232134	.0527627	.0888845

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1050841**	**.0064481**	**.0058332**	**2.078907**	**.0102518**	**.0299516**
Stddev	.0013103	.0000890	.0000236	.020677	.0002611	.0001269
%RSD	1.246910	1.380818	.4054114	.9946140	2.546500	.4236405
#1	.1051304	.0065029	.0058215	2.102651	.0100041	.0299958
#2	.1037513	.0063453	.0058605	2.069208	.0102268	.0300505
#3	.1063706	.0064960	.0058178	2.064862	.0105244	.0298085

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0220424**	**.1072966**	**.0210845**	**2.155099**	**.0403917**	**.0105850**
Stddev	.0001332	.0048316	.0001135	.044564	.0003182	.0003705
%RSD	.6042516	4.503024	.5380973	2.067859	.7877895	3.500245
#1	.0218950	.1093583	.0210226	2.199856	.0404934	.0108615
#2	.0221542	.1017762	.0212155	2.110730	.0400351	.0101640
#3	.0220779	.1107554	.0210155	2.154710	.0406466	.0107295

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.007426**	**.0410484**	**.0432694**	**1.878880**	**.1022255**	**.2051291**
Stddev	.021428	.0040720	.0001427	.028995	.0014037	.0004649
%RSD	1.067449	9.920067	.3298594	1.543208	1.373133	.2266342
#1	1.997762	.0453110	.0433745	1.905244	.1024884	.2056629
#2	2.031984	.0371983	.0433267	1.883572	.1007090	.2048131
#3	1.992532	.0406360	.0431069	1.847826	.1034792	.2049113

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LLICV01 Acquired: 10/29/2025 14:07:40 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0398141	.0382810	.3638532	.0189381	F .0124239	.0219099
Stddev	.0001082	.0020525	.0154514	.0020620	.0029877	.0027384
%RSD	.2716296	5.361733	4.246606	10.88804	24.04839	12.49839
#1	.0398197	.0399014	.3584293	.0168767	.0096052	.0244641
#2	.0397033	.0359730	.3812852	.0189370	.0155560	.0190186
#3	.0399194	.0389687	.3518449	.0210006	.0121104	.0222470

Elem	Sr4077
Units	ppm
Avg	.0213964
Stddev	.0001493
%RSD	.6978913
#1	.0212878
#2	.0215667
#3	.0213347

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5992.948	92800.84	7016.174	4584.937	7401.945
Stddev	4.907	281.97	61.465	2.637	5.512
%RSD	.0818816	.3038419	.8760514	.0575063	.0744705
#1	5989.741	92967.47	7009.725	4586.606	7401.234
#2	5998.597	92475.28	7080.610	4581.898	7407.778
#3	5990.506	92959.76	6958.188	4586.308	7396.823

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICB01 Acquired: 10/29/2025 14:12:28 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000192**	**-.001332**	**.0000368**	**.0016523**	**-.003057**	**.0003858**
Stddev	.000787	.001046	.0005023	.0008440	.000979	.0072532
%RSD	410.1887	78.53132	1365.005	51.07542	32.01522	1879.993
#1	-.000201	-.000727	.0005504	.0007453	-.002924	.0087098
#2	.000600	-.000729	.0000134	.0024143	-.002152	-.004578
#3	-.000975	-.002540	-.000453	.0017975	-.004095	-.002975

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035380**	**.0000412**	**-.000062**	**.0010978**	**.0000599**	**-.000035**
Stddev	.0025030	.0000721	.000054	.0082217	.0000459	.000031
%RSD	70.74690	174.8109	87.61879	748.9517	76.63327	89.95037
#1	.0042512	.0001137	-.000061	-.006887	.0000990	-.000013
#2	.0056070	.0000405	-.000117	.009538	.0000094	-.000071
#3	.0007558	-.000030	-.000008	.000642	.0000712	-.000021

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000516**	**-.006560**	**.0005152**	**-.024158**	**.0002702**	**.0003049**
Stddev	.000200	.005761	.0007034	.022326	.0002685	.0005840
%RSD	38.83250	87.81276	136.5371	92.41517	99.35831	191.5602
#1	-.000559	-.013210	-.000252	-.046185	.0002335	-.000240
#2	-.000691	-.003379	.000669	-.001544	.0000220	.000233
#3	-.000297	-.003091	.001129	-.024746	.0005552	.000922

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.061099**	**.0030227**	**-.000323**	**-.117359**	**-.002559**	**.0005143**
Stddev	.007193	.0019150	.000224	.022375	.000422	.0001096
%RSD	11.77305	63.35504	69.12205	19.06515	16.48106	21.30741
#1	-.065231	.0040296	-.000483	-.135626	-.002508	.0006028
#2	-.065274	.0008143	-.000419	-.092402	-.002165	.0003917
#3	-.052793	.0042242	-.000068	-.124047	-.003004	.0005485

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICB01 Acquired: 10/29/2025 14:12:28 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0221066	-.000413	-.014888	-.000708	-.005562	.0003302
Stddev	.0005889	.000623	.013234	.000877	.001726	.0008800
%RSD	2.663777	150.9524	88.88871	123.8989	31.02370	266.5366
#1	.0215687	.000286	-.009134	-.001373	-.007446	.0007728
#2	.0220154	-.000911	-.030026	-.001038	-.004057	-.000683
#3	.0227358	-.000614	-.005505	.000286	-.005184	.000901

Elem	Sr4077
Units	ppm
Avg	.0000605
Stddev	.0001189
%RSD	196.6178
#1	-.000032
#2	.000195
#3	.000018

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6130.168	95144.69	7278.849	4650.652	7739.233
Stddev	.991	99.26	40.738	16.040	.602
%RSD	.0161591	.1043274	.5596724	.3449073	.0077807
#1	6131.055	95240.90	7313.596	4669.094	7739.250
#2	6129.099	95150.54	7234.015	4639.941	7739.826
#3	6130.350	95042.63	7288.935	4642.921	7738.622

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CRI01 Acquired: 10/29/2025 14:16:49 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0198693**	**.0442487**	**.0115949**	**.0229665**	**.0499050**	**.0970909**
Stddev	.0010023	.0029648	.0004578	.0029018	.0008476	.0057034
%RSD	5.044226	6.700347	3.948342	12.63508	1.698511	5.874257
#1	.0191181	.0429587	.0112327	.0263172	.0507946	.1036746
#2	.0194824	.0476400	.0114426	.0213138	.0491066	.0939383
#3	.0210073	.0421474	.0121095	.0212686	.0498139	.0936598

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1017535**	**.0064134**	**.0058416**	**2.053676**	**.0103176**	**.0295674**
Stddev	.0009582	.0000319	.0000096	.014919	.0001461	.0000869
%RSD	.9416558	.4980086	.1645031	.7264683	1.415942	.2938956
#1	.1027274	.0064493	.0058312	2.044484	.0102900	.0295266
#2	.1017211	.0063880	.0058501	2.045654	.0101873	.0295084
#3	.1008119	.0064030	.0058436	2.070890	.0104755	.0296672

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0216022**	**.0979502**	**.0219929**	**2.124475**	**.0402649**	**.0110273**
Stddev	.0004109	.0059532	.0007662	.014744	.0001548	.0001768
%RSD	1.902249	6.077745	3.483662	.6939900	.3844968	1.603149
#1	.0218966	.0928396	.0223495	2.110218	.0401327	.0110620
#2	.0217772	.0965242	.0211134	2.139661	.0402267	.0108357
#3	.0211327	.1044869	.0225157	2.123546	.0404352	.0111841

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.942506**	**.0432077**	**.0423786**	**1.846613**	**.0968181**	**.2024829**
Stddev	.019562	.0017844	.0003747	.008586	.0009023	.0005072
%RSD	1.007071	4.129839	.8840905	.4649635	.9319336	.2504645
#1	1.921664	.0449517	.0426670	1.856408	.0978592	.2023076
#2	1.960470	.0432860	.0419551	1.840388	.0962650	.2030544
#3	1.945384	.0413854	.0425136	1.843043	.0963300	.2020866

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CRI01 Acquired: 10/29/2025 14:16:49 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0391850	.0365897	.3647980	.0188387	F .0132147	.0223118
Stddev	.0002582	.0002898	.0160803	.0016612	.0024170	.0007715
%RSD	.6588787	.7919785	4.408008	8.817919	18.28988	3.458057
#1	.0388915	.0362727	.3531115	.0203445	.0150982	.0214565
#2	.0393770	.0366556	.3581454	.0170567	.0140565	.0229554
#3	.0392864	.0368410	.3831371	.0191150	.0104894	.0225235

Elem	Sr4077
Units	ppm
Avg	.0211336
Stddev	.0001324
%RSD	.6262824
#1	.0212356
#2	.0209840
#3	.0211811

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6030.828	93745.77	7039.782	4650.586	7429.757
Stddev	8.698	94.60	57.706	8.457	9.180
%RSD	.1442275	.1009139	.8197062	.1818490	.1235624
#1	6040.353	93806.04	6977.212	4644.273	7440.345
#2	6023.306	93794.55	7090.909	4660.194	7424.013
#3	6028.826	93636.74	7051.223	4647.290	7424.913

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSA01 Acquired: 10/29/2025 14:21:04 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047665	.0103026	.0000376	.0017615	-.003016	238.2085	.0057226
Stddev	.0002845	.0015953	.0007812	.0034386	.000976	.3389	.0015002
%RSD	5.967714	15.48478	2078.874	195.2076	32.33993	.1422873	26.21530
#1	.0048312	.0117855	.0006006	-.001982	-.002079	238.4740	.0070367
#2	.0044553	.0105076	-.000854	.004780	-.004026	237.8267	.0040881
#3	.0050130	.0086147	.000366	.002486	-.002945	238.3249	.0060431

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016957	.0006609	230.9623	.0488980	.0016167	.0140734	95.03462
Stddev	.0001226	.0001396	.2804	.0004734	.0001400	.0005527	1.17085
%RSD	7.232254	21.11586	.1213882	.9681616	8.658784	3.927532	1.232020
#1	.0016641	.0008172	231.2405	.0483724	.0017553	.0146067	93.71110
#2	.0018310	.0006170	230.9665	.0490309	.0014754	.0135031	95.93534
#3	.0015920	.0005486	230.6798	.0492908	.0016194	.0141103	95.45743

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077844	245.6645	.0048467	.0008880	.1253627	.0049808	.0037220
Stddev	.0002441	.8170	.0003438	.0002663	.0203736	.0001946	.0001891
%RSD	3.135587	.3325618	7.093516	29.98755	16.25170	3.907096	5.081219
#1	.0078965	246.5715	.0048733	.0006838	.1031716	.0047609	.0039315
#2	.0075044	245.4359	.0051765	.0007909	.1432221	.0050507	.0036708
#3	.0079522	244.9862	.0044904	.0011891	.1296944	.0051308	.0035638

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221409	.0569306	.0012487	.0184667	-.004641	.0039121	.0077631
Stddev	.0479267	.0044004	.0002403	.0004087	.000730	.0185462	.0014627
%RSD	216.4625	7.729464	19.24449	2.213104	15.71957	474.0713	18.84096
#1	-.016778	.0518552	.0013893	.0180122	-.003955	-.009617	.0076516
#2	.075673	.0592582	.0009713	.0188040	-.005408	.025053	.0063595
#3	.007527	.0596784	.0013857	.0185840	-.004561	-.003700	.0092784

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSA01 Acquired: 10/29/2025 14:21:04 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.000657	F -.023720	.0050392
Stddev	.000825	.001308	.0015227
%RSD	125.6119	5.515234	30.21710
#1	-.000903	-.023133	.0067079
#2	-.001331	-.025219	.0037252
#3	.000263	-.022808	.0046843

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5744.452	86600.78	6866.950	4410.128	6201.587
Stddev	10.769	121.63	72.056	.767	11.309
%RSD	.1874622	.1404476	1.049314	.0173846	.1823490
#1	5749.754	86741.19	6783.859	4409.326	6207.645
#2	5751.541	86527.72	6904.758	4410.202	6208.577
#3	5732.060	86533.44	6912.233	4410.854	6188.541

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSAB01 Acquired: 10/29/2025 14:25:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1048885**	**.1051475**	**.0473592**	**.0510748**	**.5796515**	**236.4256**
Stddev	.0010388	.0020074	.0043663	.0037338	.0001643	.3401
%RSD	.9903834	1.909160	9.219611	7.310416	.0283462	.1438382
#1	.1037896	.1071244	.0522342	.0506302	.5795937	236.5936
#2	.1058544	.1052073	.0438079	.0475831	.5798369	236.0342
#3	.1050214	.1031108	.0460353	.0550109	.5795239	236.6490

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4776329**	**.5012885**	**.9630589**	**229.1758**	**.5378894**	**.4855431**
Stddev	.0014894	.0038676	.0021894	.4851	.0023629	.0013611
%RSD	.3118325	.7715291	.2273337	.2116513	.4392988	.2803184
#1	.4779745	.5055038	.9605313	229.4406	.5363130	.4839767
#2	.4760023	.4979036	.9642811	228.6160	.5367488	.4862159
#3	.4789217	.5004579	.9643644	229.4708	.5406062	.4864367

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4744475**	**94.74832**	**.4787434**	**243.6830**	**.9675804**	**.2016066**
Stddev	.0003112	.61266	.0019324	.6744	.0031255	.0007886
%RSD	.0655997	.6466143	.4036302	.2767429	.3230166	.3911365
#1	.4744804	94.04300	.4767579	244.2082	.9640857	.2006961
#2	.4747409	95.05370	.4788547	242.9225	.9701081	.2020531
#3	.4741211	95.14827	.4806178	243.9184	.9685472	.2020705

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0957745**	**.4686423**	**.9985241**	**-.081141**	**.9770021**	**.9592048**
Stddev	.0103290	.0028354	.0031765	.022695	.0050716	.0026737
%RSD	10.78471	.6050269	.3181169	27.96943	.5190984	.2787405
#1	.0882389	.4719086	.9961576	-.061379	.9827084	.9562226
#2	.0915360	.4672045	1.002134	-.105927	.9752893	.9600044
#3	.1075485	.4668138	.997280	-.076118	.9730087	.9613875

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSAB01 Acquired: 10/29/2025 14:25:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9869540	.9362467	.9435175	F .0054394	F -.000250	F -.026015
Stddev	.0047679	.0032878	.0137496	.0011088	.001046	.001625
%RSD	.4830914	.3511728	1.457271	20.38434	418.3625	6.246951
#1	.9814678	.9400417	.9293980	.0065814	-.001377	-.026720
#2	.9900957	.9344415	.9568646	.0053697	-.000063	-.027169
#3	.9892985	.9342569	.9442899	.0043671	.000690	-.024156

Elem	Sr4077
Units	ppm
Avg	F .0057269
Stddev	.0005373
%RSD	9.381916
#1	.0063469
#2	.0054369
#3	.0053969

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5762.989	87568.42	7006.970	4436.006	6219.246
Stddev	12.298	498.13	49.829	23.534	14.845
%RSD	.2133911	.5688512	.7111397	.5305129	.2386980
#1	5769.996	87923.45	6973.170	4453.063	6233.279
#2	5770.182	87782.84	7064.195	4445.797	6220.755
#3	5748.789	86998.98	6983.546	4409.157	6203.704

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSA01DLX20 Acquired: 10/29/2025 14:29:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009044**	**-.000900**	**.0003351**	**.0012199**	**-.003677**	**12.31525**	**.0048630**
Stddev	.0034133	.002138	.0004213	.0015117	.001423	.06372	.0006907
%RSD	377.4326	237.6385	125.7039	123.9178	38.69061	.5173682	14.20256
#1	.0048457	-.003338	.0003714	.0011874	-.003389	12.31374	.0050383
#2	-.001047	.000657	-.000103	.0027475	-.005222	12.25230	.0054491
#3	-.001086	-.000018	.000737	-.000275	-.002420	12.37971	.0041015

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001980**	**.0000106**	**12.35909**	**.0026705**	**.0001976**	**.0008388**	**4.845437**
Stddev	.0000284	.0000260	.01881	.0001026	.0001938	.0000683	.022234
%RSD	14.34718	245.1430	.1521554	3.840195	98.07029	8.143741	.4588620
#1	.0002244	.0000384	12.36983	.0025548	.0004060	.0008069	4.821005
#2	.0001680	-.000013	12.33738	.0027063	.0001638	.0009173	4.850823
#3	.0002017	.000007	12.37006	.0027503	.0000229	.0007923	4.864484

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007371**	**13.01796**	**.0002100**	**.0002555**	**-.071760**	**.0033852**	**.0009943**
Stddev	.0002747	.06860	.0002079	.0003978	.011145	.0042590	.0002185
%RSD	37.27421	.5270023	98.99385	155.7241	15.53030	125.8113	21.97025
#1	.0008683	13.00761	.0002346	.0000027	-.084330	.0063658	.0008787
#2	.0009215	12.95511	.0004045	.0007141	-.063088	.0052825	.0008579
#3	.0004213	13.09115	-.000009	.0000496	-.067862	-.001493	.0012462

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.156821**	**-.002799**	**.0007575**	**.0225842**	**-.000017**	**-.009802**	**.0000709**
Stddev	.034389	.000170	.0002129	.0000952	.000588	.008258	.0012017
%RSD	21.92865	6.077914	28.10665	.4217310	3467.525	84.24199	1694.704
#1	-.124073	-.002953	.0005758	.0224746	-.000330	-.003102	.0011125
#2	-.192644	-.002829	.0007049	.0226476	-.000382	-.019028	-.001244
#3	-.153748	-.002616	.0009917	.0226302	.000661	-.007278	.000344

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSA01DLX20 Acquired: 10/29/2025 14:29:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSA01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.003515	-.001623	.0004696
Stddev	.002816	.003190	.0000586
%RSD	80.11826	196.6044	12.47923
#1	-.000521	.002021	.0004929
#2	-.006111	-.002979	.0004029
#3	-.003912	-.003910	.0005129

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5990.179	91678.18	6913.860	4553.141	7203.995
Stddev	11.618	198.59	40.362	10.196	19.529
%RSD	.1939567	.2166145	.5837836	.2239392	.2710898
#1	6003.300	91451.71	6908.949	4557.909	7220.096
#2	5981.196	91760.30	6956.453	4560.079	7182.271
#3	5986.041	91822.55	6876.179	4541.434	7209.619

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSAB01DLX20 Acquired: 10/29/2025 14:33:36 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052736**	**.0073892**	**.0021516**	**-.000471**	**.0241661**	**11.98651**	**.0272352**
Stddev	.0000844	.0015872	.0014590	.001747	.0006888	.05714	.0009537
%RSD	1.599962	21.47962	67.80957	370.7459	2.850269	.4767057	3.501790
#1	.0053498	.0080972	.0030589	-.002196	.0235887	12.02155	.0283303
#2	.0051829	.0055713	.0004686	-.000515	.0239810	11.92057	.0265869
#3	.0052882	.0084992	.0029273	.001297	.0249285	12.01740	.0267884

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0258138**	**.0472794**	**11.99267**	**.0283545**	**.0238628**	**.0256302**	**4.709760**
Stddev	.0001762	.0000697	.02698	.0002373	.0000698	.0003466	.030184
%RSD	.6824601	.1473299	.2249887	.8368478	.2923524	1.352345	.6408901
#1	.0258823	.0473468	12.02067	.0284500	.0238153	.0252817	4.742831
#2	.0256137	.0472838	11.99050	.0280844	.0239429	.0259748	4.702754
#3	.0259454	.0472077	11.96684	.0285292	.0238301	.0256340	4.683694

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0253892**	**12.63393**	**.0485147**	**.0099117**	**-.076021**	**.0258093**	**.0509310**
Stddev	.0002415	.06328	.0003676	.0008431	.017625	.0016628	.0002904
%RSD	.9512072	.5008489	.7576204	8.506398	23.18474	6.442479	.5702647
#1	.0256345	12.63704	.0485912	.0097914	-.090317	.0268619	.0512127
#2	.0251517	12.56915	.0481149	.0108085	-.081417	.0266736	.0506325
#3	.0253815	12.69559	.0488380	.0091352	-.056328	.0238924	.0509478

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.160009**	**.0440944**	**.0502341**	**.0682637**	**.0480353**	**.0317824**	**-.001046**
Stddev	.006146	.0001809	.0002373	.0003815	.0005686	.0104979	.000305
%RSD	3.841329	.4101785	.4724698	.5588807	1.183754	33.03054	29.20122
#1	-.153715	.0440340	.0500400	.0686395	.0473909	.0228846	-.001193
#2	-.165997	.0439514	.0504987	.0682750	.0482487	.0433607	-.000695
#3	-.160315	.0442977	.0501634	.0678767	.0484663	.0291019	-.001251

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: ICSAB01DLX20 Acquired: 10/29/2025 14:33:36 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: ICSAB01DLX20 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.005708	-.000159	.0003990
Stddev	.003055	.001244	.0000706
%RSD	53.51476	783.9823	17.68822
#1	-.002748	.001256	.0004388
#2	-.008849	-.000650	.0003175
#3	-.005526	-.001082	.0004407

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6159.626	94240.54	7115.829	4673.100	7404.922
Stddev	3.650	204.94	25.672	18.153	4.409
%RSD	.0592497	.2174686	.3607757	.3884507	.0595395
#1	6160.504	94016.01	7105.309	4654.878	7409.454
#2	6155.617	94288.03	7145.090	4673.238	7404.666
#3	6162.756	94417.56	7097.088	4691.183	7400.647

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV01 Acquired: 10/29/2025 14:37:48 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.957138**	**5.060443**	**4.903376**	**4.934411**	**4.972114**	**9.776444**	**9.728464**
Stddev	.007026	.195596	.005323	.013644	.006278	.023980	.034312
%RSD	.1417338	3.865199	.1085673	.2765109	.1262695	.2452873	.3526956
#1	4.952393	4.834681	4.901674	4.922670	4.979260	9.803490	9.754453
#2	4.953811	5.178926	4.899111	4.931183	4.967480	9.757779	9.741367
#3	4.965209	5.167722	4.909342	4.949380	4.969603	9.768062	9.689571

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2503138**	**2.463746**	**24.78163**	**1.005040**	**2.458061**	**1.240384**	**4.872119**
Stddev	.0017743	.002497	.05823	.002870	.002486	.001175	.034838
%RSD	.7088176	.1013415	.2349804	.2855575	.1011562	.0947035	.7150461
#1	.2497109	2.460871	24.83363	1.003061	2.455674	1.241604	4.881042
#2	.2489195	2.465367	24.71871	1.003729	2.457873	1.239261	4.901628
#3	.2523109	2.465001	24.79255	1.008332	2.460636	1.240287	4.833688

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.457644**	**24.79424**	**2.459419**	**1.237425**	**24.41683**	**2.473843**	**2.490215**
Stddev	.007220	.09678	.002454	.002159	.13595	.002847	.006902
%RSD	.2937875	.3903401	.0997795	.1744873	.5567933	.1151031	.2771714
#1	2.464802	24.81503	2.456647	1.237239	24.46229	2.473734	2.486716
#2	2.457769	24.68875	2.460295	1.235365	24.52422	2.476744	2.485763
#3	2.450363	24.87893	2.461314	1.239671	24.26397	2.471052	2.498166

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.14600**	**4.970874**	**5.009337**	**4.978538**	**4.931139**	**4.868154**	**4.954822**
Stddev	.19127	.033620	.005952	.012831	.013800	.026663	.023072
%RSD	.7921380	.6763403	.1188153	.2577319	.2798567	.5477003	.4656387
#1	24.23486	4.950665	5.005513	4.964374	4.945780	4.888098	4.929634
#2	24.27669	4.952274	5.006305	4.981856	4.929266	4.878493	4.959904
#3	23.92647	5.009684	5.016195	4.989385	4.918371	4.837869	4.974929

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV01 Acquired: 10/29/2025 14:37:48 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.873408**	**4.869970**	**5.010995**
Stddev	.039422	.012003	.022453
%RSD	.8089147	.2464663	.4480651
#1	4.831551	4.883097	5.034878
#2	4.878842	4.867257	5.007791
#3	4.909831	4.859556	4.990317

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6003.411**	**92866.52**	**6993.625**	**4622.969**	**6805.371**
Stddev	2.611	133.25	34.405	13.516	5.061
%RSD	.0434995	.1434875	.4919447	.2923584	.0743692
#1	6000.587	92972.24	7006.446	4616.497	6811.079
#2	6005.738	92716.84	7019.779	4638.504	6803.598
#3	6003.909	92910.48	6954.651	4613.907	6801.434

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB01 Acquired: 10/29/2025 14:41:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000089**	**.0020637**	**.0001839**	**.0009606**	**-.003328**	**.0051323**	**.0048770**
Stddev	.001927	.0000888	.0006252	.0019061	.001391	.0020775	.0022777
%RSD	2168.944	4.304286	340.0043	198.4193	41.78192	40.48001	46.70376
#1	.002105	.0020866	-.000534	.0013259	-.004934	.0053047	.0048606
#2	-.000869	.0021389	.000609	.0026577	-.002547	.0029739	.0071629
#3	-.001503	.0019657	.000477	-.001102	-.002504	.0071182	.0026075

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000169**	**.0000070**	**-.005077**	**-.000099**	**-.000027**	**.0010626**	**.0094098**
Stddev	.0000489	.0000529	.003226	.000094	.000120	.0002476	.0029690
%RSD	289.8309	756.1371	63.53779	94.90667	440.2030	23.30414	31.55192
#1	.0000168	.0000618	-.007013	-.000199	-.000155	.0012703	.0062106
#2	-.000032	.0000031	-.006866	-.000011	-.000009	.0011290	.0120765
#3	.000066	-.000044	-.001353	-.000088	.000082	.0007885	.0099422

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005314**	**-.029931**	**-.000014**	**-.000176**	**-.069724**	**.0010150**	**.0001486**
Stddev	.0001874	.015724	.000158	.000196	.019499	.0039694	.0001140
%RSD	35.26485	52.53545	1140.095	111.4220	27.96569	391.0580	76.73664
#1	.0005366	-.046890	-.000057	-.000009	-.082117	.0022654	.0002735
#2	.0007162	-.015834	.000162	-.000127	-.079807	.0042087	.0000501
#3	.0003415	-.027069	-.000146	-.000391	-.047248	-.003429	.0001221

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.167364**	**-.000404**	**.0000060**	**.0012732**	**-.000554**	**.0042277**	**-.000664**
Stddev	.005673	.000520	.0000801	.0003337	.001047	.0015168	.000249
%RSD	3.389601	128.6589	1327.686	26.21086	189.1534	35.87690	37.48074
#1	-.170112	.000146	-.000026	.0012301	-.000022	.0056634	-.000377
#2	-.171140	-.000887	-.000053	.0016263	-.001760	.0043787	-.000826
#3	-.160840	-.000470	.000097	.0009631	.000121	.0026411	-.000788

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB01 Acquired: 10/29/2025 14:41:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.015075	.0007996	.0000687
Stddev	.002050	.0014807	.0001335
%RSD	13.59988	185.1904	194.3856
#1	-.013629	.0024107	-.000020
#2	-.017421	.0004897	.000222
#3	-.014175	-.000502	.000003

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5986.348	92642.15	6684.943	4551.774	7533.523
Stddev	15.600	445.49	53.677	19.825	18.373
%RSD	.2605955	.4808697	.8029597	.4355421	.2438814
#1	5976.801	92456.74	6676.321	4558.603	7531.679
#2	5977.894	93150.40	6636.098	4567.281	7516.142
#3	6004.351	92319.31	6742.409	4529.437	7552.748

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-1 Acquired: 10/29/2025 14:46:13 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037872**	**.0109073**	**.0233735**	**-.017244**	**.0153631**	**.5206618**	**.0176998**
Stddev	.0027997	.0016254	.0017148	.004456	.0008356	.0127968	.0007456
%RSD	73.92746	14.90162	7.336589	25.84093	5.438791	2.457790	4.212699
#1	.0006511	.0119072	.0214053	-.014579	.0160283	.5332180	.0183991
#2	.0060353	.0090319	.0245458	-.014765	.0156357	.5211302	.0177852
#3	.0046750	.0117829	.0241692	-.022389	.0144253	.5076373	.0169151

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011089**	**.0014728**	**2161.947**	**.1055668**	**.0078365**	**.0122446**	**1.137518**
Stddev	.0000444	.0000980	14.166	.0007521	.0001576	.0005554	.027897
%RSD	4.007912	6.653173	.6552376	.7124764	2.011182	4.535933	2.452423
#1	.0011445	.0014710	2178.008	.1054853	.0077412	.0117751	1.110132
#2	.0011231	.0013757	2151.233	.1063564	.0077498	.0121010	1.165899
#3	.0010591	.0015717	2156.599	.1048588	.0080184	.0128577	1.136524

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0582312**	**2244.548**	**.0722934**	**.0028764**	**2335.241**	**.0142018**	**.0872567**
Stddev	.0040772	6.922	.0001649	.0005645	13.249	.0008283	.0001353
%RSD	7.001669	.3083902	.2280873	19.62535	.5673331	5.832055	.1550205
#1	.0610859	2252.148	.0721047	.0035242	2323.229	.0151565	.0871894
#2	.0535618	2238.603	.0723655	.0026154	2349.451	.0137731	.0871683
#3	.0600460	2242.895	.0724100	.0024896	2333.043	.0136758	.0874124

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.629128**	**.0058814**	**.0178279**	**.0012194**	**-.094672**	**-.023546**	**.0197037**
Stddev	.375064	.0010779	.0003237	.0003059	.003852	.044307	.0018202
%RSD	14.26571	18.32650	1.815738	25.08317	4.069052	188.1693	9.238021
#1	2.220491	.0071237	.0181175	.0012420	-.096825	-.016224	.0215202
#2	2.709209	.0051953	.0178880	.0009029	-.090224	-.071058	.0197113
#3	2.957683	.0053251	.0174784	.0015134	-.096966	.016643	.0178797

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-1 Acquired: 10/29/2025 14:46:13 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.2367036	-.318499	.0604631
Stddev	.0054746	.005018	.0003503
%RSD	2.312845	1.575413	.5793138
#1	.2426672	-.324193	.0606102
#2	.2319057	-.314724	.0600632
#3	.2355380	-.316580	.0607158

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4116.067	64891.82	6413.679	3115.266	4325.405
Stddev	2.734	342.04	36.583	5.939	7.192
%RSD	.0664339	.5270857	.5703956	.1906422	.1662699
#1	4116.865	65160.47	6385.905	3122.101	4329.160
#2	4118.313	64506.78	6455.130	3111.361	4329.942
#3	4113.022	65008.21	6400.002	3112.336	4317.113

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-2 Acquired: 10/29/2025 14:50:42 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1128259**	**-.141600**	**.1084931**	**.0087550**	**-.130729**	**1771.920**	**.0238778**
Stddev	.0061776	.008453	.0057146	.0080619	.002706	16.136	.0008975
%RSD	5.475329	5.969451	5.267257	92.08299	2.069589	.9106769	3.758883
#1	.1109730	-.134395	.1074918	.0121031	-.133846	1758.130	.0240629
#2	.1077869	-.150905	.1033453	-.000441	-.129351	1767.963	.0246683
#3	.1197179	-.139502	.1146422	.014603	-.128989	1789.666	.0229021

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0428260**	**-.015535**	**9.185660**	**-.250080**	**.0564313**	**.2485702**	**2617.321**
Stddev	.0006790	.002521	.100066	.003127	.0007497	.0192752	33.283
%RSD	1.585570	16.22531	1.089373	1.250485	1.328473	7.754432	1.271641
#1	.0423611	-.015094	9.203745	-.249887	.0568787	.2417045	2615.219
#2	.0425116	-.013264	9.077784	-.247053	.0555658	.2703383	2585.139
#3	.0436052	-.018247	9.275450	-.253299	.0568494	.2336679	2651.605

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.209804**	**1.779590**	**.0474439**	**^ *****	**4.722407**	**.0517681**	**.0523104**
Stddev	.002211	.016078	.0013391	-----	.067283	.0019461	.0030135
%RSD	1.054022	.9034661	2.822558	-----	1.424758	3.759198	5.760865
#1	-.208718	1.773750	.0459864	^ -----	4.743646	.0497218	.0534248
#2	-.212349	1.767248	.0486200	^ -----	4.776506	.0519872	.0546079
#3	-.208346	1.797772	.0477252	^ -----	4.647067	.0535954	.0488983

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1877.299**	**^ *****	**-.013767**	**.0272855**	**.0025876**	**.4767761**	**.0740899**
Stddev	8.195	-----	.000740	.0001517	.0009429	.0160119	.0049848
%RSD	.4365459	-----	5.373748	.5559506	36.43989	3.358376	6.728091
#1	1884.693	^ -----	-.012919	.0271374	.0035791	.4709538	.0797707
#2	1868.487	^ -----	-.014107	.0272785	.0017023	.4948845	.0704464
#3	1878.715	^ -----	-.014276	.0274405	.0024813	.4644899	.0720526

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-2 Acquired: 10/29/2025 14:50:42 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.497999	.2703556	-2.50896
Stddev	.008594	.0030014	.03194
%RSD	1.725743	1.110172	1.272848
#1	-.500797	.2681952	-2.50685
#2	-.488355	.2690889	-2.47813
#3	-.504846	.2737827	-2.54190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5275.670	76303.30	6839.565	3909.493	5343.213
Stddev	11.130	60.42	59.683	11.464	6.277
%RSD	.2109729	.0791893	.8726183	.2932243	.1174841
#1	5281.413	76262.62	6855.330	3903.059	5344.257
#2	5282.755	76274.55	6889.783	3922.728	5348.903
#3	5262.841	76372.73	6773.582	3902.691	5336.479

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-3 Acquired: 10/29/2025 14:55:11 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0966074**	**.0234001**	**223.7055**	**.0054031**	**.1230352**	**.8461527**	**.0030886**
Stddev	.0044955	.0071466	.7976	.0023554	.0044259	.0059325	.0009812
%RSD	4.653346	30.54102	.3565370	43.59290	3.597276	.7011107	31.76939
#1	.0932243	.0257550	222.8250	.0078549	.1278098	.8469569	.0020272
#2	.1017085	.0153732	223.9118	.0031578	.1190696	.8398591	.0032759
#3	.0948893	.0290721	224.3797	.0051965	.1222261	.8516420	.0039627

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.005439**	**-.001326**	**.3079158**	**23.87427**	**.0066285**	**50.85704**	**13.61354**
Stddev	.000083	.000020	.0034554	.03673	.0001932	.02577	.17020
%RSD	1.534678	1.484544	1.122202	.1538303	2.914608	.0506723	1.250259
#1	-.005361	-.001310	.3109713	23.87888	.0064491	50.82762	13.79664
#2	-.005527	-.001321	.3086102	23.90847	.0066034	50.87562	13.46014
#3	-.005428	-.001348	.3041659	23.83546	.0068331	50.86789	13.58385

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.85785**	**2.030827**	**23.45541**	**.0046128**	**.9181123**	**-.032388**	**30.34369**
Stddev	.69038	.037489	.00250	.0004812	.0126641	.001323	.20465
%RSD	1.306106	1.845986	.0106648	10.43103	1.379360	4.084866	.6744329
#1	53.07271	2.073338	23.45666	.0048804	.9287946	-.033452	30.15181
#2	53.41525	2.002498	23.45704	.0040573	.9214195	-.030906	30.55907
#3	52.08559	2.016644	23.45253	.0049007	.9041227	-.032805	30.32019

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6312314**	**.0023431**	**-.015926**	**.0117927**	**-.043006**	**-.113250**	**.1678201**
Stddev	.0285033	.0017072	.000467	.0008278	.001212	.012997	.0027769
%RSD	4.515504	72.86132	2.934161	7.019527	2.819269	11.47600	1.654688
#1	.6638105	.0039987	-.016296	.0120400	-.041627	-.107101	.1647925
#2	.6108935	.0024419	-.016082	.0124686	-.043489	-.128180	.1684194
#3	.6189901	.0005886	-.015401	.0108694	-.043903	-.104469	.1702484

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: LR-3 Acquired: 10/29/2025 14:55:11 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0661793	.0043583	-.012199
Stddev	.0092252	.0013768	.000138
%RSD	13.93978	31.59111	1.134964
#1	.0614691	.0059297	-.012358
#2	.0602600	.0033638	-.012133
#3	.0768088	.0037813	-.012105

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5688.750	94984.42	7230.140	4495.520	7306.704
Stddev	5.939	155.22	46.136	15.385	9.307
%RSD	.1043997	.1634129	.6381104	.3422209	.1273737
#1	5690.957	94906.27	7280.329	4477.933	7304.802
#2	5693.269	94883.81	7189.574	4506.484	7316.814
#3	5682.023	95163.18	7220.518	4502.144	7298.494

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3465-01 Acquired: 10/29/2025 15:00:05 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0493948**	**-.033701**	**.1655942**	**.0037305**	**-.015435**	**138.5256**	**.5546026**
Stddev	.0008885	.001771	.0031544	.0052269	.000992	.3252	.0028919
%RSD	1.798771	5.254697	1.904887	140.1135	6.429477	.2347516	.5214307
#1	.0502892	-.032537	.1691998	.0091658	-.016229	138.8990	.5571827
#2	.0485124	-.032827	.1642385	-.001260	-.015753	138.3052	.5551484
#3	.0493829	-.035739	.1633442	.003285	-.014322	138.3725	.5514767

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0108712**	**.0055136**	**34.03086**	**.2625610**	**.1304296**	**.2482509**	**268.9536**
Stddev	.0001271	.0000667	.10357	.0013066	.0001363	.0010097	1.6328
%RSD	1.169307	1.210401	.3043304	.4976396	.1044938	.4067142	.6070871
#1	.0107317	.0055395	34.11762	.2613921	.1304880	.2491347	269.0591
#2	.0109805	.0055635	34.05877	.2623192	.1305270	.2471505	267.2706
#3	.0109015	.0054378	33.91620	.2639716	.1302739	.2484675	270.5310

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.662832**	**42.74497**	**.2109911**	**.0029603**	**4.387566**	**.4912163**	**.4378360**
Stddev	.014196	.05971	.0011584	.0004615	.036669	.0035902	.0009766
%RSD	.5330997	.1396837	.5490408	15.58930	.8357508	.7308714	.2230599
#1	2.673199	42.74248	.2122171	.0026669	4.376206	.4945269	.4388648
#2	2.668645	42.80588	.2108414	.0027217	4.357921	.4874002	.4377219
#3	2.646653	42.68654	.2099148	.0034922	4.428570	.4917220	.4369215

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.72114**	**.2412975**	**.0063326**	**.0089735**	**7.425778**	**4.333754**	**6.902574**
Stddev	.09463	.0112381	.0001240	.0013725	.028041	.040335	.007783
%RSD	.8826281	4.657370	1.958394	15.29532	.3776156	.9307115	.1127617
#1	10.73977	.2426493	.0064664	.0104223	7.456644	4.372522	6.906003
#2	10.61858	.2294447	.0063099	.0088055	7.418817	4.292017	6.893664
#3	10.80507	.2517986	.0062215	.0076927	7.401873	4.336722	6.908054

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3465-01 Acquired: 10/29/2025 15:00:05 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**1.974484**	**.1043353**	**-.130359**
Stddev	.007770	.0006537	.001376
%RSD	.3935306	.6265179	1.055640
#1	1.965565	.1037484	-.130224
#2	1.979788	.1042175	-.129055
#3	1.978099	.1050398	-.131797

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7689.028**	**117007.6**	**9247.576**	**5829.477**	**6580.797**
Stddev	14.537	453.6	52.256	12.684	4.854
%RSD	.1890584	.3876830	.5650804	.2175811	.0737571
#1	7674.251	117270.3	9239.598	5819.226	6575.438
#2	7703.312	117268.7	9199.768	5843.662	6582.054
#3	7689.522	116483.8	9303.363	5825.543	6584.898

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170288BL Acquired: 10/29/2025 15:04:07 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002318**	**-.000050**	**.0004078**	**.0023764**	**-.002672**	**.0086511**
Stddev	.000839	.000921	.0008279	.0011825	.001015	.0064302
%RSD	36.20721	1825.030	203.0208	49.75857	37.98846	74.32785
#1	-.003166	.000756	.0010353	.0037357	-.003395	.0024962
#2	-.001487	-.001054	-.000531	.0015852	-.001512	.0081320
#3	-.002302	.000146	.000719	.0018083	-.003109	.0153252

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0045987**	**-.000021**	**-.000022**	**-.003315**	**.0001667**	**-.000135**
Stddev	.0016273	.000014	.000055	.002750	.0004160	.000166
%RSD	35.38624	67.41069	252.0484	82.95655	249.6128	122.6564
#1	.0061031	-.000027	.000025	-.005273	.0003063	-.000316
#2	.0048216	-.000031	-.000082	-.000171	.0004949	.000010
#3	.0028714	-.000005	-.000008	-.004500	-.000301	-.000099

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000510**	**.0147515**	**.0007066**	**-.020291**	**-.000018**	**-.000054**
Stddev	.000533	.0037776	.0004054	.035405	.000130	.000197
%RSD	104.4872	25.60799	57.37624	174.4816	712.2234	363.5605
#1	-.000348	.0184781	.0006965	-.047466	.000055	-.000049
#2	-.000077	.0148514	.0011169	.019747	.000059	-.000253
#3	-.001104	.0109250	.0003063	-.033156	-.000169	.000140

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0923677**	**-.001522**	**.0001948**	**.1307896**	**-.008169**	**.0006468**
Stddev	.0102671	.000477	.0001082	.0415615	.000240	.0001601
%RSD	11.11551	31.37608	55.56677	31.77740	2.934113	24.74720
#1	.0828895	-.001854	.0000711	.1422611	-.008322	.0006106
#2	.0909395	-.000975	.0002720	.0846971	-.007893	.0005079
#3	.1032742	-.001736	.0002413	.1654106	-.008293	.0008218

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170288BL Acquired: 10/29/2025 15:04:07 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0223766	-.000951	-.008247	-.001376	F -.012442	-.001859
Stddev	.0002259	.000588	.007540	.000794	.001836	.001726
%RSD	1.009701	61.78572	91.43066	57.73086	14.75993	92.85903
#1	.0221915	-.000931	-.002577	-.001011	-.014487	-.000790
#2	.0223101	-.000374	-.005360	-.000829	-.010935	-.003850
#3	.0226284	-.001548	-.016804	-.002286	-.011903	-.000936

Elem	Sr4077
Units	ppm
Avg	.0000608
Stddev	.0000348
%RSD	57.19485
#1	.0000632
#2	.0000249
#3	.0000944

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6043.569	93742.16	6943.594	4670.690	7635.322
Stddev	9.167	293.63	9.530	17.655	16.361
%RSD	.1516765	.3132268	.1372419	.3779973	.2142771
#1	6046.870	93671.77	6935.328	4653.708	7623.545
#2	6050.628	93490.14	6941.437	4669.415	7654.003
#3	6033.209	94064.59	6954.017	4688.949	7628.417

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170288BS Acquired: 10/29/2025 15:08:28 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7620905	1.694395	.9137911	1.892373	.7905048	1.860064	.1912345
Stddev	.0014477	.029061	.0009404	.009317	.0018772	.006285	.0007233
%RSD	.1899627	1.715137	.1029118	.4923334	.2374691	.3379035	.3782285
#1	.7604512	1.660922	.9129682	1.883573	.7906337	1.855715	.1905894
#2	.7631933	1.709083	.9148161	1.891414	.7885664	1.857206	.1920164
#3	.7626272	1.713181	.9135888	1.902132	.7923142	1.867270	.1910975

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1987431	.1827363	.9770242	.3951942	.1878646	.2995271	2.853953
Stddev	.0003698	.0003951	.0065194	.0006361	.0006768	.0005024	.014568
%RSD	.1860504	.2161997	.6672750	.1609588	.3602354	.1677439	.5104428
#1	.1984909	.1823875	.9698112	.3949696	.1871326	.2993356	2.855081
#2	.1991676	.1826562	.9787647	.3959121	.1884674	.2991486	2.838855
#3	.1985708	.1831653	.9824968	.3947008	.1879938	.3000971	2.867925

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1940979	1.944071	.4729017	.0744888	2.888597	.2906033	.1985527
Stddev	.0007159	.015311	.0010776	.0003871	.014612	.0051351	.0007022
%RSD	.3688457	.7875828	.2278626	.5196620	.5058442	1.767064	.3536496
#1	.1934038	1.943797	.4716977	.0749356	2.872477	.2965294	.1984896
#2	.1940562	1.928899	.4732319	.0742532	2.892342	.2874646	.1978843
#3	.1948338	1.959517	.4737755	.0742777	2.900971	.2878160	.1992844

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.284039	.2835702	.3977337	.6779923	.1893814	.8279406	5.425842
Stddev	.025860	.0007978	.0013365	.0018924	.0023967	.0107503	.015342
%RSD	.2785406	.2813419	.3360239	.2791112	1.265525	1.298435	.2827597
#1	9.258881	.2831863	.3965792	.6759227	.1868087	.8266448	5.409320
#2	9.282688	.2844874	.3974241	.6796343	.1897844	.8178970	5.439639
#3	9.310548	.2830370	.3991979	.6784198	.1915510	.8392801	5.428567

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170288BS Acquired: 10/29/2025 15:08:28 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.012574	.1829055	.1883175
Stddev	.002259	.0010211	.0006620
%RSD	17.96707	.5582531	.3515262
#1	-.011999	.1830327	.1875907
#2	-.015066	.1818269	.1888859
#3	-.010659	.1838571	.1884760

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6182.525	95636.54	7158.427	4750.042	7493.713
Stddev	3.976	226.62	26.618	22.693	9.601
%RSD	.0643087	.2369564	.3718411	.4777328	.1281181
#1	6186.767	95896.65	7186.391	4756.270	7502.347
#2	6178.883	95531.24	7133.398	4768.970	7483.374
#3	6181.924	95481.73	7155.493	4724.885	7495.418

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3447-05DL2X10 Acquired: 10/29/2025 15:12:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0728251**	**-.003256**	**172.3876**	**-.003353**	**1.892524**	**2.973401**
Stddev	.0026063	.001403	1.1196	.001960	.006698	.018362
%RSD	3.578920	43.10720	.6494931	58.46747	.3538993	.6175258
#1	.0703795	-.004471	172.8042	-.003458	1.891486	2.955011
#2	.0755669	-.003577	173.2392	-.001342	1.899680	2.991734
#3	.0725287	-.001720	171.1194	-.005258	1.886406	2.973459

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1486370**	**.0013312**	**.0186095**	**3.849986**	**.0233770**	**.0173752**
Stddev	.0006879	.0000223	.0001123	.017657	.0003645	.0001299
%RSD	.4627862	1.677211	.6034957	.4586278	1.559002	.7476440
#1	.1483783	.0013347	.0186131	3.857462	.0230238	.0175252
#2	.1481161	.0013074	.0187199	3.862675	.0233555	.0172983
#3	.1494168	.0013516	.0184954	3.829821	.0237517	.0173021

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.21511**	**68.05977**	**.3041705**	**.7795179**	**.1807148**	**.0297758**
Stddev	.06448	.59186	.0019827	.0180466	.0005495	.0002241
%RSD	.1337358	.8696142	.6518496	2.315102	.3040807	.7524498
#1	48.22806	67.85032	.3064519	.7959092	.1809639	.0299988
#2	48.27214	67.60111	.3028636	.7601789	.1810956	.0295507
#3	48.14514	68.72787	.3031960	.7824656	.1800848	.0297777

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7090567**	**.1972214**	**2.538196**	**.7013034**	**.0330450**	**.0042226**
Stddev	.0194778	.0038443	.010692	.0251248	.0036753	.0002308
%RSD	2.746999	1.949224	.4212555	3.582590	11.12203	5.464719
#1	.6911270	.1978910	2.539985	.6785465	.0322657	.0044420
#2	.7062623	.1930863	2.526722	.6970982	.0298219	.0042438
#3	.7297808	.2006869	2.547881	.7282655	.0370475	.0039820

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3447-05DL2X10 Acquired: 10/29/2025 15:12:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 55.04298	.0725388	.4409335	.2556666	F 10.08136	.0043978
Stddev	.05580	.0011335	.0144138	.0041697	.03409	.0006741
%RSD	.1013681	1.562668	3.268929	1.630911	.3381101	15.32882
#1	55.10186	.0723277	.4281714	.2528872	10.04833	.0051439
#2	54.99089	.0737630	.4380622	.2536515	10.07935	.0042168
#3	55.03619	.0715256	.4565668	.2604610	10.11641	.0038326

Elem	Sr4077
Units	ppm
Avg	-.043224
Stddev	.000667
%RSD	1.543409
#1	-.043194
#2	-.042572
#3	-.043905

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5993.420	94112.27	7325.048	4536.424	7306.697
Stddev	21.753	936.87	33.706	57.481	18.181
%RSD	.3629547	.9954824	.4601432	1.267107	.2488220
#1	5979.246	94425.94	7286.927	4539.775	7293.525
#2	5982.548	94852.07	7350.905	4592.157	7299.127
#3	6018.466	93058.82	7337.310	4477.341	7327.440

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-02 Acquired: 10/29/2025 15:16:45 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0752489**	**-.010458**	**9.012527**	**.0031142**	**.0003314**	**92.66910**	**2.544743**
Stddev	.0022087	.003284	.004037	.0015893	.0013667	1.21273	.034490
%RSD	2.935155	31.39978	.0447905	51.03406	412.4062	1.308664	1.355351
#1	.0777014	-.011753	9.014138	.0018973	.0016144	91.46259	2.505668
#2	.0734166	-.012896	9.015510	.0049122	.0004856	93.88795	2.570944
#3	.0746287	-.006724	9.007934	.0025329	-.001106	92.65678	2.557618

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079671**	**.0064320**	**57.87402**	**.2615824**	**.0808045**	**.7377949**	**198.5194**
Stddev	.0003395	.0009702	.63825	.0019828	.0001381	.0042105	9.5176
%RSD	4.261609	15.08370	1.102824	.7580017	.1708662	.5706820	4.794268
#1	.0083533	.0075441	57.18724	.2636797	.0808752	.7426475	187.6523
#2	.0078327	.0059928	58.44896	.2613290	.0806454	.7356265	202.5340
#3	.0077154	.0057591	57.98588	.2597385	.0808929	.7351105	205.3718

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.806034**	**32.41049**	**.2199112**	**.0028436**	**3.534835**	**.3497669**	**3.538784**
Stddev	.057594	.29579	.0001996	.0037384	.189139	.0051813	.003841
%RSD	.8462228	.9126387	.0907822	131.4671	5.350706	1.481365	.1085442
#1	6.742746	32.17644	.2197851	-.001460	3.316464	.3439007	3.543217
#2	6.855372	32.74294	.2198070	.004699	3.641042	.3537185	3.536439
#3	6.819982	32.31208	.2201413	.005292	3.647000	.3516815	3.536696

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.767600**	**.1286760**	**.0089992**	**.0957109**	**2.386504**	**3.135220**	**7.913166**
Stddev	.350015	.0498245	.0001225	.0017319	.026956	.165543	.032001
%RSD	5.171929	38.72089	1.361260	1.809467	1.129528	5.280093	.4044060
#1	6.363569	.0724977	.0091374	.0976975	2.357762	2.944170	7.947712
#2	6.978588	.1460190	.0089038	.0949153	2.411223	3.225343	7.884534
#3	6.960641	.1675113	.0089565	.0945197	2.390528	3.236148	7.907254

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-02 Acquired: 10/29/2025 15:16:45 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.907847**	**.1382513**	**.1211008**
Stddev	.038123	.0037936	.0050230
%RSD	.7767749	2.743984	4.147793
#1	4.949603	.1338963	.1256722
#2	4.874899	.1400200	.1219066
#3	4.899040	.1408375	.1157236

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6591.010**	**100543.9**	**7673.486**	**5026.836**	**6790.072**
Stddev	10.706	519.2	290.427	19.754	8.654
%RSD	.1624264	.5163704	3.784807	.3929640	.1274568
#1	6597.833	101075.9	7358.474	5040.432	6794.980
#2	6578.671	100038.6	7731.378	5035.899	6780.079
#3	6596.525	100517.3	7930.607	5004.177	6795.156

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-05 Acquired: 10/29/2025 15:20:49 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0515651**	**-.025703**	**.8044800**	**.0043777**	**-.012417**	**138.1328**
Stddev	.0009804	.004976	.0017027	.0044882	.001056	.0782
%RSD	1.901264	19.35969	.2116554	102.5257	8.506176	.0566183
#1	.0514231	-.031413	.8063022	.0043878	-.013454	138.2130
#2	.0526088	-.023396	.8029295	.0088608	-.011342	138.1287
#3	.0506635	-.022299	.8042082	-.000116	-.012454	138.0567

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6647035**	**.0110206**	**.0127478**	**22.48433**	**.2334810**	**.1093119**
Stddev	.0025625	.0000292	.0000949	.02194	.0007413	.0002199
%RSD	.3855172	.2652855	.7443425	.0975674	.3174808	.2011890
#1	.6650997	.0110118	.0128408	22.50883	.2337347	.1095463
#2	.6619659	.0109969	.0127516	22.46650	.2340621	.1091101
#3	.6670449	.0110533	.0126511	22.47767	.2326462	.1092793

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4274742**	**236.6259**	**4.066119**	**38.63285**	**.1970919**	**.0031669**
Stddev	.0022607	1.9051	.009054	.04166	.0005452	.0005856
%RSD	.5288405	.8051060	.2226604	.1078233	.2766002	18.49126
#1	.4300513	234.5922	4.061540	38.60603	.1966815	.0026703
#2	.4258259	236.9165	4.060269	38.61168	.1977105	.0030177
#3	.4265454	238.3689	4.076547	38.68084	.1968838	.0038126

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.523897**	**.3392549**	**2.321817**	**19.03700**	**.1427700**	**.0619914**
Stddev	.019528	.0032361	.006362	.13034	.0071337	.0001084
%RSD	.5541687	.9538808	.2740256	.6846405	4.996664	.1749005
#1	3.502650	.3357895	2.321258	18.92234	.1353146	.0620285
#2	3.527979	.3421981	2.328441	19.00992	.1434641	.0618693
#3	3.541061	.3397770	2.315753	19.17875	.1495313	.0620764

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-05 Acquired: 10/29/2025 15:20:49 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0324300	5.433753	2.547040	F 11.76285	2.891994	.1691617
Stddev	.0002464	.010663	.029748	.03973	.018655	.0015471
%RSD	.7598506	.1962288	1.167929	.3377588	.6450435	.9145430
#1	.0322169	5.426055	2.513161	11.72597	2.874315	.1698698
#2	.0326999	5.429280	2.568885	11.75766	2.890175	.1673874
#3	.0323732	5.445923	2.559075	11.80492	2.911491	.1702281

Elem	Sr4077
Units	ppm
Avg	-.135708
Stddev	.001700
%RSD	1.252459
#1	-.133883
#2	-.135995
#3	-.137246

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7257.662	109815.9	8591.798	5521.034	6846.258
Stddev	6.501	435.4	31.809	40.749	10.590
%RSD	.0895763	.3964883	.3702291	.7380674	.1546815
#1	7259.170	110263.7	8572.828	5534.009	6847.818
#2	7263.278	109394.0	8574.046	5475.377	6855.982
#3	7250.540	109790.1	8628.522	5553.715	6834.975

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-07 Acquired: 10/29/2025 15:24:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0440045**	**-.019433**	**.4197015**	**-.002383**	**-.012071**	**65.85381**	**.3309380**
Stddev	.0016359	.000721	.0019238	.002716	.000510	.18121	.0021394
%RSD	3.717476	3.711285	.4583682	113.9614	4.222251	.2751744	.6464522
#1	.0440800	-.019608	.4174813	-.004324	-.012659	65.78013	.3329508
#2	.0456012	-.018641	.4207492	.000721	-.011800	66.06026	.3311719
#3	.0423321	-.020051	.4208741	-.003546	-.011754	65.72105	.3286913

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0075825**	**.0034629**	**17.42254**	**.1445281**	**.0788312**	**.2350582**	**164.2035**
Stddev	.0000296	.0000177	.03704	.0007176	.0002621	.0003328	.2824
%RSD	.3902671	.5101502	.2125840	.4964971	.3324495	.1415721	.1719634
#1	.0076132	.0034505	17.42184	.1453111	.0785476	.2347400	164.2597
#2	.0075802	.0034831	17.45992	.1439018	.0790644	.2350308	163.8973
#3	.0075542	.0034550	17.38586	.1443715	.0788815	.2354038	164.4536

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.319732**	**24.56933**	**.1481224**	**.0004227**	**4.399251**	**.2116453**	**.4312487**
Stddev	.013026	.06632	.0005220	.0006669	.032239	.0037468	.0005625
%RSD	.5615373	.2699455	.3523923	157.7668	.7328320	1.770307	.1304282
#1	2.334081	24.63512	.1476172	-.000343	4.377286	.2123184	.4306106
#2	2.316466	24.57038	.1486596	.000874	4.384204	.2150100	.4316726
#3	2.308650	24.50249	.1480903	.000737	4.436262	.2076077	.4314629

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.45641**	**.1073746**	**.0076800**	**.0095998**	**5.291564**	**2.115245**	**4.013358**
Stddev	.07867	.0003683	.0001169	.0006525	.021356	.027915	.004188
%RSD	.4262735	.3430038	1.521907	6.796695	.4035941	1.319694	.1043462
#1	18.51003	.1075781	.0075913	.0090824	5.310330	2.091108	4.013863
#2	18.36609	.1069494	.0076364	.0103328	5.296036	2.108812	4.008940
#3	18.49311	.1075962	.0078125	.0093843	5.268325	2.145814	4.017270

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3466-07 Acquired: 10/29/2025 15:24:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.468878**	**.1454791**	**-.106594**
Stddev	.008398	.0013748	.000524
%RSD	.3401638	.9450237	.4918592
#1	2.459256	.1469358	-.106992
#2	2.474736	.1452971	-.106000
#3	2.472641	.1442043	-.106790

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7708.335**	**118467.4**	**9266.770**	**5923.323**	**6979.042**
Stddev	8.431	232.3	48.321	17.730	3.967
%RSD	.1093743	.1960781	.5214469	.2993260	.0568373
#1	7702.389	118336.6	9218.905	5902.853	6975.096
#2	7704.632	118735.6	9265.870	5933.248	6979.002
#3	7717.984	118330.0	9315.534	5933.868	6983.029

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV02 Acquired: 10/29/2025 15:43:38 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.836340**	**4.744967**	**4.821642**	**4.785505**	**4.870936**	**9.401027**	**9.613775**
Stddev	.002590	.199782	.005902	.014926	.009062	.005114	.060084
%RSD	.0535450	4.210404	.1224113	.3118990	.1860413	.0543941	.6249755
#1	4.833373	4.883857	4.824210	4.782721	4.864066	9.406883	9.545153
#2	4.838146	4.835037	4.814891	4.801627	4.867535	9.398753	9.639234
#3	4.837501	4.516006	4.825826	4.772167	4.881206	9.397445	9.656938

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2431206**	**2.417618**	**24.06137**	**.9878131**	**2.421261**	**1.222553**	**4.872745**
Stddev	.0018012	.002658	.08231	.0008249	.004142	.002304	.016055
%RSD	.7408870	.1099509	.3420818	.0835063	.1710483	.1884386	.3294760
#1	.2435360	2.418817	24.01992	.9883405	2.421603	1.221866	4.888845
#2	.2446778	2.414572	24.15617	.9882363	2.416959	1.220671	4.856736
#3	.2411479	2.419466	24.00803	.9868625	2.425221	1.225123	4.872654

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.393808**	**24.19286**	**2.426560**	**1.226314**	**23.91114**	**2.402141**	**2.443836**
Stddev	.016795	.09014	.003842	.002422	.08743	.004116	.006247
%RSD	.7015906	.3726051	.1583457	.1974810	.3656288	.1713654	.2556277
#1	2.391798	24.22759	2.427096	1.229079	23.91463	2.401819	2.449153
#2	2.411518	24.26047	2.422478	1.225293	23.82203	2.406409	2.436956
#3	2.378109	24.09051	2.430106	1.224569	23.99678	2.398195	2.445400

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.96085**	**4.846944**	**4.908345**	**4.861885**	**4.810688**	**4.854844**	**4.933835**
Stddev	.02377	.043453	.002899	.007640	.021624	.015962	.004640
%RSD	.0991925	.8965049	.0590673	.1571446	.4494895	.3287791	.0940463
#1	23.93405	4.865140	4.907512	4.870172	4.809104	4.848237	4.938369
#2	23.97939	4.878341	4.905954	4.860360	4.833061	4.843246	4.934041
#3	23.96910	4.797351	4.911570	4.855122	4.789901	4.873048	4.929096

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV02 Acquired: 10/29/2025 15:43:38 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.679236**	**4.530873**	**4.915666**
Stddev	.031406	.024765	.085150
%RSD	.6711813	.5465862	1.732220
#1	4.705606	4.518197	4.850031
#2	4.687610	4.559410	5.011884
#3	4.644491	4.515012	4.885084

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6149.065**	**94368.34**	**7240.876**	**4756.792**	**6967.700**
Stddev	14.948	118.71	40.016	24.570	20.427
%RSD	.2430858	.1257906	.5526451	.5165182	.2931678
#1	6146.809	94234.18	7241.373	4766.918	6956.735
#2	6165.012	94459.73	7200.614	4774.680	6991.269
#3	6135.374	94411.12	7280.642	4728.777	6955.098

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB02 Acquired: 10/29/2025 15:48:10 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000715**	**.0014658**	**-.000296**	**.0045006**	**-.003702**	**.0090276**	**.0048320**
Stddev	.002065	.0008647	.000363	.0021339	.000891	.0055134	.0003441
%RSD	288.9552	58.99358	122.8645	47.41415	24.06726	61.07256	7.121105
#1	-.000198	.0009897	.000000	.0022677	-.002685	.0026692	.0047489
#2	.001043	.0024639	-.000701	.0047145	-.004078	.0119325	.0052100
#3	-.002989	.0009437	-.000186	.0065195	-.004343	.0124812	.0045370

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000017**	**-.000015**	**-.004068**	**-.000116**	**-.000035**	**-.000263**	**-.005172**
Stddev	.000013	.000054	.011968	.000248	.000221	.000566	.001722
%RSD	78.70182	370.4984	294.1817	212.9815	626.1105	215.6007	33.29562
#1	-.000019	-.000071	.008312	-.000370	.000140	-.000177	-.005569
#2	-.000029	-.000009	-.015577	.000126	-.000283	-.000867	-.003286
#3	-.000003	.000036	-.004940	-.000105	.000038	.000256	-.006661

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007553**	**-.010144**	**-.000212**	**-.000038**	**-.044270**	**-.001983**	**-.000033**
Stddev	.0000789	.016958	.000218	.000463	.020864	.000728	.000136
%RSD	10.43865	167.1716	102.7107	1211.221	47.12946	36.68485	409.2418
#1	.0008152	-.029362	-.000118	.000486	-.059297	-.001789	.000124
#2	.0007849	.002717	-.000462	-.000390	-.053065	-.002789	-.000104
#3	.0006660	-.003787	-.000057	-.000210	-.020448	-.001373	-.000120

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0332867**	**.0008584**	**.0000666**	**.0020162**	**-.001045**	**.0040230**	**-.001149**
Stddev	.0136254	.0002425	.0001115	.0002929	.000313	.0059908	.001383
%RSD	40.93358	28.24445	167.3966	14.52717	29.96341	148.9154	120.4045
#1	.0221149	.0007833	.0001919	.0020982	-.000690	.0080647	-.002377
#2	.0292785	.0006624	.0000295	.0016911	-.001284	.0068641	-.001418
#3	.0484666	.0011295	-.000022	.0022594	-.001160	-.002860	.000349

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB02 Acquired: 10/29/2025 15:48:10 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.015940	-.004259	.0001563
Stddev	.001863	.001272	.0000661
%RSD	11.68813	29.85613	42.26385
#1	-.017153	-.003153	.0002296
#2	-.016873	-.003975	.0001378
#3	-.013795	-.005648	.0001014

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6103.046	94045.97	7130.710	4686.791	7643.851
Stddev	10.424	465.67	40.756	19.469	15.454
%RSD	.1708070	.4951548	.5715606	.4154029	.2021774
#1	6091.438	94506.74	7084.872	4680.980	7627.573
#2	6106.089	93575.54	7144.395	4670.890	7645.659
#3	6111.610	94055.63	7162.862	4708.505	7658.322

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01 Acquired: 10/29/2025 15:52:04 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0310667**	**-.026951**	**.1084932**	**-.001212**	**-.013828**	**83.98836**	**.2972025**
Stddev	.0009530	.001749	.0010596	.001839	.000478	.22007	.0001545
%RSD	3.067535	6.489336	.9766723	151.7861	3.454209	.2620290	.0519957
#1	.0301358	-.028779	.1095739	-.002170	-.013842	83.76061	.2973801
#2	.0310238	-.026779	.1074560	-.002374	-.014299	84.19985	.2970985
#3	.0320403	-.025294	.1084498	.000909	-.013344	84.00461	.2971289

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0072587**	**.0013395**	**11.60874**	**.1165181**	**.0661841**	**.3357299**	**161.4979**
Stddev	.0000093	.0001049	.01802	.0002355	.0002019	.0014339	1.3128
%RSD	.1278973	7.832491	.1552464	.2021057	.3050052	.4271031	.8128618
#1	.0072670	.0012876	11.62947	.1165913	.0660435	.3359068	161.8554
#2	.0072605	.0014602	11.59997	.1167083	.0664154	.3370671	160.0434
#3	.0072487	.0012706	11.59679	.1162547	.0660935	.3342157	162.5948

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.019007**	**23.75261**	**.1331860**	**.0024432**	**6.719669**	**.1842745**	**.2817567**
Stddev	.003111	.03343	.0006825	.0007196	.044274	.0006712	.0001592
%RSD	.0774047	.1407602	.5124473	29.45103	.6588727	.3642395	.0564994
#1	4.020694	23.76594	.1324243	.0026980	6.725021	.1846487	.2818829
#2	4.015417	23.77732	.1337420	.0016309	6.672963	.1834996	.2818093
#3	4.020910	23.71457	.1333917	.0030007	6.761024	.1846751	.2815778

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.649012**	**.1292403**	**.0003448**	**.0048394**	**1.932659**	**2.883241**	**4.379914**
Stddev	.039532	.0068385	.0000648	.0000954	.002534	.015131	.006791
%RSD	.4570678	5.291307	18.79385	1.972047	.1310903	.5247930	.1550398
#1	8.663630	.1296692	.0003159	.0048474	1.930520	2.898047	4.376223
#2	8.604253	.1221975	.0004190	.0047402	1.932000	2.867805	4.375768
#3	8.679153	.1358543	.0002994	.0049306	1.935457	2.883871	4.387751

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01 Acquired: 10/29/2025 15:52:04 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0605778	.1224124	-.012424
Stddev	.0028291	.0022734	.001350
%RSD	4.670107	1.857189	10.86655
#1	.0573828	.1232641	-.013499
#2	.0615858	.1241371	-.010909
#3	.0627647	.1198362	-.012864

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7141.975	108531.1	8412.121	5410.749	7144.832
Stddev	10.932	707.4	53.356	26.229	6.637
%RSD	.1530660	.6517667	.6342782	.4847651	.0928958
#1	7149.354	107757.0	8371.262	5399.845	7151.996
#2	7129.416	109144.0	8392.617	5440.671	7138.892
#3	7147.156	108692.1	8472.486	5391.730	7143.607

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01DUP Acquired: 10/29/2025 15:56:07 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0305610**	**-.027726**	**.1042898**	**-.000776**	**-.013809**	**78.05788**	**.2687169**
Stddev	.0003714	.004535	.0016545	.002148	.001482	.11655	.0010919
%RSD	1.215184	16.35542	1.586425	276.5670	10.72885	.1493133	.4063223
#1	.0301584	-.023952	.1058642	-.002291	-.012296	77.97551	.2694683
#2	.0308902	-.032756	.1025655	-.001720	-.013874	78.00690	.2692181
#3	.0306345	-.026468	.1044397	.001681	-.015256	78.19124	.2674645

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0066985**	**.0009264**	**11.03025**	**.1265985**	**.0655448**	**.3282785**	**159.4195**
Stddev	.0000585	.0000498	.02937	.0002824	.0001470	.0014363	1.0916
%RSD	.8731238	5.376163	.2662767	.2230324	.2242955	.4375276	.6847495
#1	.0066328	.0008798	11.01188	.1267005	.0657014	.3268261	160.6800
#2	.0067449	.0009207	11.06413	.1268156	.0654098	.3283111	158.7858
#3	.0067179	.0009789	11.01476	.1262793	.0655232	.3296982	158.7928

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.601633**	**20.98043**	**.1279151**	**.0030304**	**6.399305**	**.1934698**	**.2631251**
Stddev	.007217	.07349	.0002424	.0005705	.038206	.0021803	.0013515
%RSD	.2003705	.3502839	.1895183	18.82438	.5970350	1.126923	.5136285
#1	3.605809	20.91272	.1279613	.0035884	6.437906	.1935047	.2626163
#2	3.605791	21.05859	.1281311	.0024483	6.361507	.1912723	.2621019
#3	3.593300	20.96997	.1276529	.0030544	6.398500	.1956324	.2646572

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.125374**	**.1492471**	**.0006037**	**.0103018**	**1.817762**	**3.334136**	**4.344155**
Stddev	.047436	.0062704	.0000206	.0001198	.002213	.044750	.020126
%RSD	.5198284	4.201377	3.405779	1.162523	.1217256	1.342175	.4632927
#1	9.179569	.1562391	.0005851	.0101640	1.817843	3.385039	4.320952
#2	9.091393	.1441226	.0006004	.0103802	1.819933	3.316380	4.356896
#3	9.105159	.1473794	.0006258	.0103613	1.815510	3.300989	4.354616

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01DUP Acquired: 10/29/2025 15:56:07 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0362037	.1089733	-.012185
Stddev	.0011013	.0019061	.001169
%RSD	3.042006	1.749168	9.595688
#1	.0351096	.1068735	-.013488
#2	.0361894	.1105945	-.011841
#3	.0373121	.1094519	-.011227

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6991.532	107030.8	8637.944	5309.210	7013.448
Stddev	3.419	565.4	10.521	26.029	1.817
%RSD	.0489043	.5282195	.1218042	.4902529	.0259127
#1	6992.989	106409.0	8650.093	5315.003	7013.685
#2	6993.981	107513.8	8631.895	5331.854	7015.135
#3	6987.626	107169.6	8631.844	5280.773	7011.523

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01LX5 Acquired: 10/29/2025 16:00:11 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063650**	**-.015802**	**.0228306**	**-.000180**	**-.005640**	**19.39392**	**.0703860**
Stddev	.0005257	.002620	.0015269	.001807	.001357	.02396	.0001767
%RSD	8.258831	16.58013	6.687836	1006.290	24.06665	.1235525	.2509971
#1	.0059452	-.014928	.0210680	.000548	-.005302	19.37387	.0704403
#2	.0069546	-.013731	.0237488	.001151	-.004484	19.42046	.0701886
#3	.0061953	-.018747	.0236749	-.002237	-.007135	19.38743	.0705292

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017224**	**-.000181**	**2.684956**	**.0261354**	**.0134616**	**.0816593**	**36.82972**
Stddev	.0000634	.000080	.004105	.0003044	.0000360	.0003065	.10560
%RSD	3.682341	44.08381	.1529015	1.164851	.2677452	.3752984	.2867329
#1	.0017943	-.000252	2.688618	.0264807	.0134227	.0817663	36.84504
#2	.0016746	-.000196	2.685731	.0259059	.0134682	.0813136	36.71730
#3	.0016981	-.000094	2.680518	.0260195	.0134938	.0818978	36.92683

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9388466**	**5.456988**	**.0273160**	**.0004564**	**1.443745**	**.0455311**	**.0644101**
Stddev	.0052277	.037814	.0003216	.0001976	.006734	.0044273	.0003252
%RSD	.5568268	.6929461	1.177325	43.29641	.4664030	9.723648	.5049411
#1	.9387806	5.448414	.0275051	.0006685	1.443185	.0460674	.0646197
#2	.9441070	5.498352	.0269447	.0004232	1.437308	.0496658	.0640354
#3	.9336521	5.424197	.0274982	.0002775	1.450741	.0408601	.0645752

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.816279**	**.0263040**	**.0005741**	**.0196440**	**.4428385**	**.7109243**	**.8947018**
Stddev	.009420	.0007273	.0001804	.0004684	.0087465	.0031051	.0002748
%RSD	.5186347	2.764825	31.42908	2.384682	1.975098	.4367679	.0307106
#1	1.806693	.0268011	.0005163	.0201559	.4423272	.7073392	.8948685
#2	1.825523	.0266416	.0004296	.0192366	.4518295	.7127627	.8948523
#3	1.816621	.0254693	.0007763	.0195397	.4343589	.7126709	.8943847

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01LX5 Acquired: 10/29/2025 16:00:11 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0005063	.0290125	-.001884
Stddev	.0030265	.0007190	.000060
%RSD	597.7739	2.478327	3.162027
#1	-.002092	.0295782	-.001832
#2	-.000219	.0282034	-.001872
#3	.003830	.0292559	-.001949

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6316.071	97520.28	7418.537	4885.111	7337.762
Stddev	11.799	291.23	20.339	21.783	7.413
%RSD	.1868129	.2986345	.2741579	.4459036	.1010292
#1	6326.720	97347.49	7411.707	4860.721	7341.544
#2	6318.106	97856.52	7402.492	4902.628	7342.521
#3	6303.386	97356.82	7441.411	4891.985	7329.220

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01MS Acquired: 10/29/2025 16:04:21 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7135194	1.966248	1.081277	1.634370	.3649145	103.6441
Stddev	.0032607	.051475	.002974	.008047	.0034799	.3341
%RSD	.4569842	2.617933	.2750425	.4923666	.9536256	.3223391
#1	.7103336	1.955642	1.084065	1.635162	.3663130	103.3685
#2	.7168501	1.920902	1.078146	1.625957	.3674776	104.0156
#3	.7133746	2.022200	1.081620	1.641993	.3609529	103.5481

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4875541	.1805190	.1974433	13.99095	.4890866	.2790142
Stddev	.0021963	.0010801	.0001153	.03639	.0007156	.0004504
%RSD	.4504641	.5983419	.0583826	.2601192	.1463183	.1614236
#1	.4896607	.1806616	.1975380	13.96721	.4893009	.2790574
#2	.4877234	.1815207	.1973149	14.03285	.4882883	.2785438
#3	.4852780	.1793746	.1974769	13.97280	.4896706	.2794415

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6379783	200.8170	4.359948	26.83800	.6518982	.0701248
Stddev	.0011151	.8072	.019721	.05938	.0017079	.0000788
%RSD	.1747900	.4019569	.4523195	.2212479	.2619902	.1123156
#1	.6367189	201.1455	4.377117	26.77883	.6509137	.0701622
#2	.6383758	199.8973	4.364320	26.83757	.6509105	.0700343
#3	.6388403	201.4081	4.338409	26.89759	.6538703	.0701778

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.922557	.4640863	.4880631	19.50244	.4047170	.3469124
Stddev	.030343	.0025871	.0014745	.07813	.0028893	.0007332
%RSD	.3057980	.5574515	.3021157	.4006238	.7139069	.2113408
#1	9.903765	.4648339	.4866852	19.56222	.4035138	.3462434
#2	9.906343	.4662173	.4878858	19.41403	.4026238	.3467975
#3	9.957562	.4612078	.4896182	19.53108	.4080135	.3476962

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01MS Acquired: 10/29/2025 16:04:21 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6766249	2.255553	4.545537	F 11.37902	.0265100	.3029559
Stddev	.0033942	.004648	.024318	.04693	.0017610	.0014557
%RSD	.5016305	.2060832	.5349850	.4124501	6.642597	.4805091
#1	.6731329	2.256285	4.538631	11.40477	.0254615	.3032180
#2	.6768298	2.259792	4.525419	11.32484	.0285430	.3042628
#3	.6799120	2.250582	4.572561	11.40743	.0255254	.3013869

Elem	Sr4077
Units	ppm
Avg	.1456602
Stddev	.0024318
%RSD	1.669528
#1	.1435610
#2	.1483250
#3	.1450945

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6957.894	106972.5	8335.869	5367.083	6713.758
Stddev	6.499	103.1	48.961	22.220	.321
%RSD	.0934076	.0963380	.5873546	.4140115	.0047782
#1	6961.439	107090.9	8334.435	5386.897	6713.902
#2	6950.393	106923.4	8287.640	5371.292	6713.981
#3	6961.849	106903.2	8385.531	5343.059	6713.391

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01MSD Acquired: 10/29/2025 16:08:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6805368**	**1.824388**	**.9970367**	**1.582292**	**.3618266**	**87.38679**	**.4454181**
Stddev	.0011970	.045557	.0045718	.007903	.0020208	.17082	.0007301
%RSD	.1758840	2.497114	.4585366	.4994647	.5584902	.1954726	.1639086
#1	.6791656	1.816590	.9926768	1.574377	.3598673	87.34415	.4458468
#2	.6810725	1.873340	.9966389	1.590183	.3639036	87.24134	.4458325
#3	.6813724	1.783233	1.001794	1.582317	.3617088	87.57489	.4445751

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1678131**	**.1833750**	**11.79773**	**.4448912**	**.2524160**	**.5658101**	**151.7563**
Stddev	.0017612	.0008577	.01831	.0003837	.0009672	.0018089	.8415
%RSD	1.049475	.4677218	.1551804	.0862500	.3831681	.3197102	.5545328
#1	.1681254	.1827332	11.77945	.4445800	.2514264	.5649170	151.5495
#2	.1659167	.1830428	11.79765	.4453199	.2524623	.5646214	152.6819
#3	.1693973	.1843491	11.81607	.4447736	.2533591	.5678919	151.0374

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.949773**	**22.96023**	**.5867921**	**.0663400**	**8.828360**	**.4155361**	**.4241587**
Stddev	.015024	.14064	.0023274	.0008472	.074643	.0025293	.0016499
%RSD	.3803805	.6125211	.3966331	1.277096	.8454933	.6086756	.3889841
#1	3.948110	22.97274	.5847589	.0665092	8.823198	.4136250	.4228624
#2	3.935650	22.81376	.5862868	.0670898	8.905449	.4145792	.4260159
#3	3.965559	23.09420	.5893306	.0654209	8.756431	.4184043	.4235979

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.59844**	**.3477325**	**.3345149**	**.6361364**	**1.995133**	**4.134667**	**9.679777**
Stddev	.05663	.0024125	.0007812	.0021982	.003385	.031916	.023519
%RSD	.3217635	.6937793	.2335244	.3455536	.1696475	.7719219	.2429683
#1	17.55608	.3457083	.3336569	.6336688	1.998059	4.110488	9.653155
#2	17.66275	.3504020	.3347028	.6368548	1.991426	4.170844	9.697733
#3	17.57647	.3470872	.3351849	.6378854	1.995914	4.122669	9.688443

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01MSD Acquired: 10/29/2025 16:08:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0699930	.2604958	.1581644
Stddev	.0066762	.0004525	.0010393
%RSD	9.538452	.1737127	.6570743
#1	.0630146	.2604066	.1573371
#2	.0706451	.2609862	.1578252
#3	.0763192	.2600944	.1593309

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7008.112	107848.3	8567.294	5373.050	6986.242
Stddev	18.637	235.1	65.323	2.548	33.227
%RSD	.2659320	.2179630	.7624748	.0474187	.4756060
#1	7028.759	107746.1	8549.555	5373.969	7019.881
#2	7003.041	107681.6	8639.655	5375.011	6985.404
#3	6992.535	108117.1	8512.672	5370.170	6953.443

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01A Acquired: 10/29/2025 16:12:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6780338**	**1.776430**	**.9907441**	**1.588780**	**.6560559**	**84.51206**	**.4476528**
Stddev	.0012714	.025050	.0035863	.003952	.0020192	.12615	.0013516
%RSD	.1875080	1.410112	.3619804	.2487725	.3077782	.1492641	.3019189
#1	.6778475	1.792358	.9919158	1.592980	.6552448	84.39208	.4488625
#2	.6768658	1.789375	.9867185	1.585134	.6583545	84.50052	.4461941
#3	.6793880	1.747556	.9935980	1.588225	.6545684	84.64358	.4479017

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1655419**	**.1814620**	**12.32376**	**.4492782**	**.2525412**	**.5783726**	**165.1321**
Stddev	.0005165	.0001879	.03983	.0006559	.0002827	.0013540	1.0352
%RSD	.3120041	.1035684	.3231911	.1459865	.1119231	.2340970	.6268829
#1	.1652017	.1816691	12.31484	.4492586	.2527722	.5770062	165.3152
#2	.1661363	.1813023	12.28915	.4499437	.2522260	.5797138	164.0176
#3	.1652878	.1814146	12.36730	.4486324	.2526254	.5783979	166.0636

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.102007**	**24.97734**	**.5959312**	**.0655533**	**9.186949**	**.4222035**	**.4485398**
Stddev	.021592	.06978	.0016962	.0003876	.027273	.0023177	.0005590
%RSD	.5263864	.2793620	.2846211	.5913173	.2968639	.5489640	.1246372
#1	4.090258	24.97266	.5971103	.0653575	9.197059	.4209758	.4479178
#2	4.088837	24.91002	.5939873	.0653026	9.156065	.4248768	.4490004
#3	4.126926	25.04933	.5966958	.0659997	9.207723	.4207578	.4487011

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.74277**	**.3662408**	**.3452134**	**.6666863**	**2.057517**	**3.957980**	**9.560356**
Stddev	.05535	.0030578	.0005157	.0017469	.007168	.020887	.066797
%RSD	.3305807	.8349011	.1493911	.2620220	.3483850	.5277220	.6986842
#1	16.75265	.3661558	.3446661	.6673246	2.051329	3.977760	9.635559
#2	16.68314	.3632264	.3456902	.6647101	2.055850	3.936138	9.507915
#3	16.79250	.3693402	.3452839	.6680242	2.065372	3.960040	9.537595

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3469-01A Acquired: 10/29/2025 16:12:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0523935	.2696831	.1500770
Stddev	.0016084	.0031661	.0006381
%RSD	3.069892	1.174006	.4251800
#1	.0539070	.2716463	.1498765
#2	.0525690	.2660306	.1507913
#3	.0507046	.2713723	.1495632

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6992.242	107230.5	8500.574	5292.304	6969.377
Stddev	15.780	301.3	20.812	14.277	7.362
%RSD	.2256825	.2809925	.2448286	.2697742	.1056377
#1	7010.288	106906.6	8504.171	5301.084	6974.655
#2	6981.034	107282.7	8478.198	5275.830	6972.510
#3	6985.404	107502.4	8519.353	5299.998	6960.967

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170264BL Acquired: 10/29/2025 16:16:14 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000643**	**-.011750**	**-.000398**	**.0013259**	**-.003898**	**-.003703**
Stddev	.001524	.003760	.000349	.0038558	.000598	.008004
%RSD	237.0931	31.99694	87.83928	290.8028	15.34700	216.1724
#1	-.001121	-.011826	-.000024	.0057694	-.003397	.005056
#2	-.001871	-.007953	-.000716	-.000652	-.003737	-.010637
#3	.001063	-.015471	-.000453	-.001139	-.004560	-.005526

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016283**	**.0000871**	**-.000007**	**-.002481**	**-.000004**	**.0002240**
Stddev	.0011883	.0000080	.000030	.010460	.000334	.0000654
%RSD	72.97987	9.138621	427.1990	421.6001	9047.183	29.21550
#1	.0021606	.0000954	-.000041	-.013398	-.000303	.0002238
#2	.0024575	.0000863	.000015	.007453	.000357	.0001586
#3	.0002669	.0000795	.000006	-.001499	-.000065	.0002895

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000018**	**.0000047**	**.0000725**	**-.015001**	**.0000521**	**-.000428**
Stddev	.000109	.0133829	.0001012	.011204	.0001799	.000278
%RSD	594.9250	284323.1	139.4998	74.69106	345.2601	64.92893
#1	-.000064	.0154514	.0000363	-.023260	-.000148	-.000711
#2	.000106	-.007331	-.000006	-.019495	.000201	-.000418
#3	-.000097	-.008106	.000187	-.002247	.000103	-.000155

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.076153**	**.0035786**	**.0000115**	**-.123973**	**-.007818**	**.0007962**
Stddev	.003360	.0034516	.0002087	.022740	.000135	.0002195
%RSD	4.412704	96.45105	1822.735	18.34280	1.732137	27.57368
#1	-.079276	.0067298	.0000573	-.135973	-.007875	.0005999
#2	-.072597	.0041163	-.000216	-.097746	-.007915	.0007553
#3	-.076586	-.000110	.000193	-.138199	-.007663	.0010332

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170264BL Acquired: 10/29/2025 16:16:14 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0238592	-.001040	-.006796	.0002561	F -.012513	.0009423
Stddev	.0004768	.000966	.006358	.0014037	.001991	.0010674
%RSD	1.998386	92.89903	93.55296	548.1571	15.91538	113.2760
#1	.0241628	-.002015	.000501	-.000952	-.011662	.0009624
#2	.0241052	-.000083	-.009750	-.000075	-.014788	-.000135
#3	.0233097	-.001021	-.011139	.001796	-.011087	.002000

Elem	Sr4077
Units	ppm
Avg	-.000072
Stddev	.000067
%RSD	92.63933
#1	-.000020
#2	-.000147
#3	-.000049

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6041.030	93707.72	7190.715	4622.753	7606.533
Stddev	14.423	37.49	111.912	9.541	4.726
%RSD	.2387456	.0400076	1.556334	.2063893	.0621359
#1	6055.844	93741.01	7164.472	4631.242	7611.965
#2	6040.213	93715.06	7094.257	4624.590	7604.273
#3	6027.033	93667.11	7313.416	4612.428	7603.360

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170264BS Acquired: 10/29/2025 16:24:59 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7661496	1.980723	.9136034	1.929093	.7901148	1.853911	.1869534
Stddev	.0009825	.077745	.0036848	.004864	.0018739	.011317	.0010518
%RSD	.1282419	3.925058	.4033214	.2521640	.2371618	.6104584	.5625930
#1	.7660351	2.045131	.9097110	1.934222	.7879533	1.845831	.1864083
#2	.7671844	2.002675	.9170377	1.928511	.7911104	1.849055	.1862861
#3	.7652294	1.894362	.9140616	1.924546	.7912806	1.866845	.1881659

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1946297	.1826937	.9578718	.3949964	.1880636	.3001500	2.895481
Stddev	.0020997	.0001542	.0097624	.0013200	.0005124	.0005086	.013064
%RSD	1.078823	.0843906	1.019177	.3341813	.2724798	.1694509	.4511694
#1	.1924790	.1825158	.9473232	.3934830	.1875198	.2999799	2.898380
#2	.1947358	.1827773	.9597039	.3955963	.1885375	.2997483	2.906851
#3	.1966744	.1827881	.9665884	.3959098	.1881334	.3007219	2.881211

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1940175	1.940805	.4712709	.0736812	2.781062	.2900542	.1994921
Stddev	.0010984	.037991	.0011917	.0001737	.019159	.0018054	.0004008
%RSD	.5661533	1.957473	.2528644	.2357236	.6889161	.6224519	.2008960
#1	.1936966	1.897277	.4699528	.0738230	2.794299	.2916924	.1992893
#2	.1931152	1.957846	.4715878	.0734875	2.789796	.2903517	.1992332
#3	.1952406	1.967291	.4722721	.0737331	2.759093	.2881185	.1999537

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.188352	.2775951	.4004902	.6828530	.1877773	.8378389	5.441819
Stddev	.041265	.0031075	.0009266	.0017836	.0006375	.0084424	.020192
%RSD	.4490966	1.119424	.2313584	.2611960	.3395092	1.007639	.3710473
#1	9.215429	.2741022	.4006513	.6843421	.1876354	.8475860	5.462341
#2	9.208768	.2786301	.4013256	.6833404	.1872227	.8328258	5.441141
#3	9.140859	.2800529	.3994936	.6808763	.1884738	.8331049	5.421974

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: PB170264BS Acquired: 10/29/2025 16:24:59 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	F -.011045	.1864110	.1889266
Stddev	.001202	.0019401	.0004549
%RSD	10.87993	1.040751	.2407935
#1	-.010479	.1842502	.1885083
#2	-.012425	.1869796	.1894109
#3	-.010231	.1880033	.1888605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6192.755	95829.11	7286.861	4791.921	7509.553
Stddev	11.801	177.72	63.927	25.413	9.078
%RSD	.1905583	.1854539	.8772935	.5303301	.1208866
#1	6188.075	96001.59	7356.248	4817.455	7511.775
#2	6184.012	95646.58	7273.978	4791.677	7499.571
#3	6206.178	95839.16	7230.356	4766.630	7517.314

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3442-01 Acquired: 10/29/2025 16:29:00 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002823**	**-.013547**	**-.000405**	**.0045794**	**-.002260**	**.0862242**	**.0081422**
Stddev	.000086	.001385	.000921	.0005452	.002177	.0124700	.0004594
%RSD	3.055874	10.22318	227.2025	11.90499	96.35462	14.46233	5.642793
#1	-.002917	-.014967	-.000401	.0051972	-.004488	.0814495	.0086708
#2	-.002749	-.013473	-.001329	.0043754	-.000137	.0768471	.0079168
#3	-.002802	-.012200	.000513	.0041657	-.002155	.1003760	.0078391

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000116**	**-.000055**	**10.29488**	**.0171299**	**-.000148**	**.0033780**	**.2480086**
Stddev	.000036	.000043	.02167	.0001722	.000216	.0002511	.0117472
%RSD	30.93492	77.53777	.2104526	1.005119	146.3392	7.433370	4.736605
#1	-.000149	-.000007	10.27092	.0169829	-.000273	.0036670	.2377649
#2	-.000078	-.000069	10.31311	.0173193	-.000272	.0032132	.2608309
#3	-.000122	-.000089	10.30060	.0170875	.000102	.0032539	.2454301

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0120782**	**.6759621**	**.0032181**	**-.000731**	**.4143295**	**.0059295**	**.0226828**
Stddev	.0005350	.0065942	.0002653	.000187	.0198249	.0024190	.0002559
%RSD	4.429202	.9755336	8.242717	25.58550	4.784810	40.79647	1.128298
#1	.0116498	.6826233	.0030236	-.000553	.4035524	.0080621	.0227459
#2	.0119069	.6694370	.0035202	-.000926	.4372085	.0064256	.0224012
#3	.0126778	.6758260	.0031103	-.000715	.4022276	.0033009	.0229012

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.018761**	**-.007118**	**.0010333**	**-.011057**	**.0001802**	**.2311916**	**.0148297**
Stddev	.023694	.000756	.0001713	.000198	.0031523	.0126863	.0019119
%RSD	126.2923	10.62649	16.57830	1.788249	1748.980	5.487366	12.89225
#1	-.003543	-.006645	.0009350	-.011032	.0036741	.2305288	.0150273
#2	-.046060	-.006717	.0009338	-.011266	-.000683	.2441963	.0128267
#3	-.006680	-.007990	.0012311	-.010872	-.002451	.2188496	.0166352

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3442-01 Acquired: 10/29/2025 16:29:00 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**.6573940**	**-.004785**	**.0342859**
Stddev	.0032167	.000394	.0001734
%RSD	.4893079	8.240824	.5056379
#1	.6593291	-.004660	.0341033
#2	.6591721	-.004468	.0344483
#3	.6536808	-.005226	.0343063

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6181.740**	**96348.97**	**7428.366**	**4696.029**	**7789.477**
Stddev	1.942	3239.69	34.519	102.896	12.027
%RSD	.0314176	3.362453	.4646860	2.191124	.1544025
#1	6183.841	98827.76	7406.954	4776.595	7794.693
#2	6180.011	92683.20	7409.958	4580.119	7775.722
#3	6181.368	97535.93	7468.187	4731.374	7798.015

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-02 Acquired: 10/29/2025 16:33:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056203	-.016591	.0314234	.0023745	-.003012	16.74937
Stddev	.0008911	.002820	.0010638	.0010394	.001180	.08894
%RSD	15.85537	16.99953	3.385467	43.77250	39.19127	.5309984
#1	.0047841	-.019213	.0311248	.0025091	-.003316	16.85190
#2	.0055192	-.016953	.0305408	.0033400	-.001709	16.69312
#3	.0065577	-.013607	.0326046	.0012744	-.004010	16.70308

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3904156	.0011075	-.000104	48.23726	.0432123	.0125081
Stddev	.0019712	.0000495	.000127	.27379	.0005863	.0001759
%RSD	.5048941	4.470202	122.4957	.5675911	1.356730	1.406148
#1	.3923892	.0011603	.000039	48.55171	.0436764	.0123654
#2	.3904109	.0011001	-.000204	48.10832	.0434072	.0124542
#3	.3884468	.0010621	-.000147	48.05175	.0425535	.0127046

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1487960	23.08101	1.215467	12.84080	.0237593	.0007151
Stddev	.0007199	.93287	.006866	.15667	.0005921	.0003918
%RSD	.4838053	4.041717	.5649196	1.220116	2.492204	54.79607
#1	.1496272	22.05498	1.222143	13.01802	.0244431	.0002802
#2	.1483888	23.87809	1.215832	12.72073	.0234159	.0008244
#3	.1483720	23.30995	1.208425	12.78364	.0234190	.0010406

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	455.9673	.0625615	.2554716	4.984259	.1901667	.0112156
Stddev	2.7813	.0021704	.0026993	.256370	.0050128	.0001757
%RSD	.6099688	3.469175	1.056612	5.143588	2.636025	1.566432
#1	456.5039	.0621003	.2571800	4.704349	.1958104	.0110961
#2	458.4412	.0606588	.2568751	5.207661	.1884586	.0114173
#3	452.9569	.0649254	.2523596	5.040766	.1862312	.0111334

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-02 Acquired: 10/29/2025 16:33:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.011221	.3892420	F 67.07786	3.095079	F 172.6297	-.002422
Stddev	.000419	.0016720	2.50509	.014857	.8507	.001172
%RSD	3.731952	.4295481	3.734607	.4800158	.4927933	48.37407
#1	-.011659	.3889961	64.25189	3.105602	173.2810	-.002114
#2	-.011180	.3910233	69.02555	3.101551	172.9409	-.001435
#3	-.010825	.3877066	67.95615	3.078084	171.6672	-.003717

Elem	Sr4077
Units	ppm
Avg	.1772252
Stddev	.0005900
%RSD	.3329008
#1	.1778267
#2	.1766475
#3	.1772012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5913.553	90536.44	7286.068	4535.327	6432.293
Stddev	14.014	778.09	375.513	34.441	8.471
%RSD	.2369742	.8594247	5.153851	.7593861	.1316925
#1	5899.365	89843.63	6852.900	4503.487	6423.910
#2	5927.385	90387.41	7519.515	4530.612	6440.849
#3	5913.909	91378.26	7485.788	4571.883	6432.120

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV03 Acquired: 10/29/2025 16:37:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.080474**	**4.736629**	**5.020818**	**5.065326**	**5.122921**	**9.727790**	**9.728265**
Stddev	.033477	.112914	.043367	.021893	.025592	.017505	.131714
%RSD	.6589344	2.383845	.8637396	.4322132	.4995504	.1799480	1.353933
#1	5.088511	4.677711	5.024387	5.071205	5.139491	9.733028	9.611041
#2	5.043711	4.866816	4.975777	5.041094	5.093447	9.742078	9.702957
#3	5.109202	4.665361	5.062290	5.083679	5.135827	9.708264	9.870797

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2486321**	**2.512984**	**24.96542**	**1.031004**	**2.515820**	**1.268240**	**5.076436**
Stddev	.0009001	.021273	.05858	.002331	.021160	.009071	.042267
%RSD	.3620181	.8465089	.2346415	.2260601	.8410669	.7152626	.8326203
#1	.2483150	2.513818	24.91324	1.030685	2.518289	1.269510	5.056298
#2	.2496478	2.491307	25.02879	1.028849	2.493534	1.258601	5.048004
#3	.2479334	2.533828	24.95424	1.033478	2.535637	1.276610	5.125007

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.468045**	**25.01163**	**2.514140**	**1.280926**	**25.34513**	**2.503216**	**2.555938**
Stddev	.003934	.12711	.021512	.001649	.12707	.005426	.001373
%RSD	.1593827	.5081855	.8556352	.1287185	.5013613	.2167722	.0537313
#1	2.463617	24.92078	2.513685	1.281265	25.43715	2.504299	2.556726
#2	2.471137	25.15688	2.492860	1.279134	25.20014	2.508018	2.554352
#3	2.469380	24.95722	2.535876	1.282379	25.39810	2.497329	2.556736

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.15648**	**4.946803**	**5.117643**	**5.082575**	**4.965470**	**5.152286**	**5.006574**
Stddev	.12962	.025141	.031972	.033958	.012203	.018009	.038266
%RSD	.5152558	.5082275	.6247443	.6681164	.2457573	.3495424	.7643159
#1	25.19415	4.936766	5.122419	5.084748	4.952469	5.168959	4.992026
#2	25.01219	4.975412	5.083552	5.047583	4.967264	5.133186	4.977716
#3	25.26308	4.928231	5.146959	5.115394	4.976676	5.154713	5.049981

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV03 Acquired: 10/29/2025 16:37:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	4.997031	4.653048	5.225471
Stddev	.018003	.009971	.023221
%RSD	.3602797	.2142851	.4443852
#1	4.986556	4.641890	5.203846
#2	4.986718	4.656168	5.250013
#3	5.017819	4.661086	5.222554

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5928.574	91379.05	7156.211	4557.535	6732.184
Stddev	36.448	163.28	29.839	11.407	49.025
%RSD	.6147860	.1786855	.4169633	.2502969	.7282120
#1	5933.907	91390.40	7180.414	4567.982	6740.605
#2	5962.062	91536.37	7122.873	4559.259	6776.452
#3	5889.754	91210.40	7165.347	4545.364	6679.494

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB03 Acquired: 10/29/2025 16:41:39 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000720**	**-.012235**	**-.000828**	**.0022945**	**-.003143**	**-.003248**	**.0006412**
Stddev	.0013943	.003900	.001263	.0044025	.001295	.001407	.0005319
%RSD	1936.285	31.87452	152.4909	191.8714	41.19038	43.30060	82.94750
#1	.0013196	-.009415	.000277	-.002789	-.002005	-.001872	.0012449
#2	-.001433	-.016686	-.000557	.004794	-.002873	-.004683	.0002417
#3	.000330	-.010605	-.002205	.004878	-.004552	-.003191	.0004370

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000506**	**-.000006**	**-.008925**	**-.000134**	**-.000095**	**-.000201**	**.0289598**
Stddev	.0000862	.000004	.008804	.000280	.000080	.000228	.0026305
%RSD	170.2689	64.15028	98.64973	208.9775	83.88274	113.6622	9.083352
#1	.0001470	-.000008	-.000999	.000158	-.000116	-.000120	.0260982
#2	-.000019	-.000001	-.007374	-.000159	-.000007	-.000458	.0312726
#3	.000024	-.000008	-.018402	-.000401	-.000162	-.000024	.0295086

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006366**	**-.005800**	**.0000606**	**-.000314**	**.0597688**	**.0017383**	**-.000124**
Stddev	.0007320	.020159	.0001374	.000188	.0133017	.0026395	.000168
%RSD	114.9919	347.5632	226.5892	59.94044	22.25535	151.8450	134.9219
#1	.0014818	.003733	.0001767	-.000529	.0446491	.0047862	.000018
#2	.0002255	-.028958	.0000963	-.000187	.0649870	.0002024	-.000082
#3	.0002025	.007825	-.000091	-.000224	.0696702	.0002263	-.000309

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0076996**	**-.004887**	**-.000120**	**.0007186**	**-.000978**	**.0098984**	**-.000416**
Stddev	.0249889	.000469	.000076	.0000357	.000909	.0029017	.000560
%RSD	324.5480	9.591337	63.14982	4.972453	92.87535	29.31500	134.6633
#1	.0287302	-.004815	-.000053	.0007455	-.001968	.0066641	-.000715
#2	.0142937	-.004458	-.000203	.0007323	-.000785	.0107577	-.000764
#3	-.019925	-.005387	-.000105	.0006780	-.000182	.0122734	.000230

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB03 Acquired: 10/29/2025 16:41:39 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.004928	.0034029	.0003274
Stddev	.001646	.0000815	.0000798
%RSD	33.39922	2.394253	24.37015
#1	-.006507	.0034355	.0004124
#2	-.003223	.0034629	.0003157
#3	-.005056	.0033101	.0002541

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6207.906	96586.26	7325.598	4765.574	7795.847
Stddev	15.405	299.07	51.139	17.577	17.404
%RSD	.2481536	.3096366	.6980826	.3688328	.2232478
#1	6195.462	96365.10	7283.714	4747.709	7792.208
#2	6203.120	96467.17	7310.491	4766.164	7780.549
#3	6225.136	96926.53	7382.588	4782.848	7814.782

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01 Acquired: 10/29/2025 16:45:58 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003668**	**-.016535**	**.0544075**	**-.000847**	**-.002028**	**6.076964**
Stddev	.001485	.002304	.0011819	.002890	.000807	.044794
%RSD	40.47606	13.93229	2.172352	341.1804	39.79550	.7371163
#1	-.005190	-.014649	.0554973	.002346	-.002596	6.125259
#2	-.002224	-.019103	.0545740	-.001604	-.002385	6.068853
#3	-.003590	-.015853	.0531511	-.003284	-.001104	6.036779

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2171951**	**-.000011**	**.0001098**	**282.3824**	**.0263002**	**.0086313**
Stddev	.0016458	.000036	.0000248	1.4642	.0003493	.0000610
%RSD	.7577307	324.1538	22.58037	.5185021	1.328049	.7068355
#1	.2188872	-.000012	.0001101	283.7776	.0263792	.0086754
#2	.2170980	.000026	.0001344	282.5119	.0266031	.0085617
#3	.2156000	-.000047	.0000848	280.8579	.0259181	.0086569

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1789297**	**6.886055**	**2.173811**	**27.58132**	**.0569305**	**-.000276**
Stddev	.0010209	.066284	.016149	.11043	.0002883	.000450
%RSD	.5705697	.9625776	.7428663	.4003776	.5063725	163.4277
#1	.1796676	6.959885	2.187397	27.60135	.0567954	.000193
#2	.1793569	6.866613	2.178079	27.68036	.0572615	-.000314
#3	.1777646	6.831666	2.155958	27.46225	.0567346	-.000705

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**636.6173**	**.0107023**	**1.075721**	**22.78704**	**.2469840**	**.0102924**
Stddev	2.7269	.0028096	.002808	.14400	.0024762	.0003932
%RSD	.4283446	26.25279	.2610289	.6319536	1.002593	3.820811
#1	633.7042	.0136897	1.076244	22.95314	.2479169	.0098987
#2	639.1090	.0103044	1.078231	22.69735	.2488584	.0102933
#3	637.0386	.0081128	1.072688	22.71062	.2441769	.0106852

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01 Acquired: 10/29/2025 16:45:58 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007180	.3801473	F 82.08150	.7988356	F 559.3753	-.037628
Stddev	.000316	.0023555	.25201	.0043782	4.5263	.000959
%RSD	4.405910	.6196351	.3070241	.5480683	.8091620	2.547881
#1	-.007391	.3824988	82.37244	.8036678	564.5916	-.038372
#2	-.007332	.3801556	81.94084	.7951329	557.0492	-.036546
#3	-.006816	.3777877	81.93121	.7977059	556.4852	-.037966

Elem	Sr4077
Units	ppm
Avg	.9068358
Stddev	.0036661
%RSD	.4042704
#1	.9101140
#2	.9075163
#3	.9028772

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5618.997	85827.33	7151.535	4351.968	5975.367
Stddev	5.523	641.56	48.244	15.662	7.709
%RSD	.0982912	.7474979	.6745899	.3598924	.1290075
#1	5614.605	86515.60	7206.826	4369.627	5972.253
#2	5625.198	85720.49	7118.004	4346.522	5984.145
#3	5617.189	85245.89	7129.776	4339.756	5969.702

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01DUP Acquired: 10/29/2025 16:50:14 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003868**	**-.018436**	**.0554226**	**-.000434**	**.0006469**	**6.255287**
Stddev	.000741	.002135	.0013586	.002448	.0010894	.044285
%RSD	19.16226	11.58130	2.451325	564.3506	168.3990	.7079610
#1	-.003091	-.020501	.0565406	-.003184	.0000847	6.296171
#2	-.003944	-.016237	.0558166	.000375	-.000047	6.261444
#3	-.004568	-.018569	.0539105	.001508	.001902	6.208245

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2181085**	**-.000007**	**.0000871**	**282.6529**	**.0260835**	**.0088743**
Stddev	.0011937	.000122	.0000478	.3612	.0007162	.0000603
%RSD	.5473111	1684.681	54.89483	.1278050	2.745919	.6789454
#1	.2192240	-.000036	.0001263	282.2650	.0268698	.0089297
#2	.2168495	.000127	.0000338	282.7142	.0259124	.0088101
#3	.2182518	-.000112	.0001013	282.9796	.0254684	.0088831

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1799263**	**6.804362**	**2.169070**	**27.78039**	**.0568683**	**.0002679**
Stddev	.0004393	.124347	.005755	.10406	.0001247	.0004085
%RSD	.2441475	1.827461	.2653166	.3745696	.2193468	152.4906
#1	.1803609	6.909317	2.173081	27.67363	.0568060	.0005613
#2	.1794825	6.836741	2.162476	27.88151	.0567870	.0004412
#3	.1799354	6.667029	2.171653	27.78604	.0570119	-.000199

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**629.3378**	**.0098147**	**1.073127**	**22.51138**	**.2501454**	**.0101228**
Stddev	9.9944	.0011488	.018220	.54624	.0008525	.0000755
%RSD	1.588088	11.70530	1.697882	2.426489	.3407893	.7454985
#1	633.8007	.0091060	1.085849	22.96257	.2494575	.0100525
#2	636.3232	.0111402	1.081278	22.66748	.2498796	.0102025
#3	617.8894	.0091978	1.052254	21.90408	.2510991	.0101134

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01DUP Acquired: 10/29/2025 16:50:14 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007051	.3780418	F 82.18454	.7953976	F 560.0253	-.040168
Stddev	.000325	.0017934	1.91586	.0044309	2.1938	.001128
%RSD	4.606604	.4743839	2.331172	.5570723	.3917373	2.807290
#1	-.006902	.3797254	83.75323	.7909061	557.7519	-.038888
#2	-.007424	.3782442	82.75110	.7955213	562.1297	-.041015
#3	-.006828	.3761558	80.04929	.7997654	560.1943	-.040600

Elem	Sr4077
Units	ppm
Avg	.9040365
Stddev	.0042729
%RSD	.4726465
#1	.9014562
#2	.9089687
#3	.9016847

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5605.453	84864.00	6976.212	4308.917	5970.011
Stddev	14.174	1541.90	65.844	71.439	15.182
%RSD	.2528608	1.816905	.9438315	1.657932	.2543046
#1	5610.672	83192.15	6964.408	4232.467	5979.954
#2	5616.277	85169.69	7047.159	4320.308	5977.543
#3	5589.409	86230.15	6917.068	4373.976	5952.536

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01LX5 Acquired: 10/29/2025 16:54:30 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000342**	**-.015378**	**.0121789**	**-.001688**	**-.003676**	**1.369297**
Stddev	.001734	.001102	.0005628	.001186	.001173	.019611
%RSD	506.3891	7.168142	4.621254	70.30234	31.90571	1.432213
#1	-.002345	-.016487	.0128287	-.003057	-.004881	1.356676
#2	.000667	-.015364	.0118434	-.001011	-.002538	1.391891
#3	.000651	-.014282	.0118647	-.000994	-.003609	1.359325

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0494933**	**.0000353**	**-.000036**	**58.68126**	**.0054858**	**.0017651**
Stddev	.0021826	.0000107	.000031	.15938	.0001495	.0000670
%RSD	4.409952	30.28140	86.39864	.2716106	2.724502	3.792947
#1	.0470720	.0000234	-.000016	58.80063	.0055127	.0018365
#2	.0513095	.0000385	-.000072	58.74289	.0053248	.0017551
#3	.0500985	.0000441	-.000020	58.50026	.0056201	.0017037

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0391259**	**1.328316**	**.4464743**	**5.778455**	**.0118120**	**-.000123**
Stddev	.0003870	.023944	.0026709	.057119	.0002192	.000318
%RSD	.9890893	1.802565	.5982186	.9884906	1.856058	259.0364
#1	.0391828	1.317254	.4485442	5.782095	.0119908	-.000254
#2	.0387135	1.311902	.4474193	5.719602	.0115674	-.000355
#3	.0394812	1.355790	.4434594	5.833667	.0118779	.000240

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**121.5422**	**.0015450**	**.2188355**	**4.487978**	**.0515361**	**.0026995**
Stddev	1.4576	.0040147	.0011494	.009567	.0001613	.0001191
%RSD	1.199231	259.8592	.5252315	.2131772	.3130604	4.412482
#1	120.7963	-.002972	.2186665	4.494457	.0513898	.0026614
#2	120.6086	.004706	.2177799	4.476990	.0517092	.0028331
#3	123.2218	.002902	.2200600	4.492488	.0515093	.0026042

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01LX5 Acquired: 10/29/2025 16:54:30 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0176624	.0821320	F 16.51590	.1521717	F 118.6567	.0052451
Stddev	.0000831	.0014663	.20687	.0032061	.8415	.0008795
%RSD	.4704365	1.785239	1.252534	2.106874	.7092284	16.76790
#1	.0177073	.0826813	16.34991	.1492061	117.7938	.0051468
#2	.0177134	.0804704	16.45013	.1555736	118.7013	.0061697
#3	.0175666	.0832443	16.74766	.1517356	119.4751	.0044189

Elem	Sr4077
Units	ppm
Avg	.1879478
Stddev	.0002885
%RSD	.1534997
#1	.1881737
#2	.1876228
#3	.1880470

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5865.968	89265.26	6900.074	4466.127	6667.401
Stddev	13.981	811.16	44.985	23.906	20.399
%RSD	.2383396	.9087106	.6519430	.5352693	.3059468
#1	5880.699	89868.39	6890.364	4484.228	6690.149
#2	5864.324	89584.31	6860.737	4475.125	6661.319
#3	5852.882	88343.08	6949.121	4439.028	6650.735

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01MS Acquired: 10/29/2025 16:58:42 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7734765	1.693664	.9546260	1.927239	.6826775	7.224903
Stddev	.0006216	.051964	.0025113	.004058	.0014494	.010478
%RSD	.0803693	3.068161	.2630644	.2105819	.2123145	.1450228
#1	.7727645	1.644726	.9567335	1.931046	.6810489	7.228604
#2	.7739115	1.748202	.9552972	1.927702	.6831577	7.213077
#3	.7737534	1.688065	.9518474	1.922968	.6838259	7.233028

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3874672	.1940921	.1912285	284.0851	.4136310	.2026790
Stddev	.0010504	.0031920	.0006594	.4060	.0025349	.0004357
%RSD	.2710974	1.644593	.3448246	.1429303	.6128432	.2149575
#1	.3875991	.1950021	.1915769	284.3207	.4122370	.2031020
#2	.3884454	.1967303	.1916406	284.3183	.4120990	.2022317
#3	.3863571	.1905438	.1904680	283.6162	.4165569	.2027034

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4511710	9.430868	2.341020	29.82139	.5405347	.0596947
Stddev	.0004264	.160399	.002144	.08262	.0018859	.0004154
%RSD	.0945026	1.700782	.0915708	.2770401	.3488917	.6959011
#1	.4510597	9.381072	2.342077	29.91250	.5420732	.0592767
#2	.4508113	9.301274	2.338553	29.80033	.5411001	.0597000
#3	.4516420	9.610259	2.342430	29.75135	.5384308	.0601075

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	612.4443	.2866081	1.264576	31.75969	.4998007	.4026034
Stddev	2.9623	.0042449	.005872	.53510	.0075932	.0008763
%RSD	.4836879	1.481091	.4643704	1.684844	1.519252	.2176601
#1	611.6008	.2914341	1.265016	31.55919	.5027300	.4016075
#2	615.7369	.2834521	1.258496	31.35380	.5054929	.4029462
#3	609.9953	.2849383	1.270216	32.36609	.4911791	.4032564

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01MS Acquired: 10/29/2025 16:58:42 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6012359	.5007295	F 70.70238	6.995650	F 555.5697	.1432400
Stddev	.0003990	.0012698	1.11630	.034975	2.5526	.0023449
%RSD	.0663706	.2535985	1.578870	.4999606	.4594609	1.637022
#1	.6007752	.5008757	70.26833	6.961279	554.8704	.1438001
#2	.6014573	.4993929	69.86830	7.031200	558.3991	.1406657
#3	.6014751	.5019200	71.97051	6.994471	553.4397	.1452540

Elem	Sr4077
Units	ppm
Avg	1.096647
Stddev	.002280
%RSD	.2078950
#1	1.098973
#2	1.096553
#3	1.094416

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5537.814	83602.62	6768.661	4280.009	5881.101
Stddev	26.994	945.84	83.211	55.245	20.719
%RSD	.4874570	1.131348	1.229363	1.290762	.3522899
#1	5568.959	84593.71	6795.603	4319.102	5904.189
#2	5523.336	83504.48	6675.316	4304.117	5864.128
#3	5521.148	82709.69	6835.063	4216.807	5874.986

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01MSD Acquired: 10/29/2025 17:02:47 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8276399**	**1.997553**	**1.017892**	**2.074535**	**.7225176**	**8.016905**
Stddev	.0026649	.037929	.006191	.021601	.0053460	.008661
%RSD	.3219845	1.898753	.6081965	1.041228	.7399138	.1080379
#1	.8299181	2.041345	1.024456	2.099448	.7286475	8.024801
#2	.8247094	1.976189	1.017063	2.061027	.7188221	8.007642
#3	.8282920	1.975124	1.012157	2.063130	.7200830	8.018273

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4166609**	**.2157127**	**.2045999**	**297.6714**	**.4366513**	**.2165666**
Stddev	.0018403	.0017691	.0009090	.7015	.0016590	.0005632
%RSD	.4416702	.8201022	.4442832	.2356719	.3799395	.2600804
#1	.4186042	.2170457	.2056187	297.1781	.4356890	.2172170
#2	.4149448	.2137057	.2038718	297.3617	.4356979	.2162364
#3	.4164336	.2163867	.2043091	298.4745	.4385669	.2162464

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4734506**	**9.886676**	**2.479967**	**31.52189**	**.5768276**	**.0636855**
Stddev	.0015706	.086923	.010848	.09767	.0016407	.0002776
%RSD	.3317316	.8791924	.4374439	.3098461	.2844304	.4359527
#1	.4752640	9.788200	2.474207	31.40921	.5785274	.0635386
#2	.4725246	9.952720	2.473213	31.58226	.5752533	.0640057
#3	.4725632	9.919107	2.492480	31.57421	.5767021	.0635122

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**629.8640**	**.3208095**	**1.312166**	**33.14142**	**.5410330**	**.4317336**
Stddev	.3948	.0027634	.001542	.23237	.0049159	.0008703
%RSD	.0626863	.8613920	.1175160	.7011496	.9086141	.2015882
#1	629.7434	.3176404	1.311950	32.89643	.5455263	.4325972
#2	630.3051	.3227163	1.313804	33.16913	.5357824	.4308567
#3	629.5435	.3220719	1.310743	33.35869	.5417903	.4317468

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01MSD Acquired: 10/29/2025 17:02:47 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6531515**	**.5414212**	F **70.23282**	**7.617045**	F **576.3744**	**.1677346**
Stddev	.0035364	.0009483	.53017	.035588	4.4174	.0023439
%RSD	.5414336	.1751438	.7548693	.4672144	.7664034	1.397374
#1	.6562354	.5406064	69.63411	7.651991	581.2230	.1662842
#2	.6492916	.5411952	70.64280	7.580849	572.5785	.1704387
#3	.6539275	.5424621	70.42154	7.618296	575.3216	.1664808

Elem	Sr4077
Units	ppm
Avg	**1.126965**
Stddev	.002398
%RSD	.2127464
#1	1.124197
#2	1.128405
#3	1.128292

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5398.939**	**80788.86**	**6358.967**	**4169.683**	**5721.337**
Stddev	7.947	502.42	36.870	22.539	5.947
%RSD	.1471973	.6218931	.5798062	.5405488	.1039359
#1	5391.051	81309.96	6354.032	4194.298	5716.461
#2	5406.944	80749.13	6398.056	4164.694	5727.962
#3	5398.820	80307.48	6324.814	4150.056	5719.589

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01A Acquired: 10/29/2025 17:06:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7783623	1.829827	.9547639	1.968827	.7482189	8.103466
Stddev	.0011584	.068417	.0045692	.009654	.0030127	.024262
%RSD	.1488259	3.739005	.4785649	.4903627	.4026555	.2994063
#1	.7770656	1.905933	.9559608	1.970520	.7447440	8.130694
#2	.7787266	1.773421	.9586155	1.958438	.7498123	8.095562
#3	.7792948	1.810127	.9497154	1.977523	.7501003	8.084141

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3997093	.2018611	.1913674	283.4367	.4092821	.2023951
Stddev	.0016752	.0020796	.0004196	.3946	.0018256	.0004720
%RSD	.4190998	1.030230	.2192802	.1392114	.4460565	.2331952
#1	.3994918	.1999689	.1917094	283.1178	.4071786	.2019920
#2	.4014825	.2015268	.1914937	283.8780	.4102131	.2029143
#3	.3981534	.2040877	.1908991	283.3142	.4104545	.2022791

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4482086	9.387029	2.356166	30.01953	.5413192	.0641037
Stddev	.0009199	.111624	.004972	.10625	.0007970	.0004027
%RSD	.2052441	1.189128	.2110119	.3539224	.1472326	.6282048
#1	.4486411	9.454323	2.353920	29.95682	.5422212	.0636721
#2	.4488326	9.448585	2.361864	29.95956	.5410263	.0644694
#3	.4471521	9.258180	2.352714	30.14220	.5407102	.0641697

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	610.7733	.2940747	1.253503	31.71752	.5174937	.4021212
Stddev	5.6895	.0059358	.000693	.25971	.0048775	.0004956
%RSD	.9315320	2.018466	.0553055	.8188211	.9425184	.1232467
#1	604.7854	.2882468	1.253551	31.84196	.5121824	.4023715
#2	616.1081	.2938645	1.252787	31.89160	.5185266	.4024417
#3	611.4266	.3001128	1.254171	31.41901	.5217719	.4015504

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3464-01A Acquired: 10/29/2025 17:06:52 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6799970	.5670821	F 80.15052	7.088590	F 555.1261	.1555228
Stddev	.0026131	.0129251	.64383	.021926	3.6254	.0027018
%RSD	.3842755	2.279226	.8032715	.3093125	.6530701	1.737246
#1	.6821326	.5575665	80.68594	7.113803	559.2957	.1585641
#2	.6807751	.5817972	80.32947	7.073991	552.7188	.1546042
#3	.6770832	.5618825	79.43615	7.077976	553.3638	.1534000

Elem	Sr4077
Units	ppm
Avg	1.065604
Stddev	.002007
%RSD	.1883779
#1	1.064038
#2	1.067867
#3	1.064905

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5530.942	82158.93	6486.451	4238.244	5868.591
Stddev	43.314	179.61	57.005	15.563	50.993
%RSD	.7831234	.2186181	.8788285	.3672094	.8689200
#1	5506.680	82365.92	6538.813	4224.542	5832.658
#2	5505.196	82044.19	6494.813	4255.165	5846.161
#3	5580.949	82066.67	6425.727	4235.026	5926.955

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3476-01 Acquired: 10/29/2025 17:19:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0468596	-.038172	.1352546	.0084497	-.012757	216.2664	.5128096
Stddev	.0012065	.001665	.0021100	.0025823	.003660	.3507	.0022225
%RSD	2.574621	4.363066	1.559985	30.56063	28.69178	.1621708	.4333897
#1	.0475587	-.039560	.1373885	.0057983	-.015807	216.1737	.5130207
#2	.0475537	-.036325	.1331695	.0085940	-.008698	216.6542	.5149190
#3	.0454665	-.038630	.1352056	.0109568	-.013765	215.9713	.5104891

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0154681	.0017884	36.12171	.2409676	.1561831	.2130759	241.3627
Stddev	.0001019	.0002008	.11120	.0005739	.0002501	.0004670	1.2068
%RSD	.6588793	11.22569	.3078420	.2381698	.1601226	.2191705	.4999807
#1	.0153515	.0020097	36.15806	.2405718	.1560739	.2133306	240.4956
#2	.0155401	.0017374	36.21019	.2407053	.1564692	.2133602	240.8516
#3	.0155128	.0016181	35.99689	.2416258	.1560062	.2125370	242.7409

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.258085	38.62570	.2350429	.0023068	12.98965	.4230522	.4195938
Stddev	.006411	.14879	.0004246	.0001465	.06159	.0017132	.0002718
%RSD	.2839076	.3852094	.1806626	6.348755	.4741236	.4049575	.0647649
#1	2.260103	38.49858	.2353373	.0021383	12.93731	.4214765	.4192808
#2	2.263243	38.78935	.2345562	.0024039	12.97412	.4228042	.4197314
#3	2.250908	38.58915	.2352354	.0023782	13.05752	.4248758	.4197693

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.91846	.1713112	.0024643	.0083755	4.216991	4.697213	3.473215
Stddev	.04222	.0093250	.0002834	.0005498	.012688	.045099	.015795
%RSD	.3866575	5.443317	11.50250	6.564647	.3008793	.9601224	.4547519
#1	10.87069	.1635442	.0027221	.0081741	4.219834	4.727006	3.491363
#2	10.93396	.1687363	.0025101	.0089977	4.228017	4.645327	3.462579
#3	10.95074	.1816531	.0021607	.0079548	4.203123	4.719305	3.465702

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3476-01 Acquired: 10/29/2025 17:19:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	1.444941	.1656706	-.132562
Stddev	.009194	.0007873	.000971
%RSD	.6363084	.4752368	.7326142
#1	1.454478	.1665298	-.131813
#2	1.444210	.1654982	-.132214
#3	1.436133	.1649837	-.133660

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7008.604	103544.3	8012.770	5362.333	6489.279
Stddev	6.098	427.4	37.063	14.999	2.892
%RSD	.0870132	.4127382	.4625536	.2797048	.0445606
#1	7001.756	104025.4	8019.696	5375.558	6486.267
#2	7013.450	103398.9	7972.732	5346.036	6492.033
#3	7010.604	103208.5	8045.882	5365.406	6489.539

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3477-01 Acquired: 10/29/2025 17:23:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0481169**	**-.031996**	**.1107302**	**.0003746**	**-.015812**	**114.9904**	**.4954826**
Stddev	.0023024	.001243	.0018598	.0015802	.001914	.3041	.0036886
%RSD	4.784967	3.886247	1.679563	421.8199	12.10793	.2644555	.7444510
#1	.0471803	-.032616	.1104588	-.001286	-.017986	115.0630	.4922389
#2	.0464303	-.032807	.1090211	.000551	-.015069	114.6565	.4947138
#3	.0507399	-.030564	.1127108	.001859	-.014379	115.2515	.4994950

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0100195**	**.0035594**	**17.56228**	**.1669309**	**.1060915**	**.2160591**	**223.4176**
Stddev	.0000027	.0001659	.05461	.0003477	.0002797	.0012641	1.8122
%RSD	.0265781	4.661756	.3109733	.2083034	.2636541	.5850749	.8111140
#1	.0100222	.0037093	17.57398	.1665866	.1059923	.2174378	221.3251
#2	.0100169	.0033811	17.50277	.1669242	.1058749	.2149547	224.4642
#3	.0100195	.0035877	17.61010	.1672820	.1064073	.2157847	224.4634

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.443848**	**35.22364**	**.1927898**	**.0009053**	**.6183078**	**.2908096**	**.4482439**
Stddev	.026806	.06686	.0003531	.0009056	.0145125	.0013999	.0005133
%RSD	.6032268	.1898187	.1831449	100.0331	2.347132	.4813644	.1145101
#1	4.412895	35.23331	.1930440	.0002624	.6063085	.2897910	.4488366
#2	4.459215	35.15247	.1929387	.0019410	.6141771	.2924058	.4479412
#3	4.459435	35.28513	.1923866	.0005125	.6344379	.2902320	.4479540

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.836641**	**.1176232**	**.0032963**	**.0087955**	**2.873379**	**6.592357**	**5.913454**
Stddev	.073618	.0073562	.0001190	.0002570	.013329	.076602	.026063
%RSD	1.076813	6.254064	3.609752	2.922261	.4638753	1.161979	.4407375
#1	6.761154	.1101247	.0033180	.0085510	2.870914	6.680729	5.936097
#2	6.840534	.1248284	.0034029	.0090635	2.861455	6.544923	5.919302
#3	6.908235	.1179165	.0031679	.0087721	2.887768	6.551417	5.884964

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3477-01 Acquired: 10/29/2025 17:23:18 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.3113670	.1504567	-.143286
Stddev	.0062962	.0015416	.001710
%RSD	2.022109	1.024642	1.193282
#1	.3182969	.1486847	-.141317
#2	.3059983	.1514899	-.144397
#3	.3098058	.1511956	-.144144

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7162.441	109176.1	8026.023	5607.390	6656.581
Stddev	4.769	820.6	27.280	32.605	5.097
%RSD	.0665888	.7516176	.3398935	.5814699	.0765768
#1	7156.954	110120.4	8049.797	5644.554	6658.809
#2	7165.595	108771.3	8032.033	5594.029	6650.749
#3	7164.774	108636.5	7996.239	5583.588	6660.185

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV04 Acquired: 10/29/2025 17:27:21 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.975337**	**5.308223**	**4.948318**	**4.942311**	**4.929834**	**9.643734**	**9.639233**
Stddev	.007561	.065845	.007552	.010754	.008600	.186543	.199119
%RSD	.1519784	1.240431	.1526165	.2175897	.1744578	1.934341	2.065710
#1	4.970314	5.235061	4.939677	4.949748	4.932258	9.746917	9.751496
#2	4.971663	5.326884	4.953655	4.929981	4.920281	9.755889	9.756871
#3	4.984033	5.362723	4.951622	4.947204	4.936962	9.428395	9.409332

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2618577**	**2.495051**	**24.61764**	**1.018015**	**2.480651**	**1.246557**	**4.701234**
Stddev	.0058195	.002910	.46968	.001489	.003452	.001679	.017073
%RSD	2.222394	.1166277	1.907921	.1462782	.1391395	.1347069	.3631545
#1	.2671853	2.491692	24.95872	1.019525	2.476671	1.246520	4.695870
#2	.2627407	2.496821	24.81227	1.016548	2.482467	1.244897	4.720344
#3	.2556472	2.496638	24.08192	1.017972	2.482816	1.248255	4.687487

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.464668**	**25.14081**	**2.486280**	**1.247016**	**23.71601**	**2.462185**	**2.492579**
Stddev	.046811	.53011	.003727	.001047	.11031	.044589	.007084
%RSD	1.899280	2.108571	.1499192	.0839360	.4651347	1.810954	.2842002
#1	2.491213	25.54439	2.482062	1.247195	23.59196	2.486891	2.494044
#2	2.492173	25.33758	2.487646	1.245892	23.80309	2.488952	2.484877
#3	2.410618	24.54044	2.489132	1.247962	23.75296	2.410712	2.498816

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.49836**	**5.193888**	**5.035000**	**5.071170**	**4.921398**	**4.796997**	**5.101909**
Stddev	.13584	.105492	.002313	.005321	.097109	.054467	.010241
%RSD	.5780708	2.031086	.0459384	.1049177	1.973208	1.135437	.2007354
#1	23.35409	5.289762	5.035661	5.066927	4.983438	4.735213	5.092035
#2	23.62380	5.211026	5.032428	5.077140	4.971271	4.838072	5.112482
#3	23.51718	5.080876	5.036910	5.069445	4.809486	4.817707	5.101210

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV04 Acquired: 10/29/2025 17:27:21 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**5.035701**	**4.749418**	**4.894116**
Stddev	.011996	.101517	.140105
%RSD	.2382198	2.137468	2.862718
#1	5.027502	4.813419	4.917534
#2	5.030132	4.802469	5.021037
#3	5.049469	4.632367	4.743778

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5910.925**	**90197.33**	**6550.770**	**4595.303**	**6667.616**
Stddev	6.210	184.79	133.502	11.514	10.024
%RSD	.1050674	.2048742	2.037959	.2505546	.1503361
#1	5917.690	90404.63	6444.610	4595.207	6679.179
#2	5909.604	90049.90	6507.049	4606.864	6661.389
#3	5905.481	90137.44	6700.650	4583.837	6662.279

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB04 Acquired: 10/29/2025 17:31:24 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000754**	**-.011305**	**-.000219**	**.0023741**	**-.002227**	**.0078355**
Stddev	.001536	.004067	.000784	.0021344	.000307	.0124493
%RSD	203.5797	35.97279	358.2262	89.90281	13.78004	158.8821
#1	-.001773	-.009295	.000289	.0021826	-.002566	-.004603
#2	-.001502	-.015985	.000176	.0045977	-.001968	.007814
#3	.001012	-.008634	-.001122	.0003419	-.002148	.020295

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052839**	**.0000274**	**-.000002**	**-.002713**	**-.000092**	**-.000118**
Stddev	.0012679	.0000253	.000028	.007909	.000157	.000114
%RSD	23.99615	92.36500	1320.719	291.5152	171.3491	96.56589
#1	.0040617	.0000229	-.000004	.006417	-.000262	-.000248
#2	.0065931	.0000546	.000027	-.007488	-.000061	-.000067
#3	.0051970	.0000047	-.000030	-.007068	.000048	-.000039

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000143**	**-.006159**	**.0012403**	**-.041222**	**.0002971**	**-.000428**
Stddev	.000307	.007008	.0004787	.016809	.0004629	.000205
%RSD	215.0758	113.7727	38.59796	40.77571	155.7836	47.94274
#1	-.000457	.000875	.0014501	-.059388	-.000007	-.000193
#2	.000156	-.006214	.0006925	-.026221	.000068	-.000572
#3	-.000127	-.013140	.0015783	-.038057	.000830	-.000519

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2478005**	**.0023862**	**.0036748**	**.1124572**	**-.002236**	**.0000267**
Stddev	.0099199	.0011748	.0000212	.0298298	.000690	.0001264
%RSD	4.003179	49.23262	.5778666	26.52546	30.84970	472.7856
#1	.2363622	.0037260	.0036507	.0865748	-.001444	.0000783
#2	.2529915	.0015323	.0036830	.1057162	-.002708	.0001191
#3	.2540478	.0019004	.0036908	.1450807	-.002555	-.000117

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB04 Acquired: 10/29/2025 17:31:24 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014175	-.000324	.0035493	-.002414	F .0309839	.0033459
Stddev	.0007465	.001301	.0101242	.001541	.0031093	.0029516
%RSD	52.66638	400.9544	285.2425	63.83753	10.03503	88.21500
#1	.0007647	-.001524	-.001816	-.003910	.0345455	.0034535
#2	.0022314	.001058	.015227	-.000832	.0288107	.0003420
#3	.0012563	-.000508	-.002763	-.002500	.0295957	.0062423

Elem	Sr4077
Units	ppm
Avg	.0001173
Stddev	.0002050
%RSD	174.8635
#1	.0003501
#2	-.000036
#3	.000038

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5916.243	92245.49	6575.791	4649.359	7387.426
Stddev	8.608	475.39	62.307	15.970	15.122
%RSD	.1455007	.5153514	.9475139	.3434892	.2047039
#1	5907.542	92766.63	6593.427	4645.460	7372.313
#2	5916.432	91835.57	6506.567	4635.700	7387.409
#3	5924.755	92134.26	6627.378	4666.918	7402.558

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3480-01 Acquired: 10/29/2025 17:35:43 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0635579	-.057578	.4025885	-.008112	-.028686	351.5697
Stddev	.0026687	.006313	.0037240	.001875	.001390	2.4582
%RSD	4.198873	10.96358	.9250204	23.11466	4.845340	.6992177
#1	.0624482	-.064662	.4020930	-.010207	-.029625	348.7873
#2	.0666024	-.052549	.4065355	-.006591	-.027089	352.4747
#3	.0616230	-.055523	.3991370	-.007539	-.029344	353.4472

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.695979	.0193872	.0292691	200.9584	1.096666	.7182612
Stddev	.008510	.0000525	.0007156	1.0830	.003017	.0016288
%RSD	.3156396	.2708246	2.445023	.5389382	.2750801	.2267627
#1	2.687184	.0193905	.0291223	199.7086	1.095111	.7167844
#2	2.704172	.0194380	.0286383	201.5438	1.100143	.7179910
#3	2.696581	.0193332	.0300468	201.6227	1.094744	.7200081

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.424052	705.3167	11.88049	232.1349	1.162071	^ *****
Stddev	.007072	7.4212	.07778	1.1103	.003119	-----
%RSD	.4966309	1.052184	.6546464	.4783000	.2684184	-----
#1	1.419768	709.2916	11.79782	230.8565	1.159480	^ -----
#2	1.420174	709.9037	11.95221	232.8576	1.161199	^ -----
#3	1.432215	696.7547	11.89146	232.6907	1.165533	^ -----

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.48861	1.595001	.9767594	7.184420	^ *****	-.000237
Stddev	.11419	.012990	.0073204	.063853	-----	.000423
%RSD	.3409914	.8144063	.7494617	.8887671	-----	178.3237
#1	33.61849	1.581260	.9701277	7.257727	^ -----	-.000702
#2	33.40398	1.607080	.9846144	7.154599	^ -----	.000127
#3	33.44335	1.596662	.9755360	7.140933	^ -----	-.000137

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3480-01 Acquired: 10/29/2025 17:35:43 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0258838	F 28.44246	4.225030	8.001162	2.001161	.2954306
Stddev	.0013579	.13248	.092516	.025372	.007303	.0014187
%RSD	5.246101	.4657980	2.189719	.3171001	.3649415	.4802177
#1	.0254359	28.29500	4.331639	8.029342	1.999643	.2947258
#2	.0274091	28.55146	4.165788	7.980133	1.994736	.2970637
#3	.0248064	28.48092	4.177664	7.994011	2.009103	.2945024

Elem	Sr4077
Units	ppm
Avg	-.282701
Stddev	.008389
%RSD	2.967431
#1	-.288448
#2	-.286580
#3	-.273074

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7620.638	115759.6	9476.255	5756.214	5541.978
Stddev	7.302	353.3	51.965	53.802	9.412
%RSD	.0958162	.3052149	.5483689	.9346793	.1698357
#1	7626.243	115677.0	9531.985	5774.296	5552.197
#2	7612.381	115454.9	9429.129	5695.701	5533.664
#3	7623.290	116146.9	9467.651	5798.647	5540.072

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01 Acquired: 10/29/2025 17:39:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0549550**	**-.032173**	**.3104805**	**.0032690**	**-.018007**	**151.0630**	**.5674139**
Stddev	.0001990	.002126	.0027727	.0014045	.001463	.1342	.0026823
%RSD	.3620166	6.607361	.8930273	42.96345	8.126357	.0888173	.4727191
#1	.0551211	-.029804	.3091290	.0046788	-.018167	150.9849	.5643700
#2	.0550094	-.032799	.3086428	.0032583	-.016471	150.9862	.5684405
#3	.0547345	-.033915	.3136698	.0018699	-.019385	151.2180	.5694313

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0104716**	**.0038419**	**39.48997**	**.1816284**	**.1250234**	**.3414144**	**233.7489**
Stddev	.0001087	.0001315	.06922	.0005179	.0009347	.0027142	.2289
%RSD	1.038297	3.423834	.1752779	.2851391	.7476131	.7949744	.0979059
#1	.0105142	.0037640	39.41691	.1811602	.1250564	.3414479	233.5328
#2	.0103480	.0037679	39.49846	.1815402	.1240726	.3386836	233.9887
#3	.0105525	.0039938	39.55456	.1821847	.1259412	.3441116	233.7251

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.576952**	**49.91835**	**.2465509**	**.0003986**	**8.891570**	**.4001060**	**.6088403**
Stddev	.006941	.02857	.0014942	.0002609	.029489	.0053496	.0026098
%RSD	.1940413	.0572396	.6060436	65.44054	.3316553	1.337045	.4286558
#1	3.569437	49.91619	.2464689	.0003741	8.865213	.3941037	.6058774
#2	3.578298	49.94795	.2450994	.0006709	8.886076	.4043711	.6107983
#3	3.583121	49.89092	.2480845	.0001509	8.923419	.4018433	.6098452

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.997899**	**.2549310**	**.0025955**	**.0942369**	**4.447739**	**9.850863**	**7.488587**
Stddev	.034876	.0021310	.0002032	.0010651	.023285	.171644	.057266
%RSD	.3488291	.8358956	7.827203	1.130245	.5235253	1.742425	.7647124
#1	9.961109	.2543547	.0025095	.0947399	4.421791	9.652937	7.487390
#2	10.00211	.2531474	.0024495	.0930134	4.454611	9.940850	7.431929
#3	10.03048	.2572908	.0028275	.0949574	4.466814	9.958802	7.546443

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01 Acquired: 10/29/2025 17:39:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**2.644739**	**.1589634**	**-.033873**
Stddev	.016324	.0006310	.000638
%RSD	.6172413	.3969588	1.884723
#1	2.640162	.1585539	-.033486
#2	2.631192	.1596901	-.034610
#3	2.662863	.1586462	-.033523

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7190.039**	**108078.1**	**8372.981**	**5509.943**	**6544.609**
Stddev	30.705	214.2	6.306	14.249	38.061
%RSD	.4270479	.1981446	.0753088	.2586070	.5815631
#1	7188.874	107840.7	8366.869	5526.194	6547.998
#2	7221.309	108137.0	8379.464	5499.586	6580.862
#3	7159.932	108256.7	8372.611	5504.051	6504.966

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01DUP Acquired: 10/29/2025 17:43:58 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0556144**	**-.034746**	**.3720224**	**.0008332**	**-.017304**	**158.3631**
Stddev	.0002181	.001857	.0010311	.0043454	.001503	.2415
%RSD	.3922328	5.345038	.2771592	521.5370	8.684934	.1525166
#1	.0555814	-.032694	.3730813	.0023731	-.018736	158.0948
#2	.0554146	-.036310	.3719643	.0041990	-.017438	158.4314
#3	.0558471	-.035236	.3710216	-.004072	-.015739	158.5632

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6078129**	**.0114250**	**.0044330**	**33.05060**	**.1909765**	**.1232226**
Stddev	.0001990	.0000391	.0001276	.01275	.0003585	.0003315
%RSD	.0327344	.3425343	2.878790	.0385896	.1877117	.2690345
#1	.6077264	.0114381	.0043334	33.04205	.1905691	.1230837
#2	.6080404	.0114559	.0045769	33.04450	.1912434	.1229832
#3	.6076718	.0113810	.0043888	33.06526	.1911171	.1236010

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3398269**	**243.4607**	**4.062673**	**47.96660**	**.2474182**	**.0020581**
Stddev	.0003155	1.1119	.011970	.11341	.0001956	.0005970
%RSD	.0928524	.4566919	.2946438	.2364322	.0790730	29.00785
#1	.3401657	244.3733	4.074888	47.83719	.2472038	.0022605
#2	.3397735	242.2223	4.062167	48.04868	.2475870	.0013862
#3	.3395414	243.7864	4.050963	48.01392	.2474639	.0025276

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.958403**	**.4086077**	**.5913343**	**10.00203**	**.2012015**	**.0032877**
Stddev	.060669	.0002172	.0012484	.05106	.0031144	.0000832
%RSD	.6772326	.0531561	.2111199	.5105285	1.547885	2.531949
#1	8.976142	.4083911	.5924950	10.01524	.2034971	.0032571
#2	8.890842	.4088255	.5900136	9.94566	.1976564	.0033819
#3	9.008226	.4086064	.5914944	10.04519	.2024509	.0032240

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01DUP Acquired: 10/29/2025 17:43:58 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087401	4.178458	F 11.46929	7.356780	2.383682	.1752329
Stddev	.0005468	.009522	.12366	.029031	.014007	.0014158
%RSD	6.256235	.2278811	1.078142	.3946130	.5876358	.8079284
#1	.0090217	4.188177	11.60407	7.387534	2.392044	.1746553
#2	.0081099	4.169146	11.36108	7.329851	2.367511	.1768461
#3	.0090886	4.178051	11.44273	7.352957	2.391491	.1741972

Elem	Sr4077
Units	ppm
Avg	-.093882
Stddev	.001339
%RSD	1.426650
#1	-.095379
#2	-.092797
#3	-.093470

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7317.530	109218.2	8320.631	5617.557	6613.448
Stddev	12.144	175.3	55.387	6.562	12.322
%RSD	.1659563	.1604640	.6656557	.1168197	.1863245
#1	7303.579	109260.2	8330.585	5618.225	6600.307
#2	7323.285	109025.8	8260.942	5610.686	6624.744
#3	7325.727	109368.7	8370.365	5623.760	6615.292

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01LX5 Acquired: 10/29/2025 17:48:01 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0123641**	**-.016689**	**.0639991**	**.0029752**	**-.008310**	**36.20353**	**.1427798**
Stddev	.0019298	.000545	.0005929	.0050035	.001564	.01084	.0028764
%RSD	15.60802	3.263541	.9264022	168.1753	18.81789	.0299285	2.014544
#1	.0104591	-.016906	.0645496	.0065715	-.009946	36.21270	.1453874
#2	.0123154	-.017091	.0640763	.0050930	-.006831	36.20632	.1396945
#3	.0143177	-.016069	.0633714	-.002739	-.008154	36.19157	.1432575

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026454**	**-.000001**	**9.718148**	**.0441346**	**.0251634**	**.0864206**	**55.95354**
Stddev	.0000784	.000038	.007964	.0002285	.0000767	.0000128	.26326
%RSD	2.962937	3819.917	.0819467	.5177988	.3050207	.0148186	.4704977
#1	.0027320	.000003	9.714908	.0439658	.0252496	.0864340	55.91431
#2	.0025794	-.000040	9.712314	.0440434	.0251377	.0864193	55.71210
#3	.0026247	.000035	9.727221	.0443946	.0251027	.0864084	56.23421

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8874376**	**12.21892**	**.0508625**	**.0001019**	**2.105363**	**.0983964**	**.1477268**
Stddev	.0027590	.04408	.0001776	.0004235	.021162	.0027168	.0007903
%RSD	.3108950	.3607728	.3491129	415.5445	1.005145	2.761049	.5349808
#1	.8891633	12.17175	.0508384	.0004343	2.085839	.0958240	.1474937
#2	.8842556	12.22595	.0506982	-.000375	2.102399	.0981276	.1486075
#3	.8888940	12.25907	.0510509	.000246	2.127850	.1012375	.1470794

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.280227**	**.0505505**	**.0010855**	**.0359978**	**1.102934**	**2.721137**	**1.512002**
Stddev	.017681	.0008584	.0002227	.0003816	.006037	.011845	.004978
%RSD	.7754087	1.698034	20.51216	1.060046	.5473194	.4353100	.3292042
#1	2.266137	.0502334	.0013410	.0363600	1.109876	2.722315	1.509493
#2	2.274476	.0498958	.0009828	.0360338	1.100011	2.708746	1.508779
#3	2.300067	.0515223	.0009327	.0355994	1.098915	2.732349	1.517735

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01LX5 Acquired: 10/29/2025 17:48:01 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.5447363	.0363740	-.006903
Stddev	.0045034	.0007727	.000263
%RSD	.8267121	2.124333	3.810584
#1	.5423716	.0360417	-.007041
#2	.5419077	.0372572	-.006599
#3	.5499294	.0358229	-.007067

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6258.521	94709.62	7054.494	4839.355	7005.148
Stddev	13.564	299.97	17.647	28.593	14.774
%RSD	.2167286	.3167295	.2501541	.5908408	.2109046
#1	6243.292	94859.67	7036.068	4849.639	6988.104
#2	6262.965	94904.96	7056.173	4861.384	7014.310
#3	6269.305	94364.23	7071.242	4807.043	7013.030

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01MS Acquired: 10/29/2025 17:52:06 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6782299**	**1.781955**	**1.323063**	**1.524353**	**.3092078**	**147.9647**
Stddev	.0013263	.107558	.001673	.003235	.0014697	.5881
%RSD	.1955522	6.035958	.1264337	.2122193	.4753188	.3974735
#1	.6768082	1.906005	1.324182	1.523750	.3091543	147.9583
#2	.6784477	1.725152	1.321140	1.521463	.3107036	148.5560
#3	.6794338	1.714707	1.323867	1.527848	.3077656	147.3799

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7224621**	**.1714575**	**.1893226**	**42.08055**	**.5076388**	**.3067016**
Stddev	.0028532	.0013639	.0003771	.15338	.0012242	.0005317
%RSD	.3949314	.7954539	.1991739	.3645012	.2411469	.1733461
#1	.7257433	.1719260	.1890234	42.13115	.5090330	.3064135
#2	.7205642	.1725254	.1891982	42.20225	.5071436	.3063762
#3	.7210788	.1699212	.1897462	41.90826	.5067398	.3073152

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5647185**	**228.1588**	**3.802440**	**46.74112**	**.6899038**	**.0639055**
Stddev	.0005237	1.2417	.012104	.24630	.0021138	.0002567
%RSD	.0927326	.5442288	.3183263	.5269396	.3063964	.4016684
#1	.5641139	228.3709	3.815513	46.69877	.6882586	.0639006
#2	.5650268	226.8247	3.800187	47.00585	.6891649	.0636513
#3	.5650150	229.2807	3.791621	46.51875	.6922879	.0641646

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.82012**	**.6565856**	**.7187681**	**17.07678**	**.3824990**	**.3238969**
Stddev	.02010	.0040638	.0007984	.07390	.0069045	.0000859
%RSD	.1858080	.6189341	.1110775	.4327473	1.805107	.0265293
#1	10.82875	.6532118	.7185211	17.14626	.3807971	.3238006
#2	10.79715	.6610970	.7196608	16.99914	.3766046	.3239243
#3	10.83447	.6554479	.7181224	17.08495	.3900954	.3239658

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01MS Acquired: 10/29/2025 17:52:06 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6222361	4.555058	9.774004	F 11.69335	2.364782	.2979961
Stddev	.0027444	.006876	.039403	.06959	.021127	.0021924
%RSD	.4410600	.1509602	.4031374	.5951021	.8934016	.7357259
#1	.6205334	4.560569	9.783548	11.77355	2.389167	.2997759
#2	.6207728	4.557252	9.730707	11.64897	2.353209	.2986652
#3	.6254021	4.547352	9.807759	11.65752	2.351970	.2955470

Elem	Sr4077
Units	ppm
Avg	.0971432
Stddev	.0022448
%RSD	2.310809
#1	.0964549
#2	.0996516
#3	.0953232

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6927.515	104449.3	8132.037	5338.263	6483.349
Stddev	14.012	431.7	64.560	16.275	12.520
%RSD	.2022716	.4132955	.7938938	.3048809	.1931162
#1	6943.676	103960.9	8090.837	5319.726	6497.207
#2	6918.744	104606.8	8098.834	5344.858	6479.989
#3	6920.126	104780.0	8206.441	5350.207	6472.852

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01MSD Acquired: 10/29/2025 17:56:02 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6820658**	**1.789330**	**1.203294**	**1.523682**	**.3139553**	**152.3986**
Stddev	.0022018	.073919	.000837	.003974	.0006334	.6725
%RSD	.3228093	4.131100	.0695265	.2608316	.2017547	.4412672
#1	.6795748	1.847572	1.202328	1.525308	.3134527	151.9454
#2	.6828709	1.706173	1.203760	1.519152	.3137465	152.0793
#3	.6837518	1.814244	1.203793	1.526585	.3146668	153.1713

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7086439**	**.1725467**	**.1911838**	**37.02486**	**.5087957**	**.3017941**
Stddev	.0019932	.0015004	.0004084	.21622	.0014624	.0006362
%RSD	.2812694	.8695502	.2136221	.5839854	.2874327	.2108075
#1	.7063789	.1709826	.1908200	36.80925	.5082633	.3010875
#2	.7101303	.1726835	.1911059	37.02365	.5104498	.3023214
#3	.7094224	.1739740	.1916256	37.24168	.5076741	.3019735

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5484958**	**230.3686**	**3.889948**	**48.73521**	**.6876880**	**.0634189**
Stddev	.0013561	1.5637	.017354	.26293	.0022176	.0004633
%RSD	.2472450	.6787923	.4461356	.5395165	.3224710	.7304587
#1	.5470962	230.9363	3.870971	48.52032	.6852145	.0632115
#2	.5485874	231.5691	3.893860	48.65691	.6894983	.0639496
#3	.5498038	228.6003	3.905012	49.02840	.6883513	.0630955

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.84732**	**.6351193**	**.6984655**	**17.47008**	**.3975645**	**.3200568**
Stddev	.06622	.0022486	.0017419	.11674	.0053594	.0006133
%RSD	.6105189	.3540373	.2493863	.6682423	1.348053	.1916342
#1	10.90703	.6332451	.6976379	17.51164	.4023554	.3200777
#2	10.85884	.6345002	.6972917	17.56036	.3985613	.3194332
#3	10.77609	.6376125	.7004668	17.33824	.3917766	.3206594

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01MSD Acquired: 10/29/2025 17:56:02 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6296736	4.573517	F 11.69428	F 12.47439	2.084192	.3053492
Stddev	.0020801	.002469	.13946	.06229	.012848	.0016414
%RSD	.3303534	.0539935	1.192578	.4993292	.6164712	.5375354
#1	.6302980	4.574225	11.53326	12.53092	2.083434	.3058687
#2	.6273527	4.575556	11.77707	12.40761	2.071740	.3035110
#3	.6313699	4.570771	11.77250	12.48462	2.097403	.3066680

Elem	Sr4077
Units	ppm
Avg	.0795830
Stddev	.0034166
%RSD	4.293131
#1	.0784313
#2	.0768911
#3	.0834266

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7157.406	107778.4	8366.945	5472.231	6591.953
Stddev	9.720	344.2	57.708	21.067	9.982
%RSD	.1358022	.3193873	.6897168	.3849730	.1514325
#1	7168.326	107420.3	8408.498	5487.933	6601.279
#2	7149.702	107808.1	8391.281	5448.290	6581.423
#3	7154.189	108106.9	8301.054	5480.469	6593.158

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01A Acquired: 10/29/2025 17:59:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6867954**	**1.819760**	**1.232393**	**1.550595**	**.6126234**	**150.4073**
Stddev	.0029053	.083326	.000451	.004786	.0012693	.1347
%RSD	.4230252	4.578942	.0365993	.3086762	.2071923	.0895290
#1	.6882579	1.802536	1.232390	1.556047	.6140886	150.3027
#2	.6886788	1.910352	1.232846	1.548651	.6119216	150.3600
#3	.6834494	1.746392	1.231943	1.547086	.6118600	150.5592

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7191125**	**.1722008**	**.1946300**	**40.04611**	**.5047837**	**.3177778**
Stddev	.0048937	.0003549	.0004245	.06637	.0010087	.0006427
%RSD	.6805245	.2061114	.2180874	.1657367	.1998293	.2022607
#1	.7241275	.1718649	.1941785	40.11972	.5036209	.3170358
#2	.7188602	.1725721	.1950209	40.02781	.5054234	.3181626
#3	.7143498	.1721652	.1946905	39.99082	.5053068	.3181350

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5622920**	**237.1917**	**3.726208**	**50.96818**	**.7251425**	**.0647768**
Stddev	.0021675	1.4839	.028098	.09138	.0005170	.0006049
%RSD	.3854809	.6256320	.7540754	.1792949	.0712945	.9337830
#1	.5602403	238.7492	3.754529	51.06681	.7245489	.0653741
#2	.5620765	237.0315	3.725759	50.95137	.7253848	.0647918
#3	.5645592	235.7944	3.698337	50.88638	.7254939	.0641646

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.59312**	**.6316265**	**.7666400**	**17.97415**	**.4770829**	**.3258991**
Stddev	.02104	.0031565	.0012767	.11821	.0042152	.0000618
%RSD	.1814880	.4997440	.1665349	.6576675	.8835351	.0189535
#1	11.60659	.6284603	.7661467	18.10969	.4804858	.3258824
#2	11.60390	.6347732	.7656835	17.92033	.4783952	.3258474
#3	11.56888	.6316460	.7680898	17.89242	.4723676	.3259675

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3481-01A Acquired: 10/29/2025 17:59:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7716198	4.598784	F 10.79418	F 12.90210	2.715616	.3064659
Stddev	.0013408	.017830	.06255	.03594	.009252	.0005868
%RSD	.1737596	.3877058	.5794639	.2785816	.3406828	.1914650
#1	.7701404	4.615526	10.85580	12.86242	2.719170	.3065779
#2	.7719643	4.600790	10.73075	12.93247	2.722564	.3069886
#3	.7727547	4.580036	10.79597	12.91141	2.705115	.3058312

Elem	Sr4077
Units	ppm
Avg	.1233113
Stddev	.0021823
%RSD	1.769783
#1	.1208428
#2	.1241069
#3	.1249843

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7160.187	108215.0	8444.153	5503.364	6510.411
Stddev	15.373	141.7	11.747	18.861	12.119
%RSD	.2147024	.1309748	.1391120	.3427141	.1861453
#1	7177.304	108101.5	8438.501	5515.454	6523.146
#2	7155.704	108373.8	8457.657	5513.007	6509.069
#3	7147.555	108169.6	8436.300	5481.632	6499.020

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV05 Acquired: 10/29/2025 18:03:53 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.851526**	**5.073818**	**4.839994**	**4.825598**	**4.830511**	**9.473940**	**9.565713**
Stddev	.003459	.099187	.009662	.008734	.006208	.038199	.027237
%RSD	.0712940	1.954886	.1996286	.1810013	.1285104	.4031989	.2847321
#1	4.847722	4.989450	4.849857	4.828226	4.832424	9.497487	9.534924
#2	4.852374	5.048923	4.839576	4.815851	4.823572	9.494467	9.586665
#3	4.854481	5.183081	4.830547	4.832716	4.835537	9.429866	9.575548

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2519691**	**2.442368**	**24.40547**	**.9983473**	**2.427191**	**1.223197**	**4.784266**
Stddev	.0009732	.002751	.13206	.0042017	.004716	.001202	.017086
%RSD	.3862356	.1126511	.5410977	.4208685	.1943110	.0982327	.3571287
#1	.2508565	2.445042	24.28920	.9978306	2.432460	1.224583	4.780044
#2	.2526623	2.442518	24.54904	1.002784	2.425750	1.222438	4.803067
#3	.2523884	2.439545	24.37817	.994428	2.423363	1.222571	4.769686

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.436654**	**24.68167**	**2.431384**	**1.223203**	**23.16303**	**2.428472**	**2.447109**
Stddev	.013209	.13810	.003043	.003041	.08445	.004528	.006894
%RSD	.5420940	.5595334	.1251753	.2485900	.3645842	.1864421	.2817035
#1	2.421582	24.60663	2.434819	1.223278	23.16345	2.428810	2.442026
#2	2.446217	24.84105	2.430310	1.226207	23.24727	2.423785	2.454956
#3	2.442162	24.59734	2.429024	1.220126	23.07838	2.432821	2.444346

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.13677**	**4.994219**	**4.943847**	**4.938655**	**4.839542**	**4.777928**	**4.939635**
Stddev	.20342	.007093	.002992	.001483	.019848	.000316	.015342
%RSD	.8791877	.1420251	.0605138	.0300192	.4101262	.0066227	.3105954
#1	23.02112	4.993981	4.946685	4.937250	4.821698	4.777690	4.921971
#2	23.37164	4.987248	4.940722	4.940205	4.860919	4.778287	4.949641
#3	23.01754	5.001428	4.944135	4.938510	4.836008	4.777806	4.947293

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV05 Acquired: 10/29/2025 18:03:53 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**4.814537**	**4.535951**	**4.917449**
Stddev	.020353	.010078	.018533
%RSD	.4227421	.2221849	.3768895
#1	4.795679	4.525319	4.902051
#2	4.811819	4.545364	4.912277
#3	4.836112	4.537170	4.938019

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6064.247**	**91980.32**	**6806.420**	**4659.722**	**6866.780**
Stddev	13.499	395.43	25.578	26.255	18.158
%RSD	.2226045	.4299113	.3757883	.5634464	.2644255
#1	6050.848	92239.24	6834.707	4674.615	6849.271
#2	6064.051	91525.14	6784.922	4629.407	6865.545
#3	6077.844	92176.56	6799.631	4675.144	6885.523

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB05 Acquired: 10/29/2025 18:07:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000748**	**-.010703**	**.0003940**	**.0031877**	**-.002991**	**.0121657**	**.0049977**
Stddev	.001434	.003147	.0008346	.0027234	.000354	.0056808	.0010636
%RSD	191.6696	29.39821	211.8466	85.43547	11.85158	46.69523	21.28189
#1	-.002145	-.007308	.0013545	.0022682	-.002874	.0129237	.0043477
#2	-.000821	-.011280	-.000154	.0062518	-.002709	.0061439	.0044203
#3	.000721	-.013522	-.000018	.0010430	-.003389	.0174294	.0062252

Elem	Be2348	Cd2265	Ca3736	Cr2677	Co2286	Cu2247	Fe2404
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000034**	**.0000201**	**.0169800**	**.0000965**	**-.000026**	**.0004204**	**.0148411**
Stddev	.0000300	.0000142	.0058440	.0002787	.000131	.0004402	.0110875
%RSD	882.7171	70.89404	34.41712	288.7702	499.5165	104.7008	74.70792
#1	.0000377	.0000351	.0226864	.0003657	-.000153	.0001548	.0173227
#2	-.000018	.0000183	.0110075	-.000191	-.000035	.0001780	.0244774
#3	-.000009	.0000068	.0172459	.000115	.000109	.0009285	.0027231

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na5895	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006973**	**-.006461**	**.0001924**	**-.000217**	**.0231821**	**.0031683**	**.0038014**
Stddev	.0004504	.021382	.0001621	.000421	.0084682	.0021563	.0001181
%RSD	64.59152	330.9422	84.25335	193.8242	36.52896	68.05833	3.106801
#1	.0002750	.007576	.0000065	-.000579	.0143861	.0013855	.0038276
#2	.0006455	.004111	.0002665	.000244	.0238811	.0025544	.0039042
#3	.0011714	-.031069	.0003042	-.000317	.0312791	.0055649	.0036724

Elem	K_7664	B_2496	Mo2020	Sn1899	Ti3361	Si2881	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.064205**	**-.003004**	**.0001224**	**.0009518**	**-.003273**	**.0054272**	**-.000634**
Stddev	.035295	.000372	.0000658	.0002453	.001407	.0106766	.002329
%RSD	54.97232	12.38467	53.77185	25.77239	42.99328	196.7263	367.2052
#1	-.024656	-.002868	.0001294	.0010227	-.004895	-.005984	-.002932
#2	-.092501	-.002719	.0000534	.0011539	-.002538	.007091	-.000696
#3	-.075458	-.003425	.0001845	.0006789	-.002385	.015174	.001725

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB05 Acquired: 10/29/2025 18:07:57 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

Elem	S_1820	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0039213	-.001276	.0001073
Stddev	.0033585	.002169	.0000780
%RSD	85.64803	170.0022	72.69793
#1	.0068676	-.002909	.0000175
#2	.0002643	-.002103	.0001577
#3	.0046320	.001185	.0001467

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5969.684	91989.46	6669.466	4632.717	7464.257
Stddev	30.464	419.62	50.970	16.178	35.734
%RSD	.5103068	.4561587	.7642268	.3492056	.4787390
#1	5941.002	92277.99	6697.641	4638.379	7430.209
#2	5966.389	91508.09	6700.128	4614.469	7461.095
#3	6001.662	92182.31	6610.628	4645.303	7501.467

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05 Acquired: 10/29/2025 18:12:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1030419	-.004963	.0036765	.9843063	.0020514	2.725548
Stddev	.0015726	.005077	.0005333	.0066712	.0014098	.034212
%RSD	1.526127	102.2935	14.50522	.6777559	68.72628	1.255230
#1	.1035527	-.006551	.0040157	.9806933	.0007070	2.698450
#2	.1012774	.000718	.0039521	.9802210	.0019285	2.763992
#3	.1042955	-.009057	.0030619	.9920047	.0035186	2.714204

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0120447	.0000186	.0004704	1.618542	.0317249	.0020215
Stddev	.0003469	.0000660	.0000973	.016787	.0001392	.0000952
%RSD	2.880405	354.9113	20.68858	1.037167	.4387909	4.710353
#1	.0124230	.0000885	.0005688	1.622657	.0316978	.0019447
#2	.0119694	-.000043	.0003742	1.632888	.0318757	.0021280
#3	.0117415	.000010	.0004683	1.600080	.0316013	.0019917

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147348	.9468444	.0201699	1.283387	.0300599	.0006823
Stddev	.0005975	.0058513	.0009926	.033152	.0000541	.0005624
%RSD	4.054997	.6179828	4.921379	2.583172	.1799653	82.42598
#1	.0141109	.9433374	.0192242	1.284068	.0301217	.0012809
#2	.0147917	.9435965	.0200820	1.316193	.0300366	.0006013
#3	.0153018	.9535993	.0212036	1.249900	.0300213	.0001649

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	.0050354	.5325956	22.71760	F 11.76872	.0495874
Stddev	-----	.0007606	.0024624	1.34326	.19043	.0004417
%RSD	-----	15.10442	.4623316	5.912873	1.618071	.8907258
#1	^ -----	.0042419	.5297799	21.39694	11.68757	.0493050
#2	6528.745	.0057581	.5343457	22.67348	11.98628	.0493608
#3	6512.217	.0051063	.5336611	24.08238	11.63231	.0500964

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05 Acquired: 10/29/2025 18:12:16 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003906	.0592793	F 30.05592	.2720355	F 1690.065	.0204521
Stddev	.000516	.0006604	.74595	.0017242	9.152	.0013403
%RSD	13.20380	1.114063	2.481882	.6338307	.5414895	6.553343
#1	-.004126	.0599626	29.40403	.2733854	1696.472	.0193259
#2	-.003317	.0592310	29.89430	.2700931	1679.584	.0200958
#3	-.004275	.0586445	30.86944	.2726279	1694.140	.0219345

Elem	Sr4077
Units	ppm
Avg	.0157401
Stddev	.0002617
%RSD	1.662371
#1	.0155306
#2	.0160334
#3	.0156564

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3869.098	59578.15	6464.723	2987.429	3955.386
Stddev	28.646	16.01	92.241	10.800	27.755
%RSD	.7403735	.0268800	1.426838	.3615099	.7016926
#1	3876.914	59583.61	6498.817	2998.532	3953.842
#2	3893.024	59560.12	6360.288	2986.796	3983.881
#3	3837.355	59590.72	6535.064	2976.960	3928.436

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05DUP Acquired: 10/29/2025 18:16:36 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1042657	-.008965	.0043424	.9817477	.0001285	2.794220
Stddev	.0032847	.001616	.0003283	.0084076	.0000882	.019798
%RSD	3.150354	18.02212	7.561163	.8563954	68.62531	.7085246
#1	.1078634	-.008612	.0045433	.9914472	.0001935	2.799603
#2	.1014265	-.007555	.0045203	.9772561	.0000281	2.810770
#3	.1035073	-.010728	.0039635	.9765398	.0001639	2.772288

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085897	.0000356	.0004148	1.631003	.0321159	.0018092
Stddev	.0018978	.0000134	.0000620	.012746	.0002201	.0002113
%RSD	22.09352	37.52589	14.93561	.7814695	.6853139	11.68130
#1	.0092279	.0000472	.0004004	1.641013	.0323700	.0016065
#2	.0100861	.0000210	.0003612	1.635342	.0319859	.0017928
#3	.0064551	.0000386	.0004826	1.616655	.0319917	.0020282

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0148181	.9409198	.0202802	1.303965	.0296961	.0008853
Stddev	.0003539	.0134896	.0011265	.012008	.0002567	.0002799
%RSD	2.388228	1.433658	5.554778	.9208776	.8644042	31.61744
#1	.0151740	.9373951	.0215050	1.317137	.0297074	.0006688
#2	.0144662	.9295424	.0192883	1.301129	.0294340	.0012014
#3	.0148141	.9558218	.0200473	1.293629	.0299470	.0007857

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 6320.849	.0083974	.5412624	36.01344	F 11.94216	.0488510
Stddev	26.452	.0019584	.0024939	1.43715	.16327	.0006534
%RSD	.4184909	23.32168	.4607581	3.990588	1.367139	1.337457
#1	6308.188	.0086760	.5389797	34.59846	12.05943	.0495205
#2	6351.252	.0102017	.5439241	35.97008	12.01135	.0488175
#3	6303.107	.0063146	.5408834	37.47178	11.75569	.0482151

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05DUP Acquired: 10/29/2025 18:16:36 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004108	.0565054	F 32.98057	.2665013	F 1671.927	.0265216
Stddev	.001252	.0007889	.96553	.0024323	13.096	.0009916
%RSD	30.46769	1.396194	2.927566	.9126973	.7832737	3.738925
#1	-.003448	.0566977	31.98643	.2691451	1685.742	.0270468
#2	-.003324	.0556381	33.04060	.2660005	1659.694	.0271403
#3	-.005551	.0571803	33.91468	.2643584	1670.346	.0253779

Elem	Sr4077
Units	ppm
Avg	.0157905
Stddev	.0000452
%RSD	.2862847
#1	.0158386
#2	.0157489
#3	.0157839

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3881.226	59475.04	6432.308	2926.054	3984.784
Stddev	25.264	63.85	66.331	13.904	31.076
%RSD	.6509368	.1073598	1.031220	.4751883	.7798676
#1	3852.556	59548.56	6373.915	2940.420	3949.631
#2	3900.233	59433.47	6418.581	2912.663	4008.599
#3	3890.888	59443.09	6504.429	2925.080	3996.122

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05LX5 Acquired: 10/29/2025 18:20:59 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0222541**	**-.010141**	**.0002565**	**.1871349**	**-.001784**	**.6085484**
Stddev	.0020774	.003110	.0002141	.0018953	.002351	.0153852
%RSD	9.334942	30.67054	83.44938	1.012796	131.8066	2.528179
#1	.0226195	-.011259	.0004663	.1886975	-.000288	.6240762
#2	.0241246	-.012538	.0000384	.1850266	-.004493	.6082592
#3	.0200183	-.006626	.0002649	.1876806	-.000570	.5933099

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035336**	**.0000878**	**-.000002**	**.3902040**	**.0076241**	**.0002597**
Stddev	.0010657	.0000241	.000061	.0166406	.0003127	.0000882
%RSD	30.16025	27.46019	2581.738	4.264590	4.102125	33.96742
#1	.0035360	.0001156	.000063	.3787965	.0079744	.0003064
#2	.0045981	.0000760	-.000058	.3825171	.0075248	.0003146
#3	.0024666	.0000718	-.000012	.4092985	.0073730	.0001579

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037386**	**.1903625**	**.0050889**	**.3045483**	**.0068888**	**-.000234**
Stddev	.0003319	.0042686	.0000873	.0358975	.0002717	.000131
%RSD	8.877983	2.242325	1.716388	11.78713	3.944280	56.05705
#1	.0039989	.1952477	.0050686	.3288336	.0065776	-.000143
#2	.0033648	.1873526	.0051846	.2633144	.0070790	-.000174
#3	.0038520	.1884873	.0050135	.3214968	.0070098	-.000385

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2117.256**	**.0031326**	**.1086833**	**13.93169**	**3.308107**	**.0116011**
Stddev	53.343	.0040075	.0002203	.26688	.028994	.0002224
%RSD	2.519441	127.9289	.2027241	1.915633	.8764651	1.916796
#1	2171.204	.0016527	.1087498	13.74795	3.318557	.0114020
#2	2116.026	.0076696	.1084374	13.80930	3.330427	.0118411
#3	2064.539	.0000755	.1088627	14.23781	3.275336	.0115601

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05LX5 Acquired: 10/29/2025 18:20:59 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197612	.0121239	9.663585	.0539647	F 536.2196	.0405681
Stddev	.0005509	.0026605	.320038	.0002335	4.4430	.0033481
%RSD	2.787998	21.94444	3.311790	.4326919	.8285711	8.253139
#1	.0196211	.0132684	10.00361	.0542014	538.0924	.0375774
#2	.0203687	.0090826	9.61893	.0539582	539.4194	.0399415
#3	.0192939	.0140206	9.36822	.0537346	531.1468	.0441852

Elem	Sr4077
Units	ppm
Avg	.0036651
Stddev	.0000901
%RSD	2.458340
#1	.0036076
#2	.0037689
#3	.0036188

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4937.028	73790.02	6760.097	3791.870	5270.720
Stddev	4.485	105.16	48.231	16.658	5.678
%RSD	.0908352	.1425075	.7134668	.4393152	.1077315
#1	4941.142	73714.80	6743.095	3772.691	5270.675
#2	4932.247	73910.18	6722.670	3800.188	5265.064
#3	4937.693	73745.07	6814.527	3802.731	5276.421

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05MS Acquired: 10/29/2025 18:25:23 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.125544**	**2.038673**	**.9842026**	**3.757754**	**1.013717**	**5.127352**
Stddev	.003670	.082470	.0075275	.027709	.010383	.010490
%RSD	.3260399	4.045268	.7648347	.7373890	1.024295	.2045883
#1	1.127283	1.969443	.9755264	3.789097	1.025662	5.131299
#2	1.128021	2.129915	.9889954	3.747649	1.008638	5.115461
#3	1.121328	2.016661	.9880860	3.736515	1.006851	5.135295

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2227899**	**.1919388**	**.2159711**	**2.721920**	**.4417452**	**.2161861**
Stddev	.0013170	.0011584	.0011297	.016575	.0025049	.0010446
%RSD	.5911527	.6034976	.5230552	.6089406	.5670435	.4832060
#1	.2236532	.1908723	.2146741	2.739301	.4446197	.2150363
#2	.2234424	.1917731	.2167398	2.720167	.4400302	.2170767
#3	.2212740	.1931711	.2164994	2.706291	.4405855	.2164453

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2975293**	**5.098753**	**.2248469**	**3.284520**	**.5635994**	**.1102769**
Stddev	.0008241	.012827	.0017264	.023407	.0028676	.0001261
%RSD	.2769983	.2515675	.7678268	.7126465	.5087924	.1143859
#1	.2968966	5.110371	.2242556	3.267649	.5602883	.1102166
#2	.2984613	5.084988	.2234938	3.311242	.5652295	.1101923
#3	.2972299	5.100899	.2267913	3.274668	.5652802	.1104219

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **6274.640**	**.3214799**	**.8253307**	**60.49570**	F **12.90650**	**.4859944**
Stddev	93.312	.0062029	.0030370	1.36121	.06431	.0015024
%RSD	1.487122	1.929496	.3679723	2.250090	.4982379	.3091424
#1	6365.119	.3169844	.8262780	59.05579	12.83450	.4873329
#2	6280.069	.3188986	.8277812	60.66986	12.92680	.4862810
#3	6178.733	.3285567	.8219330	61.76144	12.95821	.4843694

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05MS Acquired: 10/29/2025 18:25:23 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7403815	.2663893	F 30.81708	8.523770	F 1728.518	.3302497
Stddev	.0072364	.0005479	.51205	.010406	21.075	.0012084
%RSD	.9773882	.2056821	1.661592	.1220775	1.219226	.3658956
#1	.7321160	.2658144	30.30304	8.531714	1704.644	.3289619
#2	.7455758	.2664480	30.82107	8.511992	1744.536	.3304286
#3	.7434526	.2669056	31.32712	8.527606	1736.375	.3313587

Elem	Sr4077
Units	ppm
Avg	.2223554
Stddev	.0003507
%RSD	.1577092
#1	.2226411
#2	.2224611
#3	.2219641

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3834.320	59403.47	6223.294	2948.963	3911.317
Stddev	.938	413.93	9.986	8.986	10.227
%RSD	.0244626	.6968101	.1604697	.3047170	.2614793
#1	3833.916	58961.64	6225.653	2939.125	3922.662
#2	3833.652	59466.50	6231.889	2951.024	3908.484
#3	3835.392	59782.27	6212.339	2956.739	3902.805

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05MSD Acquired: 10/29/2025 18:29:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.026823**	**1.862089**	**.8826041**	**3.517503**	**.9199033**	**4.816904**
Stddev	.003917	.044787	.0037033	.014538	.0021855	.009697
%RSD	.3814419	2.405182	.4195930	.4133001	.2375766	.2013202
#1	1.030604	1.833033	.8857446	3.533274	.9224175	4.812883
#2	1.022784	1.913666	.8785204	3.514598	.9184579	4.827965
#3	1.027080	1.839568	.8835474	3.504638	.9188345	4.809864

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1992567**	**.1638291**	**.1943720**	**2.593063**	**.3999623**	**.1952410**
Stddev	.0013304	.0003032	.0006826	.013355	.0006597	.0009375
%RSD	.6676883	.1850378	.3511986	.5150291	.1649445	.4801828
#1	.1980538	.1634791	.1950194	2.581962	.3992872	.1960485
#2	.2006856	.1639989	.1936589	2.589343	.3999944	.1942128
#3	.1990305	.1640092	.1944378	2.607883	.4006054	.1954616

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2706392**	**4.843503**	**.2014648**	**2.994582**	**.5103513**	**.0997345**
Stddev	.0011644	.015970	.0015013	.052192	.0019348	.0012459
%RSD	.4302272	.3297235	.7451684	1.742896	.3791128	1.249182
#1	.2716220	4.844051	.1999958	2.974007	.5123949	.1011278
#2	.2693532	4.859193	.2014023	3.053926	.5085477	.0993481
#3	.2709423	4.827267	.2029963	2.955812	.5101115	.0987276

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **6274.122**	**.2875115**	**.8012526**	**64.95508**	F **12.23006**	**.4460739**
Stddev	15.642	.0022303	.0056684	1.55239	.02657	.0009837
%RSD	.2493040	.7757287	.7074379	2.389950	.2172438	.2205198
#1	6283.543	.2849363	.8021518	63.24295	12.20311	.4470239
#2	6282.756	.2888144	.8064176	65.35136	12.23084	.4450597
#3	6256.066	.2887840	.7951884	66.27092	12.25623	.4461381

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05MSD Acquired: 10/29/2025 18:29:31 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6717074	.2456893	F 32.88453	7.731922	F 1724.512	.2929782
Stddev	.0016989	.0031710	.46403	.017312	3.011	.0022462
%RSD	.2529264	1.290672	1.411087	.2239040	.1746155	.7666596
#1	.6708341	.2493300	32.39572	7.751088	1727.315	.2905471
#2	.6706227	.2442077	32.93887	7.727259	1724.892	.2934110
#3	.6736654	.2435302	33.31900	7.717418	1721.328	.2949764

Elem	Sr4077
Units	ppm
Avg	.2010722
Stddev	.0002958
%RSD	.1470919
#1	.2008041
#2	.2013894
#3	.2010231

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3831.296	59826.17	6603.690	2956.054	3906.269
Stddev	10.978	147.57	23.768	31.065	14.670
%RSD	.2865333	.2466637	.3599261	1.050878	.3755462
#1	3819.577	59897.80	6630.902	2961.900	3889.677
#2	3841.340	59656.45	6593.176	2922.482	3917.522
#3	3832.970	59924.24	6586.992	2983.780	3911.608

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05A Acquired: 10/29/2025 18:33:39 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.009908	1.764726	.8813425	3.380298	.9046021	4.447872
Stddev	.007415	.034792	.0053662	.014745	.0013254	.007956
%RSD	.7342397	1.971523	.6088605	.4361913	.1465166	.1788830
#1	1.002531	1.726609	.8752252	3.363348	.9035235	4.449710
#2	1.009833	1.772792	.8835470	3.387390	.9060817	4.439158
#3	1.017361	1.794776	.8852554	3.390157	.9042010	4.454750

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1916053	.1600411	.1923294	2.415859	.3925961	.1925833
Stddev	.0007418	.0007681	.0006767	.006241	.0013943	.0008861
%RSD	.3871251	.4799167	.3518534	.2583447	.3551508	.4601220
#1	.1924540	.1594900	.1916363	2.408845	.3911681	.1915795
#2	.1912812	.1609184	.1923633	2.420800	.3926661	.1929135
#3	.1910809	.1597148	.1929885	2.417933	.3939541	.1932569

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2668579	4.716836	.1966971	2.874914	.5018115	.0976555
Stddev	.0009303	.019903	.0009717	.067296	.0018649	.0003039
%RSD	.3486138	.4219481	.4940156	2.340790	.3716403	.3111615
#1	.2665638	4.706708	.1977932	2.797276	.4996592	.0980049
#2	.2661102	4.704034	.1959412	2.916556	.5029471	.0975086
#3	.2678997	4.739765	.1963570	2.910909	.5028283	.0974529

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5857.374	.2839660	.7529242	62.03342	F 11.21736	.4368466
Stddev	18.199	.0020242	.0037046	1.65480	.04224	.0014549
%RSD	.3107056	.7128372	.4920347	2.667592	.3765865	.3330539
#1	5878.032	.2816889	.7497016	60.43024	11.19877	.4352434
#2	5843.708	.2855612	.7569718	61.93462	11.26571	.4372135
#3	5850.382	.2846478	.7520991	63.73541	11.18760	.4380830

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: Q3420-05A Acquired: 10/29/2025 18:33:39 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6606018**	**.2330627**	F **32.02962**	**7.475327**	F **1617.773**	**.2733215**
Stddev	.0031511	.0024905	.40312	.025856	10.265	.0026840
%RSD	.4770051	1.068589	1.258574	.3458805	.6345012	.9819769
#1	.6573803	.2315803	31.67308	7.448658	1607.041	.2727155
#2	.6607477	.2316698	31.94873	7.500285	1618.783	.2709924
#3	.6636774	.2359380	32.46704	7.477037	1627.496	.2762567

Elem	Sr4077
Units	ppm
Avg	**.1986678**
Stddev	.0005575
%RSD	.2806034
#1	.1983439
#2	.1993115
#3	.1983480

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3952.105**	**61811.12**	**6845.877**	**3048.276**	**4049.841**
Stddev	6.392	259.15	22.341	6.080	9.471
%RSD	.1617427	.4192664	.3263395	.1994456	.2338639
#1	3958.005	62026.68	6866.398	3053.609	4060.428
#2	3952.995	61883.09	6822.078	3041.656	4046.923
#3	3945.314	61523.59	6849.156	3049.564	4042.173

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV06 Acquired: 10/29/2025 18:55:44 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.794660**	**5.489646**	**4.915123**	**4.772308**	**4.737322**	**9.450605**
Stddev	.013531	.051352	.012026	.010476	.018453	.032801
%RSD	.2822094	.9354277	.2446642	.2195064	.3895266	.3470825
#1	4.779064	5.434597	4.905328	4.762496	4.716152	9.420118
#2	4.801653	5.536254	4.911498	4.771087	4.750004	9.446385
#3	4.803263	5.498088	4.928545	4.783340	4.745811	9.485312

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.692988**	**.2527308**	**2.472349**	**24.45815**	**1.006992**	**2.457145**
Stddev	.051815	.0014115	.005850	.07173	.003146	.003827
%RSD	.5345605	.5585206	.2366369	.2932835	.3123979	.1557405
#1	9.633265	.2511217	2.467930	24.40226	1.010508	2.454789
#2	9.725958	.2533100	2.470134	24.43316	1.006023	2.455086
#3	9.719740	.2537606	2.478984	24.53904	1.004445	2.461561

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.192465**	**4.858584**	**2.454996**	**24.83725**	**2.468417**	**1.242017**
Stddev	.004365	.008238	.016274	.13094	.004130	.001600
%RSD	.3660234	.1695564	.6629054	.5272044	.1673184	.1288162
#1	1.187454	4.867258	2.436327	24.75265	2.465683	1.240216
#2	1.194499	4.850865	2.462470	24.77102	2.466401	1.242557
#3	1.195441	4.857628	2.466191	24.98807	2.473168	1.243276

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.26310**	**2.445107**	**2.252550**	**25.95918**	**5.141341**	**4.818101**
Stddev	.35537	.013532	.002265	.09562	.043863	.012448
%RSD	1.353117	.5534233	.1005735	.3683334	.8531519	.2583573
#1	26.66247	2.430975	2.251722	26.06915	5.090699	4.804764
#2	26.14510	2.446399	2.255113	25.91264	5.165901	4.820126
#3	25.98175	2.457946	2.250815	25.89574	5.167423	4.829412

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCV06 Acquired: 10/29/2025 18:55:44 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.024342**	**4.887921**	F **5.506660**	**4.625794**	**5.155324**	**4.564279**
Stddev	.008100	.019506	.051602	.013373	.016562	.011777
%RSD	.1612061	.3990607	.9370842	.2891032	.3212641	.2580193
#1	5.016181	4.865789	5.563763	4.616852	5.147966	4.550687
#2	5.024466	4.895368	5.492845	4.619361	5.174290	4.570714
#3	5.032379	4.902606	5.463372	4.641168	5.143716	4.571436

Elem	Sr4077
Units	ppm
Avg	**4.882217**
Stddev	.093396
%RSD	1.912985
#1	4.774505
#2	4.931446
#3	4.940700

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6184.626**	**91291.21**	**6843.879**	**5434.026**	**6735.636**
Stddev	10.414	149.92	50.561	14.154	5.885
%RSD	.1683797	.1642231	.7387742	.2604672	.0873671
#1	6194.359	91126.96	6897.990	5444.435	6735.174
#2	6185.874	91420.69	6835.807	5439.732	6741.737
#3	6173.644	91325.99	6797.840	5417.909	6729.995

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB06 Acquired: 10/29/2025 19:04:41 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001578**	**-.002617**	**-.000277**	**.0020717**	**-.004798**	**-.013439**
Stddev	.000698	.001252	.000726	.0037128	.001247	.010339
%RSD	44.24694	47.85022	262.1140	179.2129	25.99268	76.92929
#1	-.000818	-.003736	-.000156	-.002156	-.005278	-.005915
#2	-.002191	-.001264	.000381	.003569	-.003382	-.009175
#3	-.001726	-.002852	-.001055	.004802	-.005734	-.025228

Elem	Ba4934	Be2348	Cd2265	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063644**	**-.000025**	**-.000066**	**-.019734**	**.0003161**	**-.000117**
Stddev	.0001697	.000054	.000046	.012733	.0002426	.000067
%RSD	2.666443	217.8691	69.48677	64.52611	76.76275	56.77629
#1	.0063086	-.000046	-.000040	-.030263	.0002676	-.000045
#2	.0062296	-.000064	-.000039	-.005581	.0005793	-.000131
#3	.0065550	.000036	-.000119	-.023358	.0001014	-.000176

Elem	Cu2247	Fe2404	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000221**	**-.012253**	**.0009056**	**-.021556**	**.0000159**	**-.000288**
Stddev	.000387	.004145	.0006117	.036543	.0001764	.000443
%RSD	175.3260	33.83130	67.55009	169.5230	1108.648	153.6669
#1	-.000215	-.014511	.0009295	-.059805	-.000065	-.000001
#2	.000163	-.014780	.0015050	-.017865	-.000106	-.000066
#3	-.000610	-.007469	.0002823	.013001	.000218	-.000798

Elem	Na5895	V_2924	Zn2138	K_7664	B_2496	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3636523**	**-.000900**	**-.000367**	**.0392984**	F **.0742915**	**.0000139**
Stddev	.0075102	.001408	.000156	.0195389	.0015745	.0002255
%RSD	2.065220	156.4199	42.39071	49.71926	2.119373	1618.248
#1	.3637306	.000707	-.000279	.0596963	.0752493	-.000234
#2	.3561032	-.001492	-.000547	.0374485	.0751508	.000207
#3	.3711230	-.001916	-.000276	.0207502	.0724743	.000069

Reviewed By:
On:
Inst Id :P4
LB :LB137697

Sample Name: CCB06 Acquired: 10/29/2025 19:04:41 Type: Unk
Method: 6010-200.7 NEW(v324) Mode: CONC Corr. Factor: 1.000000
User: Jaswal Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Ti3361	Si2881	P_1774	S_1820	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056647	-.001224	F .2837423	.0015474	F .0344516	-.003212
Stddev	.0002881	.002830	.0052769	.0011670	.0012990	.000960
%RSD	5.085445	231.2551	1.859754	75.41465	3.770611	29.90157
#1	.0056596	-.004304	.2898324	.0024494	.0359511	-.002459
#2	.0059553	.001261	.2805275	.0002294	.0337378	-.004294
#3	.0053792	-.000628	.2808670	.0019634	.0336661	-.002883

Elem	Sr4077
Units	ppm
Avg	-.000082
Stddev	.000050
%RSD	60.37675
#1	-.000140
#2	-.000052
#3	-.000055

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6502.806	95999.07	6881.786	5707.122	7862.436
Stddev	21.313	132.96	23.461	27.932	29.818
%RSD	.3277478	.1385025	.3409117	.4894166	.3792447
#1	6496.827	96106.12	6881.073	5680.079	7845.170
#2	6485.121	96040.85	6858.690	5735.864	7845.270
#3	6526.470	95850.23	6905.595	5705.422	7896.866

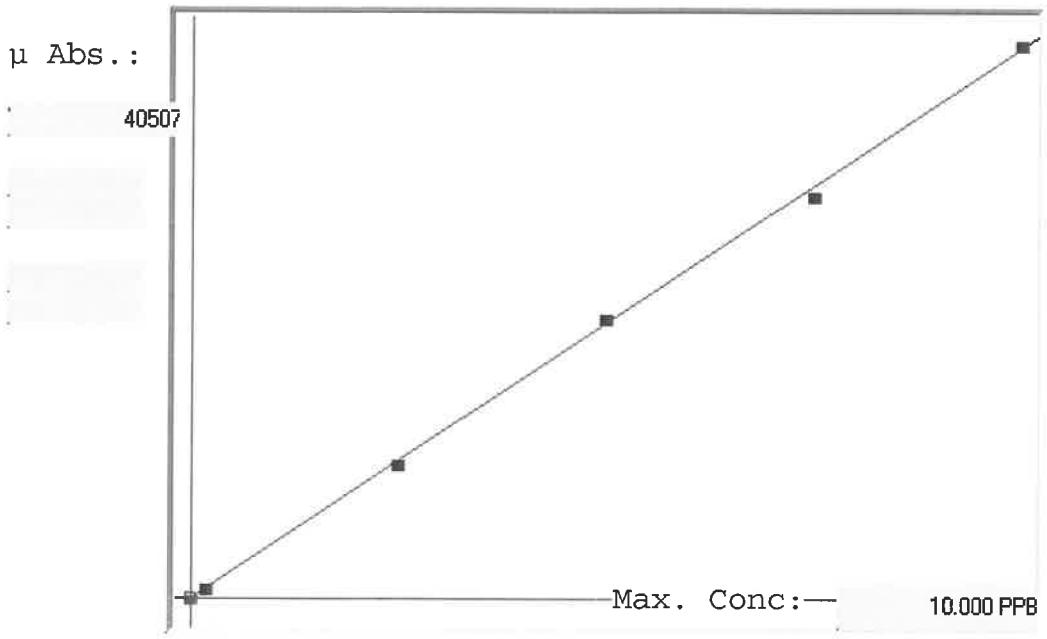
Reviewed By:mohan
On:10/27/2025 8:28:12 AM
Inst Id :CV1
LB :LB137632

LB137632

7470A

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 2.4849e-004

C= 1.6137e-003

Rho= 0.9997185

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0	0.000	0.023	0.023	88	0.000	88	0			
0.2	0.200	0.188	-0.012	752	0.0 %	752	0			
2.5	2.500	2.466	-0.034	9918	0.0 %	9918	0			
5.0	5.000	5.116	0.116	20584	0.0 %	20584				
7.5	7.500	7.338	-0.162	29526	0.0 %	29526				
10.0	10.000	10.067	0.067	40507	0.0 %	40507				

Reviewed By:mohan
On:10/27/2025 8:28:12 AM
Inst Id :CV1
LB :LB137632

LB137632 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 24 Oct 2025 08:35:03

Type	Sample ID	Extended ID	Conc.	µ Abs.	Units	Type	Stnd Conc	Method	Date
S	0.0 - 1	50	-	88	PPB	Std	0.0000	7470A	24 Oct 2025 08:58:43
S	0.2 - 1	502	-	752	PPB	Std	0.2000	7470A	24 Oct 2025 09:01:08
S	2.5 - 1	5215	-	9918	PPB	Std	2.5000	7470A	24 Oct 2025 09:03:25
S	5.0 - 1	55	-	20584	PPB	Std	5.0000	7470A	24 Oct 2025 09:05:42
S	7.5 - 1	5215	-	29526	PPB	Std	7.5000	7470A	24 Oct 2025 09:08:01
S	10.0 - 1	511	-	40507	PPB	Std	10.0000	7470A	24 Oct 2025 09:10:20
U	ICV86 - 1	ICV86	4.1563	16720	PPB	SMPL	-	7470A	24 Oct 2025 09:20:59
U	ICB86 - 1	ICB86	-0.0449	-187	PPB	SMPL	-	7470A	24 Oct 2025 09:23:13
U	CCV83 - 1	CCV83	4.6580	18739	PPB	SMPL	-	7470A	24 Oct 2025 09:25:31
U	CCB83 - 1	CCB83	0.0076	24	PPB	SMPL	-	7470A	24 Oct 2025 09:30:40
U	CRA - 1	CRA	0.1654	659	PPB	SMPL	-	7470A	24 Oct 2025 09:32:55
U	HighStd - 1	HighStd	10.0211	40322	PPB	SMPL	-	7470A	24 Oct 2025 09:37:50
U	ChkStd - 1	ChkStd	7.5549	30397	PPB	SMPL	-	7470A	24 Oct 2025 09:45:39
U	PB170231BL - 1	PBW	0.0039	9	PPB	SMPL	-	7470A	24 Oct 2025 09:50:52
U	PB170231BS - 1	LCSW	3.9811	16015	PPB	SMPL	-	7470A	24 Oct 2025 09:55:45
U	Q3414-01 - 1	SB-1	-0.0660	-272	PPB	SMPL	-	7470A	24 Oct 2025 09:58:02
U	Q3414-02 - 1	SB-2	-0.0039	-22	PPB	SMPL	-	7470A	24 Oct 2025 10:00:21
U	Q3414-03 - 1	SB-3	0.0106	36	PPB	SMPL	-	7470A	24 Oct 2025 10:02:38
U	Q3414-04 - 1	SB-4	0.0163	59	PPB	SMPL	-	7470A	24 Oct 2025 10:04:55
U	Q3414-05 - 1	SB-5	0.0101	34	PPB	SMPL	-	7470A	24 Oct 2025 10:07:11
U	CCV84 - 1	CCV84	5.0633	20370	PPB	SMPL	-	7470A	24 Oct 2025 10:09:27
U	CCB84 - 1	CCB84	-0.0645	-266	PPB	SMPL	-	7470A	24 Oct 2025 10:11:42
U	Q3414-06 - 1	SB-6	0.0034	7	PPB	SMPL	-	7470A	24 Oct 2025 10:14:01
U	Q3414-07 - 1	SB-7	0.0004	-5	PPB	SMPL	-	7470A	24 Oct 2025 10:16:15
U	Q3414-08 - 1	SB-8	0.0006	-4	PPB	SMPL	-	7470A	24 Oct 2025 10:18:31
U	Q3414-09 - 1	SB-9	0.0039	9	PPB	SMPL	-	7470A	24 Oct 2025 10:20:46
U	Q3414-10 - 1	SB-10	-0.0116	-53	PPB	SMPL	-	7470A	24 Oct 2025 10:23:02
U	Q3414-11 - 1	SB-11	-0.0083	-40	PPB	SMPL	-	7470A	24 Oct 2025 10:25:27
U	Q3414-12 - 1	SB-12	0.0036	8	PPB	SMPL	-	7470A	24 Oct 2025 10:28:13
U	Q3414-13 - 1	SB-13	0.0222	83	PPB	SMPL	-	7470A	24 Oct 2025 10:31:09
U	Q3427-04 - 1	TP-8	0.0116	40	PPB	SMPL	-	7470A	24 Oct 2025 10:34:01
U	Q3427-04DUP - 1	TP-8DUP	0.0128	45	PPB	SMPL	-	7470A	24 Oct 2025 10:36:24
U	CCV85 - 1	CCV85	5.0486	20311	PPB	SMPL	-	7470A	24 Oct 2025 10:40:53
U	CCB85 - 1	CCB85	-0.0642	-265	PPB	SMPL	-	7470A	24 Oct 2025 10:43:08
U	Q3427-04MS - 1	TP-8MS	4.0027	16102	PPB	SMPL	-	7470A	24 Oct 2025 10:45:27
U	Q3427-04MSD - 1	TP-8MSD	3.8914	15654	PPB	SMPL	-	7470A	24 Oct 2025 10:47:42
U	PB170232BL - 1	PBW	-0.0461	-192	PPB	SMPL	-	7470A	24 Oct 2025 10:50:10
U	PB170232BS - 1	LCSW	3.7523	15094	PPB	SMPL	-	7470A	24 Oct 2025 10:52:35
U	Q3417-01 - 1	101425	0.0103	35	PPB	SMPL	-	7470A	24 Oct 2025 10:54:51
U	Q3420-05 - 1	COMPOSITE	1.8605	7481	PPB	SMPL	-	7470A	24 Oct 2025 10:57:10
U	Q3422-02 - 1	PR132-FB2-20251021	-0.0680	-280	PPB	SMPL	-	7470A	24 Oct 2025 10:59:26
U	Q3434-02 - 1	PR132-WC2-20251022	1.0256	4121	PPB	SMPL	-	7470A	24 Oct 2025 11:01:45
U	Q3434-02DUP - 1	PR132-WC2-20251022DUP	1.0400	4179	PPB	SMPL	-	7470A	24 Oct 2025 11:04:02
U	Q3434-02MS - 1	PR132-WC2-20251022MS	4.6545	18725	PPB	SMPL	-	7470A	24 Oct 2025 11:06:19
U	CCV86 - 1	CCV86	5.0126	20166	PPB	SMPL	-	7470A	24 Oct 2025 11:12:30
U	CCB86 - 1	CCB86	-0.0779	-320	PPB	SMPL	-	7470A	24 Oct 2025 11:14:45
U	Q3434-02MSD - 1	PR132-WC2-20251022MSD	4.6173	18575	PPB	SMPL	-	7470A	24 Oct 2025 11:17:04
U	PB170202TB - 1	PB170202TB	-0.0632	-261	PPB	SMPL	-	7470A	24 Oct 2025 11:19:19
U	Q3427-04LX5 - 1		0.0009	-3	PPB	SMPL	-	7470A	24 Oct 2025 11:21:39
U	Q3427-04A - 1		3.9578	15921	PPB	SMPL	-	7470A	24 Oct 2025 11:23:54
U	Q3434-02LX5 - 1		0.1557	620	PPB	SMPL	-	7470A	24 Oct 2025 11:29:00
U	Q3434-02A - 1		5.1214	20604	PPB	SMPL	-	7470A	24 Oct 2025 11:31:16
U	CCV87 - 1	CCV87	4.7002	18909	PPB	SMPL	-	7470A	24 Oct 2025 11:33:33
U	CCB87 - 1	CCB87	-0.0061	-31	PPB	SMPL	-	7470A	24 Oct 2025 11:38:25

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB170225

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: 10/23/2025 **Time :** 10:35 **Temp :** 96 °C

End Digest Date: 10/23/2025 **Time :** 13:40 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLS

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6209
LFS-2	0.25	M6201
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP87148
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#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/23/25 14:40	SLS met dig	(Metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB170225

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB170225BL	PBW225	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	1
PB170225BS	LCS225	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	2
Q3417-01	101425	<2	50	25	Brown	Colorless	Clear	Clear	N/A	3
Q3420-05	COMPOSITE	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	4
Q3420-05MS	COMPOSITEMS	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	6
Q3420-05MSD	COMPOSITEMSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	7
Q3420-05DUP	COMPOSITEDUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	5
Q3422-02	PR132-FB2-20251021	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	8
Q3434-02	PR132-WC2-20251022	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB170225 **WorkList ID :** 192641 **Department :** Digestion **Date :** 10-23-2025 10:03:24

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3417-01	101425	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	D31	10/21/2025	6010D
Q3420-05	COMPOSITE	Water	Metals ICP-Group1	1:1 HNO3 to pH < 2	DALT01	J22	10/21/2025	6010D
Q3422-02	PR132-FB2-20251021	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	AECO02	D41	10/21/2025	6010D
Q3434-02	PR132-WC2-20251022	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	AECO02	D41	10/22/2025	6010D

Date/Time 10/23/25 10:15
Raw Sample Received by: Sigmet dig
Raw Sample Relinquished by: CPCSm

Date/Time 10/23/25 11:45
Raw Sample Received by: CPCSm
Raw Sample Relinquished by: Sigmet dig

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB170305

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: 10/29/2025 **Time :** 09:35 **Temp :** 96 °C

End Digest Date: 10/29/2025 **Time :** 12:35 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SJ28.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LFS-1	0.25	M6209
LFS-2	0.25	M6201
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP87148
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#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/29/25 13:35	SPS met dig	SJ / Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB170305

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB170305BL	PBW305	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	9
PB170305BS	LCS305	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	10
Q3475-01	GW-DRUM	<2	50	25	Brown	Colorless	Cloudy	Clear	N/A	11
Q3477-03	SOUTH-MAHWAH-WATER	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	12
Q3477-03MS	SOUTH-MAHWAH-WATERMS	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	14
Q3477-03MSD	SOUTH-MAHWAH-WATERMSD	<2	50	25	Colorless	Colorless	Clear	Clear	M6209,M6201	15
Q3477-03DUP	SOUTH-MAHWAH-WATERDUP	<2	50	25	Colorless	Colorless	Clear	Clear	N/A	13

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB170305 **WorkList ID :** 192754 **Department :** Digestion **Date :** 10-29-2025 08:51:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3475-01	GW-DRUM	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	D41	10/28/2025	6010D
Q3477-03	SOUTH-MAHWAH-WATER	Water	Metals PSEG Group2	1:1 HNO3 to pH < 2	PSEG03	D41	10/28/2025	6010D

Date/Time 10/29/25 09:10
Raw Sample Received by: SLS motdlg
Raw Sample Relinquished by: CVP(SM)

Date/Time 10/29/25 10:10
Raw Sample Received by: CVP(SM)
Raw Sample Relinquished by: SLS motdlg

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 # LB137632

Review By	jaswal	Review On	10/24/2025 6:53:25 PM
Supervise By	mohan	Supervise On	10/27/2025 8:28:12 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87732

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/24/25 08:58		mohan	OK
2	S0.2	S0.2	CAL2	10/24/25 09:01		mohan	OK
3	S2.5	S2.5	CAL3	10/24/25 09:03		mohan	OK
4	S5	S5	CAL4	10/24/25 09:05		mohan	OK
5	S7.5	S7.5	CAL5	10/24/25 09:08		mohan	OK
6	S10	S10	CAL6	10/24/25 09:10		mohan	OK
7	ICV86	ICV86	ICV	10/24/25 09:20		mohan	OK
8	ICB86	ICB86	ICB	10/24/25 09:23		mohan	OK
9	CCV83	CCV83	CCV	10/24/25 09:25		mohan	OK
10	CCB83	CCB83	CCB	10/24/25 09:30		mohan	OK
11	CRA	CRA	CRDL	10/24/25 09:32		mohan	OK
12	HighStd	HighStd	HIGH STD	10/24/25 09:37		mohan	OK
13	ChkStd	ChkStd	SAM	10/24/25 09:45		mohan	OK
14	PB170231BL	PB170231BL	MB	10/24/25 09:50		mohan	OK
15	PB170231BS	PB170231BS	LCS	10/24/25 09:55		mohan	OK
16	Q3414-01	SB-1	SAM	10/24/25 09:58		mohan	OK
17	Q3414-02	SB-2	SAM	10/24/25 10:00		mohan	OK
18	Q3414-03	SB-3	SAM	10/24/25 10:02		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB137632

Review By	jaswal	Review On	10/24/2025 6:53:25 PM
Supervise By	mohan	Supervise On	10/27/2025 8:28:12 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87732

19	Q3414-04	SB-4	SAM	10/24/25 10:04		mohan	OK
20	Q3414-05	SB-5	SAM	10/24/25 10:07		mohan	OK
21	CCV84	CCV84	CCV	10/24/25 10:09		mohan	OK
22	CCB84	CCB84	CCB	10/24/25 10:11		mohan	OK
23	Q3414-06	SB-6	SAM	10/24/25 10:14		mohan	OK
24	Q3414-07	SB-7	SAM	10/24/25 10:16		mohan	OK
25	Q3414-08	SB-8	SAM	10/24/25 10:18		mohan	OK
26	Q3414-09	SB-9	SAM	10/24/25 10:20		mohan	OK
27	Q3414-10	SB-10	SAM	10/24/25 10:23		mohan	OK
28	Q3414-11	SB-11	SAM	10/24/25 10:25		mohan	OK
29	Q3414-12	SB-12	SAM	10/24/25 10:28		mohan	OK
30	Q3414-13	SB-13	SAM	10/24/25 10:31		mohan	OK
31	Q3427-04	TP-8	SAM	10/24/25 10:34		mohan	OK
32	Q3427-04DUP	TP-8DUP	DUP	10/24/25 10:36		mohan	OK
33	CCV85	CCV85	CCV	10/24/25 10:40		mohan	OK
34	CCB85	CCB85	CCB	10/24/25 10:43		mohan	OK
35	Q3427-04MS	TP-8MS	MS	10/24/25 10:45		mohan	OK
36	Q3427-04MSD	TP-8MSD	MSD	10/24/25 10:47		mohan	OK
37	PB170232BL	PB170232BL	MB	10/24/25 10:50		mohan	OK
38	PB170232BS	PB170232BS	LCS	10/24/25 10:52		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB137632

Review By	jaswal	Review On	10/24/2025 6:53:25 PM
Supervise By	mohan	Supervise On	10/27/2025 8:28:12 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87732

39	Q3417-01	101425	SAM	10/24/25 10:54		mohan	OK
40	Q3420-05	COMPOSITE	SAM	10/24/25 10:57		mohan	OK
41	Q3422-02	PR132-FB2-2025102	SAM	10/24/25 10:59		mohan	OK
42	Q3434-02	PR132-WC2-2025102	SAM	10/24/25 11:01		mohan	OK
43	Q3434-02DUP	PR132-WC2-2025102	DUP	10/24/25 11:04		mohan	OK
44	Q3434-02MS	PR132-WC2-2025102	MS	10/24/25 11:06		mohan	OK
45	CCV86	CCV86	CCV	10/24/25 11:12		mohan	OK
46	CCB86	CCB86	CCB	10/24/25 11:14		mohan	OK
47	Q3434-02MSD	PR132-WC2-2025102	MSD	10/24/25 11:17		mohan	OK
48	PB170202TB	PB170202TB	MB	10/24/25 11:19		mohan	OK
49	Q3427-04L	TP-8L	SD	10/24/25 11:21		mohan	OK
50	Q3427-04A	TP-8A	PS	10/24/25 11:23		mohan	OK
51	Q3434-02L	PR132-WC2-2025102	SD	10/24/25 11:29		mohan	OK
52	Q3434-02A	PR132-WC2-2025102	PS	10/24/25 11:31		mohan	OK
53	CCV87	CCV87	CCV	10/24/25 11:33		mohan	OK
54	CCB87	CCB87	CCB	10/24/25 11:38		mohan	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137662

Review By	Janvi	Review On	10/28/2025 11:25:13 AM
Supervise By	jaswal	Supervise On	10/28/2025 3:16:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/24/25 14:07		Jaswal	OK
2	S1	S1	CAL2	10/24/25 14:12		Jaswal	OK
3	S2	S2	CAL3	10/24/25 14:16		Jaswal	OK
4	S3	S3	CAL4	10/24/25 14:20		Jaswal	OK
5	S4	S4	CAL5	10/24/25 14:24		Jaswal	OK
6	S5	S5	CAL6	10/24/25 14:29		Jaswal	OK
7	ICV01	ICV01	ICV	10/24/25 14:33		Jaswal	OK
8	LLICV01	LLICV01	LLICV	10/24/25 14:38		Jaswal	OK
9	ICB01	ICB01	ICB	10/24/25 14:43		Jaswal	OK
10	CRI01	CRI01	CRDL	10/24/25 14:48		Jaswal	OK
11	ICSA01	ICSA01	ICSA	10/24/25 14:52		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	10/24/25 14:56		Jaswal	OK
13	ICSADL	ICSADL	ICSA	10/24/25 15:01		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	10/24/25 15:07		Jaswal	OK
15	CCV01	CCV01	CCV	10/24/25 15:12		Jaswal	OK
16	CCB01	CCB01	CCB	10/24/25 15:16		Jaswal	OK
17	PB170225BL	PB170225BL	MB	10/24/25 15:20		Jaswal	OK
18	PB170225BS	PB170225BS	LCS	10/24/25 15:24		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137662

Review By	Janvi	Review On	10/28/2025 11:25:13 AM
Supervise By	jaswal	Supervise On	10/28/2025 3:16:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

19	LR-2	LR-2	HIGH STD	10/24/25 15:33		Jaswal	OK
20	LR-3	LR-3	HIGH STD	10/24/25 15:37		Jaswal	OK
21	LR-1	LR-1	HIGH STD	10/24/25 15:42		Jaswal	OK
22	Q3422-02	PR132-FB2-2025102	SAM	10/24/25 15:51		Jaswal	OK
23	Q3434-02	PR132-WC2-2025102	SAM	10/24/25 15:55	Na high	Jaswal	Dilution
24	Q3417-01	101425	SAM	10/24/25 16:00	NOT USE	Jaswal	Not Ok
25	CCV02	CCV02	CCV	10/24/25 16:32		Jaswal	OK
26	CCB02	CCB02	CCB	10/24/25 16:47		Jaswal	OK
27	Q3440-01	JB-2	SAM	10/24/25 17:55		Jaswal	OK
28	Q3447-01	P001-TW1-251023-01	SAM	10/24/25 17:59	Fe high & Ag oversaturated.	Jaswal	Dilution
29	Q3447-03	P001-TW2-251023-01	SAM	10/24/25 18:03	Ag oversaturated.	Jaswal	Dilution
30	Q3447-05	P001-TW3-251023-01	SAM	10/24/25 18:08	Cu,Pb high	Jaswal	Dilution
31	Q3447-07	P001-TW4-251023-01	SAM	10/24/25 18:12		Jaswal	OK
32	Q3449-01	CF-620-COMP-41	SAM	10/24/25 18:16		Jaswal	OK
33	PB170252BL	PB170252BL	MB	10/24/25 18:20		Jaswal	OK
34	PB170252BS	PB170252BS	LCS	10/24/25 18:25		Jaswal	OK
35	CCV03	CCV03	CCV	10/24/25 18:29		Jaswal	OK
36	CCB03	CCB03	CCB	10/24/25 18:33		Jaswal	OK
37	Q3444-01	16 Banker	SAM	10/24/25 18:37		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137662

Review By	Janvi	Review On	10/28/2025 11:25:13 AM
Supervise By	jaswal	Supervise On	10/28/2025 3:16:27 PM

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

38	Q3444-02	29 Hanover	SAM	10/24/25 18:41		Jaswal	OK
39	Q3444-03	29 Post	SAM	10/24/25 18:46		Jaswal	OK
40	Q3444-04	683 WARWICK	SAM	10/24/25 18:50		Jaswal	OK
41	Q3444-05	735 WARWICK	SAM	10/24/25 18:54		Jaswal	OK
42	Q3444-06	739 WARWICK	SAM	10/24/25 18:59		Jaswal	OK
43	Q3444-06DUP	739 WARWICKDUP	DUP	10/24/25 19:03		Jaswal	OK
44	Q3444-06L	739 WARWICKL	SD	10/24/25 19:07		Jaswal	OK
45	Q3444-06MS	739 WARWICKMS	MS	10/24/25 19:11		Jaswal	OK
46	Q3444-06MSD	739 WARWICKMSD	MSD	10/24/25 19:15		Jaswal	OK
47	CCV04	CCV04	CCV	10/24/25 19:19		Jaswal	OK
48	CCB04	CCB04	CCB	10/24/25 19:23		Jaswal	OK
49	Q3444-06A	739 WARWICKA	PS	10/24/25 19:28	0.1 ML OF M6008 AND M6017 IN 10ML SAMPLE.	Jaswal	OK
50	Q3434-02DL	PR132-WC2-2025102	SAM	10/24/25 19:32	Not use	Jaswal	Not Ok
51	Q3417-01DL	101425DL	SAM	10/24/25 19:36	NOT USE	Jaswal	Not Ok
52	CCV05	CCV05	CCV	10/24/25 20:06		Jaswal	OK
53	CCB05	CCB05	CCB	10/24/25 20:10		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137697

Review By	Janvi	Review On	10/31/2025 10:49:23 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/29/25 13:36		Jaswal	OK
2	S1	S1	CAL2	10/29/25 13:40		Jaswal	OK
3	S2	S2	CAL3	10/29/25 13:44		Jaswal	OK
4	S3	S3	CAL4	10/29/25 13:49		Jaswal	OK
5	S4	S4	CAL5	10/29/25 13:53		Jaswal	OK
6	S5	S5	CAL6	10/29/25 13:57		Jaswal	OK
7	ICV01	ICV01	ICV	10/29/25 14:01		Jaswal	OK
8	LLICV01	LLICV01	LLICV	10/29/25 14:07		Jaswal	OK
9	ICB01	ICB01	ICB	10/29/25 14:12		Jaswal	OK
10	CRI01	CRI01	CRDL	10/29/25 14:16		Jaswal	OK
11	ICSA01	ICSA01	ICSA	10/29/25 14:21		Jaswal	OK
12	ICSAB01	ICSAB01	ICSAB	10/29/25 14:25		Jaswal	OK
13	ICSADL	ICSADL	ICSA	10/29/25 14:29		Jaswal	OK
14	ICSABDL	ICSABDL	ICSAB	10/29/25 14:33		Jaswal	OK
15	CCV01	CCV01	CCV	10/29/25 14:37		Jaswal	OK
16	CCB01	CCB01	CCB	10/29/25 14:41		Jaswal	OK
17	LR-1	LR-1	HIGH STD	10/29/25 14:46		Jaswal	OK
18	LR-2	LR-2	HIGH STD	10/29/25 14:50		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137697

Review By	Janvi	Review On	10/31/2025 10:49:23 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

19	LR-3	LR-3	HIGH STD	10/29/25 14:55		Jaswal	OK
20	Q3465-01	SU-03-10242025	SAM	10/29/25 15:00		Jaswal	OK
21	PB170288BL	PB170288BL	MB	10/29/25 15:04		Jaswal	OK
22	PB170288BS	PB170288BS	LCS	10/29/25 15:08		Jaswal	OK
23	Q3447-05DL2	P001-TW3-251023-01	SAM	10/29/25 15:12	10X for Cu,Pb	Jaswal	Confirms
24	Q3466-02	B8-0.0-1.0-20251023	SAM	10/29/25 15:16		Jaswal	OK
25	Q3466-05	B9-0.0-1.0-20251023	SAM	10/29/25 15:20		Jaswal	OK
26	Q3466-07	B7-1.0-2.0-20251023	SAM	10/29/25 15:24		Jaswal	OK
27	CCV02	CCV02	CCV	10/29/25 15:43		Jaswal	OK
28	CCB02	CCB02	CCB	10/29/25 15:48		Jaswal	OK
29	Q3469-01	TP-13	SAM	10/29/25 15:52		Jaswal	OK
30	Q3469-01DUP	TP-13DUP	DUP	10/29/25 15:56		Jaswal	OK
31	Q3469-01L	TP-13L	SD	10/29/25 16:00		Jaswal	OK
32	Q3469-01MS	TP-13MS	MS	10/29/25 16:04		Jaswal	OK
33	Q3469-01MSD	TP-13MSD	MSD	10/29/25 16:08		Jaswal	OK
34	Q3469-01A	TP-13A	PS	10/29/25 16:12	0.1ml of each m6008 and m6017 in 10ml sample.	Jaswal	OK
35	PB170264BL	PB170264BL	MB	10/29/25 16:16		Jaswal	OK
36	PB170264BS	PB170264BS	LCS	10/29/25 16:24		Jaswal	OK
37	Q3442-01	SW-1	SAM	10/29/25 16:29		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137697

Review By	Janvi	Review On	10/31/2025 10:49:23 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

38	Q3464-02	MW3	SAM	10/29/25 16:33		Jaswal	OK
39	CCV03	CCV03	CCV	10/29/25 16:37		Jaswal	OK
40	CCB03	CCB03	CCB	10/29/25 16:41		Jaswal	OK
41	Q3464-01	MW2	SAM	10/29/25 16:45		Jaswal	OK
42	Q3464-01DUP	MW2DUP	DUP	10/29/25 16:50		Jaswal	OK
43	Q3464-01L	MW2L	SD	10/29/25 16:54		Jaswal	OK
44	Q3464-01MS	MW2MS	MS	10/29/25 16:58		Jaswal	OK
45	Q3464-01MSD	MW2MSD	MSD	10/29/25 17:02		Jaswal	OK
46	Q3464-01A	MW2A	PS	10/29/25 17:06	0.1ml of each m6008 and m6017 in 10ml sample.	Jaswal	OK
47	Q3476-01	NB-07-102825	SAM	10/29/25 17:19		Jaswal	OK
48	Q3477-01	SOUTH-MAHWAH-SC	SAM	10/29/25 17:23		Jaswal	OK
49	CCV04	CCV04	CCV	10/29/25 17:27		Jaswal	OK
50	CCB04	CCB04	CCB	10/29/25 17:31		Jaswal	OK
51	Q3480-01	RT3449	SAM	10/29/25 17:35	Ag is oversaturated, Need dilution	Jaswal	Dilution
52	Q3481-01	OR-02-102825	SAM	10/29/25 17:39		Jaswal	OK
53	Q3481-01DUP	OR-02-102825DUP	DUP	10/29/25 17:43		Jaswal	OK
54	Q3481-01L	OR-02-102825L	SD	10/29/25 17:48		Jaswal	OK
55	Q3481-01MS	OR-02-102825MS	MS	10/29/25 17:52		Jaswal	OK
56	Q3481-01MSD	OR-02-102825MSD	MSD	10/29/25 17:56		Jaswal	OK

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Instrument ID: P4

Daily Analysis Runlog For Sequence/QCBatch ID # LB137697

Review By	Janvi	Review On	10/31/2025 10:49:23 AM
Supervise By		Supervise On	

STD. NAME	STD REF.#
ICAL Standard	MP87637,MP87643,MP87641,MP87640,MP87639,MP87638
ICV Standard	MP87644,MP87643
CCV Standard	MP87647
ICSA Standard	MP87645,MP87646
CRI Standard	MP87643
LCS Standard	
Chk Standard	MP87668,MP87648,MP87651,MP87649,MP87650

57	Q3481-01A	OR-02-102825A	PS	10/29/25 17:59	0.1ml of each m6008 and m6017 in 10ml sample.	Jaswal	OK
58	CCV05	CCV05	CCV	10/29/25 18:03		Jaswal	OK
59	CCB05	CCB05	CCB	10/29/25 18:07		Jaswal	OK
60	Q3420-05	COMPOSITE	SAM	10/29/25 18:12	Na oversaturated	Jaswal	Dilution
61	Q3420-05DUP	COMPOSITEDUP	DUP	10/29/25 18:16	Na High	Jaswal	Dilution
62	Q3420-05L	COMPOSITEL	SD	10/29/25 18:20		Jaswal	OK
63	Q3420-05MS	COMPOSITEMS	MS	10/29/25 18:25	Na High	Jaswal	Dilution
64	Q3420-05MSD	COMPOSITEMSD	MSD	10/29/25 18:29	Na High	Jaswal	Dilution
65	Q3420-05A	COMPOSITEA	PS	10/29/25 18:33	Na High, 0.1ml of each m6008 and m6017 in 10ml sample.	Jaswal	Dilution
66	CCV06	CCV06	CCV	10/29/25 18:55		Jaswal	OK
67	CCB06	CCB06	CCB	10/29/25 19:04		Jaswal	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q3420

Test : Mercury,Metals ICP-Group1

Prepbatch ID : PB170225,PB170232,

Sequence ID/Qc Batch ID: LB137632,LB137662,LB137697,

Standard ID :
MP87148,MP87633,MP87634,MP87635,MP87636,MP87637,MP87638,MP87639,MP87640,MP87641,MP87642,MP87643,MP87644,MP87645,MP87646,MP87647,MP87648,MP87649,MP87650,MP87651,MP87668,MP87702,MP87703,MP87704,MP87705,MP87706,MP87707,MP87708,MP87709,MP87710,MP87711,MP87712,MP87713,MP87714,MP87732,

Chemical ID :
M4916,M5062,M5467,M5501,M5658,M5697,M5748,M5798,M5799,M5800,M5801,M5814,M5820,M5882,M5962,M5969,M5971,M5979,M5985,M5998,M6021,M6023,M6026,M6027,M6028,M6030,M6032,M6058,M6077,M6086,M6128,M6137,M6140,M6142,M6144,M6145,M6151,M6157,M6158,M6159,M6160,M6161,M6163,M6164,M6165,M6171,M6174,M6176,M6177,M6178,M6179,M6182,M6184,M6187,M6196,M6200,M6201,M6209,M6213,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP87148	09/09/2025	02/17/2026	Sagar Kanani	None	None	Sarabjit Jaswal 09/10/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP87633	10/17/2025	11/07/2025	Sagar Kanani	None	None	Sarabjit Jaswal 10/28/2025

FROM 1600.00000ml of M6157 + 800.00000ml of M6187 = Final Quantity: 3200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP87634	10/17/2025	03/31/2026	Sagar Kanani	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/28/2025

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 %	MP87635	10/17/2025	02/02/2026	Sagar Kanani	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/28/2025

FROM 100.00000ml of M6213 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP87636	10/17/2025	02/03/2026	Sagar Kanani	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/28/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M5501 + 240.00000ml of M6196 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP87637	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 125.00000ml of M6200 + 2350.00000ml of W3112 + 25.00000ml of M6187 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP87638	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 5.00000ml of M5467 + 5.00000ml of M5820 + 5.00000ml of M5969 + 5.00000ml of M5971 + 5.00000ml of M5998 + 5.00000ml of M6077 + 5.00000ml of M6160 + 5.00000ml of M6174 + 5.00000ml of M6176 + 455.00000ml of MP87637 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP87639	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 50.00000ml of MP87637 + 50.00000ml of MP87638 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP87640	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 25.00000ml of MP87638 + 75.00000ml of MP87637 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP87641	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 16.00000ml of MP87638 + 184.00000ml of MP87637 = Final Quantity: 200.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP87642	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.05000ml of M6140 + 0.05000ml of M6159 + 0.06000ml of M6177 + 0.10000ml of M5697 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5969 + 0.10000ml of M5971 + 0.10000ml of M6128 + 0.10000ml of M6176 + 0.15000ml of M5800 + 0.20000ml of M5799 + 0.20000ml of M5979 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.20000ml of M6027 + 0.20000ml of M6145 + 0.25000ml of M5467 + 0.25000ml of M6160 + 0.50000ml of M5814 + 0.50000ml of M6032 + 1.00000ml of M6086 + 1.00000ml of M6142 + 1.00000ml of M6144 + 1.00000ml of M6171 + 1.00000ml of M6178 + 2.00000ml of M6137 + 89.03000ml of MP87637 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP87643	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 2.00000ml of MP87642 + 98.00000ml of MP87637 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4163	NEW ICV-060925	MP87644	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 0.20000ml of M6058 + 0.40000ml of M6163 + 0.40000ml of M6164 + 0.40000ml of M6165 + 48.60000ml of MP87637 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP87645	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 25.00000ml of M6182 + 225.00000ml of MP87637 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP87646	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 0.10000ml of M6077 + 10.00000ml of M6182 + 10.00000ml of M6184 + 79.90000ml of MP87637 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP87647	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 50.00000ml of MP87637 + 50.00000ml of MP87638 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
903	ICP AES RINSE SOLN	MP87648	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 200.00000ml of M6187 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4226	LR-2	MP87649	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 13.50000ml of M6140 + 9.00000ml of M6142 + 9.50000ml of M6159 + 18.00000ml of MP87637 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4227	LR-3	MP87650	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 1.15000ml of M6026 + 1.25000ml of M5658 + 1.25000ml of M5748 + 1.50000ml of M6145 + 2.50000ml of M5697 + 2.50000ml of M6128 + 39.85000ml of MP87637 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4225	LR-1	MP87651	10/17/2025	11/17/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 11.50000ml of M6086 + 11.50000ml of M6144 + 11.50000ml of M6171 + 15.50000ml of MP87637 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP87668	10/17/2025	11/11/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/28/2025

FROM 1.00000ml of M6179 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6187 = 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.	MP87702	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 10/28/2025

FROM 1.00000ml of M6187 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP87703	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 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	MP87704	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.30000ml of W3112 + 0.20000ml of MP87702 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP87705	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 245.00000ml of W3112 + 2.50000ml of MP87702 = 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	MP87706	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 242.50000ml of W3112 + 5.00000ml of MP87702 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP87707	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 240.00000ml of W3112 + 7.50000ml of MP87702 = 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	MP87708	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 237.50000ml of W3112 + 10.00000ml of MP87702 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP87709	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6161 + 2.50000ml of M6187 + 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)	MP87710	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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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)	MP87711	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6187 + 10.00000ml of MP87702 = 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)	MP87712	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6187 = Final Quantity: 500.000 ml

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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)	MP87713	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.30000ml of W3112 + 0.20000ml of MP87702 = 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)	MP87714	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 240.50000ml of W3112 + 7.00000ml of MP87702 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP87732	10/24/2025	10/25/2025	Sagar Kanani	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/28/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6200 = Final Quantity: 500.000 ml

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CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	020623	02/06/2026	03/06/2023 / bin	03/01/2023 / bin	M5467

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)	0000281938	07/06/2026	07/24/2023 / mohan	04/14/2023 / mohan	M5501

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

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

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.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

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 #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	03/31/2026	03/31/2025 / kareem	06/11/2024 / Jaswal	M5969

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	06/06/2025 / Janvi	07/01/2024 / Jaswal	M5971

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	08/05/2026	08/06/2025 / Janvi	02/22/2024 / Jaswal	M5979

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGIN10-5 / INDIUM 1 x 500 ml	U2-IN729349	02/21/2028	10/08/2024 / Jaswal	06/14/2024 / Jaswal	M5985

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB727800	07/30/2026	07/30/2025 / Janvi	02/22/2024 / kareem	M5998

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	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

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.	57182 / Pb, 10000 PPM, 125 ml	110923	11/09/2026	12/05/2024 / janvi	08/05/2024 / Jaswal	M6026

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	062024	06/20/2027	06/04/2025 / Janvi	08/05/2024 / Jaswal	M6027

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CHEMICAL RECEIPT LOG BOOK

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	08/05/2024 / 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.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

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	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	09/06/2029	01/23/2025 / kareem	09/19/2024 / kareem	M6077

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Calcium, 500 ml, 10000 PPM	082324	08/23/2027	03/06/2025 / JANVI	10/14/2024 / jaswal	M6086

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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	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

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	011025	01/10/2028	06/25/2025 / Janvi	01/13/2025 / Jaswal	M6140

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	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

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	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

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	121724	12/17/2027	02/04/2025 /	01/13/2025 / Jaswal	M6145

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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)	22G2862015	02/17/2026	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

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)	24i1262013	11/07/2025	05/07/2025 / RUPESH	02/18/2025 / Mohan	M6157

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	10/30/2025	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

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	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

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	071724	07/17/2027	03/24/2025 / kareem	10/18/2024 / kareem	M6160

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV 5 0415	12/31/2025	05/01/2025 / mohan	03/30/2024 / mohan	M6161

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1	V2-MEB744107	06/08/2026	06/09/2025 / jaswal	06/06/2025 / jaswal	M6163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2	U2-MEB733713	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6164

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3	V2-MEB749572	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6165

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	011525	01/15/2028	07/15/2025 /	02/13/2025 / Janvi	M6171

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	V2-MEB742428	07/31/2026	07/31/2025 / Janvi	05/05/2025 / Janvi	M6174

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	092724	09/27/2027	08/06/2025 / Janvi	08/06/2025 / Janvi	M6176

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	031525	03/15/2028	08/06/2025 / Janvi	08/06/2025 / Janvi	M6177

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	080528	08/05/2028	08/06/2025 / Janvi	08/06/2025 / Janvi	M6178

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	08/05/2026	08/06/2025 / Janvi	06/02/2024 / Janvi	M6179

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	02/05/2026	08/06/2025 / Janvi	03/06/2024 / Janvi	M6182

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	02/05/2026	08/06/2025 / Janvi	03/06/2024 / Janvi	M6184

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)	24H0162012	01/28/2026	08/29/2025 / Sagar	08/08/2025 / Sagar	M6187

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	H330-500 / HYDROXYLAMINE HYDROCHLORIDE ACS 500G	243373	02/03/2026	09/04/2025 / mohan	08/04/2025 / mohan	M6196

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	02/10/2026	09/11/2025 / Sagar	08/25/2025 / Sagar	M6200

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml	V2-MEB743480	10/15/2026	10/15/2025 /	07/20/2025 / janvi	M6201

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml	V2-MEB752149	10/15/2026	10/15/2025 / Janvi	07/20/2025 / Janvi	M6209

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)	216224-	02/02/2026	10/08/2025 / Sagar	10/07/2025 / Sagar	M6213

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

Certificate of Analysis

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

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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 – 0120633

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	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - 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.

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M6032

R: 8/5/24

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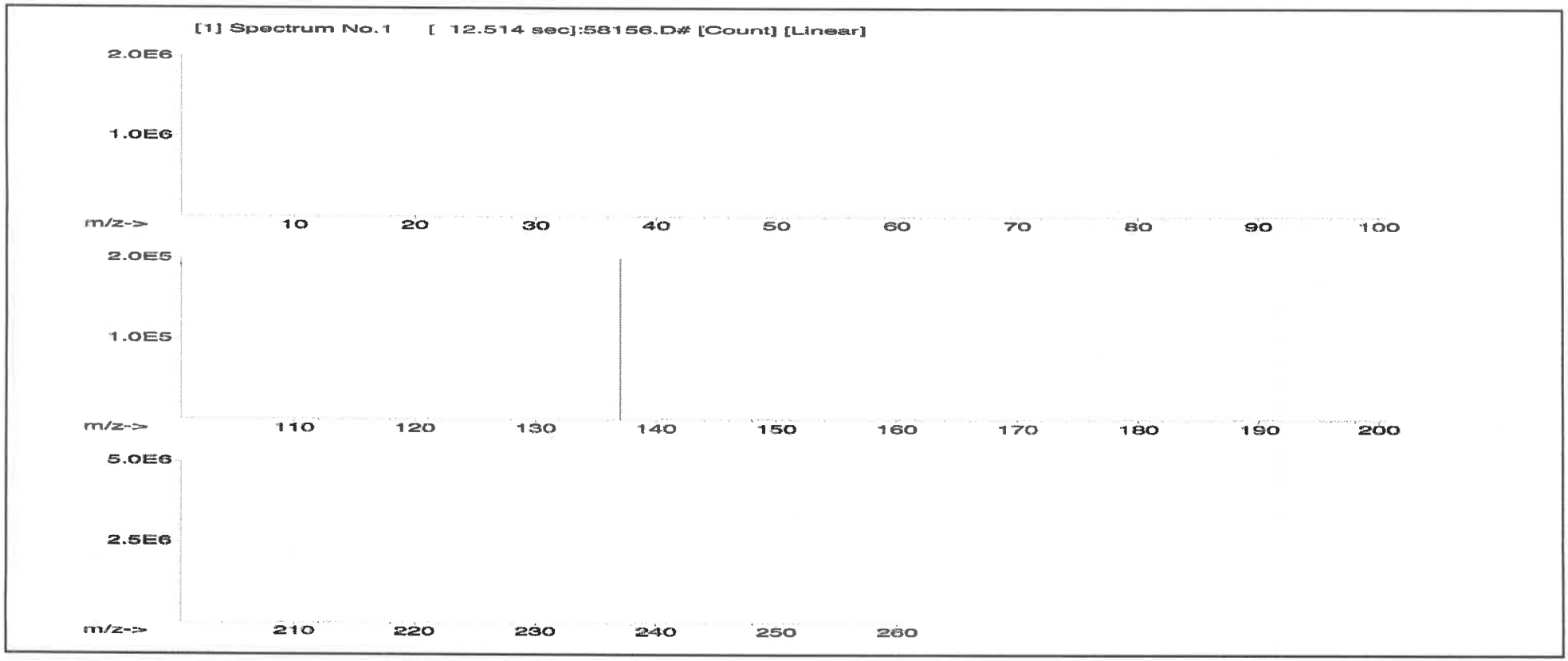
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
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	010924
Reviewed By:	Pedro L. Rentas	010924

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	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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:

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).

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Revd 10/14/2024 M6085/M6086/M6087

CERTIFIED WEIGHT REPORT:

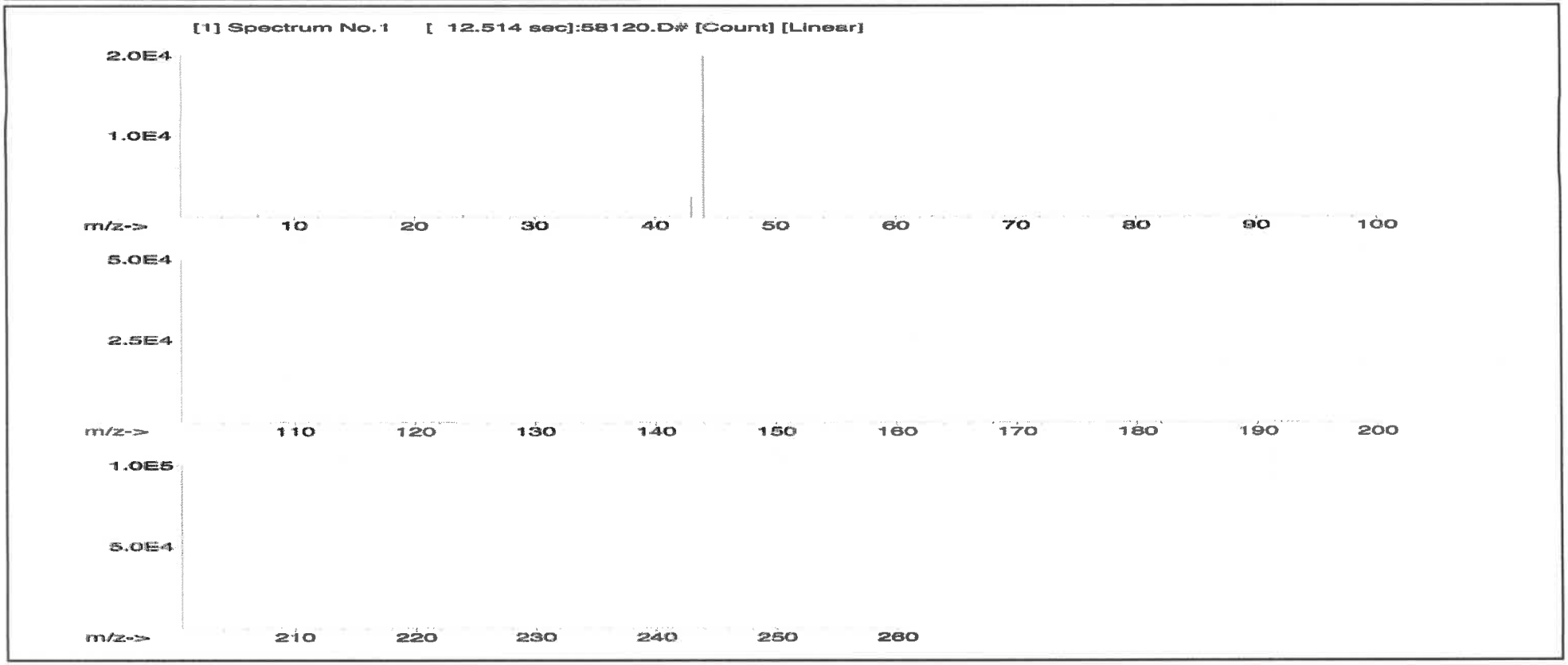
Part Number:	**58120**		**Solvent:**	24002546	Nitric Acid
Lot Number:	**082324**				
Description:	**Calcium (Ca)**		2%	80.0	Nitric Acid
Expiration Date:	082327			(mL)	
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

Lot #

Giovanni Esposito

Formulated By:	Giovanni Esposito	082324
Reviewed By:	Pedro L. Rentas	082324

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	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2656	**10001.2**	**20.0**	471-34-1	5 mg/m3	ori-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	30	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).

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R 8/5/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

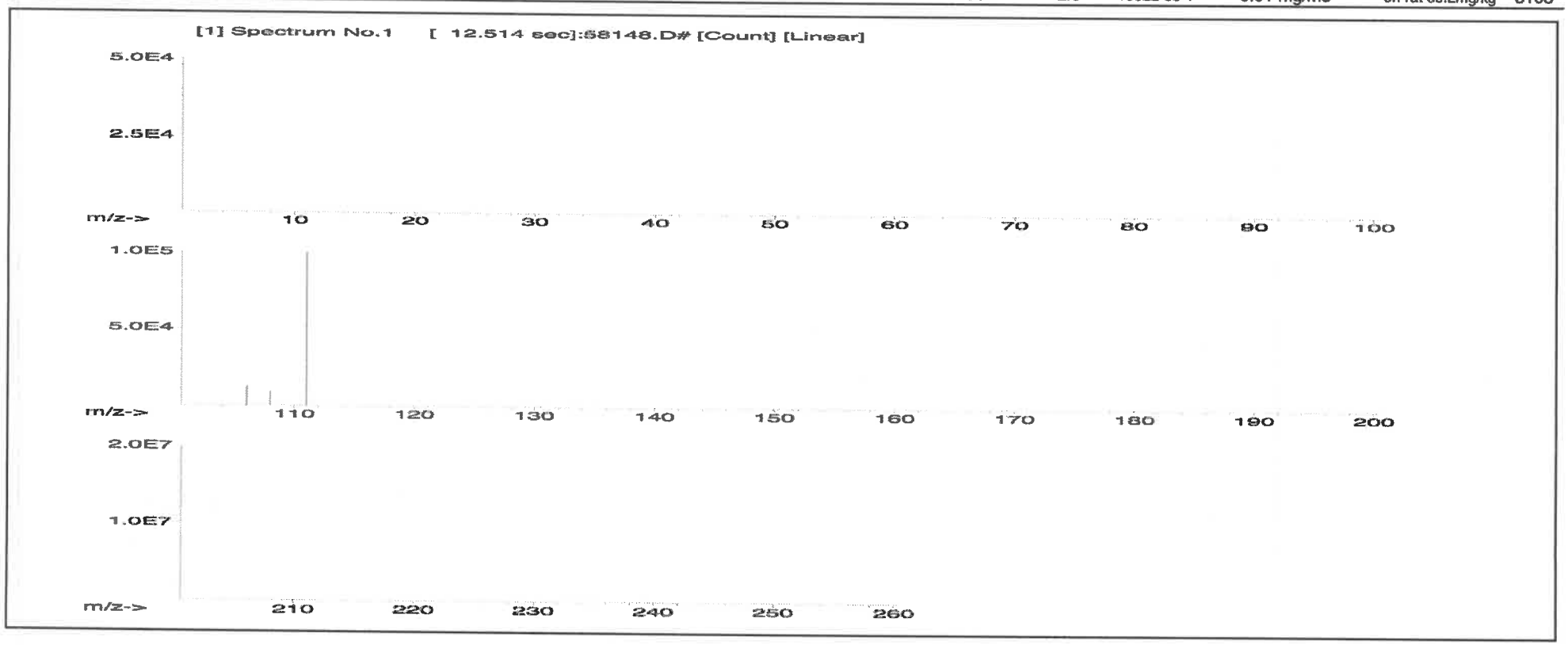
CERTIFIED WEIGHT REPORT:

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



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

R: 8/5/24

M6026

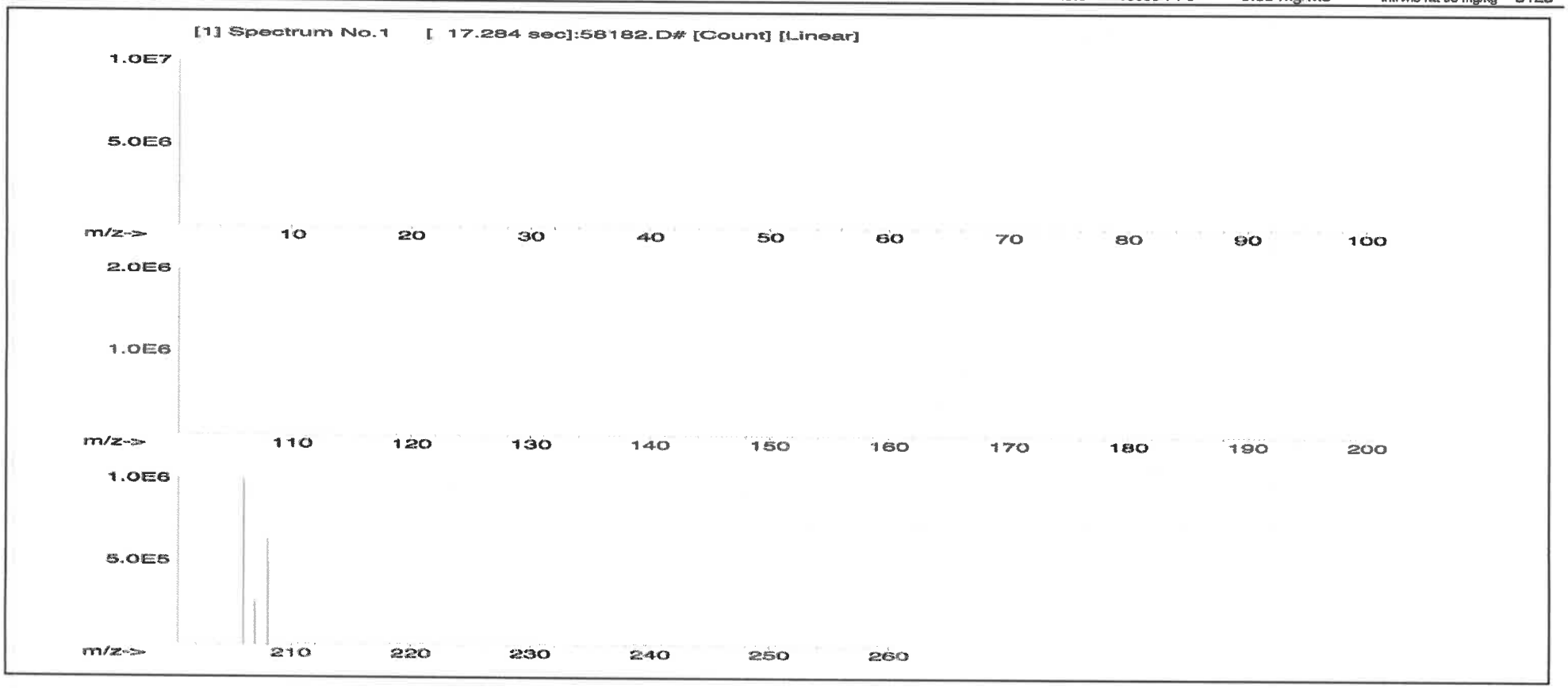
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57182**			**Lot #**	
Lot Number:	**110923**	**Solvent:**	24002546	Nitric Acid	
Description:	**Lead (Pb)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	110926				
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:	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



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.

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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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* 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.

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

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 HNO_3. 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% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); 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

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

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 020623
Description: Cerium (Ce)

Expiration Date: 020626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

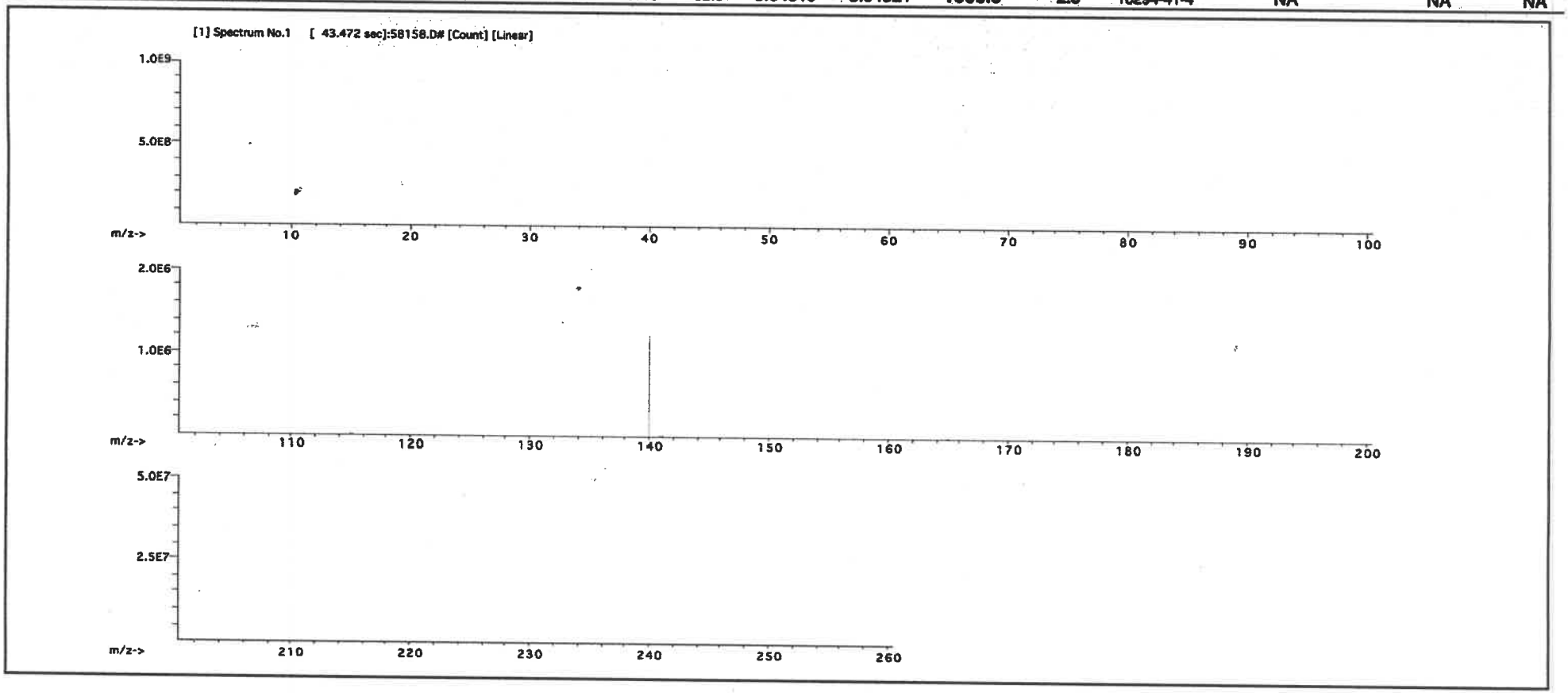
Weight shown below was diluted to (mL): 1000.12 0.058 Flask Uncertainty

		Lot #	
Solvent:	21110221	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	020623
Reviewed By:	Pedro L. Rentas	020623

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. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04921	**1000.0**	**2.0**	10294-41-4	NA	NA	NA



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	T	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.

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Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M5493 - M5708
Added 4/14/23
JMG

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 2

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
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 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T 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

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M5658 R ! 8/25/23

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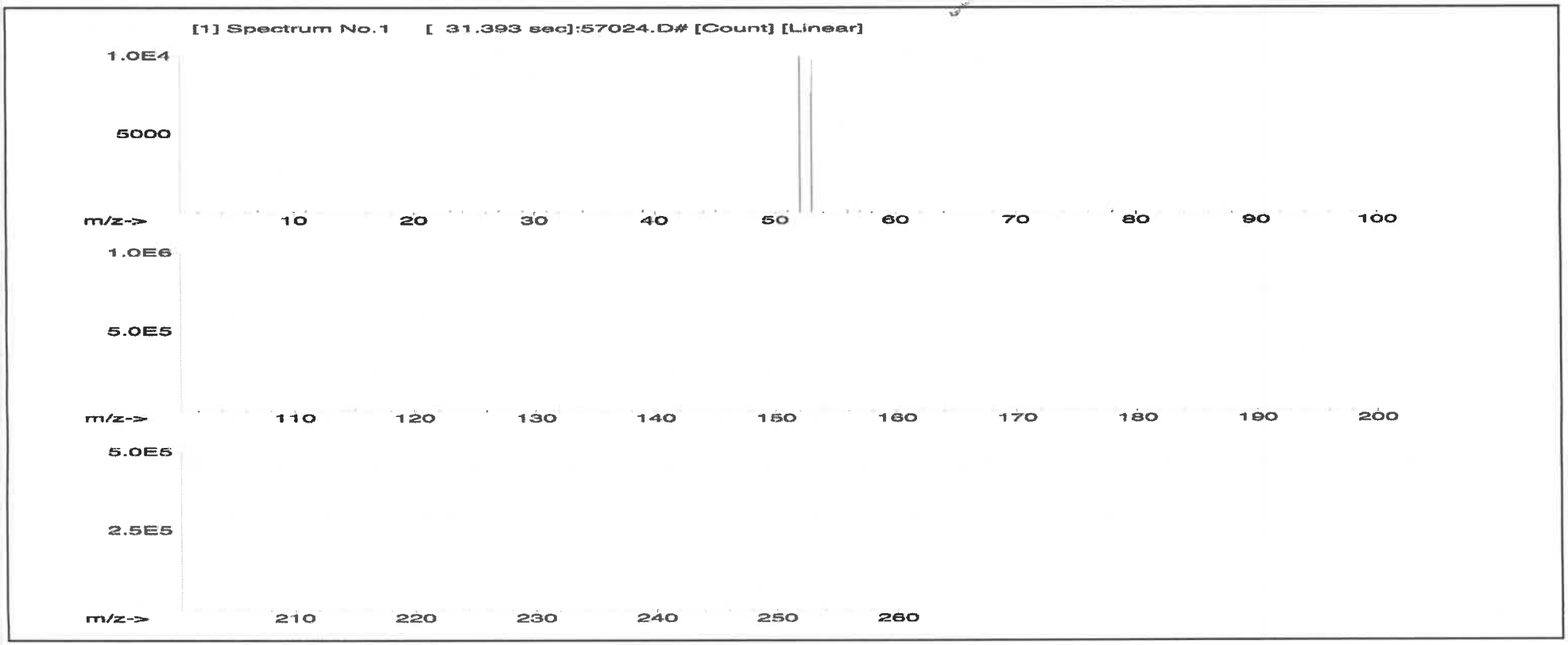
CERTIFIED WEIGHT REPORT:

		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



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.
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* 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).

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M5697 R: 10/27/23

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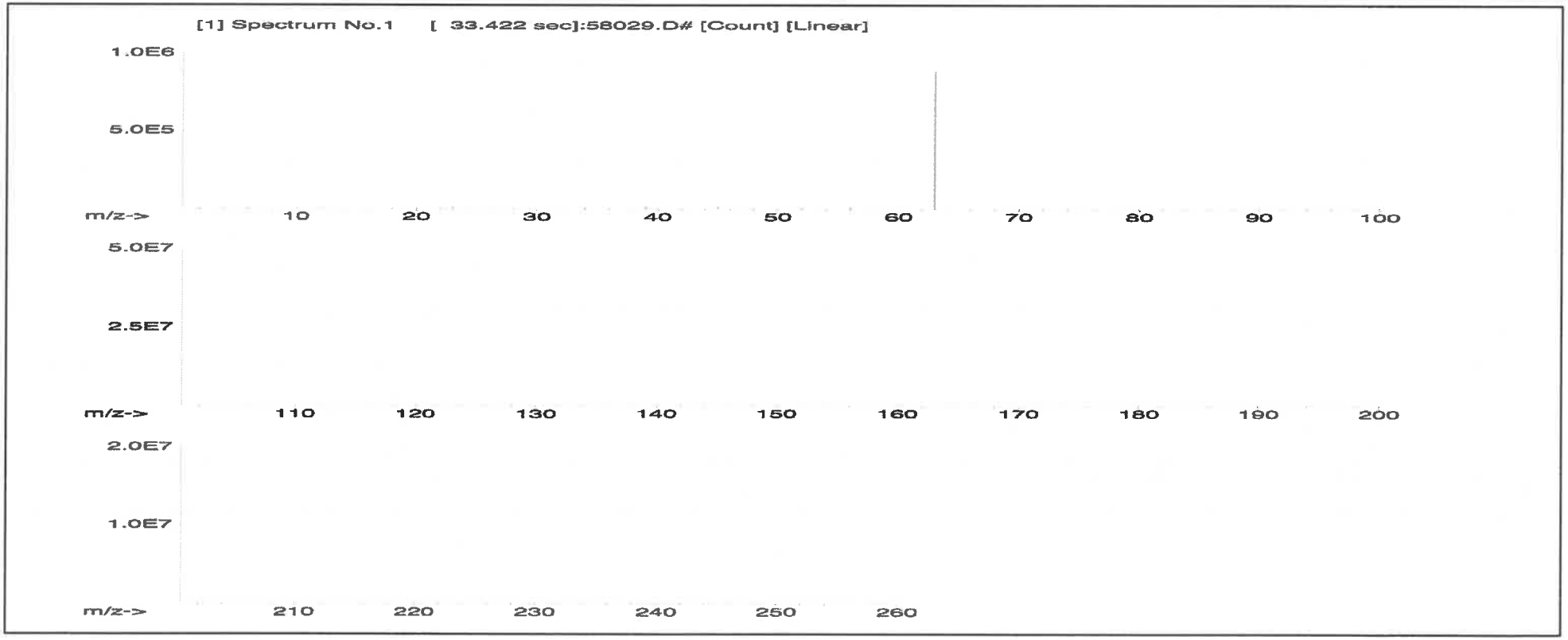
CERTIFIED WEIGHT REPORT:

		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



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:

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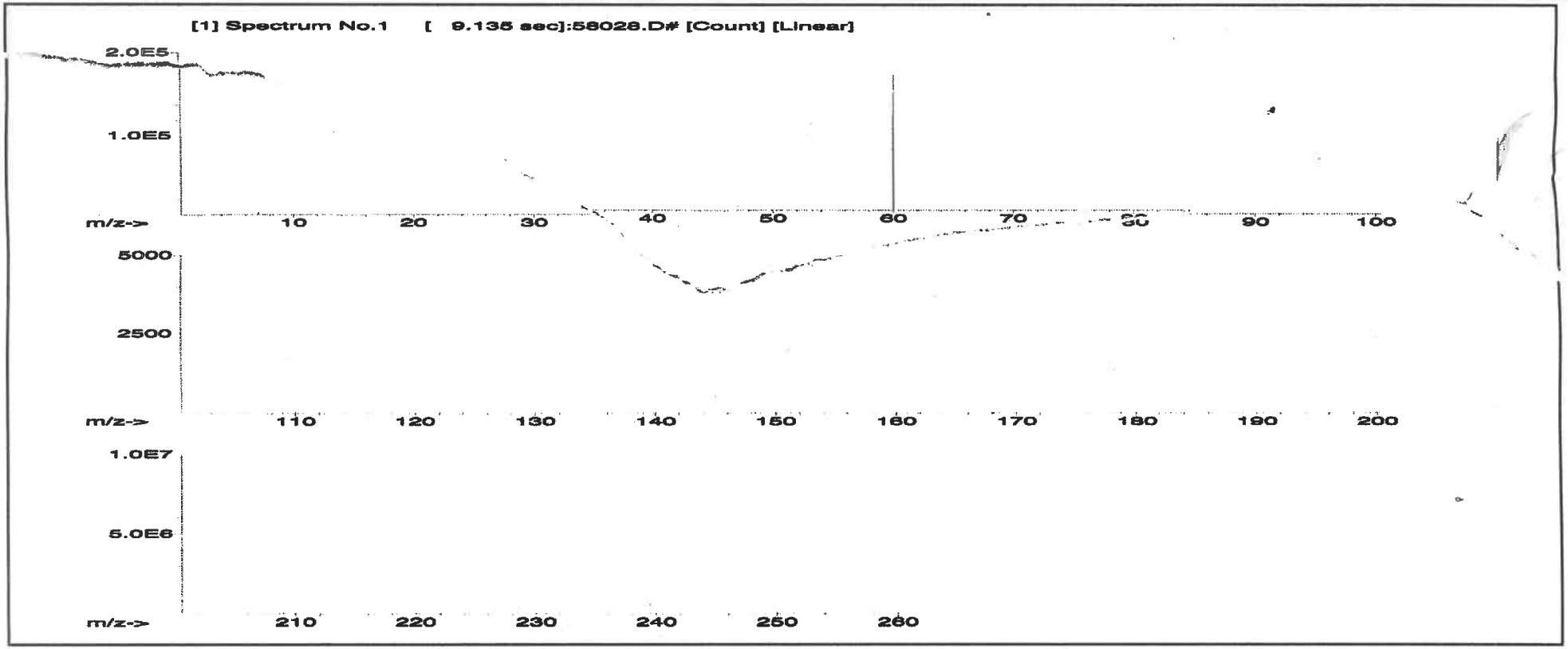
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
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	091223
Reviewed By:	Pedro L. Rentas	091223

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. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	**2.2**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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	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.

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R: 02/09/24 M5798

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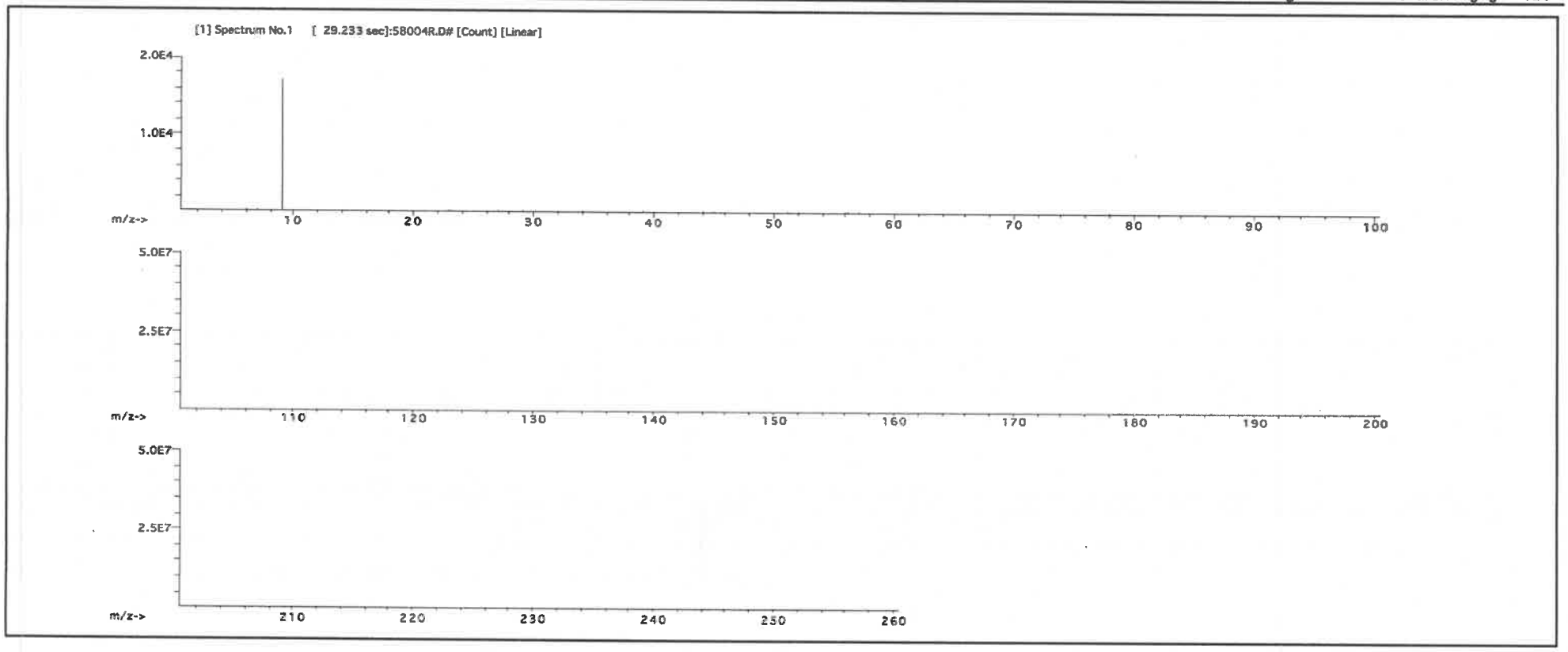
CERTIFIED WEIGHT REPORT:

		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



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.

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

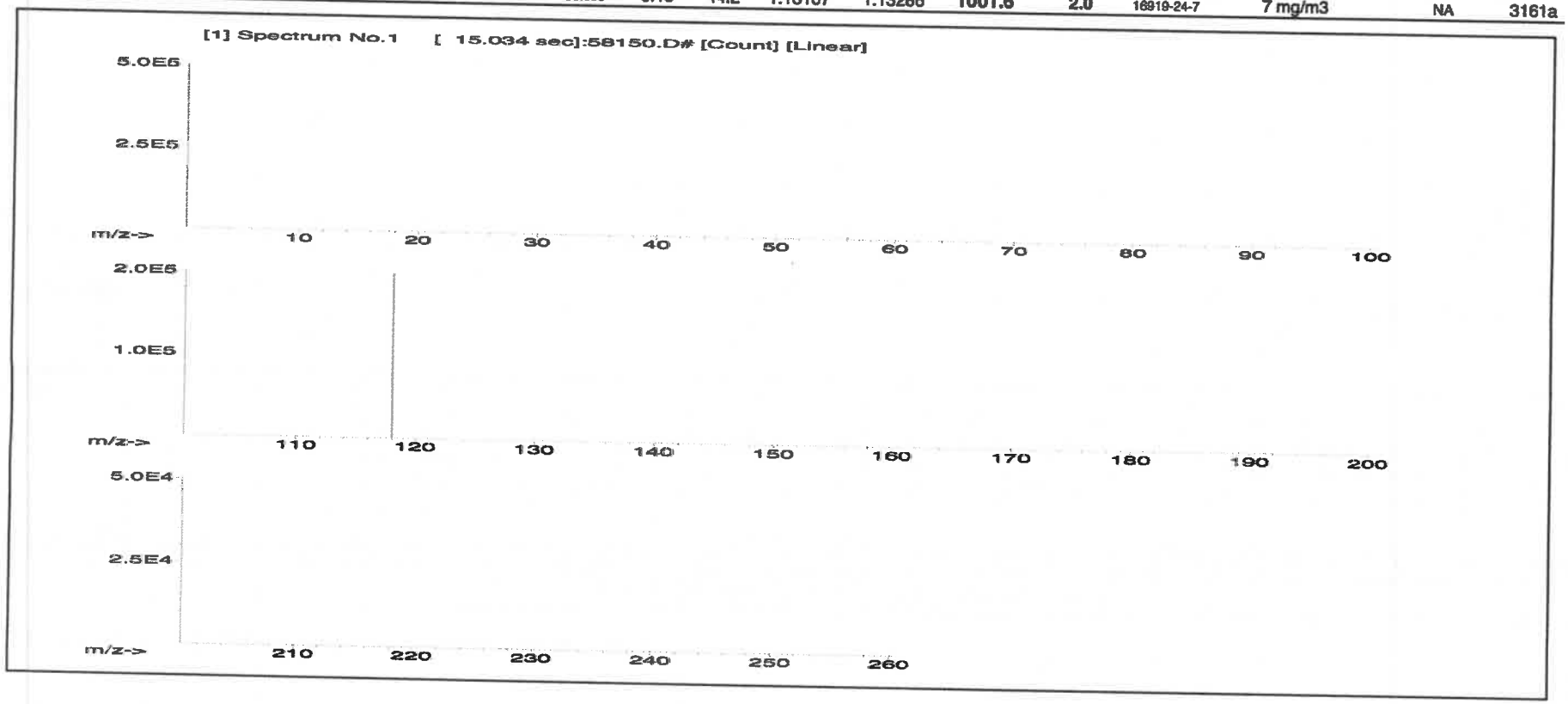
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



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:

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R: 02/09/24 IM5800 BH

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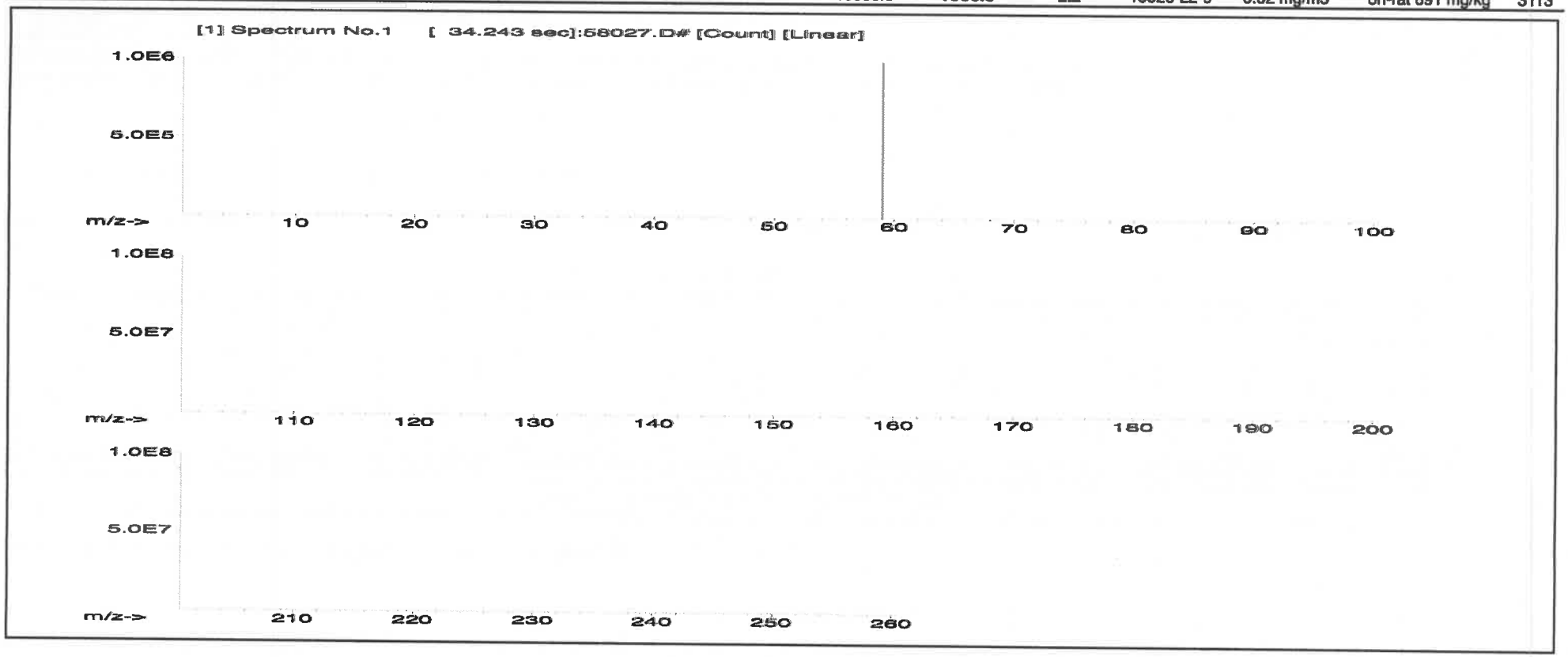
CERTIFIED WEIGHT REPORT:

		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



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.

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* 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.
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* 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).

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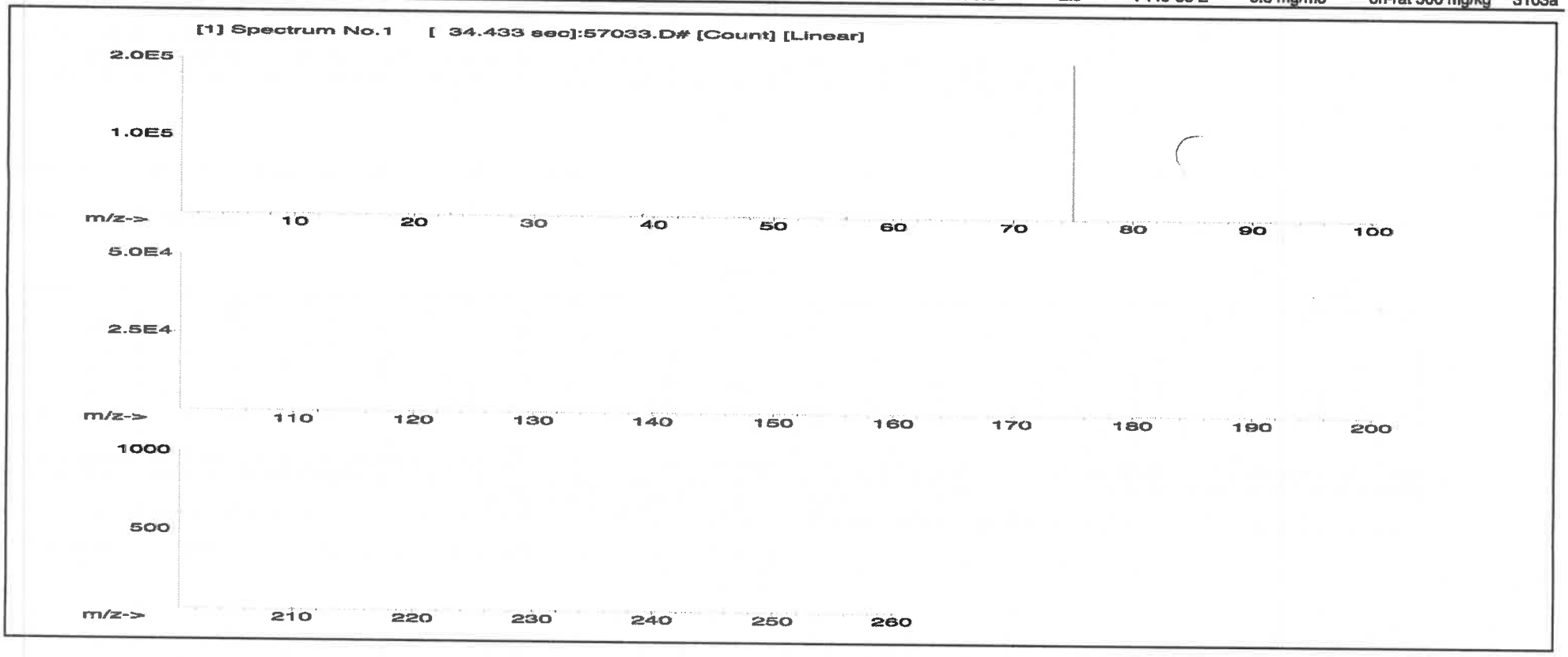
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
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



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.

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* 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.
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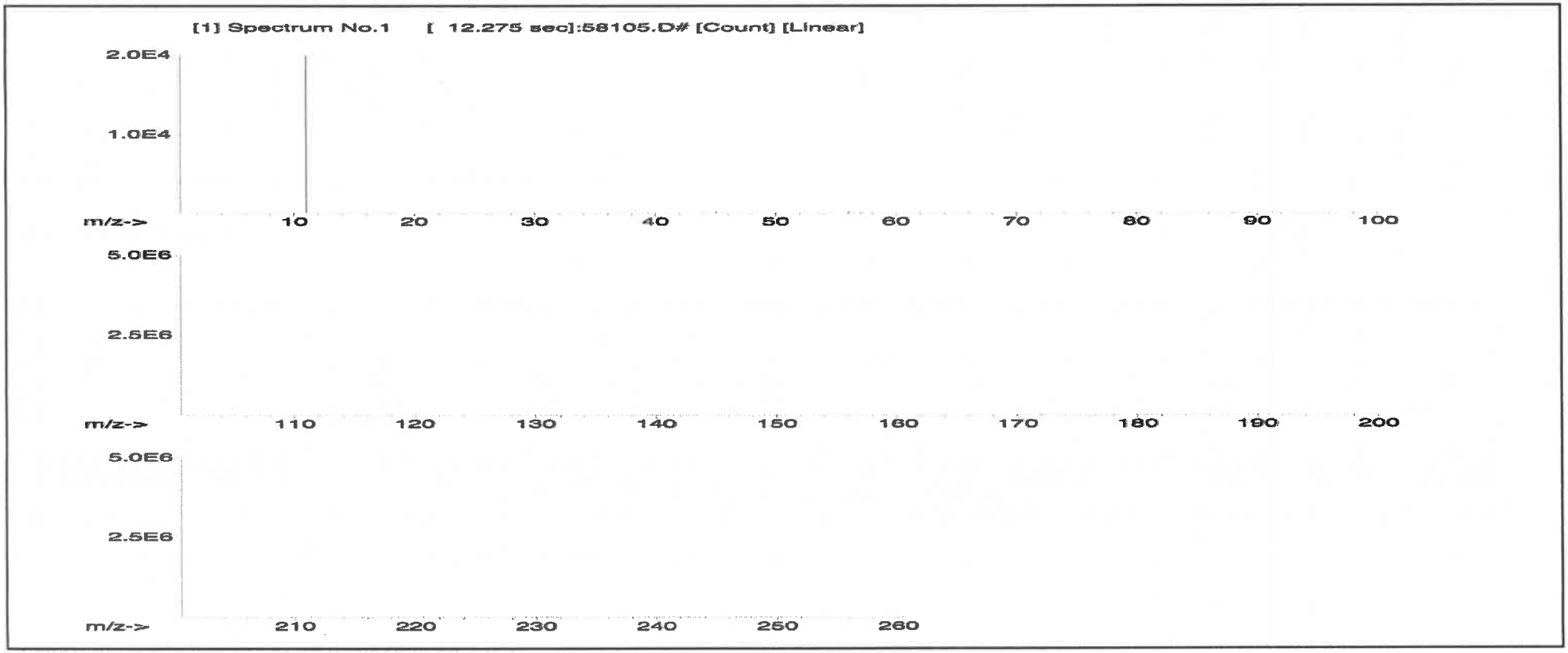
CERTIFIED WEIGHT REPORT:

Part Number:	**57005**		**Solvent:**	MKBQ8597V	Ammonium hydroxide
Lot Number:	**071123**				
Description:	**Boron (B)**		2.0%	40.0 (mL)	Ammonium hydroxide
Expiration Date:	071126				
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):	1999.48	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. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



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	T	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:

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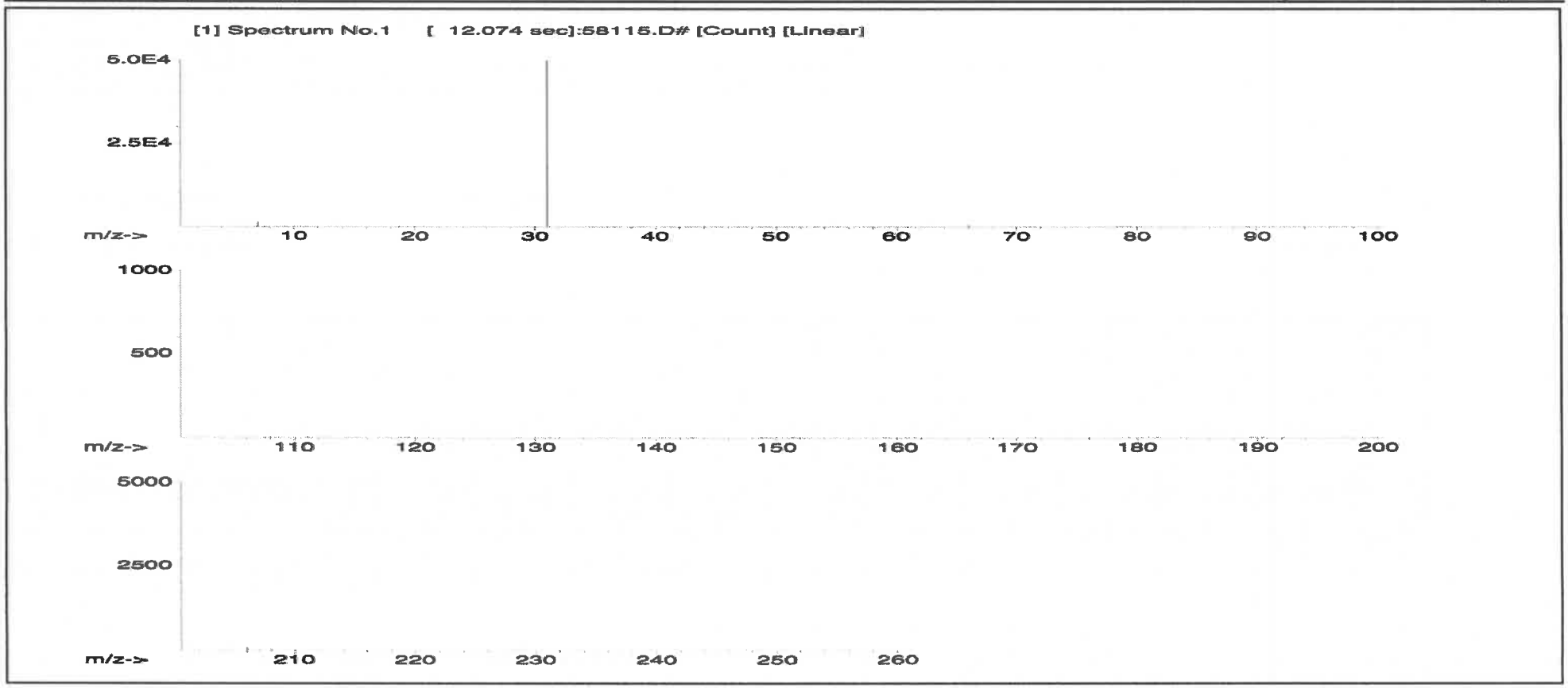
CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
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		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

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	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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	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.

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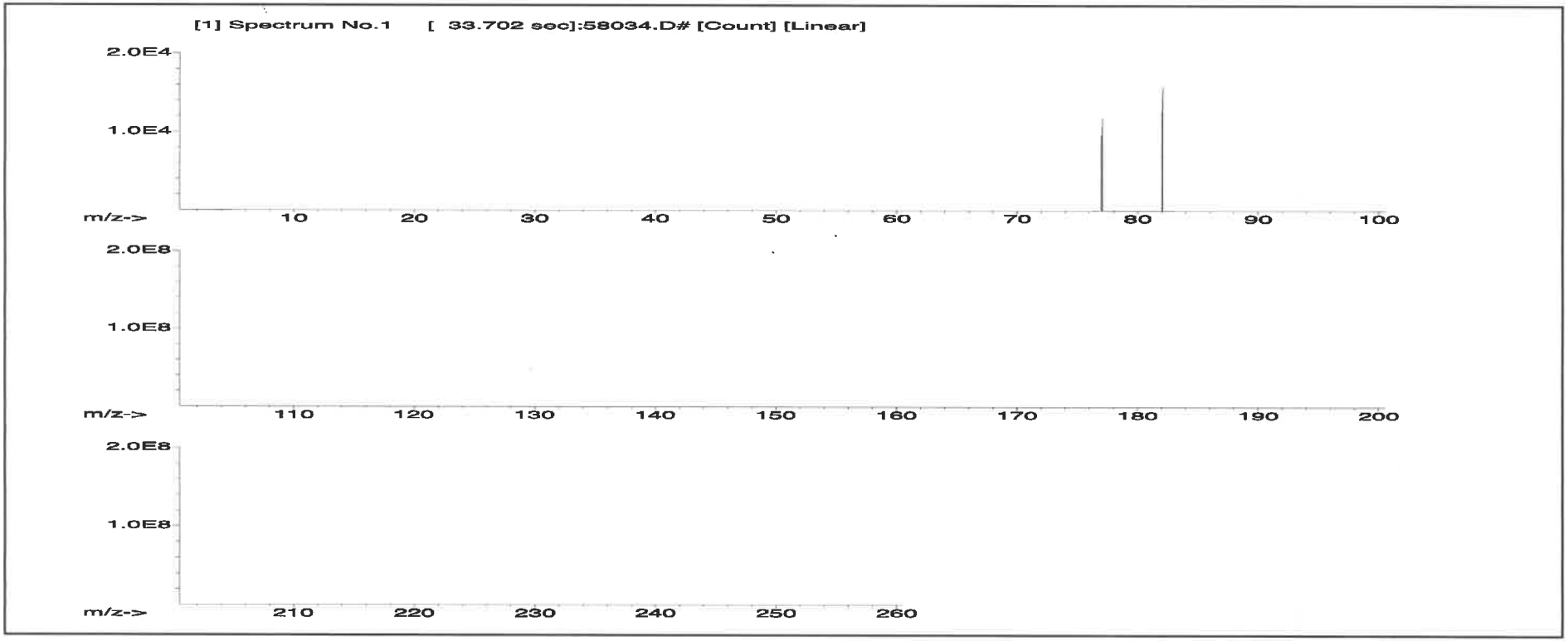
CERTIFIED WEIGHT REPORT:

		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



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:

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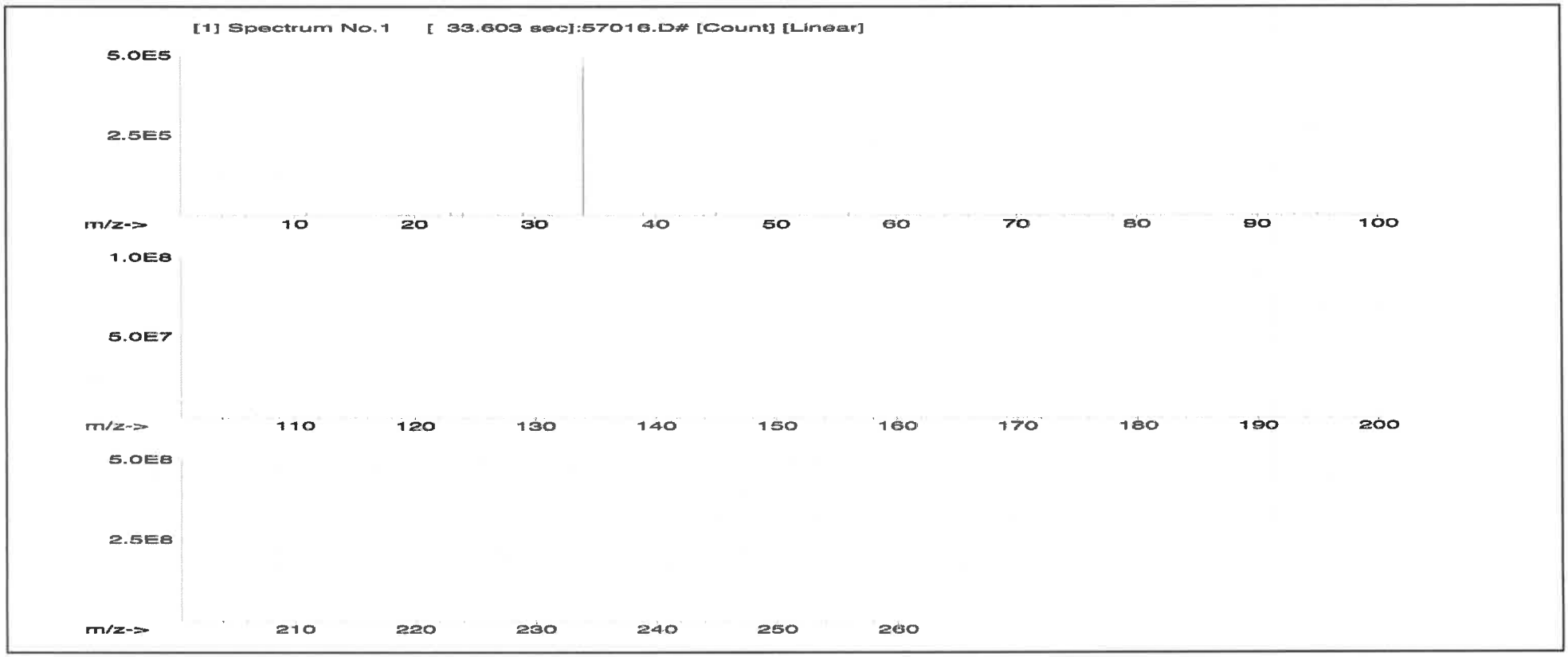
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
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):	4000.0	0.06	Flask Uncertainty	

Lot #

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

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	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



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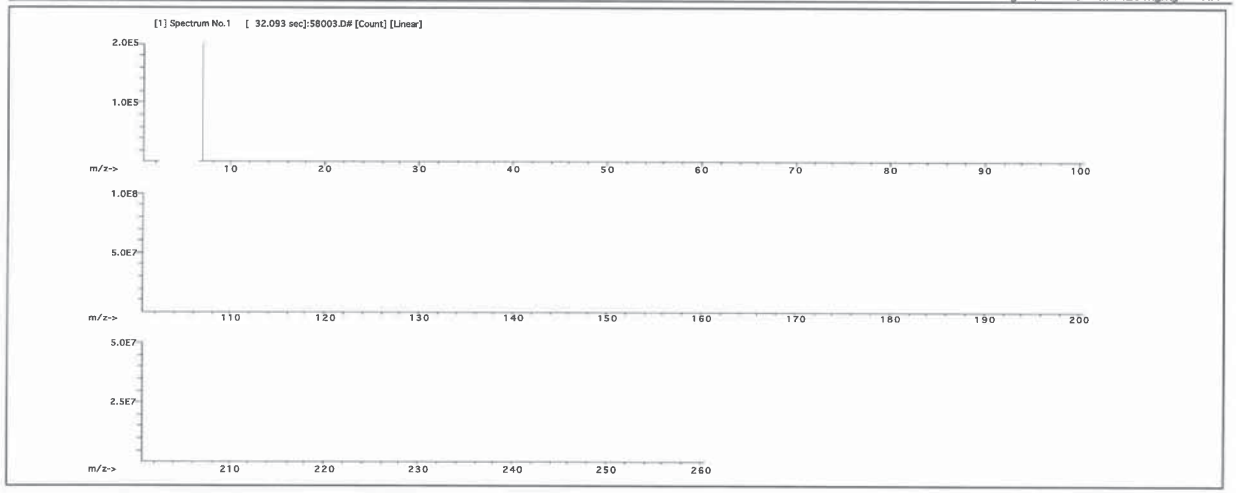
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
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):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

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. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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	T	Ni	<0.02	Pr	<0.02	Sc	<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:

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).

M5978, M5979

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Certificate of Analysis

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R: 2/22/24

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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:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 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, $X_{CRM/RM}$, 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	<	0.000536	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

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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

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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 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- 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	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

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

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute 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 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 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

- February 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

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MS-997

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB727800
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**1 000 ± 7 µg/mL**	**Cadmium, Cd**	**500.0 ± 2.2 µg/mL**
Lead, Pb	**1 000 ± 4 µg/mL**	**Selenium, Se**	**1 000 ± 6 µg/mL**
Thallium, Tl	**1 000 ± 7 µg/mL**		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 21, 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

- December 21, 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

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Certificate of Analysis

R! 08/22/24 M6058, M6059

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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-CLP-4
Lot Number:	V2-MEB746172
Matrix:	3% (v/v) HNO_3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 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	1 000 ± 6 µg/mL		

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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**

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"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 12, 2024

- 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

- August 12, 2029

- 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:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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M6077

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Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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EXP.: 9/6/2029

1.0 ACCREDITATION / REGISTRATION

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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-CLP-4
Lot Number:	V2-MEB746762
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 5 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	**1 000 ± 6 µg/mL**		

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

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

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X_a = mean of Assay Method A with

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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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.

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- 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

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- 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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 06, 2024

- 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 06, 2029

- 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:

Joseph Burns
Custom VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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:

R->1/13/28

M6128

Part Number:	**58025**	**Solvent:**	**Lot #** 24002546	Nitric Acid
Lot Number:	**101124**			
Description:	**Manganese (Mn)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	101127			
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):	4000.2	0.10	Flask Uncertainty	

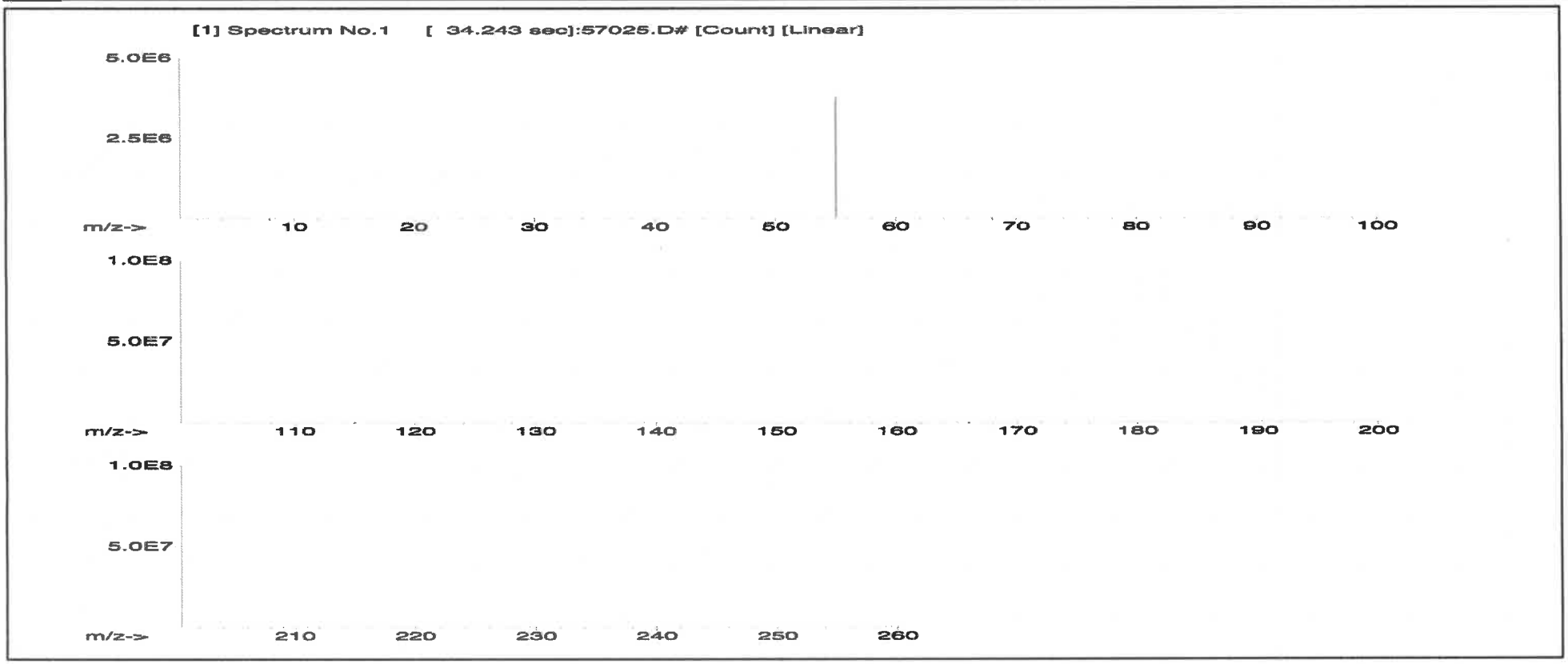
Giovanni Esposito

Formulated By:	Giovanni Esposito	101124

Pedro Rentas

Reviewed By:	Pedro L. Rentas	101124

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. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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 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).

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F: 540-585-3012
info@inorganicventures.com

M6137 R→10/3/24

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 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI1
Lot Number:	V2-SI744713
Matrix:	tr. HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon
Starting Material:	Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL

Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**999 ± 5 µg/mL** ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	**1000 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

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

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. 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 silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

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 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

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

July 10, 2024

- 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 10, 2029**

- 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
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFIED WEIGHT REPORT:

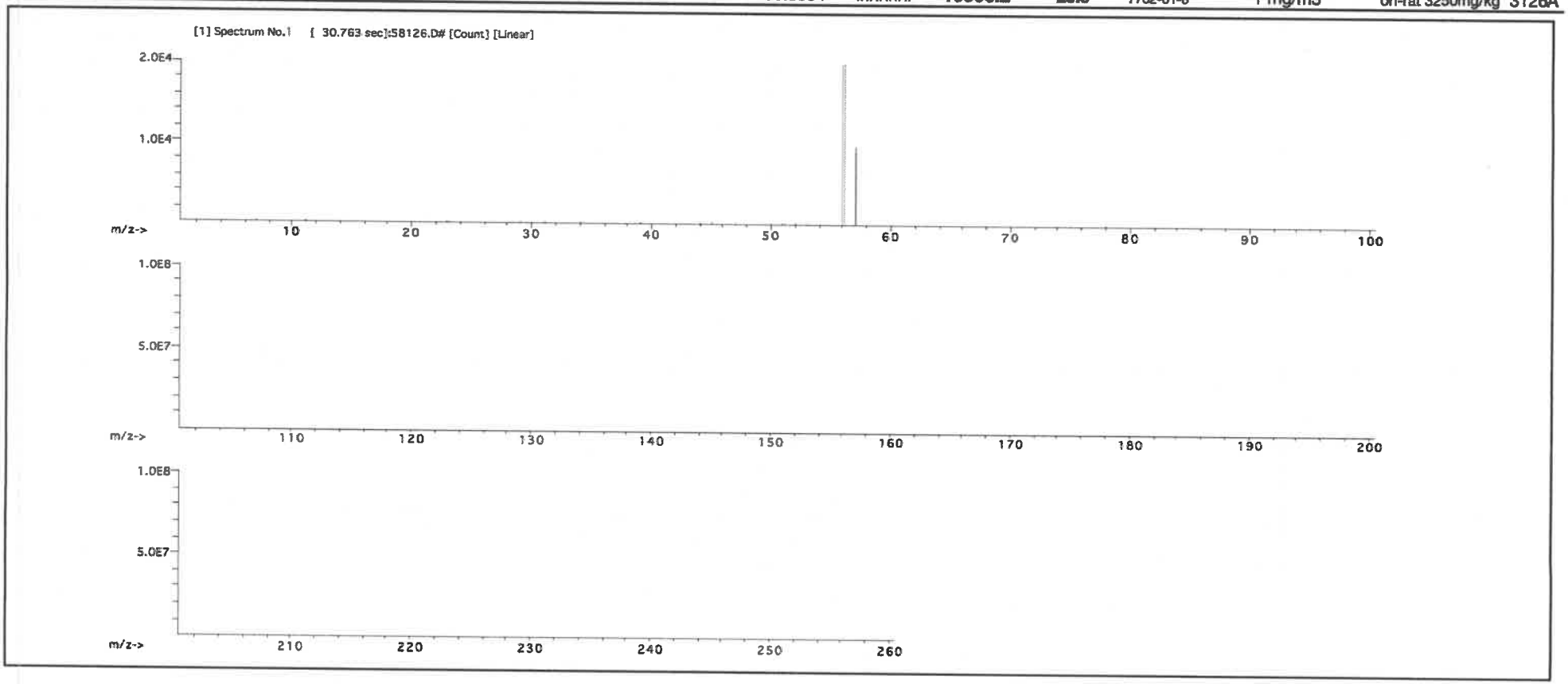
Part Number: 58126 R->1|B|2S
Lot Number: 011025
Description: Iron (Fe) M6140
Expiration Date: 011028
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07 ± 0.100 Flask Uncertainty

		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	011025
Reviewed By:	Pedro L. Rentas	011025

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(III) nitrate nonahydrate (Fe)	IN028	FED082023A1	10000	99.999	0.10	13.0	153.8534	######	**10000.2**	**20.0**	7782-61-8	1 mg/m3	orl-rat 3250mg/kg	3126A



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	T	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).

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CERTIFIED WEIGHT REPORT:

R-> 1/13/25

Part Number: 57119
Lot Number: 103024
Description: Potassium (K)

M6141
M6142
M6143

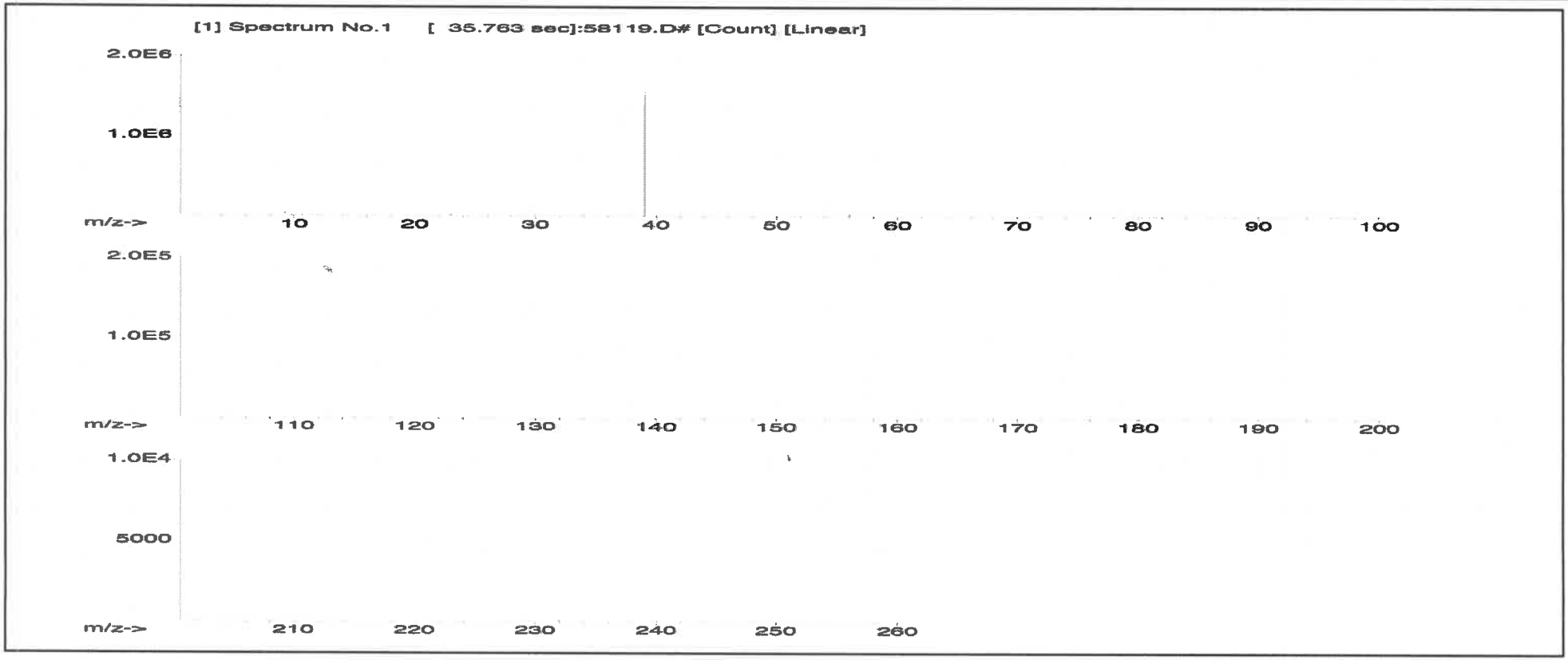
Expiration Date: 103027
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	80.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	103024
Reviewed By:	Pedro L. Rentas	103024

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	KD062022A1	10000	99.999	0.10	37.7	106.1040	######	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3750 mg/kg	3141a



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:

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).

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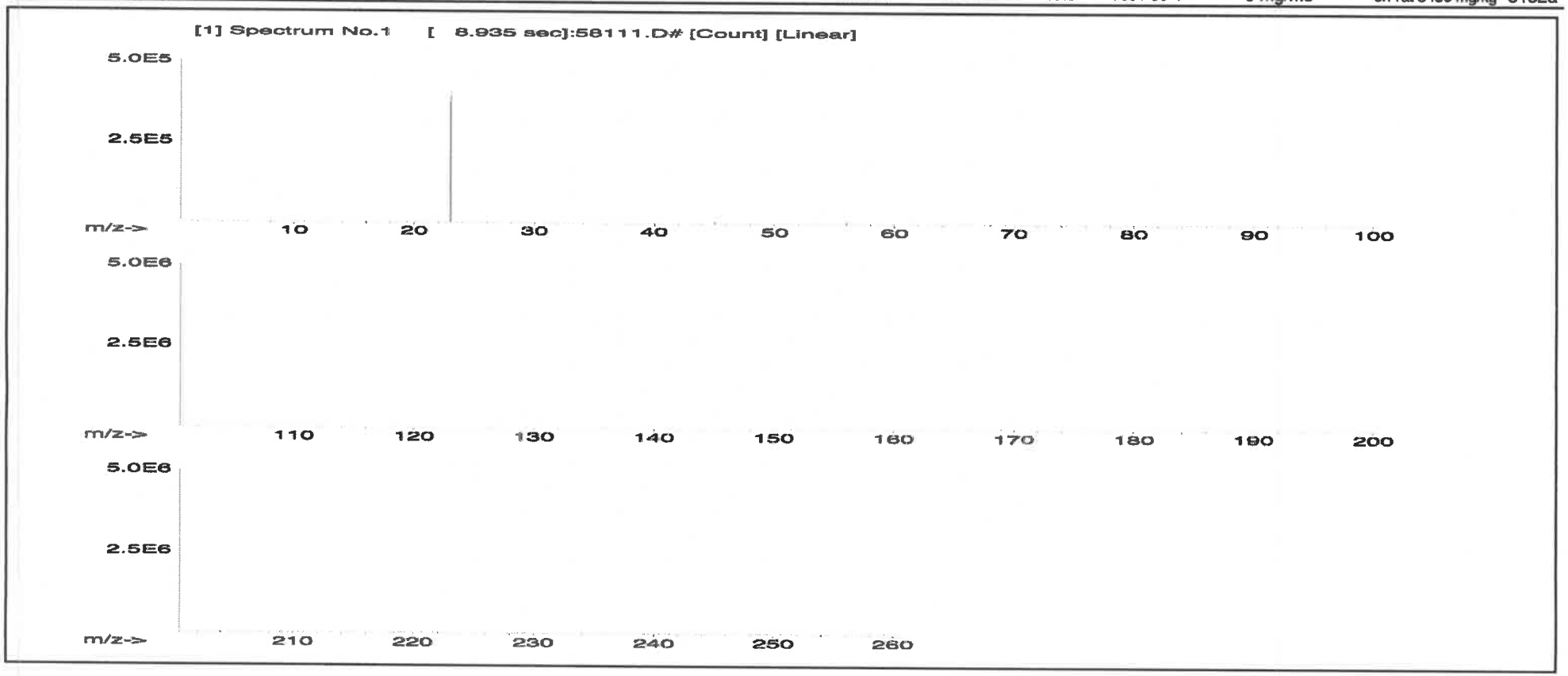
CERTIFIED WEIGHT REPORT:

R->1/13/25

Part Number:	**58111**		**Lot #**		
Lot Number:	**072424**	**Solvent:**	24002546	Nitric Acid	
Description:	**Sodium (Na)**				
		MG144 2%	80.0 (mL)	Nitric Acid	
Expiration Date:	072427				
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):	4000.2	0.10	Flask Uncertainty		

Formulated By:	Benson Chan 072424
Reviewed By:	Pedro L. Rentas 072424

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	148.7096	######	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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	Sc	<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:

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).

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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

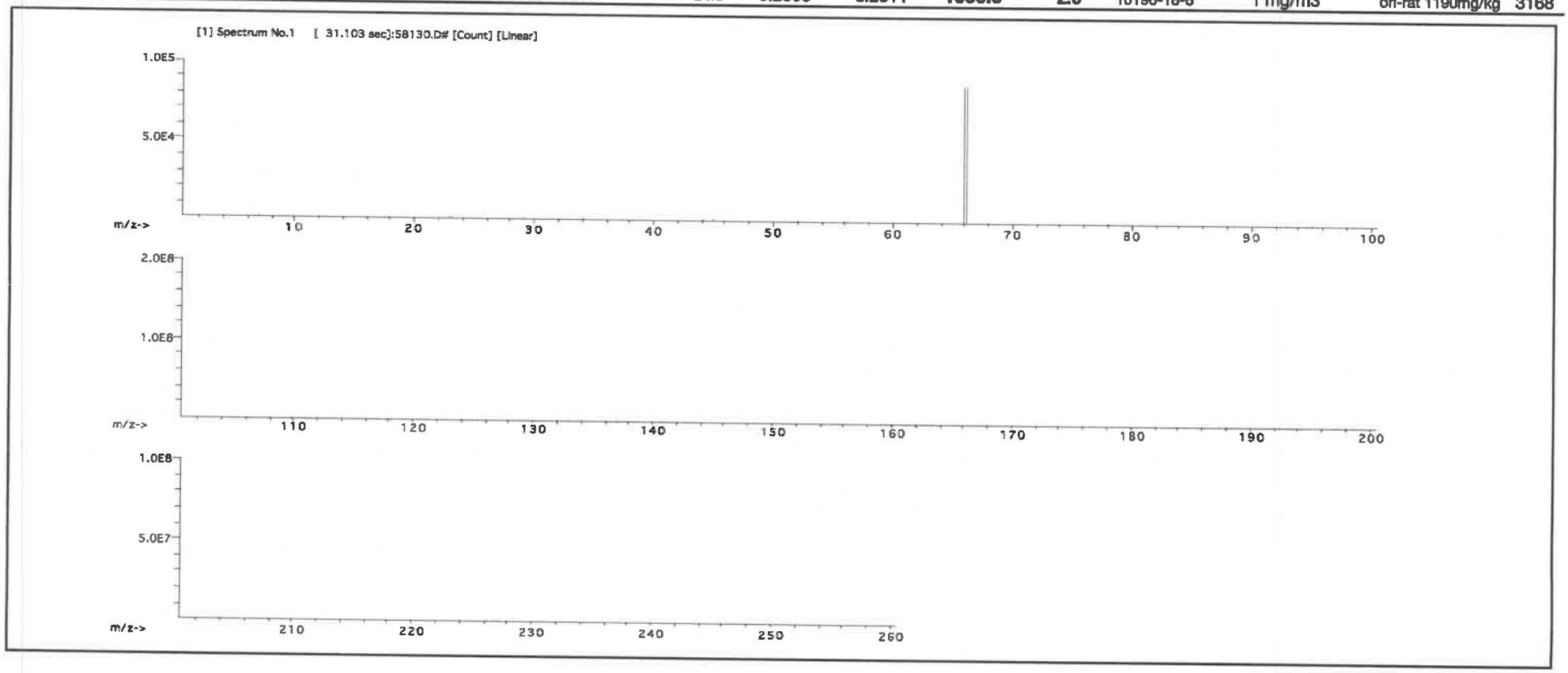
CERTIFIED WEIGHT REPORT:

Part Number:	**58030**	R → 1/13/25	**Solvent:**	**Lot #** 24012496	Nitric Acid
Lot Number:	**121724**				
Description:	**Zinc (Zn)**	M6145	2%	40.0 (mL)	Nitric Acid
Expiration Date:	121727				
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	121724
Reviewed By:	Pedro L. Rentas	121724

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	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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:

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).

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

M6151

R-> 1/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
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	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 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	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 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.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 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	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 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.: 22G2862015

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor | J.T.Baker

M615 MB

Material No.: 9673-33
Batch No.: 24I1262013
Manufactured Date: 2024-08-07
Retest Date:2029-08-06
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.2 %
Appearance	Passes Test	Passes Test
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	<1 ppm
ACS - Substances Reducing Permanganate(as SO2)	<= 2 ppm	<2 ppm
Ammonium (NH_4)	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO_3)	<= 0.2 ppm	0.1 ppm
Phosphate (PO_4)	<= 0.5 ppm	<0.1 ppm
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 4.0 ppb	<2.0 ppb
Trace Impurities - Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	<1.0 ppb
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	<1.0 ppb
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	<0.3 ppb
Trace Impurities - Copper (Cu)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Gold (Au)	<= 10.0 ppb	<5.0 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<100.0 ppb
Trace Impurities - Iron (Fe)	<= 50.0 ppb	<1.0 ppb
Trace Impurities - Lead (Pb)	<= 0.5 ppb	<0.5 ppb
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	<1.0 ppb
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	<0.1 ppb
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	<0.3 ppb
Trace Impurities - Potassium (K)	<= 500.0 ppb	<10.0 ppb
Trace Impurities - Selenium (Se)	<= 50.0 ppb	7.2 ppb
Trace Impurities - Silicon (Si)	<= 100.0 ppb	12.8 ppb
Trace Impurities - Silver (Ag)	<= 1.0 ppb	<1.0 ppb

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker

Material No.: 9673-33
Batch No.: 24I1262013

Test	Specification	Result
Trace Impurities - Sodium (Na)	<= 500.0 ppb	<5.0 ppb
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	<1.0 ppb
Trace Impurities - Tin (Sn)	<= 5.0 ppb	1.1 ppb
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	<1.0 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

J Croak

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R-02102/2025

M-6158

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

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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

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:	QCP-CICV-1
Lot Number:	V2-MEB744107
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 1 000 µg/mL ea: Aluminum, Barium, 500 µg/mL ea: Iron, 250 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 125 µg/mL ea: Silver, Copper, 100 µg/mL ea: Chromium, 25 µg/mL ea: Beryllium

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
Aluminum, Al	**1 000 ± 4 µg/mL**	**Barium, Ba**	**1 000 ± 6 µg/mL**
Beryllium, Be	**24.98 ± 0.12 µg/mL**	**Calcium, Ca**	**2 500 ± 8 µg/mL**
Chromium, Cr	**99.9 ± 0.6 µg/mL**	**Cobalt, Co**	**250.2 ± 1.2 µg/mL**
Copper, Cu	**125.0 ± 0.5 µg/mL**	**Iron, Fe**	**500.0 ± 2.2 µg/mL**
Magnesium, Mg	**2 500 ± 11 µg/mL**	**Manganese, Mn**	**249.9 ± 1.1 µg/mL**
Nickel, Ni	**250.0 ± 1.2 µg/mL**	**Potassium, K**	**2 500 ± 11 µg/mL**
Silver, Ag	**125.0 ± 0.6 µg/mL**	**Sodium, Na**	**2 500 ± 11 µg/mL**
Vanadium, V	**250.0 ± 1.1 µg/mL**	**Zinc, Zn**	**249.9 ± 1.1 µg/mL**

Density: 1.081 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
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

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

May 22, 2024

- 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

- **May 22, 2029**

- 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.

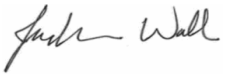
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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:	QCP-CICV-2
Lot Number:	U2-MEB733713
Matrix:	3% (w/v) Tartaric acid 1% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Antimony

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
Antimony, Sb	**500.0 ± 2.8 µg/mL**		

Density: 1.017 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Sb	ICP Assay	3102a	140911

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)

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 01, 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 01, 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

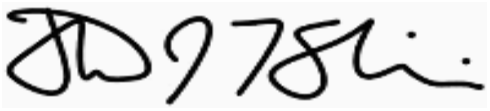
- Sealed TCT Bag Open Date: _____

- 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

Certificate of Analysis

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Christiansburg, VA 24073 USA
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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:	QCP-CICV-3
Lot Number:	V2-MEB749572
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 250 µg/mL ea: Cadmium

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
Arsenic, As	**500.0 ± 3.1 µg/mL**	**Cadmium, Cd**	**250.1 ± 1.1 µg/mL**
Lead, Pb	**500.0 ± 2.3 µg/mL**	**Selenium, Se**	**500.0 ± 3.2 µg/mL**
Thallium, Tl	**500.0 ± 3.0 µg/mL**		

Density: 1.040 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

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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.

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 02, 2025

- 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

- **January 02, 2030**

- 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: _____

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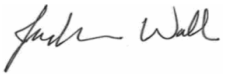
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

R -> 2/13/25

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: 58112
Lot Number: 011525
Description: Magnesium (Mg)

M 6171

	Lot #	
Solvent:	24012496	Nitric Acid
2%	40.0 (mL)	Nitric Acid

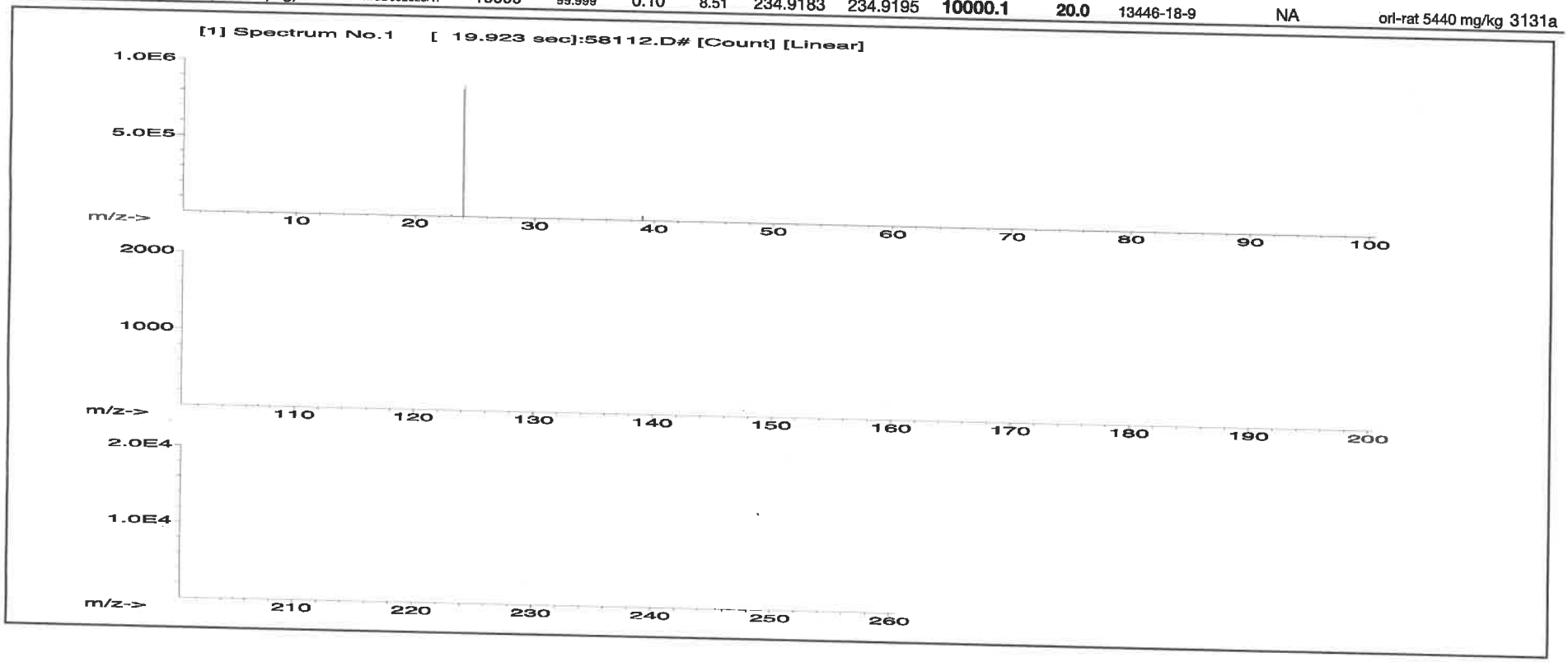
Expiration Date: 011528
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

5E-05	Balance Uncertainty	
0.100	Flask Uncertainty	

Weight shown below was diluted to (mL): 2000.07

Formulated By:	Benson Chan	011525
Reviewed By:	Pedro L. Rentas	011525

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	234.9183	234.9195	**10000.1**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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:

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.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	V2-MEB742428
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:
	Calcium, Potassium,
	Magnesium, Sodium,
	2 000 µg/mL ea:
	Aluminum, Barium,
	1 000 µg/mL ea:
	Iron,
	500 µg/mL ea:
	Nickel, Vanadium,
	Zinc, Cobalt,
	Manganese,
	250 µg/mL ea:
	Silver, Copper,
	200 µg/mL ea:
	Chromium,
	50 µg/mL ea:
	Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.03 ± 0.30 µg/mL	Calcium, Ca	5 000 ± 16 µg/mL
Chromium, Cr	200.0 ± 1.1 µg/mL	Cobalt, Co	500.0 ± 2.3 µg/mL
Copper, Cu	250.0 ± 1.1 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 22 µg/mL	Manganese, Mn	499.9 ± 2.2 µg/mL
Nickel, Ni	500.1 ± 2.3 µg/mL	Potassium, K	5 000 ± 22 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 22 µg/mL
Vanadium, V	500.0 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.117 g/mL (measured at 20 ± 4 °C)

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
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
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

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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)

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**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2024

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

11.2 Lot Expiration Date

- March 22, 2029

- 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
Custom Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certified Reference Material CRM

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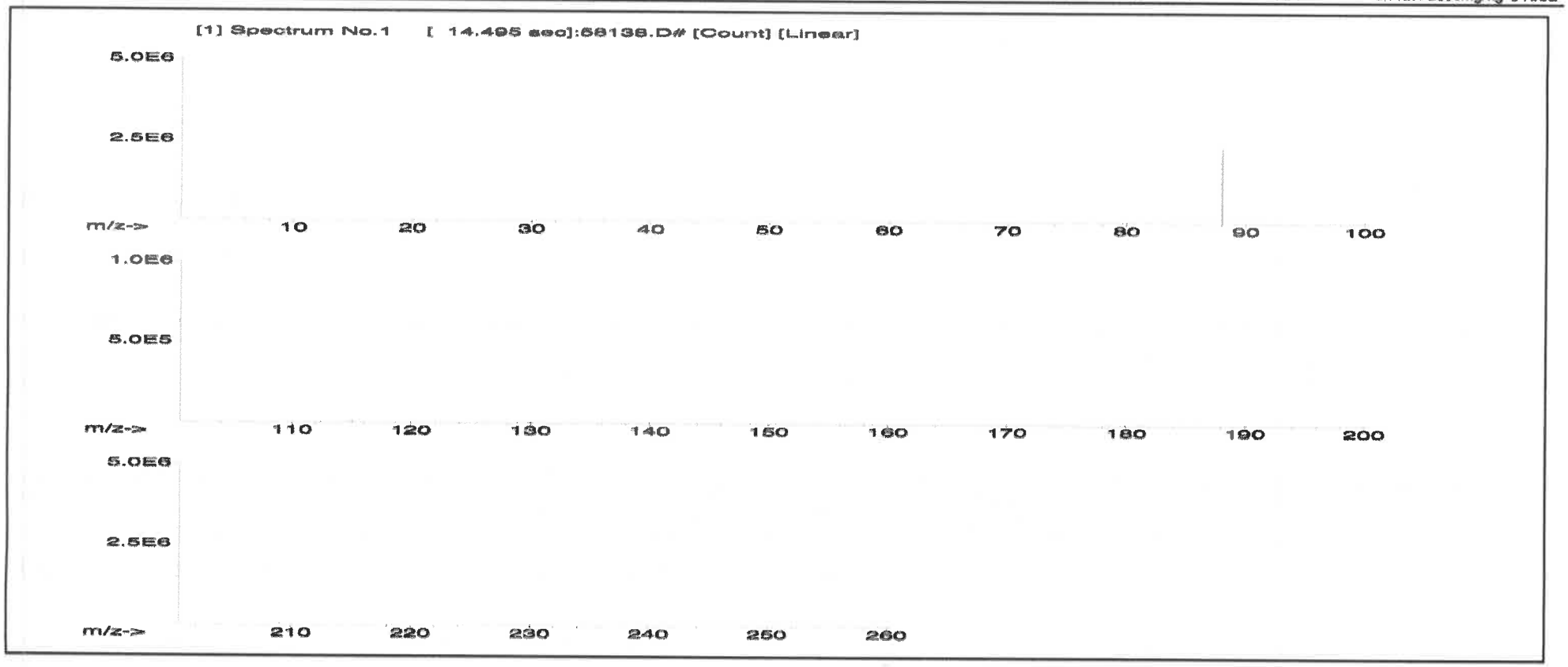
CERTIFIED WEIGHT REPORT:

R->8/6/29

Part Number:	57038		**Lot #**		
Lot Number:	092724	**Solvent:**	24002546	Nitric Acid	
Description:	Strontium (Sr)				
		M6176 2%	40.0 (mL)	Nitric Acid	
Expiration Date:	092727				
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		

Formulated By:	Benson Chan	092724
Reviewed By:	Pedro L. Rentas	092724

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	4.85481	**1000.0**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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).

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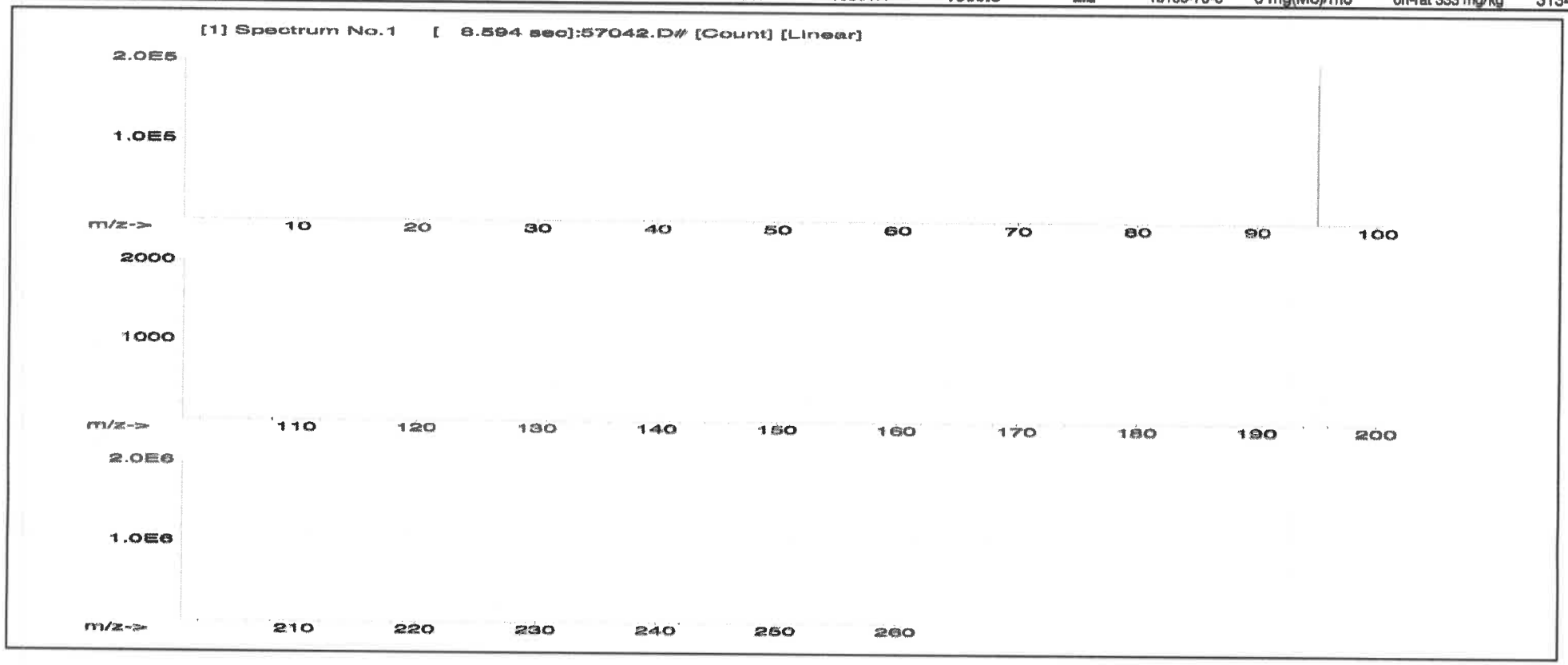
CERTIFIED WEIGHT REPORT:

R→ 8/6/25
M6177

		Lot #	Solvent:		
Part Number:	57042	MKBQ8597V	Ammonium hydroxide		
Lot Number:	080525	080525	ASTM Type 1 Water		
Description:	Molybdenum (Mo)	0.5%	10.0 (mL)	Ammonium hydroxide	
Expiration Date:	080528				
Recommended Storage:	Ambient (15 - 30 °C)				
Nominal Concentration (µg/mL):	1000				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	1999.41	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	080525
Reviewed By:	Pedro L. Rentas	080525

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	112322	0.1000	200.0	0.084	1000	10001.4	**1000.5**	**2.2**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



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	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:

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 by an ISO17025 certified organization with weights traceable through NIST to the SI kilogram (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).
Rev 1.0, 2/25/2025

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Certified Reference Material CRM

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CERTIFIED WEIGHT REPORT:

R>8/6/28
M6178

Part Number:	**57082**		**Lot #**		
Lot Number:	**031525**	**Solvent:**	24014457	Nitric Acid	
Description:	**Lead (Pb)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	031528				
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	0.10	Flask Uncertainty		

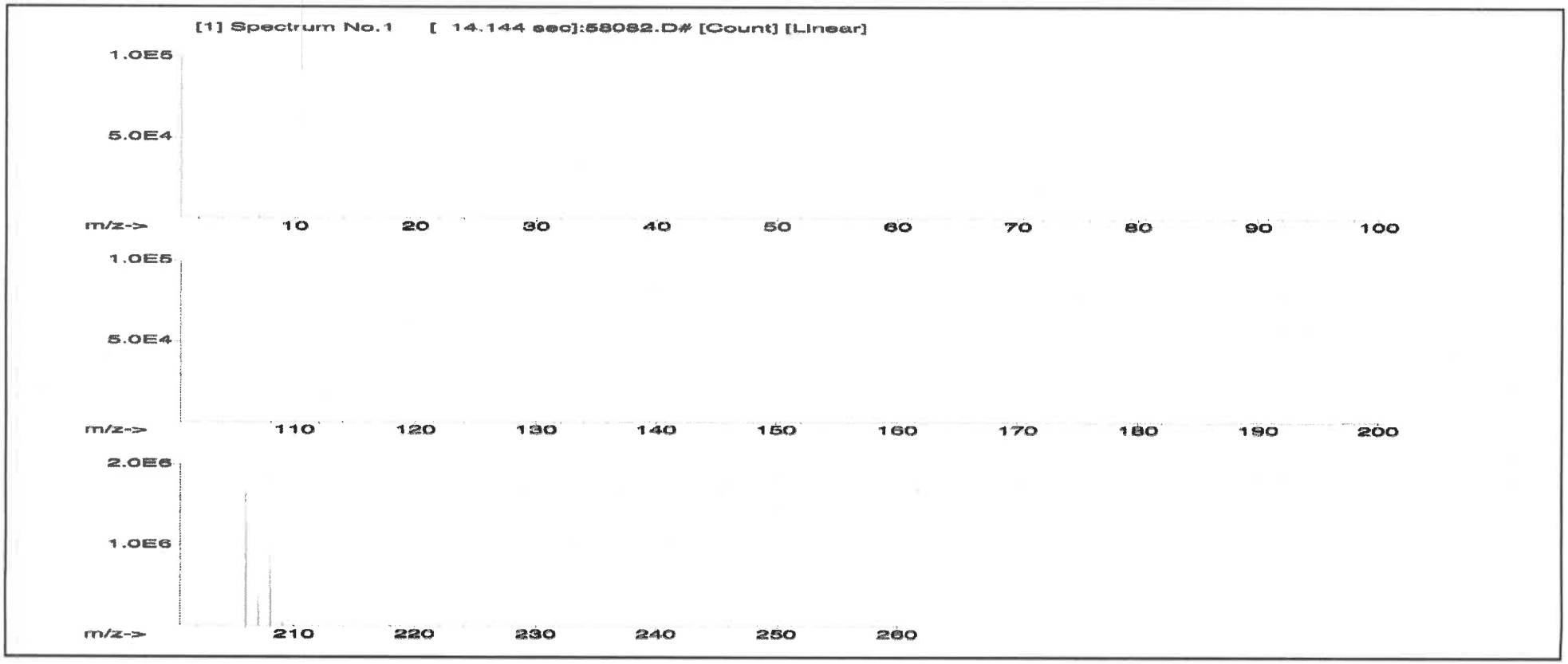
Giovanni Esposito

Formulated By:	Giovanni Esposito	031525

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031525

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	1000	99.999	0.10	62.5	3.20015	3.20067	**1000.2**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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	Sc	<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).

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

M6179
R -> 6/2/24

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 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

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

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

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 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

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

11.2 Lot Expiration Date

- February 20, 2029

- 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
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

R→03/06/24

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (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.

M6182

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 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

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 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 interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 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.

R→03/06/24

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (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

M6184

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

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 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 interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 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.

Nitric Acid 69%
CMOS

M6187
R.D :- 08/08/25

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
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	< 1.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	0.1 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	< 1 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 1 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	< 1.0 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	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 1.0 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	13 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

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

M6200
R.0 → 08/25/25

avantor™ | J.T.Baker®

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

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:	WW-LFS-2
Lot Number:	V2-MEB743480
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Silica,
	80 µg/mL ea: Antimony,
	70 µg/mL ea: Tin,
	40 µg/mL ea: Molybdenum,
	20 µg/mL ea: Titanium

R - 7/20/23
M6201
M6202
M6203
M6204

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	80.1 ± 0.5 µg/mL	Molybdenum, Mo	40.05 ± 0.22 µg/mL
Silica, SiO2	200.3 ± 1.4 µg/mL	Tin, Sn	70.1 ± 0.4 µg/mL
Titanium, Ti	20.03 ± 0.12 µg/mL		

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
SiO2	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

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)

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**

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 07, 2024

- 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

- May 07, 2029

- 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:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Thomas Kozikowski
Stock VS Manager

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™

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inorganicventures.com

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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 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	WW-LFS-1
Lot Number:	W2-MEB752149
Matrix:	5% (v/v) HNO3

R -> 7/20/23

M6209
M6210
M6211
M6212

Value / Analyte(s):		
	1 000 µg/mL ea:	
	Potassium,	
	600 µg/mL ea:	
	Phosphorus,	
	300 µg/mL ea:	
	Sodium,	Iron,
	200 µg/mL ea:	
	Magnesium,	Aluminum,
	Cerium,	Selenium,
	Thallium,	
	100 µg/mL ea:	
	Lead,	Calcium,
	80 µg/mL ea:	
	Arsenic,	
	70 µg/mL ea:	
	Mercury,	
	50 µg/mL ea:	
	Nickel,	
	40 µg/mL ea:	
	Chromium,	
	30 µg/mL ea:	
	Copper,	Boron,
	Vanadium,	
	20 µg/mL ea:	
	Zinc,	Strontium,
	Barium,	Beryllium,
	Cadmium,	Cobalt,
	Manganese,	Lithium,
	7.5 µg/mL ea:	
	Silver	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.2 ± 0.7 µg/mL	Arsenic, As	80.1 ± 0.5 µg/mL
Barium, Ba	20.02 ± 0.12 µg/mL	Beryllium, Be	20.02 ± 0.11 µg/mL
Boron, B	30.02 ± 0.15 µg/mL	Cadmium, Cd	20.04 ± 0.09 µg/mL
Calcium, Ca	100.1 ± 0.3 µg/mL	Cerium, Ce	200.2 ± 1.0 µg/mL
Chromium, Cr	40.02 ± 0.26 µg/mL	Cobalt, Co	20.03 ± 0.09 µg/mL
Copper, Cu	30.03 ± 0.13 µg/mL	Iron, Fe	300.3 ± 1.3 µg/mL
Lead, Pb	100.1 ± 0.5 µg/mL	Lithium, Li	20.03 ± 0.09 µg/mL
Magnesium, Mg	200.2 ± 0.9 µg/mL	Manganese, Mn	19.99 ± 0.09 µg/mL
Mercury, Hg	70.0 ± 0.3 µg/mL	Nickel, Ni	50.05 ± 0.22 µg/mL
Phosphorus, P	600.5 ± 2.9 µg/mL	Potassium, K	1 001 ± 4 µg/mL
Selenium, Se	200.2 ± 1.1 µg/mL	Silver, Ag	7.52 ± 0.03 µg/mL
Sodium, Na	300.3 ± 1.3 µg/mL	Strontium, Sr	20.02 ± 0.10 µg/mL
Thallium, Tl	200.2 ± 1.0 µg/mL	Vanadium, V	30.02 ± 0.13 µg/mL
Zinc, Zn	20.05 ± 0.09 µg/mL		

Density: 1.037 g/mL (measured at 20 ± 5 °C)

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
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
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
Ce	ICP Assay	3110	160830
Ce	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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° - 25° C to minimize the effects of transpiration. Use at 20° ± 5° 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**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver)

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 08, 2025

- 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

- April 08, 2029

- 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:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R 8/05/24

M6027

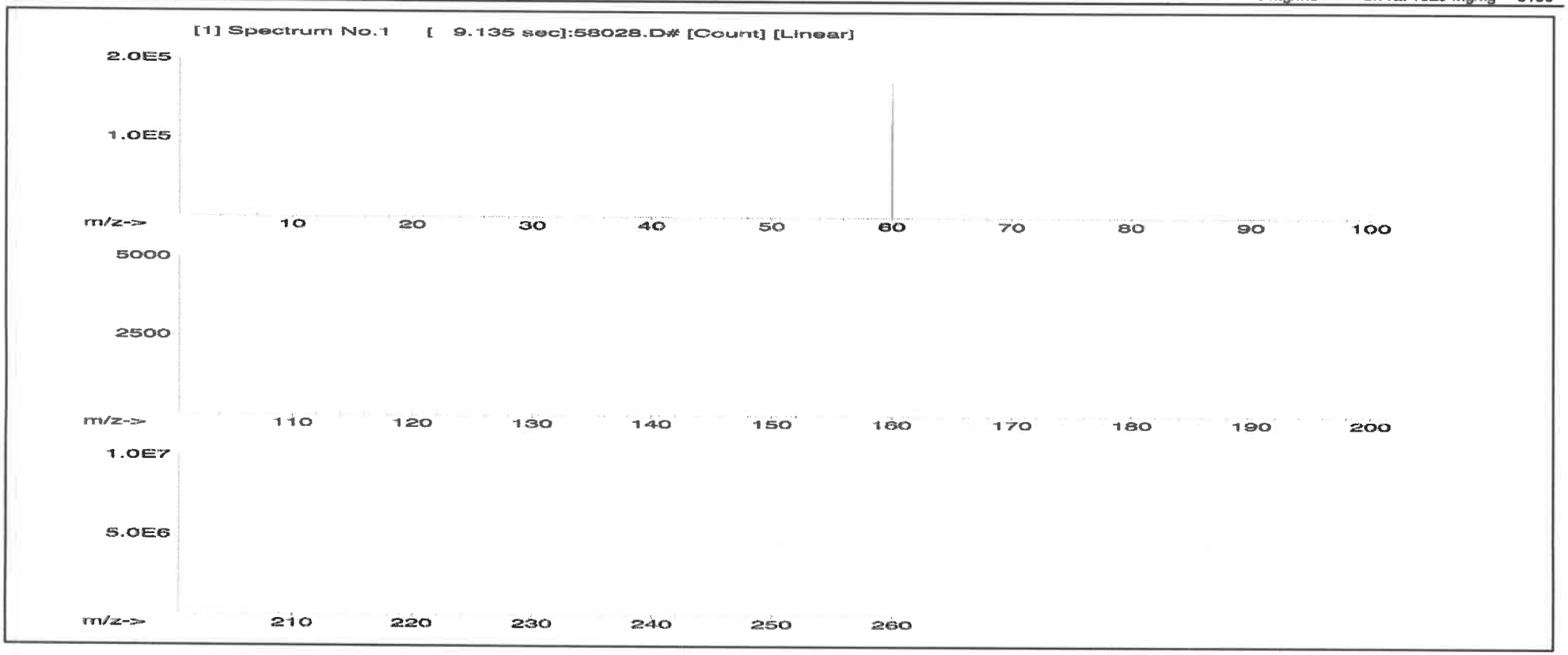
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**			
Lot Number:	**062024**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062027			
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	062024
Reviewed By:	Pedro L. Rentas	062024

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. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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).

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Certified Reference Material CRM

M6030

R: 8/5/24

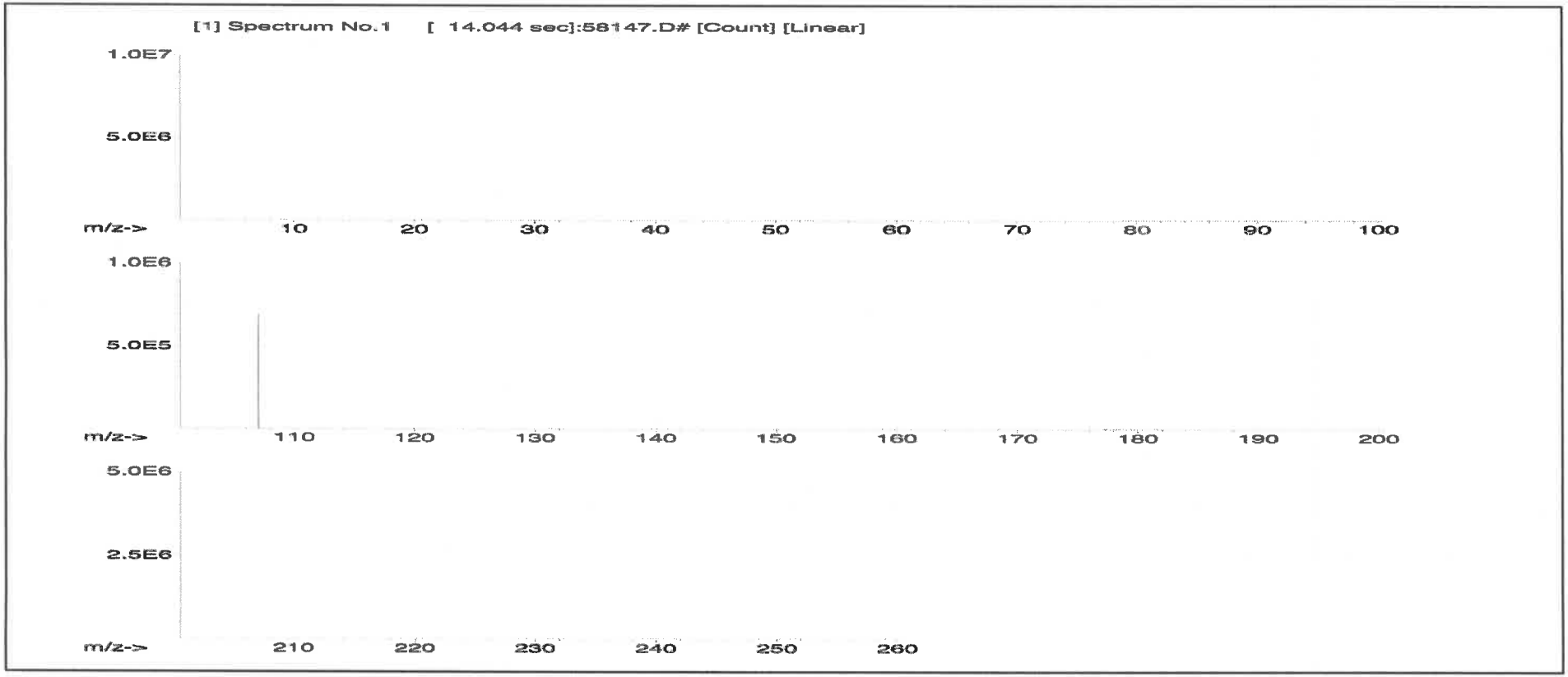
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57047**		**Lot #**		
Lot Number:	**122823**	**Solvent:**	24002546	Nitric Acid	
Description:	**Silver (Ag)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	122826				
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):	4000.30	0.058	Flask 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



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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* 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.
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* 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).

opened : 3/24/25

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CERTIFIED WEIGHT REPORT:

M6160

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)
Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.26

Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

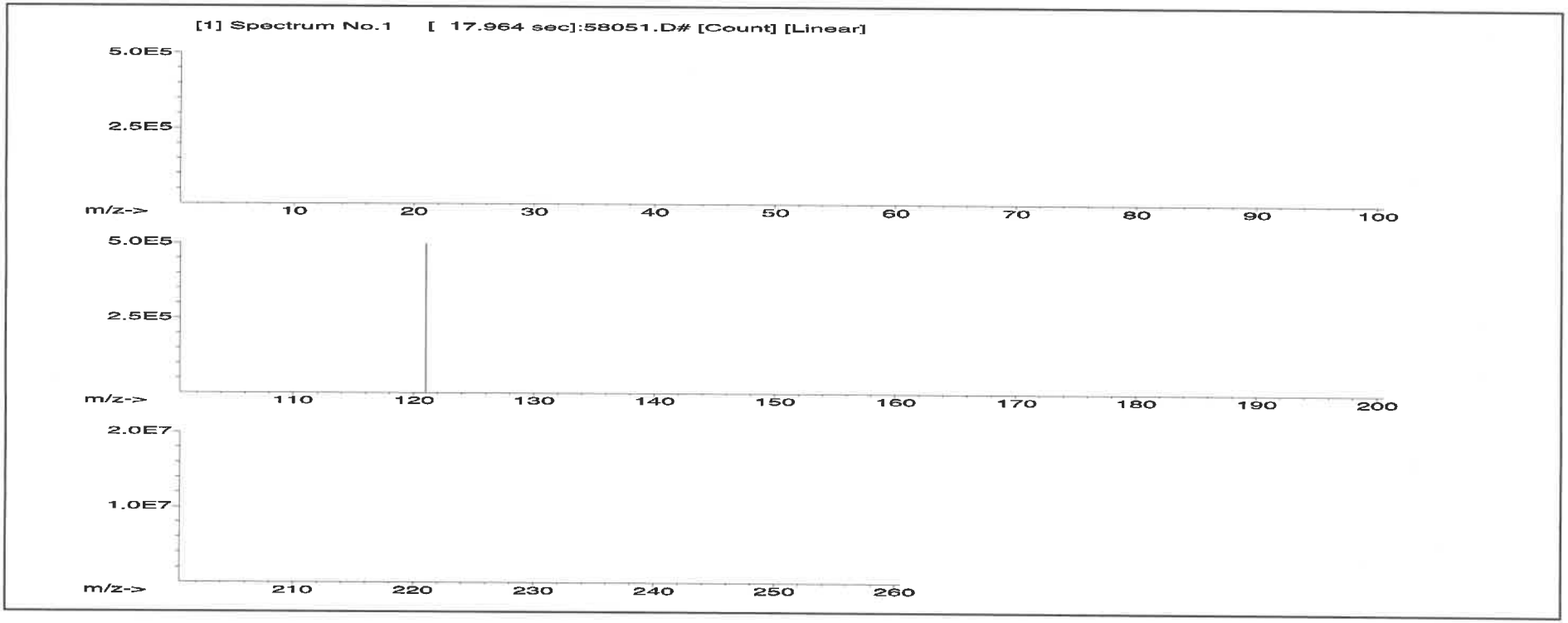
Giovanni Esposito

Formulated By:	Giovanni Esposito	071724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	071724

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	060324	0.1000	200.0	0.084	1000	10001.4	**1000.0**	**2.2**	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



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.
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R ! 8/5/24

M6023

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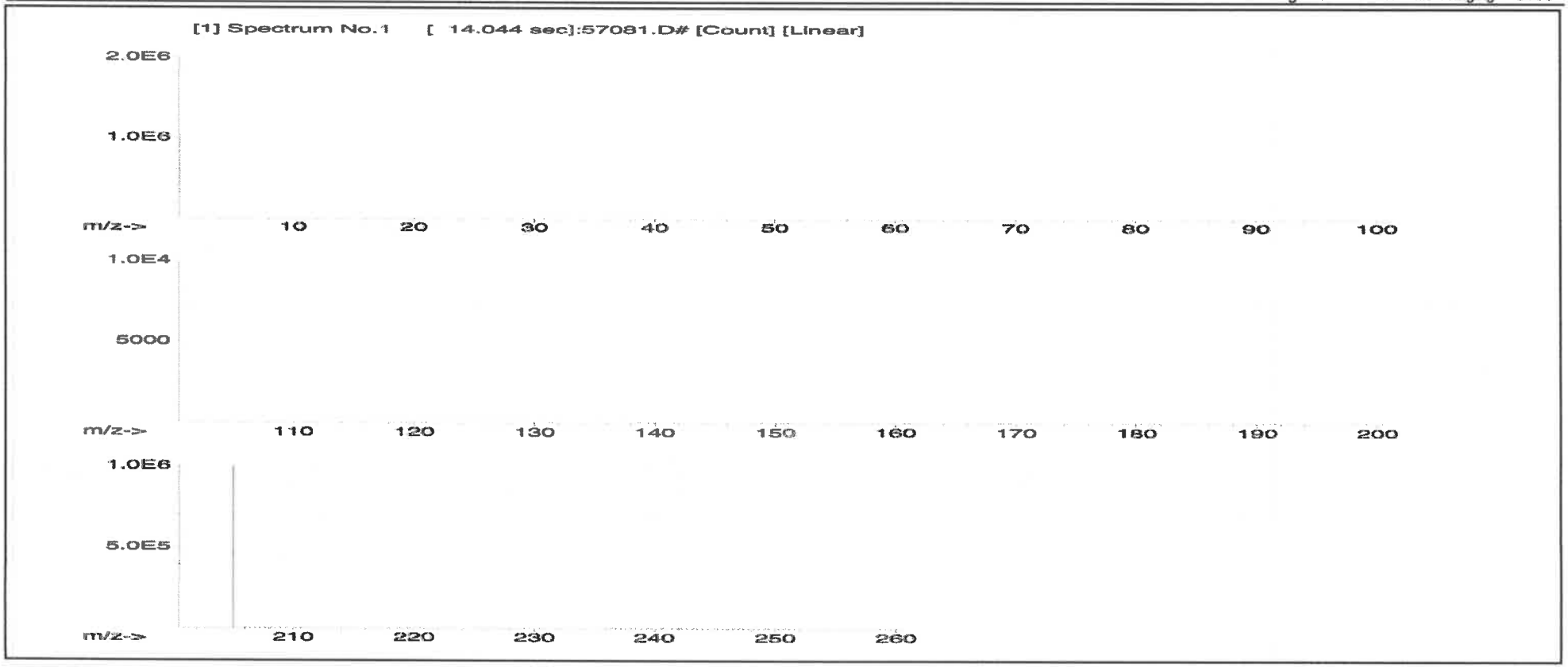
CERTIFIED WEIGHT REPORT:

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



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:

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Bc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
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):	2000.3	0.06	Flask Uncertainty	

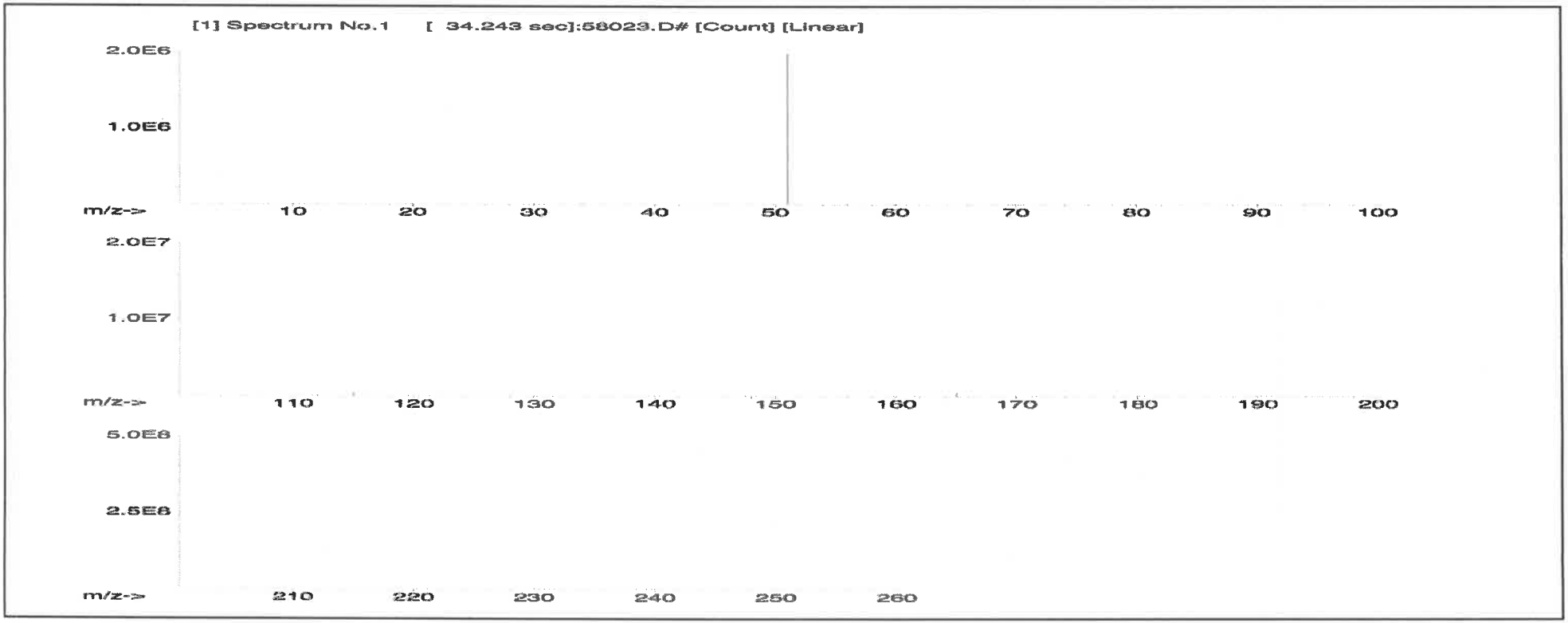
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

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	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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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
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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
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SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. EMS-2025-1026
QUOTE NO. Q2510070 Q3420
COC Number 2045139

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Dal-Tile LLC - Dickson Plant
ADDRESS: 187 Warren & Molley Drive
CITY Dickson STATE: TN ZIP: 37055
ATTENTION: Michel Gil
PHONE: 214-301-4003 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Wastewater Sampling
PROJECT NO.: EMS-2025-1026 LOCATION: Nashville, TN
PROJECT MANAGER: James Eagles
e-mail: james.eagles@alliancetg.com
PHONE: 601-415-6913 FAX:

CLIENT BILLING INFORMATION

BILL TO: ATG - Baytown AEM PO#:
ADDRESS: 400 Texas 146
CITY Baytown STATE: TX ZIP: 77520
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☑ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

1: 1664A SILICA/HEXANE 2. 3. 4 TURBA + TSS 5: TURBA + TSS - NH3 6. 7. 8. 9.

ALLIANCE 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
								C	E	F	B	C					← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER
1.	Oil & Grease #1	WW		X	10/21	12:40pm	1	X									pH: 6.96
2.	Oil & Grease #2	WW		X	10/21	2:55pm	1	X									pH: 6.75
3.	Oil & Grease #3	WW		X	10/21	2:59pm	1	X									pH: 6.83
4.	Cyanide	WW		X	10/21	3:04pm	1		X								pH: 8.42
5.	Composite #1	WW	X		10/21	3:14pm	1			X							pH: 8.17
6.	Composite #2	WW	X		10/21	3:17pm	1			V							
7.	Phenol	WW	X		10/21	3:20pm	1				X						
8.	Ammonia	WW	X		10/21	3:17pm	1					X					
9.	TSS Work						1			X							
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. James Eagles	10/21/25	1. Brad Bull
2.	10/22/25 10:30	2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 5.1 °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

From: James Eagles
Sent: Wednesday, October 22, 2025 8:04 AM
To: Yazmeen Gomez
Cc: James Gunn; Mohammad Ahmed
Subject: Dal-Tile Dickson Facility October Samples

Good morning Yazmeen,

I took samples for the Dal-Tile Dickson yesterday, TN facility. During the site visit, their composite sampler once again did not pull enough wastewater to fill all of the composite sample bottles. I was able to fill the two bottles that did not have any preservatives in them as well as the 500ml bottles designated for Ammonia and Mercury testing.

When you receive the samples, you'll will find the following bottles in the cooler:

3 x 1 Liter amber bottles with a grab samples for their Oil & Grease tests
1 x 500 ml bottle with a grab sample for their monthly cyanide test
2 x 500 ml bottles with the composite samples and no preservative (labeled Composite #1 and Composite #2)
- Please use these for as many tests that can be conducted that they were asking for.
1 x 500 ml bottle with the composite sample for the mercury tests
1 x 500 ml bottle with the composite sample for the ammonia test

The details listed above are reflected on the CoC.

The cooler was designated for "Next Day Air" and the UPS tracking number is: **J4644862582**

Please let me know if you have any questions or need to discuss anything regarding this sampling event.

Thanks,

ENVIRONMENTAL 360 NOW Alliance TECHNICAL GROUP
James Eagles
Compliance Specialist
Mobile: 601-415-6913
www.alliancetg.com

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

QA Control Code: A2070148