SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHJJ2

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHJJ2	P5027-01	X			
MBHK14	P5027-02	X			
MBHK15	P5027-03	X			
MBHK16	P5027-04	X			
MBHK17	P5027-05	X			
MBHK18	P5027-06	X			
MBHK19	P5027-07	X			
MBHK20	P5027-08	X			
MBHK21	P5027-09	X			
MBHK22	P5027-10	X			
MBHK22D	P5027-11	X			
MBHK22S	P5027-12	X			
MBHK23	P5027-13	X			
MBHK24	P5027-14	X			
MBHK25	P5027-15	X			
MBHK26	P5027-16	X			
MBHK27	P5027-17	X			
MBHK28	P5027-18	X			
MBHK29	P5027-19	X			
MBHK30	P5027-20	X			
MBHK31	P5027-21	X			
MBHK32	P5027-22	X			

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG Narrative. All edits and manual integrations have been peer-reviewed. Release of the data contained in this hardcopy Complete SDG File and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

68HERH20D0011

SDG # MBHJJ2

USEPA CLP COC (LAB COPY)

DateShipped: 11/26/2024

CarrierName: FedEx

AirbillNo: 7702 6139 1576

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 1

No: 2-112624-092004-0026

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P174-SB-01-Z00-02	MBHJJ2	Soil/		ICP-AES(35)	4571 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z02-06	MBHK14	Soil/		ICP-AES(35)	4572 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z06-12	MBHK15	Soil/		ICP-AES(35)	4573 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z12-18	MBHK16	Soil/		ICP-AES(35)	4574 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z18-24	MBHK17	Soil/		ICP-AES(35)	4575 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z24-30	MBHK18	Soil/		ICP-AES(35)	4576 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-01-Z30-36	MBHK19	Soil/		ICP-AES(35)	4577 (Wet ice < 6 C) (1)	P174-SB-01	11/20/2024 09:45	
P174-SB-12-Z00-02	MBHK20	Soil/		ICP-AES(35)	4658 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P174-SB-12-Z02-06	MBHK21	Soil/		ICP-AES(35)	4659 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P174-SB-12-Z06-12	MBHK22	Soil/		ICP-AES(35)	4610 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	

Sample(s) to be used for Lab QC: P174-SB-12-Z06-12 Tag 4610 - Special Instructions: Samples MBHKF8 and MBHK22 are MS/MSDs. Samples MBHK27, MBHK28, MBHK30 and MBHKG1 have limited sample mass.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LSASD SOP C-109 Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
1 Cooler	WSP	1635 11/26/24	UA	1005 11-27-24	IR Gun # 1 2.6°C
					Custody Seal Intact
			11/26/24		Temp Blank present

2

68HERH20D0011

SDG # MBHJJ2

USEPA CLP COC (LAB COPY)

DateShipped: 11/26/2024

CarrierName: FedEx

AirbillNo: 7702 6139 1576

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 1

No: 2-112624-092004-0026

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P174-SB-12-Z12-18	MBHK23	Soil/		ICP-AES(35)	4611 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P174-SB-12-Z18-24	MBHK24	Soil/		ICP-AES(35)	4612 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P174-SB-12-Z24-30	MBHK25	Soil/		ICP-AES(35)	4613 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P174-SB-12-Z30-36	MBHK26	Soil/		ICP-AES(35)	4614 (Wet ice < 6 C) (1)	P174-SB-12	11/20/2024 10:02	
P175-SB-01-Z00-02	MBHK27	Soil/		ICP-AES(35)	4717 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	
P175-SB-01-Z02-06	MBHK28	Soil/		ICP-AES(35)	4718 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	
P175-SB-01-Z06-12	MBHK29	Soil/		ICP-AES(35)	4719 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	
P175-SB-01-Z12-18	MBHK30	Soil/		ICP-AES(35)	4680 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	
P175-SB-01-Z18-24	MBHK31	Soil/		ICP-AES(35)	4681 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	
P175-SB-01-Z24-30	MBHK32	Soil/		ICP-AES(35)	4682 (Wet ice < 6 C) (1)	P175-SB-01	11/21/2024 09:25	

Special Instructions: Samples MBHKF8 and MBHK22 are MS/MSDs. Samples MBHK27, MBHK28, MBHK30 and MBHKG1 have limited sample mass.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LSASD SOP C-109 Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
1 Cooler	CSP	11/26/24 16:35		1005 11-27-24	IR Gun #1 2.6
					Custody Seal Intact
					Temp Blank present
			11/26/24		

3

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassandra Reine		Log-in Date 11/27/2024
Received By (Signature)		
Case Number 51879	SDG No. MBHJJ2	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	n/a
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No. and Shipping Container ID No.	770261391576 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.6 Degree C
8. Sample Condition	Intact
9. Sample Tags Sample Tag Numbers	Absent Listed on Traffic Report
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	11/27/2024
12.Time Received	10:05

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHJJ2	N/A	4571	P5027-01	Intact
2	MBHK14	N/A	4572	P5027-02	Intact
3	MBHK15	N/A	4573	P5027-03	Intact
4	MBHK16	N/A	4574	P5027-04	Intact
5	MBHK17	N/A	4575	P5027-05	Intact
6	MBHK18	N/A	4576	P5027-06	Intact
7	MBHK19	N/A	4577	P5027-07	Intact
8	MBHK20	N/A	4658	P5027-08	Intact
9	MBHK21	N/A	4659	P5027-09	Intact
10	MBHK22	N/A	4610	P5027-10	Intact
11	MBHK22D	N/A	4610	P5027-11	Intact
12	MBHK22S	N/A	4610	P5027-12	Intact
13	MBHK23	N/A	4611	P5027-13	Intact
14	MBHK24	N/A	4612	P5027-14	Intact
15	MBHK25	N/A	4613	P5027-15	Intact
16	MBHK26	N/A	4614	P5027-16	Intact
17	MBHK27	N/A	4717	P5027-17	Intact
18	MBHK28	N/A	4718	P5027-18	Intact
19	MBHK29	N/A	4719	P5027-19	Intact
20	MBHK30	N/A	4680	P5027-20	Intact
21	MBHK31	N/A	4681	P5027-21	Intact
22	MBHK32	N/A	4682	P5027-22	Intact
23	N/A	N/A	N/A	N/A	N/A

* Contact SMO and attach record of resolution

Reviewed By		Logbook No.	N/A
Date	11/27/24	Logbook Page No.	N/A

FORM DC-2
COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME	**Alliance Technical Group, LLC**		
LAB CODE	**ACE**		
CONTRACT NO.	**68HERH20D0011**		
CASE NO.	**51879**	SDG NO.	**MBHJJ2**
MA NO.		SOW NO.	**SFAM01.1**

All documents delivered in the Complete SDG File must be original documents where possible.
(Reference - Exhibit B Section 2.4)

	PAGE NOs: FROM	PAGE NOs: TO	CHECK LAB	CHECK REGION
1 . SDG Cover Page	1	1	✓	
2 . Traffic Report/Chain of Custody Record(s)	2	3	✓	
3 . Sample Log-In Sheet (DC-1)	4	4	✓	
4 . CSF Inventory Sheet (DC-2)	5	7	✓	
5 . SDG Narrative	8	10	✓	
6 . Communication Logs	NA	NA	✓	
7 . Percent Solids Log	11	13	✓	
Analysis Forms and Data (ICP-AES)				
8 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	14	33	✓	
9 . Instrument raw data by instrument in analysis order	34	599	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	600	757	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	758	759	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	760	782	✓	
13 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
14 . Extraction Logs for TCLP and SPLP	NA	NA	✓	
15 . Raw GPC Data	NA	NA	✓	
16 . Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (ICP-MS)				
17 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
18 . Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	NA	NA	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
22 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
23. Extraction Logs for TCLP and SPLP	NA	NA	✓	
24. Raw GPC Data	NA	NA	✓	
25. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Mercury)				
26. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
27. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
28. Standard and Reagent Preparation Logs	NA	NA	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
31. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
32. Extraction Logs for TCLP and SPLP	NA	NA	✓	
33. Raw GPC Data	NA	NA	✓	
34. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Cyanide)				
35. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
36. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
37. Standard and Reagent Preparation Logs	NA	NA	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
40. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
41. Extraction Logs for TCLP and SPLP	NA	NA	✓	
42. Raw GPC Data	NA	NA	✓	
43. Raw Florisil Data	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
Additional				
44. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	783	783	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	784	785	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	786	787	✓	
47. Other Records and related Communication Logs (describe or list)				
	NA	NA	✓	

48. Comments:

Completed by:
(CLP Lab)

(Signature)	Nimisha Pandya, Document Control Officer (Print Name & Title)	(Date)

Audited by:
(EPA)

(Signature)	(Print Name & Title)	(Date)

284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MBHJJ2
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5027

A. Number of Samples and Date of Receipt

20 Soil samples were delivered to the laboratory intact on 11/27/2024.

B. Parameters

Test requested for Metals CLP FULL = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 2.6^{o}C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue: A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution: To maintain COC integrity, ASB requests no changes to the Sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

F. Analytical Techniques:

All analyses were based on CLP Methodology by method SFAM01.1.

Inter Element correction factors (IECs) are determined annually and correction factor are applied during ICP-AES analysis.

G. Calculation:

Calculation for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)
Vf = Final digestion volume (mL)
W = Initial aliquot amount (g) (Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample MBHJJ2 For Arsenic:

If C = 0.1276805 ppm
Vf = 100 ml
W = 1.23 g
S = 0.745(74.5/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.1276805 \times \frac{100}{1.23 \times 0.745} \times 1$$

$$= 13.9336 \text{ mg/kg}$$

$$= 14 \text{ mg/kg (Reported Result with Signification)}$$

H. QA/ QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. Spike sample did meet requirements except for Antimony, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements except for Selenium. Serial Dilution did meet requirements except for Cobalt.

Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

284 Sheffield Street
Mountainside, NJ 07092

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

Signature_____ Name: Nimisha Pandya

Date _____ Title: Document Control Officer

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/2/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 12:40
In Date: 11/28/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:48
Out Date: 11/29/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133671

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
P5027-01	MBHJJ2	1	1.15	8.73	9.88	7.65	74.5	
P5027-02	MBHK14	2	1.18	8.58	9.76	7.94	78.8	
P5027-03	MBHK15	3	1.15	8.70	9.85	8.35	82.8	
P5027-04	MBHK16	4	1.12	8.41	9.53	8.69	90.0	
P5027-05	MBHK17	5	1.15	8.60	9.75	9.03	91.6	
P5027-06	MBHK18	6	1.16	8.40	9.56	9.02	93.6	
P5027-07	MBHK19	7	1.18	8.41	9.59	9.01	93.1	
P5027-08	MBHK20	8	1.15	8.79	9.94	7.83	76.0	
P5027-09	MBHK21	9	1.17	8.53	9.7	8.25	83.0	
P5027-10	MBHK22	10	1.18	8.70	9.88	8.52	84.4	
P5027-11	MBHK22D	11	1.18	8.70	9.88	8.52	84.4	
P5027-12	MBHK22S	12	1.18	8.70	9.88	8.52	84.4	
P5027-13	MBHK23	13	1.15	8.76	9.91	8.85	87.9	
P5027-14	MBHK24	14	1.15	8.62	9.77	8.99	91.0	
P5027-15	MBHK25	15	1.16	8.48	9.64	9.2	94.8	
P5027-16	MBHK26	16	1.15	8.37	9.52	8.47	87.5	
P5027-17	MBHK27	17	1.18	8.48	9.66	9.11	93.5	
P5027-18	MBHK28	18	1.15	8.66	9.81	9.2	93.0	
P5027-19	MBHK29	19	1.18	8.50	9.68	8.67	88.1	
P5027-20	MBHK30	20	1.14	8.63	9.77	8.32	83.2	
P5027-21	MBHK31	21	1.19	8.47	9.66	8.6	87.5	
P5027-22	MBHK32	22	1.15	8.80	9.95	8.79	86.8	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

SB 13367)

WorkList Name : %1-p5027 **WorkList ID :** 185860 **Department :** Wet-Chemistry **Date :** 11-28-2024 08:48:35

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5027-01	MBHJJ2	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-02	MBHK14	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-03	MBHK15	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-04	MBHK16	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-05	MBHK17	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-06	MBHK18	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-07	MBHK19	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-08	MBHK20	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-09	MBHK21	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-10	MBHK22	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-11	MBHK22D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-12	MBHK22S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-13	MBHK23	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-14	MBHK24	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-15	MBHK25	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-16	MBHK26	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-17	MBHK27	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5027-18	MBHK28	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5027-19	MBHK29	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5027-20	MBHK30	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5027-21	MBHK31	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO

12

Date/Time 11.28.24 12:00

Raw Sample Received by: SB WC)

Raw Sample Relinquished by: CP Sm

Date/Time 11.28.24 12:45

Raw Sample Received by: CP Sm

Raw Sample Relinquished by: SB WC)

WORKLIST(Hardcopy Internal Chain)

(B 133671)

WorkList Name : %1-p5027 **WorkList ID :** 185860 **Department :** Wet-Chemistry **Date :** 11-28-2024 08:48:35

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5027-22	MBHK32	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO

13

Date/Time 11.28.24 12:00

Raw Sample Received by: JB WOC)

Raw Sample Relinquished by: AP Sm

Date/Time 11.28.24 12.45

Raw Sample Received by: AP Sm

Raw Sample Relinquished by: JB WOC)

EPA SAMPLE NO.

MBHJJ2

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-01

% Solids: 74.5 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6200		12/27/2024	1753
7440-36-0	Antimony	1.6	J*	12/27/2024	1753
7440-38-2	Arsenic	14		12/27/2024	1753
7440-39-3	Barium	160		12/27/2024	1753
7440-41-7	Beryllium	0.74		12/27/2024	1753
7440-43-9	Cadmium	0.76		12/27/2024	1753
7440-70-2	Calcium	4200		12/27/2024	1753
7440-47-3	Chromium	12		12/27/2024	1753
7440-48-4	Cobalt	8.9	*	12/27/2024	1753
7440-50-8	Copper	42		12/27/2024	1753
7439-89-6	Iron	16000		12/27/2024	1753
7439-92-1	Lead	260		12/27/2024	1753
7439-95-4	Magnesium	2000		12/27/2024	1753
7439-96-5	Manganese	800		12/27/2024	1753
7440-02-0	Nickel	16		12/27/2024	1753
7440-09-7	Potassium	610		12/27/2024	1753
7782-49-2	Selenium	8.5	*	12/27/2024	1753
7440-22-4	Silver	1.1	U*	12/27/2024	1753
7440-23-5	Sodium	550	U	12/27/2024	1753
7440-28-0	Thallium	2.7	U*	12/27/2024	1753
7440-62-2	Vanadium	17		12/27/2024	1753
7440-66-6	Zinc	190	*	12/27/2024	1753

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK14

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-02

% Solids: 78.8 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6300		12/27/2024	1757
7440-36-0	Antimony	1.4	J*	12/27/2024	1757
7440-38-2	Arsenic	14		12/27/2024	1757
7440-39-3	Barium	160		12/27/2024	1757
7440-41-7	Beryllium	0.73		12/27/2024	1757
7440-43-9	Cadmium	0.67		12/27/2024	1757
7440-70-2	Calcium	4200		12/27/2024	1757
7440-47-3	Chromium	11		12/27/2024	1757
7440-48-4	Cobalt	9.2	*	12/27/2024	1757
7440-50-8	Copper	49		12/27/2024	1757
7439-89-6	Iron	16000		12/27/2024	1757
7439-92-1	Lead	210		12/27/2024	1757
7439-95-4	Magnesium	2000		12/27/2024	1757
7439-96-5	Manganese	850		12/27/2024	1757
7440-02-0	Nickel	16		12/27/2024	1757
7440-09-7	Potassium	500	J	12/27/2024	1757
7782-49-2	Selenium	8.7	*	12/27/2024	1757
7440-22-4	Silver	1.0	U*	12/27/2024	1757
7440-23-5	Sodium	510	U	12/27/2024	1757
7440-28-0	Thallium	2.5	U*	12/27/2024	1757
7440-62-2	Vanadium	17		12/27/2024	1757
7440-66-6	Zinc	150	*	12/27/2024	1757

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK15

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-03

% Solids: 82.8 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6700		12/27/2024	1801
7440-36-0	Antimony	0.96	J*	12/27/2024	1801
7440-38-2	Arsenic	11		12/27/2024	1801
7440-39-3	Barium	120		12/27/2024	1801
7440-41-7	Beryllium	0.70		12/27/2024	1801
7440-43-9	Cadmium	0.44	J	12/27/2024	1801
7440-70-2	Calcium	4100		12/27/2024	1801
7440-47-3	Chromium	9.6		12/27/2024	1801
7440-48-4	Cobalt	8.8	*	12/27/2024	1801
7440-50-8	Copper	28		12/27/2024	1801
7439-89-6	Iron	16000		12/27/2024	1801
7439-92-1	Lead	81		12/27/2024	1801
7439-95-4	Magnesium	2100		12/27/2024	1801
7439-96-5	Manganese	820		12/27/2024	1801
7440-02-0	Nickel	12		12/27/2024	1801
7440-09-7	Potassium	430	J	12/27/2024	1801
7782-49-2	Selenium	8.7	*	12/27/2024	1801
7440-22-4	Silver	0.91	U*	12/27/2024	1801
7440-23-5	Sodium	450	U	12/27/2024	1801
7440-28-0	Thallium	2.3	U*	12/27/2024	1801
7440-62-2	Vanadium	17		12/27/2024	1801
7440-66-6	Zinc	70	*	12/27/2024	1801

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK16

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-04

% Solids: 90 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6200		12/27/2024	1805
7440-36-0	Antimony	1.6	J*	12/27/2024	1805
7440-38-2	Arsenic	9.7		12/27/2024	1805
7440-39-3	Barium	70		12/27/2024	1805
7440-41-7	Beryllium	0.68		12/27/2024	1805
7440-43-9	Cadmium	0.27	J	12/27/2024	1805
7440-70-2	Calcium	2800		12/27/2024	1805
7440-47-3	Chromium	12		12/27/2024	1805
7440-48-4	Cobalt	8.2	*	12/27/2024	1805
7440-50-8	Copper	14		12/27/2024	1805
7439-89-6	Iron	16000		12/27/2024	1805
7439-92-1	Lead	30		12/27/2024	1805
7439-95-4	Magnesium	2100		12/27/2024	1805
7439-96-5	Manganese	610		12/27/2024	1805
7440-02-0	Nickel	13		12/27/2024	1805
7440-09-7	Potassium	520		12/27/2024	1805
7782-49-2	Selenium	9.3	*	12/27/2024	1805
7440-22-4	Silver	0.82	U*	12/27/2024	1805
7440-23-5	Sodium	410	U	12/27/2024	1805
7440-28-0	Thallium	2.0	U*	12/27/2024	1805
7440-62-2	Vanadium	17		12/27/2024	1805
7440-66-6	Zinc	42	*	12/27/2024	1805

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK17

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-05

% Solids: 91.6 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	5800		12/27/2024	1809
7440-36-0	Antimony	1.9	J*	12/27/2024	1809
7440-38-2	Arsenic	19		12/27/2024	1809
7440-39-3	Barium	53		12/27/2024	1809
7440-41-7	Beryllium	0.75		12/27/2024	1809
7440-43-9	Cadmium	0.24	J	12/27/2024	1809
7440-70-2	Calcium	3100		12/27/2024	1809
7440-47-3	Chromium	9.4		12/27/2024	1809
7440-48-4	Cobalt	13	*	12/27/2024	1809
7440-50-8	Copper	63		12/27/2024	1809
7439-89-6	Iron	20000		12/27/2024	1809
7439-92-1	Lead	27		12/27/2024	1809
7439-95-4	Magnesium	2800		12/27/2024	1809
7439-96-5	Manganese	610		12/27/2024	1809
7440-02-0	Nickel	16		12/27/2024	1809
7440-09-7	Potassium	850		12/27/2024	1809
7782-49-2	Selenium	11	*	12/27/2024	1809
7440-22-4	Silver	0.76	U*	12/27/2024	1809
7440-23-5	Sodium	380	U	12/27/2024	1809
7440-28-0	Thallium	1.9	U*	12/27/2024	1809
7440-62-2	Vanadium	22		12/27/2024	1809
7440-66-6	Zinc	43	*	12/27/2024	1809

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK18

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-06

% Solids: 93.6 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4500		12/27/2024	1813
7440-36-0	Antimony	5.1	U*	12/27/2024	1813
7440-38-2	Arsenic	11		12/27/2024	1813
7440-39-3	Barium	59		12/27/2024	1813
7440-41-7	Beryllium	0.49		12/27/2024	1813
7440-43-9	Cadmium	0.26	J	12/27/2024	1813
7440-70-2	Calcium	43000		12/27/2024	1813
7440-47-3	Chromium	7.1		12/27/2024	1813
7440-48-4	Cobalt	11	*	12/27/2024	1813
7440-50-8	Copper	19		12/27/2024	1813
7439-89-6	Iron	14000		12/27/2024	1813
7439-92-1	Lead	24		12/27/2024	1813
7439-95-4	Magnesium	9800		12/27/2024	1813
7439-96-5	Manganese	930		12/27/2024	1813
7440-02-0	Nickel	14		12/27/2024	1813
7440-09-7	Potassium	720		12/27/2024	1813
7782-49-2	Selenium	5.4	*	12/27/2024	1813
7440-22-4	Silver	0.85	U*	12/27/2024	1813
7440-23-5	Sodium	110	J	12/27/2024	1813
7440-28-0	Thallium	2.1	U*	12/27/2024	1813
7440-62-2	Vanadium	14		12/27/2024	1813
7440-66-6	Zinc	34	*	12/27/2024	1813

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK19

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-07

% Solids: 93.1 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4300		12/27/2024	1817
7440-36-0	Antimony	4.7	U*	12/27/2024	1817
7440-38-2	Arsenic	6.8	D	12/30/2024	2002
7440-39-3	Barium	69		12/27/2024	1817
7440-41-7	Beryllium	0.47		12/27/2024	1817
7440-43-9	Cadmium	0.34	J	12/27/2024	1817
7440-70-2	Calcium	81000	D	12/30/2024	2002
7440-47-3	Chromium	6.9		12/27/2024	1817
7440-48-4	Cobalt	11	*	12/27/2024	1817
7440-50-8	Copper	20		12/27/2024	1817
7439-89-6	Iron	13000		12/27/2024	1817
7439-92-1	Lead	24		12/27/2024	1817
7439-95-4	Magnesium	30000		12/27/2024	1817
7439-96-5	Manganese	1400		12/27/2024	1817
7440-02-0	Nickel	15		12/27/2024	1817
7440-09-7	Potassium	830		12/27/2024	1817
7782-49-2	Selenium	5.2	*	12/27/2024	1817
7440-22-4	Silver	0.78	U*	12/27/2024	1817
7440-23-5	Sodium	130	J	12/27/2024	1817
7440-28-0	Thallium	2.0	U*	12/27/2024	1817
7440-62-2	Vanadium	13		12/27/2024	1817
7440-66-6	Zinc	33	*	12/27/2024	1817

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK20

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-08

% Solids: 76 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7800		12/27/2024	1821
7440-36-0	Antimony	2.0	J*	12/27/2024	1821
7440-38-2	Arsenic	21		12/27/2024	1821
7440-39-3	Barium	370		12/27/2024	1821
7440-41-7	Beryllium	0.91		12/27/2024	1821
7440-43-9	Cadmium	1.2		12/27/2024	1821
7440-70-2	Calcium	5300		12/27/2024	1821
7440-47-3	Chromium	20		12/27/2024	1821
7440-48-4	Cobalt	11	*	12/27/2024	1821
7440-50-8	Copper	72		12/27/2024	1821
7439-89-6	Iron	18000		12/27/2024	1821
7439-92-1	Lead	460		12/27/2024	1821
7439-95-4	Magnesium	2200		12/27/2024	1821
7439-96-5	Manganese	640		12/27/2024	1821
7440-02-0	Nickel	21		12/27/2024	1821
7440-09-7	Potassium	990		12/27/2024	1821
7782-49-2	Selenium	13	*	12/27/2024	1821
7440-22-4	Silver	1.1	U*	12/27/2024	1821
7440-23-5	Sodium	530	U	12/27/2024	1821
7440-28-0	Thallium	2.6	U*	12/27/2024	1821
7440-62-2	Vanadium	23		12/27/2024	1821
7440-66-6	Zinc	380	*	12/27/2024	1821

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK21

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-09

% Solids: 83 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7300		12/27/2024	1825
7440-36-0	Antimony	2.1	J*	12/27/2024	1825
7440-38-2	Arsenic	25		12/27/2024	1825
7440-39-3	Barium	330		12/27/2024	1825
7440-41-7	Beryllium	0.94		12/27/2024	1825
7440-43-9	Cadmium	1.3		12/27/2024	1825
7440-70-2	Calcium	5000		12/27/2024	1825
7440-47-3	Chromium	19		12/27/2024	1825
7440-48-4	Cobalt	11	*	12/27/2024	1825
7440-50-8	Copper	71		12/27/2024	1825
7439-89-6	Iron	21000		12/27/2024	1825
7439-92-1	Lead	500		12/27/2024	1825
7439-95-4	Magnesium	2400		12/27/2024	1825
7439-96-5	Manganese	580		12/27/2024	1825
7440-02-0	Nickel	20		12/27/2024	1825
7440-09-7	Potassium	720		12/27/2024	1825
7782-49-2	Selenium	14	*	12/27/2024	1825
7440-22-4	Silver	0.94	U*	12/27/2024	1825
7440-23-5	Sodium	470	U	12/27/2024	1825
7440-28-0	Thallium	2.4	U*	12/27/2024	1825
7440-62-2	Vanadium	24		12/27/2024	1825
7440-66-6	Zinc	370	*	12/27/2024	1825

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK22

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-10

% Solids: 84.4 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7100		12/27/2024	1829
7440-36-0	Antimony	5.7	U*	12/27/2024	1829
7440-38-2	Arsenic	20		12/27/2024	1829
7440-39-3	Barium	280		12/27/2024	1829
7440-41-7	Beryllium	0.81		12/27/2024	1829
7440-43-9	Cadmium	1.1		12/27/2024	1829
7440-70-2	Calcium	17000		12/27/2024	1829
7440-47-3	Chromium	15		12/27/2024	1829
7440-48-4	Cobalt	12	*	12/27/2024	1829
7440-50-8	Copper	55		12/27/2024	1829
7439-89-6	Iron	17000		12/27/2024	1829
7439-92-1	Lead	510		12/27/2024	1829
7439-95-4	Magnesium	6100		12/27/2024	1829
7439-96-5	Manganese	790		12/27/2024	1829
7440-02-0	Nickel	17		12/27/2024	1829
7440-09-7	Potassium	730		12/27/2024	1829
7782-49-2	Selenium	9.5	*	12/27/2024	1829
7440-22-4	Silver	0.96	U*	12/27/2024	1829
7440-23-5	Sodium	480	U	12/27/2024	1829
7440-28-0	Thallium	2.4	U*	12/27/2024	1829
7440-62-2	Vanadium	22		12/27/2024	1829
7440-66-6	Zinc	260	*	12/27/2024	1829

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK23

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-13

% Solids: 87.9 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4600		12/27/2024	1840
7440-36-0	Antimony	4.6	U*	12/27/2024	1840
7440-38-2	Arsenic	8.9	D	12/30/2024	2006
7440-39-3	Barium	82		12/27/2024	1840
7440-41-7	Beryllium	0.54		12/27/2024	1840
7440-43-9	Cadmium	0.46		12/27/2024	1840
7440-70-2	Calcium	94000	D	12/30/2024	2006
7440-47-3	Chromium	7.6		12/27/2024	1840
7440-48-4	Cobalt	11	*	12/27/2024	1840
7440-50-8	Copper	26		12/27/2024	1840
7439-89-6	Iron	12000		12/27/2024	1840
7439-92-1	Lead	48		12/27/2024	1840
7439-95-4	Magnesium	6900		12/27/2024	1840
7439-96-5	Manganese	790		12/27/2024	1840
7440-02-0	Nickel	13		12/27/2024	1840
7440-09-7	Potassium	1000		12/27/2024	1840
7782-49-2	Selenium	4.6	*	12/27/2024	1840
7440-22-4	Silver	0.77	U*	12/27/2024	1840
7440-23-5	Sodium	380	U	12/27/2024	1840
7440-28-0	Thallium	1.9	U*	12/27/2024	1840
7440-62-2	Vanadium	11		12/27/2024	1840
7440-66-6	Zinc	60	*	12/27/2024	1840

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK24

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-14

% Solids: 91 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4600		12/27/2024	1844
7440-36-0	Antimony	5.4	U*	12/27/2024	1844
7440-38-2	Arsenic	9.6	D	12/30/2024	2010
7440-39-3	Barium	62		12/27/2024	1844
7440-41-7	Beryllium	0.50		12/27/2024	1844
7440-43-9	Cadmium	0.57		12/27/2024	1844
7440-70-2	Calcium	110000	D	12/30/2024	2010
7440-47-3	Chromium	7.2		12/27/2024	1844
7440-48-4	Cobalt	13	*	12/27/2024	1844
7440-50-8	Copper	27		12/27/2024	1844
7439-89-6	Iron	13000		12/27/2024	1844
7439-92-1	Lead	45		12/27/2024	1844
7439-95-4	Magnesium	11000		12/27/2024	1844
7439-96-5	Manganese	1100		12/27/2024	1844
7440-02-0	Nickel	16		12/27/2024	1844
7440-09-7	Potassium	830		12/27/2024	1844
7782-49-2	Selenium	5.5	*	12/27/2024	1844
7440-22-4	Silver	0.89	U*	12/27/2024	1844
7440-23-5	Sodium	120	J	12/27/2024	1844
7440-28-0	Thallium	2.2	U*	12/27/2024	1844
7440-62-2	Vanadium	12		12/27/2024	1844
7440-66-6	Zinc	98	*	12/27/2024	1844

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK25

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-15

% Solids: 94.8 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	2800		12/27/2024	1848
7440-36-0	Antimony	4.6	U*	12/27/2024	1848
7440-38-2	Arsenic	6.1	D	12/30/2024	2014
7440-39-3	Barium	49		12/27/2024	1848
7440-41-7	Beryllium	0.32	J	12/27/2024	1848
7440-43-9	Cadmium	0.31	J	12/27/2024	1848
7440-70-2	Calcium	75000	D	12/30/2024	2014
7440-47-3	Chromium	5.8		12/27/2024	1848
7440-48-4	Cobalt	9.8	*	12/27/2024	1848
7440-50-8	Copper	13		12/27/2024	1848
7439-89-6	Iron	7800		12/27/2024	1848
7439-92-1	Lead	9.0		12/27/2024	1848
7439-95-4	Magnesium	3000		12/27/2024	1848
7439-96-5	Manganese	710		12/27/2024	1848
7440-02-0	Nickel	9.4		12/27/2024	1848
7440-09-7	Potassium	750		12/27/2024	1848
7782-49-2	Selenium	1.8	J*	12/27/2024	1848
7440-22-4	Silver	0.77	U*	12/27/2024	1848
7440-23-5	Sodium	390	U	12/27/2024	1848
7440-28-0	Thallium	1.9	U*	12/27/2024	1848
7440-62-2	Vanadium	6.3		12/27/2024	1848
7440-66-6	Zinc	26	*	12/27/2024	1848

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK26

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-16

% Solids: 87.5 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	5700		12/27/2024	1852
7440-36-0	Antimony	5.0	U*	12/27/2024	1852
7440-38-2	Arsenic	9.6		12/27/2024	1852
7440-39-3	Barium	63		12/27/2024	1852
7440-41-7	Beryllium	0.66		12/27/2024	1852
7440-43-9	Cadmium	0.24	J	12/27/2024	1852
7440-70-2	Calcium	29000		12/27/2024	1852
7440-47-3	Chromium	8.8		12/27/2024	1852
7440-48-4	Cobalt	10	*	12/27/2024	1852
7440-50-8	Copper	25		12/27/2024	1852
7439-89-6	Iron	13000		12/27/2024	1852
7439-92-1	Lead	53		12/27/2024	1852
7439-95-4	Magnesium	6400		12/27/2024	1852
7439-96-5	Manganese	760		12/27/2024	1852
7440-02-0	Nickel	13		12/27/2024	1852
7440-09-7	Potassium	1500		12/27/2024	1852
7782-49-2	Selenium	4.9	*	12/27/2024	1852
7440-22-4	Silver	0.83	U*	12/27/2024	1852
7440-23-5	Sodium	410	U	12/27/2024	1852
7440-28-0	Thallium	2.1	U*	12/27/2024	1852
7440-62-2	Vanadium	11		12/27/2024	1852
7440-66-6	Zinc	64	*	12/27/2024	1852

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK27

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-17

% Solids: 93.5 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	580		12/27/2024	1856
7440-36-0	Antimony	5.1	U*	12/27/2024	1856
7440-38-2	Arsenic	1.3	JD	12/30/2024	2017
7440-39-3	Barium	3.8	J	12/27/2024	1856
7440-41-7	Beryllium	0.16	J	12/27/2024	1856
7440-43-9	Cadmium	0.088	J	12/27/2024	1856
7440-70-2	Calcium	220000	D	12/31/2024	1340
7440-47-3	Chromium	3.8		12/27/2024	1856
7440-48-4	Cobalt	6.4	*	12/27/2024	1856
7440-50-8	Copper	2.9		12/27/2024	1856
7439-89-6	Iron	3200		12/27/2024	1856
7439-92-1	Lead	4.6		12/27/2024	1856
7439-95-4	Magnesium	9300		12/27/2024	1856
7439-96-5	Manganese	110		12/27/2024	1856
7440-02-0	Nickel	5.3		12/27/2024	1856
7440-09-7	Potassium	400	J	12/27/2024	1856
7782-49-2	Selenium	3.0	U*	12/27/2024	1856
7440-22-4	Silver	0.84	U*	12/27/2024	1856
7440-23-5	Sodium	100	J	12/27/2024	1856
7440-28-0	Thallium	1.4	J*	12/27/2024	1856
7440-62-2	Vanadium	2.1	J	12/27/2024	1856
7440-66-6	Zinc	19	*	12/27/2024	1856

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK28

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-18

% Solids: 93 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	16	U	12/27/2024	1900
7440-36-0	Antimony	4.7	U*	12/27/2024	1900
7440-38-2	Arsenic	0.78	U	12/27/2024	1900
7440-39-3	Barium	16	U	12/27/2024	1900
7440-41-7	Beryllium	0.39	U	12/27/2024	1900
7440-43-9	Cadmium	0.39	U	12/27/2024	1900
7440-70-2	Calcium	390	U	12/27/2024	1900
7440-47-3	Chromium	0.78	U	12/27/2024	1900
7440-48-4	Cobalt	3.9	U*	12/27/2024	1900
7440-50-8	Copper	2.0	U	12/27/2024	1900
7439-89-6	Iron	7.8	U	12/27/2024	1900
7439-92-1	Lead	0.78	U	12/27/2024	1900
7439-95-4	Magnesium	390	U	12/27/2024	1900
7439-96-5	Manganese	1.2	U	12/27/2024	1900
7440-02-0	Nickel	3.1	U	12/27/2024	1900
7440-09-7	Potassium	390	U	12/27/2024	1900
7782-49-2	Selenium	2.7	U*	12/27/2024	1900
7440-22-4	Silver	0.78	U*	12/27/2024	1900
7440-23-5	Sodium	390	U	12/27/2024	1900
7440-28-0	Thallium	2.0	U*	12/27/2024	1900
7440-62-2	Vanadium	3.9	U	12/27/2024	1900
7440-66-6	Zinc	4.7	U*	12/27/2024	1900

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK29

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-19

% Solids: 88.1 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	5300		01/02/2025	1639
7440-36-0	Antimony	0.76	J*	01/02/2025	1639
7440-38-2	Arsenic	12		01/02/2025	1639
7440-39-3	Barium	170		01/02/2025	1639
7440-41-7	Beryllium	0.62		01/02/2025	1639
7440-43-9	Cadmium	0.72		01/02/2025	1639
7440-70-2	Calcium	61000		01/02/2025	1639
7440-47-3	Chromium	8.5		01/02/2025	1639
7440-48-4	Cobalt	13	*	01/02/2025	1639
7440-50-8	Copper	27		01/02/2025	1639
7439-89-6	Iron	13000		01/02/2025	1639
7439-92-1	Lead	190		01/02/2025	1639
7439-95-4	Magnesium	21000		01/02/2025	1639
7439-96-5	Manganese	1400		01/02/2025	1639
7440-02-0	Nickel	15		01/02/2025	1639
7440-09-7	Potassium	930		01/02/2025	1639
7782-49-2	Selenium	4.4	*	01/02/2025	1639
7440-22-4	Silver	0.89	U*	01/02/2025	1639
7440-23-5	Sodium	570		01/02/2025	1639
7440-28-0	Thallium	2.2	U*	01/02/2025	1639
7440-62-2	Vanadium	6.9		01/02/2025	1639
7440-66-6	Zinc	93	*	01/02/2025	1639

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK30

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-20

% Solids: 83.2 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6900		12/27/2024	1908
7440-36-0	Antimony	5.2	U*	12/27/2024	1908
7440-38-2	Arsenic	14		12/27/2024	1908
7440-39-3	Barium	220		12/27/2024	1908
7440-41-7	Beryllium	0.71		12/27/2024	1908
7440-43-9	Cadmium	0.62		12/27/2024	1908
7440-70-2	Calcium	36000		12/27/2024	1908
7440-47-3	Chromium	8.5		12/27/2024	1908
7440-48-4	Cobalt	14	*	12/27/2024	1908
7440-50-8	Copper	24		12/27/2024	1908
7439-89-6	Iron	16000		12/27/2024	1908
7439-92-1	Lead	150		12/27/2024	1908
7439-95-4	Magnesium	5500		12/27/2024	1908
7439-96-5	Manganese	2200		12/27/2024	1908
7440-02-0	Nickel	15		12/27/2024	1908
7440-09-7	Potassium	810		12/27/2024	1908
7782-49-2	Selenium	8.0	*	12/27/2024	1908
7440-22-4	Silver	0.86	U*	12/27/2024	1908
7440-23-5	Sodium	510		12/27/2024	1908
7440-28-0	Thallium	2.2	U*	12/27/2024	1908
7440-62-2	Vanadium	15		12/27/2024	1908
7440-66-6	Zinc	54	*	12/27/2024	1908

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK31

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-21

% Solids: 87.5 Date Received: 11/27/2024

Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6600		12/27/2024	1912
7440-36-0	Antimony	0.56	J*	12/27/2024	1912
7440-38-2	Arsenic	15		12/27/2024	1912
7440-39-3	Barium	100		12/27/2024	1912
7440-41-7	Beryllium	0.71		12/27/2024	1912
7440-43-9	Cadmium	0.82		12/27/2024	1912
7440-70-2	Calcium	9000		12/27/2024	1912
7440-47-3	Chromium	8.3		12/27/2024	1912
7440-48-4	Cobalt	14	*	12/27/2024	1912
7440-50-8	Copper	15		12/27/2024	1912
7439-89-6	Iron	15000		12/27/2024	1912
7439-92-1	Lead	67		12/27/2024	1912
7439-95-4	Magnesium	3000		12/27/2024	1912
7439-96-5	Manganese	1900		12/27/2024	1912
7440-02-0	Nickel	17		12/27/2024	1912
7440-09-7	Potassium	690		12/27/2024	1912
7782-49-2	Selenium	8.3	*	12/27/2024	1912
7440-22-4	Silver	0.87	U*	12/27/2024	1912
7440-23-5	Sodium	350	J	12/27/2024	1912
7440-28-0	Thallium	2.2	U*	12/27/2024	1912
7440-62-2	Vanadium	14		12/27/2024	1912
7440-66-6	Zinc	44	*	12/27/2024	1912

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MBHK32

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No. : SDG No.: MBHJJ2

Matrix: SOIL Lab Sample ID: P5027-22

% Solids: 86.8 Date Received: 11/27/2024

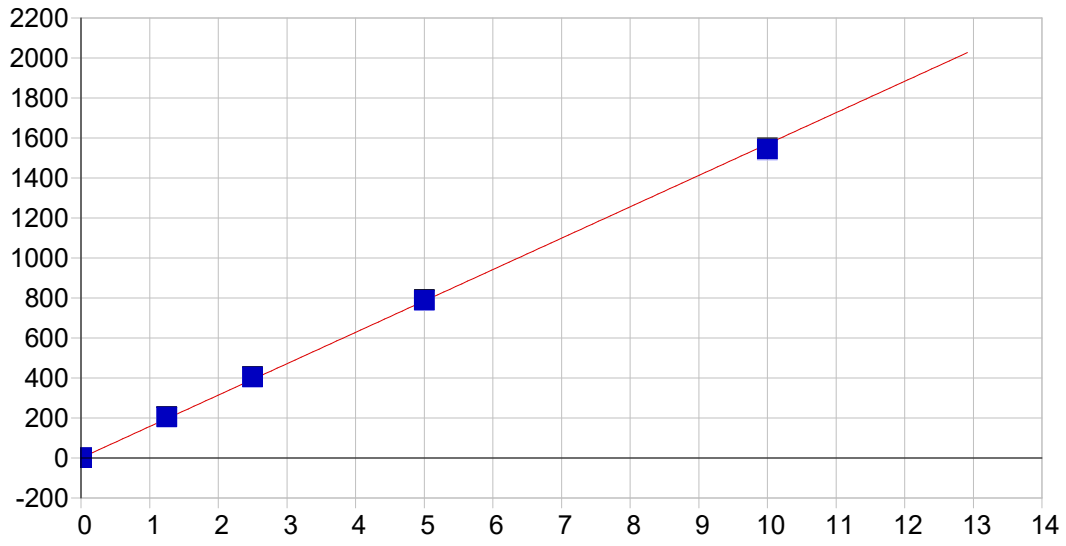
Analytical Method: ICP_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7000		12/27/2024	1916
7440-36-0	Antimony	1.6	J*	12/27/2024	1916
7440-38-2	Arsenic	18		12/27/2024	1916
7440-39-3	Barium	84		12/27/2024	1916
7440-41-7	Beryllium	0.71		12/27/2024	1916
7440-43-9	Cadmium	0.80		12/27/2024	1916
7440-70-2	Calcium	2000		12/27/2024	1916
7440-47-3	Chromium	8.6		12/27/2024	1916
7440-48-4	Cobalt	15	*	12/27/2024	1916
7440-50-8	Copper	17		12/27/2024	1916
7439-89-6	Iron	18000		12/27/2024	1916
7439-92-1	Lead	32		12/27/2024	1916
7439-95-4	Magnesium	1800		12/27/2024	1916
7439-96-5	Manganese	2000		12/27/2024	1916
7440-02-0	Nickel	19		12/27/2024	1916
7440-09-7	Potassium	790		12/27/2024	1916
7782-49-2	Selenium	11	*	12/27/2024	1916
7440-22-4	Silver	0.81	U*	12/27/2024	1916
7440-23-5	Sodium	270	J	12/27/2024	1916
7440-28-0	Thallium	2.0	U*	12/27/2024	1916
7440-62-2	Vanadium	16		12/27/2024	1916
7440-66-6	Zinc	45	*	12/27/2024	1916

NOTE: Hardness (total) is reported in mg/L

Comments:



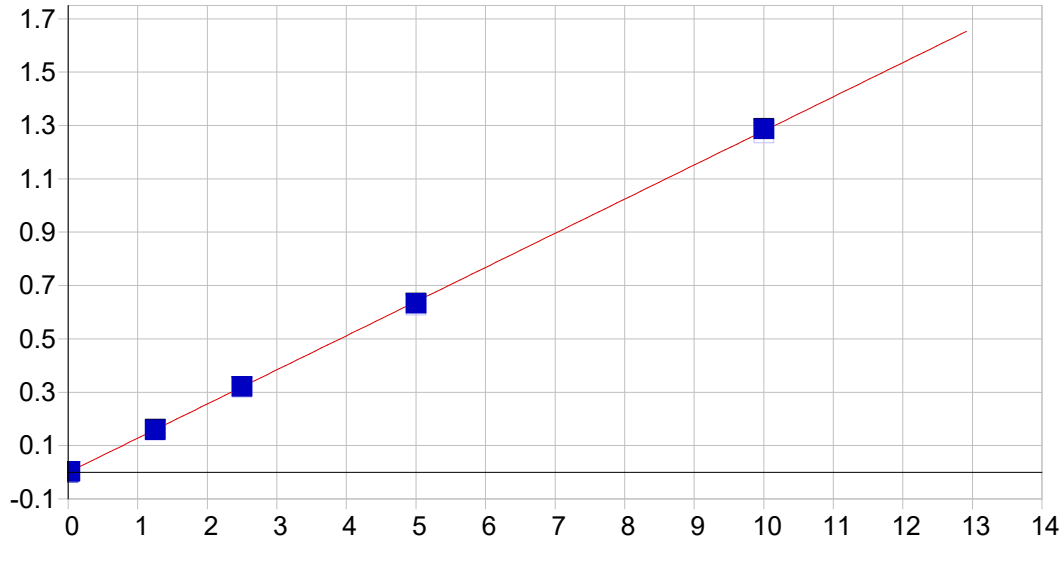
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A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999800	Status:	OK.
Std Error of Est:	0.052413		
Predicted MDL:	0.005037		
Predicted MQL:	0.016791		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.02740	.117	1
S1	.01000	.01138	.001	13.8	1.8116	.899	1
S2	1.2500	1.3035	.054	4.28	203.76	1.30	1
S3	2.5000	2.5744	.074	2.98	402.37	1.69	1
S4	5.0000	5.0305	.031	.611	786.14	2.35	1
S5	10.000	9.8401	-.160	-1.60	1537.6	6.87	1

Reviewed By:mohan
On:12/31/2024
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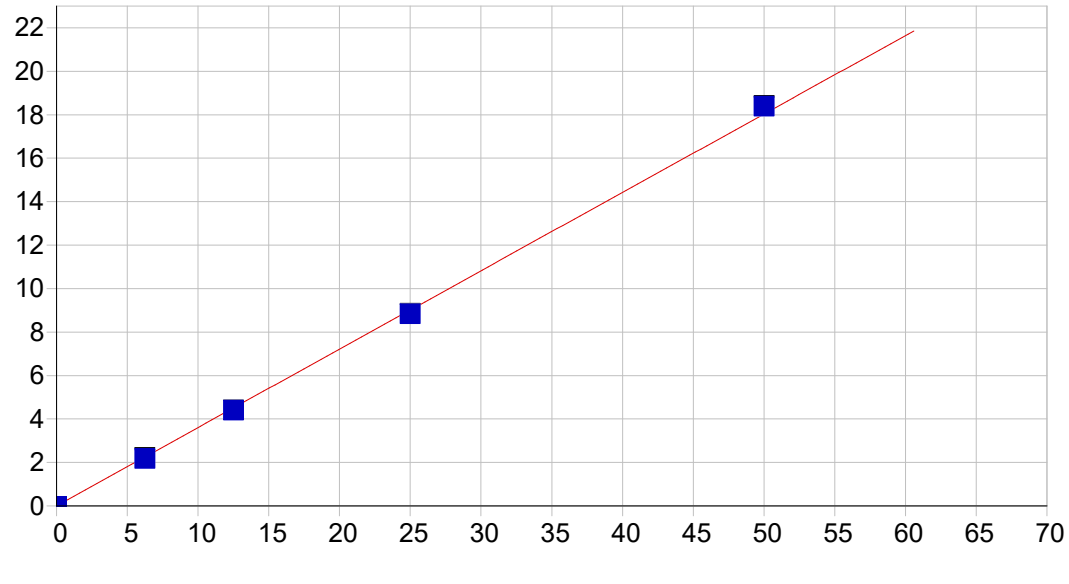
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A1 (Gain):	0.127996	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999974	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.002875		
Predicted MQL:	0.009583		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00022	.000	1
S1	.02500	.02430	-.001	-2.79	.00277	.000	1
S2	1.2500	1.2426	-.007	-.593	.15697	.003	1
S3	2.5000	2.5088	.009	.354	.31719	.001	1
S4	5.0000	4.9466	-.053	-1.07	.62551	.001	1
S5	10.000	10.053	.053	.526	1.2717	.003	1

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5



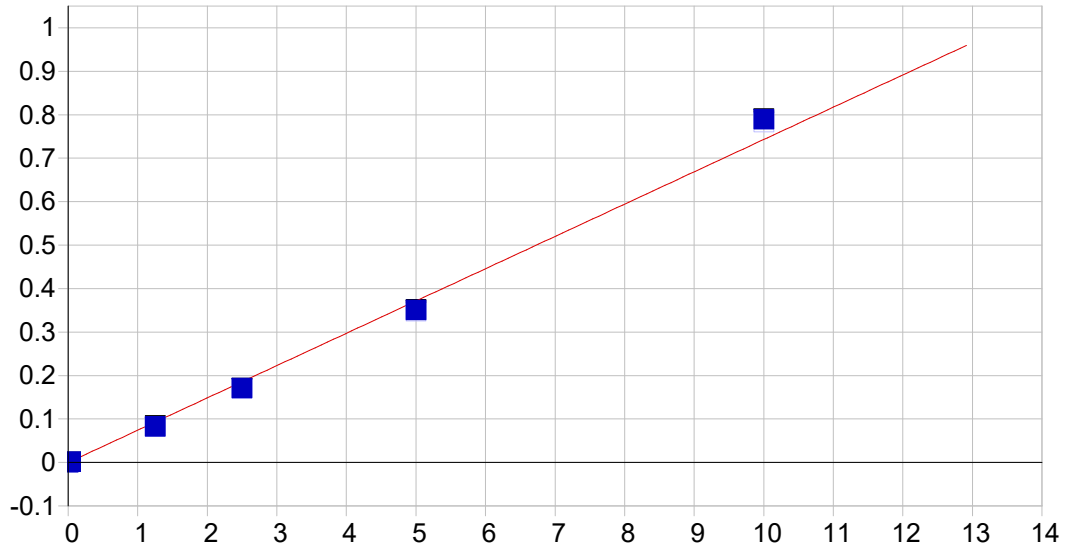
Pb 220.353 {453}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000383	Re-Slope:	1.000000
A1 (Gain):	0.360619	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999756	Status:	OK.
Std Error of Est:	0.000298		
Predicted MDL:	0.002124		
Predicted MQL:	0.007081		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.01000	.00731	-.003	-26.9	.00300	.001	1
S2	6.2500	6.0244	-.226	-3.61	2.1704	.044	1
S3	12.500	12.210	-.290	-2.32	4.3988	.005	1
S4	25.000	24.509	-.491	-1.97	8.8290	.021	1
S5	50.000	51.009	1.01	2.02	18.376	.030	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



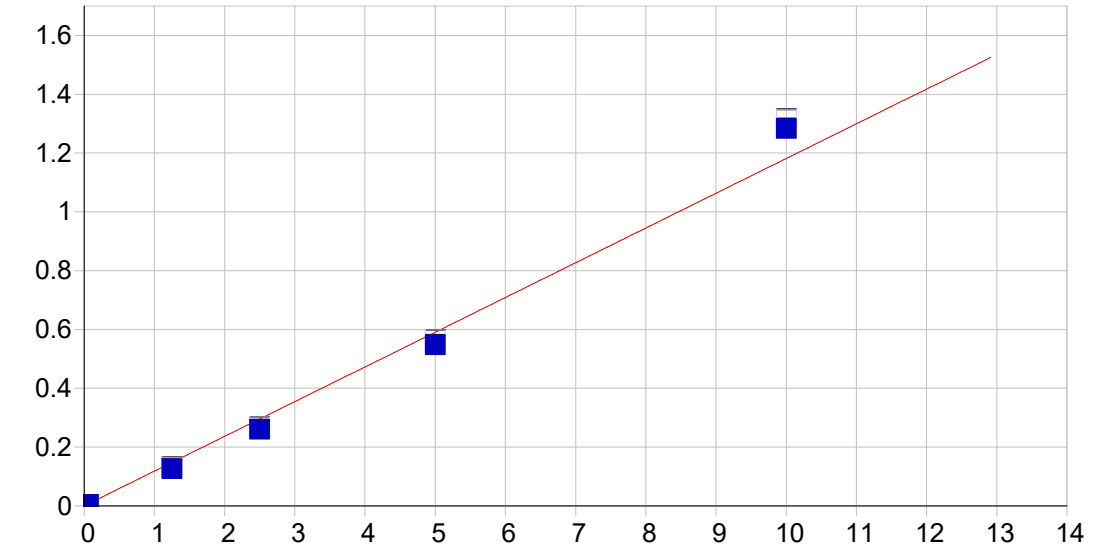
Se 196.090 {472}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000085	Re-Slope:	1.000000
A1 (Gain):	0.074303	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997621	Status:	OK.
Std Error of Est:	0.000160		
Predicted MDL:	0.005188		
Predicted MQL:	0.017295		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00008	.000	1
S1	.03500	.02488	-.010	-28.9	.00176	.000	1
S2	1.2500	1.1165	-.134	-10.7	.08206	.002	1
S3	2.5000	2.3001	-.200	-8.00	.16920	.000	1
S4	5.0000	4.7184	-.282	-5.63	.34727	.002	1
S5	10.000	10.625	.625	6.25	.78293	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



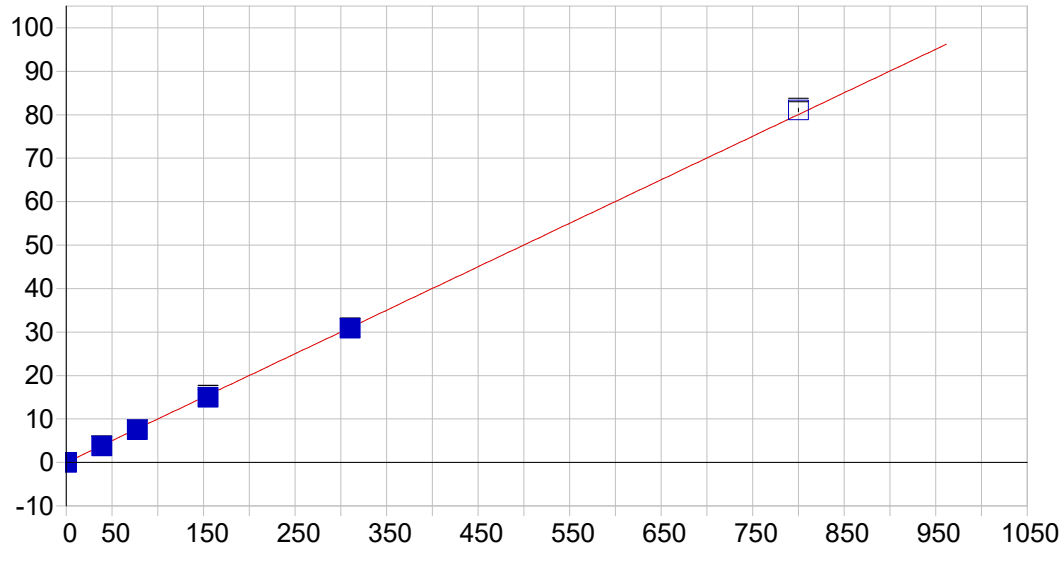
Sb 206.833 {463}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000254	Re-Slope:	1.000000
A1 (Gain):	0.118106	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.995864	Status:	OK.
Std Error of Est:	0.000455		
Predicted MDL:	0.003975		
Predicted MQL:	0.013250		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00026	.000	1
S1	.06000	.04729	-.013	-21.2	.00584	.000	1
S2	1.2500	1.0637	-.186	-14.9	.13003	.003	1
S3	2.5000	2.2042	-.296	-11.8	.26886	.000	1
S4	5.0000	4.6367	-.363	-7.27	.56443	.001	1
S5	10.000	10.858	.858	8.58	1.3157	.003	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



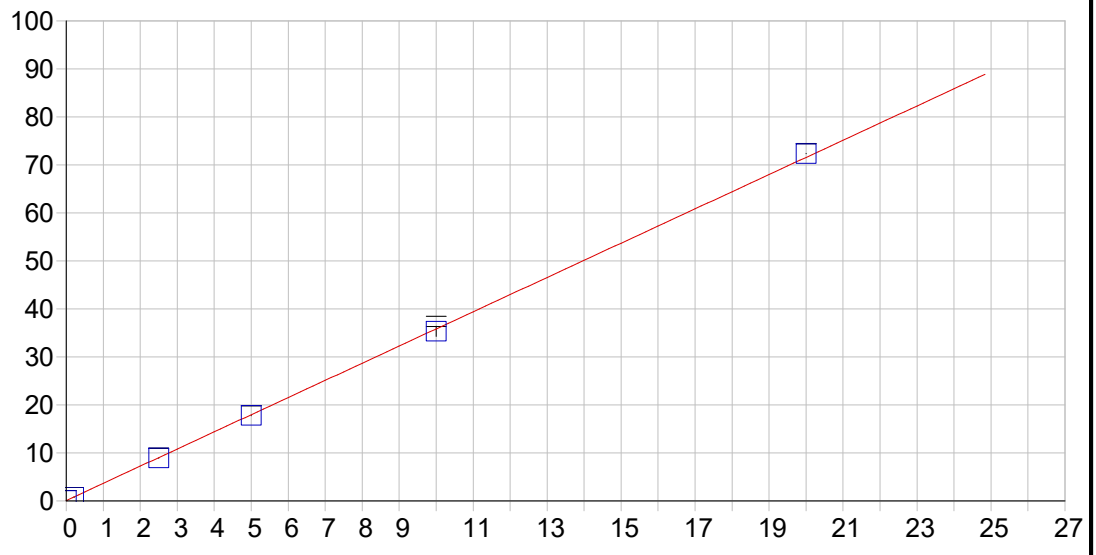
Al 396.152 { 85}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000266	Re-Slope:	1.000000
A1 (Gain):	0.100060	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999842	Status:	OK.
Std Error of Est:	0.001107		
Predicted MDL:	0.029582		
Predicted MQL:	0.098608		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	-.00026	.004	1
S1	.20000	.19150	-.008	-4.25	.01893	.004	1
S2	38.750	37.513	-1.24	-3.19	3.7575	.012	1
S3	77.500	75.144	-2.36	-3.04	7.5271	.018	1
S4	155.00	149.72	-5.28	-3.41	14.997	.446	1
S5	310.00	308.39	-1.61	-.519	30.891	.032	1
S6	800.00	810.51	10.5	1.31	81.099	.387	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



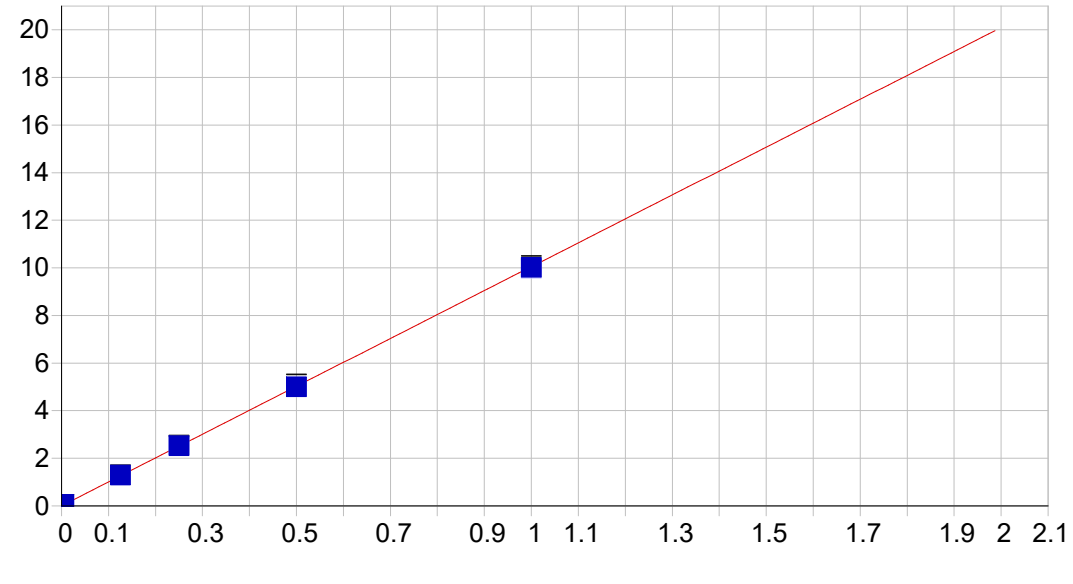
Ba 493.409 { 68}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.091981	Re-Slope:	1.000000
A1 (Gain):	3.573707	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999930	Status:	OK.
Std Error of Est:	0.004488		
Predicted MDL:	0.001771		
Predicted MQL:	0.005903		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.09200	.005	1
S1	.20000	.19929	-.001	-.357	.80417	.017	1
S2	2.5000	2.4673	-.033	-1.31	8.9096	.029	1
S3	5.0000	4.9498	-.050	-1.00	17.781	.047	1
S4	10.000	9.8626	-.137	-1.37	35.338	1.06	1
S5	20.000	20.221	.221	1.10	72.356	.011	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



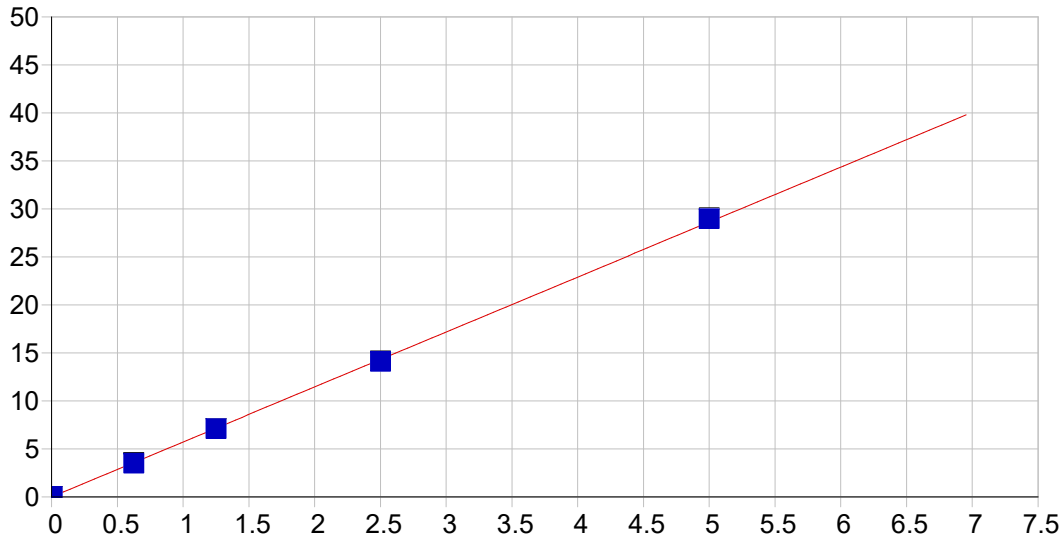
Be 234.861 {144}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001742	Re-Slope:	1.000000
A1 (Gain):	10.047430	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000311		
Predicted MDL:	0.000163		
Predicted MQL:	0.000544		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00174	.000	1
S1	.00500	.00521	.000	4.17	.05403	.001	1
S2	.12500	.12834	.003	2.67	1.2854	.009	1
S3	.25000	.25171	.002	.686	2.5193	.028	1
S4	.50000	.49808	-.002	-.385	4.9831	.118	1
S5	1.0000	.99666	-.003	-.334	9.9695	.075	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



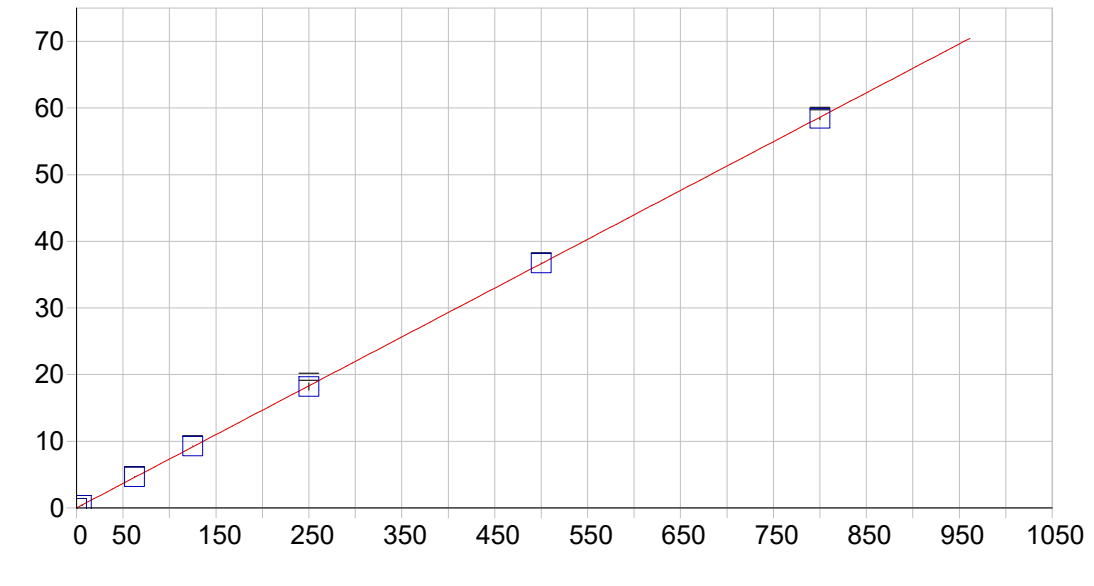
Cd 214.438 {457}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000361	Re-Slope:	1.000000
A1 (Gain):	5.725509	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999923	Status:	OK.
Std Error of Est:	0.000598		
Predicted MDL:	0.000090		
Predicted MQL:	0.000301		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00036	.000	1
S1	.00500	.00490	-.000	-2.04	.02851	.001	1
S2	.62500	.61247	-.013	-2.01	3.5125	.070	1
S3	1.2500	1.2407	-.009	-.740	7.1153	.007	1
S4	2.5000	2.4651	-.035	-1.40	14.136	.028	1
S5	5.0000	5.0568	.057	1.14	28.997	.056	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



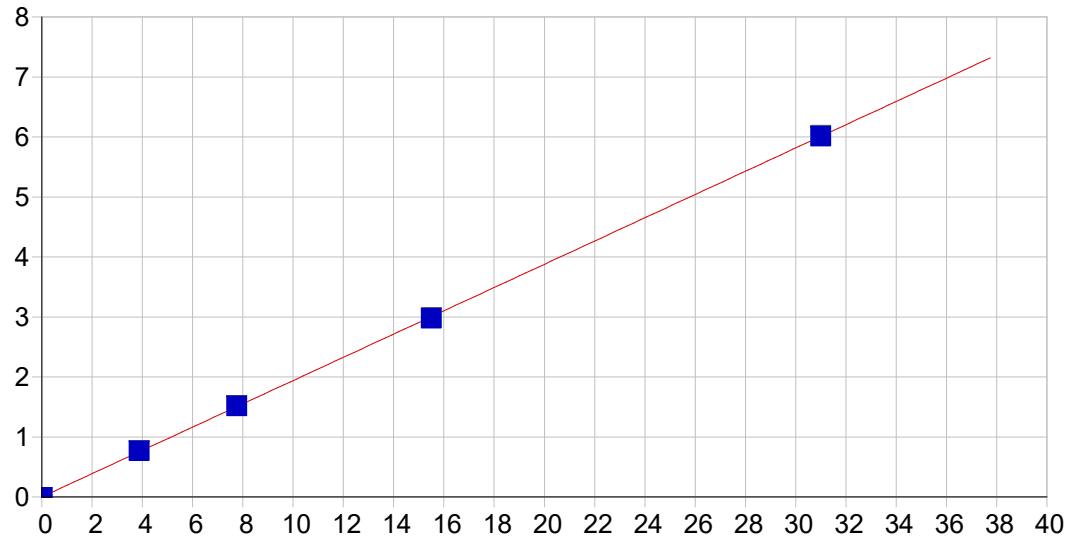
Ca 373.690 { 90}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003639	Re-Slope:	1.000000
A1 (Gain):	0.073276	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.001666		
Predicted MDL:	0.030562		
Predicted MQL:	0.101872		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00033	-.000	.000	.00362	.003	1
S1	5.0000	5.2109	.211	4.22	.38548	.003	1
S2	62.500	63.613	1.11	1.78	4.6649	.020	1
S3	125.00	126.61	1.61	1.29	9.2811	.024	1
S4	250.00	248.29	-1.71	-.684	18.197	.508	1
S5	500.00	501.42	1.42	.285	36.746	.052	1
S6	800.00	797.35	-2.65	-.331	58.430	.207	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



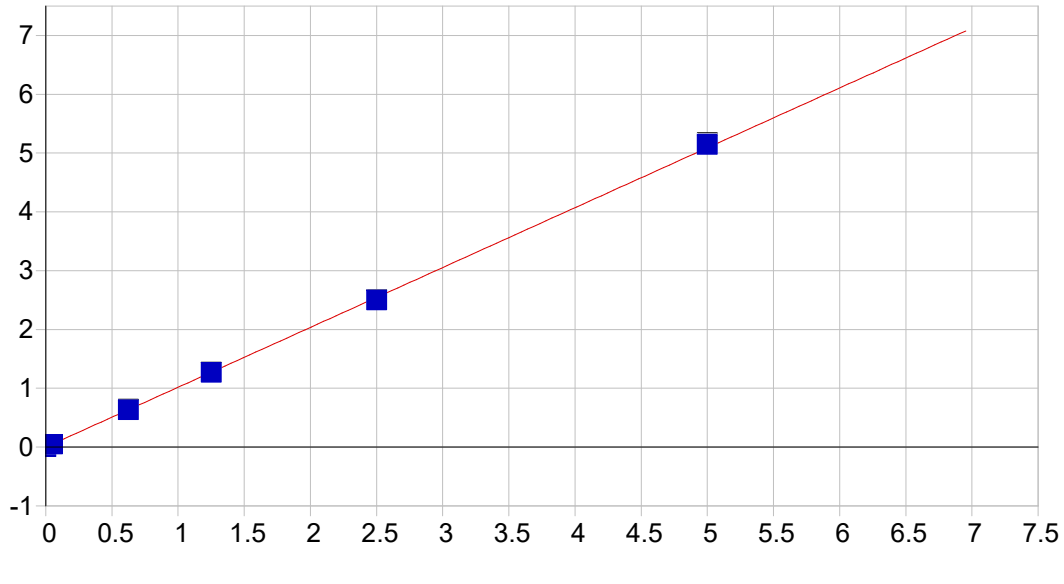
Cr 267.716 {126}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000203	Re-Slope:	1.000000
A1 (Gain):	0.193839	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000042		
Predicted MDL:	0.001023		
Predicted MQL:	0.003411		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00020	.000	1
S1	.01000	.01003	.000	.336	.00215	.000	1
S2	3.8750	3.9473	.072	1.87	.76594	.002	1
S3	7.7500	7.8147	.065	.835	1.5162	.002	1
S4	15.500	15.359	-.141	-.910	2.9797	.005	1
S5	31.000	31.004	.004	.013	6.0146	.013	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



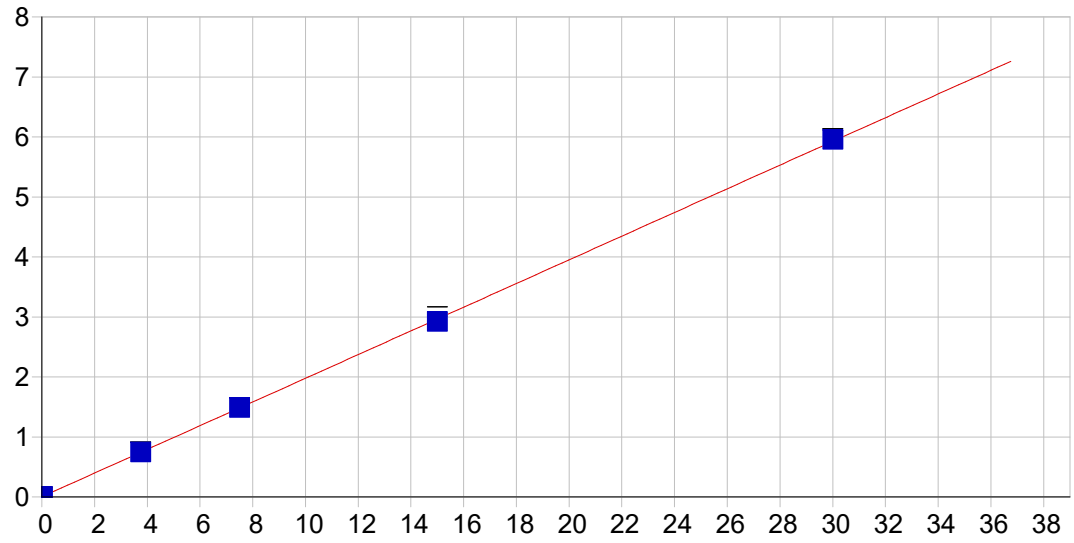
Co 228.616 {448}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000304	Re-Slope:	1.000000
A1 (Gain):	1.017961	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999920	Status:	OK.
Std Error of Est:	0.000344		
Predicted MDL:	0.000471		
Predicted MQL:	0.001570		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00030	.000	1
S1	.05000	.05101	.001	2.02	.05179	.001	1
S2	.62500	.61932	-.006	-.908	.63219	.013	1
S3	1.2500	1.2453	-.005	-.379	1.2714	.001	1
S4	2.5000	2.4544	-.046	-1.82	2.5064	.006	1
S5	5.0000	5.0550	.055	1.10	5.1619	.012	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



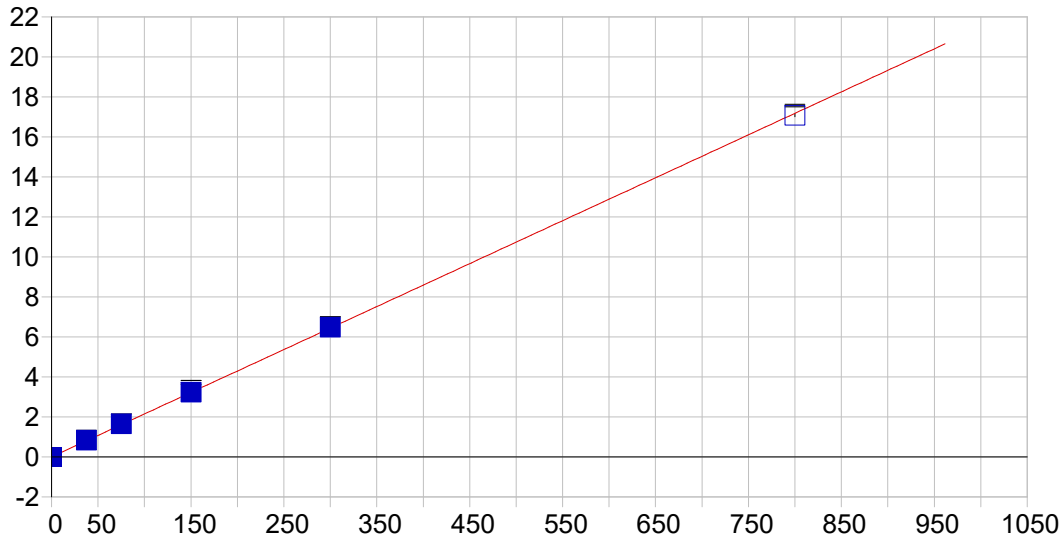
Cu 324.754 {104}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002559	Re-Slope:	1.000000
A1 (Gain):	0.197422	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.000077		
Predicted MDL:	0.008007		
Predicted MQL:	0.026689		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00256	.001	1
S1	.02500	.02147	-.004	-14.1	.00679	.001	1
S2	3.7500	3.7751	.025	.669	.74777	.003	1
S3	7.5000	7.5191	.019	.254	1.4868	.002	1
S4	15.000	14.804	-.196	-1.31	2.9248	.079	1
S5	30.000	30.156	.156	.518	5.9553	.016	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



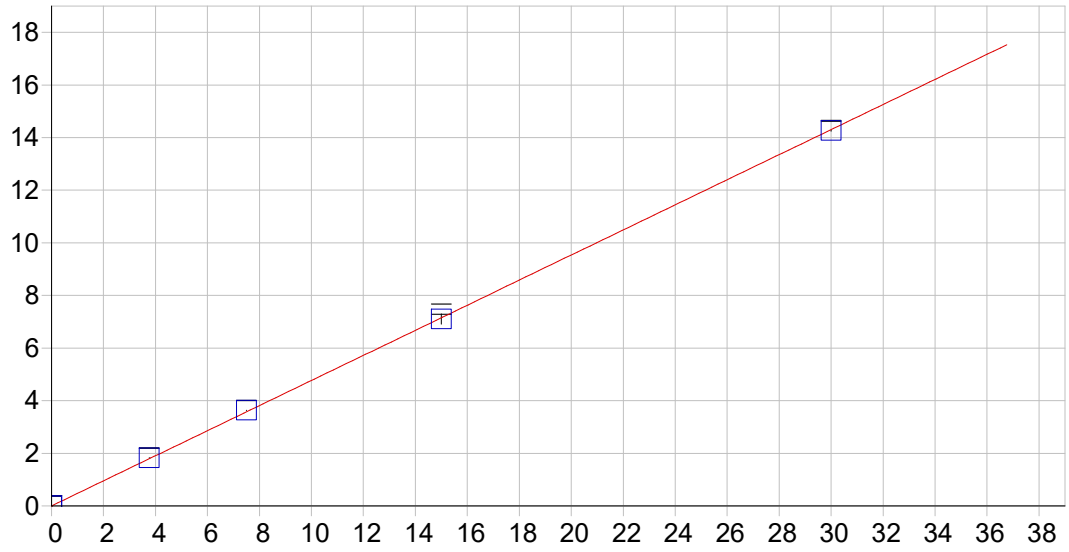
Fe 259.837 {130}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000278	Re-Slope:	1.000000
A1 (Gain):	0.021475	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.035698		
Predicted MQL:	0.118994		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00028	.001	1
S1	.10000	.10478	.005	4.78	.00197	.000	1
S2	37.500	38.416	.916	2.44	.82487	.004	1
S3	75.000	76.901	1.90	2.53	1.6515	.003	1
S4	150.00	150.30	.304	.203	3.2282	.094	1
S5	300.00	301.99	1.99	.664	6.4864	.023	1
S6	800.00	794.88	-5.12	-.640	17.070	.066	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



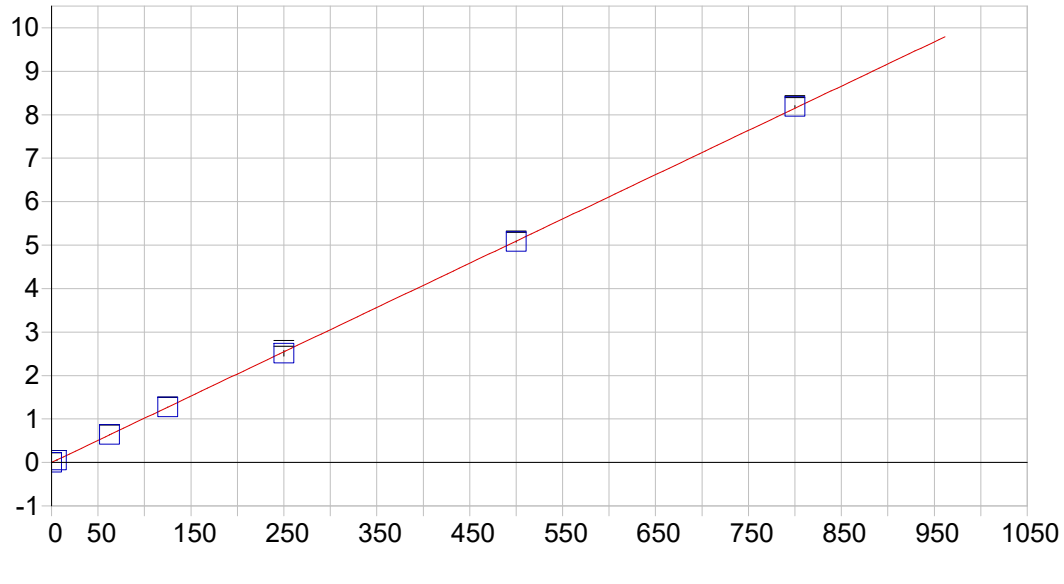
Mn 257.610 {131}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000353	Re-Slope:	1.000000
A1 (Gain):	0.476790	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.000152		
Predicted MDL:	0.001414		
Predicted MQL:	0.004714		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00035	.000	1
S1	.01500	.01698	.002	13.2	.00845	.001	1
S2	3.7500	3.8235	.074	1.96	1.8234	.002	1
S3	7.5000	7.6174	.117	1.57	3.6323	.005	1
S4	15.000	14.894	-.106	-.707	7.1016	.198	1
S5	30.000	29.913	-.087	-.289	14.263	.021	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

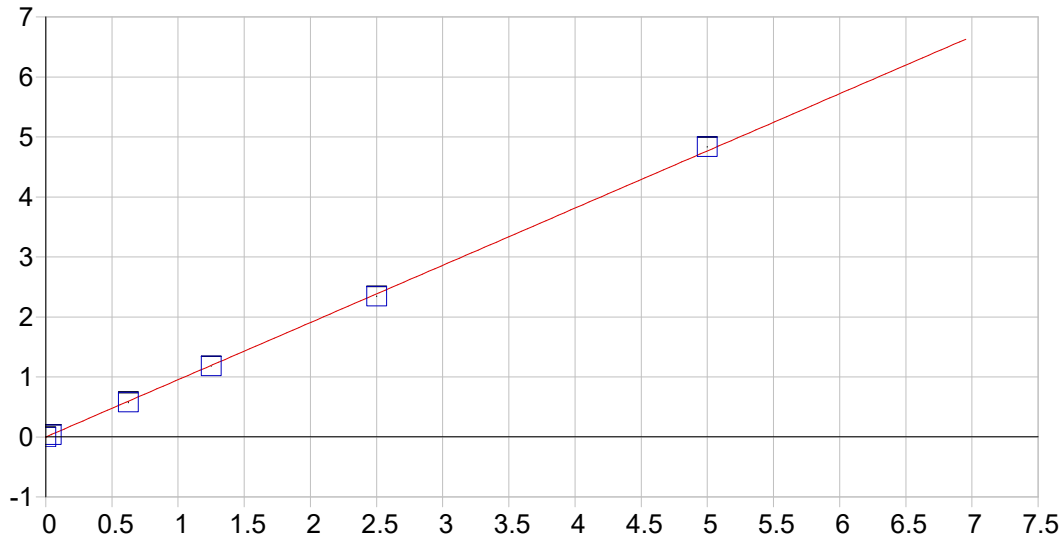


Mg 279.079 {121}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001401	Re-Slope:	1.000000
A1 (Gain):	0.010188	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.000233		
Predicted MDL:	0.095496		
Predicted MQL:	0.318319		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00017	-.000	.000	-.00140	.001	1
S1	5.0000	5.1921	.192	3.84	.05150	.000	1
S2	62.500	62.826	.326	.522	.63866	.004	1
S3	125.00	125.12	.122	.097	1.2733	.004	1
S4	250.00	246.69	-3.31	-1.33	2.5118	.068	1
S5	500.00	498.81	-1.19	-.238	5.0804	.014	1
S6	800.00	803.86	3.86	.483	8.1882	.023	1



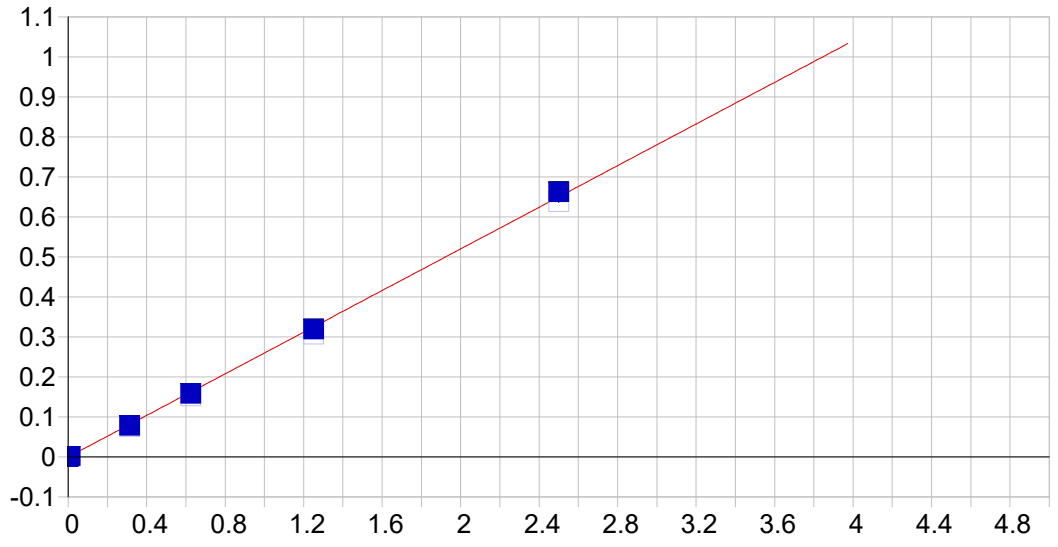
Ni 231.604 {446}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000284	Re-Slope:	1.000000
A1 (Gain):	0.953359	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999885	Status:	OK.
Std Error of Est:	0.000343		
Predicted MDL:	0.000608		
Predicted MQL:	0.002025		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00028	.001	1
S1	.04000	.03944	-.001	-1.41	.03731	.000	1
S2	.62500	.60904	-.016	-2.55	.58035	.011	1
S3	1.2500	1.2372	-.013	-1.02	1.1792	.002	1
S4	2.5000	2.4598	-.040	-1.61	2.3448	.006	1
S5	5.0000	5.0696	.070	1.39	4.8328	.006	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

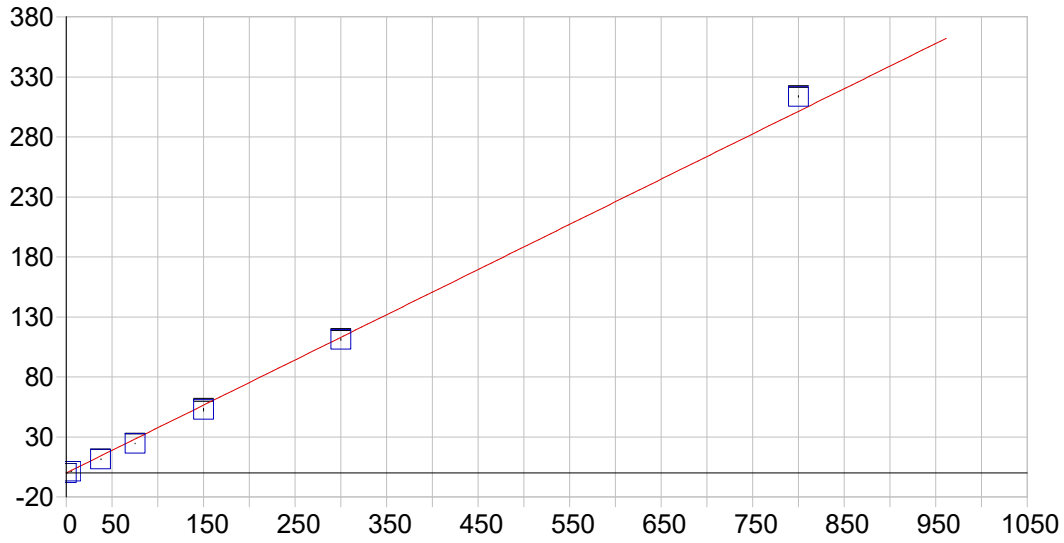


Ag 328.068 {103}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000392	Re-Slope:	1.000000
A1 (Gain):	0.260195	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000044		
Predicted MDL:	0.001439		
Predicted MQL:	0.004798		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00039	.000	1
S1	.01000	.00990	-.000	-.957	.00218	.000	1
S2	.31250	.30316	-.009	-2.99	.07537	.000	1
S3	.62500	.61087	-.014	-2.26	.15231	.000	1
S4	1.2500	1.2271	-.023	-1.83	.30641	.001	1
S5	2.5000	2.5465	.046	1.86	.63720	.001	1



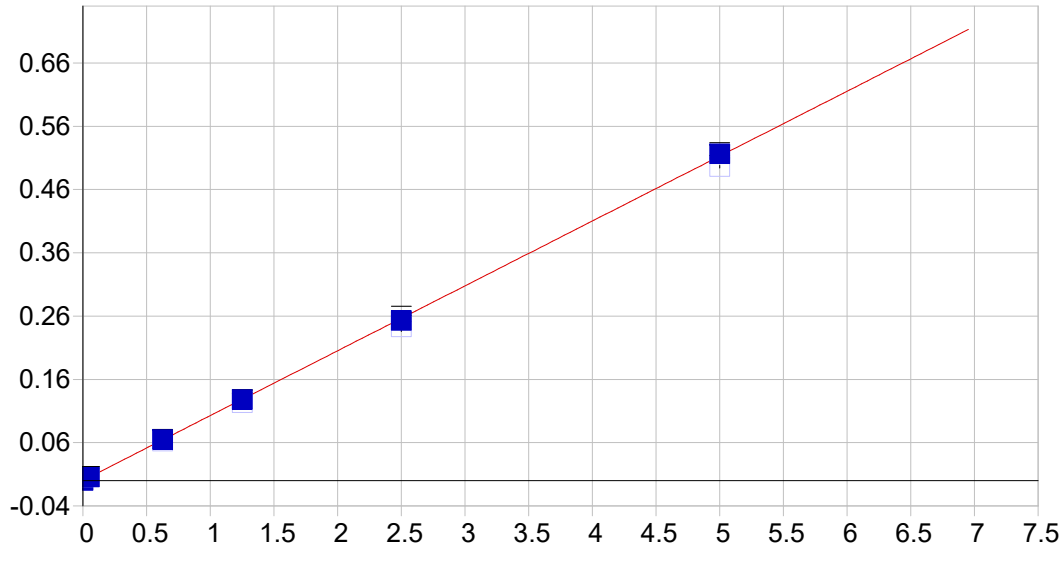
Na 818.326 { 41}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.031962	Re-Slope:	1.000000
A1 (Gain):	0.376774	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998153	Status:	OK.
Std Error of Est:	0.070893		
Predicted MDL:	0.027106		
Predicted MQL:	0.090352		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00322	.003	.000	-.03075	.016	1
S1	5.0000	3.5593	-1.44	-28.8	1.3091	.017	1
S2	37.500	30.665	-6.84	-18.2	11.522	.042	1
S3	75.000	65.111	-9.89	-13.2	24.500	.317	1
S4	150.00	140.00	-10.0	-6.67	52.716	1.16	1
S5	300.00	295.25	-4.75	-1.58	111.21	.794	1
S6	800.00	832.92	32.9	4.12	313.79	.727	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



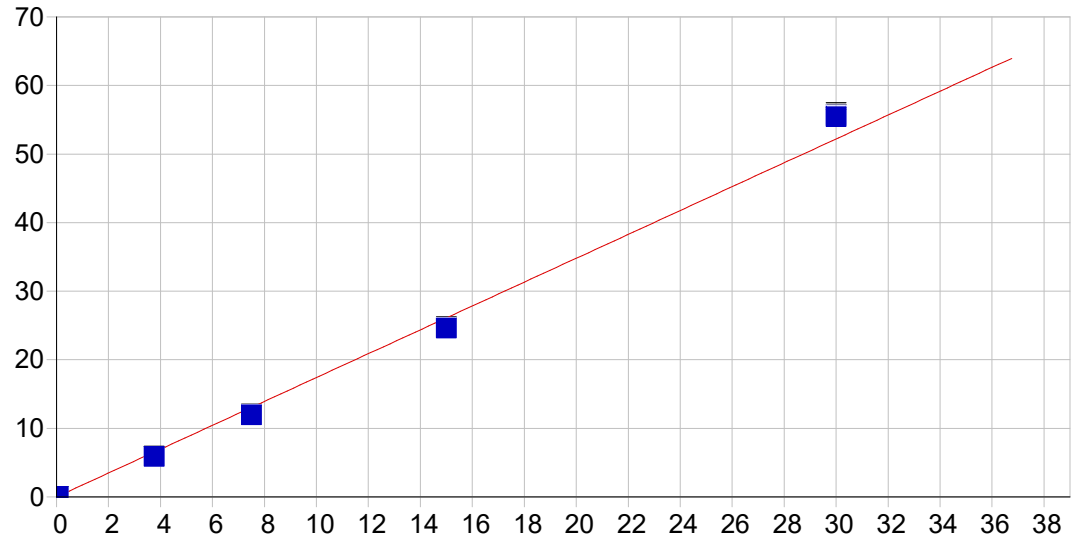
V 292.402 {115}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000187	Re-Slope:	1.000000
A1 (Gain):	0.102531	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999953	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.011369		
Predicted MQL:	0.037898		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00019	.001	1
S1	.05000	.05004	.000	.084	.00530	.001	1
S2	.62500	.62931	.004	.690	.06214	.000	1
S3	1.2500	1.2450	-.005	-.397	.12271	.000	1
S4	2.5000	2.4645	-.036	-1.42	.24260	.007	1
S5	5.0000	5.0361	.036	.723	.49600	.002	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



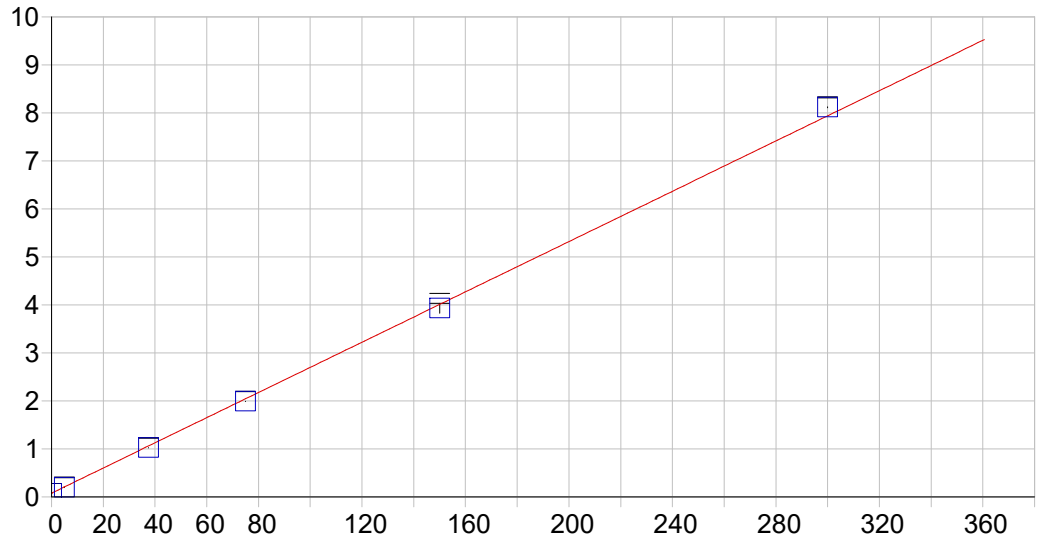
Zn 213.856 {158}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004113	Re-Slope:	1.000000
A1 (Gain):	1.739977	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997774	Status:	OK.
Std Error of Est:	0.008315		
Predicted MDL:	0.000705		
Predicted MQL:	0.002351		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00414	.001	1
S1	.06000	.05488	-.005	-8.54	.09992	.001	1
S2	3.7500	3.3835	-.367	-9.77	5.9232	.016	1
S3	7.5000	6.8681	-.632	-8.43	12.018	.083	1
S4	15.000	14.142	-.858	-5.72	24.739	.081	1
S5	30.000	31.861	1.86	6.20	55.697	.366	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



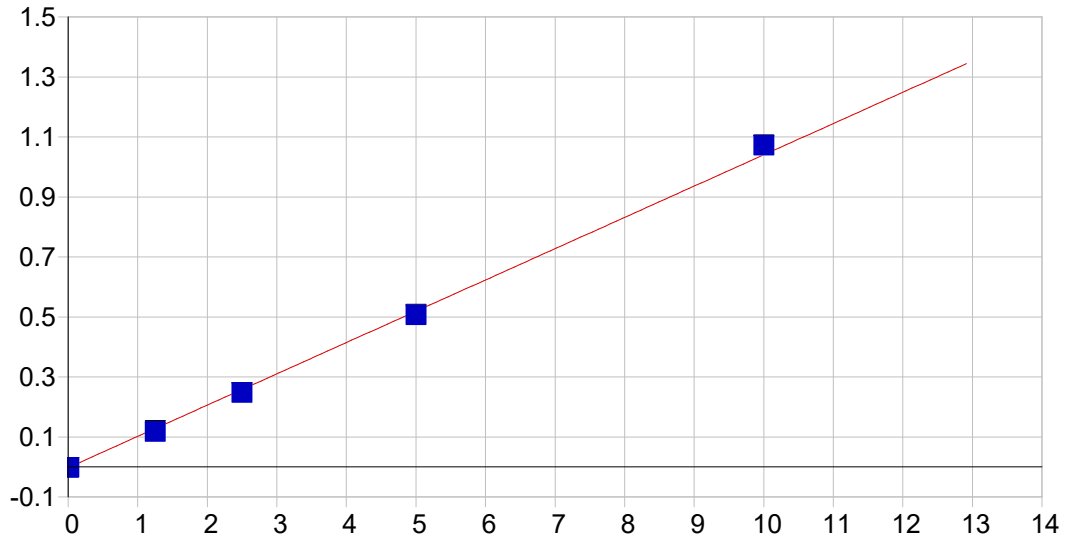
K 769.896 { 44}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.078852	Re-Slope:	1.000000
A1 (Gain):	0.026202	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999691	Status:	OK.
Std Error of Est:	0.001343		
Predicted MDL:	0.157116		
Predicted MQL:	0.523721		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00068	.001	.000	.07887	.003	1
S1	5.0000	4.6343	-.366	-7.31	.20028	.009	1
S2	37.500	36.084	-1.42	-3.78	1.0243	.003	1
S3	75.000	72.980	-2.02	-2.69	1.9911	.005	1
S4	150.00	146.98	-3.02	-2.01	3.9301	.101	1
S5	300.00	306.82	6.82	2.27	8.1183	.011	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



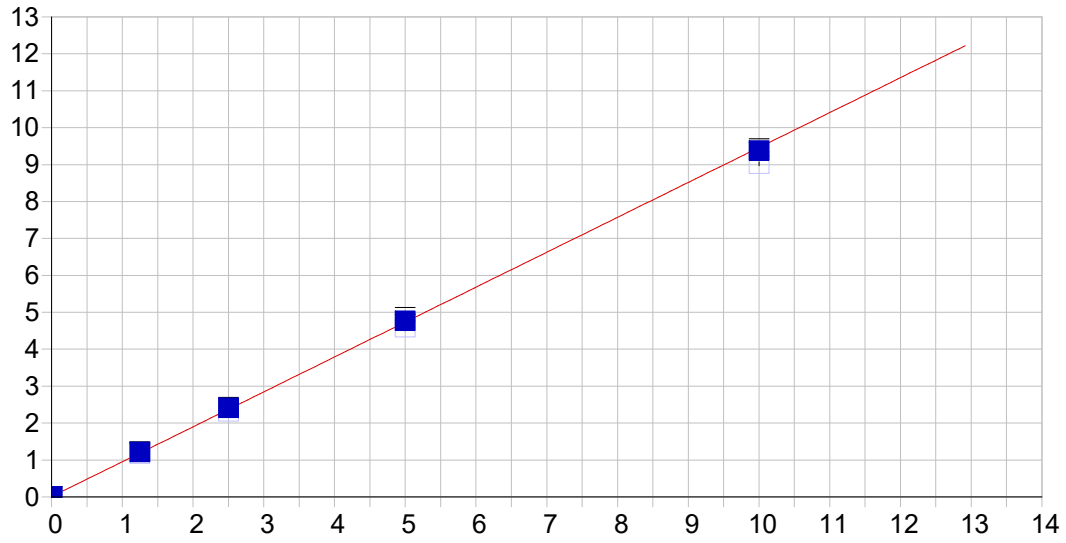
P 177.495 {490}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002554	Re-Slope:	1.000000
A1 (Gain):	0.104279	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999370	Status:	OK.
Std Error of Est:	0.000062		
Predicted MDL:	0.002717		
Predicted MQL:	0.009058		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00255	.000	1
S1	.01000	.00829	-.002	-17.1	-.00169	.000	1
S2	1.2500	1.1573	-.093	-7.42	.11794	.003	1
S3	2.5000	2.3983	-.102	-4.07	.24716	.000	1
S4	5.0000	4.8854	-.115	-2.29	.50613	.002	1
S5	10.000	10.311	.311	3.11	1.0711	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



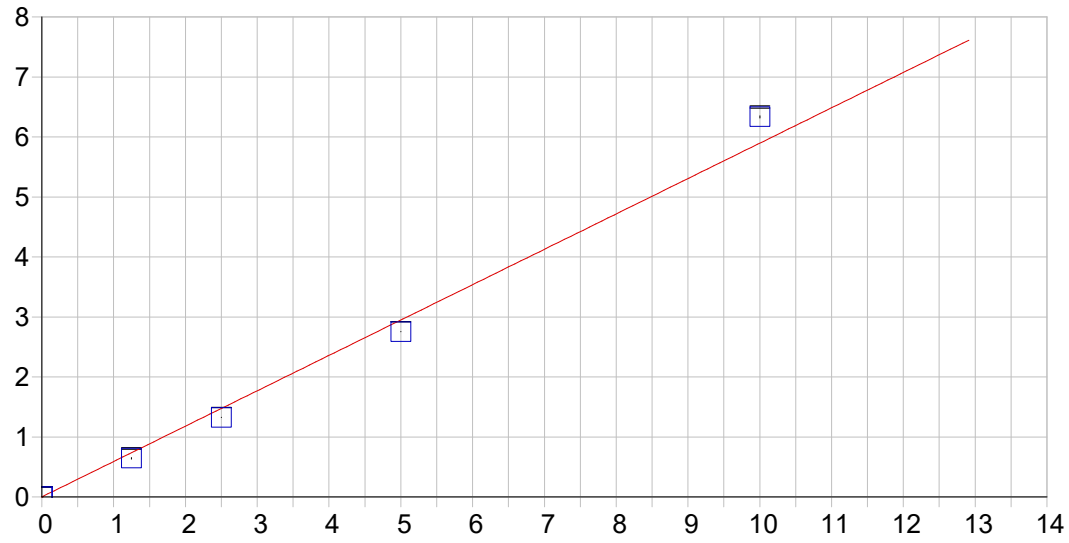
B 249.678 {135}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007337	Re-Slope:	1.000000
A1 (Gain):	0.945534	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999556	Status:	OK.
Std Error of Est:	0.000455		
Predicted MDL:	0.002029		
Predicted MQL:	0.006764		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00735	.001	1
S1	.01000	-.00155	-.012	-116.	.00582	.001	1
S2	1.2500	1.2751	.025	2.01	1.1681	.009	1
S3	2.5000	2.5369	.037	1.48	2.3162	.018	1
S4	5.0000	5.0364	.036	.728	4.5897	.089	1
S5	10.000	9.9135	-.086	-.865	9.0213	.049	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



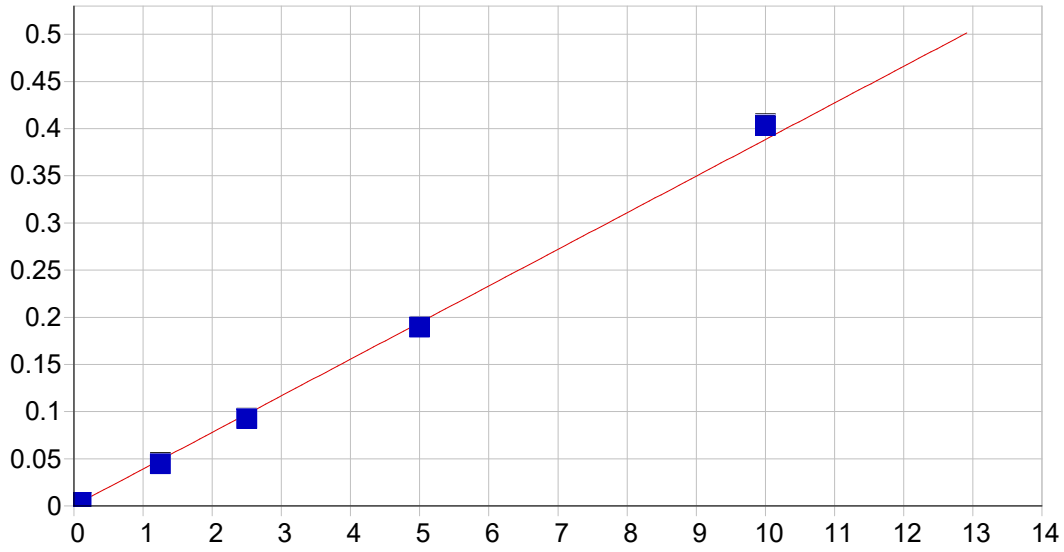
Mo 202.030 {467}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000217	Re-Slope:	1.000000
A1 (Gain):	0.589536	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.996721	Status:	OK.
Std Error of Est:	0.000802		
Predicted MDL:	0.000561		
Predicted MQL:	0.001871		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00022	.000	1
S1	.01000	.00946	-.001	-5.40	.00579	.000	1
S2	1.2500	1.0900	-.160	-12.8	.64280	.012	1
S3	2.5000	2.2442	-.256	-10.2	1.3232	.002	1
S4	5.0000	4.6719	-.328	-6.56	2.7545	.005	1
S5	10.000	10.744	.744	7.44	6.3344	.019	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



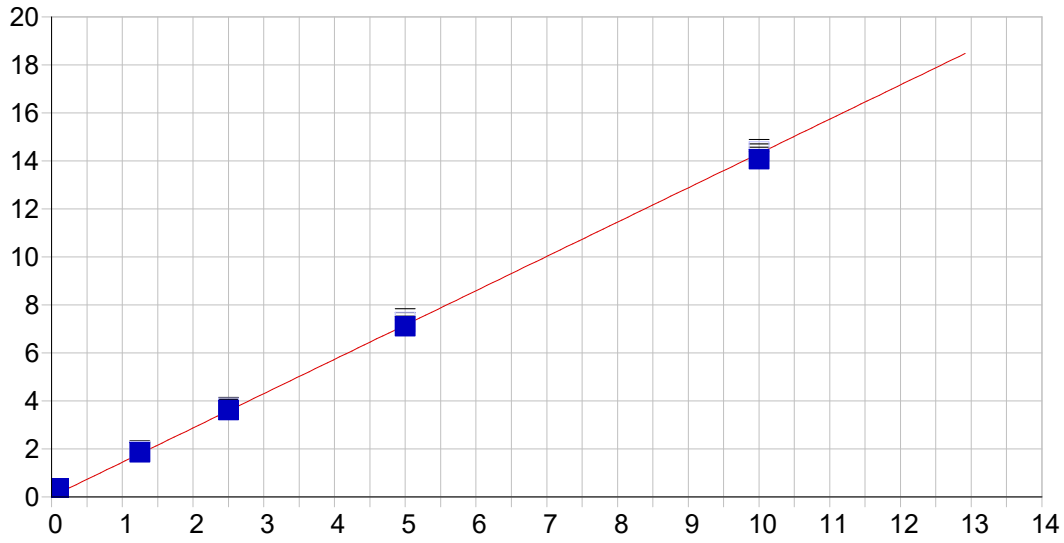
S 182.034 {485}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000345	Re-Slope:	1.000000
A1 (Gain):	0.038810	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999045	Status:	OK.
Std Error of Est:	0.000090		
Predicted MDL:	0.006062		
Predicted MQL:	0.020205		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00035	.000	1
S1	.10000	.08621	-.014	-13.8	.00369	.000	1
S2	1.2500	1.1384	-.112	-8.93	.04468	.001	1
S3	2.5000	2.3706	-.129	-5.18	.09266	.000	1
S4	5.0000	4.8737	-.126	-2.53	.19012	.000	1
S5	10.000	10.381	.381	3.81	.40448	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



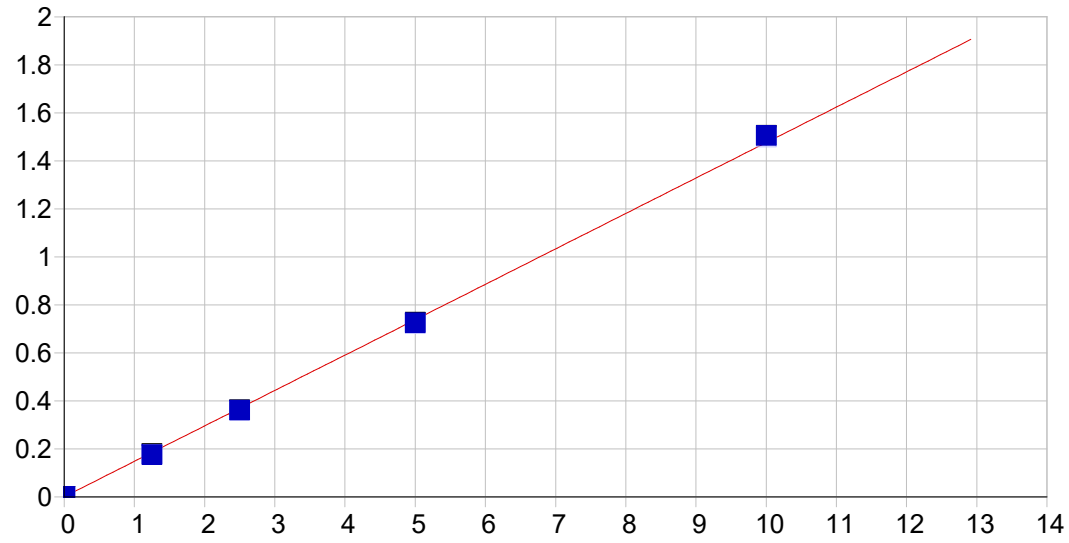
Si 251.611 {134}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.014317	Re-Slope:	1.000000
A1 (Gain):	1.429473	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.994603	Status:	OK.
Std Error of Est:	0.008104		
Predicted MDL:	0.001310		
Predicted MQL:	0.004368		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.01411	.002	1
S1	.10000	.24485	.145	145.	.36635	.002	1
S2	1.2500	1.2881	.038	3.05	1.8962	.018	1
S3	2.5000	2.5224	.022	.895	3.7011	.038	1
S4	5.0000	4.9656	-.034	-.688	7.2748	.155	1
S5	10.000	9.8303	-.170	-1.70	14.391	.095	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

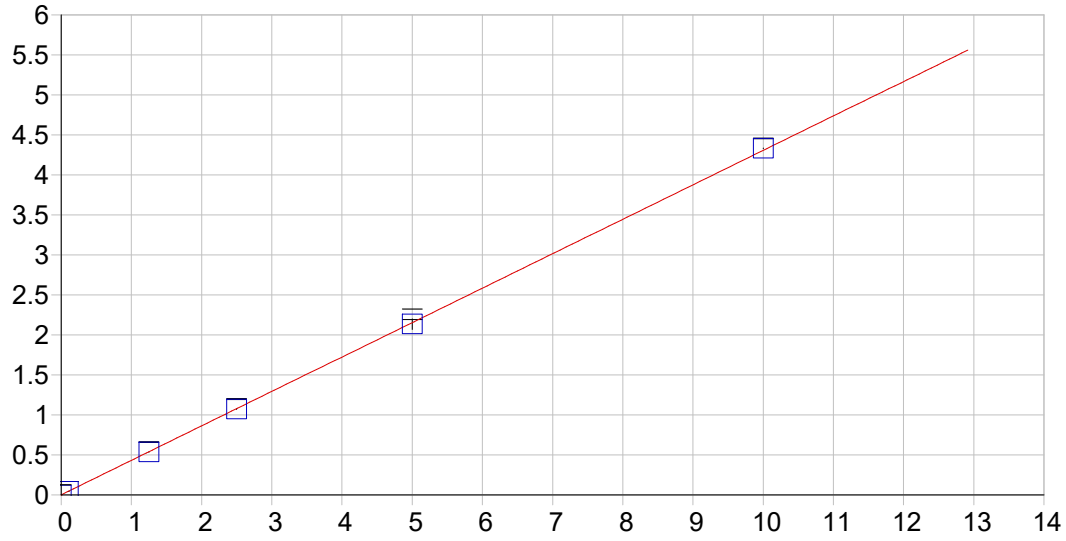


Sn 189.989 {478}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000613	Re-Slope:	1.000000
A1 (Gain):	0.147576	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999736	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.001570		
Predicted MQL:	0.005235		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00061	.000	1
S1	.00700	.00521	-.002	-25.6	.00134	.000	1
S2	1.2500	1.1926	-.057	-4.59	.17568	.003	1
S3	2.5000	2.4451	-.055	-2.19	.35961	.001	1
S4	5.0000	4.9137	-.086	-1.73	.72206	.003	1
S5	10.000	10.200	.200	2.00	1.4985	.001	1



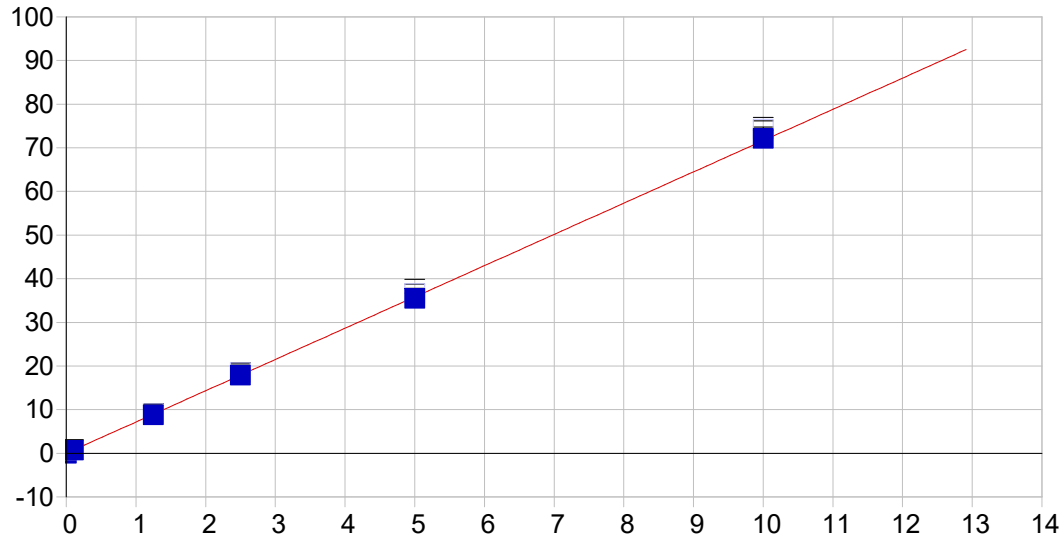
Ti 336.121 {100}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001964	Re-Slope:	1.000000
A1 (Gain):	0.430420	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000160		
Predicted MDL:	0.004066		
Predicted MQL:	0.013555		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00196	.000	1
S1	.10000	.09944	-.001	-.558	.04477	.001	1
S2	1.2500	1.2407	-.009	-.743	.53599	.004	1
S3	2.5000	2.4897	-.010	-.412	1.0736	.006	1
S4	5.0000	4.9559	-.044	-.882	2.1351	.067	1
S5	10.000	10.064	.064	.643	4.3338	.004	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



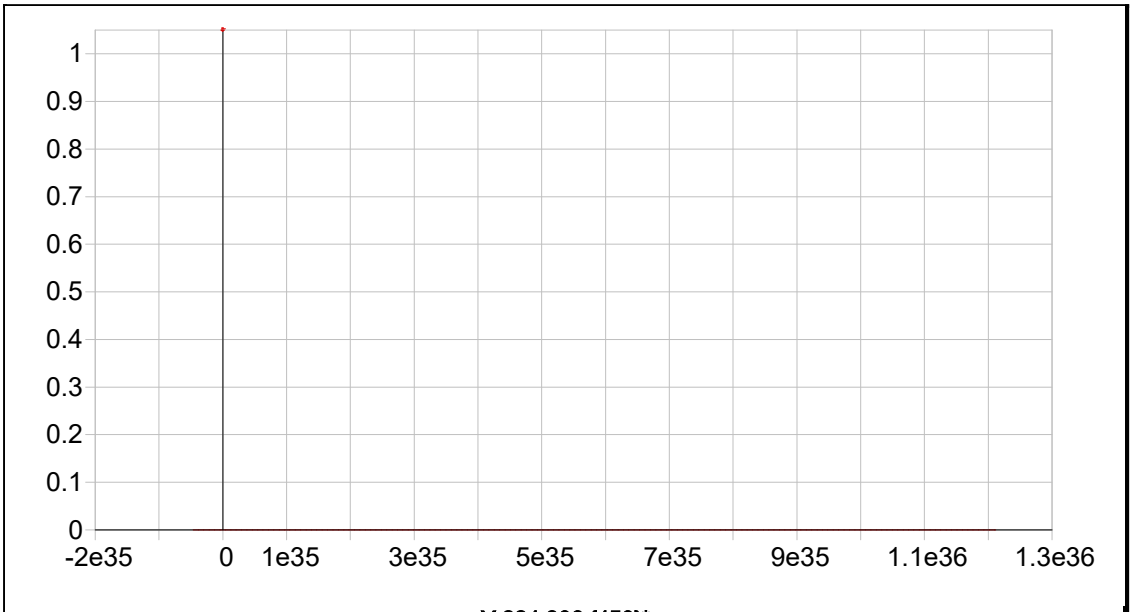
Sr 407.771 { 83}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002159	Re-Slope:	1.000000
A1 (Gain):	7.164940	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.003270		
Predicted MDL:	0.000308		
Predicted MQL:	0.001027		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00217	.002	1
S1	.10000	.10394	.004	3.94	.74331	.001	1
S2	1.2500	1.2291	-.021	-1.67	9.0733	.011	1
S3	2.5000	2.4983	-.002	-.067	18.436	.045	1
S4	5.0000	4.9526	-.047	-.948	36.558	1.05	1
S5	10.000	10.066	.066	.661	74.270	.411	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

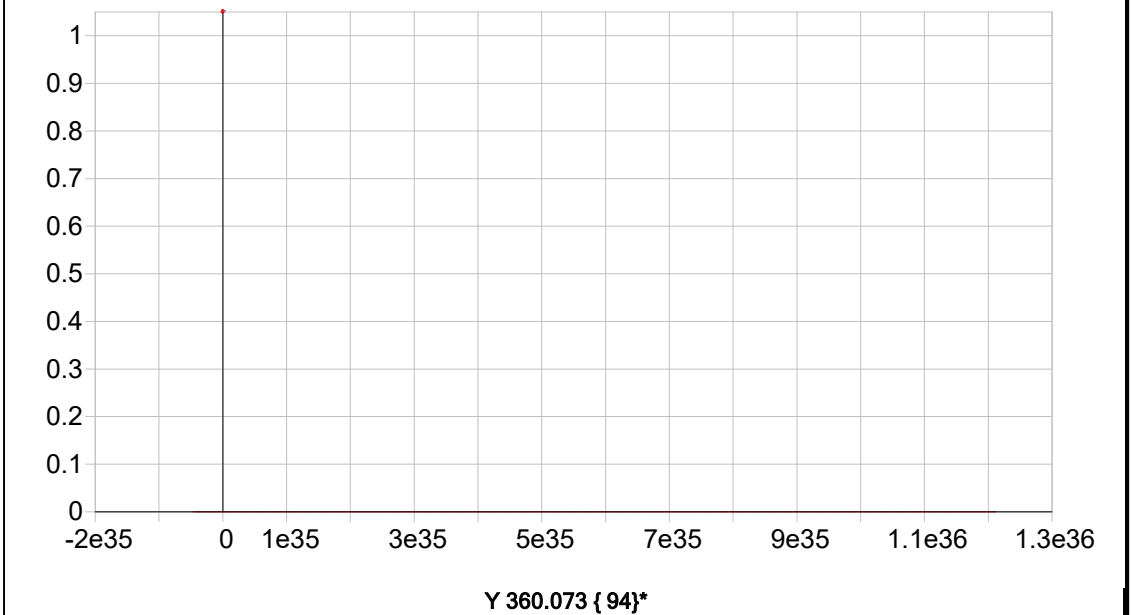


Y 224.306 {450}*

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



Y 360.073 { 94}*

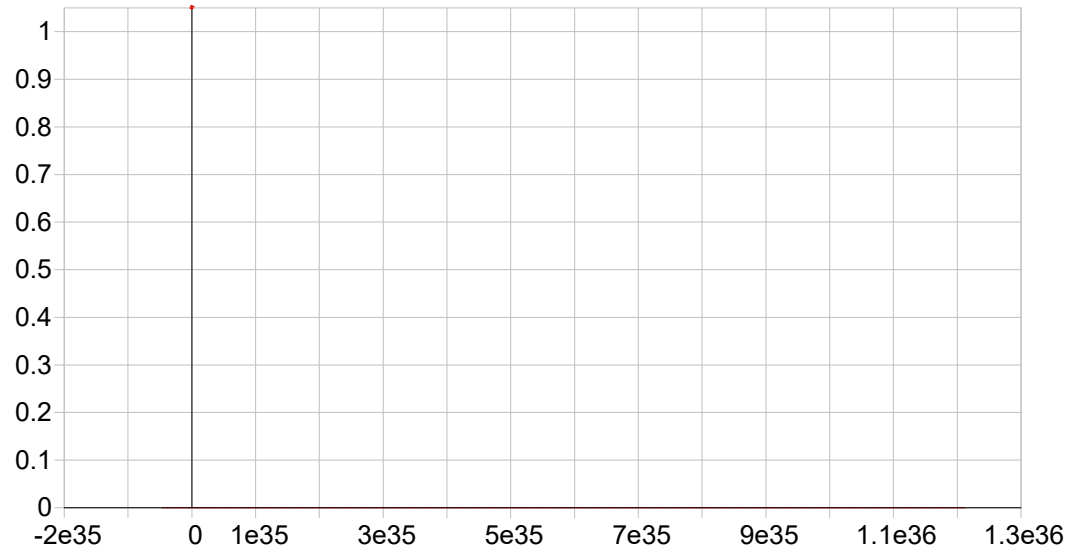
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

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

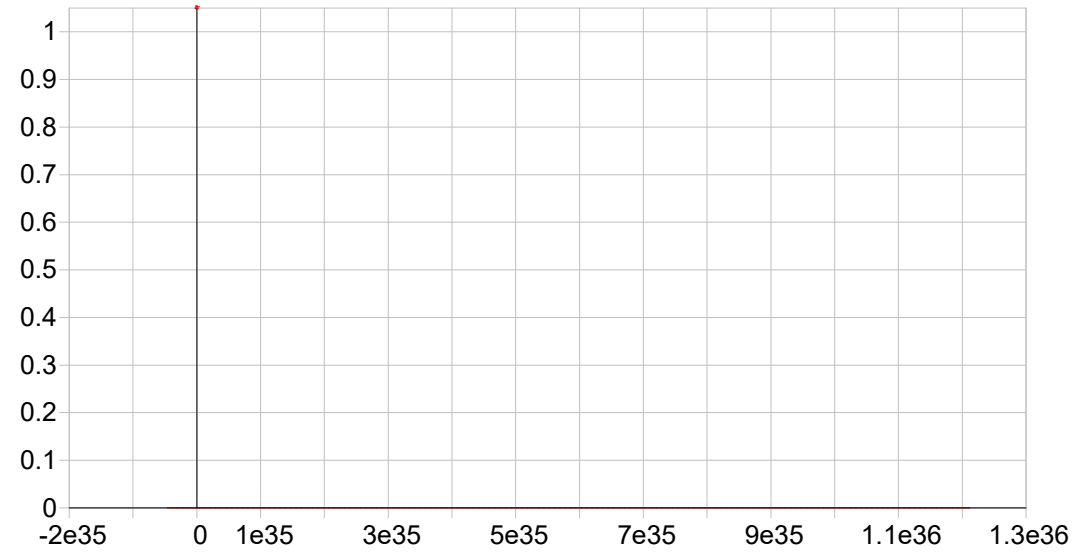


Y 371.030 { 91}*

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

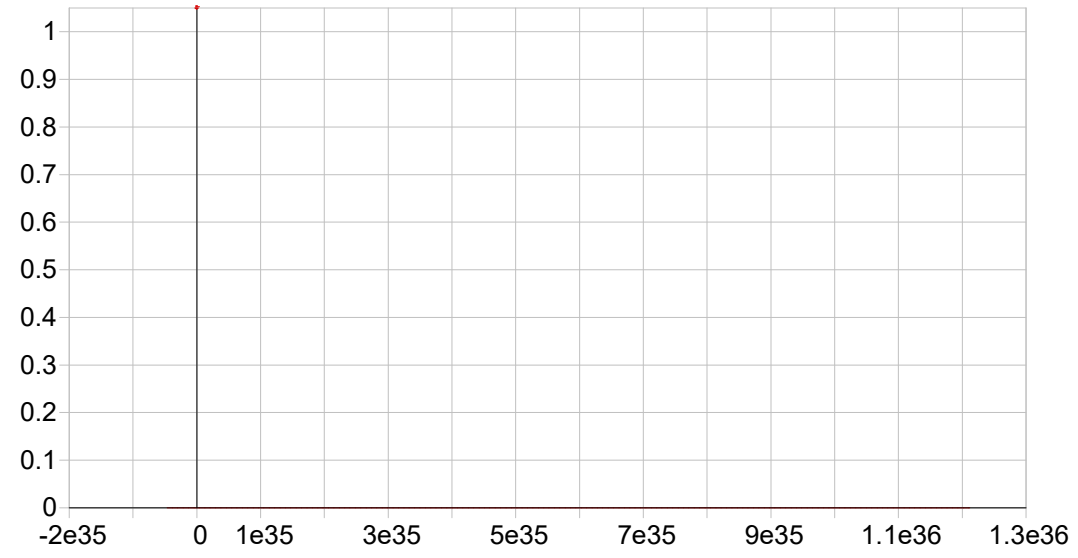
Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5



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



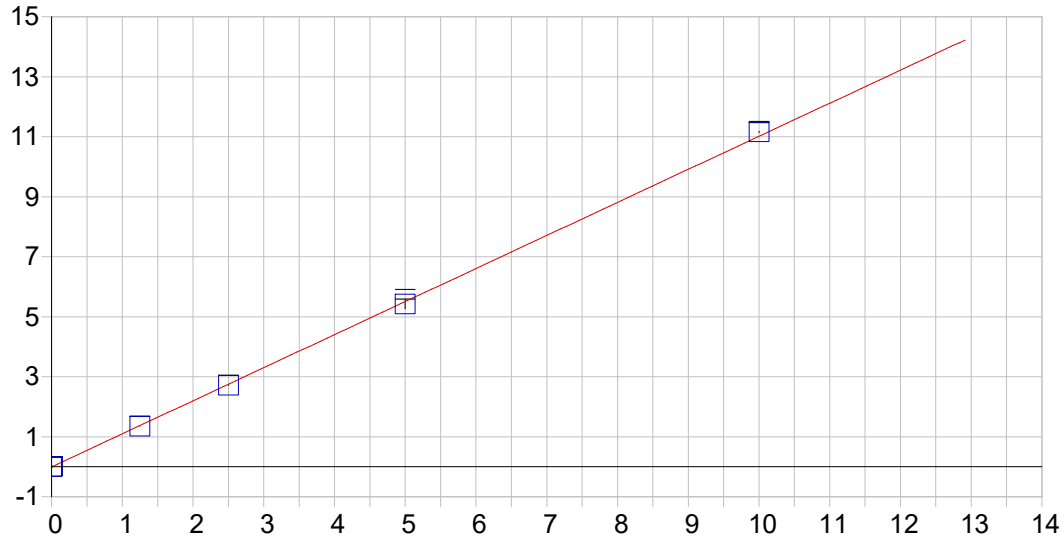
In 230.606 {446}*

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:mohan
On:12/31/2024
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Inst Id :P5

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



Li 670.784 { 50}

Date of Fit:	12/27/2024 18:53:57	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003424	Re-Slope:	1.000000
A1 (Gain):	1.101915	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999899	Status:	OK.
Std Error of Est:	0.000322		
Predicted MDL:	0.004247		
Predicted MQL:	0.014157		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00342	.001	1
S5	10.000	10.133	.133	1.33	11.162	.020	1
S4	5.0000	4.9208	-.079	-1.58	5.4188	.158	1
S3	2.5000	2.4677	-.032	-1.29	2.7158	.009	1
S2	1.2500	1.2296	-.020	-1.63	1.3515	.003	1
S1	.01500	.01422	-.001	-5.18	.01225	.010	1

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/27/2024 12:22:59 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	.02740	-.00022	.00038	-.00008	.00026	-.00026	.09200	.00174
Stddev	.11665	.00035	.00038	.00037	.00007	.00411	.00483	.00024
%RSD	425.68	158.21	97.621	441.78	28.941	1560.3	5.2488	13.965
#1	.02666	-.00058	.00033	.00028	.00032	-.00024	.09672	.00146
#2	.14443	-.00022	.00004	-.00046	.00027	.00384	.08707	.00193
#3	-.08888	.00013	.00078	-.00007	.00018	-.00438	.09221	.00182

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00036	.00362	.00020	-.00030	.00256	-.00028	.00035	-.00140
Stddev	.00035	.00300	.00007	.00025	.00076	.00053	.00032	.00143
%RSD	96.424	82.947	35.074	81.400	29.871	191.00	90.810	101.92
#1	.00058	.00076	.00016	-.00007	.00303	-.00008	.00067	-.00301
#2	-.00004	.00335	.00016	-.00056	.00168	.00013	.00035	-.00094
#3	.00055	.00674	.00029	-.00029	.00297	-.00088	.00003	-.00026

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00028	-.00039	-.03075	.00019	.00414	.07887	-.00255	.00735
Stddev	.00054	.00023	.01564	.00085	.00083	.00342	.00020	.00124
%RSD	191.28	58.240	50.853	454.54	20.114	4.3423	7.7473	16.828
#1	.00031	-.00061	-.03638	.00022	.00418	.08174	-.00277	.00611
#2	-.00042	-.00015	-.01308	-.00068	.00329	.07508	-.00237	.00736
#3	-.00074	-.00041	-.04279	.00102	.00495	.07979	-.00252	.00858

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00022	.00035	.01411	.00061	.00196	-.00217	-.00342
Stddev	.00008	.00019	.00222	.00028	.00035	.00236	.00076
%RSD	36.381	56.162	15.728	45.174	17.993	108.80	22.216
#1	.00021	.00013	.01601	.00055	.00182	-.00297	-.00294
#2	.00030	.00042	.01465	.00091	.00170	.00049	-.00430
#3	.00014	.00050	.01167	.00037	.00237	-.00404	-.00303

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/27/2024 12:22:59 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	2026.4	25409.	1993.7	1694.0	1833.4
Stddev	10.5	59.	10.9	4.3	9.2
%RSD	.51906	.23177	.54869	.25565	.50402
#1	2022.3	25341.	1995.1	1690.2	1828.6
#2	2038.4	25445.	2003.8	1693.0	1844.1
#3	2018.6	25441.	1982.1	1698.7	1827.5

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/27/2024 12:27:05 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1.8116	.00277	.00300	.00176	.00584	.01893	.80417	.05403
Stddev	.8987	.00034	.00053	.00016	.00034	.00390	.01691	.00090
%RSD	49.607	12.219	17.628	9.3345	5.7435	20.607	2.1032	1.6699
#1	2.1375	.00316	.00355	.00163	.00590	.02107	.82051	.05345
#2	.79545	.00252	.00250	.00171	.00548	.02129	.80527	.05356
#3	2.5019	.00264	.00295	.00194	.00614	.01443	.78674	.05507

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02851	.38548	.00215	.05179	.00679	.00197	.00845	.05150
Stddev	.00055	.00318	.00004	.00060	.00116	.00034	.00080	.00015
%RSD	1.9200	.82368	1.8006	1.1508	17.065	16.990	9.5073	.28427
#1	.02788	.38531	.00213	.05242	.00659	.00185	.00920	.05136
#2	.02877	.38873	.00213	.05123	.00575	.00235	.00856	.05147
#3	.02888	.38239	.00219	.05171	.00804	.00172	.00760	.05165

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03731	.00218	1.3091	.00530	.09992	.20028	-.00169	.00582
Stddev	.00039	.00027	.0172	.00134	.00075	.00853	.00029	.00055
%RSD	1.0370	12.622	1.3159	25.312	.75394	4.2572	16.977	9.4462
#1	.03687	.00220	1.3227	.00680	.10071	.20725	-.00188	.00598
#2	.03748	.00189	1.2897	.00492	.09986	.20283	-.00136	.00520
#3	.03759	.00244	1.3149	.00419	.09920	.19077	-.00182	.00626

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00579	.00369	.36635	.00134	.04477	.74331	.01225
Stddev	.00032	.00025	.00215	.00013	.00104	.00093	.01049
%RSD	5.5293	6.8203	.58811	9.5307	2.3124	.12546	85.680
#1	.00571	.00382	.36826	.00135	.04367	.74337	.00162
#2	.00552	.00385	.36678	.00120	.04491	.74422	.02260
#3	.00615	.00340	.36401	.00146	.04572	.74235	.01253

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/27/2024 12:27:05 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	2042.7	25683.	2022.7	1705.5	1853.7
Stddev	5.8	129.	10.1	8.7	4.8
%RSD	.28551	.50157	.49821	.50861	.25746
#1	2046.9	25765.	2021.4	1707.2	1859.0
#2	2036.0	25534.	2013.3	1696.1	1849.7
#3	2045.1	25749.	2033.3	1713.2	1852.3

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/27/2024 12:31:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	203.76	.15697	2.1704	.08206	.13003	3.7575	8.9096	1.2854
Stddev	1.30	.00318	.0440	.00177	.00288	.0121	.0291	.0092
%RSD	.63939	2.0284	2.0268	2.1528	2.2111	.32104	.32657	.71198
#1	204.71	.15779	2.1934	.08274	.13109	3.7714	8.9384	1.2880
#2	202.28	.15346	2.1197	.08006	.12677	3.7512	8.9100	1.2753
#3	204.29	.15966	2.1982	.08339	.13222	3.7499	8.8802	1.2931

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.5125	4.6649	.76594	.63219	.74777	.82487	1.8234	.63866
Stddev	.0700	.0196	.00210	.01251	.00295	.00378	.0024	.00445
%RSD	1.9925	.41958	.27443	1.9787	.39407	.45859	.13070	.69699
#1	3.5496	4.6866	.76794	.63960	.74874	.82710	1.8224	.64284
#2	3.4318	4.6595	.76612	.61775	.75010	.82701	1.8261	.63398
#3	3.5562	4.6486	.76375	.63924	.74446	.82051	1.8217	.63915

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.58035	.07537	11.522	.06214	5.9232	1.0243	.11794	1.1681
Stddev	.01115	.00023	.042	.00031	.0161	.0032	.00253	.0092
%RSD	1.9205	.29887	.36694	.49896	.27206	.31290	2.1462	.78699
#1	.58655	.07558	11.519	.06245	5.9336	1.0241	.11936	1.1750
#2	.56748	.07539	11.481	.06183	5.9046	1.0212	.11501	1.1576
#3	.58701	.07513	11.565	.06216	5.9314	1.0276	.11943	1.1715

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.64280	.04468	1.8962	.17568	.53599	9.0733	1.3515
Stddev	.01188	.00110	.0176	.00345	.00376	.0114	.0026
%RSD	1.8483	2.4570	.92887	1.9663	.70154	.12514	.19417
#1	.64880	.04539	1.9121	.17770	.53865	9.0840	1.3543
#2	.62912	.04342	1.8772	.17169	.53169	9.0614	1.3490
#3	.65049	.04523	1.8992	.17765	.53763	9.0745	1.3512

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/27/2024 12:31:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	1982.2	25422.	2030.5	1645.9	1748.6
Stddev	32.4	104.	9.5	4.0	30.8
%RSD	1.6328	.40820	.46946	.24338	1.7636
#1	1964.6	25390.	2022.9	1642.4	1730.5
#2	2019.5	25338.	2041.2	1645.0	1784.3
#3	1962.3	25538.	2027.5	1650.3	1731.2

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/27/2024 12:34:59 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	402.37	.31719	4.3988	.16920	.26886	7.5271	17.781	2.5193
Stddev	1.69	.00062	.0047	.00048	.00035	.0185	.047	.0284
%RSD	.42066	.19459	.10611	.28506	.12946	.24556	.26399	1.1260
#1	400.42	.31731	4.4038	.16913	.26849	7.5057	17.728	2.5095
#2	403.41	.31652	4.3946	.16972	.26892	7.5376	17.796	2.5513
#3	403.28	.31774	4.3980	.16876	.26918	7.5379	17.819	2.4971

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.1153	9.2811	1.5162	1.2714	1.4868	1.6515	3.6323	1.2733
Stddev	.0074	.0238	.0024	.0008	.0020	.0031	.0048	.0045
%RSD	.10419	.25633	.15642	.06485	.13297	.18666	.13271	.35017
#1	7.1233	9.2536	1.5143	1.2723	1.4887	1.6491	3.6375	1.2690
#2	7.1137	9.2952	1.5154	1.2706	1.4871	1.6550	3.6312	1.2779
#3	7.1087	9.2945	1.5188	1.2714	1.4847	1.6504	3.6281	1.2731

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.1792	.15231	24.500	.12271	12.018	1.9911	.24716	2.3162
Stddev	.0025	.00024	.317	.00031	.083	.0046	.00041	.0177
%RSD	.21148	.15433	1.2928	.25375	.68772	.23016	.16660	.76554
#1	1.1792	.15224	24.431	.12255	12.113	1.9894	.24737	2.3105
#2	1.1817	.15212	24.846	.12250	11.982	1.9877	.24742	2.3360
#3	1.1767	.15257	24.224	.12306	11.960	1.9963	.24669	2.3020

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.3232	.09266	3.7011	.35961	1.0736	18.436	2.7158
Stddev	.0022	.00025	.0378	.00077	.0062	.045	.0086
%RSD	.16926	.26611	1.0225	.21423	.57500	.24198	.31548
#1	1.3242	.09259	3.6887	.36050	1.0665	18.396	2.7063
#2	1.3249	.09246	3.7436	.35919	1.0763	18.484	2.7230
#3	1.3207	.09293	3.6710	.35914	1.0779	18.426	2.7181

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/27/2024 12:34:59 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	1887.1	24866.	2021.0	1567.9	1669.0
Stddev	7.9	89.	14.4	13.2	7.4
%RSD	.42124	.35918	.71473	.84143	.44491
#1	1879.6	24877.	2026.6	1555.3	1660.7
#2	1886.2	24950.	2004.6	1581.6	1671.3
#3	1895.4	24772.	2031.8	1566.9	1675.0

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/27/2024 12:38:44 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	786.14	.62551	8.8290	.34727	.56443	14.997	35.338	4.9831
Stddev	2.35	.00116	.0208	.00187	.00120	.446	1.064	.1179
%RSD	.29944	.18587	.23508	.53955	.21301	2.9716	3.0119	2.3655
#1	788.34	.62420	8.8077	.34755	.56352	14.500	34.147	4.8644
#2	783.66	.62641	8.8299	.34528	.56397	15.361	36.197	5.1001
#3	786.43	.62593	8.8492	.34899	.56579	15.130	35.669	4.9847

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.136	18.197	2.9797	2.5064	2.9248	3.2282	7.1016	2.5118
Stddev	.028	.508	.0046	.0061	.0792	.0944	.1978	.0683
%RSD	.20073	2.7903	.15445	.24473	2.7081	2.9247	2.7849	2.7181
#1	14.105	17.626	2.9842	2.4999	2.8342	3.1220	6.8803	2.4336
#2	14.142	18.596	2.9750	2.5071	2.9806	3.3027	7.2611	2.5599
#3	14.161	18.370	2.9798	2.5121	2.9597	3.2599	7.1634	2.5418

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.3448	.30641	52.716	.24260	24.739	3.9301	.50613	4.5897
Stddev	.0059	.00106	1.157	.00704	.081	.1009	.00183	.0893
%RSD	.25185	.34697	2.1954	2.9010	.32572	2.5670	.36070	1.9447
#1	2.3402	.30659	51.486	.23479	24.792	3.8165	.50421	4.4937
#2	2.3426	.30527	53.784	.24846	24.646	4.0093	.50634	4.6702
#3	2.3514	.30737	52.876	.24455	24.779	3.9646	.50785	4.6051

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.7545	.19012	7.2748	.72206	2.1351	36.558	5.4188
Stddev	.0049	.00017	.1548	.00278	.0668	1.046	.1579
%RSD	.17916	.08779	2.1282	.38467	3.1290	2.8604	2.9146
#1	2.7514	.19017	7.1156	.71899	2.0617	35.380	5.2418
#2	2.7519	.19025	7.4248	.72278	2.1925	37.377	5.5452
#3	2.7602	.18993	7.2839	.72441	2.1510	36.916	5.4696

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: S4 Acquired: 12/27/2024 12:38:44 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	1756.1	24460.	2001.8	1462.7	1599.6
Stddev	6.6	78.	41.0	9.5	7.2
%RSD	.37424	.31713	2.0499	.64919	.45095
#1	1763.5	24414.	2045.9	1458.7	1607.2
#2	1751.0	24549.	1964.8	1473.5	1592.8
#3	1753.6	24416.	1994.6	1455.8	1598.9

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/27/2024 12:42:29 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1537.6	1.2717	18.376	.78293	1.3157	30.891	72.356	9.9695
Stddev	6.9	.0029	.030	.00116	.0026	.032	.011	.0752
%RSD	.44708	.23037	.16302	.14855	.19576	.10489	.01502	.75404
#1	1543.7	1.2703	18.350	.78161	1.3128	30.923	72.362	10.049
#2	1530.1	1.2696	18.369	.78341	1.3173	30.892	72.362	9.8989
#3	1538.9	1.2750	18.408	.78378	1.3172	30.858	72.343	9.9610

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	28.997	36.746	6.0146	5.1619	5.9553	6.4864	14.263	5.0804
Stddev	.056	.052	.0135	.0120	.0158	.0227	.021	.0140
%RSD	.19169	.14173	.22444	.23234	.26519	.34935	.14397	.27505
#1	28.946	36.803	5.9994	5.1482	5.9568	6.5112	14.285	5.0913
#2	28.989	36.700	6.0250	5.1673	5.9388	6.4668	14.259	5.0852
#3	29.056	36.736	6.0196	5.1702	5.9702	6.4811	14.244	5.0646

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.8328	.63720	111.21	.49600	55.697	8.1183	1.0711	9.0213
Stddev	.0056	.00088	.79	.00198	.366	.0108	.0012	.0490
%RSD	.11576	.13884	.71390	.39948	.65708	.13305	.11259	.54337
#1	4.8293	.63641	111.52	.49656	56.120	8.1280	1.0697	9.0678
#2	4.8299	.63816	110.31	.49765	55.501	8.1067	1.0717	8.9701
#3	4.8393	.63704	111.80	.49380	55.471	8.1202	1.0719	9.0260

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.3344	.40448	14.391	1.4985	4.3338	74.270	11.162
Stddev	.0188	.00079	.095	.0011	.0039	.411	.020
%RSD	.29698	.19446	.65849	.07168	.09005	.55392	.18295
#1	6.3128	.40459	14.486	1.4973	4.3357	74.722	11.150
#2	6.3472	.40365	14.296	1.4993	4.3293	73.918	11.150
#3	6.3434	.40521	14.391	1.4991	4.3364	74.171	11.186

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/27/2024 12:42:29 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1481.7	23234.	1969.2	1218.4	1477.4
Stddev	9.9	28.	14.2	9.1	6.9
%RSD	.67003	.12070	.72307	.74870	.46966
#1	1491.0	23244.	1953.4	1208.9	1484.5
#2	1471.3	23202.	1981.0	1219.3	1470.7
#3	1482.8	23256.	1973.2	1227.0	1477.0

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: S6 Acquired: 12/27/2024 12:46:29 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S06 Custom ID2: Custom ID3:
Comment:

Elem	Al3961	Ca3736	Fe2598	Mg2790	Na8183
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	81.099	58.430	17.070	8.1882	313.79
Stddev	.387	.207	.066	.0230	.73
%RSD	.47682	.35407	.38655	.28116	.23172
#1	80.664	58.205	16.996	8.1634	314.20
#2	81.231	58.476	17.089	8.1924	314.22
#3	81.403	58.611	17.124	8.2088	312.95

Int. Std.	Y_3710
Units	Cts/S
Avg	1921.4
Stddev	7.1
%RSD	.36918
#1	1928.4
#2	1921.6
#3	1914.2

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: ICV003 Acquired: 12/27/2024 13:33:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.092522	.9956109	.9565487	.9032936	.9229332	2.364004
Stddev	.009906	.0081884	.0033296	.0099259	.0032862	.044860
%RSD	.9067055	.8224462	.3480866	1.098860	.3560603	1.897638
#1	1.081625	.9861756	.9540908	.8938420	.9205742	2.312207
#2	1.094959	.9997989	.9603380	.9024047	.9215388	2.390420
#3	1.100982	1.000858	.9552173	.9136340	.9266867	2.389384

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5137152	.5125059	.4923224	9.982969	.5327023	.4915366
Stddev	.0016223	.0077134	.0003774	.051025	.0017288	.0006164
%RSD	.3158028	1.505039	.0766493	.5111187	.3245271	.1254036
#1	.5136858	.5037407	.4919520	9.966720	.5342521	.4917964
#2	.5121078	.5182577	.4923087	10.04014	.5330169	.4908328
#3	.5153520	.5155195	.4927064	9.94205	.5308378	.4919805

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4863737	10.36947	.5266918	6.114171	.4994420	.2406843
Stddev	.0048847	.09518	.0009173	.029648	.0005685	.0010682
%RSD	1.004317	.9179135	.1741630	.4848984	.1138189	.4438244
#1	.4892463	10.39398	.5270057	6.082861	.4996339	.2409903
#2	.4891412	10.45000	.5274110	6.117839	.4998896	.2415661
#3	.4807336	10.26443	.5256588	6.141815	.4988024	.2394964

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.391330	.5079699	.9695426	9.307005	F -.002124	F -.003119
Stddev	.147713	.0103812	.0034130	.178992	.002695	.001477
%RSD	1.572871	2.043670	.3520224	1.923198	126.9173	47.35678
#1	9.224464	.5197493	.9673217	9.108246	-.005046	-.004805
#2	9.505358	.5040044	.9734725	9.455470	-.001589	-.002494
#3	9.444168	.5001558	.9678336	9.357298	.000265	-.002057

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: ICV003 Acquired: 12/27/2024 13:33:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV003 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0007654	F .0034212	F .0012258	F -.001138	F -.004004	F -.009487
Stddev	.0009055	.0052467	.0004474	.000832	.003672	.000159
%RSD	118.3125	153.3596	36.49663	73.10299	91.70968	1.676727
#1	.0017829	.0092765	.0010416	-.000257	-.005456	-.009571
#2	.0000482	.0018400	.0009000	-.001910	.000172	-.009587
#3	.0004649	-.000853	.0017359	-.001246	-.006727	-.009304

Elem	Li6707
Units	ppm
Avg	F .0019923
Stddev	.0024641
%RSD	123.6815
#1	.0033738
#2	.0034558
#3	-.000853

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2074.021	26278.39	2056.929	1744.084	1868.404
Stddev	5.008	174.58	23.178	11.616	3.533
%RSD	.2414767	.6643630	1.126834	.6659977	.1890747
#1	2068.297	26101.75	2079.003	1738.534	1864.358
#2	2077.594	26282.58	2032.785	1736.285	1869.976
#3	2076.173	26450.85	2058.998	1757.433	1870.878

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: ICB003 Acquired: 12/27/2024 13:37:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005882	-.002212	-.003633	-.001101	-.002058	-.013607	-.005842
Stddev	.0009713	.002019	.000685	.003281	.000452	.020258	.001042
%RSD	165.1104	91.26619	18.85291	298.0646	21.95315	148.8801	17.83683
#1	.0008560	-.004363	-.003144	.000939	-.001953	.002777	-.006918
#2	.0013976	-.000359	-.003339	.000644	-.001669	-.007340	-.004838
#3	-.000489	-.001914	-.004416	-.004885	-.002554	-.036259	-.005770

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000264	.0000205	.0000298	-.001494	-.000360	-.006094	.0019968
Stddev	.0001606	.0000197	.0141260	.000357	.000397	.003791	.0138564
%RSD	607.3839	96.35491	47349.11	23.90584	110.1804	62.21554	693.9303
#1	-.000095	.0000236	.0018745	-.001510	-.000801	-.003459	-.007347
#2	-.000035	.0000385	.0131429	-.001844	-.000245	-.004383	.017917
#3	.000209	-.000001	-.014928	-.001130	-.000033	-.010439	-.004580

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005603	.0083412	-.000420	.0016194	-.005640	-.012354	-.002059
Stddev	.0004861	.0555065	.000174	.0007017	.022862	.007982	.000108
%RSD	86.75239	665.4476	41.33373	43.33402	405.3511	64.61034	5.239736
#1	.0005528	-.004101	-.000405	.0022506	.013149	-.003736	-.001935
#2	.0010501	.069013	-.000255	.0017438	-.031094	-.019492	-.002129
#3	.0000780	-.039888	-.000601	.0008638	.001024	-.013832	-.002114

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2065648	-.002280	-.004012	.0001947	-.008047	-.002322	-.004394
Stddev	.1053469	.002647	.001792	.0004371	.003903	.001411	.001900
%RSD	50.99944	116.0808	44.65341	224.4941	48.50163	60.74987	43.25256
#1	.2824353	-.004432	-.004039	.0005068	-.012148	-.001701	-.003188
#2	.0862844	.000675	-.005791	.0003821	-.004378	-.001329	-.006585
#3	.2509748	-.003084	-.002208	-.000305	-.007614	-.003937	-.003409

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: ICB003 Acquired: 12/27/2024 13:37:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB003 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002715	-.000398	-.006945
Stddev	.000551	.000316	.003369
%RSD	20.29442	79.48091	48.51375
#1	-.002093	-.000720	-.003822
#2	-.002909	-.000089	-.006498
#3	-.003143	-.000384	-.010516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2065.283	26095.99	2022.328	1746.364	1865.737
Stddev	5.722	50.54	14.321	6.643	4.537
%RSD	.2770638	.1936608	.7081317	.3803726	.2431867
#1	2060.489	26040.31	2027.421	1746.151	1862.737
#2	2071.618	26138.96	2006.157	1739.831	1870.956
#3	2063.742	26108.70	2033.406	1753.111	1863.517

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: ICSA003 Acquired: 12/27/2024 13:41:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058539	.0008354	.0056900	-.018085	.0021839	238.9972
Stddev	.0041527	.0029352	.0032940	.008355	.0015775	.0211
%RSD	70.93924	351.3362	57.89095	46.19890	72.23354	.0088277
#1	.0102415	-.001841	.0071866	-.027020	.0039620	239.0169
#2	.0053353	.000373	.0019134	-.016770	.0016369	238.9998
#3	.0019848	.003974	.0079700	-.010465	.0009526	238.9749

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001161	.0022062	.0002981	250.4204	.0515612	.0383446
Stddev	.002318	.0000224	.0000291	.2633	.0006703	.0005725
%RSD	199.6404	1.014090	9.743871	.1051244	1.299943	1.493040
#1	.001470	.0022276	.0002866	250.7075	.0511927	.0380474
#2	-.002902	.0022080	.0003311	250.1904	.0523349	.0390046
#3	-.002052	.0021830	.0002765	250.3633	.0511561	.0379818

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.016203	101.9037	.0132900	259.1188	.0030599	.0006707
Stddev	.008218	.1212	.0003479	.4916	.0008240	.0006349
%RSD	50.71858	.1189225	2.618015	.1897312	26.92916	94.65555
#1	-.017830	101.9249	.0136685	258.9166	.0030338	.0010658
#2	-.023485	101.7733	.0132175	259.6793	.0022492	-.000062
#3	-.007293	102.0129	.0129841	258.7605	.0038966	.001008

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0638901	.0111445	-.036266	-.144920	-.003013	.0023460
Stddev	.0398987	.0092951	.000749	.105255	.001600	.0014659
%RSD	62.44908	83.40474	2.066022	72.62975	53.12099	62.48534
#1	.0449820	.0183680	-.037053	-.260945	-.001601	.0034053
#2	.0369603	.0006579	-.035562	-.118249	-.002686	.0006730
#3	.1097278	.0144077	-.036181	-.055567	-.004751	.0029598

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: ICSA003 Acquired: 12/27/2024 13:41:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA003 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022309	.0062367	-.000150	F .0106035	-.006957	.0016604
Stddev	.0001685	.0014157	.002151	.0016860	.000700	.0006612
%RSD	7.552125	22.70003	1434.178	15.90064	10.05822	39.82348
#1	.0021520	.0054752	-.001620	.0118319	-.006580	.0023932
#2	.0021164	.0053647	.002319	.0086812	-.007764	.0011084
#3	.0024244	.0078702	-.001149	.0112972	-.006527	.0014795

Elem	Li6707
Units	ppm
Avg	.0105311
Stddev	.0052094
%RSD	49.46636
#1	.0069290
#2	.0165043
#3	.0081601

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1969.854	24652.72	2007.626	1653.585	1666.494
Stddev	2.056	14.99	6.212	6.408	3.956
%RSD	.1043956	.0608246	.3094247	.3875123	.2373967
#1	1967.610	24656.02	2003.073	1660.558	1665.650
#2	1970.303	24665.79	2005.102	1652.242	1663.028
#3	1971.649	24636.35	2014.702	1647.955	1670.804

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: ICSAB003 Acquired: 12/27/2024 13:45:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1137288	.1063862	.0560412	.0247872	.5266077	237.0958
Stddev	.0013909	.0032077	.0015107	.0001597	.0029367	.3748
%RSD	1.222994	3.015171	2.695727	.6444194	.5576576	.1580758
#1	.1121607	.1098212	.0573097	.0249144	.5235604	237.5276
#2	.1142127	.1058690	.0543699	.0246079	.5294195	236.9046
#3	.1148132	.1034686	.0564440	.0248392	.5268431	236.8552

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5306186	.5217519	1.008513	247.0195	.5855648	.5273668
Stddev	.0027532	.0024067	.002380	.1103	.0008933	.0021195
%RSD	.5188572	.4612663	.2359754	.0446378	.1525581	.4018942
#1	.5277072	.5244949	1.009090	247.1408	.5865680	.5286644
#2	.5331801	.5207666	1.005898	246.9922	.5848552	.5249210
#3	.5309683	.5199943	1.010552	246.9254	.5852713	.5285151

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4572106	101.0261	.5299625	256.9722	.9988020	.1747741
Stddev	.0106372	.1732	.0023182	.6828	.0019648	.0001729
%RSD	2.326545	.1713997	.4374316	.2657281	.1967190	.0989089
#1	.4601338	101.1588	.5295064	257.6665	.9996888	.1746301
#2	.4454174	101.0892	.5279062	256.9487	.9965501	.1747263
#3	.4660805	100.8302	.5324749	256.3014	1.000167	.1749658

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0884385	.5296914	.8710180	-.872801	-.001472	.0078214
Stddev	.0168475	.0136618	.0022878	.230776	.004035	.0012103
%RSD	19.04992	2.579192	.2626549	26.44082	274.0165	15.47442
#1	.0753872	.5193350	.8686707	-1.08104	-.004284	.0066594
#2	.1074576	.5245642	.8711421	-.91268	.003150	.0077299
#3	.0824708	.5451751	.8732412	-.62469	-.003283	.0090749

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: ICSAB003 Acquired: 12/27/2024 13:45:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB003 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013752	.0141436	.0007630	F .0104752	-.007601	.0017516
Stddev	.0004654	.0060185	.0016246	.0024556	.003305	.0006590
%RSD	33.84338	42.55326	212.9333	23.44200	43.48621	37.62283
#1	.0013445	.0102843	.0012114	.0105193	-.010436	.0014325
#2	.0018552	.0210784	-.001039	.0129085	-.008396	.0013129
#3	.0009259	.0110680	.002116	.0079979	-.003970	.0025094

Elem	Li6707
Units	ppm
Avg	-.006731
Stddev	.003457
%RSD	51.35676
#1	-.006566
#2	-.010268
#3	-.003360

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1966.454	24791.38	2036.842	1651.416	1672.351
Stddev	.552	54.05	6.795	6.041	1.119
%RSD	.0280702	.2180232	.3335857	.3657888	.0669028
#1	1966.030	24844.55	2029.261	1658.203	1671.322
#2	1966.255	24793.11	2042.382	1649.416	1673.542
#3	1967.078	24736.49	2038.884	1646.628	1672.190

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV019 Acquired: 12/27/2024 13:49:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV019 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.967059	4.891526	24.65818	4.705388	4.845758	403.5478	10.27386
Stddev	.017037	.023607	.11954	.039478	.022873	.3102	.01132
%RSD	.3429965	.4826190	.4847753	.8389868	.4720296	.0768641	.1101928
#1	4.980075	4.874849	24.57545	4.663902	4.822216	403.7264	10.28657
#2	4.947776	4.881189	24.60386	4.709771	4.847159	403.1896	10.27016
#3	4.973325	4.918538	24.79523	4.742492	4.867898	403.7273	10.26485

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5088783	2.484578	403.4767	15.34907	2.501901	15.14543	410.4449
Stddev	.0048697	.011369	.2763	.06924	.012741	.02581	.3175
%RSD	.9569555	.4575709	.0684885	.4510859	.5092547	.1704396	.0773429
#1	.5112904	2.476698	403.4954	15.42902	2.492082	15.13277	410.3583
#2	.5032733	2.479424	403.1914	15.30877	2.497323	15.17513	410.1798
#3	.5120712	2.497611	403.7431	15.30942	2.516299	15.12838	410.7967

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.18257	406.7870	2.490459	1.260420	405.7221	2.538481	14.45154
Stddev	.02608	.8113	.007844	.006673	1.8660	.023257	.06505
%RSD	.1718039	.1994298	.3149538	.5293980	.4599258	.9161846	.4501178
#1	15.19019	405.9562	2.485149	1.268102	407.6596	2.511682	14.51928
#2	15.15352	406.8275	2.486760	1.257088	405.5697	2.550375	14.38957
#3	15.20399	407.5772	2.499468	1.256069	403.9369	2.553386	14.44579

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.5114	4.972462	4.919788	4.756574	5.013081	4.963160	5.004490
Stddev	.5911	.040695	.039919	.026682	.037660	.036690	.024806
%RSD	.3875833	.8183976	.8113898	.5609454	.7512252	.7392404	.4956655
#1	152.8476	4.945536	4.928755	4.732339	4.988005	4.977752	4.986442
#2	151.8288	4.952574	4.876148	4.752216	4.994851	4.921419	4.994251
#3	152.8577	5.019276	4.954460	4.785166	5.056386	4.990309	5.032775

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: CCV019 Acquired: 12/27/2024 13:49:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV019 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.120514	4.815531	5.121629
Stddev	.008277	.006112	.003763
%RSD	.1616530	.1269152	.0734693
#1	5.127545	4.809591	5.122248
#2	5.111391	4.821801	5.117596
#3	5.122604	4.815201	5.125045

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1683.911	23628.66	1983.402	1409.724	1526.839
Stddev	8.869	110.51	12.434	4.035	6.823
%RSD	.5266887	.4677123	.6269158	.2862242	.4468963
#1	1694.107	23511.30	1978.393	1405.071	1534.685
#2	1677.983	23643.94	1997.559	1412.259	1522.293
#3	1679.643	23730.74	1974.253	1411.842	1523.539

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB019 Acquired: 12/27/2024 13:53:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB019 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000963	.0025773	.0020698	.0004024	.0011079	.0461811	-.003856
Stddev	.003001	.0012973	.0006918	.0029342	.0010246	.0279398	.000708
%RSD	311.5286	50.33673	33.42544	729.1789	92.47664	60.50041	18.37053
#1	-.004214	.0016016	.0015853	-.001256	.0022362	.0177603	-.003481
#2	-.000377	.0020808	.0017620	-.001327	.0008522	.0736137	-.003414
#3	.001701	.0040495	.0028621	.003790	.0002355	.0471694	-.004673

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000419	.0002859	.0538381	.0012352	.0005005	-.002227	.0792847
Stddev	.0002467	.0000804	.0174823	.0010583	.0002988	.009636	.0148404
%RSD	589.1074	28.11051	32.47201	85.68131	59.68774	432.7824	18.71791
#1	-.000079	.0003058	.0391724	.0011591	.0008351	-.002836	.0902250
#2	.000326	.0001974	.0491577	.0023295	.0004061	-.011543	.0852370
#3	-.000121	.0003544	.0731843	.0002170	.0002604	.007700	.0623922

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017319	.0486565	-.000035	.0017151	.0828409	.0074930	.0003077
Stddev	.0005837	.0281826	.000443	.0010284	.0109232	.0117710	.0007949
%RSD	33.70207	57.92148	1260.768	59.96070	13.18577	157.0933	258.2945
#1	.0021367	.0352352	.000433	.0005412	.0868731	-.002266	.0011937
#2	.0019961	.0296931	-.000449	.0024572	.0704748	.004179	-.000343
#3	.0010628	.0810413	-.000090	.0021470	.0911749	.020566	.000072

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.119037	-.005427	.0128871	.0016509	-.001030	-.000243	-.002230
Stddev	.220510	.001515	.0003451	.0005340	.002263	.001235	.001281
%RSD	185.2455	27.92273	2.677848	32.34342	219.7990	508.7672	57.43540
#1	.026837	-.007100	.0126563	.0020249	.001391	.000042	-.002315
#2	-.011238	-.005037	.0132839	.0010394	-.001386	-.001596	-.003467
#3	-.372709	-.004145	.0127213	.0018883	-.003093	.000825	-.000909

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: CCB019 Acquired: 12/27/2024 13:53:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB019 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.003275	.0003814	.0031650
Stddev	.001636	.0003616	.0032799
%RSD	49.94388	94.78945	103.6293
#1	-.001552	.0006919	.0062736
#2	-.004806	-.000016	.0034841
#3	-.003466	.000468	-.000263

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2055.685	26209.18	2043.386	1748.063	1856.344
Stddev	6.657	109.76	4.568	7.265	5.760
%RSD	.3238468	.4187867	.2235611	.4155913	.3102847
#1	2057.934	26335.81	2039.403	1756.356	1859.459
#2	2060.926	26150.48	2048.372	1745.009	1859.876
#3	2048.194	26141.24	2042.381	1742.823	1849.697

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5172-20ADLX20 Acquired: 12/27/2024 13:57:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ38A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2293569	-.076050	.5599082	.0950349	.0131528	88.76196	1.201426
Stddev	.0045578	.002006	.0028886	.0066808	.0021601	.22999	.006195
%RSD	1.987220	2.638195	.5159120	7.029799	16.42343	.2591099	.5156221
#1	.2289946	-.077029	.5579946	.0928390	.0141735	88.76302	1.197856
#2	.2340850	-.077378	.5584991	.0897285	.0146135	88.99142	1.208579
#3	.2249910	-.073742	.5632310	.1025373	.0106715	88.53144	1.197843

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070835	.0050663	55.18195	.1407095	.1104601	.6129394	182.5055
Stddev	.0000955	.0001249	.32928	.0010866	.0005128	.0156964	1.0596
%RSD	1.348513	2.464725	.5967132	.7722241	.4642110	2.560834	.5805800
#1	.0071937	.0052091	55.05883	.1419376	.1098990	.6113131	182.5679
#2	.0070331	.0050124	55.55505	.1398731	.1105769	.6293856	183.5325
#3	.0070237	.0049774	54.93197	.1403177	.1109045	.5981195	181.4161

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.340002	43.97917	.1884694	-.036332	.4584190	.2908347	3.043346
Stddev	.016826	.23733	.0005182	.000354	.0147803	.0053829	.018551
%RSD	.3877028	.5396316	.2749693	.9751398	3.224183	1.850860	.6095710
#1	4.333047	43.94516	.1888144	-.036497	.4754574	.2970406	3.049647
#2	4.359191	44.23167	.1887204	-.036574	.4507520	.2880335	3.022464
#3	4.327769	43.76068	.1878735	-.035926	.4490477	.2874300	3.057926

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.94229	6.711561	.0412835	-.000025	2.924608	11.47928	.0297808
Stddev	.08502	.014036	.0025698	.000232	.005350	.10719	.0025898
%RSD	.3277166	.2091356	6.224789	935.5754	.1829182	.9337964	8.696397
#1	25.84818	6.709128	.0410411	.000191	2.920673	11.42807	.0327700
#2	25.96515	6.698900	.0439659	.000005	2.922452	11.60248	.0283602
#3	26.01354	6.726654	.0388434	-.000270	2.930699	11.40730	.0282120

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5172-20ADLX20 Acquired: 12/27/2024 13:57:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ38A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.280771	.1361498	.0627745
Stddev	.010302	.0015675	.0021217
%RSD	.8043926	1.151326	3.379959
#1	1.280890	.1344996	.0634783
#2	1.291014	.1376190	.0603903
#3	1.270410	.1363308	.0644550

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2328.927	29437.30	2337.124	1967.270	1847.014
Stddev	8.428	22.85	17.441	12.494	5.164
%RSD	.3618829	.0776158	.7462529	.6351144	.2795681
#1	2338.555	29425.41	2347.653	1960.227	1852.817
#2	2322.889	29463.64	2316.992	1981.697	1845.298
#3	2325.336	29422.84	2346.726	1959.888	1842.927

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5184-20ADLX20 Acquired: 12/27/2024 14:01:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8115263	-.073785	.5544124	.0209297	.1543521	221.5419	.4630109
Stddev	.0072464	.002505	.0013869	.0024966	.0038665	.7016	.0051442
%RSD	.8929296	3.394585	.2501620	11.92846	2.505014	.3166709	1.111026
#1	.8049493	-.074946	.5559885	.0218305	.1577119	221.1493	.4614919
#2	.8192945	-.075498	.5533784	.0228509	.1501258	222.3519	.4687435
#3	.8103352	-.070910	.5538704	.0181077	.1552187	221.1246	.4587973

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104590	.0160908	21.83509	2.592379	.3276626	2.424891	460.6620
Stddev	.0001203	.0001456	.25302	.001497	.0009295	.015275	2.0479
%RSD	1.150149	.9046915	1.158762	.0577653	.2836739	.6299312	.4445521
#1	.0105862	.0162179	21.59325	2.590751	.3271079	2.430833	460.3688
#2	.0104440	.0159320	22.09797	2.592687	.3271442	2.436303	462.8407
#3	.0103470	.0161226	21.81403	2.593699	.3287357	2.407538	458.7766

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.813015	164.6862	.5818952	.0194131	.4576342	1.285070	2.972938
Stddev	.034265	.6914	.0009370	.0004110	.0154688	.007132	.010757
%RSD	.3887988	.4198360	.1610320	2.117303	3.380159	.5549728	.3618355
#1	8.822029	164.3889	.5817880	.0198376	.4606003	1.280401	2.969883
#2	8.841871	165.4765	.5810163	.0190171	.4714051	1.293279	2.964039
#3	8.775144	164.1931	.5828812	.0193847	.4408971	1.281529	2.984892

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.332040	2.363994	.0313590	-.002560	.4321715	11.34663	.0403477
Stddev	.068232	.003923	.0069321	.000321	.0039703	.10644	.0011267
%RSD	2.047750	.1659637	22.10548	12.55487	.9186935	.9380950	2.792396
#1	3.409326	2.362937	.0334240	-.002631	.4346070	11.31663	.0411729
#2	3.280139	2.360707	.0236291	-.002209	.4275900	11.46486	.0408062
#3	3.306656	2.368337	.0370238	-.002840	.4343175	11.25841	.0390641

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5184-20ADLX20 Acquired: 12/27/2024 14:01:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	3.827242	-.337172	.1079688
Stddev	.023444	.001326	.0050190
%RSD	.6125436	.3934116	4.648552
#1	3.831778	-.337331	.1039649
#2	3.848085	-.338412	.1063422
#3	3.801861	-.335773	.1135994

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2207.384	28257.02	2258.385	1860.288	1816.684
Stddev	7.079	101.53	12.379	14.033	9.246
%RSD	.3206870	.3593210	.5481436	.7543667	.5089645
#1	2210.677	28227.65	2260.044	1864.900	1819.201
#2	2212.216	28369.99	2245.259	1871.434	1824.412
#3	2199.258	28173.40	2269.850	1844.529	1806.440

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/27/2024 14:05:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047183	-.001672	-.001755	-.004380	-.003532	.0155995	-.003382
Stddev	.0011359	.001723	.000827	.002558	.002105	.0228948	.002059
%RSD	24.07421	103.0448	47.10701	58.40673	59.59613	146.7669	60.89361
#1	.0051960	-.003475	-.001178	-.007051	-.003651	.0166248	-.004220
#2	.0034215	-.000042	-.002702	-.004138	-.005575	-.007791	-.004889
#3	.0055373	-.001498	-.001386	-.001951	-.001370	.037964	-.001035

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000028	.0000606	.0298679	-.000659	-.000432	.0015608	.0065921
Stddev	.000298	.0000188	.0321598	.000800	.000192	.0068157	.0299676
%RSD	1052.795	30.96687	107.6735	121.3314	44.36324	436.6968	454.5984
#1	.000303	.0000646	.0179066	.000009	-.000213	-.006307	.0352429
#2	-.000115	.0000401	.0054027	-.001545	-.000513	.005674	-.024538
#3	-.000273	.0000770	.0662943	-.000441	-.000571	.005314	.009072

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003497	.1409549	-.000665	.0015334	.0235352	-.008483	-.001543
Stddev	.0007985	.0622910	.000633	.0010888	.0218083	.008074	.000758
%RSD	228.3565	44.19211	95.18748	71.00539	92.66259	95.17119	49.09070
#1	-.000257	.2128823	-.001339	.0027033	.0392972	.000570	-.000713
#2	.000052	.1049064	-.000573	.0013474	.0326622	-.011082	-.001719
#3	.001254	.1050761	-.000083	.0005496	-.001354	-.014937	-.002198

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0554779	-.003935	-.002087	-.000254	-.009167	.0025246	-.005456
Stddev	.0528744	.001396	.000568	.000179	.006967	.0011843	.000718
%RSD	95.30701	35.46899	27.23304	70.36450	76.00246	46.91048	13.15353
#1	-.005497	-.002622	-.001681	-.000048	-.001150	.0038681	-.005366
#2	.083268	-.003783	-.002737	-.000364	-.013752	.0020736	-.006214
#3	.088663	-.005401	-.001844	-.000352	-.012600	.0016320	-.004787

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/27/2024 14:05:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002575	-.000385	-.001674
Stddev	.001652	.000095	.003414
%RSD	64.13441	24.70423	203.8788
#1	-.000757	-.000361	.001896
#2	-.002986	-.000304	-.004907
#3	-.003983	-.000490	-.002013

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2078.823	26222.81	2031.113	1746.879	1879.117
Stddev	3.177	119.42	12.068	10.397	2.639
%RSD	.1528312	.4553970	.5941350	.5951936	.1404477
#1	2080.975	26303.41	2018.603	1750.256	1876.412
#2	2080.320	26279.40	2032.054	1755.168	1881.684
#3	2075.174	26085.61	2042.683	1735.213	1879.254

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165326BSRE Acquired: 12/27/2024 14:09:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0271500	.0481767	.0189600	.0534912	.0958349	.4223054
Stddev	.0035869	.0013600	.0020808	.0029975	.0028307	.0154735
%RSD	13.21130	2.822943	10.97467	5.603798	2.953780	3.664059
#1	.0230086	.0476407	.0195876	.0541073	.0938709	.4400436
#2	.0292667	.0497231	.0206547	.0561329	.0990797	.4115797
#3	.0291747	.0471664	.0166376	.0502335	.0945542	.4152929

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4043858	.0105495	.0098017	10.42388	.0195585	.1017683
Stddev	.0009526	.0001361	.0000395	.05141	.0009151	.0008228
%RSD	.2355583	1.290279	.4028294	.4931600	4.678570	.8084733
#1	.4052561	.0106353	.0098290	10.45692	.0206060	.1024430
#2	.4033682	.0103925	.0097564	10.36466	.0189149	.1008517
#3	.4045332	.0106206	.0098196	10.45007	.0191546	.1020101

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497693	.2149888	.0324617	10.44453	.0780559	.0202148
Stddev	.0032980	.0528966	.0012702	.06390	.0003373	.0007219
%RSD	6.626478	24.60435	3.912965	.6117912	.4320884	3.570890
#1	.0535376	.2759920	.0309953	10.42747	.0777350	.0201630
#2	.0483606	.1818395	.0332237	10.51523	.0780252	.0195202
#3	.0474096	.1871350	.0331660	10.39089	.0784074	.0209611

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.348228	.1050773	.1086612	9.882222	.0143723	F -.003479
Stddev	.069126	.0023788	.0017858	.164427	.0014316	.002046
%RSD	.9407152	2.263832	1.643474	1.663865	9.960566	58.79813
#1	7.403933	.1035906	.1091727	9.823033	.0133093	-.003141
#2	7.270867	.1038204	.1066755	9.755583	.0138074	-.005673
#3	7.369885	.1078208	.1101355	10.06805	.0160001	-.001624

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165326BSRE Acquired: 12/27/2024 14:09:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0182611	.1751474	F .4901277	F .0094972	.1957099	.2066795
Stddev	.0003096	.0038232	.0021722	.0016431	.0036455	.0001573
%RSD	1.695268	2.182866	.4431916	17.30068	1.862708	.0761238
#1	.0179820	.1786131	.4920227	.0090579	.1993990	.2068595
#2	.0185941	.1710463	.4877571	.0113153	.1956213	.2065683
#3	.0182072	.1757829	.4906034	.0081184	.1921096	.2066107

Elem	Li6707
Units	ppm
Avg	.0312461
Stddev	.0042671
%RSD	13.65657
#1	.0264254
#2	.0327736
#3	.0345393

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2086.737	26356.40	2055.108	1767.038	1882.462
Stddev	2.831	101.32	9.832	4.503	1.995
%RSD	.1356579	.3844283	.4784377	.2548326	.1059851
#1	2083.858	26257.23	2044.227	1764.060	1882.393
#2	2086.836	26352.24	2063.355	1772.218	1884.490
#3	2089.517	26459.75	2057.742	1764.836	1880.502

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165695BL Acquired: 12/27/2024 14:13:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS695 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015240	-.001797	-.002021	-.005167	-.001673	.0008382	-.003968
Stddev	.0031323	.002674	.002567	.003500	.000211	.0092900	.002620
%RSD	205.5284	148.8056	126.9919	67.73180	12.60595	1108.366	66.01133
#1	.0048642	-.002742	-.000634	-.001928	-.001897	-.004366	-.001935
#2	-.001348	.001221	-.004983	-.004694	-.001479	.011564	-.003046
#3	.001056	-.003871	-.000446	-.008880	-.001642	-.004683	-.006924

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000023	-.000022	.0179128	-.000811	-.000159	-.009520	.0447673
Stddev	.000016	.000049	.0130256	.000377	.000895	.001640	.0529012
%RSD	68.75053	216.6998	72.71678	46.55377	562.1155	17.22772	118.1693
#1	-.000010	-.000042	.0042552	-.000383	.000870	-.010200	.0007603
#2	-.000041	-.000058	.0301976	-.000953	-.000587	-.010709	.0300818
#3	-.000019	.000033	.0192854	-.001096	-.000761	-.007649	.1034597

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017893	.0599970	.0002074	.0014632	-.002289	-.004787	-.002733
Stddev	.0004323	.0446020	.0003581	.0006113	.020753	.008199	.000476
%RSD	24.16078	74.34047	172.6718	41.77887	906.6258	171.2662	17.41371
#1	.0021895	.0843419	.0005694	.0021689	-.025999	-.008647	-.002194
#2	.0013308	.0871289	-.000147	.0010934	.012578	-.010343	-.003094
#3	.0018475	.0085201	.000199	.0011275	.006554	.004629	-.002911

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0602594	-.004764	-.002701	.0004767	-.005277	.0003150	-.003717
Stddev	.0790803	.001254	.002779	.0005102	.001823	.0011147	.000900
%RSD	131.2332	26.32225	102.8738	107.0402	34.54949	353.8997	24.20463
#1	-.011843	-.006199	-.000397	.0010237	-.007224	.0007786	-.004682
#2	.144835	-.003881	-.001920	.0000137	-.003609	.0011231	-.002902
#3	.047786	-.004211	-.005788	.0003925	-.004998	-.000957	-.003566

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165695BL Acquired: 12/27/2024 14:13:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS695 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001068	-.000414	.0000463
Stddev	.002452	.000331	.0028580
%RSD	229.7063	80.14521	6176.890
#1	.001172	-.000735	-.000816
#2	-.003688	-.000073	.003236
#3	-.000687	-.000432	-.002281

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2108.076	26621.64	2043.638	1781.356	1904.079
Stddev	4.587	46.49	12.059	1.994	3.077
%RSD	.2175830	.1746315	.5900900	.1119580	.1616163
#1	2102.874	26663.11	2030.707	1782.954	1901.381
#2	2109.819	26571.39	2045.628	1781.992	1903.425
#3	2111.536	26630.42	2054.577	1779.121	1907.431

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165695BS Acquired: 12/27/2024 14:21:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS695 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0230230	.0534859	.0199474	.0562448	.0965657	.4179421
Stddev	.0030126	.0025960	.0003568	.0025373	.0024272	.0103007
%RSD	13.08531	4.853682	1.788577	4.511205	2.513558	2.464617
#1	.0197028	.0563537	.0203472	.0547205	.0958486	.4284635
#2	.0237843	.0512962	.0198335	.0591739	.0992707	.4078773
#3	.0255820	.0528079	.0196615	.0548401	.0945778	.4174855

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4130975	.0106527	.0099067	10.53609	.0202476	.1031394
Stddev	.0021500	.0001337	.0000339	.04077	.0008527	.0003781
%RSD	.5204629	1.254991	.3419926	.3869246	4.211514	.3665756
#1	.4119746	.0107803	.0099283	10.57653	.0208400	.1035681
#2	.4155765	.0106641	.0098677	10.49500	.0192702	.1029965
#3	.4117414	.0105137	.0099242	10.53675	.0206325	.1028536

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0550703	.2168375	.0327149	10.59375	.0790955	.0202812
Stddev	.0034179	.0140277	.0004840	.08562	.0010264	.0011345
%RSD	6.206470	6.469222	1.479516	.8082566	1.297608	5.593650
#1	.0585569	.2007717	.0321947	10.56564	.0780147	.0206641
#2	.0549287	.2266574	.0331520	10.68990	.0800570	.0190048
#3	.0517254	.2230834	.0327979	10.52572	.0792147	.0211747

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.457233	.1031009	.1106837	10.12989	F .0137574	F -.005101
Stddev	.079077	.0138563	.0011024	.24873	.0014069	.001747
%RSD	1.060411	13.43952	.9959850	2.455440	10.22657	34.24467
#1	7.546826	.0970733	.1111878	9.85635	.0129687	-.005142
#2	7.397172	.0932793	.1094194	10.34249	.0129217	-.003334
#3	7.427701	.1189501	.1114439	10.19084	.0153818	-.006826

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165695BS Acquired: 12/27/2024 14:21:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS695 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0185224	.1800185	F .4976788	F .0084187	.2028909	.2078811
Stddev	.0003521	.0019433	.0046955	.0022150	.0065160	.0006426
%RSD	1.901065	1.079515	.9434697	26.31058	3.211570	.3091283
#1	.0182209	.1807727	.5018771	.0103587	.1995329	.2081981
#2	.0189094	.1814716	.4926085	.0088921	.2104009	.2071416
#3	.0184368	.1778111	.4985507	.0060052	.1987387	.2083036

Elem	Li6707
Units	ppm
Avg	.0317430
Stddev	.0064944
%RSD	20.45925
#1	.0249912
#2	.0322928
#3	.0379450

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2066.687	26063.47	2028.266	1750.383	1865.128
Stddev	2.323	70.59	14.746	.517	1.693
%RSD	.1123878	.2708534	.7270448	.0295121	.0907694
#1	2064.011	26140.61	2011.494	1750.977	1863.203
#2	2068.190	26002.08	2039.199	1750.035	1866.384
#3	2067.858	26047.72	2034.104	1750.138	1865.798

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165571BL Acquired: 12/27/2024 14:25:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS571 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007516	.0001477	-.004213	-.002119	-.001468	.0165513	-.005720
Stddev	.0017119	.0013280	.000454	.001010	.001586	.0249654	.001629
%RSD	227.7795	899.3005	10.77779	47.67544	108.0190	150.8363	28.47736
#1	.0020497	-.001326	-.004359	-.001461	.000064	.0405363	-.007438
#2	-.001189	.000516	-.004575	-.003283	-.003103	.0184084	-.005522
#3	.001394	.001252	-.003704	-.001615	-.001366	-.009291	-.004199

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	-.000005	.0286453	-.000859	-.000406	-.008400	.0223148
Stddev	.000128	.000011	.0277714	.000369	.000074	.004191	.0325646
%RSD	851.3339	200.4532	96.94909	42.94403	18.33441	49.88771	145.9326
#1	.000101	-.000014	.0507548	-.001277	-.000401	-.004978	.0236772
#2	-.000153	.000007	-.002525	-.000726	-.000482	-.007148	.0541768
#3	.000006	-.000010	.037706	-.000576	-.000334	-.013074	-.010910

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000716	-.006457	-.000665	.0007639	.0078968	.0004440	-.002452
Stddev	.000457	.034501	.000634	.0003938	.0245126	.0041162	.000146
%RSD	63.74633	534.2989	95.41669	51.55013	310.4137	926.9818	5.940019
#1	-.000618	.010869	-.000061	.0011651	.0174538	.0040745	-.002289
#2	-.000317	.015947	-.001325	.0007487	-.019955	-.004028	-.002495
#3	-.001214	-.046188	-.000608	.0003780	.026191	.001285	-.002571

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0600303	-.004300	-.005212	.0000843	-.001303	.0012549	-.004156
Stddev	.0914466	.001165	.001548	.0006363	.001983	.0015662	.000393
%RSD	152.3341	27.10599	29.70827	754.5802	152.2358	124.8135	9.444489
#1	-.015459	-.005457	-.005803	.0007232	.000359	.0015541	-.003703
#2	.033834	-.004316	-.006378	-.000549	-.000769	.0026499	-.004397
#3	.161716	-.003126	-.003455	.000079	-.003498	-.000439	-.004368

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165571BL Acquired: 12/27/2024 14:25:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS571 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.000913	-.000396	.0023947
Stddev	.002748	.000117	.0030283
%RSD	301.0706	29.42757	126.4606
#1	-.000005	-.000343	.0015642
#2	.001267	-.000316	.0057516
#3	-.004000	-.000530	-.000132

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2073.860	26313.70	2030.153	1761.800	1873.593
Stddev	.843	66.07	11.494	7.828	2.179
%RSD	.0406446	.2510714	.5661823	.4443229	.1163240
#1	2074.801	26238.56	2034.562	1754.044	1872.140
#2	2073.175	26339.83	2038.790	1769.698	1872.540
#3	2073.605	26362.70	2017.107	1761.659	1876.099

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165571BS Acquired: 12/27/2024 14:29:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS571 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240725	.0469095	.0168009	.0556960	.0940248	.4209753
Stddev	.0026679	.0013398	.0027002	.0023108	.0018697	.0164945
%RSD	11.08284	2.856123	16.07150	4.149000	1.988494	3.918173
#1	.0269631	.0467780	.0196221	.0580593	.0929653	.4388619
#2	.0235497	.0483102	.0165401	.0555873	.0929255	.4063644
#3	.0217047	.0456403	.0142407	.0534415	.0961836	.4176997

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4039900	.0105927	.0097055	10.38362	.0201005	.1012330
Stddev	.0014200	.0002358	.0000380	.04204	.0008896	.0005857
%RSD	.3514896	2.226336	.3913900	.4048600	4.425553	.5785882
#1	.4055022	.0106972	.0097052	10.42029	.0203539	.1006256
#2	.4026850	.0103226	.0097436	10.33774	.0208358	.1017944
#3	.4037828	.0107581	.0096676	10.39284	.0191117	.1012791

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0524251	.2072427	.0338024	10.40197	.0778180	.0202548
Stddev	.0032229	.0156665	.0011629	.07718	.0003717	.0009470
%RSD	6.147559	7.559501	3.440133	.7419337	.4776772	4.675695
#1	.0522035	.2040004	.0339145	10.41601	.0774789	.0200265
#2	.0557530	.2242767	.0349050	10.31874	.0782155	.0194428
#3	.0493187	.1934510	.0325875	10.47116	.0777596	.0212951

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.319856	.0920967	.1077371	9.971941	.0161926	F -.003730
Stddev	.037768	.0156804	.0003950	.068115	.0012361	.002783
%RSD	.5159680	17.02608	.3666280	.6830623	7.633974	74.61401
#1	7.348855	.0867802	.1075678	10.01652	.0148174	-.000640
#2	7.277148	.0797656	.1081886	9.89353	.0165491	-.006038
#3	7.333565	.1097441	.1074551	10.00577	.0172113	-.004511

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165571BS Acquired: 12/27/2024 14:29:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS571 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0185375	.1751447	F .4905480	.0099625	.2008400	.2042195
Stddev	.0002974	.0028639	.0026697	.0007060	.0028045	.0009274
%RSD	1.604547	1.635161	.5442240	7.086857	1.396407	.4541070
#1	.0182937	.1779695	.4935629	.0106131	.1986698	.2052424
#2	.0188689	.1722432	.4884837	.0092117	.1998436	.2039826
#3	.0184499	.1752214	.4895975	.0100626	.2040067	.2034336

Elem	Li6707
Units	ppm
Avg	.0294908
Stddev	.0031963
%RSD	10.83815
#1	.0271923
#2	.0281393
#3	.0331408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2082.321	26461.51	2039.644	1763.378	1879.215
Stddev	7.670	56.98	16.727	10.609	5.860
%RSD	.3683541	.2153272	.8200771	.6016139	.3118218
#1	2088.260	26400.57	2024.541	1768.574	1885.228
#2	2073.661	26513.46	2057.622	1751.173	1873.522
#3	2085.043	26470.51	2036.770	1770.388	1878.894

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165726BL Acquired: 12/27/2024 14:33:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS726 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028751	.0007665	-.001963	-.002029	-.005206	.0086061	-.005814
Stddev	.0019052	.0010127	.001635	.004976	.005302	.0313730	.000609
%RSD	66.26484	132.1150	83.27928	245.2273	101.8468	364.5447	10.48094
#1	.0046947	.0002898	-.001505	.003577	-.008980	.0399690	-.005982
#2	.0030361	.0019297	-.000606	-.005922	-.007494	-.022777	-.005139
#3	.0008945	.0000802	-.003779	-.003743	.000856	.008626	-.006322

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001343	-.000058	-.009985	-.001049	-.000009	-.001520	-.013884
Stddev	.0000728	.000070	.018391	.000580	.000221	.002249	.019767
%RSD	54.19821	120.3443	184.1782	55.25208	2529.066	147.9628	142.3727
#1	.0001671	.000009	.007409	-.000460	.000025	.000890	.003666
#2	.0000509	-.000131	-.029232	-.001619	.000194	-.001888	-.010020
#3	.0001849	-.000053	-.008133	-.001068	-.000245	-.003563	-.035298

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014421	.0046525	-.000378	.0008693	-.014507	-.011084	-.002566
Stddev	.0010907	.0715231	.000267	.0002516	.018741	.007982	.000243
%RSD	75.63592	1537.309	70.47359	28.93818	129.1781	72.01897	9.472612
#1	.0020102	-.018929	-.000384	.0010543	.001157	-.010099	-.002762
#2	.0001846	-.052102	-.000109	.0009707	-.035269	-.003639	-.002641
#3	.0021315	.084989	-.000642	.0005828	-.009410	-.019513	-.002294

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2551315	-.004729	-.007536	-.000050	-.006024	.0027307	-.004900
Stddev	.2326744	.003692	.000638	.000136	.001168	.0010401	.000869
%RSD	91.19782	78.06919	8.471854	270.9494	19.39149	38.08752	17.72940
#1	.2188309	-.000501	-.007184	-.000191	-.007215	.0038564	-.005904
#2	.0427410	-.007313	-.008273	-.000040	-.005977	.0025304	-.004405
#3	.5038226	-.006372	-.007152	.000080	-.004880	.0018054	-.004393

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165726BL Acquired: 12/27/2024 14:33:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS726 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.003676	-.000325	-.003749
Stddev	.000410	.000264	.002698
%RSD	11.15391	81.27439	71.97638
#1	-.003226	-.000287	-.003232
#2	-.004029	-.000607	-.001346
#3	-.003774	-.000082	-.006668

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2073.425	26354.94	2030.984	1761.632	1872.655
Stddev	6.905	98.20	19.245	4.966	7.515
%RSD	.3330332	.3725967	.9475892	.2819153	.4013012
#1	2065.505	26449.92	2039.171	1763.650	1865.471
#2	2076.586	26361.09	2044.782	1765.271	1872.030
#3	2078.184	26253.81	2008.998	1755.974	1880.462

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165726BSRE Acquired: 12/27/2024 14:37:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS726 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0209924	.0491876	.0153474	F .0478685	.0946748	.4129169
Stddev	.0032936	.0036472	.0028898	.0037134	.0033205	.0247927
%RSD	15.68962	7.414877	18.82936	7.757588	3.507229	6.004293
#1	.0243662	.0485086	.0135725	.0438957	.0976779	.4084191
#2	.0208256	.0531266	.0186819	.0484575	.0952376	.4396506
#3	.0177853	.0459276	.0137876	.0512522	.0911089	.3906809

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4063511	.0104978	.0097209	10.41185	.0190764	.1007333
Stddev	.0006901	.0001209	.0000727	.03807	.0005372	.0005125
%RSD	.1698216	1.151663	.7477279	.3656771	2.815823	.5087737
#1	.4061657	.0103812	.0096426	10.37560	.0188549	.1003902
#2	.4057727	.0104895	.0097339	10.45152	.0196889	.1004873
#3	.4071149	.0106226	.0097862	10.40842	.0186854	.1013224

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481908	.2421383	.0324747	10.43005	.0776756	.0207452
Stddev	.0105450	.0149485	.0007764	.14964	.0005422	.0006288
%RSD	21.88182	6.173535	2.390746	1.434745	.6980612	3.030971
#1	.0572135	.2364896	.0316673	10.29552	.0779443	.0213680
#2	.0507603	.2308373	.0332158	10.40340	.0770515	.0201106
#3	.0365984	.2590881	.0325410	10.59123	.0780309	.0207571

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.363247	.1104457	.1081110	9.993074	F .0137012	F -.004948
Stddev	.047991	.0112716	.0002167	.171215	.0018739	.001125
%RSD	.6517655	10.20559	.2004566	1.713332	13.67655	22.73471
#1	7.365060	.1232842	.1078612	9.823815	.0152917	-.005907
#2	7.410306	.1021748	.1082480	9.989228	.0116355	-.005226
#3	7.314375	.1058780	.1082239	10.16618	.0141764	-.003710

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165726BSRE Acquired: 12/27/2024 14:37:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS726 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0185667	.1729697	F .4941195	F .0091432	.1996639	.2053115
Stddev	.0002509	.0070176	.0022465	.0011209	.0005532	.0004743
%RSD	1.351049	4.057131	.4546439	12.25897	.2770792	.2310030
#1	.0183274	.1676956	.4939306	.0104369	.1996638	.2052646
#2	.0188277	.1702789	.4919734	.0085302	.1991107	.2048625
#3	.0185450	.1809345	.4964545	.0084625	.2002171	.2058075

Elem	Li6707
Units	ppm
Avg	.0287929
Stddev	.0020289
%RSD	7.046496
#1	.0310938
#2	.0280244
#3	.0272605

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2071.561	26346.90	2028.098	1763.981	1870.772
Stddev	2.942	56.58	4.613	5.400	1.598
%RSD	.1420008	.2147588	.2274579	.3061046	.0854016
#1	2069.194	26283.52	2033.337	1757.766	1869.312
#2	2070.635	26392.34	2026.311	1766.655	1870.525
#3	2074.855	26364.83	2024.645	1767.521	1872.478

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165817BL Acquired: 12/27/2024 14:41:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS817 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008590	-.000795	-.002032	-.003049	-.003752	.0187292	-.006480
Stddev	.0019435	.001024	.001168	.004518	.003125	.0053325	.001202
%RSD	226.2348	128.7530	57.47539	148.2000	83.29132	28.47148	18.55363
#1	.0031027	-.001928	-.003315	.002162	-.004751	.0232006	-.005670
#2	-.000223	-.000522	-.001752	-.005881	-.006255	.0128274	-.005909
#3	-.000303	.000064	-.001030	-.005427	-.000250	.0201597	-.007862

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000039	.0000140	.0150448	-.000803	.0000128	-.002561	.0483892
Stddev	.000045	.0000528	.0098979	.000277	.0004048	.005936	.0359729
%RSD	114.3708	377.6379	65.78975	34.49921	3151.477	231.7822	74.34072
#1	-.000089	-.000023	.0079630	-.001044	-.000392	.002825	.0608107
#2	-.000002	-.000010	.0108168	-.000865	.000014	-.008925	.0765052
#3	-.000027	.000074	.0263545	-.000501	.000417	-.001582	.0078517

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000252	.1059972	-.000110	.0021137	-.002803	-.004177	-.002269
Stddev	.0009301	.1000013	.000369	.0005691	.024756	.009942	.000345
%RSD	3685.480	94.34333	335.1265	26.92274	883.3219	238.0423	15.22347
#1	-.000268	.0506605	-.000291	.0027707	-.018369	-.014848	-.002211
#2	.001067	.2214360	.000315	.0017741	-.015784	.004826	-.001957
#3	-.000723	.0458952	-.000354	.0017964	.025744	-.002509	-.002640

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1401034	-.003459	-.007142	.0003119	-.005686	.0024290	-.005426
Stddev	.1500858	.002111	.000476	.0009518	.005518	.0012765	.000725
%RSD	107.1251	61.02872	6.659013	305.1968	97.03575	52.55425	13.35264
#1	.3118840	-.005713	-.006612	.0006058	-.005479	.0024475	-.006260
#2	.0740712	-.003135	-.007531	-.000752	-.011304	.0011433	-.004955
#3	.0343551	-.001529	-.007283	.001082	-.000275	.0036961	-.005062

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165817BL Acquired: 12/27/2024 14:41:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS817 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001926	-.000397	-.005032
Stddev	.005163	.000197	.002305
%RSD	268.1120	49.53839	45.80627
#1	-.003155	-.000429	-.007591
#2	.003741	-.000186	-.003120
#3	-.006364	-.000575	-.004385

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2066.740	26388.56	2020.561	1749.068	1873.561
Stddev	8.409	50.23	22.749	4.974	4.011
%RSD	.4068523	.1903332	1.125861	.2843789	.2140830
#1	2076.450	26355.66	2006.054	1744.065	1878.155
#2	2061.946	26363.65	2046.779	1749.126	1871.775
#3	2061.826	26446.37	2008.849	1754.013	1870.753

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165817BS Acquired: 12/27/2024 14:45:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS817 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0241813	.0472669	.0174472	.0526290	.0934643	.3863738
Stddev	.0045501	.0002881	.0003923	.0036213	.0022404	.0157008
%RSD	18.81656	.6096064	2.248274	6.880729	2.397104	4.063625
#1	.0209345	.0470457	.0177636	.0562175	.0951591	.3862903
#2	.0293820	.0475928	.0175697	.0526937	.0943096	.3707149
#3	.0222274	.0471623	.0170083	.0489758	.0909242	.4021161

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3867402	.0099605	.0093640	9.847219	.0184153	.0962260
Stddev	.0038947	.0002818	.0000529	.043394	.0006642	.0009086
%RSD	1.007047	2.829410	.5648733	.4406717	3.606606	.9441917
#1	.3830345	.0098893	.0093442	9.822763	.0190633	.0955009
#2	.3907997	.0102712	.0093238	9.897321	.0184466	.0959321
#3	.3863865	.0097212	.0094239	9.821573	.0177361	.0972452

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502156	.2306769	.0306595	9.991476	.0739907	.0199314
Stddev	.0041020	.0305452	.0009136	.019530	.0004901	.0005835
%RSD	8.168767	13.24156	2.979846	.1954637	.6623314	2.927297
#1	.0544568	.1998823	.0302601	10.01305	.0739905	.0206051
#2	.0499214	.2609665	.0317048	9.98638	.0744809	.0196029
#3	.0462687	.2311819	.0300136	9.97500	.0735007	.0195864

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.069954	.0986892	.1030330	9.395198	.0144019	F -.005743
Stddev	.082307	.0020502	.0018865	.236014	.0004239	.001459
%RSD	1.164180	2.077385	1.830936	2.512071	2.943229	25.40485
#1	6.988159	.1008607	.1040815	9.123926	.0147915	-.006948
#2	7.152763	.0984198	.1041623	9.553442	.0144638	-.006160
#3	7.068939	.0967870	.1008552	9.508227	.0139505	-.004121

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165817BS Acquired: 12/27/2024 14:45:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS817 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0176784	.1642310	F .4652103	F .0084662	.1941521	.1946873
Stddev	.0006231	.0040324	.0044329	.0017848	.0071267	.0016205
%RSD	3.524757	2.455320	.9528750	21.08180	3.670666	.8323618
#1	.0169977	.1602120	.4633696	.0080036	.1869543	.1928480
#2	.0178167	.1642044	.4702670	.0104368	.2012055	.1959047
#3	.0182207	.1682766	.4619944	.0069583	.1942963	.1953092

Elem	Li6707
Units	ppm
Avg	.0275717
Stddev	.0020324
%RSD	7.371455
#1	.0253402
#2	.0293168
#3	.0280580

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2094.459	27093.39	2072.232	1793.901	1900.089
Stddev	1.790	683.39	20.711	44.808	1.131
%RSD	.0854736	2.522334	.9994722	2.497824	.0595134
#1	2093.377	26763.35	2092.987	1783.142	1898.788
#2	2093.474	26637.66	2051.564	1755.452	1900.835
#3	2096.525	27879.15	2072.146	1843.110	1900.644

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165572BL Acquired: 12/27/2024 14:49:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS572 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012639	-.000638	-.003388	-.000574	-.001094	.0405533	-.005988
Stddev	.0023428	.002577	.001130	.002983	.003740	.0314505	.001601
%RSD	185.3618	404.1212	33.36030	519.2805	342.0402	77.55345	26.73670
#1	-.000695	-.002134	-.003490	-.000382	-.004787	.0046556	-.006605
#2	.003859	-.002116	-.002210	-.003648	-.001185	.0632612	-.004171
#3	.000628	.002338	-.004464	.002307	.002692	.0537432	-.007189

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000073	.0000757	.0652159	-.000717	-.000092	.0001930	.0070995
Stddev	.000233	.0000818	.0450043	.000759	.000222	.0075360	.0296989
%RSD	321.1540	107.9984	69.00820	105.7994	240.3346	3904.466	418.3265
#1	.000190	.0001286	.1169803	-.000428	.000064	-.004999	.0390548
#2	-.000155	.0001171	.0432993	-.001578	.000005	-.003259	.0018998
#3	-.000253	-.000018	.0353682	-.000146	-.000346	.008837	-.019656

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005905	.0136866	-.000471	.0010954	-.025879	.0002750	-.000096
Stddev	.0015252	.0609278	.000346	.0012618	.056260	.0075493	.000444
%RSD	258.2728	445.1644	73.54263	115.1968	217.3918	2744.957	463.6787
#1	-.000055	-.037254	-.000744	.0005796	.006430	.0082461	-.000515
#2	-.000506	.081181	-.000082	.0001731	-.090842	-.000655	.000370
#3	.002332	-.002867	-.000586	.0025334	.006774	-.006766	-.000143

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0259470	-.002372	-.004698	.0002022	-.005350	.0021595	-.005630
Stddev	.1785123	.001053	.002056	.0002002	.002059	.0002088	.000810
%RSD	687.9883	44.40870	43.76588	98.99612	38.49229	9.667653	14.39676
#1	.2318647	-.001666	-.006465	.0000186	-.007726	.0019819	-.005857
#2	-.085078	-.003582	-.002441	.0004156	-.004260	.0023895	-.004730
#3	-.068946	-.001867	-.005189	.0001724	-.004065	.0021071	-.006302

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165572BL Acquired: 12/27/2024 14:49:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS572 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.000316	-.000225	-.002255
Stddev	.004105	.000194	.005478
%RSD	1299.843	86.53684	242.9062
#1	.001918	-.000233	-.006964
#2	.002188	-.000415	.003757
#3	-.005053	-.000026	-.003559

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2090.362	26539.59	2054.537	1760.622	1894.160
Stddev	4.737	118.81	22.953	9.299	2.667
%RSD	.2266094	.4476756	1.117198	.5281811	.1407813
#1	2094.797	26404.36	2035.975	1750.229	1897.004
#2	2085.372	26627.22	2047.435	1763.483	1891.716
#3	2090.917	26587.19	2080.202	1768.155	1893.761

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165572BS Acquired: 12/27/2024 14:53:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS572 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225251	.0454406	.0163620	.0570152	.0913619	.4093781
Stddev	.0024024	.0022871	.0023251	.0018564	.0060431	.0319595
%RSD	10.66522	5.033236	14.21064	3.255970	6.614432	7.806832
#1	.0251578	.0452133	.0140886	.0552521	.0851818	.4267202
#2	.0219658	.0478330	.0162616	.0568410	.0972579	.4289178
#3	.0204518	.0432757	.0187356	.0589526	.0916461	.3724963

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3856575	.0101849	.0093825	10.01041	.0188916	.0971416
Stddev	.0002077	.0002201	.0000129	.03059	.0008535	.0001160
%RSD	.0538554	2.160546	.1372583	.3056296	4.517982	.1194515
#1	.3854799	.0099718	.0093934	10.04004	.0184476	.0970098
#2	.3856067	.0101716	.0093683	10.01225	.0198756	.0972284
#3	.3858859	.0104113	.0093857	9.97893	.0183515	.0971866

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0444269	.2002286	.0311405	9.825786	.0743976	.0190799
Stddev	.0088425	.0235116	.0002332	.114204	.0008027	.0023703
%RSD	19.90359	11.74238	.7489741	1.162286	1.078893	12.42291
#1	.0388411	.2270817	.0313043	9.808195	.0747827	.0163814
#2	.0546218	.1833410	.0308735	9.721399	.0749350	.0200331
#3	.0398178	.1902632	.0312437	9.947765	.0734749	.0208252

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.002051	.1020397	.1057384	9.245818	.0166772	F -.005424
Stddev	.050725	.0149403	.0009569	.146674	.0025624	.001901
%RSD	.7244340	14.64169	.9049984	1.586377	15.36497	35.04096
#1	7.045675	.0952347	.1050597	9.087420	.0141136	-.003312
#2	6.946390	.0917132	.1068329	9.273095	.0166795	-.006996
#3	7.014089	.1191711	.1053228	9.376937	.0192384	-.005963

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165572BS Acquired: 12/27/2024 14:53:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS572 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0171371	.1686948	F .4731235	F .0090427	.1901507	.1995006
Stddev	.0000861	.0014981	.0011286	.0014115	.0027785	.0005405
%RSD	.5025544	.8880510	.2385419	15.60916	1.461237	.2709478
#1	.0171459	.1678625	.4743463	.0074299	.1882049	.2001242
#2	.0170469	.1677976	.4729023	.0100527	.1933329	.1991657
#3	.0172185	.1704242	.4721219	.0096456	.1889144	.1992119

Elem	Li6707
Units	ppm
Avg	.0239361
Stddev	.0038260
%RSD	15.98409
#1	.0283212
#2	.0212784
#3	.0222087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2112.464	26753.07	2083.411	1777.299	1905.556
Stddev	2.405	144.00	7.503	12.265	1.297
%RSD	.1138669	.5382502	.3601507	.6901112	.0680812
#1	2115.233	26820.78	2077.692	1784.555	1906.366
#2	2110.896	26587.70	2080.633	1763.138	1904.060
#3	2111.262	26850.73	2091.907	1784.204	1906.244

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165829BL Acquired: 12/27/2024 14:57:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS829 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038195	-.000174	-.002892	-.008306	-.002223	-.001894	-.004634
Stddev	.0016749	.002229	.001209	.002632	.002730	.017613	.001191
%RSD	43.85119	1284.358	41.81204	31.68298	122.8132	929.7375	25.71019
#1	.0056886	-.002374	-.002723	-.010097	-.002155	-.019119	-.005427
#2	.0024545	-.000229	-.004177	-.005285	.000473	-.002649	-.005212
#3	.0033155	.002082	-.001776	-.009537	-.004987	.016084	-.003264

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000817	-.000014	-.031373	-.000895	-.000058	-.002556	.0354107
Stddev	.0001027	.000037	.004341	.001204	.000155	.008183	.0140443
%RSD	125.6698	253.8893	13.83711	134.4293	264.9850	320.1283	39.66111
#1	.0001612	-.000024	-.031246	-.001313	-.000155	-.010554	.0417317
#2	.0001182	-.000045	-.035776	.000462	.000120	-.002914	.0193167
#3	-.000034	.000026	-.027096	-.001834	-.000141	.005800	.0451836

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000756	.0413184	-.000412	.0001662	-.021159	-.001538	-.002660
Stddev	.000923	.1077891	.000581	.0009992	.024094	.011584	.000670
%RSD	122.1538	260.8741	140.9638	601.1652	113.8703	753.2754	25.17525
#1	.000279	-.008498	-.000973	.0001732	-.009244	.011819	-.003209
#2	-.001497	-.032552	-.000451	.0011620	-.048889	-.008844	-.001914
#3	-.001049	.165005	.000187	-.000836	-.005344	-.007589	-.002856

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.037520	-.002191	-.005934	.0000577	-.008261	-.000569	-.005336
Stddev	.058800	.000579	.000771	.0005565	.002920	.001457	.000900
%RSD	156.7159	26.40881	12.98930	964.6555	35.34244	255.9809	16.87126
#1	-.015556	-.001696	-.005059	.0006636	-.008087	.000126	-.006376
#2	-.104140	-.002827	-.006232	-.000060	-.005433	-.002244	-.004816
#3	.007136	-.002049	-.006512	-.000431	-.011264	.000410	-.004816

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165829BL Acquired: 12/27/2024 14:57:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS829 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001118	-.000034	-.004380
Stddev	.003211	.000265	.005673
%RSD	287.3259	777.9728	129.5299
#1	.002590	.000271	-.004751
#2	-.002927	-.000203	-.009859
#3	-.003016	-.000170	.001470

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2084.447	26301.34	2056.343	1753.970	1883.440
Stddev	3.789	67.67	9.598	3.229	4.127
%RSD	.1817665	.2572738	.4667553	.1840817	.2190943
#1	2080.613	26316.64	2067.198	1752.917	1879.517
#2	2088.189	26360.05	2048.981	1757.594	1887.744
#3	2084.540	26227.34	2052.849	1751.399	1883.059

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165829BS Acquired: 12/27/2024 15:01:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS829 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0212253	.0483383	.0162327	.0491740	.0916312	.4206177
Stddev	.0011840	.0021695	.0024195	.0011512	.0030278	.0344483
%RSD	5.578332	4.488151	14.90522	2.341186	3.304295	8.189927
#1	.0219415	.0474619	.0170356	.0501169	.0883382	.4412213
#2	.0218758	.0508089	.0135138	.0478910	.0922606	.3808489
#3	.0198586	.0467442	.0181488	.0495141	.0942948	.4397828

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3867078	.0100179	.0093468	9.977793	.0186107	.0975634
Stddev	.0029903	.0000306	.0001297	.042941	.0006725	.0002890
%RSD	.7732598	.3055591	1.387573	.4303669	3.613380	.2961708
#1	.3832630	.0099829	.0093667	9.936795	.0179042	.0972317
#2	.3882260	.0100315	.0092083	10.02244	.0192429	.0977604
#3	.3886344	.0100395	.0094654	9.97414	.0186851	.0976981

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501260	.2202741	.0314844	9.948368	.0745326	.0204362
Stddev	.0046048	.0244866	.0016899	.137309	.0009849	.0008503
%RSD	9.186396	11.11642	5.367311	1.380217	1.321447	4.160674
#1	.0536894	.2115222	.0298718	9.943418	.0755208	.0202411
#2	.0517620	.2479342	.0332422	9.813601	.0745258	.0213671
#3	.0449266	.2013661	.0313393	10.08809	.0735510	.0197004

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.025724	.1049470	.1048858	9.322013	.0147810	F -.004083
Stddev	.049899	.0108755	.0005033	.135518	.0029164	.001194
%RSD	.7102330	10.36281	.4798627	1.453742	19.73103	29.23473
#1	7.049340	.0959884	.1043472	9.247530	.0145252	-.005431
#2	6.968401	.1170475	.1053442	9.240072	.0120008	-.003659
#3	7.059432	.1018051	.1049660	9.478436	.0178169	-.003159

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165829BS Acquired: 12/27/2024 15:01:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS829 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174415	.1654276	F .4708635	F .0085363	.1909729	.1990332
Stddev	.0002839	.0037707	.0019241	.0012251	.0047421	.0006059
%RSD	1.627601	2.279342	.4086334	14.35135	2.483121	.3044106
#1	.0172127	.1610741	.4720436	.0098098	.1867409	.1987106
#2	.0173527	.1676608	.4686432	.0084330	.1900797	.1997321
#3	.0177592	.1675480	.4719036	.0073662	.1960980	.1986569

Elem	Li6707
Units	ppm
Avg	.0272264
Stddev	.0052306
%RSD	19.21140
#1	.0268365
#2	.0326411
#3	.0222018

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2118.097	26764.54	2088.379	1793.000	1915.433
Stddev	5.614	157.50	7.956	9.333	7.880
%RSD	.2650492	.5884702	.3809651	.5205435	.4114196
#1	2112.411	26798.69	2079.571	1795.883	1907.469
#2	2118.242	26592.76	2095.044	1782.565	1915.601
#3	2123.636	26902.16	2090.521	1800.552	1923.228

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165788BL Acquired: 12/27/2024 15:05:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS788 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022496	-.001849	-.002836	-.003858	-.000531	.0005356	-.005857
Stddev	.0037806	.000972	.001108	.002028	.003366	.0353897	.000918
%RSD	168.0516	52.55646	39.06037	52.57442	633.4221	6607.370	15.67391
#1	.0066010	-.002314	-.001589	-.003482	-.002774	-.033540	-.004835
#2	-.000229	-.002501	-.003705	-.002044	.003339	-.001961	-.006612
#3	.000376	-.000732	-.003216	-.006048	-.002159	.037107	-.006125

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000084	-.000002	.0079962	-.001436	-.000308	-.000741	.0206698
Stddev	.000161	.000040	.0174106	.000678	.000386	.008319	.0268945
%RSD	191.8073	2292.127	217.7376	47.22204	125.3905	1121.873	130.1155
#1	-.000261	.000012	-.010152	-.000680	.000132	-.009802	.0497756
#2	.000055	-.000046	.009580	-.001637	-.000589	.001026	-.003262
#3	-.000046	.000029	.024560	-.001990	-.000466	.006551	.015495

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010853	.1017141	-.000323	.0010547	-.002556	.0011628	-.002370
Stddev	.0010404	.0381126	.000451	.0010377	.027071	.0167607	.000437
%RSD	95.86876	37.47034	139.4830	98.39041	1058.895	1441.464	18.42275
#1	.0003343	.0665711	.000010	-.000143	.018918	-.016743	-.002219
#2	.0022729	.1422268	-.000143	.001681	.006377	.016476	-.002862
#3	.0006487	.0963444	-.000837	.001626	-.032965	.003755	-.002028

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0272647	-.000933	-.005449	-.000322	-.008322	-.002348	-.006351
Stddev	.1469354	.001311	.002719	.000449	.005455	.001305	.001717
%RSD	538.9216	140.5003	49.90875	139.2443	65.54967	55.58217	27.03530
#1	-.124943	-.002037	-.007927	-.000746	-.006167	-.001096	-.006864
#2	.168288	-.001278	-.002540	.000148	-.014526	-.003700	-.007754
#3	.038449	.000516	-.005880	-.000369	-.004274	-.002246	-.004436

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165788BL Acquired: 12/27/2024 15:05:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS788 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001798	-.000317	-.005314
Stddev	.002594	.000207	.003275
%RSD	144.2807	65.37194	61.63092
#1	.000261	-.000387	-.005823
#2	-.000944	-.000480	-.001814
#3	-.004711	-.000084	-.008304

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2120.784	26738.75	2081.191	1787.734	1914.539
Stddev	8.689	138.01	5.438	16.358	10.461
%RSD	.4097197	.5161336	.2613155	.9150284	.5464091
#1	2117.357	26897.46	2075.468	1805.554	1911.668
#2	2130.664	26671.86	2081.814	1784.247	1926.135
#3	2114.331	26646.95	2086.292	1773.400	1905.812

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165788BS Acquired: 12/27/2024 15:09:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS788 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0222433	.0469598	.0163939	.0563604	.0938722	.4470255
Stddev	.0013356	.0019177	.0022152	.0021099	.0009174	.0020767
%RSD	6.004588	4.083686	13.51236	3.743549	.9773207	.4645639
#1	.0221746	.0447627	.0186629	.0544653	.0949211	.4481748
#2	.0209434	.0482973	.0162820	.0586339	.0932193	.4446282
#3	.0236120	.0478195	.0142367	.0559819	.0934762	.4482736

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3917106	.0101124	.0094393	10.08933	.0190589	.0982195
Stddev	.0009240	.0001946	.0000310	.03463	.0014034	.0003817
%RSD	.2358862	1.924436	.3280486	.3432096	7.363464	.3886180
#1	.3919801	.0101173	.0094319	10.05222	.0201893	.0979789
#2	.3906818	.0099153	.0094127	10.12077	.0194993	.0986596
#3	.3924699	.0103044	.0094733	10.09499	.0174881	.0980199

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0484585	.2438667	.0322916	9.978559	.0752878	.0191229
Stddev	.0065662	.0296966	.0010729	.039501	.0003431	.0006344
%RSD	13.55012	12.17739	3.322633	.3958589	.4557258	3.317280
#1	.0471354	.2585056	.0317068	9.966442	.0756300	.0197502
#2	.0555855	.2634018	.0316381	10.02270	.0749438	.0184817
#3	.0426546	.2096928	.0335299	9.94654	.0752898	.0191368

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.070825	.0947665	.1061795	9.467577	.0154715	F -.005836
Stddev	.045608	.0086661	.0004936	.039484	.0032022	.001079
%RSD	.6450098	9.144721	.4649059	.4170469	20.69733	18.48385
#1	7.108822	.1044359	.1062841	9.422211	.0191650	-.005230
#2	7.083406	.0921634	.1056419	9.486333	.0134736	-.007081
#3	7.020248	.0877003	.1066124	9.494187	.0137760	-.005196

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: PB165788BS Acquired: 12/27/2024 15:09:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS788 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174815	.1778058	F .4778761	F .0075562	.1944643	.2006574
Stddev	.0003513	.0017764	.0051550	.0023794	.0010587	.0006885
%RSD	2.009764	.9990772	1.078721	31.48885	.5444170	.3431365
#1	.0177158	.1789245	.4827763	.0048515	.1942155	.2001305
#2	.0170776	.1757575	.4724995	.0093267	.1956252	.2014365
#3	.0176513	.1787354	.4783526	.0084904	.1935522	.2004054

Elem	Li6707
Units	ppm
Avg	.0253289
Stddev	.0026404
%RSD	10.42466
#1	.0226329
#2	.0279100
#3	.0254437

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2104.257	26459.50	2062.821	1762.101	1897.183
Stddev	4.475	97.40	9.402	1.015	4.321
%RSD	.2126763	.3681000	.4557692	.0576270	.2277825
#1	2099.349	26465.98	2052.729	1763.092	1893.780
#2	2105.308	26359.02	2071.333	1761.063	1895.723
#3	2108.113	26553.49	2064.400	1762.148	1902.045

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-11 Acquired: 12/27/2024 15:13:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2034073	-.009390	5.308508	.0080435	-.034157	72.72163
Stddev	.0048668	.002940	.011714	.0045680	.002726	.12592
%RSD	2.392659	31.31284	.2206649	56.79084	7.981968	.1731536
#1	.2041109	-.010600	5.299249	.0060538	-.032157	72.59848
#2	.1982270	-.006037	5.304597	.0132688	-.037262	72.85015
#3	.2078841	-.011532	5.321677	.0048078	-.033051	72.71627

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.846571	.0083220	.0106540	173.0933	.1572852	.1228447
Stddev	.006285	.0000440	.0000190	.1297	.0015600	.0006251
%RSD	.2208092	.5283923	.1778944	.0749205	.9918293	.5088639
#1	2.845386	.0083191	.0106758	173.0012	.1561650	.1235049
#2	2.853365	.0083674	.0106414	173.2416	.1590670	.1222618
#3	2.840962	.0082795	.0106449	173.0371	.1566236	.1227674

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5747776	172.4395	8.130933	62.97732	.1755088	.0062228
Stddev	.0041788	.2797	.012507	.14599	.0009514	.0000999
%RSD	.7270349	.1622060	.1538186	.2318140	.5420710	1.605226
#1	.5794064	172.1661	8.131166	62.81049	.1744359	.0061283
#2	.5736436	172.7251	8.143322	63.03985	.1762495	.0063273
#3	.5712829	172.4274	8.118311	63.08164	.1758412	.0062126

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9086743	.2241500	2.621499	7.185883	F 13.85120	.0586107
Stddev	.0368863	.0110876	.002139	.133793	.02404	.0001565
%RSD	4.059352	4.946509	.0815765	1.861890	.1735368	.2669556
#1	.9199458	.2168319	2.623968	7.033118	13.85301	.0586311
#2	.8674673	.2369068	2.620221	7.282211	13.82631	.0587560
#3	.9386097	.2187113	2.620308	7.242318	13.87428	.0584450

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-11 Acquired: 12/27/2024 15:13:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060836	3.333784	8.949468	F 10.76687	1.281118	.1238859
Stddev	.0004957	.009874	.028093	.03488	.004818	.0009002
%RSD	8.148327	.2961738	.3139056	.3239953	.3760893	.7266045
#1	.0063658	3.328317	8.954116	10.75083	1.276004	.1230593
#2	.0063737	3.327854	8.974947	10.74289	1.281778	.1237534
#3	.0055112	3.345182	8.919341	10.80689	1.285573	.1248449

Elem	Li6707
Units	ppm
Avg	.1326850
Stddev	.0048062
%RSD	3.622247
#1	.1288676
#2	.1380822
#3	.1311050

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2465.423	31218.63	2491.680	2065.210	1717.313
Stddev	9.023	73.67	8.818	7.304	3.738
%RSD	.3659797	.2359864	.3539122	.3536827	.2176908
#1	2455.304	31158.04	2484.192	2056.784	1713.581
#2	2468.331	31197.21	2489.450	2069.088	1721.058
#3	2472.633	31300.64	2501.400	2069.756	1717.299

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-10LX5 Acquired: 12/27/2024 15:17:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0437651	.0008782	1.067542	-.007305	-.016357	17.11936	.6670969
Stddev	.0015016	.0022667	.005722	.001653	.003341	.12390	.0046795
%RSD	3.431146	258.1099	.5360117	22.62227	20.42216	.7237661	.7014780
#1	.0451224	-.001147	1.068838	-.008704	-.017854	17.18861	.6718619
#2	.0421520	.003327	1.061283	-.007730	-.012530	17.19315	.6669210
#3	.0440209	.000454	1.072505	-.005481	-.018688	16.97631	.6625078

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020396	.0019600	41.23738	.0378725	.0368207	.1364283	41.37063
Stddev	.0001002	.0000506	.35195	.0008777	.0003969	.0028971	.39748
%RSD	4.911053	2.580281	.8534681	2.317596	1.077932	2.123497	.9607886
#1	.0020427	.0019755	41.57019	.0388841	.0367728	.1333879	41.79470
#2	.0021381	.0019035	41.27296	.0374213	.0364500	.1391567	41.31063
#3	.0019379	.0020011	40.86899	.0373122	.0372395	.1367403	41.00655

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.943499	15.02831	.0330116	.0024136	.2303990	.0475716	.6311807
Stddev	.024137	.14286	.0007158	.0008331	.0249981	.0079566	.0015742
%RSD	1.241931	.9506337	2.168443	34.51599	10.84990	16.72547	.2494014
#1	1.966287	15.19174	.0321850	.0030263	.2200141	.0564817	.6293823
#2	1.946003	14.96600	.0334208	.0027497	.2122672	.0450568	.6323088
#3	1.918208	14.92718	.0334289	.0014650	.2589157	.0411762	.6318510

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.613662	2.749947	.0079308	.0019717	.6599580	2.201105	2.134444
Stddev	.266439	.005280	.0017022	.0003973	.0048967	.029365	.007579
%RSD	16.51146	.1920148	21.46362	20.15271	.7419698	1.334085	.3550719
#1	1.782113	2.747402	.0077443	.0018153	.6555979	2.229697	2.131416
#2	1.752388	2.746421	.0063295	.0024234	.6590204	2.202594	2.128847
#3	1.306483	2.756017	.0097186	.0016763	.6652556	2.171024	2.143068

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-10LX5 Acquired: 12/27/2024 15:17:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2966292	.0287184	.0253471
Stddev	.0027355	.0002037	.0040808
%RSD	.9221861	.7094612	16.09954
#1	.2956226	.0288379	.0221353
#2	.2997254	.0284831	.0239670
#3	.2945396	.0288342	.0299390

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2205.013	27861.39	2165.930	1857.315	1867.355
Stddev	9.721	44.87	28.121	4.342	8.715
%RSD	.4408381	.1610519	1.298325	.2337575	.4667106
#1	2200.112	27842.18	2136.582	1861.084	1863.140
#2	2216.208	27912.67	2168.568	1858.294	1877.376
#3	2198.718	27829.32	2192.638	1852.568	1861.549

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV020 Acquired: 12/27/2024 15:31:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV020 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.033328	4.910600	24.56480	4.638432	4.835926	406.5815	10.30821
Stddev	.010566	.007004	.02243	.006127	.009117	1.4033	.04111
%RSD	.2099290	.1426375	.0912920	.1320957	.1885242	.3451381	.3988469
#1	5.044237	4.904771	24.55980	4.643430	4.827366	406.6431	10.31998
#2	5.032606	4.908658	24.54529	4.631596	4.845513	407.9530	10.34216
#3	5.023141	4.918370	24.58930	4.640269	4.834898	405.1485	10.26250

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5145824	2.480265	405.0654	15.45558	2.498709	15.13780	411.8134
Stddev	.0021421	.001718	.9469	.03870	.003487	.04234	1.8130
%RSD	.4162871	.0692825	.2337541	.2503939	.1395662	.2796976	.4402520
#1	.5146725	2.479442	405.2682	15.41429	2.497030	15.13870	412.6848
#2	.5123966	2.479113	405.8945	15.46142	2.496379	15.17969	413.0262
#3	.5166780	2.482240	404.0336	15.49103	2.502718	15.09502	409.7292

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.18624	406.8024	2.489298	1.270833	411.5213	2.526722	14.40538
Stddev	.03146	1.0239	.000448	.004501	3.4129	.009749	.06862
%RSD	.2071520	.2516927	.0179934	.3541884	.8293330	.3858439	.4763769
#1	15.17885	407.2529	2.489806	1.266142	407.6682	2.530241	14.46441
#2	15.22073	407.5238	2.488959	1.271240	412.7316	2.534224	14.33009
#3	15.15913	405.6305	2.489129	1.275117	414.1640	2.515702	14.42164

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	156.6443	4.969899	4.967726	4.739213	5.033261	5.028392	5.008280
Stddev	.2756	.014950	.019427	.006888	.007017	.014247	.008618
%RSD	.1759632	.3008158	.3910682	.1453444	.1394135	.2833399	.1720663
#1	156.5360	4.954283	4.957741	4.732072	5.025253	5.033505	4.998344
#2	156.9576	4.971335	4.955323	4.739750	5.036197	5.012294	5.013711
#3	156.4392	4.984080	4.990116	4.745817	5.038334	5.039377	5.012786

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: CCV020 Acquired: 12/27/2024 15:31:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV020 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.126596	4.800908	5.205409
Stddev	.019089	.014331	.021216
%RSD	.3723433	.2984978	.4075731
#1	5.136195	4.802583	5.192693
#2	5.138980	4.814328	5.229900
#3	5.104613	4.785814	5.193632

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1711.276	23751.46	1981.815	1428.920	1546.673
Stddev	4.468	95.47	5.957	3.737	2.745
%RSD	.2610756	.4019743	.3005918	.2615257	.1774774
#1	1715.568	23861.41	1987.693	1425.641	1548.731
#2	1711.610	23689.46	1981.970	1432.988	1547.732
#3	1706.651	23703.51	1975.782	1428.131	1543.556

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB020 Acquired: 12/27/2024 15:36:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB020 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000164	-.001099	.0005969	.0031557	-.006310	.0074070	-.005905
Stddev	.001427	.003009	.0020859	.0043136	.004931	.0169693	.001384
%RSD	868.1585	273.7222	349.4334	136.6910	78.15514	229.0966	23.43518
#1	.001333	-.003801	-.000083	.0064619	-.011868	-.012171	-.004307
#2	-.000318	.002143	-.001065	.0047288	-.004599	.017893	-.006728
#3	-.001509	-.001640	.002938	-.001724	-.002462	.016499	-.006680

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000004	.0000682	-.013443	-.001506	-.000016	-.011325	.0200955
Stddev	.000063	.0000200	.031343	.000033	.000195	.010653	.0388927
%RSD	1540.276	29.30034	233.1628	2.183652	1207.036	94.05956	193.5389
#1	.000068	.0000867	-.039600	-.001506	-.000020	-.004221	.0646731
#2	-.000040	.0000470	.021298	-.001473	.000180	-.006182	.0025254
#3	-.000041	.0000710	-.022026	-.001538	-.000209	-.023574	-.006912

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012860	.0510449	.0001472	.0007111	.0372912	-.010194	-.001716
Stddev	.0003156	.0556804	.0003298	.0012397	.0100248	.007087	.000607
%RSD	24.53910	109.0811	224.0439	174.3273	26.88240	69.52901	35.36186
#1	.0012265	.1142871	.0001569	.0018109	.0408740	-.013231	-.001207
#2	.0016272	.0093928	.0004721	-.000632	.0450322	-.015256	-.001553
#3	.0010045	.0294548	-.000187	.000955	.0259673	-.002094	-.002388

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2489302	-.002757	.0050757	.0006636	-.000889	-.002206	-.003820
Stddev	.1745868	.001290	.0021721	.0005192	.001648	.001001	.001572
%RSD	70.13485	46.80896	42.79458	78.24595	185.4636	45.36464	41.15052
#1	.0621980	-.001268	.0074271	.0002546	-.002475	-.001181	-.005280
#2	.4080905	-.003437	.0046558	.0004884	-.001005	-.003181	-.002156
#3	.2765020	-.003564	.0031442	.0012478	.000815	-.002257	-.004023

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: CCB020 Acquired: 12/27/2024 15:36:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB020 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002676	-.000141	.0116458
Stddev	.002355	.000426	.0056899
%RSD	88.01126	301.7039	48.85776
#1	-.001609	-.000632	.0087808
#2	-.005376	.000076	.0181987
#3	-.001043	.000133	.0079579

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2081.679	26341.91	2041.174	1761.330	1883.623
Stddev	3.349	199.21	30.365	8.798	3.371
%RSD	.1608923	.7562408	1.487633	.4994818	.1789395
#1	2083.439	26121.33	2007.538	1751.208	1880.637
#2	2083.780	26508.69	2049.418	1767.137	1887.277
#3	2077.816	26395.71	2066.565	1765.644	1882.954

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-12 Acquired: 12/27/2024 15:40:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2860053	.0403706	5.226828	.2284539	.0712265	75.54816
Stddev	.0048846	.0023466	.017243	.0057460	.0010186	.23484
%RSD	1.707861	5.812631	.3298880	2.515191	1.430028	.3108422
#1	.2915543	.0376756	5.241532	.2228137	.0716516	75.37300
#2	.2823558	.0419617	5.231102	.2343002	.0719636	75.81501
#3	.2841059	.0414745	5.207850	.2282477	.0700642	75.45646

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.182775	.0898517	.1058285	171.9110	.4944421	1.077996
Stddev	.022464	.0003316	.0002385	.6920	.0005036	.001905
%RSD	.3633336	.3690304	.2254044	.4025119	.1018514	.1767574
#1	6.175785	.0900943	.1060741	171.6272	.4949086	1.079826
#2	6.207902	.0899870	.1058138	172.6998	.4939082	1.076023
#3	6.164636	.0894739	.1055977	171.4061	.4945094	1.078137

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9579192	174.0653	8.927213	62.93766	1.146535	.0350983
Stddev	.0073710	.2294	.026793	.22930	.003609	.0006853
%RSD	.7694776	.1317737	.3001313	.3643262	.3147465	1.952440
#1	.9540719	173.8718	8.916582	63.17654	1.150533	.0352305
#2	.9664178	174.3187	8.957691	62.71933	1.143518	.0357079
#3	.9532679	174.0055	8.907367	62.91712	1.145554	.0343566

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9425799	1.066486	3.282573	7.401074	F 13.52934	.0623552
Stddev	.0092279	.009020	.017379	.045353	.03755	.0005012
%RSD	.9790002	.8457477	.5294288	.6127855	.2775205	.8036991
#1	.9324329	1.057009	3.290370	7.435506	13.56967	.0618397
#2	.9504699	1.074965	3.262661	7.418030	13.52298	.0628406
#3	.9448370	1.067484	3.294687	7.349686	13.49538	.0623854

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-12 Acquired: 12/27/2024 15:40:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063569	3.252093	8.899529	F 10.52121	1.282727	.1186235
Stddev	.0002163	.018419	.041554	.03126	.005886	.0011876
%RSD	3.402350	.5663667	.4669184	.2971043	.4588976	1.001118
#1	.0062012	3.272607	8.925294	10.55519	1.281684	.1176983
#2	.0062656	3.246697	8.921701	10.51475	1.289066	.1199626
#3	.0066038	3.236974	8.851592	10.49368	1.277433	.1182095

Elem	Li6707
Units	ppm
Avg	.1443958
Stddev	.0042895
%RSD	2.970648
#1	.1466168
#2	.1471194
#3	.1394513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2427.059	31056.11	2454.584	2049.341	1708.696
Stddev	5.104	64.04	13.303	5.582	3.194
%RSD	.2102837	.2062100	.5419490	.2723792	.1869069
#1	2432.951	30998.46	2449.493	2043.940	1710.892
#2	2424.246	31044.83	2444.579	2055.088	1710.164
#3	2423.981	31125.04	2469.680	2048.995	1705.032

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-06 Acquired: 12/27/2024 15:44:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1312659	-.056190	1.543424	.0753290	.0036264	61.00942	1.321441
Stddev	.0040230	.001143	.004390	.0018521	.0017631	.10680	.003334
%RSD	3.064785	2.033562	.2844240	2.458693	48.61975	.1750516	.2523229
#1	.1275881	-.055249	1.542108	.0773449	.0053993	60.89856	1.317803
#2	.1355624	-.057461	1.539842	.0749395	.0018732	61.01809	1.322171
#3	.1306472	-.055860	1.548321	.0737026	.0036067	61.11162	1.324351

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070976	.0055513	66.24467	.1800787	.0917184	.3237822	153.6231
Stddev	.0002112	.0001185	.07558	.0007766	.0003351	.0081087	.5140
%RSD	2.975596	2.135373	.1140954	.4312505	.3653857	2.504385	.3345620
#1	.0069388	.0054706	66.16369	.1799080	.0917518	.3213442	153.0787
#2	.0073373	.0054959	66.25699	.1794016	.0920356	.3171721	154.1000
#3	.0070168	.0056874	66.31334	.1809264	.0913678	.3328302	153.6906

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.69641	20.78891	.1406410	-.027759	.4543289	.1605101	.8474294
Stddev	.03903	.15793	.0013784	.000690	.0244197	.0112558	.0064283
%RSD	.3648774	.7596804	.9800528	2.486166	5.374889	7.012542	.7585618
#1	10.65550	20.60786	.1404212	-.028088	.4824901	.1734889	.8496574
#2	10.70051	20.86051	.1393857	-.026966	.4414840	.1546189	.8524473
#3	10.73323	20.89836	.1421160	-.028223	.4390124	.1534225	.8401835

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.733329	9.477705	.0355415	.0079649	2.037780	6.137456	.0708024
Stddev	.114837	.041072	.0024421	.0000837	.005529	.059472	.0009101
%RSD	2.426142	.4333491	6.871076	1.050584	.2713081	.9689958	1.285374
#1	4.658615	9.452148	.0327254	.0079969	2.031635	6.080355	.0697578
#2	4.675813	9.455887	.0370753	.0080278	2.042352	6.132968	.0712254
#3	4.865559	9.525082	.0368238	.0078699	2.039354	6.199044	.0714240

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-06 Acquired: 12/27/2024 15:44:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6859106	.1208941	.0950708
Stddev	.0024387	.0008188	.0024262
%RSD	.3555402	.6773043	2.551971
#1	.6832457	.1217915	.0922833
#2	.6864551	.1207035	.0962216
#3	.6880311	.1201874	.0967074

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2472.446	31458.65	2443.151	2086.430	1896.240
Stddev	7.508	122.50	12.612	23.320	8.106
%RSD	.3036684	.3894080	.5162131	1.117703	.4274523
#1	2479.995	31447.71	2457.618	2077.203	1903.624
#2	2472.362	31341.98	2434.472	2069.135	1897.529
#3	2464.980	31586.25	2437.362	2112.952	1887.567

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-07 Acquired: 12/27/2024 15:54:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1318258	-.054533	1.568770	.0855250	.0048536	61.39216	1.334784
Stddev	.0029844	.002114	.005653	.0011906	.0012211	.49452	.013455
%RSD	2.263914	3.877053	.3603694	1.392152	25.15770	.8055034	1.008028
#1	.1298613	-.054376	1.573952	.0841502	.0037109	60.82407	1.319430
#2	.1352600	-.052503	1.569618	.0862035	.0047096	61.72620	1.340407
#3	.1303560	-.056722	1.562741	.0862213	.0061402	61.62622	1.344515

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071152	.0056917	67.61520	.1835871	.0937966	.3319396	155.2471
Stddev	.0000787	.0000988	.56267	.0002149	.0002761	.0126360	1.1934
%RSD	1.106047	1.736469	.8321641	.1170374	.2943338	3.806720	.7686911
#1	.0070379	.0057882	66.97808	.1837233	.0936283	.3278585	153.9249
#2	.0071124	.0055907	68.04400	.1836986	.0941152	.3218485	155.5718
#3	.0071952	.0056961	67.82352	.1833394	.0936463	.3461118	156.2444

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.76591	20.92058	.1436089	-.027915	.4492811	.1663006	.8965034
Stddev	.07741	.12912	.0002473	.001311	.0042693	.0169712	.0024771
%RSD	.7189924	.6171951	.1721743	4.696201	.9502599	10.20513	.2763007
#1	10.68010	20.78364	.1438906	-.027938	.4455078	.1593572	.8990892
#2	10.78714	20.93798	.1434275	-.029214	.4539153	.1539022	.8941517
#3	10.83049	21.04012	.1435087	-.026592	.4484203	.1856426	.8962695

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.644334	9.693201	.0372528	.0080875	2.082077	6.193231	.0718012
Stddev	.026010	.006663	.0022570	.0001926	.006880	.049259	.0015554
%RSD	.5600370	.0687389	6.058711	2.381496	.3304602	.7953627	2.166306
#1	4.641513	9.685647	.0346971	.0080102	2.086021	6.239611	.0719523
#2	4.619850	9.698244	.0380884	.0079455	2.086078	6.198557	.0701757
#3	4.671640	9.695711	.0389728	.0083067	2.074132	6.141526	.0732755

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-07 Acquired: 12/27/2024 15:54:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6954753	.1268548	.0971572
Stddev	.0065555	.0020579	.0025773
%RSD	.9425850	1.622288	2.652687
#1	.6880509	.1245146	.0996589
#2	.6979101	.1283824	.0973024
#3	.7004650	.1276674	.0945105

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2462.010	31095.49	2459.228	2073.658	1878.514
Stddev	3.502	176.33	6.401	10.524	3.269
%RSD	.1422248	.5670617	.2602887	.5075202	.1740216
#1	2458.268	31283.36	2453.866	2082.673	1874.808
#2	2462.553	31069.54	2457.503	2076.208	1879.749
#3	2465.208	30933.58	2466.315	2062.093	1880.986

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-06LX5 Acquired: 12/27/2024 15:58:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0261982	-.012218	.3154933	.0117200	-.006175	13.74845	.2983783
Stddev	.0049474	.001304	.0002274	.0023909	.002437	.02508	.0006126
%RSD	18.88438	10.67488	.0720752	20.39987	39.46236	.1824511	.2053276
#1	.0229455	-.010718	.3156380	.0130996	-.008982	13.73962	.2977360
#2	.0318917	-.012855	.3152312	.0089592	-.004944	13.72898	.2984426
#3	.0237574	-.013082	.3156107	.0131010	-.004600	13.77676	.2989562

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015874	.0010730	15.23236	.0403309	.0237516	.0713494	34.86474
Stddev	.0001191	.0000441	.04984	.0008681	.0001820	.0095449	.16919
%RSD	7.504723	4.107286	.3272091	2.152431	.7661525	13.37764	.4852732
#1	.0016078	.0011155	15.20847	.0404525	.0239333	.0748791	34.69066
#2	.0016950	.0010275	15.28964	.0411317	.0235693	.0605424	34.87499
#3	.0014594	.0010758	15.19895	.0394084	.0237522	.0786266	35.02857

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.431458	4.728060	.0276643	-.005872	.0925567	.0376127	.2249534
Stddev	.001177	.042533	.0003079	.000483	.0341296	.0093685	.0012049
%RSD	.0483980	.8995842	1.112904	8.221829	36.87426	24.90774	.5356407
#1	2.431951	4.777161	.0280003	-.005316	.1208604	.0274714	.2237338
#2	2.430115	4.702582	.0275968	-.006188	.0546560	.0459443	.2261432
#3	2.432309	4.704437	.0273957	-.006111	.1021538	.0394223	.2249831

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8905947	1.948261	.0036152	.0015427	.4197709	1.427498	.0125460
Stddev	.2920306	.006825	.0017974	.0003548	.0061116	.006670	.0010157
%RSD	32.79051	.3503139	49.71922	22.99760	1.455930	.4672334	8.095841
#1	1.001050	1.941084	.0032172	.0011332	.4248242	1.420522	.0117185
#2	.559448	1.954670	.0020501	.0017584	.4129782	1.433813	.0122400
#3	1.111287	1.949028	.0055782	.0017364	.4215104	1.428158	.0136795

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-06LX5 Acquired: 12/27/2024 15:58:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1550162	.0286513	.0186753
Stddev	.0033288	.0001336	.0034170
%RSD	2.147367	.4663758	18.29683
#1	.1512301	.0287915	.0184258
#2	.1563350	.0286369	.0153899
#3	.1574836	.0285254	.0222103

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2199.209	27818.94	2177.055	1845.527	1911.312
Stddev	1.661	146.14	8.685	5.905	1.162
%RSD	.0755227	.5253127	.3989121	.3199616	.0608046
#1	2201.028	27693.70	2182.250	1843.940	1912.538
#2	2197.774	27979.50	2181.886	1852.063	1911.172
#3	2198.825	27783.64	2167.029	1840.577	1910.226

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-08 Acquired: 12/27/2024 16:02:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2164264	.0461736	1.602045	.2215456	.1465341	64.15328	4.785831
Stddev	.0038061	.0030257	.000213	.0016715	.0011408	.35995	.022428
%RSD	1.758610	6.552811	.0133033	.7544819	.7785363	.5610761	.4686241
#1	.2135266	.0443422	1.601815	.2201747	.1456604	63.74606	4.760091
#2	.2207363	.0445127	1.602235	.2234077	.1461172	64.28481	4.801171
#3	.2150164	.0496660	1.602087	.2210543	.1478248	64.42896	4.796230

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0932269	.1016347	66.99816	.5505383	1.057684	.7552550	155.2367
Stddev	.0005931	.0000405	.50259	.0007288	.000890	.0102615	.9470
%RSD	.6362028	.0398253	.7501605	.1323852	.0841612	1.358686	.6100226
#1	.0927659	.1015898	66.41841	.5511747	1.056771	.7475891	154.1499
#2	.0938960	.1016684	67.26509	.5506969	1.057731	.7512632	155.6759
#3	.0930189	.1016457	67.31096	.5497432	1.058549	.7669126	155.8843

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.50644	20.64694	1.129641	.0393153	.4509759	1.051296	1.635132
Stddev	.06337	.20323	.000814	.0015800	.0068048	.015243	.008588
%RSD	.5507315	.9842881	.0720167	4.018723	1.508913	1.449950	.5252112
#1	11.43448	20.45966	1.128729	.0383713	.4508958	1.038991	1.639061
#2	11.53092	20.61813	1.130290	.0384353	.4442115	1.046548	1.641053
#3	11.55391	20.86304	1.129904	.0411393	.4578204	1.068348	1.625283

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.577009	9.654431	.0312498	.0084680	2.093560	6.232130	.0699106
Stddev	.153295	.017178	.0010741	.0004644	.005649	.037562	.0026755
%RSD	3.349247	.1779266	3.437228	5.484408	.2698304	.6027105	3.827018
#1	4.521863	9.634744	.0302497	.0082402	2.098752	6.211396	.0673047
#2	4.750248	9.666370	.0323851	.0081616	2.087544	6.275489	.0697766
#3	4.458916	9.662178	.0311147	.0090024	2.094386	6.209505	.0726506

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-08 Acquired: 12/27/2024 16:02:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL6S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6870184	.1265169	.0909740
Stddev	.0017647	.0010718	.0033185
%RSD	.2568580	.8471760	3.647765
#1	.6870547	.1260321	.0939042
#2	.6852359	.1277455	.0873704
#3	.6887646	.1257732	.0916474

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2455.860	31161.39	2456.023	2077.834	1877.379
Stddev	2.231	148.71	9.283	8.994	2.448
%RSD	.0908402	.4772410	.3779796	.4328486	.1303926
#1	2453.305	31070.58	2465.434	2067.512	1874.700
#2	2456.859	31333.02	2455.764	2083.987	1879.498
#3	2457.418	31080.58	2446.872	2082.003	1877.940

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-09 Acquired: 12/27/2024 16:06:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0810748	-.056843	1.060490	.0780112	.0060721	62.66935	1.073066
Stddev	.0029621	.003453	.001526	.0024240	.0022349	.07423	.002234
%RSD	3.653588	6.074573	.1439069	3.107225	36.80582	.1184424	.2082212
#1	.0844804	-.054431	1.062244	.0770039	.0069800	62.70445	1.073514
#2	.0790968	-.060799	1.059472	.0807764	.0035261	62.71952	1.075043
#3	.0796473	-.055300	1.059753	.0762533	.0077101	62.58409	1.070642

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060400	.0036461	34.10928	.0971054	.0830797	.1561175	141.3286
Stddev	.0000734	.0000945	.14977	.0009321	.0002229	.0062767	.4834
%RSD	1.215992	2.591206	.4390942	.9598690	.2683190	4.020505	.3420069
#1	.0060561	.0035568	34.16698	.0981525	.0829655	.1526233	140.7743
#2	.0059598	.0036364	34.22162	.0967976	.0833366	.1633638	141.6624
#3	.0061040	.0037450	33.93924	.0963662	.0829371	.1523656	141.5490

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.963443	19.85564	.1201625	-.026477	.3374171	.1413607	.4790064
Stddev	.008922	.05333	.0005146	.000381	.0105254	.0103422	.0023330
%RSD	.0895466	.2685703	.4282336	1.439546	3.119412	7.316178	.4870576
#1	9.955697	19.91566	.1198783	-.026820	.3431710	.1309374	.4814509
#2	9.973198	19.83755	.1198527	-.026066	.3438114	.1516199	.4787648
#3	9.961433	19.81371	.1207565	-.026544	.3252690	.1415249	.4768036

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.445260	8.988663	.0299076	.0064293	1.830516	6.256075	.0510544
Stddev	.174191	.016187	.0027724	.0005142	.003699	.048158	.0035370
%RSD	5.055952	.1800819	9.269805	7.997390	.2020473	.7697872	6.927823
#1	3.623456	8.991682	.0277537	.0069352	1.829383	6.201745	.0541607
#2	3.275373	8.971179	.0330355	.0064455	1.827516	6.293505	.0517977
#3	3.436950	9.003127	.0289335	.0059072	1.834648	6.272977	.0472049

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-09 Acquired: 12/27/2024 16:06:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7055791	.0416681	.0914162
Stddev	.0012502	.0008708	.0034435
%RSD	.1771927	2.089832	3.766876
#1	.7059087	.0426389	.0881116
#2	.7041971	.0414096	.0911533
#3	.7066316	.0409559	.0949836

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2509.559	31688.73	2485.731	2108.615	1907.943
Stddev	5.160	200.62	17.198	15.902	2.630
%RSD	.2056295	.6330985	.6918721	.7541614	.1378405
#1	2511.552	31467.41	2497.184	2091.585	1905.886
#2	2503.699	31740.11	2465.955	2111.185	1907.036
#3	2513.426	31858.65	2494.054	2123.077	1910.906

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-10 Acquired: 12/27/2024 16:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1049401	-.064780	.2752135	.0967949	.0065931	67.82582
Stddev	.0074604	.000458	.0032446	.0060330	.0059662	.25775
%RSD	7.109192	.7076316	1.178940	6.232809	90.49069	.3800151
#1	.1111444	-.065280	.2727566	.0902202	.0000031	67.59037
#2	.0966623	-.064379	.2788914	.0980881	.0116270	67.78589
#3	.1070135	-.064682	.2739923	.1020765	.0081494	68.10121

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.079034	.0069735	.0041651	62.26660	.1109886	.1041952
Stddev	.003433	.0001347	.0000997	.18249	.0004868	.0001611
%RSD	.3181241	1.931918	2.392914	.2930829	.4385970	.1545934
#1	1.075101	.0071211	.0040879	62.12249	.1114455	.1043599
#2	1.081423	.0068571	.0042776	62.20551	.1104766	.1041878
#3	1.080579	.0069423	.0041298	62.47180	.1110437	.1040380

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2274337	169.8916	11.62869	27.69325	.1682995	-.031553
Stddev	.0028496	.8047	.02953	.09810	.0011146	.000457
%RSD	1.252943	.4736533	.2539266	.3542206	.6622419	1.449900
#1	.2243457	169.2568	11.61432	27.65205	.1670688	-.031792
#2	.2279939	169.6214	11.60909	27.80523	.1692408	-.031841
#3	.2299617	170.7967	11.66265	27.62248	.1685888	-.031025

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4020816	.1615557	.5956595	7.053822	F 12.97832	.0587286
Stddev	.0320146	.0050043	.0034208	.082758	.03988	.0018167
%RSD	7.962205	3.097588	.5742885	1.173229	.3072851	3.093428
#1	.3834231	.1622913	.5995249	7.088421	12.93499	.0569501
#2	.3837734	.1562242	.5930224	7.113664	12.98648	.0586544
#3	.4390483	.1661515	.5944314	6.959379	13.01349	.0605812

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-10 Acquired: 12/27/2024 16:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038255	1.642609	8.260477	.0317864	.7548973	-.019327
Stddev	.0005476	.009388	.028381	.0016301	.0027687	.000934
%RSD	14.31429	.5715221	.3435730	5.128260	.3667632	4.830436
#1	.0044392	1.632322	8.292096	.0334025	.7564012	-.018793
#2	.0033868	1.650714	8.237207	.0318139	.7517022	-.018783
#3	.0036506	1.644792	8.252128	.0301427	.7565887	-.020405

Elem	Li6707
Units	ppm
Avg	.1076462
Stddev	.0031378
%RSD	2.914934
#1	.1072581
#2	.1047204
#3	.1109600

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2788.111	35263.96	2786.917	2348.543	1848.111
Stddev	6.563	50.25	11.883	4.783	1.105
%RSD	.2353838	.1424908	.4263741	.2036620	.0598056
#1	2784.026	35253.75	2785.823	2346.504	1847.921
#2	2795.681	35318.52	2799.309	2354.008	1849.299
#3	2784.626	35219.60	2775.619	2345.118	1847.113

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-11 Acquired: 12/27/2024 16:14:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1094136	-.064368	.2731720	.0937510	.0072022	67.60190
Stddev	.0025957	.001177	.0032760	.0009756	.0024217	.15946
%RSD	2.372412	1.827957	1.199234	1.040653	33.62401	.2358879
#1	.1074506	-.063495	.2749035	.0941735	.0086229	67.78603
#2	.1084334	-.065706	.2752188	.0926354	.0085777	67.50809
#3	.1123567	-.063902	.2693936	.0944442	.0044060	67.51159

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.078190	.0069742	.0041466	62.03230	.1109282	.1026752
Stddev	.005075	.0001091	.0000787	.14661	.0007863	.0003678
%RSD	.4707368	1.564987	1.897525	.2363373	.7088721	.3581986
#1	1.083751	.0068565	.0041174	62.14290	.1101828	.1022506
#2	1.077012	.0069939	.0042357	62.08798	.1108517	.1028972
#3	1.073807	.0070721	.0040866	61.86601	.1117499	.1028777

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2191313	169.1169	11.59494	27.70172	.1670598	-.031996
Stddev	.0023044	.4718	.03179	.09523	.0005690	.000454
%RSD	1.051588	.2789575	.2741680	.3437529	.3406231	1.419118
#1	.2164812	169.6582	11.62716	27.68516	.1664753	-.032515
#2	.2206634	168.8989	11.59405	27.80415	.1670920	-.031672
#3	.2202492	168.7935	11.56360	27.61587	.1676121	-.031800

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4169282	.1589888	.5908801	7.150208	F 12.87964	.0563430
Stddev	.0103267	.0062606	.0012871	.106536	.01808	.0017741
%RSD	2.476854	3.937772	.2178306	1.489976	.1403917	3.148735
#1	.4116918	.1621986	.5913786	7.201438	12.87327	.0549112
#2	.4102687	.1629936	.5894183	7.027735	12.86561	.0583277
#3	.4288241	.1517743	.5918434	7.221452	12.90005	.0557902

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5079-11 Acquired: 12/27/2024 16:14:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041996	1.625262	8.326533	.0327736	.7538218	-.019007
Stddev	.0004908	.007688	.056121	.0023732	.0022419	.000730
%RSD	11.68607	.4730546	.6739968	7.241036	.2974062	3.842434
#1	.0037485	1.624812	8.380788	.0300337	.7557129	-.019813
#2	.0041281	1.617809	8.268717	.0341855	.7544074	-.018389
#3	.0047222	1.633166	8.330095	.0341014	.7513453	-.018820

Elem	Li6707
Units	ppm
Avg	.1072892
Stddev	.0009080
%RSD	.8463173
#1	.1063046
#2	.1074694
#3	.1080935

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2801.433	35368.63	2764.184	2352.430	1861.872
Stddev	2.300	81.81	17.575	5.513	2.282
%RSD	.0820855	.2313203	.6358018	.2343696	.1225632
#1	2800.110	35428.98	2744.473	2350.339	1861.158
#2	2800.101	35275.51	2778.220	2348.267	1860.033
#3	2804.088	35401.42	2769.859	2358.682	1864.426

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-10LX5 Acquired: 12/27/2024 16:18:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0244876	-.015950	.0568177	.0201157	-.004829	16.77635	.2641158
Stddev	.0027195	.001500	.0031112	.0035706	.001442	.04437	.0008783
%RSD	11.10565	9.402060	5.475752	17.75021	29.86995	.2644799	.3325492
#1	.0274426	-.014264	.0577515	.0160367	-.003534	16.75752	.2650931
#2	.0220899	-.016452	.0533466	.0226752	-.004568	16.74450	.2633924
#3	.0239302	-.017135	.0593551	.0216351	-.006384	16.82703	.2638620

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017745	.0006469	15.62917	.0267461	.0267621	.0524602	42.40134
Stddev	.0002369	.0000233	.01185	.0004023	.0004489	.0034228	.15355
%RSD	13.34734	3.595508	.0758205	1.504212	1.677404	6.524487	.3621347
#1	.0016625	.0006373	15.64107	.0266419	.0263298	.0487014	42.43813
#2	.0016145	.0006734	15.61737	.0264062	.0267306	.0553973	42.23274
#3	.0020466	.0006300	15.62907	.0271903	.0272260	.0532819	42.53316

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.917714	6.962826	.0326669	-.008197	.0961212	.0357085	.1699183
Stddev	.018129	.026192	.0001244	.000521	.0302134	.0084795	.0007403
%RSD	.6213466	.3761737	.3809451	6.357494	31.43260	23.74650	.4356794
#1	2.931291	6.935439	.0328060	-.008699	.1299173	.0376872	.1692042
#2	2.897126	6.965408	.0325660	-.008233	.0867205	.0430236	.1706823
#3	2.924723	6.987632	.0326288	-.007659	.0717256	.0264145	.1698685

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.825623	2.588576	.0106176	.0011183	.3188793	2.137522	.0051088
Stddev	.144588	.008853	.0015351	.0006187	.0042797	.017224	.0011217
%RSD	7.919943	.3419980	14.45826	55.32246	1.342096	.8057796	21.95687
#1	1.714842	2.585201	.0117573	.0013114	.3199342	2.147024	.0042430
#2	1.989186	2.581906	.0112236	.0004261	.3225328	2.117640	.0047075
#3	1.772840	2.598619	.0088720	.0016175	.3141708	2.147901	.0063760

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-10LX5 Acquired: 12/27/2024 16:18:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1897199	-.005383	.0276879
Stddev	.0022472	.000471	.0023178
%RSD	1.184467	8.750845	8.371032
#1	.1881741	-.005383	.0253702
#2	.1886878	-.004912	.0300057
#3	.1922977	-.005855	.0276878

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2260.508	28539.10	2224.203	1913.556	1899.412
Stddev	3.746	13.97	19.868	7.346	3.107
%RSD	.1657130	.0489497	.8932864	.3838734	.1635649
#1	2263.733	28531.79	2221.836	1915.244	1899.070
#2	2261.393	28555.21	2245.148	1905.513	1902.676
#3	2256.399	28530.31	2205.623	1919.911	1896.491

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-12 Acquired: 12/27/2024 16:22:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1948488	.0362263	.3086452	.2095756	.1308675	70.05997
Stddev	.0016465	.0022867	.0008949	.0032190	.0030407	.02616
%RSD	.8449930	6.312362	.2899482	1.535961	2.323459	.0373354
#1	.1933854	.0335929	.3084983	.2132283	.1343047	70.02980
#2	.1966316	.0377105	.3096045	.2083454	.1297693	70.07617
#3	.1945295	.0373756	.3078329	.2071531	.1285285	70.07396

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.105021	.0821650	.0980404	61.76115	.4216582	1.041410
Stddev	.004651	.0006947	.0001468	.11013	.0017573	.001419
%RSD	.1133003	.8454312	.1497344	.1783197	.4167690	.1362240
#1	4.107001	.0829190	.0982051	61.64481	.4196290	1.043031
#2	4.108355	.0815509	.0979925	61.77484	.4226767	1.040800
#3	4.099708	.0820253	.0979235	61.86379	.4226690	1.040398

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5744942	169.9697	12.28921	27.68287	1.124664	.0263706
Stddev	.0084771	.1297	.00246	.03453	.001965	.0005116
%RSD	1.475573	.0763355	.0200542	.1247185	.1746944	1.939966
#1	.5669666	169.9234	12.29196	27.67563	1.125594	.0269516
#2	.5836767	170.1162	12.28847	27.72044	1.125991	.0261725
#3	.5728392	169.8694	12.28720	27.65254	1.122407	.0259877

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4227699	.9359813	1.227730	7.097479	F 12.74819	.0511067
Stddev	.0150422	.0051392	.001148	.100832	.02240	.0023459
%RSD	3.558020	.5490709	.0934988	1.420676	.1757307	4.590247
#1	.4084589	.9411400	1.227884	7.213906	12.77322	.0489897
#2	.4214010	.9359420	1.226512	7.040051	12.74134	.0536288
#3	.4384498	.9308618	1.228793	7.038479	12.73001	.0507016

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5079-12 Acquired: 12/27/2024 16:22:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLF8S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035126	1.612795	8.356889	.0319367	.7526116	-.021370
Stddev	.0001874	.002210	.058396	.0003926	.0011274	.000286
%RSD	5.335165	.1370386	.6987815	1.229375	.1498000	1.336054
#1	.0034173	1.612006	8.417802	.0322901	.7539134	-.021622
#2	.0037285	1.611087	8.301386	.0315141	.7519503	-.021427
#3	.0033920	1.615291	8.351480	.0320061	.7519712	-.021060

Elem	Li6707
Units	ppm
Avg	.1080963
Stddev	.0014484
%RSD	1.339884
#1	.1081004
#2	.1066459
#3	.1095427

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2783.288	35321.21	2743.337	2355.648	1860.607
Stddev	2.688	280.74	7.272	14.267	2.862
%RSD	.0965867	.7948101	.2650631	.6056522	.1538224
#1	2783.484	35645.29	2739.421	2371.690	1857.305
#2	2785.873	35152.39	2751.728	2344.380	1862.370
#3	2780.507	35165.96	2738.864	2350.876	1862.147

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-06 Acquired: 12/27/2024 16:26:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1173806	-.066421	.4340899	.0896692	.0118158	72.90797	.9870586
Stddev	.0030050	.000280	.0005570	.0037881	.0006888	.17639	.0019754
%RSD	2.560079	.4208075	.1283118	4.224529	5.829873	.2419338	.2001339
#1	.1202714	-.066193	.4346638	.0902140	.0114651	72.76242	.9848034
#2	.1142731	-.066733	.4340544	.0856382	.0126094	72.85735	.9884830
#3	.1175973	-.066338	.4335515	.0931554	.0113729	73.10413	.9878893

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074044	.0034494	56.05900	.1189371	.0997555	.3646893	162.6861
Stddev	.0001443	.0000504	.20741	.0006350	.0005144	.0015396	.5222
%RSD	1.948587	1.460617	.3699800	.5338725	.5156206	.4221544	.3209761
#1	.0072791	.0034747	55.99309	.1192275	.0994347	.3632168	162.2177
#2	.0075621	.0033914	55.89255	.1182089	.1003488	.3662881	162.5915
#3	.0073720	.0034822	56.29135	.1193749	.0994831	.3645628	163.2491

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.445334	25.09158	.1625777	-.029761	.3213723	.1630255	.8081282
Stddev	.016164	.12837	.0003175	.001466	.0174373	.0029663	.0024450
%RSD	.1913908	.5115923	.1952821	4.924423	5.425876	1.819511	.3025472
#1	8.432094	24.95558	.1628960	-.028207	.3096718	.1596100	.8099962
#2	8.440562	25.10854	.1625760	-.029959	.3130316	.1645112	.8053609
#3	8.463346	25.21063	.1622611	-.031118	.3414135	.1649553	.8090275

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.152694	9.835847	.0393172	.0068510	3.784345	6.541286	.0347580
Stddev	.142434	.003896	.0010054	.0004615	.007892	.073007	.0011147
%RSD	2.764258	.0396144	2.557120	6.736098	.2085323	1.116100	3.207027
#1	5.212598	9.839416	.0381573	.0072820	3.775492	6.516181	.0355201
#2	5.255392	9.831690	.0399395	.0063641	3.790639	6.484143	.0334786
#3	4.990092	9.836436	.0398548	.0069069	3.786905	6.623533	.0352752

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-06 Acquired: 12/27/2024 16:26:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6446452	-.027510	.1335166
Stddev	.0039130	.000385	.0031017
%RSD	.6069982	1.398600	2.323088
#1	.6428747	-.027923	.1321356
#2	.6419304	-.027163	.1370690
#3	.6491305	-.027443	.1313452

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2816.183	35589.61	2805.511	2380.688	1891.074
Stddev	4.812	169.02	25.248	13.177	1.853
%RSD	.1708562	.4749138	.8999605	.5534984	.0980046
#1	2811.430	35572.02	2808.704	2373.296	1889.342
#2	2816.067	35766.74	2829.011	2395.902	1890.850
#3	2821.051	35430.07	2778.818	2372.867	1893.028

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-07 Acquired: 12/27/2024 16:29:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1136767	-.064165	.4329675	.0889427	.0114251	72.89069	.9886339
Stddev	.0018487	.002691	.0021926	.0003113	.0026586	.14611	.0020149
%RSD	1.626236	4.194185	.5064073	.3499491	23.26957	.2004501	.2038084
#1	.1139531	-.063720	.4310894	.0887490	.0142195	73.00903	.9908677
#2	.1153715	-.067051	.4324362	.0893017	.0111286	72.93566	.9880806
#3	.1117054	-.061724	.4353769	.0887774	.0089272	72.72738	.9869535

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078109	.0034616	56.07270	.1178822	.0990161	.3616209	163.0018
Stddev	.0000334	.0000170	.21291	.0012601	.0002586	.0038147	.2092
%RSD	.4272264	.4923120	.3797007	1.068935	.2611178	1.054899	.1283150
#1	.0077729	.0034807	56.28834	.1165992	.0988122	.3630309	162.8168
#2	.0078246	.0034559	56.06714	.1179292	.0993069	.3573018	162.9599
#3	.0078353	.0034481	55.86263	.1191181	.0989293	.3645299	163.2288

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.440600	25.12679	.1609709	-.029124	.3386292	.1641509	.8081310
Stddev	.011871	.02430	.0006272	.001217	.0179519	.0044141	.0016274
%RSD	.1406454	.0966933	.3896295	4.178266	5.301341	2.689072	.2013797
#1	8.449575	25.15220	.1606042	-.030074	.3500625	.1636334	.8095965
#2	8.445085	25.12438	.1616951	-.029545	.3179383	.1600183	.8063795
#3	8.427139	25.10379	.1606134	-.027752	.3478870	.1688009	.8084168

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.203642	9.792390	.0393305	.0069193	3.757202	6.585170	.0340225
Stddev	.170773	.030248	.0014160	.0003778	.012175	.033415	.0017348
%RSD	3.281792	.3088900	3.600370	5.460288	.3240544	.5074215	5.099054
#1	5.384488	9.760449	.0377981	.0069190	3.744990	6.612796	.0327995
#2	5.045144	9.796122	.0396029	.0072973	3.769340	6.594684	.0360080
#3	5.181293	9.820598	.0405906	.0065417	3.757277	6.548030	.0332600

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-07 Acquired: 12/27/2024 16:29:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6494930	-.028275	.1361898
Stddev	.0037192	.000343	.0017242
%RSD	.5726328	1.213114	1.266026
#1	.6497361	-.027928	.1380249
#2	.6456582	-.028281	.1346035
#3	.6530847	-.028614	.1359411

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2824.317	35841.81	2799.782	2388.960	1899.645
Stddev	.218	108.65	13.661	9.271	.471
%RSD	.0077230	.3031445	.4879300	.3880790	.0248038
#1	2824.115	35906.69	2790.654	2388.307	1900.188
#2	2824.288	35716.38	2793.204	2380.033	1899.344
#3	2824.548	35902.38	2815.488	2398.540	1899.404

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-06LX5 Acquired: 12/27/2024 16:33:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0213377	-.017769	.0937150	.0180379	.0003535	18.97413	.2533896
Stddev	.0010599	.002640	.0009971	.0022481	.0032837	.01600	.0032785
%RSD	4.967217	14.85654	1.063985	12.46297	928.8415	.0843456	1.293839
#1	.0225262	-.020784	.0927525	.0191666	.0037912	18.95568	.2537922
#2	.0204904	-.016650	.0936492	.0194979	-.002751	18.98246	.2564482
#3	.0209966	-.015873	.0947434	.0154491	.000020	18.98425	.2499284

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020884	.0006425	14.76892	.0303793	.0264894	.0954982	42.82711
Stddev	.0000653	.0000462	.04310	.0003716	.0002415	.0076227	.09020
%RSD	3.127953	7.184331	.2918522	1.223264	.9116199	7.981995	.2106172
#1	.0021360	.0005977	14.72278	.0300847	.0266121	.1036947	42.92161
#2	.0020139	.0006400	14.80815	.0307968	.0266449	.0941779	42.74193
#3	.0021154	.0006900	14.77581	.0302563	.0262112	.0886219	42.81779

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.224741	6.591586	.0331577	-.006604	.0751851	.0437875	.2343560
Stddev	.007881	.038737	.0005872	.000371	.0239821	.0161572	.0004362
%RSD	.3542246	.5876740	1.771074	5.613306	31.89747	36.89919	.1861263
#1	2.233086	6.546993	.0331135	-.006192	.1016729	.0415117	.2348154
#2	2.217426	6.616907	.0325938	-.006911	.0549455	.0609620	.2339475
#3	2.223713	6.610857	.0337658	-.006709	.0689368	.0288888	.2343050

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.522170	2.079253	.0057025	.0015784	.7844199	1.780238	.0041561
Stddev	.071058	.007571	.0050720	.0003773	.0059827	.021788	.0000820
%RSD	4.668202	.3641361	88.94324	23.90630	.7626956	1.223910	1.974026
#1	1.577064	2.081384	.0073637	.0011618	.7901276	1.769283	.0041665
#2	1.547537	2.070844	.0000082	.0018973	.7849365	1.805330	.0040694
#3	1.441910	2.085530	.0097356	.0016760	.7781957	1.766101	.0042324

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-06LX5 Acquired: 12/27/2024 16:33:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1656880	-.007712	.0359447
Stddev	.0019597	.000211	.0056573
%RSD	1.182781	2.732043	15.73886
#1	.1638358	-.007934	.0409730
#2	.1654882	-.007515	.0370419
#3	.1677400	-.007687	.0298191

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2214.609	27951.03	2155.966	1868.260	1865.281
Stddev	10.658	172.94	14.653	13.538	8.382
%RSD	.4812532	.6187297	.6796682	.7246231	.4493578
#1	2214.554	27855.04	2164.678	1863.200	1863.224
#2	2225.294	28150.68	2139.048	1883.599	1874.500
#3	2203.979	27847.38	2164.172	1857.981	1858.120

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5087-08 Acquired: 12/27/2024 16:38:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1963840	.0339219	.4556154	.2013945	.1316094	74.63072	3.967815
Stddev	.0025355	.0032550	.0008775	.0040876	.0039225	.23714	.011011
%RSD	1.291106	9.595458	.1925944	2.029655	2.980377	.3177564	.2775138
#1	.1972549	.0344871	.4563130	.1981153	.1359454	74.41092	3.962951
#2	.1935278	.0368573	.4546302	.2059741	.1305751	74.88205	3.980420
#3	.1983693	.0304214	.4559029	.2000942	.1283078	74.59917	3.960073

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0819054	.0947358	54.79765	.4274193	1.022034	.7136830	161.1960
Stddev	.0004794	.0001045	.15509	.0005591	.002893	.0069942	.2187
%RSD	.5852524	.1103185	.2830173	.1308184	.2831107	.9800206	.1357029
#1	.0818347	.0946701	54.61884	.4268813	1.022488	.7063300	160.9655
#2	.0824162	.0946809	54.87856	.4273793	1.018940	.7144666	161.4008
#3	.0814653	.0948563	54.89555	.4279974	1.024674	.7202525	161.2216

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.040931	24.61185	1.102256	.0293670	.3538224	.9309468	1.434506
Stddev	.015655	.02481	.002891	.0006233	.0203997	.0092516	.005020
%RSD	.1731604	.1008020	.2622782	2.122600	5.765521	.9937830	.3499774
#1	9.028177	24.61018	1.103555	.0286514	.3437348	.9209730	1.439067
#2	9.058402	24.63745	1.098943	.0297923	.3404318	.9392480	1.435325
#3	9.036213	24.58792	1.104270	.0296572	.3773006	.9326195	1.429127

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.255604	9.450980	.0417047	.0067454	3.598353	6.515297	.0342793
Stddev	.116954	.028121	.0015983	.0005340	.006555	.051351	.0004439
%RSD	2.225329	.2975503	3.832304	7.916113	.1821606	.7881656	1.295083
#1	5.363880	9.446044	.0430910	.0072964	3.591556	6.516497	.0347898
#2	5.271364	9.425654	.0399565	.0062302	3.604636	6.566038	.0340645
#3	5.131569	9.481243	.0420667	.0067097	3.598866	6.463357	.0339836

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5087-08 Acquired: 12/27/2024 16:38:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLY4S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6369503	-.029198	.1313755
Stddev	.0062732	.000634	.0071817
%RSD	.9848781	2.171165	5.466587
#1	.6326321	-.029911	.1246794
#2	.6340727	-.028698	.1389602
#3	.6441460	-.028984	.1304868

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2775.552	35493.89	2762.985	2349.137	1892.264
Stddev	10.258	62.33	18.989	3.526	8.522
%RSD	.3695897	.1756042	.6872516	.1501062	.4503404
#1	2763.707	35537.45	2762.032	2349.045	1885.022
#2	2781.427	35521.72	2744.491	2345.658	1901.654
#3	2781.523	35422.49	2782.432	2352.709	1890.116

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5266-04 Acquired: 12/27/2024 16:41:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1136707	-.095625	.4461435	.1242915	.0085153	77.76786	.8205757
Stddev	.0011315	.001680	.0031785	.0076546	.0050129	1.54195	.0149581
%RSD	.9953973	1.757123	.7124311	6.158582	58.86861	1.982758	1.822873
#1	.1146072	-.094006	.4439602	.1155065	.0139739	76.18940	.8062869
#2	.1139914	-.097360	.4446803	.1295268	.0041182	79.27049	.8361234
#3	.1124135	-.095508	.4497901	.1278413	.0074539	77.84369	.8193168

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0096203	.0053668	474.6177	.2395023	.1513039	.1721947	254.9485
Stddev	.0001831	.0000548	8.0226	.0143565	.0006486	.0034801	4.7476
%RSD	1.903166	1.021930	1.690329	5.994312	.4286639	2.021014	1.862183
#1	.0094258	.0054080	466.2660	.2411139	.1507334	.1742050	249.9735
#2	.0097893	.0053045	482.2647	.2244080	.1511690	.1681763	259.4302
#3	.0096459	.0053877	475.3226	.2529850	.1520093	.1742029	255.4417

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.915065	242.6404	.3260782	-.051716	1.042740	.2484252	.8780101
Stddev	.167756	4.9289	.0007186	.004174	.029116	.0134161	.0500720
%RSD	2.119446	2.031365	.2203646	8.071128	2.792266	5.400443	5.702899
#1	7.741042	237.7098	.3255643	-.052892	1.028995	.2329722	.8901281
#2	8.075758	247.5676	.3257710	-.047080	1.076184	.2570976	.8229912
#3	7.928395	242.6438	.3268993	-.055176	1.023041	.2552057	.9209110

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.19851	6.007883	.1132258	.0134916	7.256245	5.892932	.0372664
Stddev	.30911	.013462	.0020896	.0004141	.019842	.088107	.0011678
%RSD	2.342016	.2240751	1.845532	3.069116	.2734511	1.495131	3.133711
#1	12.84459	5.995316	.1108530	.0130144	7.233452	5.813974	.0366093
#2	13.41554	6.006242	.1140326	.0137039	7.265625	5.987973	.0365752
#3	13.33541	6.022090	.1147917	.0137564	7.269659	5.876850	.0386148

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5266-04 Acquired: 12/27/2024 16:41:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.610813	.1843253	.1699663
Stddev	.036711	.0015682	.0045187
%RSD	2.279046	.8507562	2.658579
#1	1.573005	.1828801	.1654249
#2	1.646319	.1841032	.1700121
#3	1.613115	.1859927	.1744619

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2184.111	28261.87	2277.412	1860.824	1628.565
Stddev	4.765	1327.03	36.757	86.809	4.071
%RSD	.2181483	4.695466	1.613968	4.665086	.2499959
#1	2178.610	27954.29	2302.795	1837.991	1624.482
#2	2186.924	29715.68	2235.262	1956.767	1632.624
#3	2186.800	27115.64	2294.180	1787.713	1628.590

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5266-19 Acquired: 12/27/2024 16:45:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1151950	-.096446	.4482165	.1219986	.0135397	78.57672	.8302638
Stddev	.0044525	.004178	.0053890	.0046951	.0009910	.31223	.0033811
%RSD	3.865223	4.331697	1.202330	3.848522	7.319009	.3973534	.4072267
#1	.1164232	-.092062	.4470124	.1204497	.0135233	78.92967	.8332691
#2	.1189046	-.100381	.4435314	.1272724	.0145388	78.46395	.8266030
#3	.1102573	-.096897	.4541057	.1182735	.0125571	78.33655	.8309194

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0095203	.0051745	480.8492	.2410378	.1519176	.1763502	257.5093
Stddev	.0001119	.0002435	2.0265	.0032628	.0016325	.0064053	1.0763
%RSD	1.174934	4.706219	.4214358	1.353659	1.074592	3.632152	.4179618
#1	.0096199	.0049878	483.1606	.2372702	.1519932	.1825160	258.6967
#2	.0093993	.0050857	479.3778	.2429335	.1502486	.1697296	256.5978
#3	.0095419	.0054500	480.0091	.2429096	.1535110	.1768050	257.2335

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.972121	244.5533	.3243101	-.052821	1.023644	.2500937	.8897258
Stddev	.030423	.7252	.0041473	.002482	.031516	.0085460	.0126242
%RSD	.3816222	.2965568	1.278821	4.698625	3.078826	3.417126	1.418885
#1	8.007150	245.2097	.3240657	-.049965	1.004204	.2418567	.8755039
#2	7.952300	243.7748	.3202904	-.054460	1.006722	.2495059	.8940666
#3	7.956914	244.6755	.3285743	-.054036	1.060007	.2589184	.8996068

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.09349	5.993741	.1099515	.0136370	7.247741	6.251942	.0380646
Stddev	.15413	.069615	.0023148	.0002392	.075499	.034965	.0009522
%RSD	1.177130	1.161464	2.105320	1.754225	1.041695	.5592642	2.501413
#1	13.21934	5.985795	.1080321	.0135400	7.244486	6.291380	.0387155
#2	12.92159	5.928439	.1093002	.0134615	7.173922	6.239711	.0369718
#3	13.13955	6.066988	.1125222	.0139095	7.324815	6.224736	.0385067

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5266-19 Acquired: 12/27/2024 16:45:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.628775	.1926386	.1724541
Stddev	.007858	.0008383	.0039135
%RSD	.4824331	.4351751	2.269314
#1	1.634751	.1934845	.1683906
#2	1.619875	.1918081	.1727736
#3	1.631701	.1926232	.1761981

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2193.086	28051.90	2271.937	1840.132	1637.199
Stddev	28.237	205.79	18.449	11.434	19.491
%RSD	1.287525	.7336080	.8120483	.6213733	1.190495
#1	2200.098	28277.67	2253.076	1852.975	1641.812
#2	2217.157	27874.82	2272.790	1831.059	1653.970
#3	2162.005	28003.21	2289.945	1836.364	1615.816

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5266-04LX5 Acquired: 12/27/2024 16:49:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0217079	-.017485	.0981184	.0051162	-.016634	17.51002	.1839302
Stddev	.0031771	.002572	.0022106	.0020474	.006097	.36019	.0042285
%RSD	14.63564	14.70875	2.252969	40.01874	36.65710	2.057022	2.298989
#1	.0234934	-.016057	.0997327	.0056261	-.009679	17.21480	.1795546
#2	.0180397	-.020454	.0990236	.0068604	-.019162	17.91134	.1879945
#3	.0235904	-.015944	.0955989	.0028620	-.021060	17.40393	.1842415

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024068	.0010197	110.7075	.0563324	.0522340	.0380675	59.56265
Stddev	.0000570	.0000493	1.8791	.0002590	.0004115	.0079079	1.05643
%RSD	2.366746	4.838113	1.697377	.4597997	.7878531	20.77346	1.773643
#1	.0024595	.0010762	109.0229	.0563965	.0521056	.0429319	58.55597
#2	.0023464	.0009853	112.7342	.0560474	.0526944	.0423277	60.66263
#3	.0024145	.0009974	110.3655	.0565534	.0519019	.0289428	59.46936

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.848937	55.88440	.0656308	-.011012	.2052978	.0586401	.2256859
Stddev	.030936	1.20974	.0001709	.000772	.0084137	.0094972	.0009244
%RSD	1.673152	2.164712	.2604468	7.009001	4.098269	16.19574	.4096182
#1	1.826299	54.64644	.0656487	-.011706	.2149138	.0692410	.2254400
#2	1.884186	57.06379	.0657921	-.011151	.1992900	.0509080	.2249093
#3	1.836326	55.94298	.0654516	-.010181	.2016897	.0557714	.2267085

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.852228	1.196456	.0198858	.0031568	1.448698	1.471886	.0042099
Stddev	.033492	.001448	.0012274	.0002035	.005420	.016800	.0003235
%RSD	1.174239	.1210248	6.172093	6.446917	.3741181	1.141418	7.685189
#1	2.816321	1.194820	.0184931	.0032165	1.451165	1.456459	.0045509
#2	2.857743	1.197573	.0203546	.0029301	1.452445	1.489786	.0041716
#3	2.882620	1.196974	.0208096	.0033238	1.442483	1.469413	.0039073

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5266-04LX5 Acquired: 12/27/2024 16:49:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3700673	.0426382	.0372634
Stddev	.0072328	.0007833	.0044376
%RSD	1.954462	1.837172	11.90863
#1	.3679120	.0422344	.0389261
#2	.3781327	.0435411	.0406294
#3	.3641571	.0421392	.0322346

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2081.519	26173.07	2065.670	1738.304	1769.030
Stddev	1.488	40.96	19.678	3.500	1.647
%RSD	.0714694	.1564877	.9526225	.2013413	.0930888
#1	2082.894	26140.31	2079.661	1741.985	1770.928
#2	2081.722	26159.92	2043.170	1737.906	1768.176
#3	2079.940	26218.99	2074.180	1735.019	1767.985

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5266-20 Acquired: 12/27/2024 16:53:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1938215	.0061421	.4840956	.2700271	.1566383	81.52999	4.432752
Stddev	.0038492	.0020221	.0029801	.0042808	.0006549	.25008	.013045
%RSD	1.985955	32.92174	.6156098	1.585312	.4181097	.3067392	.2942862
#1	.1944282	.0060387	.4871464	.2717092	.1573088	81.68091	4.438267
#2	.1973313	.0082139	.4811915	.2732114	.1566060	81.66775	4.442134
#3	.1897049	.0041737	.4839490	.2651608	.1560001	81.24132	4.417855

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1003167	.1027937	479.6861	.6204869	1.124178	.5970146	257.1900
Stddev	.0005848	.0001106	1.2182	.0034253	.001000	.0099478	.3557
%RSD	.5829164	.1075930	.2539583	.5520338	.0889915	1.666254	.1383120
#1	.0996436	.1029184	480.3477	.6178531	1.125207	.5880076	257.4109
#2	.1006068	.1027554	480.4303	.6243592	1.124116	.6076918	257.3794
#3	.1006997	.1027074	478.2802	.6192483	1.123209	.5953445	256.7796

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.778923	242.0528	1.305521	.0171936	1.037029	1.164205	1.663663
Stddev	.037744	.6276	.002163	.0007623	.024253	.005804	.008318
%RSD	.4299368	.2592822	.1656632	4.433356	2.338688	.4985118	.5000046
#1	8.813552	242.1385	1.306884	.0163534	1.052464	1.167736	1.669195
#2	8.784525	242.6332	1.306653	.0178409	1.049547	1.157507	1.667698
#3	8.738691	241.3868	1.303028	.0173863	1.009074	1.167371	1.654097

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.30404	5.977825	.1023553	.0139596	7.244473	6.342557	.0385598
Stddev	.13966	.004515	.0064030	.0002208	.016100	.050239	.0011364
%RSD	1.049753	.0755209	6.255653	1.581381	.2222332	.7920883	2.947213
#1	13.46160	5.981608	.1088281	.0138747	7.260455	6.287649	.0394788
#2	13.25506	5.979039	.1022132	.0142103	7.244705	6.353801	.0372891
#3	13.19547	5.972827	.0960245	.0137940	7.228259	6.386221	.0389116

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5266-20 Acquired: 12/27/2024 16:53:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME29Y9S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.610667	.1957205	.1682501
Stddev	.003834	.0013424	.0054968
%RSD	.2380588	.6858778	3.267036
#1	1.606569	.1950199	.1647030
#2	1.614167	.1972683	.1745820
#3	1.611264	.1948734	.1654654

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2194.906	27866.85	2257.262	1841.108	1640.047
Stddev	5.462	196.89	6.693	22.908	6.145
%RSD	.2488333	.7065435	.2965074	1.244235	.3746564
#1	2188.889	27799.05	2259.967	1825.782	1633.277
#2	2196.278	27712.82	2249.640	1830.100	1641.595
#3	2199.551	28088.69	2262.179	1867.442	1645.270

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-10 Acquired: 12/27/2024 16:57:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2139403	-.066393	4.509162	.0926502	.0114856	73.57344
Stddev	.0020629	.001025	.005494	.0009484	.0008978	.30676
%RSD	.9642432	1.544300	.1218411	1.023679	7.816500	.4169459
#1	.2127290	-.065339	4.505797	.0937329	.0117931	73.25285
#2	.2163222	-.067387	4.506187	.0922514	.0121892	73.86420
#3	.2127696	-.066453	4.515502	.0919662	.0104745	73.60325

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.975805	.0082760	.0108104	82.19795	.3476036	.1111869
Stddev	.014269	.0001131	.0000515	.27533	.0040012	.0004620
%RSD	.4795072	1.366106	.4759815	.3349564	1.151085	.4155193
#1	2.959870	.0084038	.0108430	81.88271	.3522103	.1112515
#2	2.987400	.0081893	.0108372	82.31992	.3449945	.1106960
#3	2.980147	.0082347	.0107511	82.39123	.3456059	.1116132

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5850305	178.3820	9.586583	28.68602	.2040468	-.031567
Stddev	.0065974	.8990	.036431	.07555	.0004279	.000723
%RSD	1.127703	.5039606	.3800226	.2633591	.2097286	2.288831
#1	.5910202	177.3462	9.544679	28.60525	.2038617	-.031998
#2	.5779591	178.9586	9.610744	28.75494	.2045362	-.031969
#3	.5861123	178.8413	9.604325	28.69787	.2037426	-.030733

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5143162	.1777653	3.042593	10.10447	F 16.97935	.0672977
Stddev	.0079294	.0077905	.035099	.02440	.01501	.0034636
%RSD	1.541737	4.382464	1.153595	.2414712	.0884059	5.146715
#1	.5081263	.1769714	3.082232	10.13226	16.97499	.0644869
#2	.5232540	.1859224	3.015459	10.09460	16.99606	.0662390
#3	.5115682	.1704022	3.030087	10.08656	16.96701	.0711670

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-10 Acquired: 12/27/2024 16:57:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061546	3.832883	7.200332	.3030986	1.149887	.0994996
Stddev	.0002983	.006512	.024572	.0027894	.001287	.0011308
%RSD	4.846501	.1699043	.3412553	.9202803	.1119593	1.136506
#1	.0064976	3.833429	7.188218	.2998892	1.148443	.0982912
#2	.0060107	3.826116	7.228609	.3044685	1.150915	.1005323
#3	.0059555	3.839106	7.184170	.3049382	1.150303	.0996754

Elem	Li6707
Units	ppm
Avg	.1237805
Stddev	.0043685
%RSD	3.529265
#1	.1189123
#2	.1273589
#3	.1250703

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2460.813	30942.42	2474.084	2044.031	1756.325
Stddev	6.024	276.25	11.997	23.287	1.508
%RSD	.2447840	.8927892	.4849118	1.139292	.0858849
#1	2459.044	30627.80	2484.909	2018.377	1756.976
#2	2455.872	31145.29	2461.185	2063.838	1754.600
#3	2467.523	31054.17	2476.158	2049.877	1757.399

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-11 Acquired: 12/27/2024 17:01:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2148643	-.066411	4.506934	.0958696	.0079819	73.51833
Stddev	.0017576	.003562	.016559	.0048523	.0031440	.34824
%RSD	.8180254	5.362865	.3674187	5.061325	39.38972	.4736839
#1	.2154421	-.064897	4.504235	.0999267	.0053341	73.80575
#2	.2128905	-.063855	4.491891	.0904945	.0114568	73.13107
#3	.2162604	-.070479	4.524678	.0971875	.0071548	73.61815

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.977364	.0081499	.0108531	81.92287	.3419466	.1111066
Stddev	.018190	.0000840	.0000678	.48676	.0010933	.0002030
%RSD	.6109546	1.031088	.6243361	.5941684	.3197279	.1827284
#1	2.995305	.0082229	.0108180	82.27136	.3416225	.1109203
#2	2.958934	.0080581	.0108100	81.36672	.3431653	.1113230
#3	2.977853	.0081688	.0109312	82.13053	.3410520	.1110767

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5790638	178.6780	9.595447	28.66027	.2038036	-.029716
Stddev	.0053989	.6047	.046429	.11763	.0011908	.000515
%RSD	.9323561	.3384249	.4838668	.4104254	.5842804	1.733397
#1	.5824137	179.3498	9.648527	28.78062	.2029574	-.030248
#2	.5819421	178.1772	9.562386	28.54557	.2032882	-.029219
#3	.5728356	178.5072	9.575427	28.65462	.2051653	-.029682

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4935809	.1881993	3.003895	9.863063	F 16.96380	.0695770
Stddev	.0229165	.0002916	.003673	.085971	.02872	.0015760
%RSD	4.642913	.1549302	.1222827	.8716510	.1692734	2.265061
#1	.5198511	.1885212	3.003327	9.766761	16.98493	.0695490
#2	.4776931	.1879529	3.000539	9.932083	16.93111	.0680151
#3	.4831987	.1881237	3.007819	9.890344	16.97537	.0711667

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-11 Acquired: 12/27/2024 17:01:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0064334	3.827515	7.079850	.3034711	1.154022	.0963190
Stddev	.0001031	.018546	.006513	.0012152	.009065	.0007618
%RSD	1.603012	.4845389	.0919961	.4004462	.7854751	.7909361
#1	.0063281	3.838474	7.087226	.3022283	1.163871	.0961991
#2	.0065342	3.806102	7.077434	.3046568	1.146029	.0956242
#3	.0064380	3.837969	7.074891	.3035282	1.152165	.0971336

Elem	Li6707
Units	ppm
Avg	.1218171
Stddev	.0017716
%RSD	1.454286
#1	.1220603
#2	.1199364
#3	.1234544

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2475.442	31374.66	2505.938	2077.933	1766.315
Stddev	8.001	94.64	13.327	8.065	.912
%RSD	.3232338	.3016348	.5318363	.3881171	.0516430
#1	2482.819	31265.49	2493.250	2069.334	1767.324
#2	2466.936	31425.02	2519.824	2085.329	1765.548
#3	2476.572	31433.47	2504.739	2079.135	1766.074

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV021 Acquired: 12/27/2024 17:05:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV021 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.037666	4.875123	25.01080	4.932109	4.867872	403.7483	10.15017
Stddev	.012784	.009834	.05185	.029296	.019632	2.0862	.05722
%RSD	.2537682	.2017252	.2073209	.5939764	.4032955	.5167082	.5637507
#1	5.036255	4.865159	24.95147	4.912021	4.845464	401.6211	10.08782
#2	5.025646	4.884823	25.04745	4.918581	4.876108	403.8329	10.16243
#3	5.051097	4.875387	25.03347	4.965723	4.882045	405.7909	10.20028

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5098982	2.520188	398.7838	15.89220	2.536973	14.96297	403.9608
Stddev	.0023527	.005976	1.6790	.42077	.005983	.07753	2.1866
%RSD	.4614072	.2371267	.4210390	2.647682	.2358437	.5181442	.5412818
#1	.5087716	2.513448	396.8869	16.33765	2.530267	14.87364	401.9562
#2	.5083205	2.524839	399.3850	15.50146	2.541764	15.00263	403.6337
#3	.5126023	2.522276	400.0795	15.83747	2.538889	15.01265	406.2925

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.90998	399.3367	2.525259	1.247048	408.6250	2.498262	15.12381
Stddev	.06091	1.9485	.005315	.029382	4.2946	.025175	.40457
%RSD	.4085225	.4879247	.2104627	2.356090	1.050977	1.007698	2.675066
#1	14.84856	397.9391	2.521465	1.278460	404.4697	2.482108	15.54699
#2	14.91101	398.5086	2.531333	1.220240	408.3589	2.485410	14.74085
#3	14.97037	401.5624	2.522977	1.242444	413.0464	2.527269	15.08359

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.5638	5.052402	4.917778	4.838617	5.071677	4.971030	5.078154
Stddev	.9765	.018290	.041695	.019215	.009679	.043540	.008394
%RSD	.6400602	.3620015	.8478341	.3971082	.1908478	.8758722	.1653052
#1	151.5322	5.032233	4.888778	4.821142	5.063886	4.938245	5.071102
#2	152.6854	5.057063	4.898995	4.835515	5.068632	4.954415	5.087439
#3	153.4738	5.067911	4.965560	4.859194	5.082513	5.020432	5.075920

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV021 Acquired: 12/27/2024 17:05:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV021 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.041748	4.789713	5.103547
Stddev	.032815	.021809	.028609
%RSD	.6508650	.4553390	.5605639
#1	5.007393	4.764609	5.072306
#2	5.045083	4.800533	5.109869
#3	5.072769	4.803996	5.128466

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1676.590	23104.36	2008.355	1377.830	1523.514
Stddev	5.477	514.93	17.014	33.727	3.743
%RSD	.3266968	2.228714	.8471646	2.447830	.2456841
#1	1682.397	22564.99	2024.230	1342.950	1527.473
#2	1675.855	23590.75	2010.442	1410.272	1520.033
#3	1671.517	23157.36	1990.394	1380.268	1523.038

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB021 Acquired: 12/27/2024 17:09:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB021 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006229	.0001058	.0036656	.0013582	-.006506	-.002286	-.004073
Stddev	.0025977	.0024487	.0019448	.0024361	.000372	.022275	.001502
%RSD	417.0254	2314.516	53.05604	179.3588	5.718662	974.5278	36.88195
#1	.0020104	.0028491	.0058373	-.001412	-.006852	-.015552	-.004729
#2	.0022322	-.001859	.0030751	.002323	-.006555	-.014736	-.002355
#3	-.002374	-.000673	.0020845	.003164	-.006112	.023431	-.005136

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000372	.0000470	.0561592	-.000804	-.000187	.0007548	.0350242
Stddev	.0002069	.0000923	.0799213	.000465	.000318	.0069322	.0277848
%RSD	557.0680	196.6367	142.3121	57.86413	170.5852	918.3650	79.33032
#1	.0002510	.0001530	-.009178	-.000268	-.000224	-.007178	.0645771
#2	-.000162	-.000016	.032385	-.001110	-.000485	.005648	.0310626
#3	.000023	.000003	.145270	-.001032	.000149	.003794	.0094328

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009884	.0182199	-.000646	.0000585	.0428979	-.010282	.0324850
Stddev	.0003713	.0565925	.000532	.0011745	.0522923	.009597	.0005237
%RSD	37.56915	310.6072	82.29272	2007.772	121.8993	93.33565	1.612248
#1	.0007160	-.007232	-.001217	.0013119	.0580174	-.001921	.0330687
#2	.0014114	.083069	-.000163	-.001017	.0859646	-.020761	.0323299
#3	.0008378	-.021177	-.000560	-.000120	-.015288	-.008164	.0320563

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.153190	-.001585	.0105727	.0003641	-.008127	-.001649	-.003829
Stddev	.075600	.001258	.0028388	.0001435	.008027	.000604	.001426
%RSD	49.35049	79.39193	26.85037	39.42053	98.76983	36.65295	37.23248
#1	-.232230	-.000154	.0106683	.0002010	.001141	-.002254	-.003588
#2	-.145763	-.002518	.0133626	.0004711	-.012851	-.001648	-.002539
#3	-.081578	-.002084	.0076874	.0004202	-.012669	-.001045	-.005359

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB021 Acquired: 12/27/2024 17:09:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB021 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0033530	-.000146	.0021252
Stddev	.0025295	.000021	.0017567
%RSD	75.43947	14.15465	82.65899
#1	.0047761	-.000123	.0005593
#2	.0004325	-.000163	.0040248
#3	.0048503	-.000151	.0017916

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2063.527	26156.99	2028.998	1737.938	1866.401
Stddev	1.715	83.26	11.884	7.119	1.065
%RSD	.0830897	.3183246	.5857162	.4096333	.0570844
#1	2065.276	26200.74	2017.468	1732.439	1867.151
#2	2063.457	26060.97	2028.318	1735.396	1866.870
#3	2061.849	26209.25	2041.208	1745.979	1865.181

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-10LX5 Acquired: 12/27/2024 17:13:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486917	-.016352	.9147462	.0194177	-.002486	17.46316	.7075743
Stddev	.0006212	.000787	.0108311	.0015015	.001989	1.06390	.0427406
%RSD	1.275680	4.814874	1.184057	7.732854	80.01805	6.092262	6.040447
#1	.0479879	-.015726	.9073902	.0195275	-.002033	16.32406	.6612278
#2	.0489235	-.016095	.9271838	.0178642	-.000763	18.43111	.7454364
#3	.0491635	-.017236	.9096646	.0208613	-.004663	17.63432	.7160587

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021749	.0020044	19.54565	.0815302	.0297336	.1408251	42.98252
Stddev	.0001941	.0000528	1.13700	.0014669	.0008632	.0184044	2.50221
%RSD	8.926211	2.634838	5.817170	1.799218	2.902976	13.06897	5.821471
#1	.0019510	.0019826	18.34193	.0832199	.0289611	.1215408	40.31581
#2	.0022954	.0019659	20.60145	.0807872	.0306653	.1582008	45.27898
#3	.0022784	.0020646	19.69357	.0805833	.0295745	.1427336	43.35276

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.305888	6.956478	.0409830	-.006839	.1727122	.0334495	.7581505
Stddev	.129833	.372803	.0004160	.001348	.0450406	.0097420	.0045023
%RSD	5.630488	5.359081	1.015149	19.70965	26.07842	29.12461	.5938551
#1	2.165447	6.551051	.0406827	-.007927	.1379751	.0267532	.7632697
#2	2.421538	7.284508	.0414579	-.005331	.2236017	.0446256	.7563757
#3	2.330679	7.033874	.0408083	-.007259	.1565596	.0289698	.7548061

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.336883	3.467316	.0151100	.0018764	.7787099	1.745546	.0582536
Stddev	.295743	.048696	.0017942	.0003982	.0089672	.086198	.0009335
%RSD	12.65544	1.404423	11.87404	21.22025	1.151549	4.938153	1.602474
#1	2.096142	3.429874	.0151289	.0014183	.7719277	1.652792	.0581007
#2	2.667007	3.522367	.0133065	.0020711	.7888768	1.823190	.0574061
#3	2.247501	3.449707	.0168947	.0021397	.7753250	1.760655	.0592542

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-10LX5 Acquired: 12/27/2024 17:13:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2732751	.0217947	.0324866
Stddev	.0177409	.0014436	.0033221
%RSD	6.491962	6.623638	10.22612
#1	.2550770	.0203082	.0298279
#2	.2905204	.0231911	.0362108
#3	.2742278	.0218847	.0314212

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2157.530	27331.83	2146.175	1818.033	1849.286
Stddev	17.195	285.11	114.824	16.031	20.862
%RSD	.7969881	1.043142	5.350172	.8817887	1.128131
#1	2170.620	27033.20	2266.702	1808.150	1864.073
#2	2138.056	27361.13	2038.062	1809.419	1825.423
#3	2163.915	27601.16	2133.761	1836.530	1858.364

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-12 Acquired: 12/27/2024 17:17:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3022863	.0345404	4.547974	.2269791	.1468199	77.18666
Stddev	.0026554	.0040277	.005753	.0029680	.0020282	.18834
%RSD	.8784532	11.66089	.1265012	1.307589	1.381402	.2440011
#1	.3023128	.0298904	4.545647	.2280538	.1455213	77.10359
#2	.2996177	.0369403	4.554526	.2236235	.1457813	77.40224
#3	.3049284	.0367905	4.543748	.2292599	.1491570	77.05413

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.416447	.0905913	.1088622	82.63667	.6932318	1.106498
Stddev	.012516	.0003444	.0000801	.16447	.0011087	.000367
%RSD	.1950594	.3801241	.0735418	.1990308	.1599266	.0331465
#1	6.408567	.0904761	.1088928	82.65232	.6941890	1.106075
#2	6.430878	.0909785	.1089226	82.79276	.6920170	1.106699
#3	6.409894	.0903193	.1087714	82.46494	.6934894	1.106720

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9746865	182.0473	10.51238	28.97271	1.218186	.0342873
Stddev	.0127980	.4675	.01707	.12755	.001862	.0008897
%RSD	1.313039	.2567839	.1623827	.4402425	.1528385	2.594722
#1	.9746601	181.5307	10.50395	28.99399	1.220139	.0352321
#2	.9874977	182.4412	10.53202	29.08828	1.217989	.0341641
#3	.9619017	182.1701	10.50116	28.83586	1.216431	.0334657

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5546138	1.050292	3.740493	10.48009	F 17.01728	.0694012
Stddev	.0255767	.017899	.019495	.08862	.02696	.0018536
%RSD	4.611631	1.704203	.5211883	.8456429	.1584080	2.670908
#1	.5822907	1.030886	3.740926	10.45445	17.02934	.0680292
#2	.5318501	1.066154	3.759768	10.57871	17.03609	.0715100
#3	.5497006	1.053835	3.720786	10.40712	16.98639	.0686645

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5080-12 Acquired: 12/27/2024 17:17:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLE8S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057990	3.864127	7.141480	.3062577	1.161758	.0921568
Stddev	.0002089	.010064	.004837	.0005614	.007645	.0006836
%RSD	3.602597	.2604544	.0677351	.1833195	.6580194	.7418157
#1	.0056139	3.858389	7.138117	.3058587	1.152987	.0929409
#2	.0057576	3.858244	7.139299	.3068997	1.167004	.0918436
#3	.0060255	3.875748	7.147024	.3060148	1.165284	.0916858

Elem	Li6707
Units	ppm
Avg	.1322395
Stddev	.0050481
%RSD	3.817381
#1	.1362760
#2	.1265794
#3	.1338631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2446.725	31208.59	2468.050	2065.956	1746.124
Stddev	6.169	60.68	5.277	10.897	4.134
%RSD	.2521261	.1944371	.2138304	.5274659	.2367790
#1	2444.061	31203.30	2470.469	2063.846	1745.153
#2	2442.335	31150.73	2461.997	2056.268	1742.562
#3	2453.778	31271.74	2471.684	2077.754	1750.658

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5335-19 Acquired: 12/27/2024 17:21:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1306307	-.111891	.2677283	.1401346	.0135719	115.9523	.8732660
Stddev	.0053264	.004472	.0044049	.0057232	.0014968	.3450	.0033139
%RSD	4.077434	3.996669	1.645271	4.084064	11.02838	.2975377	.3794802
#1	.1283338	-.116488	.2627687	.1359733	.0148778	115.8429	.8751293
#2	.1367201	-.107556	.2711850	.1466614	.0119385	116.3388	.8752287
#3	.1268381	-.111628	.2692313	.1377692	.0138995	115.6753	.8694399

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0123206	.0031016	454.8373	.2346592	.1941529	.2281527	283.3140
Stddev	.0001946	.0000596	1.3382	.0012972	.0000547	.0069040	.7114
%RSD	1.579226	1.920763	.2942150	.5527950	.0281624	3.026062	.2511067
#1	.0121030	.0031430	454.6621	.2359978	.1941959	.2215822	282.9885
#2	.0123808	.0030334	456.2545	.2334078	.1941713	.2275280	284.1300
#3	.0124779	.0031285	453.5953	.2345720	.1940913	.2353478	282.8236

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.870608	197.4162	.4088620	-.058805	1.198109	.3340558	.6380584
Stddev	.002035	.4997	.0013278	.000198	.022794	.0029438	.0033421
%RSD	.0417772	.2531409	.3247460	.3373964	1.902477	.8812292	.5237947
#1	4.872548	196.8718	.4090273	-.059030	1.208850	.3321598	.6376497
#2	4.870787	197.8542	.4100994	-.058655	1.213548	.3374471	.6349394
#3	4.868490	197.5224	.4074594	-.058732	1.171929	.3325605	.6415861

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.90313	5.543194	.1046617	.0165182	4.951738	6.940380	.0392173
Stddev	.08895	.006328	.0013385	.0005568	.003967	.011632	.0020041
%RSD	.4469162	.1141545	1.278859	3.370736	.0801062	.1675971	5.110342
#1	19.83659	5.540643	.1050646	.0169105	4.955184	6.948574	.0401661
#2	20.00416	5.550399	.1057524	.0158809	4.952628	6.927067	.0369149
#3	19.86864	5.538539	.1031680	.0167632	4.947402	6.945501	.0405708

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5335-19 Acquired: 12/27/2024 17:21:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.080544	.2930532	.2928547
Stddev	.003125	.0025762	.0032735
%RSD	.1502187	.8790764	1.117791
#1	2.083888	.2947396	.2897594
#2	2.080050	.2943321	.2962813
#3	2.077696	.2900878	.2925234

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2227.500	28444.15	2290.347	1882.165	1628.584
Stddev	7.015	100.20	2.590	.913	5.881
%RSD	.3149083	.3522800	.1130974	.0485010	.3611346
#1	2219.966	28353.85	2289.716	1882.730	1622.438
#2	2228.693	28426.65	2288.129	1881.112	1629.155
#3	2233.842	28551.95	2293.194	1882.654	1634.159

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5335-20 Acquired: 12/27/2024 17:25:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1346953	-.112867	.2676224	.1395750	.0149711	115.8171	.8740427
Stddev	.0008979	.001835	.0033569	.0054185	.0008087	.7577	.0066976
%RSD	.6665883	1.625856	1.254327	3.882148	5.401580	.6542607	.7662826
#1	.1343885	-.114645	.2638145	.1393980	.0150387	115.3364	.8692192
#2	.1357064	-.112975	.2701534	.1450799	.0141308	116.6906	.8816898
#3	.1339911	-.110980	.2688993	.1342472	.0157439	115.4242	.8712191

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0122747	.0030735	453.6287	.2344596	.1948286	.2277771	283.1520
Stddev	.0003808	.0000112	1.9850	.0019685	.0009641	.0015457	1.5954
%RSD	3.102076	.3649653	.4375736	.8396052	.4948495	.6786083	.5634304
#1	.0126337	.0030736	452.4365	.2343199	.1937571	.2260020	282.0393
#2	.0118754	.0030621	455.9201	.2364942	.1951026	.2285038	284.9798
#3	.0123151	.0030846	452.5294	.2325646	.1956260	.2288256	282.4370

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.880824	196.7964	.4103690	-.057670	1.217787	.3256483	.6464777
Stddev	.016775	1.5187	.0020238	.000250	.007965	.0022235	.0056445
%RSD	.3436935	.7717088	.4931557	.4343477	.6540926	.6828016	.8731175
#1	4.875560	195.3803	.4081011	-.057662	1.223319	.3274087	.6445529
#2	4.899599	198.4003	.4119908	-.057423	1.221385	.3231495	.6420473
#3	4.867312	196.6088	.4110150	-.057924	1.208657	.3263867	.6528329

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.92937	5.555439	.1073874	.0166073	4.966431	6.924279	.0395406
Stddev	.12625	.019910	.0025484	.0005176	.012637	.044901	.0018809
%RSD	.6334835	.3583856	2.373058	3.116969	.2544523	.6484526	4.756860
#1	19.93429	5.532912	.1082012	.0160306	4.953575	6.951606	.0412921
#2	20.05309	5.562728	.1045315	.0170318	4.978838	6.948773	.0397769
#3	19.80074	5.570677	.1094295	.0167595	4.966879	6.872458	.0375527

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5335-20 Acquired: 12/27/2024 17:25:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.085806	.2904182	.2965147
Stddev	.017434	.0007504	.0016594
%RSD	.8358371	.2583922	.5596321
#1	2.069621	.2912208	.2956858
#2	2.104265	.2902999	.2984252
#3	2.083531	.2897340	.2954331

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2219.250	28386.22	2299.318	1878.771	1624.358
Stddev	2.154	163.57	15.715	20.129	1.926
%RSD	.0970465	.5762136	.6834440	1.071374	.1185937
#1	2216.896	28575.05	2307.183	1899.344	1622.837
#2	2221.122	28295.25	2281.223	1877.851	1626.525
#3	2219.732	28288.37	2309.546	1859.118	1623.713

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5335-19LX5 Acquired: 12/27/2024 17:29:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0233818	-.020182	.0613212	.0083886	-.016803	25.86639	.1920312
Stddev	.0026698	.000548	.0001690	.0061845	.003674	.07513	.0007898
%RSD	11.41827	2.713002	.2755610	73.72450	21.86467	.2904401	.4113078
#1	.0250619	-.020763	.0611772	.0152397	-.012974	25.88663	.1917367
#2	.0203032	-.019676	.0615072	.0032183	-.017135	25.78321	.1929260
#3	.0247801	-.020106	.0612792	.0067078	-.020299	25.92931	.1914310

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029963	.0003833	103.0069	.0521344	.0597742	.0453766	65.01259
Stddev	.0001937	.0000736	.2548	.0006182	.0004558	.0046306	.06646
%RSD	6.466233	19.19913	.2473741	1.185749	.7625948	10.20485	.1022231
#1	.0030743	.0002983	103.1168	.0522305	.0600958	.0446966	64.97847
#2	.0027758	.0004265	102.7155	.0514738	.0592525	.0503096	64.97012
#3	.0031390	.0004249	103.1882	.0526989	.0599742	.0411236	65.08918

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.121790	44.94075	.0807911	-.011288	.2769545	.0721534	.1668449
Stddev	.001939	.24743	.0008360	.000756	.0240338	.0090028	.0007983
%RSD	.1728377	.5505607	1.034786	6.699410	8.677884	12.47727	.4784741
#1	1.120621	45.16942	.0798262	-.011949	.2504643	.0824667	.1677460
#2	1.120721	44.67808	.0812482	-.010463	.2973638	.0658666	.1665630
#3	1.124028	44.97476	.0812989	-.011452	.2830353	.0681270	.1662259

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.506247	1.077484	.0220405	.0043930	.9627564	1.820729	.0065753
Stddev	.088830	.002580	.0017916	.0001822	.0150236	.012302	.0006763
%RSD	1.971256	.2394122	8.128555	4.146869	1.560475	.6756848	10.28541
#1	4.404089	1.074982	.0224249	.0043262	.9454561	1.828897	.0061303
#2	4.549350	1.077336	.0200879	.0045991	.9725169	1.806580	.0073535
#3	4.565301	1.080135	.0236086	.0042536	.9702962	1.826712	.0062421

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5335-19LX5 Acquired: 12/27/2024 17:29:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4762991	.0629852	.0718456
Stddev	.0041547	.0004053	.0035265
%RSD	.8722971	.6434105	4.908485
#1	.4735669	.0631368	.0692612
#2	.4742501	.0625261	.0704126
#3	.4810804	.0632929	.0758631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2085.239	26384.29	2046.196	1764.312	1775.015
Stddev	7.796	93.54	17.599	8.217	7.813
%RSD	.3738544	.3545205	.8600936	.4657582	.4401854
#1	2093.932	26290.20	2028.094	1757.336	1783.992
#2	2082.914	26385.41	2063.245	1762.230	1769.742
#3	2078.870	26477.26	2047.250	1773.371	1771.312

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5335-21 Acquired: 12/27/2024 17:33:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2159665	-.008703	.2887076	.2662299	.1557588	112.6142	4.241562
Stddev	.0053485	.002383	.0025712	.0034882	.0039255	.1842	.011416
%RSD	2.476538	27.38392	.8905786	1.310207	2.520237	.1635810	.2691434
#1	.2100529	-.007546	.2857936	.2669305	.1530206	112.4278	4.233255
#2	.2204655	-.011444	.2906568	.2693146	.1602562	112.6186	4.236851
#3	.2173811	-.007120	.2896724	.2624446	.1539996	112.7961	4.254579

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0956426	.0955915	428.2840	.5676653	1.104833	.6144189	268.9300
Stddev	.0005432	.0006514	.5289	.0019618	.008161	.0048520	.1005
%RSD	.5679232	.6814560	.1235038	.3455935	.7386820	.7896881	.0373839
#1	.0962516	.0952511	427.6888	.5698927	1.100999	.6169362	268.8139
#2	.0954684	.0951807	428.7001	.5669086	1.099296	.6174948	268.9863
#3	.0952080	.0963425	428.4632	.5661945	1.114206	.6088256	268.9898

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.444406	186.1391	1.312856	.0124773	1.131229	1.173133	1.334172
Stddev	.010997	.1636	.009306	.0005807	.023717	.010357	.000923
%RSD	.2019879	.0878947	.7088566	4.653664	2.096598	.8828479	.0691845
#1	5.432733	185.9912	1.307917	.0120237	1.158614	1.173844	1.335226
#2	5.445913	186.3148	1.307061	.0131317	1.117747	1.183117	1.333506
#3	5.454571	186.1113	1.323591	.0122766	1.117326	1.162440	1.333785

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.64316	5.183595	.0963341	.0157372	4.637716	6.626723	.0369767
Stddev	.11064	.022529	.0029985	.0003481	.028188	.032581	.0018829
%RSD	.5934411	.4346216	3.112629	2.211853	.6077961	.4916586	5.092229
#1	18.60965	5.171412	.0966064	.0156537	4.623423	6.643510	.0391472
#2	18.55316	5.169781	.0932087	.0154384	4.619538	6.647487	.0360012
#3	18.76668	5.209592	.0991871	.0161194	4.670187	6.589172	.0357816

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5335-21 Acquired: 12/27/2024 17:33:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2923S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.973488	.2700329	.2804812
Stddev	.006740	.0011532	.0030435
%RSD	.3415208	.4270595	1.085097
#1	1.967816	.2688607	.2838562
#2	1.971709	.2700720	.2796420
#3	1.980939	.2711661	.2779452

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2307.965	29439.67	2374.354	1941.758	1710.747
Stddev	15.289	69.30	3.270	5.486	12.904
%RSD	.6624596	.2353913	.1377200	.2825321	.7542701
#1	2310.867	29459.20	2374.738	1946.955	1713.769
#2	2321.596	29497.10	2370.910	1942.297	1721.871
#3	2291.433	29362.70	2377.416	1936.022	1696.600

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5131-07 Acquired: 12/27/2024 17:37:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2131226	-.060483	1.683469	.1109117	.0117644	66.30315
Stddev	.0024144	.001174	.006272	.0022294	.0014038	.10371
%RSD	1.132886	1.940514	.3725809	2.010093	11.93283	.1564219
#1	.2153287	-.061573	1.687641	.1091211	.0110219	66.32843
#2	.2134957	-.059241	1.676256	.1134088	.0133835	66.18914
#3	.2105433	-.060636	1.686510	.1102054	.0108877	66.39190

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.559130	.0079856	.0109117	98.84475	.1169258	.1461844
Stddev	.002972	.0002602	.0000986	.34683	.0058034	.0011489
%RSD	.1905948	3.258457	.9036483	.3508841	4.963359	.7859190
#1	1.559917	.0080075	.0110253	99.06212	.1196198	.1473855
#2	1.555844	.0082341	.0108609	98.44477	.1208927	.1450960
#3	1.561628	.0077151	.0108488	99.02735	.1102650	.1460718

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3467804	194.8321	25.41082	23.89051	.2050911	-.028939
Stddev	.0115683	.6549	.05703	.11900	.0010593	.002398
%RSD	3.335907	.3361224	.2244399	.4981031	.5165239	8.286565
#1	.3508136	195.3937	25.44680	23.92525	.2062895	-.031309
#2	.3337354	194.1127	25.34506	23.98828	.2047040	-.028994
#3	.3557921	194.9898	25.44060	23.75801	.2042797	-.026514

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.284090	.1995270	2.752143	6.846024	F 11.02194	.0359956
Stddev	.027887	.0054200	.126677	.209916	.04592	.0033511
%RSD	2.171740	2.716419	4.602856	3.066248	.4166476	9.309728
#1	1.298441	.1994492	2.829128	7.070618	11.06795	.0346133
#2	1.301880	.2049854	2.821364	6.654779	10.97611	.0335568
#3	1.251950	.1941463	2.605938	6.812675	11.02176	.0398168

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5131-07 Acquired: 12/27/2024 17:37:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0180615	1.930626	6.336247	.1196141	.7821906	.0468835
Stddev	.0002309	.008677	.055922	.0000227	.0044243	.0004504
%RSD	1.278142	.4494242	.8825764	.0189404	.5656292	.9606782
#1	.0180768	1.940639	6.398014	.1195948	.7794358	.0473303
#2	.0178234	1.925319	6.321673	.1196085	.7872940	.0464296
#3	.0182844	1.925919	6.289056	.1196391	.7798420	.0468907

Elem	Li6707
Units	ppm
Avg	.1049216
Stddev	.0058067
%RSD	5.534280
#1	.1076435
#2	.0982540
#3	.1088673

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2553.175	33175.76	2511.826	2218.657	1801.896
Stddev	7.355	1316.62	11.483	88.747	5.769
%RSD	.2880868	3.968613	.4571633	4.000040	.3201855
#1	2555.299	32550.82	2500.532	2172.590	1799.067
#2	2559.236	32287.99	2523.490	2162.416	1808.534
#3	2544.992	34688.46	2511.455	2320.965	1798.087

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5131-08 Acquired: 12/27/2024 17:41:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2080950	-.055157	1.641310	.1090677	.0068490	65.09002
Stddev	.0017039	.004794	.003707	.0028683	.0026148	.16894
%RSD	.8188079	8.690796	.2258805	2.629791	38.17734	.2595480
#1	.2100559	-.054320	1.643108	.1117678	.0094315	64.94580
#2	.2069749	-.060314	1.637047	.1093787	.0042031	65.04838
#3	.2072541	-.050837	1.643777	.1060566	.0069124	65.27589

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.530884	.0077790	.0106477	97.29970	.1187850	.1427079
Stddev	.002731	.0001952	.0001021	.32937	.0007337	.0007985
%RSD	.1784256	2.509568	.9590064	.3385142	.6176854	.5595061
#1	1.528293	.0075601	.0107510	97.13464	.1195859	.1431389
#2	1.530621	.0079350	.0106454	97.08550	.1186241	.1431983
#3	1.533737	.0078420	.0105468	97.67897	.1181452	.1417866

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3466630	191.6788	25.00591	23.53253	.2012362	-.030360
Stddev	.0116130	.7273	.06460	.08167	.0004848	.002008
%RSD	3.349924	.3794627	.2583511	.3470720	.2409182	6.615278
#1	.3404416	191.0393	24.94903	23.62511	.2015991	-.030725
#2	.3394862	191.5270	24.99254	23.47064	.2014239	-.028194
#3	.3600611	192.4700	25.07615	23.50186	.2006856	-.032160

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.263655	.1833735	2.786997	6.726890	F 10.77657	.0335870
Stddev	.026968	.0053650	.006131	.207857	.01300	.0021266
%RSD	2.134107	2.925709	.2199797	3.089941	.1206060	6.331741
#1	1.238096	.1786561	2.780279	6.725750	10.79114	.0330165
#2	1.261031	.1892097	2.792289	6.935315	10.76615	.0359408
#3	1.291839	.1822547	2.788424	6.519606	10.77244	.0318039

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5131-08 Acquired: 12/27/2024 17:41:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0177121	1.884970	6.217225	.1165618	.7638239	.0463573
Stddev	.0000602	.006638	.038997	.0017414	.0034014	.0004745
%RSD	.3401333	.3521275	.6272401	1.493985	.4453160	1.023644
#1	.0176826	1.892045	6.175424	.1176869	.7605325	.0468337
#2	.0176724	1.878881	6.223623	.1174426	.7636135	.0458846
#3	.0177815	1.883983	6.252627	.1145559	.7673256	.0463536

Elem	Li6707
Units	ppm
Avg	.1033290
Stddev	.0017645
%RSD	1.707697
#1	.1048577
#2	.1037312
#3	.1013981

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2589.704	32779.66	2562.471	2182.458	1834.178
Stddev	5.357	144.94	7.342	10.022	2.702
%RSD	.2068472	.4421501	.2865215	.4592257	.1473162
#1	2595.756	32620.14	2570.283	2173.977	1836.988
#2	2585.572	32815.58	2561.420	2179.878	1831.599
#3	2587.784	32903.26	2555.712	2193.518	1833.946

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5131-07LX5 Acquired: 12/27/2024 17:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0387691	-.017245	.3425079	.0177909	-.005793	15.83699	.3730141
Stddev	.0026701	.003909	.0023952	.0039956	.002489	.02336	.0018366
%RSD	6.887169	22.66611	.6993135	22.45852	42.97174	.1474910	.4923554
#1	.0359736	-.014999	.3414370	.0219346	-.006737	15.84268	.3748363
#2	.0412931	-.021758	.3408350	.0174761	-.007672	15.81131	.3711636
#3	.0390405	-.014977	.3452517	.0139621	-.002970	15.85697	.3730426

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021275	.0020746	23.95349	.0282489	.0381121	.0765508	47.05006
Stddev	.0001236	.0000659	.04705	.0005104	.0004751	.0021220	.07954
%RSD	5.810770	3.176427	.1964179	1.806674	1.246587	2.771965	.1690616
#1	.0022633	.0020987	23.98987	.0282332	.0386604	.0752246	47.14175
#2	.0020974	.0020001	23.90036	.0287669	.0378229	.0789982	47.00891
#3	.0020216	.0021251	23.97024	.0277465	.0378530	.0754297	46.99953

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.200060	5.827968	.0404950	-.006608	.2676225	.0479170	.7173834
Stddev	.007489	.178542	.0002318	.000750	.0278979	.0100633	.0010012
%RSD	.1207893	3.063529	.5724910	11.34619	10.42436	21.00156	.1395676
#1	6.206871	5.798534	.0403233	-.006372	.2361731	.0363503	.7176780
#2	6.192040	5.665973	.0404030	-.007447	.2773061	.0527362	.7182042
#3	6.201270	6.019398	.0407587	-.006004	.2893884	.0546644	.7162679

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.848429	2.239736	.0044443	.0046686	.3860460	1.568117	.0227209
Stddev	.124418	.009549	.0012742	.0001383	.0042015	.007440	.0013169
%RSD	6.731031	.4263228	28.67144	2.962573	1.088341	.4744345	5.795879
#1	1.752712	2.250677	.0047799	.0045612	.3822157	1.571663	.0241919
#2	1.803506	2.235449	.0055171	.0046199	.3905398	1.573121	.0216518
#3	1.989070	2.233083	.0030358	.0048247	.3853826	1.559568	.0223191

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5131-07LX5 Acquired: 12/27/2024 17:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1877260	.0110095	.0270246
Stddev	.0009813	.0003700	.0042656
%RSD	.5227143	3.360779	15.78422
#1	.1873543	.0109157	.0254082
#2	.1869849	.0106953	.0318621
#3	.1888388	.0114173	.0238033

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2167.671	27529.81	2121.030	1834.293	1850.702
Stddev	2.988	26.98	4.161	4.194	4.384
%RSD	.1378308	.0979849	.1961812	.2286174	.2368624
#1	2168.193	27521.01	2117.533	1838.810	1849.296
#2	2170.363	27508.33	2119.925	1830.523	1855.617
#3	2164.457	27560.09	2125.632	1833.548	1847.194

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5131-09 Acquired: 12/27/2024 17:49:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2910030	.0425831	1.694560	.2363672	.1447936	68.43895
Stddev	.0048237	.0028132	.002138	.0043526	.0005705	.12522
%RSD	1.657610	6.606345	.1261858	1.841435	.3939863	.1829644
#1	.2885411	.0401196	1.692104	.2359349	.1447260	68.29685
#2	.2879071	.0419812	1.696008	.2322469	.1442599	68.53314
#3	.2965609	.0456485	1.695567	.2409197	.1453948	68.48687

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.830462	.0889506	.1069828	97.59595	.4577131	1.109240
Stddev	.011517	.0006432	.0001526	.32884	.0008102	.002393
%RSD	.2384297	.7230556	.1426393	.3369408	.1770190	.2157130
#1	4.817722	.0882211	.1069075	97.32396	.4585381	1.107715
#2	4.840136	.0891943	.1068824	97.96140	.4569185	1.108008
#3	4.833528	.0894362	.1071584	97.50247	.4576825	1.111998

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7274531	193.7719	25.91772	23.61454	1.185858	.0334367
Stddev	.0049074	.4405	.04643	.07062	.000864	.0005073
%RSD	.6746074	.2273087	.1791528	.2990361	.0728571	1.517064
#1	.7221363	193.2842	25.86651	23.61888	1.185555	.0336771
#2	.7284141	194.1409	25.92955	23.68289	1.185185	.0337790
#3	.7318090	193.8905	25.95709	23.54186	1.186832	.0328539

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.271734	1.026990	3.491219	6.754060	F 10.85691	.0351858
Stddev	.012776	.006783	.017039	.063350	.01605	.0014568
%RSD	1.004596	.6604824	.4880491	.9379537	.1478739	4.140266
#1	1.274999	1.021002	3.478169	6.801667	10.84618	.0365829
#2	1.257642	1.034357	3.510495	6.778353	10.84918	.0336759
#3	1.282560	1.025611	3.484992	6.682158	10.87537	.0352988

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5131-09 Acquired: 12/27/2024 17:49:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHMM6S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0179240	1.906490	6.259273	.1188191	.7714222	.0453627
Stddev	.0003722	.005250	.020693	.0013972	.0052153	.0009694
%RSD	2.076313	.2753607	.3305986	1.175902	.6760675	2.137082
#1	.0175440	1.908128	6.235849	.1191084	.7655198	.0454508
#2	.0179402	1.900616	6.275074	.1200491	.7733385	.0462851
#3	.0182878	1.910725	6.266894	.1173000	.7754083	.0443522

Elem	Li6707
Units	ppm
Avg	.1055902
Stddev	.0032058
%RSD	3.036084
#1	.1063276
#2	.1020799
#3	.1083630

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.325	32422.91	2533.254	2160.754	1804.369
Stddev	4.359	137.13	5.361	15.672	3.319
%RSD	.1715067	.4229538	.2116228	.7253141	.1839266
#1	2538.249	32301.65	2535.395	2156.332	1800.638
#2	2546.312	32395.36	2527.154	2147.767	1805.475
#3	2539.413	32571.73	2537.214	2178.162	1806.993

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-01 Acquired: 12/27/2024 17:53:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1276805	-.061284	2.418848	.0776453	.0147884	57.22474	1.488963
Stddev	.0035349	.001756	.001180	.0040662	.0021121	.20362	.002839
%RSD	2.768509	2.864617	.0487773	5.236914	14.28195	.3558217	.1906990
#1	.1250605	-.061801	2.419607	.0799460	.0157330	57.00779	1.486196
#2	.1317010	-.062723	2.419449	.0729504	.0123688	57.25474	1.491870
#3	.1262799	-.059328	2.417489	.0800396	.0162632	57.41170	1.488823

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067703	.0069614	38.77655	.1124705	.0813846	.3874620	142.9987
Stddev	.0001000	.0000539	.01364	.0015712	.0004309	.0024344	.4871
%RSD	1.477246	.7746650	.0351672	1.396993	.5294458	.6282887	.3406457
#1	.0068406	.0069600	38.76081	.1140170	.0813272	.3894971	142.4376
#2	.0068146	.0069081	38.78478	.1125187	.0818413	.3881237	143.2448
#3	.0066558	.0070160	38.78405	.1108757	.0809853	.3847651	143.3135

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.308612	18.34720	.1450279	-.023410	.4181731	.1533029	1.749096
Stddev	.009452	.13889	.0012488	.001639	.0222627	.0029267	.005082
%RSD	.1293244	.7569973	.8610650	7.001522	5.323810	1.909121	.2905660
#1	7.302691	18.42163	.1463257	-.024244	.4058917	.1499422	1.747476
#2	7.303633	18.43301	.1449232	-.021521	.4438715	.1552915	1.745021
#3	7.319513	18.18696	.1438347	-.024464	.4047560	.1546750	1.754790

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.544508	9.041477	.0378801	.0057320	3.987395	9.808429	.1609487
Stddev	.196343	.012074	.0009993	.0003984	.005473	.085395	.0015834
%RSD	3.541216	.1335397	2.637959	6.950318	.1372637	.8706277	.9838220
#1	5.336549	9.039561	.0368327	.0055671	3.992308	9.741940	.1591655
#2	5.726688	9.054394	.0388230	.0054426	3.981496	9.904735	.1621902
#3	5.570288	9.030475	.0379847	.0061864	3.988382	9.778614	.1614905

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-01 Acquired: 12/27/2024 17:53:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.143846	-.013983	.0981920
Stddev	.002633	.000755	.0029938
%RSD	.2301537	5.401964	3.048903
#1	1.140848	-.013453	.0950199
#2	1.145781	-.013649	.1009680
#3	1.144910	-.014848	.0985881

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2392.483	30453.91	2383.002	2023.157	1830.560
Stddev	3.139	216.07	3.236	17.182	4.017
%RSD	.1312219	.7095032	.1358135	.8492718	.2194684
#1	2391.097	30339.93	2386.677	2019.229	1828.088
#2	2390.276	30703.11	2381.754	2041.964	1828.396
#3	2396.078	30318.70	2380.576	2008.280	1835.195

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-02 Acquired: 12/27/2024 17:57:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK14 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1420701	-.060795	2.098763	.0855890	.0137799	62.15995	1.584712
Stddev	.0031142	.002430	.029359	.0043377	.0022037	.19345	.002918
%RSD	2.192026	3.996449	1.398856	5.068054	15.99219	.3112212	.1841230
#1	.1456423	-.062092	2.122736	.0818559	.0116543	61.96021	1.581842
#2	.1399261	-.062301	2.066018	.0903475	.0160542	62.34644	1.587676
#3	.1406420	-.057992	2.107534	.0845634	.0136311	62.17322	1.584619

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071864	.0065692	41.71218	.1075212	.0907478	.4792324	154.2661
Stddev	.0002431	.0002394	.13373	.0009940	.0013561	.0119520	.3638
%RSD	3.382718	3.643799	.3205953	.9244848	1.494335	2.493994	.2358021
#1	.0073193	.0067859	41.61237	.1084764	.0917948	.4679058	153.9119
#2	.0073340	.0063122	41.86413	.1064925	.0892160	.4917244	154.6387
#3	.0069058	.0066094	41.66005	.1075948	.0912326	.4780670	154.2476

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.351030	19.41587	.1590510	-.025246	.4616901	.1644046	1.502213
Stddev	.003842	.04689	.0028711	.001106	.0221854	.0052726	.014585
%RSD	.0460053	.2415281	1.805133	4.382745	4.805250	3.207091	.9709078
#1	8.354465	19.37377	.1612710	-.026504	.4867109	.1583660	1.509797
#2	8.346881	19.46641	.1558086	-.024810	.4539399	.1680959	1.485399
#3	8.351744	19.40744	.1600733	-.024424	.4444195	.1667518	1.511444

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.916073	8.453076	.0400742	.0052623	3.742149	10.10053	.1890058
Stddev	.122203	.123838	.0007191	.0003277	.062027	.05695	.0038657
%RSD	2.485794	1.465004	1.794408	6.227516	1.657536	.5638343	2.045272
#1	4.888921	8.562069	.0402662	.0054077	3.799785	10.16613	.1929981
#2	4.809729	8.318416	.0406778	.0048870	3.676507	10.07175	.1852806
#3	5.049568	8.478744	.0392786	.0054922	3.750154	10.06372	.1887385

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-02 Acquired: 12/27/2024 17:57:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK14 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.186871	-.010785	.1042889
Stddev	.004060	.000363	.0021413
%RSD	.3420474	3.362038	2.053247
#1	1.182606	-.011184	.1032080
#2	1.190688	-.010693	.1067552
#3	1.187318	-.010477	.1029034

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2325.326	30300.20	2323.788	2017.667	1746.973
Stddev	28.933	183.13	11.178	13.507	26.124
%RSD	1.244272	.6043927	.4810281	.6694298	1.495361
#1	2300.693	30338.70	2313.828	2023.160	1723.099
#2	2357.189	30461.03	2321.659	2027.562	1774.877
#3	2318.096	30100.88	2335.878	2002.279	1742.942

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-03 Acquired: 12/27/2024 18:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK15 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1231017	-.073658	.8904431	.0959433	.0105267	74.19223	1.283516
Stddev	.0010776	.001680	.0032787	.0013015	.0048129	.13382	.004462
%RSD	.8753873	2.281152	.3682145	1.356493	45.72140	.1803634	.3476616
#1	.1242939	-.073111	.8870434	.0967574	.0159519	74.34261	1.288499
#2	.1228144	-.072319	.8906999	.0966301	.0088580	74.14782	1.282159
#3	.1221969	-.075543	.8935858	.0944423	.0067701	74.08627	1.279889

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077233	.0048225	45.29395	.1054147	.0971124	.3129046	172.4605
Stddev	.0000570	.0001755	.28394	.0003558	.0009712	.0010800	.5327
%RSD	.7387114	3.639222	.6268812	.3375065	1.000034	.3451405	.3088821
#1	.0076754	.0046919	45.61944	.1058162	.0980823	.3120658	173.0197
#2	.0077864	.0050220	45.16531	.1052891	.0961400	.3141232	171.9590
#3	.0077081	.0047535	45.09709	.1051387	.0971148	.3125248	172.4028

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.071141	23.21126	.1345764	-.030047	.4255543	.1848687	.7689606
Stddev	.016427	.07417	.0010022	.000962	.0054062	.0013591	.0020105
%RSD	.1810925	.3195454	.7447216	3.202692	1.270379	.7351588	.2614528
#1	9.085992	23.21894	.1341684	-.029520	.4228462	.1847094	.7669258
#2	9.053496	23.13354	.1338426	-.029463	.4220373	.1863004	.7690102
#3	9.073936	23.28129	.1357183	-.031157	.4317793	.1835962	.7709458

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.761146	7.916014	.0360182	.0078247	2.862768	9.652441	.0708399
Stddev	.081824	.031793	.0021186	.0006126	.016253	.063229	.0011924
%RSD	1.718581	.4016312	5.881937	7.829073	.5677237	.6550606	1.683257
#1	4.730565	7.882943	.0352035	.0075714	2.844287	9.705005	.0707898
#2	4.853856	7.918746	.0344279	.0085233	2.869186	9.582276	.0720566
#3	4.699017	7.946353	.0384232	.0073793	2.874832	9.670043	.0696733

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-03 Acquired: 12/27/2024 18:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK15 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.047262	-.016865	.1271657
Stddev	.004201	.000354	.0023750
%RSD	.4011808	2.096649	1.867633
#1	1.046824	-.016553	.1296940
#2	1.051665	-.016793	.1249816
#3	1.043297	-.017249	.1268216

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2506.772	32012.37	2483.358	2125.530	1848.174
Stddev	4.266	115.70	11.134	6.246	2.960
%RSD	.1701679	.3614259	.4483569	.2938778	.1601809
#1	2505.688	31979.56	2470.621	2127.867	1848.791
#2	2511.474	31916.62	2488.207	2118.452	1850.778
#3	2503.152	32140.93	2491.246	2130.271	1844.954

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-04 Acquired: 12/27/2024 18:05:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK16 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1185009	-.087981	.3682108	.1132243	.0191569	75.78618	.8521537
Stddev	.0034969	.002721	.0027107	.0034788	.0026032	.14977	.0031995
%RSD	2.950960	3.092374	.7361776	3.072515	13.58873	.1976228	.3754648
#1	.1223533	-.085095	.3653445	.1094654	.0221334	75.84426	.8549231
#2	.1155270	-.090499	.3707329	.1163306	.0180314	75.61607	.8486512
#3	.1176223	-.088349	.3685552	.1138769	.0173058	75.89822	.8528867

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083640	.0033167	33.75036	.1478782	.1004113	.1762518	197.4141
Stddev	.0001229	.0001412	.08755	.0007632	.0006373	.0044033	.4274
%RSD	1.469552	4.256992	.2594073	.5161304	.6347228	2.498306	.2164855
#1	.0084912	.0033001	33.81465	.1469992	.1001330	.1763144	197.8938
#2	.0082459	.0031846	33.65065	.1482624	.0999605	.1718176	197.0740
#3	.0083551	.0034655	33.78579	.1483730	.1011405	.1806235	197.2744

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.407433	26.17332	.1559695	-.036690	.4831772	.2100752	.5140443
Stddev	.039266	.11693	.0009648	.001772	.0130976	.0036306	.0005779
%RSD	.5300881	.4467458	.6185941	4.828432	2.710732	1.728223	.1124146
#1	7.444323	26.15971	.1566031	-.038063	.4887610	.2111748	.5141873
#2	7.366159	26.06380	.1548591	-.034691	.4925575	.2130289	.5134084
#3	7.411819	26.29646	.1564462	-.037318	.4682130	.2060220	.5145372

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.405707	7.763377	.0336751	.0099428	1.253135	9.217790	.0308553
Stddev	.157281	.032261	.0016456	.0006225	.006591	.053033	.0010559
%RSD	2.455331	.4155586	4.886758	6.261005	.5259219	.5753367	3.422084
#1	6.407700	7.752045	.0344960	.0101497	1.260164	9.253946	.0318376
#2	6.561983	7.738311	.0347488	.0092432	1.247094	9.156909	.0297387
#3	6.247439	7.799776	.0317805	.0104356	1.252147	9.242515	.0309895

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-04 Acquired: 12/27/2024 18:05:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK16 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.467190	-.065282	.1451097
Stddev	.007898	.000237	.0009782
%RSD	.5382795	.3629104	.6740903
#1	1.475784	-.065271	.1462377
#2	1.460251	-.065524	.1445968
#3	1.465536	-.065051	.1444947

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2503.622	32035.84	2480.804	2113.741	1756.737
Stddev	3.018	49.21	13.626	3.527	6.559
%RSD	.1205536	.1536201	.5492407	.1668620	.3733464
#1	2506.249	32074.00	2465.436	2109.698	1762.008
#2	2504.291	31980.29	2491.408	2116.185	1758.810
#3	2500.325	32053.23	2485.567	2115.340	1749.392

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-05 Acquired: 12/27/2024 18:09:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK17 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2511504	-.114854	.3559799	.1477038	.0247572	77.04371	.6949784
Stddev	.0035915	.004179	.0034487	.0051972	.0007446	.11232	.0020017
%RSD	1.430034	3.638421	.9687881	3.518689	3.007534	.1457923	.2880296
#1	.2492297	-.110934	.3577610	.1418612	.0240258	77.16978	.6964524
#2	.2489276	-.119251	.3581738	.1494378	.0255143	77.00710	.6957832
#3	.2552939	-.114376	.3520048	.1518123	.0247314	76.95427	.6926995

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099255	.0031341	40.63122	.1244827	.1730039	.8303473	262.5365
Stddev	.0002640	.0000815	.14706	.0010986	.0007937	.0009468	.3273
%RSD	2.659449	2.598676	.3619288	.8825592	.4587951	.1140304	.1246623
#1	.0102100	.0032244	40.76097	.1247350	.1733697	.8292715	262.7893
#2	.0096886	.0030663	40.66121	.1254333	.1735487	.8307160	262.6534
#3	.0098778	.0031115	40.47148	.1232799	.1720932	.8310543	262.1668

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.023427	36.64965	.2060539	-.049763	.6095912	.2939895	.5638984
Stddev	.028204	.19307	.0022254	.001696	.0245061	.0046520	.0065888
%RSD	.3515245	.5267856	1.079995	3.408497	4.020084	1.582363	1.168442
#1	8.052752	36.83409	.2073099	-.051466	.6291505	.2896272	.5675136
#2	8.021031	36.66589	.2073673	-.049749	.5821021	.2934559	.5678882
#3	7.996497	36.44899	.2034845	-.048074	.6175210	.2988852	.5562934

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.25657	9.646835	.0605694	.0031989	.6316530	7.964164	.0279454
Stddev	.27634	.055615	.0021175	.0003855	.0072523	.010684	.0029233
%RSD	2.454930	.5765152	3.495988	12.04970	1.148152	.1341514	10.46078
#1	11.05502	9.676668	.0618764	.0027901	.6278285	7.976490	.0312831
#2	11.57158	9.681169	.0617056	.0035557	.6400171	7.957545	.0267132
#3	11.14311	9.582669	.0581263	.0032510	.6271134	7.958457	.0258399

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-05 Acquired: 12/27/2024 18:09:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK17 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.518256	-.123732	.1470100
Stddev	.006429	.000472	.0035690
%RSD	.4234416	.3817879	2.427762
#1	1.525505	-.123225	.1429254
#2	1.513247	-.124159	.1485775
#3	1.516015	-.123812	.1495271

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2846.745	36430.07	2847.012	2407.463	1766.621
Stddev	15.363	398.21	13.124	34.642	10.850
%RSD	.5396806	1.093081	.4609578	1.438944	.6141427
#1	2849.969	36170.00	2839.358	2389.681	1763.052
#2	2830.026	36231.70	2839.512	2385.323	1758.006
#3	2860.241	36888.50	2862.165	2447.385	1778.806

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-06 Acquired: 12/27/2024 18:13:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK18 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1258775	-.047837	.2828802	.0630788	-.004288	52.85557	.6982462
Stddev	.0036007	.006178	.0010906	.0119909	.002767	3.66131	.0506004
%RSD	2.860480	12.91523	.3855276	19.00934	64.52609	6.927004	7.246787
#1	.1220482	-.041583	.2820903	.0508433	-.006780	48.75641	.6416830
#2	.1263895	-.053937	.2841245	.0748091	-.004774	55.80117	.7392106
#3	.1291948	-.047992	.2824259	.0635841	-.001310	54.00912	.7138450

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057494	.0030038	500.6717	.0833306	.1249279	.2197951	159.2152
Stddev	.0002736	.0002875	34.9036	.0013128	.0009115	.0140422	10.6364
%RSD	4.757770	9.570833	6.971356	1.575463	.7296403	6.388765	6.680509
#1	.0054854	.0033106	461.7381	.0847943	.1259757	.2035836	147.2697
#2	.0060316	.0027405	529.1601	.0829406	.1243174	.2281739	167.6599
#3	.0057313	.0029604	511.1171	.0822570	.1244906	.2276277	162.7162

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.97677	115.2387	.1610488	-.027644	1.240587	.1646966	.3979327
Stddev	.74692	7.9376	.0008425	.000930	.057972	.0246530	.0077980
%RSD	6.804543	6.887973	.5231288	3.365745	4.672933	14.96876	1.959639
#1	10.13982	106.2690	.1617667	-.028379	1.173693	.1397625	.4055842
#2	11.57560	121.3559	.1612584	-.026598	1.276198	.1890586	.3899960
#3	11.21487	118.0910	.1601213	-.027956	1.271869	.1652686	.3982177

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.470836	9.533988	.0475438	.0013956	.9583002	8.878991	.0263203
Stddev	.648161	.013504	.0050759	.0007172	.0038696	.426836	.0003853
%RSD	7.651676	.1416454	10.67618	51.38726	.4037972	4.807257	1.463899
#1	7.753633	9.548428	.0421662	.0022220	.9568753	8.397221	.0258822
#2	9.014713	9.521671	.0482138	.0010287	.9553451	9.209945	.0266062
#3	8.644164	9.531866	.0522514	.0009361	.9626802	9.029807	.0264727

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-06 Acquired: 12/27/2024 18:13:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK18 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.291913	.2700167	.1047096
Stddev	.086975	.0204524	.0089882
%RSD	6.732235	7.574500	8.583952
#1	1.192843	.2474135	.0945942
#2	1.355713	.2872447	.1077557
#3	1.327184	.2753918	.1117790

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2398.322	30638.94	2424.917	2015.105	1632.671
Stddev	2.308	57.82	124.207	5.112	2.413
%RSD	.0962286	.1886999	5.122124	.2536719	.1478085
#1	2395.986	30657.93	2565.124	2018.701	1629.905
#2	2400.601	30574.01	2328.662	2017.360	1634.341
#3	2398.377	30684.86	2380.965	2009.253	1633.768

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-07 Acquired: 12/27/2024 18:17:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1116922	-.043398	.3013814	.0668044	-.010705	55.52176
Stddev	.0039965	.004869	.0059162	.0050032	.001550	3.06661
%RSD	3.578109	11.21882	1.963028	7.489323	14.47572	5.523261
#1	.1108274	-.044689	.3043575	.0631991	-.009156	53.69179
#2	.1081988	-.038013	.2945681	.0646978	-.012255	53.81138
#3	.1160502	-.047490	.3052187	.0725165	-.010702	59.06210

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8911790	.0060388	.0044209	F 1004.942	.0879500	.1428756
Stddev	.0495511	.0002709	.0003145	54.327	.0026399	.0007688
%RSD	5.560176	4.485164	7.113399	5.405978	3.001546	.5380632
#1	.8608437	.0060068	.0046625	973.647	.0900524	.1435153
#2	.8643330	.0057853	.0045349	973.506	.0888103	.1430888
#3	.9483602	.0063242	.0040653	1067.673	.0849873	.1420227

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2611514	164.7266	17.73082	378.8062	.1954713	-.031088
Stddev	.0156535	9.0905	.97560	20.7980	.0012848	.000849
%RSD	5.994038	5.518528	5.502273	5.490393	.6573080	2.730250
#1	.2639359	159.4601	17.15174	366.5904	.1963436	-.031983
#2	.2442926	159.4962	17.18353	367.0078	.1960745	-.030295
#3	.2752259	175.2233	18.85719	402.8204	.1939959	-.030985

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.665390	.1660353	.4205731	10.65703	7.267848	.0737275
Stddev	.051920	.0252185	.0022944	.78021	.006774	.0088021
%RSD	3.117594	15.18863	.5455296	7.321116	.0932100	11.93873
#1	1.625370	.1502696	.4215121	10.13584	7.273076	.0695781
#2	1.646742	.1527156	.4222490	10.28123	7.270273	.0677670
#3	1.724058	.1951209	.4179582	11.55402	7.260195	.0838374

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-07 Acquired: 12/27/2024 18:17:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014550	1.761716	9.201351	.0283085	1.136267	.5621423
Stddev	.0005777	.010396	.411306	.0013013	.061298	.0297269
%RSD	39.70264	.5900996	4.470065	4.596752	5.394641	5.288150
#1	.0020553	1.755547	8.974453	.0271511	1.097517	.5439204
#2	.0009029	1.773718	8.953467	.0280572	1.104347	.5460607
#3	.0014069	1.755882	9.676132	.0297170	1.206938	.5964457

Elem	Li6707
Units	ppm
Avg	.1394816
Stddev	.0104570
%RSD	7.497058
#1	.1297806
#2	.1381057
#3	.1505584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2283.485	29333.36	2350.575	1919.780	1479.399
Stddev	3.480	26.97	108.279	5.816	2.190
%RSD	.1523933	.0919491	4.606473	.3029773	.1480453
#1	2285.996	29303.31	2410.729	1925.469	1480.622
#2	2284.947	29341.29	2415.421	1920.028	1480.704
#3	2279.513	29355.47	2225.575	1913.844	1476.870

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-08 Acquired: 12/27/2024 18:21:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2021775	-.066355	4.391744	.1187349	.0187730	73.91638
Stddev	.0031432	.004543	.005609	.0067107	.0043066	3.97485
%RSD	1.554688	6.846151	.1277166	5.651816	22.94039	5.377491
#1	.1986443	-.061811	4.394275	.1112198	.0138345	70.02684
#2	.2046635	-.070896	4.385315	.1241282	.0207371	77.97137
#3	.2032246	-.066358	4.395641	.1208568	.0217474	73.75094

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.521453	.0086673	.0110384	50.10456	.1884886	.1041300
Stddev	.184146	.0001221	.0001637	2.64475	.0020912	.0001882
%RSD	5.229257	1.408113	1.483377	5.278462	1.109484	.1807286
#1	3.346939	.0085340	.0111395	47.56774	.1908138	.1043197
#2	3.713917	.0087736	.0108494	52.84542	.1867616	.1041269
#3	3.503503	.0086944	.0111261	49.90052	.1878906	.1039433

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6854546	168.5545	6.093646	21.31136	.2010174	-.024427
Stddev	.0280991	8.9487	.315828	1.29212	.0002271	.000773
%RSD	4.099344	5.309100	5.182911	6.063068	.1130006	3.166302
#1	.6637483	159.8515	5.793096	20.21150	.2007810	-.024522
#2	.7171929	177.7302	6.422806	22.73439	.2010372	-.023611
#3	.6754226	168.0817	6.065036	20.98820	.2012340	-.025149

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4999364	.2150541	3.616926	9.369017	F 13.96563	.0512525
Stddev	.0184103	.0081716	.036071	.668683	.02229	.0059167
%RSD	3.682529	3.799800	.9972886	7.137176	.1596375	11.54430
#1	.4910619	.2100249	3.638584	8.812762	13.94095	.0450453
#2	.4876443	.2244828	3.636908	10.11090	13.97161	.0568281
#3	.5211031	.2106545	3.575286	9.18338	13.98432	.0518841

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-08 Acquired: 12/27/2024 18:21:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK20 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069726	4.780308	8.224760	.3856602	1.295248	.0371610
Stddev	.0001832	.014611	.264324	.0030159	.069062	.0026321
%RSD	2.628065	.3056572	3.213761	.7819980	5.331968	7.083008
#1	.0071654	4.773831	8.017481	.3838996	1.232635	.0347643
#2	.0069517	4.797038	8.522420	.3839384	1.369325	.0399780
#3	.0068007	4.770054	8.134380	.3891425	1.283785	.0367408

Elem	Li6707
Units	ppm
Avg	.1408899
Stddev	.0102093
%RSD	7.246290
#1	.1324846
#2	.1522510
#3	.1379341

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2449.688	31417.08	2423.548	2070.145	1774.257
Stddev	9.874	137.85	78.862	13.760	6.161
%RSD	.4030696	.4387753	3.253972	.6646770	.3472456
#1	2439.448	31346.43	2494.684	2066.265	1768.902
#2	2459.150	31328.87	2338.747	2058.742	1780.991
#3	2450.464	31575.93	2437.212	2085.429	1772.878

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-09 Acquired: 12/27/2024 18:25:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK21 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2651702	-.091508	5.322600	.1495161	.0222150	77.95902
Stddev	.0040302	.004726	.030187	.0083718	.0036078	3.21009
%RSD	1.519864	5.165066	.5671490	5.599234	16.24023	4.117665
#1	.2616017	-.091713	5.287779	.1521023	.0244557	79.23625
#2	.2643677	-.086683	5.338649	.1401564	.0180532	74.30690
#3	.2695414	-.096129	5.341372	.1562896	.0241362	80.33391

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.492928	.0099753	.0135782	52.95848	.2062374	.1174887
Stddev	.143958	.0004456	.0004091	2.17130	.0041212	.0004774
%RSD	4.121426	4.467344	3.012901	4.100013	1.998265	.4063515
#1	3.551324	.0100912	.0131423	53.82354	.2025724	.1169885
#2	3.328947	.0094832	.0139537	50.48799	.2106986	.1179396
#3	3.598513	.0103516	.0136387	54.56393	.2054413	.1175379

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7551819	222.1774	6.136052	25.04120	.2075273	-.036337
Stddev	.0337309	9.4648	.248080	.92490	.0009935	.001796
%RSD	4.466592	4.260033	4.042990	3.693530	.4787363	4.943077
#1	.7699128	226.3810	6.235078	25.47720	.2066323	-.034978
#2	.7165911	211.3389	5.853753	23.97888	.2085963	-.038373
#3	.7790419	228.8123	6.319325	25.66753	.2073533	-.035659

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7242282	.2495206	3.892180	7.694053	F 14.56787	.0455075
Stddev	.0123757	.0078864	.069736	.480209	.08404	.0057570
%RSD	1.708811	3.160602	1.791687	6.241303	.5768572	12.65056
#1	.7334966	.2573948	3.823996	7.973057	14.47207	.0471860
#2	.7101744	.2416222	3.963371	7.139558	14.62914	.0390978
#3	.7290137	.2495447	3.889174	7.969542	14.60241	.0502386

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-09 Acquired: 12/27/2024 18:25:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK21 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082138	4.281746	8.746072	.4807179	1.318825	.0051118
Stddev	.0003589	.019642	.268019	.0050517	.056659	.0006932
%RSD	4.369061	.4587266	3.064446	1.050873	4.296188	13.55979
#1	.0084367	4.259312	8.876849	.4751286	1.345290	.0043269
#2	.0077998	4.290077	8.437769	.4849582	1.253776	.0056400
#3	.0084050	4.295849	8.923597	.4820668	1.357409	.0053685

Elem	Li6707
Units	ppm
Avg	.1432018
Stddev	.0071674
%RSD	5.005088
#1	.1427775
#2	.1362560
#3	.1505719

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2444.856	31245.87	2461.943	2067.128	1755.201
Stddev	9.279	282.28	80.854	28.809	8.390
%RSD	.3795284	.9034080	3.284168	1.393689	.4780142
#1	2455.525	31492.71	2413.113	2091.929	1764.792
#2	2438.661	30938.11	2555.272	2035.527	1751.593
#3	2440.384	31306.79	2417.443	2073.928	1749.219

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-10 Acquired: 12/27/2024 18:29:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2044866	-.060975	5.355238	.0991293	-.068389	74.21131
Stddev	.0054330	.004975	.017742	.0011826	.002546	1.14202
%RSD	2.656894	8.158964	.3312953	1.193029	3.723509	1.538873
#1	.1987911	-.066712	5.374890	.0991623	-.068056	75.52986
#2	.2096122	-.058364	5.340400	.1002951	-.071086	73.56857
#3	.2050564	-.057849	5.350424	.0979306	-.066025	73.53549

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.911991	.0085004	.0110182	176.6728	.1578996	.1237643
Stddev	.044225	.0000743	.0000874	2.5607	.0004577	.0008266
%RSD	1.518724	.8738362	.7935983	1.449415	.2898922	.6678506
#1	2.962308	.0084254	.0110563	179.6275	.1574575	.1246504
#2	2.894384	.0085018	.0110801	175.0988	.1583715	.1230142
#3	2.879281	.0085739	.0109182	175.2920	.1578696	.1236284

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5801804	175.4104	8.251733	64.15650	.1775935	-.027526
Stddev	.0108442	2.5692	.118001	1.09989	.0016767	.000484
%RSD	1.869112	1.464668	1.430019	1.714387	.9441281	1.759027
#1	.5919309	178.3730	8.387884	65.42430	.1795101	-.027523
#2	.5780523	174.0632	8.188301	63.58795	.1768723	-.027043
#3	.5705579	173.7950	8.179015	63.45724	.1763980	-.028011

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9484683	.2256791	2.705727	7.601103	F 13.98744	.0481745
Stddev	.0305616	.0058627	.009979	.286943	.04406	.0010934
%RSD	3.222201	2.597791	.3688199	3.775013	.3149918	2.269606
#1	.9718661	.2211257	2.716448	7.927819	14.03728	.0488470
#2	.9138911	.2322941	2.696709	7.390010	13.95367	.0469129
#3	.9596476	.2236176	2.704022	7.485481	13.97138	.0487636

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-10 Acquired: 12/27/2024 18:29:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061621	3.355757	9.187934	F 10.87008	1.305920	.1247676
Stddev	.0004897	.014580	.165254	.03824	.020073	.0024573
%RSD	7.947385	.4344754	1.798602	.3517694	1.537063	1.969537
#1	.0055985	3.372589	9.329445	10.91421	1.329004	.1276025
#2	.0064042	3.347626	9.006319	10.84668	1.296179	.1234540
#3	.0064836	3.347055	9.228040	10.84935	1.292575	.1232462

Elem	Li6707
Units	ppm
Avg	.1421989
Stddev	.0048932
%RSD	3.441081
#1	.1467457
#2	.1428303
#3	.1370207

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2442.450	31282.87	2442.335	2067.329	1705.224
Stddev	10.598	182.45	38.205	22.174	10.076
%RSD	.4339134	.5832231	1.564287	1.072609	.5909189
#1	2432.130	31170.41	2400.570	2048.181	1693.852
#2	2441.914	31184.81	2475.521	2062.181	1708.779
#3	2453.306	31493.38	2450.914	2091.624	1713.041

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV022 Acquired: 12/27/2024 18:33:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV022 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.093368	4.893302	24.89426	4.917460	4.872049	412.7983	10.47493
Stddev	.013226	.019048	.05544	.020301	.018621	1.9929	.04928
%RSD	.2596761	.3892684	.2226891	.4128371	.3822073	.4827762	.4704263
#1	5.099976	4.895309	24.86216	4.919782	4.877848	413.7186	10.51170
#2	5.078140	4.911267	24.95827	4.936500	4.887081	414.1648	10.49415
#3	5.101988	4.873330	24.86235	4.896098	4.851218	410.5116	10.41894

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5307531	2.511530	413.8148	15.61787	2.526876	15.41190	417.8044
Stddev	.0043378	.006460	1.8943	.01074	.005149	.05857	1.9174
%RSD	.8172858	.2571980	.4577661	.0687698	.2037692	.3800618	.4589332
#1	.5323358	2.507390	414.9199	15.60712	2.527359	15.45326	418.2836
#2	.5340772	2.518973	414.8970	15.62861	2.531766	15.43756	419.4368
#3	.5258462	2.508227	411.6275	15.61787	2.521502	15.34487	415.6928

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.33693	414.3177	2.509891	1.235859	425.8021	2.571167	14.86600
Stddev	.09582	2.3921	.004225	.003726	4.1376	.029402	.02833
%RSD	.6247586	.5773506	.1683340	.3014882	.9717195	1.143545	.1905830
#1	15.36197	415.1274	2.508649	1.231590	427.9507	2.553549	14.88744
#2	15.41773	416.1998	2.514598	1.237528	428.4234	2.605110	14.87668
#3	15.23107	411.6258	2.506426	1.238458	421.0322	2.554841	14.83388

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	159.8891	5.024212	5.075063	4.835463	5.040647	5.178869	5.070771
Stddev	1.1587	.011353	.045537	.013148	.025325	.053665	.011161
%RSD	.7247163	.2259708	.8972731	.2719112	.5024223	1.036231	.2201082
#1	160.6908	5.018002	5.085461	4.836608	5.029970	5.193585	5.061714
#2	160.4159	5.037315	5.114502	4.848001	5.069563	5.223641	5.083240
#3	158.5605	5.017318	5.025226	4.821779	5.022409	5.119382	5.067360

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV022 Acquired: 12/27/2024 18:33:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV022 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.207987	4.892738	5.352213
Stddev	.020556	.024275	.021913
%RSD	.3946985	.4961410	.4094231
#1	5.227783	4.912017	5.368532
#2	5.209431	4.900721	5.360802
#3	5.186747	4.865477	5.327307

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1695.083	23740.82	1947.691	1424.012	1541.230
Stddev	6.668	47.71	22.137	3.720	5.572
%RSD	.3933625	.2009799	1.136583	.2612526	.3615183
#1	1695.914	23771.30	1942.610	1423.592	1543.229
#2	1688.039	23685.83	1928.537	1420.520	1534.934
#3	1701.297	23765.33	1971.927	1427.925	1545.527

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB022 Acquired: 12/27/2024 18:36:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB022 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035841	.0001460	.0033263	.0049468	-.002254	.0415061
Stddev	.0012120	.0031534	.0013649	.0029803	.004116	.0358901
%RSD	33.81495	2159.187	41.03412	60.24707	182.6212	86.46938
#1	.0041585	.0007320	.0027860	.0016310	-.004497	.0267499
#2	.0021917	-.003259	.0023143	.0074024	-.004762	.0153464
#3	.0044020	.002965	.0048787	.0058071	.002497	.0824221

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006887	.0000906	.0001207	.0138875	-.001544	-.000301
Stddev	.000772	.0003393	.0000311	.0333682	.001567	.000789
%RSD	11.20895	374.5682	25.72639	240.2750	101.4963	262.2486
#1	-.007319	-.000209	.0001190	.0427562	-.002730	-.001187
#2	-.005996	.000459	.0001525	.0215526	.000233	-.000042
#3	-.007346	.000022	.0000905	-.022646	-.002135	.000327

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003887	.0269914	.0004267	.0699877	-.000479	.0015814
Stddev	.009990	.0096300	.0019779	.0409679	.000378	.0006265
%RSD	257.0116	35.67807	463.5249	58.53589	78.92551	39.61568
#1	-.013665	.0174967	.0003044	.0885809	-.000050	.0017985
#2	-.004298	.0267263	-.001487	.0230203	-.000625	.0020705
#3	.006302	.0367512	.002463	.0983620	-.000762	.0008753

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0658246	-.008383	.0332056	.5889882	-.002070	.0081881
Stddev	.0332517	.007549	.0002589	.1370158	.003105	.0017721
%RSD	50.51571	90.04366	.7795588	23.26291	150.0164	21.64314
#1	.0986400	-.017057	.0333777	.4311173	-.005654	.0066374
#2	.0666806	-.004795	.0329079	.6589286	-.000363	.0078070
#3	.0321531	-.003298	.0333312	.6769187	-.000192	.0101197

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB022 Acquired: 12/27/2024 18:36:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB022 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003787	-.006193	-.000724	-.002193	-.000547	-.000071
Stddev	.0004390	.002129	.000451	.001387	.002268	.000256
%RSD	115.9076	34.38061	62.31130	63.23809	414.3433	360.5159
#1	.0001200	-.003961	-.001217	-.001318	-.001856	-.000365
#2	.0008855	-.008202	-.000621	-.001469	-.001858	.000100
#3	.0001306	-.006417	-.000333	-.003792	.002072	.000052

Elem	Li6707
Units	ppm
Avg	F .0198137
Stddev	.0053452
%RSD	26.97711
#1	.0247206
#2	.0206026
#3	.0141179

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2064.663	26249.55	2008.840	1749.756	1871.453
Stddev	12.735	46.70	5.096	1.719	10.807
%RSD	.6168103	.1779059	.2536569	.0982552	.5774617
#1	2053.390	26207.45	2006.028	1749.098	1862.691
#2	2078.477	26241.42	2014.722	1748.463	1883.528
#3	2062.123	26299.78	2005.769	1751.707	1868.138

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-13 Acquired: 12/27/2024 18:40:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1413244	-.040834	.6291512	.0602639	-.008121	60.32534
Stddev	.0038914	.008047	.0054532	.0028145	.003311	.23164
%RSD	2.753535	19.70604	.8667479	4.670260	40.76756	.3839778
#1	.1452112	-.035239	.6254634	.0597377	-.008951	60.11256
#2	.1413336	-.050055	.6354152	.0633044	-.004474	60.57208
#3	.1374284	-.037206	.6265751	.0577497	-.010938	60.29139

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.067242	.0070050	.0060275	F 1083.118	.0985298	.1446123
Stddev	.003539	.0001220	.0000331	3.307	.0011560	.0011025
%RSD	.3315757	1.742096	.5491554	.3053065	1.173195	.7624023
#1	1.066207	.0071372	.0060656	1080.312	.0998644	.1442165
#2	1.071182	.0069811	.0060117	1086.764	.0978775	.1437622
#3	1.064335	.0068967	.0060053	1082.279	.0978474	.1458580

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3329180	155.5006	10.24520	89.92081	.1748001	-.029006
Stddev	.0012095	.2603	.01525	.29324	.0008647	.001109
%RSD	.3633044	.1674136	.1488099	.3261074	.4946543	3.824083
#1	.3328722	155.2484	10.23960	89.58227	.1740116	-.029208
#2	.3341498	155.7684	10.26245	90.08426	.1746640	-.027810
#3	.3317320	155.4849	10.23354	90.09589	.1757248	-.030001

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8838270	.1480512	.7823528	13.40198	8.175404	.0722473
Stddev	.0221480	.0066010	.0066840	.08727	.006925	.0011216
%RSD	2.505923	4.458600	.8543424	.6511437	.0847024	1.552456
#1	.8598417	.1483249	.7899481	13.30194	8.169073	.0710192
#2	.8881344	.1413176	.7773682	13.46245	8.182799	.0725052
#3	.9035050	.1545111	.7797422	13.44155	8.174339	.0732175

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-13 Acquired: 12/27/2024 18:40:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021593	2.222412	9.231532	.0629752	.5747745	.8115128
Stddev	.0004028	.004359	.071380	.0005379	.0019895	.0049265
%RSD	18.65477	.1961293	.7732175	.8541703	.3461433	.6070810
#1	.0021734	2.227190	9.149136	.0623544	.5726415	.8065345
#2	.0025549	2.218652	9.270949	.0633016	.5765800	.8163859
#3	.0017496	2.221395	9.274512	.0632698	.5751019	.8116180

Elem	Li6707
Units	ppm
Avg	.1337138
Stddev	.0057594
%RSD	4.307241
#1	.1273078
#2	.1384636
#3	.1353702

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2481.391	31595.42	2602.459	2089.020	1550.723
Stddev	8.245	272.34	20.642	15.524	5.417
%RSD	.3322759	.8619528	.7931788	.7431247	.3493179
#1	2472.019	31289.85	2624.310	2073.673	1544.478
#2	2487.527	31683.89	2583.288	2088.673	1554.148
#3	2484.628	31812.53	2599.778	2104.715	1553.543

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-14 Acquired: 12/27/2024 18:44:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1252263	-.034733	.4997781	.0610319	-.008759	51.37658
Stddev	.0031066	.000757	.0009214	.0025795	.004072	.19925
%RSD	2.480774	2.179100	.1843661	4.226466	46.48162	.3878293
#1	.1275877	-.033908	.5001182	.0595128	-.009400	51.21665
#2	.1217071	-.035395	.4987350	.0640102	-.004406	51.59978
#3	.1263841	-.034897	.5004811	.0595727	-.012473	51.31330

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6961820	.0056244	.0063750	F 1097.902	.0802687	.1495077
Stddev	.0051934	.0002506	.0000701	1.004	.0015075	.0013225
%RSD	.7459785	4.456118	1.099033	.0914487	1.878105	.8845486
#1	.6950405	.0056343	.0063663	1097.813	.0795783	.1508840
#2	.7018511	.0058700	.0064491	1098.948	.0819978	.1493925
#3	.6916543	.0053690	.0063098	1096.946	.0792300	.1482467

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2988531	146.4994	12.70779	119.5241	.1737719	-.028303
Stddev	.0057153	.1234	.01856	.2906	.0010451	.001192
%RSD	1.912412	.0842567	.1460422	.2431320	.6014262	4.211440
#1	.2986131	146.3855	12.70651	119.2469	.1740323	-.028858
#2	.3046846	146.6306	12.72696	119.8265	.1746622	-.029117
#3	.2932616	146.4820	12.68991	119.4990	.1726213	-.026935

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.285788	.1349632	1.095955	9.250576	F 15.30469	.0636977
Stddev	.014946	.0017210	.002482	.013525	.08332	.0020668
%RSD	1.162390	1.275133	.2264364	.1462055	.5444392	3.244704
#1	1.276813	.1335791	1.093875	9.235976	15.35064	.0640244
#2	1.277510	.1344205	1.098702	9.253074	15.35493	.0655817
#3	1.303041	.1368901	1.095287	9.262678	15.20851	.0614870

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-14 Acquired: 12/27/2024 18:44:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045043	1.926615	8.867994	.0570486	.8987905	.9510654
Stddev	.0005702	.014046	.136803	.0018910	.0043798	.0007854
%RSD	12.65857	.7290588	1.542663	3.314628	.4873008	.0825781
#1	.0045409	1.939369	8.935841	.0587793	.8955612	.9515201
#2	.0050553	1.928914	8.957614	.0573361	.8970345	.9515176
#3	.0039167	1.911561	8.710528	.0550303	.9037759	.9501585

Elem	Li6707
Units	ppm
Avg	.1243006
Stddev	.0026222
%RSD	2.109569
#1	.1215573
#2	.1267820
#3	.1245624

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2469.695	31507.76	2586.397	2080.092	1516.342
Stddev	9.949	294.80	17.924	15.770	8.488
%RSD	.4028450	.9356347	.6930151	.7581387	.5597369
#1	2460.882	31817.23	2583.739	2096.644	1509.295
#2	2467.720	31475.83	2569.950	2078.389	1513.965
#3	2480.484	31230.23	2605.501	2065.242	1525.764

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-15 Acquired: 12/27/2024 18:48:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1024597	-.017609	.1167954	.0233113	-.019342	36.75688
Stddev	.0030801	.002838	.0022586	.0066949	.004943	1.00791
%RSD	3.006196	16.11758	1.933825	28.71942	25.55704	2.742104
#1	.0992211	-.014354	.1193369	.0196492	-.024301	37.11920
#2	.1028060	-.019568	.1160315	.0192464	-.014415	35.61790
#3	.1053521	-.018905	.1150177	.0310384	-.019311	37.53355

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6376857	.0041423	.0039688	F 913.6489	.0758461	.1276212
Stddev	.0154142	.0001987	.0002032	22.1286	.0005463	.0007789
%RSD	2.417201	4.797745	5.120132	2.422007	.7203298	.6103553
#1	.6421451	.0039554	.0039158	922.7507	.0753023	.1267606
#2	.6205335	.0041205	.0041932	888.4209	.0763950	.1278249
#3	.6503786	.0043511	.0037973	929.7752	.0758409	.1282779

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1651938	100.9383	9.219514	39.47703	.1220273	-.017403
Stddev	.0066401	2.3805	.209909	.86732	.0014953	.000692
%RSD	4.019592	2.358375	2.276793	2.197012	1.225370	3.976070
#1	.1633847	101.9433	9.314652	39.80459	.1223142	-.017990
#2	.1596458	98.2201	8.978882	38.49364	.1233583	-.017578
#3	.1725510	102.6515	9.365009	40.13286	.1204093	-.016640

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7298004	.0823347	.3376251	9.730688	8.472772	.0529222
Stddev	.0244829	.0081547	.0020200	.376978	.007042	.0046576
%RSD	3.354741	9.904306	.5982860	3.874114	.0831175	8.800881
#1	.7278740	.0802500	.3385567	9.894873	8.465839	.0549965
#2	.7063375	.0754247	.3390112	9.299462	8.472560	.0475878
#3	.7551896	.0913293	.3353075	9.997731	8.479918	.0561824

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-15 Acquired: 12/27/2024 18:48:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071600	1.138489	8.925117	.0207544	.6540237	.5792582
Stddev	.0007574	.005216	.125382	.0048922	.0147422	.0151073
%RSD	10.57835	.4581132	1.404826	23.57202	2.254072	2.608044
#1	.0074084	1.136795	8.961503	.0151414	.6613377	.5869432
#2	.0063096	1.134332	8.785566	.0230088	.6370546	.5618533
#3	.0077621	1.144342	9.028282	.0241129	.6636787	.5889780

Elem	Li6707
Units	ppm
Avg	.0997636
Stddev	.0056212
%RSD	5.634536
#1	.1026724
#2	.0932840
#3	.1033343

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2271.509	28884.04	2372.103	1901.934	1599.957
Stddev	5.651	97.38	31.059	13.537	1.965
%RSD	.2487642	.3371361	1.309361	.7117409	.1228186
#1	2269.294	28889.02	2360.317	1896.043	1600.231
#2	2267.301	28784.27	2407.330	1892.341	1597.870
#3	2277.931	28978.83	2348.661	1917.418	1601.771

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-16 Acquired: 12/27/2024 18:52:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK26 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1158689	-.045541	.6401999	.0596853	-.007357	68.85900	.7631518
Stddev	.0011729	.003203	.0014216	.0040193	.000733	.09451	.0013733
%RSD	1.012225	7.034200	.2220572	6.734182	9.959438	.1372538	.1799480
#1	.1172223	-.046441	.6418079	.0567563	-.006535	68.93303	.7616854
#2	.1152349	-.048198	.6391100	.0580321	-.007596	68.75254	.7644077
#3	.1151496	-.041984	.6396816	.0642676	-.007940	68.89142	.7633624

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079380	.0028710	350.9193	.1063301	.1215035	.3060321	154.7798
Stddev	.0000182	.0000395	.8973	.0037232	.0002775	.0021836	.3045
%RSD	.2295163	1.375197	.2556943	3.501537	.2284011	.7135105	.1967070
#1	.0079328	.0029005	351.8379	.1059880	.1215103	.3083496	154.9737
#2	.0079583	.0028864	350.8749	.1027898	.1217776	.3040132	154.9368
#3	.0079230	.0028262	350.0450	.1102126	.1212227	.3057334	154.4289

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.112792	76.63945	.1614063	-.027207	.6157661	.1353333	.7708790
Stddev	.010335	.15517	.0011629	.001692	.0200691	.0019600	.0299756
%RSD	.1134129	.2024648	.7204608	6.217302	3.259206	1.448294	3.888491
#1	9.121718	76.59127	.1602634	-.026991	.6385038	.1364241	.7705600
#2	9.115189	76.81300	.1625881	-.025634	.6005220	.1365053	.7410642
#3	9.101469	76.51409	.1613673	-.028996	.6082726	.1330706	.8010128

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.98655	6.614190	.0935715	.0058819	1.097037	9.651433	.0250760
Stddev	.05226	.004425	.0036014	.0001080	.004817	.088208	.0013182
%RSD	.2905411	.0668943	3.848843	1.836645	.4390851	.9139403	5.256688
#1	18.04005	6.609520	.0934731	.0059790	1.091657	9.638873	.0265948
#2	17.98396	6.614730	.0972211	.0057655	1.098507	9.570177	.0244034
#3	17.93563	6.618319	.0900203	.0059011	1.100948	9.745248	.0242298

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-16 Acquired: 12/27/2024 18:52:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK26 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4116993	.2084935	.1729596
Stddev	.0036604	.0007596	.0022446
%RSD	.8890868	.3643373	1.297773
#1	.4156953	.2089131	.1703685
#2	.4108936	.2089507	.1742038
#3	.4085088	.2076166	.1743067

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2412.448	30696.47	2457.221	2025.342	1665.175
Stddev	3.631	921.99	15.872	58.989	3.051
%RSD	.1505081	3.003573	.6459396	2.912530	.1832060
#1	2408.403	30559.76	2439.599	2014.014	1661.662
#2	2413.512	31679.17	2470.394	2089.173	1667.154
#3	2415.427	29850.46	2461.669	1972.839	1666.710

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-17 Acquired: 12/27/2024 18:56:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0280409	.0169813	.0542007	-.032115	-.032596	6.906095
Stddev	.0028055	.0037833	.0047942	.003200	.007610	.079111
%RSD	10.00515	22.27904	8.845336	9.963689	23.34658	1.145531
#1	.0252753	.0188506	.0562258	-.032652	-.023831	6.963209
#2	.0308847	.0126272	.0487262	-.035012	-.037518	6.815796
#3	.0279626	.0194660	.0576502	-.028681	-.036440	6.939280

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0448573	.0018614	.0010443	F 2470.086	.0450438	.0758001
Stddev	.0016507	.0000946	.0000198	48.358	.0008385	.0003597
%RSD	3.679986	5.080865	1.895638	1.957757	1.861533	.4745078
#1	.0430122	.0018308	.0010289	2462.476	.0440866	.0757430
#2	.0453655	.0019675	.0010666	2425.983	.0456482	.0754724
#3	.0461942	.0017859	.0010375	2521.797	.0453967	.0761849

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0339343	38.18254	1.250378	110.2531	.0628671	-.007735
Stddev	.0023866	.42398	.013286	1.0260	.0007591	.000343
%RSD	7.032929	1.110410	1.062576	.9305995	1.207487	4.437488
#1	.0366875	38.38632	1.252276	110.4737	.0636826	-.007450
#2	.0324531	37.69514	1.236245	109.1347	.0627377	-.007639
#3	.0326624	38.46616	1.262614	111.1509	.0621811	-.008116

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.238932	.0247697	.2259154	4.709198	1.338458	.0471815
Stddev	.017508	.0022623	.0041096	.105478	.002908	.0015539
%RSD	1.413127	9.133242	1.819075	2.239820	.2172647	3.293569
#1	1.259129	.0236446	.2212492	4.795131	1.335654	.0486594
#2	1.229597	.0273740	.2275009	4.591485	1.341460	.0455613
#3	1.228070	.0232906	.2289960	4.740979	1.338259	.0473237

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-17 Acquired: 12/27/2024 18:56:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025960	31.53101	5.067032	.0170632	-.026088	1.606611
Stddev	.0019619	.05731	.069263	.0002268	.007305	.012532
%RSD	75.57399	.1817671	1.366939	1.329254	28.00325	.7800316
#1	.0046423	31.55870	5.104238	.0168678	-.028923	1.609352
#2	.0024146	31.56922	4.987117	.0173119	-.031550	1.592936
#3	.0007311	31.46511	5.109741	.0170098	-.017790	1.617546

Elem	Li6707
Units	ppm
Avg	.0630821
Stddev	.0018257
%RSD	2.894144
#1	.0649182
#2	.0612670
#3	.0630611

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2008.704	25646.86	2146.190	1678.474	1446.776
Stddev	5.095	253.23	18.866	23.629	3.271
%RSD	.2536494	.9873813	.8790396	1.407771	.2260898
#1	2002.912	25935.49	2133.796	1705.449	1443.392
#2	2010.706	25543.13	2167.901	1668.530	1447.016
#3	2012.495	25461.97	2136.871	1661.441	1449.920

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-18 Acquired: 12/27/2024 19:00:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK28 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000495	.0008857	-.001548	-.000227	-.001311	-.000431	-.023104
Stddev	.002394	.0000779	.000269	.002415	.000780	.004177	.000326
%RSD	483.6682	8.796552	17.36463	1065.204	59.48343	968.4363	1.412776
#1	-.003146	.0008718	-.001799	.001910	-.001713	-.000198	-.023242
#2	.000152	.0008157	-.001264	.000256	-.001807	.003624	-.023339
#3	.001509	.0009696	-.001581	-.002847	-.000412	-.004720	-.022731

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000140	-.000038	-.036290	-.001278	.0001363	-.010804	.0187470
Stddev	.000048	.000027	.003585	.000206	.0000890	.000404	.0063240
%RSD	33.85752	70.54568	9.879883	16.08252	65.32433	3.740879	33.73337
#1	-.000099	-.000056	-.036416	-.001268	.0000358	-.011186	.0230025
#2	-.000130	-.000051	-.039810	-.001489	.0001676	-.010844	.0217585
#3	-.000192	-.000007	-.032643	-.001078	.0002054	-.010381	.0114801

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000054	.1110646	-.000107	.0004378	.0435540	-.004103	.0056358
Stddev	.000180	.0292323	.000024	.0004918	.0040766	.002481	.0000929
%RSD	334.5448	26.32007	22.33151	112.3313	9.359930	60.47158	1.649320
#1	.000135	.1378619	-.000113	.0002317	.0433718	-.001485	.0055524
#2	-.000073	.0798908	-.000080	.0000826	.0477187	-.006420	.0056190
#3	-.000223	.1154409	-.000127	.0009990	.0395716	-.004404	.0057360

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-2.80655	-.000327	-.007625	-.000162	-.007220	-.008097	-.004628
Stddev	.00557	.000296	.000342	.000060	.001264	.000360	.000201
%RSD	.1986326	90.59627	4.484281	36.86150	17.50096	4.442890	4.340208
#1	-2.80680	-.000665	-.007436	-.000231	-.007746	-.007778	-.004407
#2	-2.81199	-.000112	-.007420	-.000125	-.005778	-.008025	-.004680
#3	-2.80085	-.000205	-.008020	-.000130	-.008135	-.008487	-.004798

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-18 Acquired: 12/27/2024 19:00:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK28 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.000531	-.000225	.0020120
Stddev	.001149	.000104	.0003520
%RSD	216.3274	46.08673	17.49590
#1	-.000594	-.000147	.0017556
#2	-.001648	-.000186	.0024133
#3	.000648	-.000343	.0018670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7724.522	101996.1	6956.378	6494.701	7520.086
Stddev	85.930	378.5	86.466	34.070	79.025
%RSD	1.112430	.3711272	1.242977	.5245815	1.050852
#1	7626.365	101757.9	7008.021	6477.886	7429.743
#2	7761.040	102432.6	6856.556	6533.910	7554.141
#3	7786.162	101797.9	7004.558	6472.307	7576.373

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-19 Acquired: 12/27/2024 19:04:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK29 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037727	-.000379	-.000868	.0015326	-.005328	.0257770	-.006296
Stddev	.0018909	.001714	.000521	.0027900	.003210	.0166779	.001089
%RSD	50.11974	451.9127	59.99146	182.0462	60.24794	64.70049	17.29214
#1	.0055227	-.001515	-.001260	.0039485	-.002395	.0073957	-.006669
#2	.0040286	.001592	-.001067	-.001521	-.004832	.0299931	-.005070
#3	.0017670	-.001214	-.000277	.002170	-.008757	.0399423	-.007150

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000234	.0000426	.0599531	-.001433	.0000126	-.003277	.0598684
Stddev	.0000884	.0000832	.0400738	.000161	.0001573	.005334	.0373640
%RSD	377.6112	195.2091	66.84189	11.22007	1252.966	162.7853	62.41015
#1	.0001253	.0001374	.0515130	-.001374	-.000066	-.000471	.0521080
#2	-.000034	-.000018	.1035747	-.001615	-.000090	-.009428	.1005032
#3	-.000021	.000009	.0247716	-.001310	.000194	.000069	.0269940

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011113	.0333295	.0004881	.0007104	-.007144	.0005409	.0302719
Stddev	.0014525	.1476829	.0001884	.0009364	.018768	.0101055	.0003038
%RSD	130.7057	443.0994	38.60746	131.8115	262.7324	1868.409	1.003445
#1	.0010306	-.036265	.0004288	.0004216	.004545	.0089003	.0300532
#2	-.000299	.202951	.0003364	.0017572	-.028792	.0034118	.0306188
#3	.002602	-.066698	.0006991	-.000048	.002817	-.010689	.0301438

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3631622	-.005163	-.005348	.0001000	-.002899	-.001917	-.006085
Stddev	.1607526	.002185	.002491	.0007439	.002455	.000888	.000907
%RSD	44.26468	42.31313	46.57067	744.1262	84.68313	46.32254	14.90428
#1	.3327840	-.006912	-.002854	.0003057	-.003889	-.001822	-.006264
#2	.5369366	-.005862	-.005354	.0007194	-.000104	-.002850	-.005102
#3	.2197661	-.002714	-.007835	-.000725	-.004705	-.001081	-.006889

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-19 Acquired: 12/27/2024 19:04:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK29 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002634	.0001256	.0120559
Stddev	.003018	.0003573	.0044243
%RSD	114.5906	284.4164	36.69787
#1	.000573	-.000008	.0167091
#2	-.005418	-.000145	.0115555
#3	-.003056	.000531	.0079031

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2085.304	26611.86	2029.033	1777.113	1895.248
Stddev	1.995	90.14	12.280	3.983	1.889
%RSD	.0956617	.3387071	.6052251	.2241378	.0996719
#1	2083.271	26653.73	2019.317	1778.729	1897.424
#2	2087.258	26508.41	2024.946	1772.576	1894.292
#3	2085.382	26673.45	2042.835	1780.034	1894.028

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-20 Acquired: 12/27/2024 19:08:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK30 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1671425	-.048046	1.724887	.0928750	.0006687	80.24610
Stddev	.0021905	.001524	.007609	.0061160	.0020430	.14574
%RSD	1.310547	3.170972	.4411216	6.585240	305.5117	.1816146
#1	.1690303	-.047111	1.731992	.0859429	.0000928	80.17431
#2	.1676565	-.047223	1.725810	.0951724	-.001024	80.15019
#3	.1647407	-.049804	1.716859	.0975097	.002938	80.41381

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.561329	.0082446	.0071732	414.5064	.0987703	.1617285
Stddev	.010201	.0001901	.0002397	.4972	.0007547	.0010575
%RSD	.3982519	2.305620	3.341628	.1199524	.7640531	.6538822
#1	2.559209	.0081810	.0073084	415.0772	.0995960	.1624027
#2	2.552355	.0084584	.0073148	414.2747	.0985984	.1622732
#3	2.572423	.0080945	.0068965	414.1673	.0981164	.1605097

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2793297	182.1550	25.19163	63.67191	.1768579	-.029659
Stddev	.0078620	.7054	.06663	.02696	.0003560	.001799
%RSD	2.814602	.3872756	.2644867	.0423403	.2012995	6.066183
#1	.2846146	181.7589	25.16145	63.69895	.1770240	-.031625
#2	.2830798	181.7365	25.14543	63.67174	.1764492	-.028094
#3	.2702948	182.9694	25.26801	63.64503	.1771005	-.029257

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.884507	.1696361	.6320345	9.473109	F 17.23760	.1230692
Stddev	.046215	.0093224	.0034842	.112384	.11475	.0012530
%RSD	.7853632	5.495512	.5512752	1.186346	.6657104	1.018116
#1	5.935769	.1594423	.6330228	9.547011	17.29409	.1219409
#2	5.846031	.1717375	.6281629	9.528538	17.31315	.1228489
#3	5.871721	.1777284	.6349179	9.343778	17.10555	.1244177

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-20 Acquired: 12/27/2024 19:08:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK30 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071906	10.04526	9.322852	.0579561	1.063474	.9909130
Stddev	.0009159	.06807	.055028	.0009586	.003725	.0042550
%RSD	12.73691	.6776105	.5902480	1.654029	.3502249	.4294050
#1	.0061875	10.10089	9.385684	.0590418	1.062446	.9954612
#2	.0079822	10.06552	9.299634	.0576003	1.060372	.9902485
#3	.0074020	9.96936	9.283238	.0572263	1.067605	.9870293

Elem	Li6707
Units	ppm
Avg	.0824572
Stddev	.0035208
%RSD	4.269859
#1	.0802761
#2	.0805765
#3	.0865190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2489.732	31493.42	2542.232	2084.612	1643.289
Stddev	1.267	126.83	1.513	7.365	5.614
%RSD	.0508983	.4027042	.0595071	.3532976	.3416210
#1	2488.313	31403.15	2540.560	2091.027	1639.529
#2	2490.133	31638.42	2542.630	2086.238	1640.597
#3	2490.751	31438.68	2543.506	2076.570	1649.742

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-21 Acquired: 12/27/2024 19:12:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK31 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1779055	-.046837	.7677996	.0963672	.0064454	76.12159	1.151305
Stddev	.0016525	.001083	.0040249	.0009423	.0011575	.32154	.003594
%RSD	.9288469	2.311912	.5242056	.9777773	17.95870	.4223998	.3121349
#1	.1794588	-.046906	.7632360	.0968678	.0052185	75.90290	1.150818
#2	.1780885	-.045721	.7708426	.0952804	.0075181	75.97110	1.147979
#3	.1761691	-.047883	.7693204	.0969536	.0065997	76.49078	1.155117

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081441	.0095017	103.8566	.0955877	.1591972	.1713942	178.1219
Stddev	.0000457	.0000989	.3712	.0004929	.0009309	.0047046	.7307
%RSD	.5607757	1.041008	.3574287	.5156076	.5847393	2.744902	.4102209
#1	.0081717	.0095924	103.4710	.0951361	.1601763	.1716775	177.4633
#2	.0080914	.0093962	103.8872	.0955137	.1583234	.1665543	177.9944
#3	.0081692	.0095165	104.2115	.0961134	.1590920	.1759507	178.9079

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.72297	34.35879	.1975486	-.028092	4.084854	.1566262	.5044416
Stddev	.07279	.21702	.0019789	.000794	.019778	.0086342	.0011820
%RSD	.3350841	.6316227	1.001725	2.826551	.4841721	5.512587	.2343171
#1	21.69249	34.12228	.1988110	-.028907	4.080336	.1647064	.5056032
#2	21.67038	34.40535	.1985669	-.027320	4.067727	.1576438	.5032402
#3	21.80605	34.54876	.1952679	-.028049	4.106500	.1475283	.5044815

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.920028	8.072851	.0406918	.0062020	4.137840	6.932078	.0299499
Stddev	.139825	.007187	.0006102	.0004844	.016763	.066215	.0025941
%RSD	1.765465	.0890244	1.499530	7.810221	.4051078	.9552025	8.661348
#1	7.762763	8.068160	.0400071	.0067242	4.121790	6.909970	.0269671
#2	8.030313	8.081125	.0411780	.0057674	4.155234	6.879744	.0316791
#3	7.967008	8.069267	.0408905	.0061143	4.136496	7.006518	.0312035

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-21 Acquired: 12/27/2024 19:12:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK31 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9084386	.0896693	.0760446
Stddev	.0085910	.0008222	.0043698
%RSD	.9456906	.9169464	5.746380
#1	.9012128	.0887383	.0719658
#2	.9179376	.0899738	.0755114
#3	.9061652	.0902959	.0806565

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2951.236	37781.49	2969.190	2501.253	1712.426
Stddev	10.872	129.68	16.153	6.940	4.678
%RSD	.3683764	.3432492	.5440088	.2774757	.2731782
#1	2946.595	37742.88	2981.250	2498.811	1712.327
#2	2963.658	37675.48	2975.483	2495.863	1717.153
#3	2943.455	37926.09	2950.838	2509.084	1707.798

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5027-22 Acquired: 12/27/2024 19:16:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK32 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2199605	-.078301	.4025451	.1419404	.0196476	87.01902	1.045643
Stddev	.0037382	.005276	.0016405	.0111453	.0040056	5.31695	.062423
%RSD	1.699464	6.737787	.4075293	7.852094	20.38711	6.110101	5.969804
#1	.2240292	-.072282	.4042281	.1333717	.0177723	81.43718	.980055
#2	.2191745	-.082124	.4009507	.1545404	.0242468	92.02405	1.104327
#3	.2166779	-.080497	.4024564	.1379090	.0169236	87.59582	1.052546

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088464	.0099431	24.62620	.1070756	.1870569	.2115608	225.2978
Stddev	.0004012	.0005350	1.40024	.0045585	.0019080	.0147743	13.3356
%RSD	4.535327	5.380733	5.685964	4.257234	1.020018	6.983472	5.919092
#1	.0084805	.0104571	23.16652	.1106120	.1892595	.2036641	211.1619
#2	.0092754	.0093893	25.95826	.1086838	.1860006	.2286054	237.6545
#3	.0087834	.0099831	24.75381	.1019310	.1859106	.2024130	227.0769

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.82376	22.02966	.2369595	-.037201	3.386488	.1962095	.5557224
Stddev	1.43348	1.30594	.0027771	.002464	.147476	.0090889	.0275256
%RSD	5.774617	5.928076	1.171965	6.624614	4.354840	4.632260	4.953124
#1	23.32604	20.63407	.2401661	-.039639	3.244055	.1864651	.5776656
#2	26.18293	23.22213	.2353450	-.037253	3.538537	.2044572	.5646640
#3	24.96232	22.23280	.2353673	-.034711	3.376871	.1977062	.5248377

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.767764	3.655344	.0361930	.0055814	3.427062	6.991125	.0228362
Stddev	.835182	.039613	.0079140	.0003405	.048724	.309873	.0024239
%RSD	8.550386	1.083692	21.86621	6.101050	1.421742	4.432373	10.61410
#1	8.911728	3.698665	.0270861	.0055209	3.480918	6.704165	.0204012
#2	10.58040	3.620969	.0400904	.0052752	3.386039	7.319704	.0252488
#3	9.81117	3.646397	.0414025	.0059481	3.414230	6.949505	.0228587

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5027-22 Acquired: 12/27/2024 19:16:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK32 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9731005	-.113862	.0935180
Stddev	.0621347	.007093	.0043784
%RSD	6.385225	6.229549	4.681871
#1	.9088204	-.106112	.0895419
#2	1.032841	-.120032	.0982104
#3	.977641	-.115442	.0928016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2938.299	37920.70	2928.179	2509.401	1745.520
Stddev	11.596	1244.79	129.225	86.574	15.610
%RSD	.3946494	3.282621	4.413163	3.449994	.8942735
#1	2926.151	37242.20	3062.385	2463.425	1728.035
#2	2949.250	37162.57	2804.589	2455.515	1758.051
#3	2939.496	39357.32	2917.562	2609.264	1750.476

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-01 Acquired: 12/27/2024 19:20:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1282425	-.044457	.2819356	.0757469	-.007310	41.99373
Stddev	.0070618	.001109	.0028690	.0016770	.001619	.16445
%RSD	5.506637	2.495089	1.017618	2.213975	22.14544	.3916105
#1	.1262966	-.045476	.2790756	.0738201	-.005642	42.18146
#2	.1223576	-.044620	.2848136	.0765430	-.008875	41.87509
#3	.1360732	-.043276	.2819176	.0768776	-.007412	41.92465

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.314977	.0059056	.0058421	423.7538	.0848867	.1268342
Stddev	.005200	.0000832	.0001971	1.7703	.0009114	.0012514
%RSD	.3954197	1.409363	3.373999	.4177719	1.073616	.9866591
#1	1.320366	.0059848	.0056225	425.6959	.0858014	.1276770
#2	1.309991	.0059131	.0060038	422.2302	.0848798	.1274294
#3	1.314573	.0058189	.0059001	423.3354	.0839788	.1253963

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3276209	161.3320	14.65933	93.39627	.2128410	-.028866
Stddev	.0077134	.7938	.09413	.69294	.0004329	.001299
%RSD	2.354361	.4920138	.6421217	.7419362	.2034030	4.501770
#1	.3313508	162.0405	14.76398	94.18708	.2132696	-.027552
#2	.3327604	160.4742	14.58156	93.10635	.2128494	-.030151
#3	.3187515	161.4814	14.63246	92.89538	.2124039	-.028895

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5937292	.1271879	.4627353	7.333342	F 13.70187	.0522102
Stddev	.0270814	.0066961	.0025559	.051858	.01397	.0017601
%RSD	4.561229	5.264772	.5523504	.7071478	.1019522	3.371264
#1	.6090733	.1325345	.4598753	7.391591	13.71125	.0542426
#2	.6096541	.1196774	.4647962	7.292195	13.68581	.0512091
#3	.5624601	.1293520	.4635343	7.316241	13.70854	.0511789

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-01 Acquired: 12/27/2024 19:20:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056744	.8940946	4.809926	.0194683	.5524077	.1724413
Stddev	.0006676	.0048568	.065224	.0014356	.0049640	.0013794
%RSD	11.76440	.5432044	1.356021	7.373847	.8986149	.7999059
#1	.0059230	.8908888	4.885053	.0210761	.5508074	.1727218
#2	.0049182	.8996825	4.767769	.0190138	.5484412	.1736589
#3	.0061820	.8917125	4.776957	.0183150	.5579745	.1709433

Elem	Li6707
Units	ppm
Avg	.0988436
Stddev	.0034373
%RSD	3.477502
#1	.0974804
#2	.0962970
#3	.1027534

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2585.315	32867.00	2619.301	2172.177	1695.592
Stddev	6.687	63.52	32.235	2.531	2.396
%RSD	.2586671	.1932750	1.230687	.1165158	.1412862
#1	2593.015	32854.94	2582.079	2171.048	1697.274
#2	2581.966	32810.38	2637.954	2170.408	1696.653
#3	2580.963	32935.69	2637.870	2175.076	1692.849

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-02 Acquired: 12/27/2024 19:24:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1152151	-.044385	1.886869	.0546729	-.005215	51.15467
Stddev	.0055410	.001257	.002099	.0032590	.002026	.11794
%RSD	4.809301	2.831522	.1112390	5.960813	38.84205	.2305589
#1	.1206454	-.043669	1.888010	.0572813	-.007483	51.05024
#2	.1095696	-.043650	1.884446	.0510197	-.003584	51.28259
#3	.1154304	-.045836	1.888150	.0557178	-.004579	51.13117

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.102342	.0064721	.0088078	298.0966	.6847605	.0995671
Stddev	.001481	.0000911	.0000160	.2129	.0016401	.0003205
%RSD	.1343537	1.407129	.1819774	.0714073	.2395123	.3218645
#1	1.101089	.0063835	.0088263	297.8508	.6838561	.0997526
#2	1.101959	.0064672	.0087992	298.2251	.6837718	.0997517
#3	1.103976	.0065654	.0087979	298.2137	.6866537	.0991971

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4198861	145.8075	6.791157	146.1536	.5274502	-.025736
Stddev	.0082843	.2482	.001388	.3349	.0006078	.000809
%RSD	1.972993	.1702527	.0204344	.2291214	.1152243	3.143806
#1	.4103222	145.5471	6.792013	146.4351	.5281256	-.026524
#2	.4248372	145.8338	6.791903	146.2424	.5272776	-.025776
#3	.4244988	146.0415	6.789556	145.7833	.5269475	-.024908

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7319094	.1361928	2.109811	5.835451	F 12.23056	.0553003
Stddev	.0242654	.0098194	.011120	.128537	.00971	.0005396
%RSD	3.315352	7.209896	.5270656	2.202691	.0794121	.9756892
#1	.7586846	.1440569	2.108026	5.971492	12.23751	.0555273
#2	.7113716	.1393343	2.099691	5.818826	12.23471	.0546844
#3	.7256721	.1251871	2.121715	5.716036	12.21947	.0556893

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-02 Acquired: 12/27/2024 19:24:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0097976	9.142809	5.845428	.0923396	.5371929	.1692335
Stddev	.0003482	.014351	.015520	.0005475	.0044916	.0008945
%RSD	3.554486	.1569686	.2655127	.5929073	.8361172	.5285371
#1	.0101010	9.130504	5.860154	.0922631	.5353940	.1682181
#2	.0094173	9.158574	5.829220	.0918343	.5423051	.1699048
#3	.0098743	9.139348	5.846910	.0929212	.5338796	.1695777

Elem	Li6707
Units	ppm
Avg	.0936842
Stddev	.0029916
%RSD	3.193273
#1	.0946896
#2	.0960435
#3	.0903194

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2326.365	29649.46	2356.305	1958.595	1761.088
Stddev	4.032	53.41	8.291	8.756	4.529
%RSD	.1733317	.1801309	.3518851	.4470494	.2571674
#1	2328.419	29607.39	2347.100	1951.821	1761.942
#2	2328.958	29631.44	2363.187	1968.482	1765.129
#3	2321.720	29709.54	2358.629	1955.482	1756.192

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-03 Acquired: 12/27/2024 19:28:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0554449	-.021843	1.113906	.0124122	-.023759	30.22535
Stddev	.0073107	.005553	.004739	.0102715	.004064	.13137
%RSD	13.18546	25.42284	.4253993	82.75365	17.10338	.4346267
#1	.0493215	-.023869	1.111798	.0029658	-.026437	30.35627
#2	.0635388	-.015562	1.119333	.0109241	-.025758	30.22625
#3	.0534743	-.026099	1.110588	.0233466	-.019084	30.09354

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5025500	.0040789	.0070687	F 1093.313	.1368671	.0863647
Stddev	.0021395	.0002414	.0001040	4.740	.0009735	.0003627
%RSD	.4257219	5.918659	1.471621	.4335796	.7112792	.4199330
#1	.5046874	.0038675	.0071502	1098.773	.1378759	.0865714
#2	.5025541	.0040271	.0069515	1090.921	.1359333	.0865768
#3	.5004085	.0043419	.0071044	1090.246	.1367920	.0859459

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1976527	101.7352	7.202506	591.0022	.1195832	-.019807
Stddev	.0016361	.2744	.026531	1.7259	.0008566	.000523
%RSD	.8277730	.2697593	.3683594	.2920248	.7162993	2.640378
#1	.1976754	101.9768	7.233133	592.8292	.1190381	-.019207
#2	.1992774	101.7919	7.187813	590.7781	.1205705	-.020046
#3	.1960054	101.4368	7.186571	589.3993	.1191411	-.020168

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.274327	.0818680	1.527117	4.723202	6.166240	.0667618
Stddev	.030869	.0030191	.002496	.114370	.014370	.0009135
%RSD	2.422391	3.687705	.1634559	2.421461	.2330382	1.368329
#1	1.261779	.0823905	1.525528	4.615723	6.150905	.0668777
#2	1.309494	.0786218	1.529994	4.843401	6.179395	.0676118
#3	1.251708	.0845917	1.525829	4.710480	6.168418	.0657958

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-03 Acquired: 12/27/2024 19:28:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050188	21.31544	4.966316	.0522571	.3152612	.3367475
Stddev	.0005644	.02897	.040480	.0025044	.0053248	.0008789
%RSD	11.24558	.1358965	.8150902	4.792378	1.689021	.2609865
#1	.0055151	21.28918	4.920813	.0547037	.3205789	.3377487
#2	.0044048	21.34652	4.998328	.0523689	.3152754	.3363900
#3	.0051364	21.31063	4.979808	.0496987	.3099293	.3361036

Elem	Li6707
Units	ppm
Avg	.0738219
Stddev	.0013518
%RSD	1.831174
#1	.0742043
#2	.0723201
#3	.0749414

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2096.839	27100.16	2213.946	1778.194	1569.436
Stddev	5.713	24.70	10.380	4.670	2.394
%RSD	.2724407	.0911565	.4688537	.2625988	.1525509
#1	2098.884	27126.63	2224.419	1782.257	1569.790
#2	2101.247	27096.11	2203.661	1773.093	1571.634
#3	2090.385	27077.73	2213.758	1779.232	1566.885

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-04 Acquired: 12/27/2024 19:32:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1008427	-.031604	1.645102	.0366650	-.015731	44.65625	.8532688
Stddev	.0038993	.005545	.004630	.0080361	.003275	.48868	.0090315
%RSD	3.866698	17.54393	.2814314	21.91771	20.81708	1.094314	1.058454
#1	.1030227	-.032568	1.646425	.0412080	-.016169	45.21750	.8635732
#2	.1031645	-.025641	1.648926	.0273864	-.012259	44.42625	.8467265
#3	.0963410	-.036603	1.639954	.0414008	-.018764	44.32501	.8495069

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0052945	.0141467	692.1778	.1702081	.0995911	.4238752	128.9337
Stddev	.0001144	.0001895	8.1467	.0004141	.0000520	.0071474	1.3349
%RSD	2.161107	1.339369	1.176967	.2433140	.0522523	1.686217	1.035308
#1	.0053409	.0140577	701.5380	.1703091	.0995673	.4302119	130.4732
#2	.0053784	.0140181	688.3096	.1705623	.0995552	.4161275	128.2314
#3	.0051642	.0143643	686.6858	.1697528	.0996508	.4252863	128.0967

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.225080	375.9678	.1425407	-.022643	1.015533	.1288312	3.317807
Stddev	.088198	4.1070	.0015188	.001218	.017161	.0012882	.006962
%RSD	1.072310	1.092373	1.065536	5.379747	1.689844	.9998897	.2098387
#1	8.326034	380.6818	.1410972	-.023982	1.005926	.1273463	3.321647
#2	8.162981	374.0588	.1424001	-.022346	1.035346	.1296491	3.309771
#3	8.186224	373.1628	.1441250	-.021601	1.005328	.1294982	3.322004

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.597491	8.365625	.0492850	.0037071	14.08376	5.529157	.1217749
Stddev	.115886	.008318	.0046225	.0007940	.00603	.049260	.0003773
%RSD	2.070325	.0994324	9.379013	21.41921	.0428035	.8909172	.3098405
#1	5.731240	8.356989	.0523747	.0029936	14.09058	5.574134	.1213447
#2	5.534223	8.366304	.0439709	.0035653	14.08156	5.536825	.1219302
#3	5.527009	8.373583	.0515095	.0045625	14.07914	5.476513	.1220498

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-04 Acquired: 12/27/2024 19:32:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5105893	.2160806	.0967273
Stddev	.0022543	.0021666	.0042942
%RSD	.4415099	1.002683	4.439460
#1	.5118228	.2184310	.1015525
#2	.5119577	.2156476	.0953033
#3	.5079874	.2141632	.0933260

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2185.013	28007.79	2244.394	1839.862	1616.464
Stddev	2.431	48.87	21.204	1.927	.769
%RSD	.1112360	.1744928	.9447479	.1047431	.0475616
#1	2183.324	28037.22	2224.218	1837.679	1615.584
#2	2187.798	27951.37	2242.468	1841.327	1616.806
#3	2183.916	28034.76	2266.495	1840.580	1617.002

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-05 Acquired: 12/27/2024 19:40:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0874453	-.048044	1.391848	.0599189	.0019356	54.88532	1.006040
Stddev	.0001835	.001407	.003733	.0027028	.0029271	.24248	.004383
%RSD	.2098394	2.928256	.2682407	4.510745	151.2258	.4417970	.4356687
#1	.0874183	-.049639	1.389249	.0628291	-.001444	54.70807	1.009729
#2	.0876408	-.047510	1.390168	.0574875	.003664	54.78624	1.001195
#3	.0872768	-.046982	1.396126	.0594403	.003587	55.16165	1.007196

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059256	.0052587	64.05034	.1262071	.0807372	.2722984	123.4501
Stddev	.0001967	.0000605	.14940	.0009446	.0002014	.0092521	.0679
%RSD	3.318703	1.150373	.2332569	.7484711	.2495130	3.397779	.0550177
#1	.0059882	.0053042	64.05161	.1251628	.0809622	.2758879	123.3940
#2	.0057052	.0052818	63.90031	.1264562	.0806758	.2617894	123.4307
#3	.0060832	.0051900	64.19910	.1270022	.0805736	.2792178	123.5256

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.918311	36.02513	.1166281	-.020749	.4790040	.1295515	.9701921
Stddev	.024650	.11167	.0010340	.001071	.0468864	.0060057	.0029496
%RSD	.3562953	.3099733	.8865548	5.163190	9.788310	4.635751	.3040266
#1	6.926701	35.93489	.1155271	-.019518	.5293720	.1344952	.9725829
#2	6.890561	35.99049	.1175786	-.021473	.4366260	.1312913	.9710975
#3	6.937670	36.15002	.1167786	-.021255	.4710140	.1228680	.9668959

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.430344	9.275058	.0298216	.0047194	2.700984	6.309351	.0717472
Stddev	.056760	.007777	.0033168	.0001125	.004020	.054949	.0016461
%RSD	1.281159	.0838502	11.12220	2.382813	.1488186	.8709084	2.294356
#1	4.483032	9.273169	.0319140	.0047508	2.698020	6.281024	.0701282
#2	4.370241	9.268400	.0315535	.0048128	2.705559	6.274345	.0734192
#3	4.437760	9.283606	.0259974	.0045946	2.699373	6.372682	.0716943

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-05 Acquired: 12/27/2024 19:40:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6179766	.0847348	.0942081
Stddev	.0048092	.0003614	.0012647
%RSD	.7782175	.4264776	1.342488
#1	.6178502	.0843607	.0956657
#2	.6132318	.0847618	.0935581
#3	.6228477	.0850820	.0934005

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2415.361	30651.86	2371.490	2039.920	1858.924
Stddev	6.621	136.52	8.236	10.837	5.072
%RSD	.2741106	.4453920	.3472834	.5312250	.2728523
#1	2416.490	30680.10	2377.598	2036.867	1859.368
#2	2421.344	30503.43	2374.747	2030.938	1863.759
#3	2408.248	30772.06	2362.123	2051.956	1853.644

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-10 Acquired: 12/27/2024 19:44:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0753665	-.051577	.4153909	.0731636	.0044421	53.82341
Stddev	.0009493	.001427	.0014460	.0026711	.0018658	.23642
%RSD	1.259541	2.766446	.3481091	3.650884	42.00208	.4392490
#1	.0750447	-.051082	.4137237	.0706961	.0057356	53.55072
#2	.0746199	-.053186	.4163040	.0760000	.0023033	53.97088
#3	.0764348	-.050464	.4161450	.0727948	.0052873	53.94864

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9870166	.0059393	.0031574	54.11420	.0866149	.0882252
Stddev	.0054190	.0000829	.0000983	.11300	.0002235	.0004477
%RSD	.5490312	1.396392	3.113157	.2088148	.2580553	.5074509
#1	.9807678	.0059881	.0030609	53.99476	.0868599	.0883020
#2	.9904239	.0059863	.0031539	54.21940	.0865630	.0877441
#3	.9898582	.0058436	.0032574	54.12844	.0864220	.0886295

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2668124	141.1482	10.82873	22.70631	.1091162	-.024046
Stddev	.0031906	.7493	.04711	.10172	.0003716	.000059
%RSD	1.195838	.5308300	.4350874	.4479903	.3405831	.2462346
#1	.2634479	140.2863	10.77458	22.58937	.1087496	-.023993
#2	.2671947	141.6443	10.86028	22.77432	.1094927	-.024110
#3	.2697948	141.5141	10.85135	22.75524	.1091063	-.024035

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4813004	.1255514	.6002928	3.675838	F 14.34755	.0284970
Stddev	.0092180	.0046665	.0026811	.034937	.06090	.0018570
%RSD	1.915224	3.716824	.4466374	.9504618	.4244565	6.516311
#1	.4853529	.1209765	.6032156	3.670265	14.28362	.0306222
#2	.4877979	.1303044	.5979474	3.644022	14.35414	.0276811
#3	.4707504	.1253732	.5997155	3.713227	14.40488	.0271876

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-10 Acquired: 12/27/2024 19:44:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLL8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053913	1.490708	6.151791	.0359094	.5100505	.0432458
Stddev	.0003072	.008996	.074480	.0008414	.0014183	.0005094
%RSD	5.698540	.6034679	1.210705	2.343026	.2780705	1.177898
#1	.0050746	1.481645	6.067150	.0349535	.5084539	.0436294
#2	.0056881	1.490842	6.180917	.0365379	.5105327	.0434402
#3	.0054113	1.499635	6.207308	.0362367	.5111647	.0426679

Elem	Li6707
Units	ppm
Avg	.0944677
Stddev	.0013169
%RSD	1.393977
#1	.0959483
#2	.0940271
#3	.0934276

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2517.622	32075.41	2482.003	2135.834	1861.499
Stddev	6.491	76.83	25.938	6.375	2.729
%RSD	.2578370	.2395317	1.045024	.2984852	.1465793
#1	2511.358	32018.11	2511.631	2129.443	1860.896
#2	2517.191	32045.41	2463.394	2135.867	1859.122
#3	2524.319	32162.72	2470.985	2142.193	1864.478

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-11 Acquired: 12/27/2024 19:48:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLT9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1206366	-.049223	2.366089	.0703888	.0077922	52.37091
Stddev	.0034729	.002071	.005141	.0027087	.0006111	.12564
%RSD	2.878815	4.206876	.2172982	3.848171	7.842474	.2398991
#1	.1181627	-.051509	2.362436	.0709975	.0077680	52.27426
#2	.1246069	-.047473	2.371968	.0727413	.0071936	52.51293
#3	.1191404	-.048688	2.363862	.0674275	.0084151	52.32553

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.063549	.0062825	.0062880	33.10507	.1325958	.0748063
Stddev	.003790	.0002160	.0000234	.06975	.0005465	.0001426
%RSD	.1836759	3.437654	.3722436	.2106974	.4121681	.1905696
#1	2.059692	.0063395	.0063136	33.18555	.1326899	.0746977
#2	2.067269	.0064643	.0062677	33.06770	.1330891	.0747535
#3	2.063684	.0060437	.0062827	33.06197	.1320083	.0749677

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3560097	123.8311	4.071517	14.16878	.1456337	-.020473
Stddev	.0091384	.6572	.009746	.13025	.0001731	.000983
%RSD	2.566894	.5307385	.2393731	.9192811	.1188481	4.801523
#1	.3576266	123.4742	4.069906	14.30144	.1458335	-.021558
#2	.3642317	124.5896	4.081968	14.16383	.1455296	-.019640
#3	.3461708	123.4296	4.062676	14.04108	.1455380	-.020222

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3735943	.1624692	2.557413	9.091340	F 10.74011	.0376942
Stddev	.0255485	.0084640	.006591	.171279	.02700	.0024810
%RSD	6.838580	5.209613	.2577125	1.883979	.2514140	6.581931
#1	.3866264	.1610430	2.560011	9.196225	10.71402	.0393022
#2	.3441577	.1548089	2.549919	9.184107	10.73835	.0389434
#3	.3899987	.1715557	2.562308	8.893688	10.76794	.0348368

Reviewed By:mohan
On:12/31/2024
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Inst Id :P5

Sample Name: P5082-11 Acquired: 12/27/2024 19:48:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLT9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063011	3.307602	5.607586	.1461863	.6776939	.0252533
Stddev	.0011338	.004570	.042924	.0017441	.0038945	.0009408
%RSD	17.99434	.1381753	.7654593	1.193057	.5746693	3.725407
#1	.0069908	3.306902	5.617048	.1478845	.6733856	.0259514
#2	.0049925	3.312483	5.644989	.1462746	.6809644	.0241834
#3	.0069200	3.303423	5.560721	.1443997	.6787316	.0256251

Elem	Li6707
Units	ppm
Avg	.0883171
Stddev	.0035744
%RSD	4.047213
#1	.0902352
#2	.0905230
#3	.0841931

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2512.921	31852.64	2459.986	2118.470	1924.400
Stddev	2.984	182.54	4.417	12.692	2.303
%RSD	.1187345	.5730773	.1795361	.5991295	.1196647
#1	2512.036	31912.71	2465.076	2119.892	1922.395
#2	2510.480	31997.57	2457.165	2130.392	1923.890
#3	2516.247	31647.63	2457.717	2105.127	1926.915

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-12 Acquired: 12/27/2024 19:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1263660	-.068586	3.144633	.0875828	.0147659	61.24927
Stddev	.0037803	.001919	.005324	.0024216	.0020116	.23371
%RSD	2.991582	2.798376	.1693056	2.764934	13.62306	.3815724
#1	.1233292	-.067620	3.141625	.0865188	.0170857	60.98400
#2	.1306000	-.067341	3.150780	.0903542	.0135051	61.33893
#3	.1251689	-.070796	3.141494	.0858753	.0137068	61.42486

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.433950	.0077434	.0103274	37.95061	.1740920	.0878700
Stddev	.005897	.0002116	.0000517	.05263	.0005941	.0003037
%RSD	.4112558	2.733349	.5006510	.1386917	.3412389	.3455856
#1	1.427142	.0076128	.0102777	37.92000	.1747765	.0882185
#2	1.437233	.0079876	.0103809	38.01139	.1737098	.0877285
#3	1.437474	.0076297	.0103236	37.92045	.1737899	.0876628

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5222876	155.4735	3.903327	17.67189	.1806431	-.027022
Stddev	.0085713	.5487	.022732	.07371	.0003585	.000921
%RSD	1.641116	.3529149	.5823861	.4171163	.1984721	3.406785
#1	.5321055	154.8419	3.877779	17.58920	.1809609	-.027216
#2	.5184630	155.8327	3.910883	17.69574	.1807141	-.026020
#3	.5162945	155.7459	3.921320	17.73072	.1802544	-.027830

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4858841	.1779706	2.582856	7.376048	F 18.73296	.0429656
Stddev	.0212042	.0096449	.011168	.202992	.01284	.0021586
%RSD	4.364041	5.419357	.4323880	2.752038	.0685392	5.024095
#1	.4828051	.1886005	2.572417	7.382565	18.74743	.0418042
#2	.5084594	.1697785	2.581518	7.169877	18.72293	.0416363
#3	.4663877	.1755328	2.594632	7.575703	18.72853	.0454563

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-12 Acquired: 12/27/2024 19:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094300	4.729087	5.985293	.2697558	.8869247	.0266417
Stddev	.0005176	.000940	.037086	.0004730	.0069434	.0007016
%RSD	5.489115	.0198715	.6196199	.1753542	.7828661	2.633425
#1	.0096606	4.728023	5.997956	.2700650	.8789501	.0274125
#2	.0097921	4.729804	5.943534	.2699912	.8901941	.0260404
#3	.0088371	4.729433	6.014389	.2692113	.8916300	.0264723

Elem	Li6707
Units	ppm
Avg	.0897160
Stddev	.0022235
%RSD	2.478329
#1	.0919423
#2	.0897102
#3	.0874954

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2436.252	31130.92	2387.495	2063.070	1897.296
Stddev	7.390	56.69	12.184	3.486	4.370
%RSD	.3033200	.1820997	.5103328	.1689850	.2303057
#1	2443.549	31066.22	2382.291	2064.404	1901.732
#2	2436.434	31171.84	2401.417	2065.692	1897.160
#3	2428.773	31154.71	2378.778	2059.113	1892.996

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-13 Acquired: 12/27/2024 19:56:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1320265	-.058585	3.134318	.0813103	.0099368	52.09515
Stddev	.0056066	.002616	.004879	.0053161	.0007860	.14939
%RSD	4.246537	4.465495	.1556695	6.538037	7.909839	.2867576
#1	.1255582	-.060599	3.137055	.0864788	.0097094	51.99332
#2	.1354935	-.059527	3.128685	.0815943	.0092895	52.02549
#3	.1350277	-.055628	3.137215	.0758580	.0108114	52.26665

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.440401	.0067453	.0111117	29.99006	.1725762	.0830614
Stddev	.006334	.0001621	.0000891	.10488	.0002255	.0000095
%RSD	.4397208	2.402834	.8014764	.3497214	.1306621	.0113936
#1	1.436228	.0066986	.0110202	29.87007	.1723754	.0830692
#2	1.437286	.0066117	.0111168	30.03583	.1725330	.0830641
#3	1.447689	.0069256	.0111981	30.06428	.1728201	.0830509

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5093407	143.2485	6.184398	14.09091	.1669889	-.023948
Stddev	.0013546	.5571	.010673	.11472	.0005546	.001308
%RSD	.2659528	.3889220	.1725778	.8141569	.3320858	5.462084
#1	.5108331	142.7567	6.174546	13.95854	.1676143	-.025301
#2	.5081890	143.1353	6.182912	14.16161	.1667954	-.023853
#3	.5089999	143.8535	6.195736	14.15258	.1665571	-.022690

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5089932	.1987516	2.824199	6.335896	F 14.04061	.0358772
Stddev	.0208818	.0134116	.012770	.076152	.01114	.0013013
%RSD	4.102575	6.747899	.4521469	1.201913	.0793647	3.627088
#1	.5324979	.1940552	2.814927	6.353989	14.04318	.0349922
#2	.5018989	.2138798	2.838764	6.401373	14.02840	.0373713
#3	.4925828	.1883198	2.818907	6.252328	14.05024	.0352681

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-13 Acquired: 12/27/2024 19:56:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072159	3.241308	5.521624	.6149958	.5861412	.0496032
Stddev	.0004610	.002962	.017515	.0017960	.0046318	.0004423
%RSD	6.388348	.0913983	.3172028	.2920283	.7902135	.8917129
#1	.0067459	3.243677	5.510270	.6141680	.5834082	.0496395
#2	.0072347	3.237987	5.512807	.6137630	.5835265	.0500263
#3	.0076673	3.242261	5.541795	.6170563	.5914891	.0491439

Elem	Li6707
Units	ppm
Avg	.0825197
Stddev	.0028576
%RSD	3.462889
#1	.0793759
#2	.0849595
#3	.0832237

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2418.220	30861.85	2371.031	2046.384	1918.041
Stddev	6.376	214.15	16.828	20.096	3.975
%RSD	.2636606	.6939113	.7097508	.9820383	.2072617
#1	2413.864	31050.98	2390.460	2063.925	1915.059
#2	2425.538	30629.32	2361.603	2024.457	1922.554
#3	2415.257	30905.24	2361.031	2050.769	1916.509

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-14 Acquired: 12/27/2024 20:00:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1386067	-.062974	2.763254	.0877761	.0118582	62.35105
Stddev	.0034366	.004572	.002165	.0035358	.0048055	1.18116
%RSD	2.479419	7.259573	.0783627	4.028243	40.52424	1.894367
#1	.1356245	-.065918	2.762456	.0895035	.0173643	63.53178
#2	.1378306	-.057707	2.761602	.0837086	.0085094	61.16946
#3	.1423650	-.065296	2.765706	.0901161	.0097010	62.35190

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.591774	.0072643	.0105932	27.76635	.1370196	.0880563
Stddev	.032189	.0001757	.0000933	.49395	.0001235	.0003734
%RSD	2.022190	2.419260	.8806337	1.778952	.0901245	.4240794
#1	1.623195	.0074109	.0106964	28.27583	.1369141	.0876253
#2	1.558869	.0070695	.0105148	27.28955	.1371554	.0882610
#3	1.593257	.0073126	.0105685	27.73368	.1369893	.0882826

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3834194	151.3747	7.582730	16.28253	.1385917	-.026820
Stddev	.0052534	2.8924	.140600	.26456	.0003002	.000972
%RSD	1.370146	1.910776	1.854211	1.624811	.2165684	3.623047
#1	.3832230	154.1446	7.730222	16.55525	.1386583	-.027228
#2	.3782670	148.3736	7.450223	16.02697	.1382638	-.027522
#3	.3887683	151.6059	7.567747	16.26538	.1388529	-.025711

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4791633	.1721190	3.004204	7.297550	F 12.52460	.0321898
Stddev	.0151468	.0063445	.014152	.225249	.01213	.0004375
%RSD	3.161096	3.686130	.4710880	3.086637	.0968647	1.359157
#1	.4728068	.1758754	2.991151	7.453840	12.53835	.0326950
#2	.4682306	.1647938	3.002215	7.039357	12.51540	.0319317
#3	.4964526	.1756878	3.019246	7.399452	12.52003	.0319429

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: P5082-14 Acquired: 12/27/2024 20:00:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHLW2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087838	2.116470	5.705202	.1765472	.7047876	.0270133
Stddev	.0005906	.014020	.064268	.0020628	.0158329	.0002155
%RSD	6.723279	.6624286	1.126477	1.168397	2.246477	.7978517
#1	.0081231	2.117639	5.754053	.1777034	.7224305	.0271435
#2	.0092604	2.101902	5.632398	.1741657	.6918155	.0271319
#3	.0089678	2.129869	5.729155	.1777727	.7001168	.0267646

Elem	Li6707
Units	ppm
Avg	.1039433
Stddev	.0024846
%RSD	2.390322
#1	.1039628
#2	.1014491
#3	.1064181

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2462.978	31279.60	2428.309	2082.259	1926.022
Stddev	4.973	74.23	34.480	7.990	2.105
%RSD	.2018992	.2372995	1.419909	.3837291	.1093085
#1	2457.535	31195.83	2400.708	2073.621	1923.982
#2	2464.116	31305.79	2466.959	2083.771	1925.897
#3	2467.283	31337.18	2417.262	2089.385	1928.187

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV023 Acquired: 12/27/2024 20:04:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV023 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.879320	4.722862	24.05007	4.743705	4.669089	395.9458	10.07221
Stddev	.008604	.010845	.02240	.007351	.014574	2.3018	.05478
%RSD	.1763395	.2296225	.0931413	.1549557	.3121290	.5813509	.5439163
#1	4.885869	4.734589	24.06874	4.751628	4.685041	398.6026	10.13540
#2	4.882516	4.713195	24.02523	4.742383	4.665754	394.5529	10.04318
#3	4.869575	4.720803	24.05624	4.737106	4.656472	394.6817	10.03805

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5095469	2.428269	400.7420	15.09042	2.439852	14.93068	401.0969
Stddev	.0032902	.002421	2.1437	.01637	.004028	.05348	2.1004
%RSD	.6457056	.0997108	.5349203	.1084569	.1651077	.3581661	.5236517
#1	.5104283	2.430540	403.1394	15.10128	2.443908	14.99134	403.5219
#2	.5059058	2.425721	400.0768	15.09838	2.435851	14.91037	399.9170
#3	.5123065	2.428545	399.0099	15.07159	2.439798	14.89034	399.8519

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.80844	400.9699	2.423365	1.188282	406.0017	2.478006	14.28773
Stddev	.09389	2.1069	.002887	.003039	3.2193	.012491	.07979
%RSD	.6340579	.5254481	.1191298	.2557610	.7929268	.5040704	.5584247
#1	14.91505	403.4020	2.426287	1.185058	408.9906	2.491890	14.22467
#2	14.77220	399.7013	2.420515	1.191095	402.5932	2.467680	14.37742
#3	14.73807	399.8064	2.423293	1.188693	406.4212	2.474449	14.26108

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	154.3392	4.849854	4.919523	4.639881	4.873001	5.011305	4.900970
Stddev	.4545	.006139	.033459	.013594	.024386	.035560	.005536
%RSD	.2944799	.1265776	.6801279	.2929767	.5004302	.7095991	.1129611
#1	154.8229	4.856328	4.920660	4.652554	4.891516	5.013211	4.907282
#2	153.9210	4.844116	4.885511	4.641564	4.845370	4.974830	4.898692
#3	154.2737	4.849119	4.952400	4.625524	4.882117	5.045874	4.896936

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCV023 Acquired: 12/27/2024 20:04:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV023 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.015392	4.750433	5.158790
Stddev	.031824	.021243	.028230
%RSD	.6345358	.4471822	.5472167
#1	5.052097	4.774962	5.191282
#2	4.995501	4.737966	5.140288
#3	4.998579	4.738372	5.144799

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1695.276	23640.99	1943.921	1420.576	1533.595
Stddev	1.634	85.33	10.180	8.006	3.313
%RSD	.0964099	.3609291	.5236778	.5635791	.2160460
#1	1696.737	23566.15	1937.121	1422.735	1536.081
#2	1693.511	23622.92	1955.624	1411.711	1534.870
#3	1695.579	23733.91	1939.018	1427.281	1529.833

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

Sample Name: CCB023 Acquired: 12/27/2024 20:07:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB023 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009909	-.000818	.0037764	.0006959	-.000110	.0052289
Stddev	.0004898	.000542	.0017992	.0041423	.003882	.0230505
%RSD	49.43227	66.24010	47.64366	595.2294	3530.874	440.8281
#1	.0008425	-.000457	.0046053	-.003714	-.003737	-.003448
#2	.0015378	-.000555	.0050118	.001298	.003984	-.012224
#3	.0005924	-.001441	.0017122	.004504	-.000576	.031359

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007150	.0000213	.0000830	.0081285	-.000804	-.000200
Stddev	.000686	.0003143	.0001008	.0156651	.000594	.000292
%RSD	9.588489	1478.747	121.3922	192.7188	73.89273	145.8067
#1	-.007490	-.000038	.0001073	.0202228	-.001347	.000124
#2	-.006361	-.000259	.0001695	.0137299	-.000169	-.000281
#3	-.007600	.000361	-.000028	-.009567	-.000897	-.000444

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006296	.0126625	.0015686	.0684284	-.000021	.0015576
Stddev	.003819	.0173560	.0010388	.0845053	.000359	.0006532
%RSD	60.66064	137.0658	66.22845	123.4945	1687.643	41.93724
#1	-.003423	-.001995	.0019593	.0935672	.000364	.0023000
#2	-.010630	.008155	.0023554	-.025794	-.000345	.0010710
#3	-.004834	.031828	.0003910	.137512	-.000083	.0013019

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0632189	-.005290	.0323710	.5238093	-.003973	.0070633
Stddev	.0146047	.006008	.0003942	.0735522	.000725	.0012849
%RSD	23.10175	113.5714	1.217684	14.04179	18.24357	18.19103
#1	.0719416	-.000036	.0321717	.6074129	-.003154	.0060897
#2	.0463583	-.011840	.0328251	.4690553	-.004530	.0085197
#3	.0713569	-.003994	.0321164	.4949597	-.004237	.0065806

Reviewed By:mohan
On:12/31/2024
11:25:14 PM
Inst Id :P5

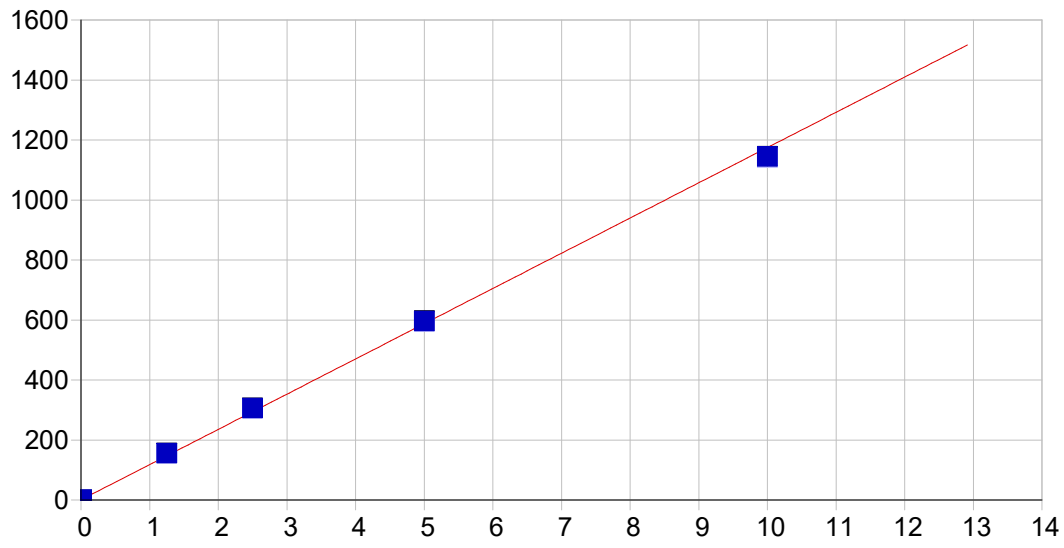
Sample Name: CCB023 Acquired: 12/27/2024 20:07:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v47) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB023 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004882	-.002585	-.000846	-.003848	-.001928	-.000260
Stddev	.0000678	.004636	.000781	.001147	.002990	.000521
%RSD	13.89325	179.3870	92.37330	29.80141	155.1254	199.8763
#1	.0005158	-.007237	-.000039	-.002558	-.002412	-.000854
#2	.0004109	.002035	-.001599	-.004752	.001275	.000118
#3	.0005378	-.002552	-.000899	-.004235	-.004646	-.000045

Elem	Li6707
Units	ppm
Avg	F .0345393
Stddev	.0059575
%RSD	17.24835
#1	.0399243
#2	.0281397
#3	.0355541

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2059.199	26300.58	2019.374	1745.108	1866.130
Stddev	1.911	72.36	9.151	15.755	3.055
%RSD	.0928247	.2751415	.4531407	.9028323	.1637125
#1	2058.917	26360.04	2010.285	1752.635	1863.013
#2	2057.445	26220.01	2028.585	1727.000	1866.257
#3	2061.236	26321.70	2019.253	1755.687	1869.119

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



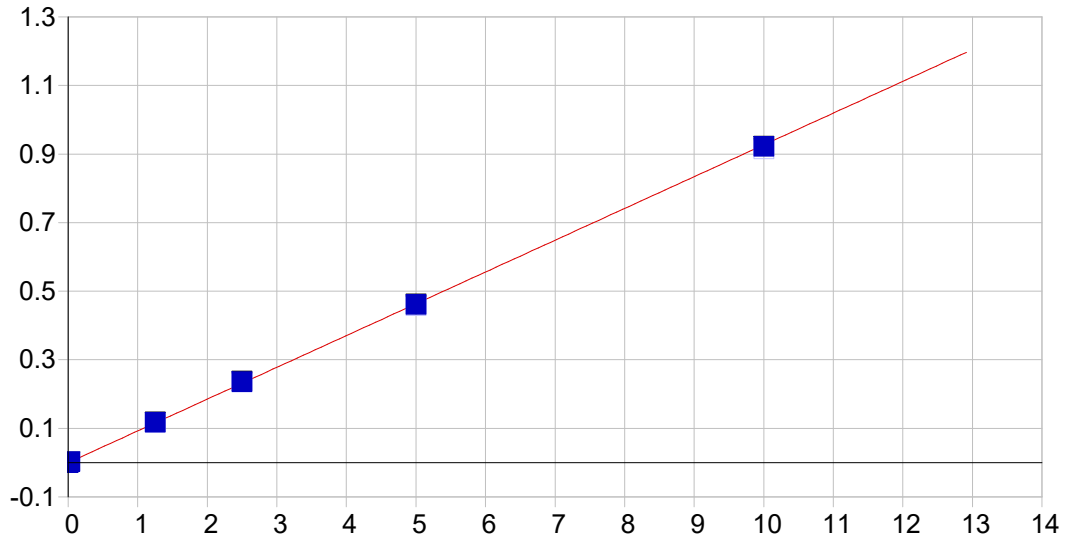
As 189.042 {478}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.487541	Re-Slope:	1.000000
A1 (Gain):	117.421288	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999548	Status:	OK.
Std Error of Est:	0.058949		
Predicted MDL:	0.006092		
Predicted MQL:	0.020308		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.48771	.366	1
S1	.01000	.00763	-.002	-23.7	1.3820	.511	1
S2	1.2500	1.3236	.074	5.89	155.29	.349	1
S3	2.5000	2.6043	.104	4.17	305.05	.377	1
S4	5.0000	5.0772	.077	1.54	594.19	.796	1
S5	10.000	9.7473	-.253	-2.53	1140.1	.765	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



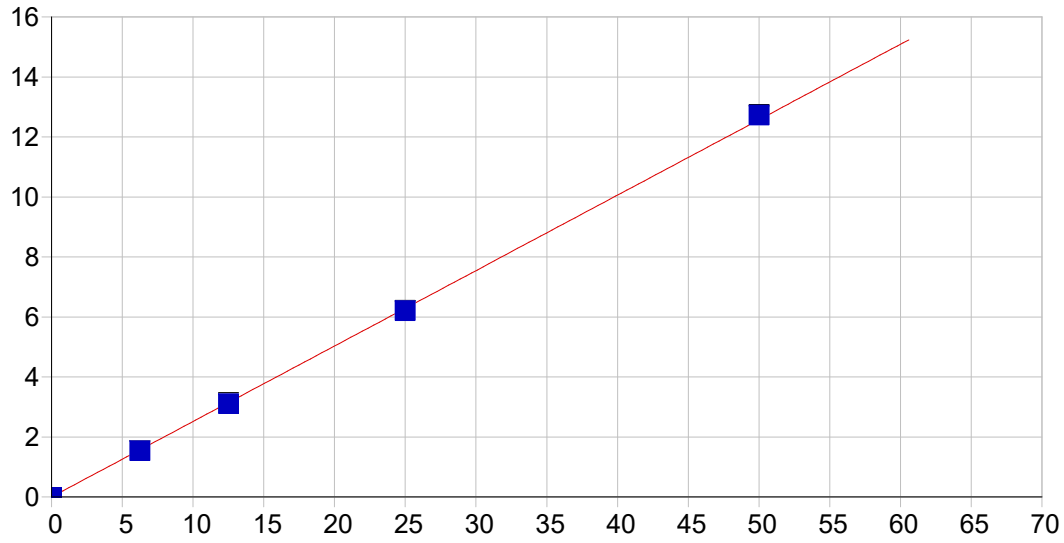
Tl 190.856 {477}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000178	Re-Slope:	1.000000
A1 (Gain):	0.092687	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.003364		
Predicted MQL:	0.011214		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00018	.000	1
S1	.02500	.02740	.002	9.61	.00228	.000	1
S2	1.2500	1.2724	.022	1.79	.11676	.000	1
S3	2.5000	2.5488	.049	1.95	.23407	.002	1
S4	5.0000	4.9764	-.024	-.472	.45709	.002	1
S5	10.000	9.9501	-.050	-.499	.91411	.001	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



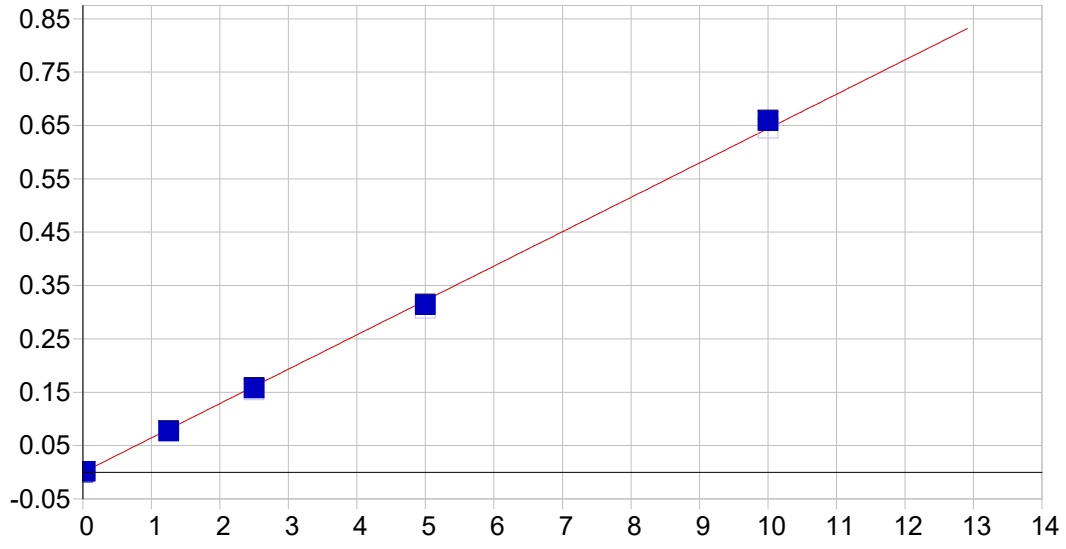
Pb 220.353 {453}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000232	Re-Slope:	1.000000
A1 (Gain):	0.251458	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999915	Status:	OK.
Std Error of Est:	0.000123		
Predicted MDL:	0.002610		
Predicted MQL:	0.008701		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00023	.000	1
S1	.01000	.01046	.000	4.55	.00285	.000	1
S2	6.2500	6.1203	-.130	-2.08	1.5375	.002	1
S3	12.500	12.360	-.140	-1.12	3.1049	.033	1
S4	25.000	24.669	-.331	-1.32	6.1967	.019	1
S5	50.000	50.600	.600	1.20	12.710	.018	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



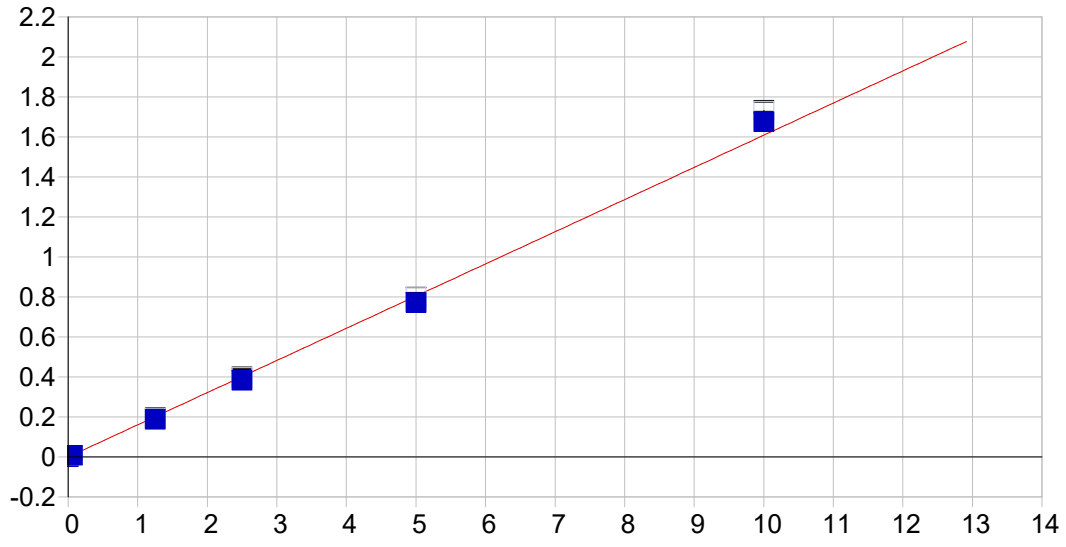
Se 196.090 {472}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000074	Re-Slope:	1.000000
A1 (Gain):	0.064417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999649	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.006553		
Predicted MQL:	0.021842		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00007	.000	1
S1	.03500	.02902	-.006	-17.1	.00179	.000	1
S2	1.2500	1.1970	-.053	-4.24	.07522	.001	1
S3	2.5000	2.4479	-.052	-2.08	.15399	.001	1
S4	5.0000	4.8798	-.120	-2.40	.30702	.001	1
S5	10.000	10.231	.231	2.31	.64451	.001	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



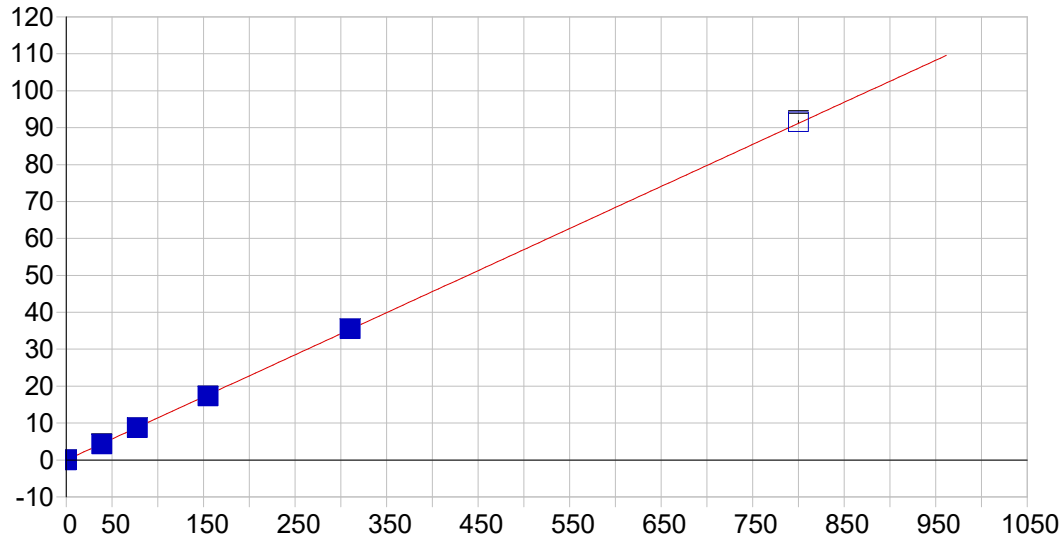
Sb 206.833 {463}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000312	Re-Slope:	1.000000
A1 (Gain):	0.160865	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999083	Status:	OK.
Std Error of Est:	0.000293		
Predicted MDL:	0.003552		
Predicted MQL:	0.011838		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00031	.000	1
S1	.06000	.05564	-.004	-7.27	.00864	.001	1
S2	1.2500	1.1671	-.083	-6.63	.19415	.000	1
S3	2.5000	2.3809	-.119	-4.76	.39614	.004	1
S4	5.0000	4.7946	-.205	-4.11	.79786	.001	1
S5	10.000	10.412	.412	4.12	1.7283	.004	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



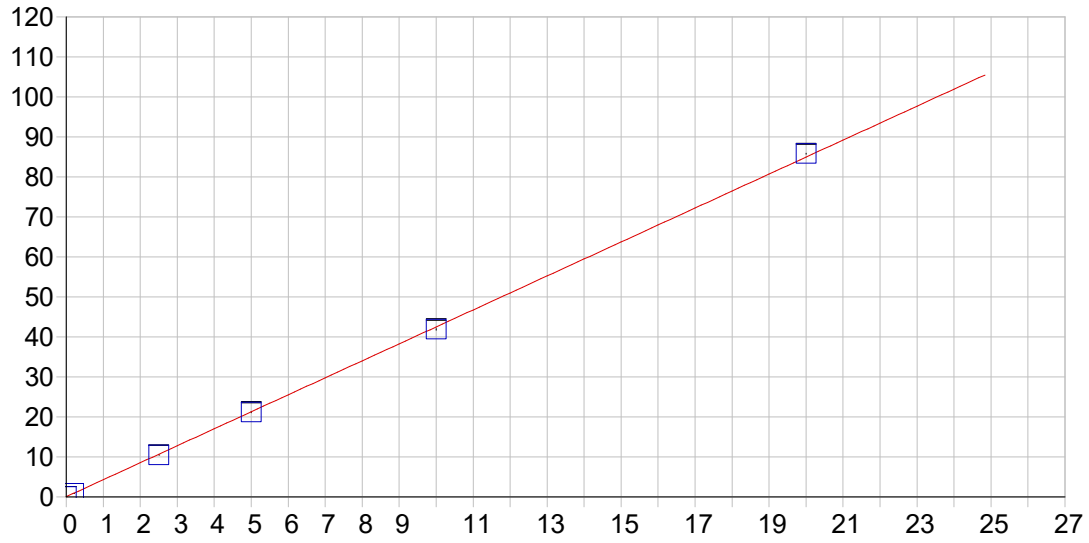
Al 396.152 { 85}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000875	Re-Slope:	1.000000
A1 (Gain):	0.113968	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999951	Status:	OK.
Std Error of Est:	0.000702		
Predicted MDL:	0.024766		
Predicted MQL:	0.082552		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00088	.004	1
S1	.20000	.19692	-.003	-1.54	.02336	.004	1
S2	38.750	37.889	-.861	-2.22	4.3239	.022	1
S3	77.500	76.718	-.782	-1.01	8.7538	.052	1
S4	155.00	151.41	-3.59	-2.32	17.276	.046	1
S5	310.00	311.86	1.86	.599	35.581	.036	1
S6	800.00	803.38	3.38	.423	91.561	.340	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



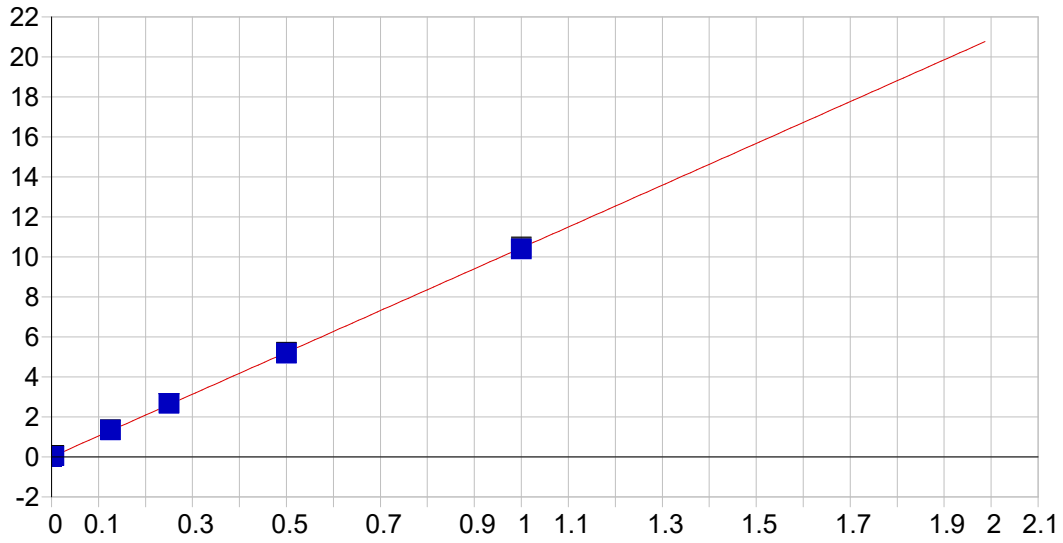
Ba 493.409 { 68}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.053605	Re-Slope:	1.000000
A1 (Gain):	4.245252	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.005162		
Predicted MDL:	0.001435		
Predicted MQL:	0.004784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.05361	.002	1
S1	.20000	.20272	.003	1.36	.91421	.000	1
S2	2.5000	2.4567	-.043	-1.73	10.483	.032	1
S3	5.0000	4.9861	-.014	-.278	21.221	.148	1
S4	10.000	9.8546	-.145	-1.45	41.889	.180	1
S5	20.000	20.200	.200	.999	85.807	.127	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



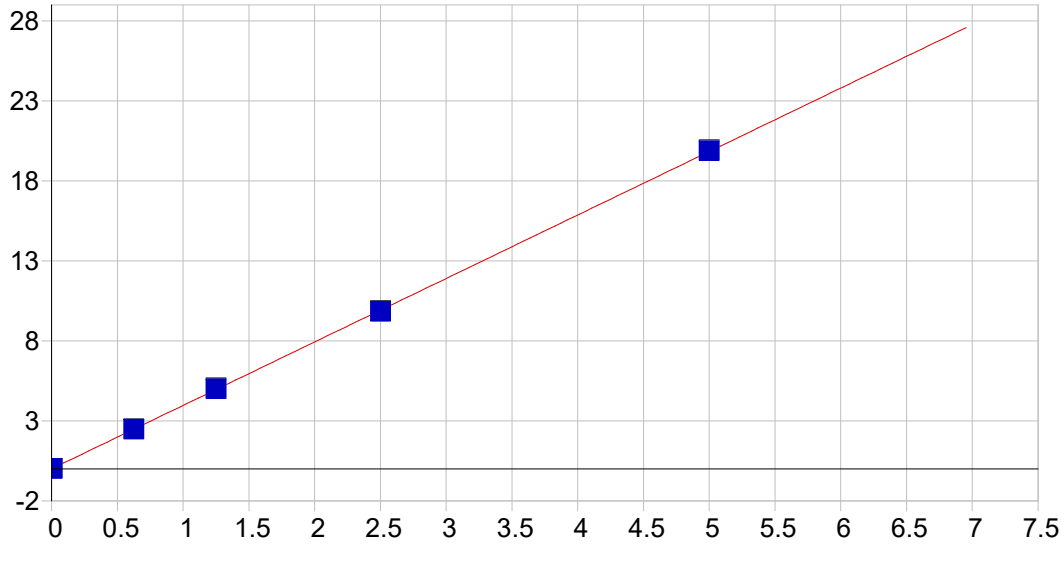
Be 234.861 {144}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000173	Re-Slope:	1.000000
A1 (Gain):	10.450081	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000477		
Predicted MDL:	0.000141		
Predicted MQL:	0.000469		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00018	.001	1
S1	.00500	.00532	.000	6.46	.05540	.002	1
S2	.12500	.12825	.003	2.60	1.3341	.006	1
S3	.25000	.25540	.005	2.16	2.6568	.005	1
S4	.50000	.49601	-.004	-.799	5.1591	.043	1
S5	1.0000	.99502	-.005	-.498	10.350	.101	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



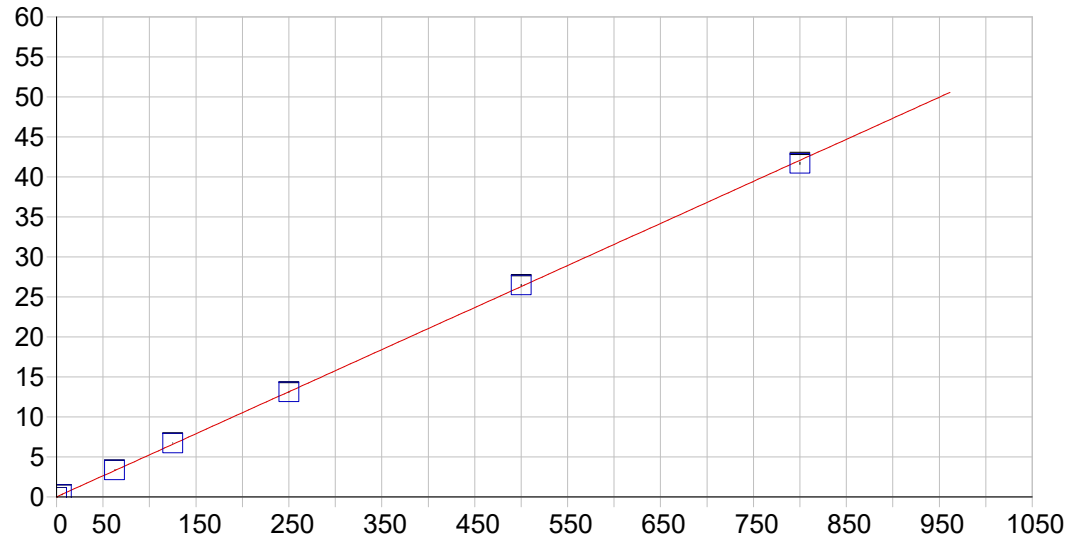
Cd 214.438 {457}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000151	Re-Slope:	1.000000
A1 (Gain):	3.967115	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999988	Status:	OK.
Std Error of Est:	0.000162		
Predicted MDL:	0.000112		
Predicted MQL:	0.000372		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.00500	.00494	-.000	-1.24	.01982	.000	1
S2	.62500	.62359	-.001	-.226	2.4778	.003	1
S3	1.2500	1.2579	.008	.633	4.9981	.056	1
S4	2.5000	2.4813	-.019	-.747	9.8590	.027	1
S5	5.0000	5.0122	.012	.245	19.915	.032	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



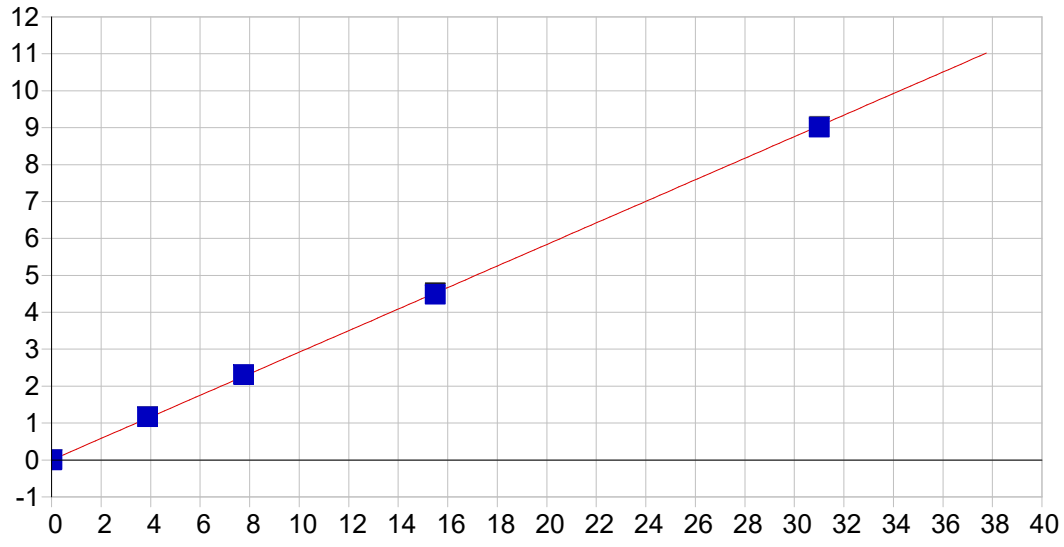
Ca 373.690 { 90}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005249	Re-Slope:	1.000000
A1 (Gain):	0.052583	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.001892		
Predicted MDL:	0.035846		
Predicted MQL:	0.119486		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00025	-.000	.000	.00524	.000	1
S1	5.0000	5.0615	.061	1.23	.27139	.003	1
S2	62.500	63.753	1.25	2.01	3.3576	.009	1
S3	125.00	127.86	2.86	2.29	6.7287	.027	1
S4	250.00	249.14	-.856	-.342	13.106	.057	1
S5	500.00	503.75	3.75	.751	26.494	.078	1
S6	800.00	792.92	-7.08	-.885	41.699	.136	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



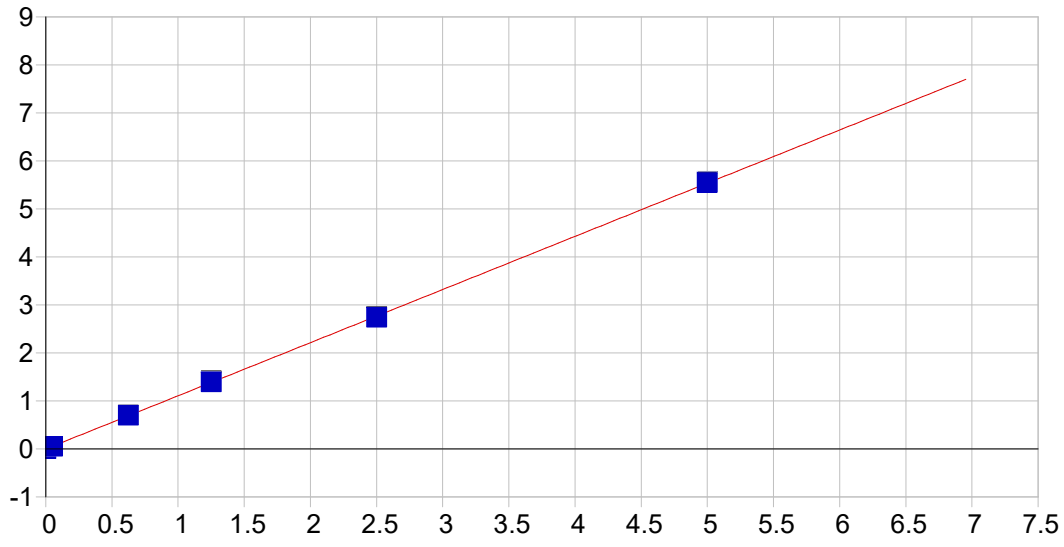
Cr 267.716 {126}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000123	Re-Slope:	1.000000
A1 (Gain):	0.291879	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999926	Status:	OK.
Std Error of Est:	0.000105		
Predicted MDL:	0.000838		
Predicted MQL:	0.002792		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00012	.000	1
S1	.01000	.01079	.001	7.89	.00303	.000	1
S2	3.8750	3.9911	.116	3.00	1.1657	.001	1
S3	7.7500	7.9095	.159	2.06	2.3102	.002	1
S4	15.500	15.363	-.137	-.887	4.4874	.036	1
S5	31.000	30.861	-.139	-.448	9.0146	.021	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



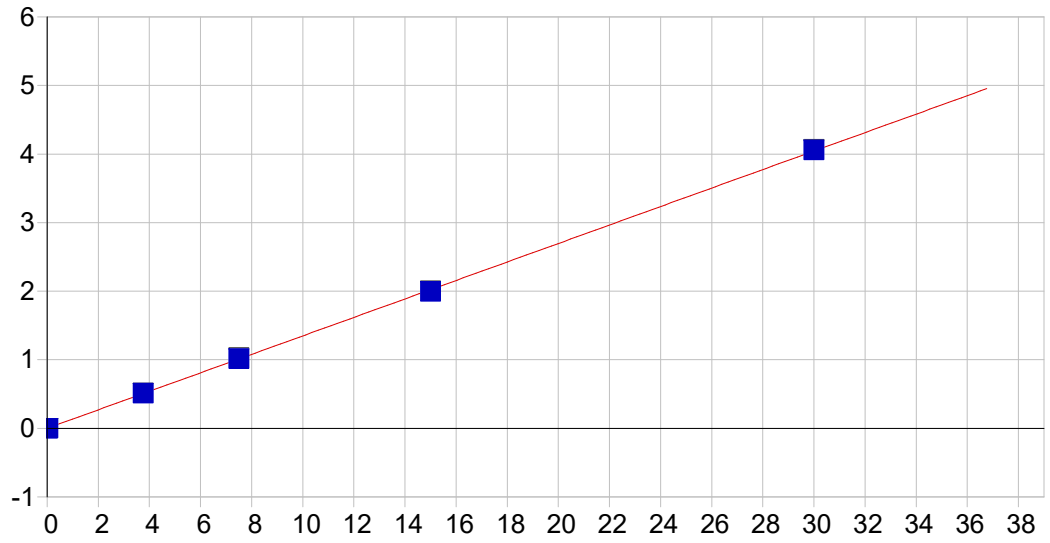
Co 228.616 {448}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000442	Re-Slope:	1.000000
A1 (Gain):	1.107243	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.000202		
Predicted MDL:	0.000431		
Predicted MQL:	0.001438		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00044	.000	1
S1	.05000	.05071	.001	1.42	.05588	.001	1
S2	.62500	.63052	.006	.883	.69992	.001	1
S3	1.2500	1.2609	.011	.869	1.4001	.016	1
S4	2.5000	2.4738	-.026	-1.05	2.7476	.008	1
S5	5.0000	5.0091	.009	.181	5.5637	.012	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



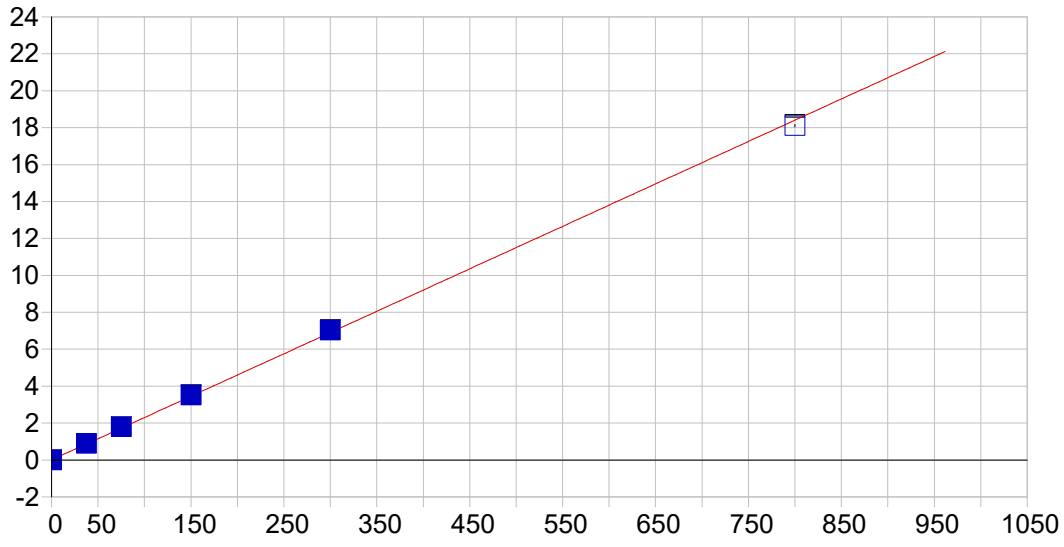
Cu 324.754 {104}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000698	Re-Slope:	1.000000
A1 (Gain):	0.134754	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000064		
Predicted MDL:	0.009928		
Predicted MQL:	0.033093		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00070	.001	1
S1	.02500	.03233	.007	29.3	.00505	.001	1
S2	3.7500	3.7869	.037	.984	.51094	.001	1
S3	7.5000	7.5440	.044	.586	1.0172	.006	1
S4	15.000	14.796	-.204	-1.36	1.9943	.007	1
S5	30.000	30.116	.116	.387	4.0585	.009	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



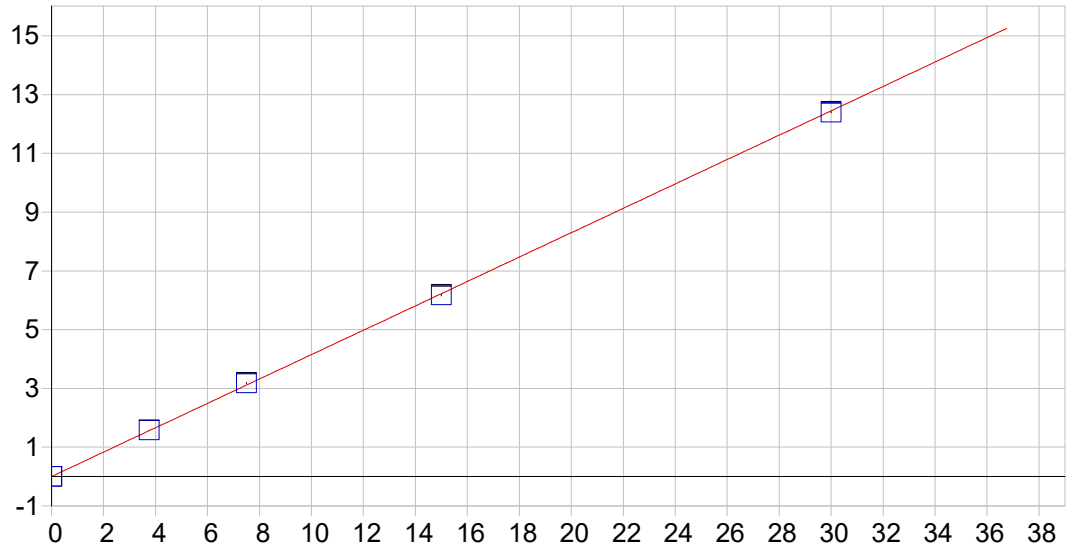
Fe 259.837 {130}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000335	Re-Slope:	1.000000
A1 (Gain):	0.023007	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000209		
Predicted MDL:	0.030909		
Predicted MQL:	0.103030		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00033	.001	1
S1	.10000	.07923	-.021	-20.8	.00216	.001	1
S2	37.500	38.915	1.41	3.77	.89583	.003	1
S3	75.000	78.396	3.40	4.53	1.8044	.011	1
S4	150.00	152.69	2.69	1.79	3.5140	.010	1
S5	300.00	305.77	5.77	1.92	7.0366	.023	1
S6	800.00	786.75	-13.2	-1.66	18.101	.066	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



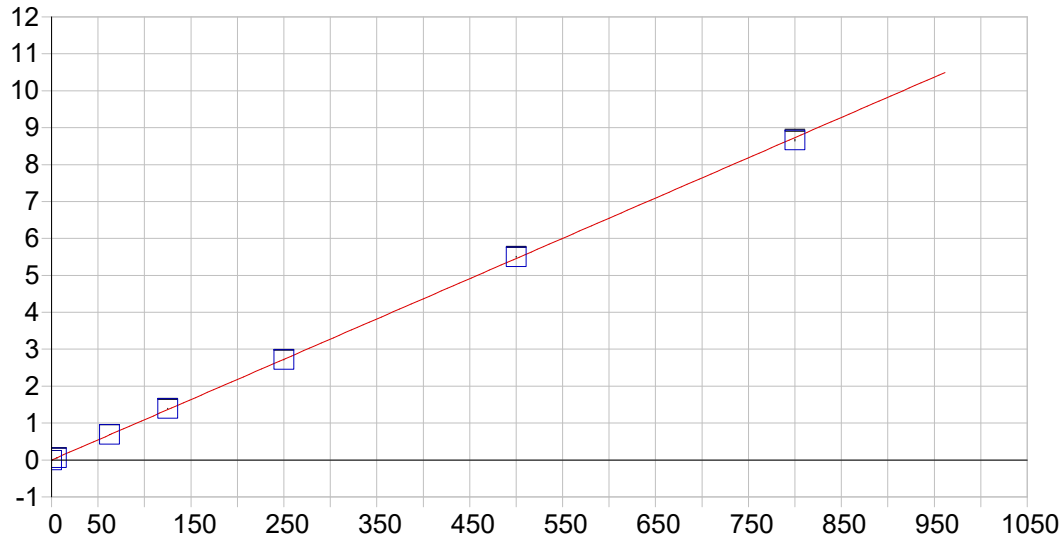
Mn 257.610 {131}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000007	Re-Slope:	1.000000
A1 (Gain):	0.414990	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000155		
Predicted MDL:	0.001440		
Predicted MQL:	0.004801		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.001	1
S1	.01500	.01584	.001	5.58	.00658	.000	1
S2	3.7500	3.8023	.052	1.40	1.5779	.005	1
S3	7.5000	7.6753	.175	2.34	3.1852	.022	1
S4	15.000	14.886	-.114	-.757	6.1778	.027	1
S5	30.000	29.885	-.115	-.383	12.402	.029	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



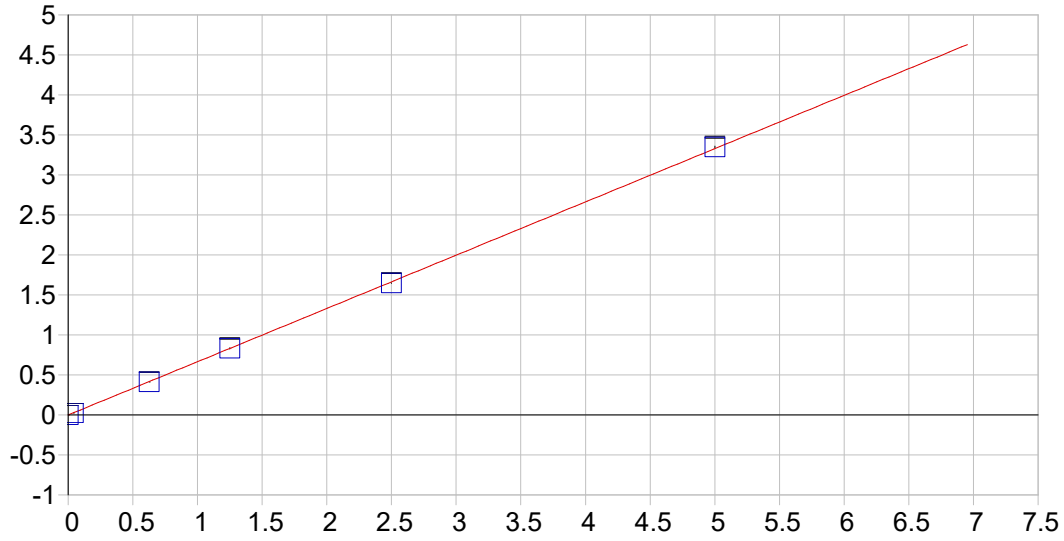
Mg 279.079 {121}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001169	Re-Slope:	1.000000
A1 (Gain):	0.010916	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000352		
Predicted MDL:	0.082729		
Predicted MQL:	0.275763		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00030	-.000	.000	-.00117	.001	1
S1	5.0000	5.1700	.170	3.40	.05527	.000	1
S2	62.500	63.240	.740	1.18	.68914	.000	1
S3	125.00	127.33	2.33	1.87	1.3888	.012	1
S4	250.00	248.82	-1.18	-.473	2.7148	.010	1
S5	500.00	504.23	4.23	.846	5.5028	.016	1
S6	800.00	793.71	-6.29	-.786	8.6628	.025	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



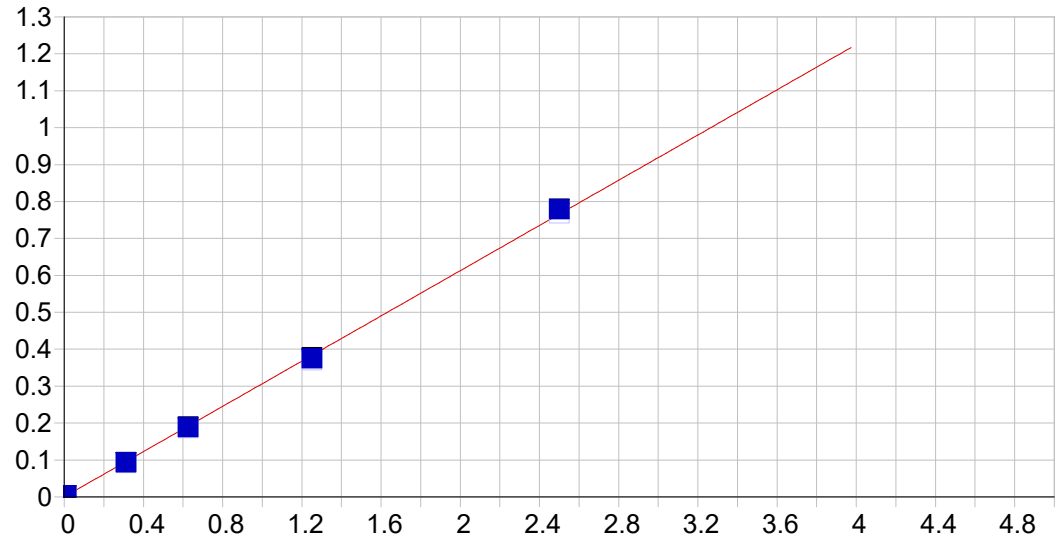
Ni 231.604 {446}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001016	Re-Slope:	1.000000
A1 (Gain):	0.665882	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.000743		
Predicted MQL:	0.002475		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00102	.000	1
S1	.04000	.03859	-.001	-3.54	.02468	.001	1
S2	.62500	.61828	-.007	-1.07	.41069	.000	1
S3	1.2500	1.2512	.001	.094	.83212	.009	1
S4	2.5000	2.4775	-.023	-.901	1.6487	.003	1
S5	5.0000	5.0295	.029	.590	3.3480	.011	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



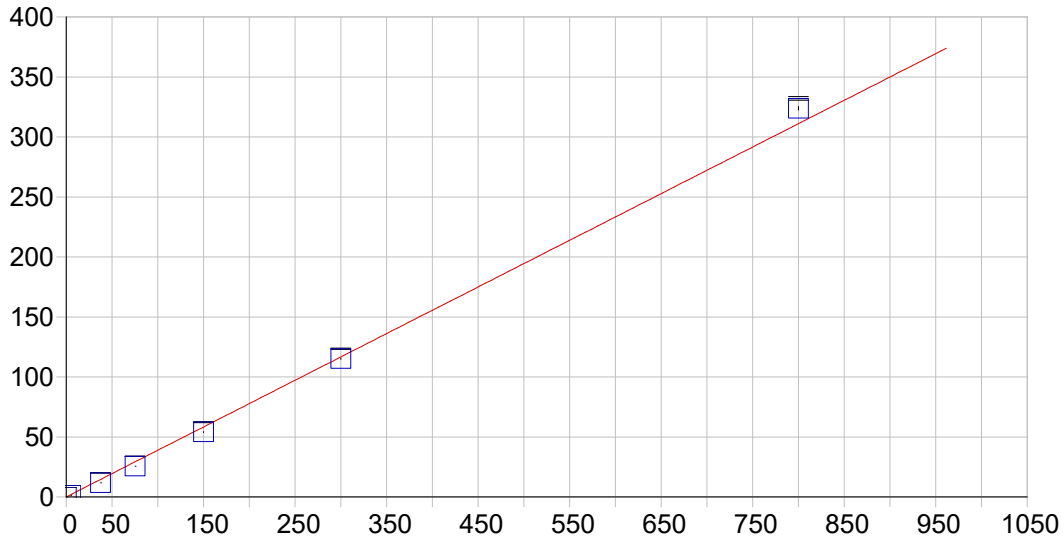
Ag 328.068 {103}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000378	Re-Slope:	1.000000
A1 (Gain):	0.306197	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999823	Status:	OK.
Std Error of Est:	0.000048		
Predicted MDL:	0.001408		
Predicted MQL:	0.004694		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.01000	.01034	.000	3.36	.00354	.000	1
S2	.31250	.30442	-.008	-2.58	.09221	.000	1
S3	.62500	.61524	-.010	-1.56	.18601	.001	1
S4	1.2500	1.2247	-.025	-2.02	.36987	.003	1
S5	2.5000	2.5428	.043	1.71	.76795	.001	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



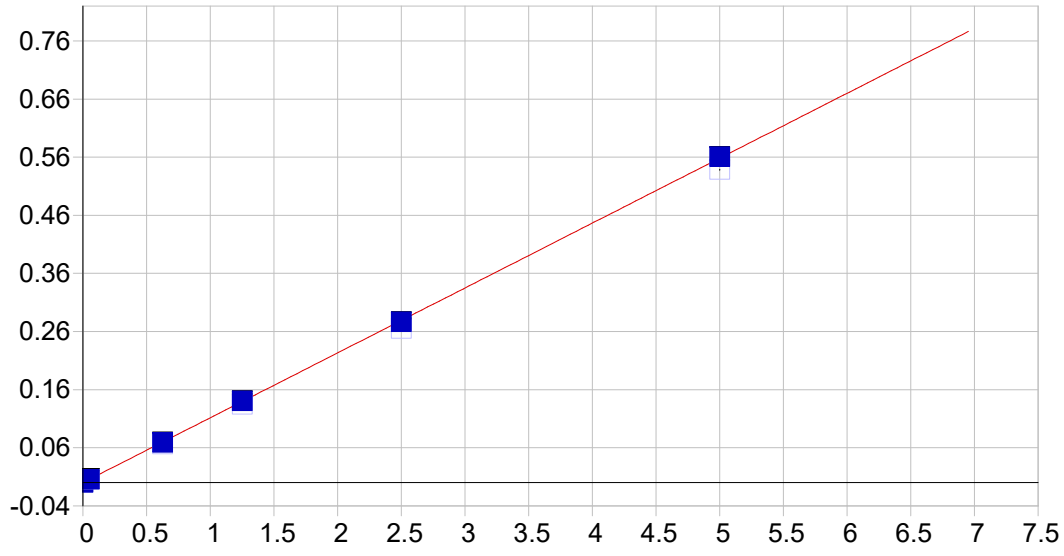
Na 818.326 { 41}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006771	Re-Slope:	1.000000
A1 (Gain):	0.388794	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998069	Status:	OK.
Std Error of Est:	0.074804		
Predicted MDL:	0.024427		
Predicted MQL:	0.081424		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00338	.003	.000	.00809	.008	1
S1	5.0000	3.4397	-1.56	-31.2	1.3441	.018	1
S2	37.500	30.223	-7.28	-19.4	11.757	.037	1
S3	75.000	65.587	-9.41	-12.6	25.506	.035	1
S4	150.00	138.97	-11.0	-7.35	54.039	.366	1
S5	300.00	296.33	-3.67	-1.22	115.22	.528	1
S6	800.00	832.94	32.9	4.12	323.85	1.50	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



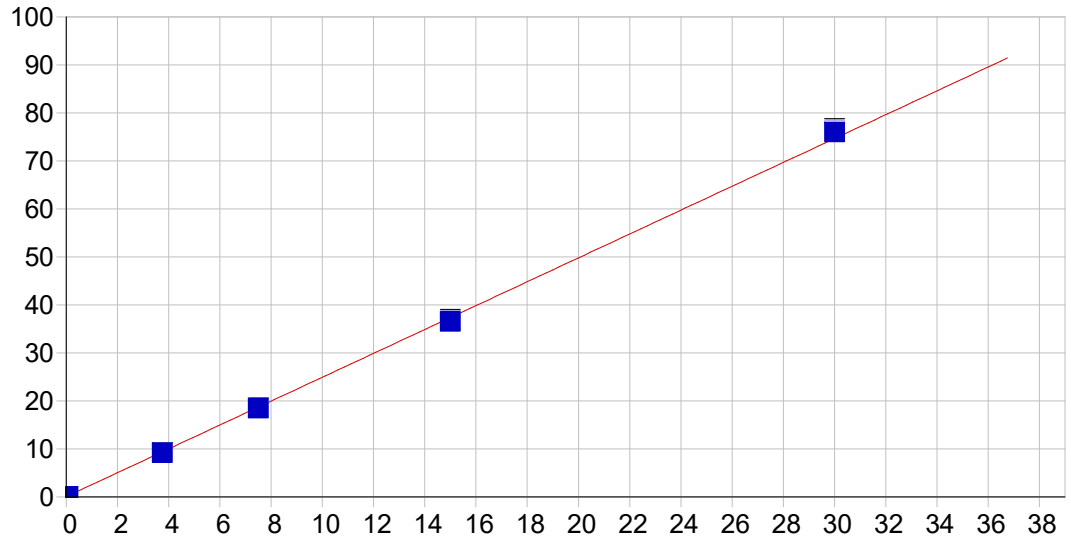
V 292.402 {115}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000002	Re-Slope:	1.000000
A1 (Gain):	0.111652	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.009828		
Predicted MQL:	0.032760		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00000	.000	1
S1	.05000	.04957	-.000	-.863	.00552	.002	1
S2	.62500	.61975	-.005	-.839	.06640	.001	1
S3	1.2500	1.2573	.007	.585	.13479	.001	1
S4	2.5000	2.4760	-.024	-.962	.26526	.001	1
S5	5.0000	5.0224	.022	.449	.53839	.001	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



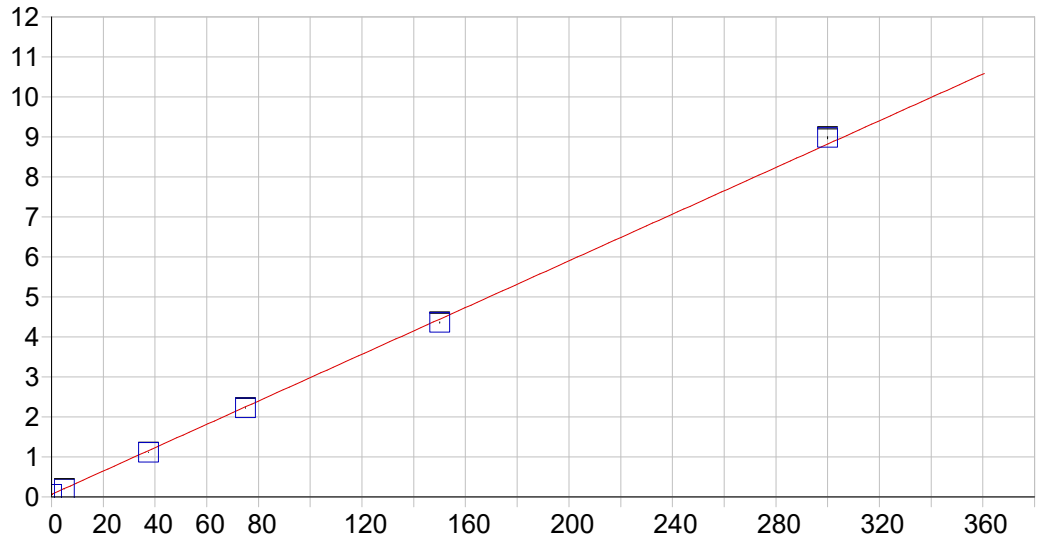
Zn 213.856 {158}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.070515	Re-Slope:	1.000000
A1 (Gain):	2.486116	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999817	Status:	OK.
Std Error of Est:	0.003397		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.07052	.000	1
S1	.06000	.05901	-.001	-1.65	.21769	.003	1
S2	3.7500	3.6616	-.088	-2.36	9.2194	.074	1
S3	7.5000	7.3918	-.108	-1.44	18.539	.042	1
S4	15.000	14.663	-.337	-2.25	36.707	.266	1
S5	30.000	30.535	.535	1.78	76.348	.417	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



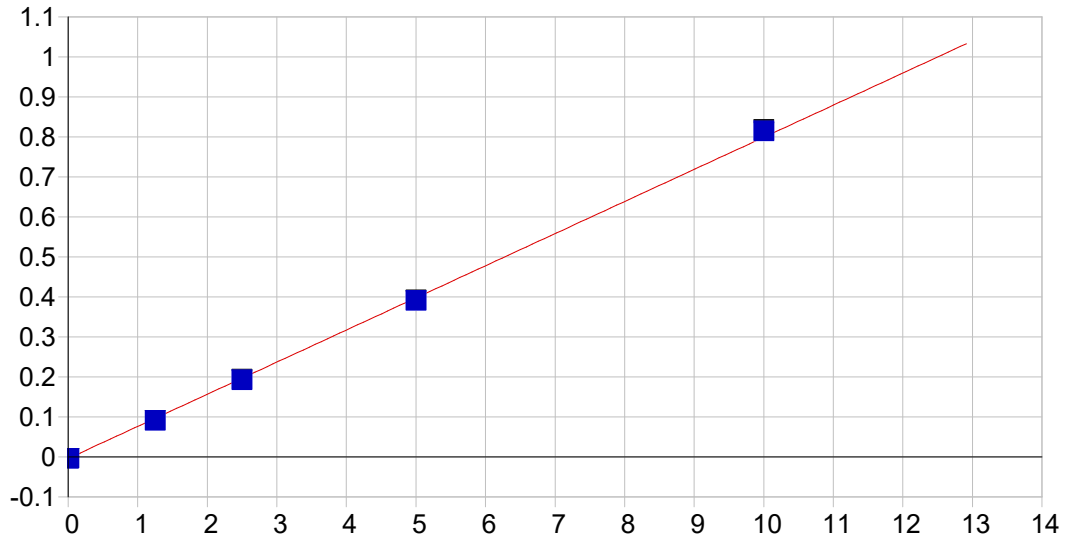
K 769.896 { 44}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.063542	Re-Slope:	1.000000
A1 (Gain):	0.029187	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999790	Status:	OK.
Std Error of Est:	0.001234		
Predicted MDL:	0.139000		
Predicted MQL:	0.463334		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00053	.001	.000	.06356	.003	1
S1	5.0000	4.7361	-.264	-5.28	.20177	.004	1
S2	37.500	36.018	-1.48	-3.95	1.1148	.003	1
S3	75.000	73.917	-1.08	-1.44	2.2209	.007	1
S4	150.00	147.30	-2.70	-1.80	4.3628	.017	1
S5	300.00	305.53	5.53	1.84	8.9808	.025	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



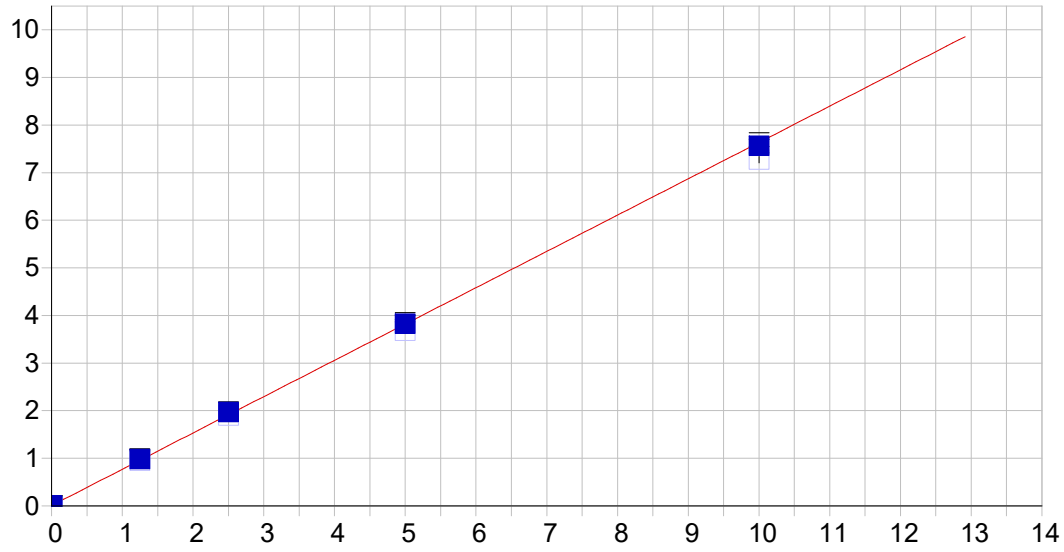
P 177.495 {490}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003951	Re-Slope:	1.000000
A1 (Gain):	0.080303	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999733	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.003405		
Predicted MQL:	0.011350		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00395	.000	1
S1	.01000	.00769	-.002	-23.1	-.00333	.000	1
S2	1.2500	1.1868	-.063	-5.05	.09121	.000	1
S3	2.5000	2.4484	-.052	-2.07	.19237	.002	1
S4	5.0000	4.9194	-.081	-1.61	.39050	.001	1
S5	10.000	10.198	.198	1.98	.81379	.003	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



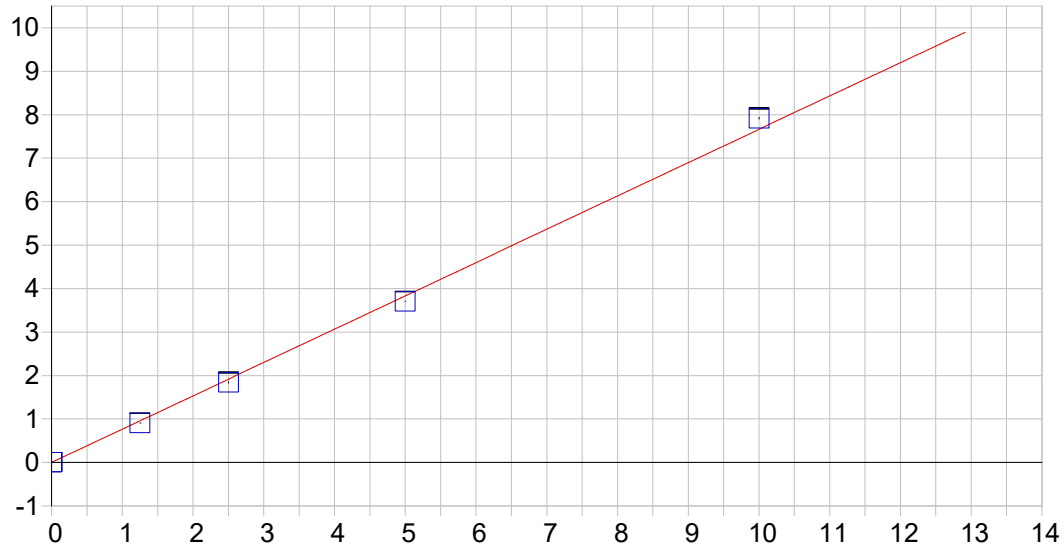
B 249.678 {135}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006534	Re-Slope:	1.000000
A1 (Gain):	0.762832	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999296	Status:	OK.
Std Error of Est:	0.000462		
Predicted MDL:	0.002176		
Predicted MQL:	0.007255		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00654	.002	1
S1	.01000	-.00434	-.014	-143.	.00318	.001	1
S2	1.2500	1.2817	.032	2.54	.94803	.001	1
S3	2.5000	2.5736	.074	2.94	1.8972	.006	1
S4	5.0000	5.0044	.004	.089	3.6790	.025	1
S5	10.000	9.9050	-.095	-.950	7.2723	.067	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



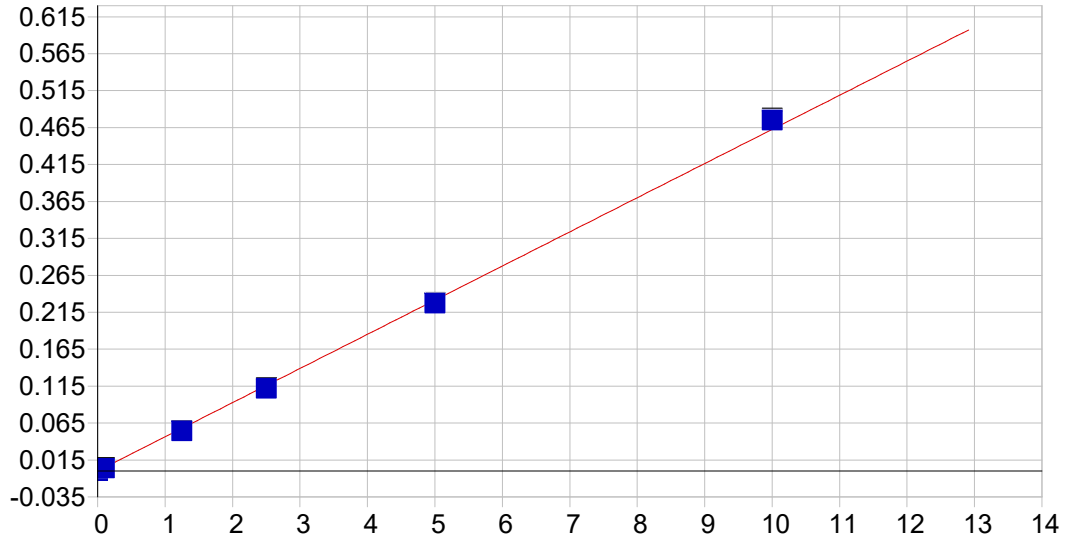
Mo 202.030 {467}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000025	Re-Slope:	1.000000
A1 (Gain):	0.766525	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999370	Status:	OK.
Std Error of Est:	0.000456		
Predicted MDL:	0.000537		
Predicted MQL:	0.001789		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00002	.000	1
S1	.01000	.00944	-.001	-5.57	.00721	.000	1
S2	1.2500	1.1830	-.067	-5.36	.90680	.004	1
S3	2.5000	2.4057	-.094	-3.77	1.8440	.014	1
S4	5.0000	4.8325	-.168	-3.35	3.7042	.008	1
S5	10.000	10.329	.329	3.29	7.9177	.019	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



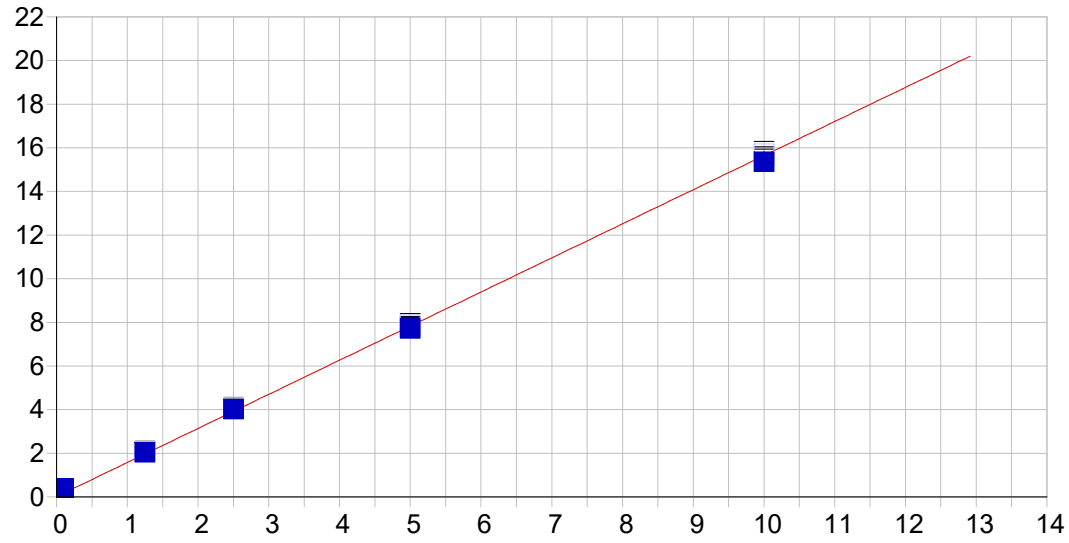
S 182.034 {485}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000099	Re-Slope:	1.000000
A1 (Gain):	0.046242	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999510	Status:	OK.
Std Error of Est:	0.000077		
Predicted MDL:	0.005146		
Predicted MQL:	0.017152		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00010	.000	1
S1	.10000	.08812	-.012	-11.9	.00417	.000	1
S2	1.2500	1.1663	-.084	-6.69	.05422	.000	1
S3	2.5000	2.4155	-.084	-3.38	.11217	.001	1
S4	5.0000	4.9120	-.088	-1.76	.22798	.001	1
S5	10.000	10.268	.268	2.68	.47640	.002	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



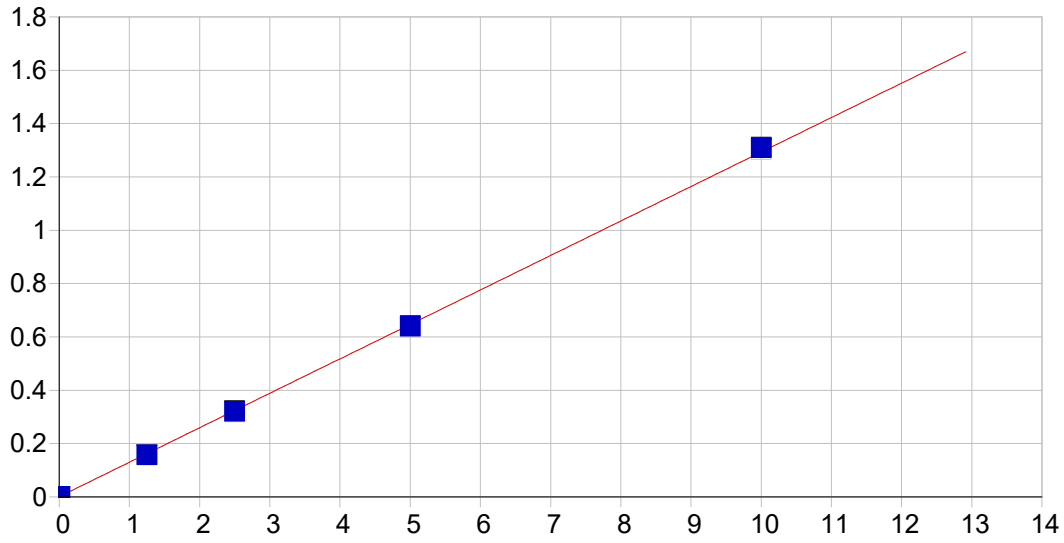
Si 251.611 {134}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013342	Re-Slope:	1.000000
A1 (Gain):	1.563030	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.994404	Status:	OK.
Std Error of Est:	0.009024		
Predicted MDL:	0.001097		
Predicted MQL:	0.003655		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.01311	.003	1
S1	.10000	.24651	.147	147.	.40085	.003	1
S2	1.2500	1.2974	.047	3.79	2.0855	.005	1
S3	2.5000	2.5611	.061	2.44	4.1051	.007	1
S4	5.0000	4.9262	-.074	-1.48	7.8905	.066	1
S5	10.000	9.8201	-.180	-1.80	15.717	.129	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



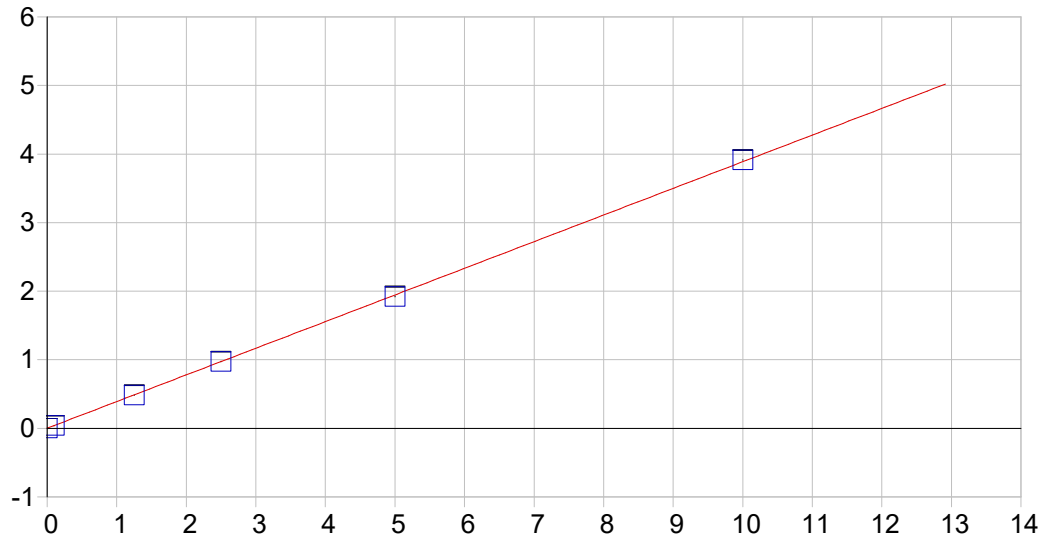
Sn 189.989 {478}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000797	Re-Slope:	1.000000
A1 (Gain):	0.129221	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999898	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.001670		
Predicted MQL:	0.005568		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00080	.000	1
S1	.00700	.00560	-.001	-20.1	.00148	.000	1
S2	1.2500	1.2142	-.036	-2.86	.15689	.000	1
S3	2.5000	2.4716	-.028	-1.14	.31856	.003	1
S4	5.0000	4.9428	-.057	-1.14	.63628	.002	1
S5	10.000	10.123	.123	1.23	1.3024	.003	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



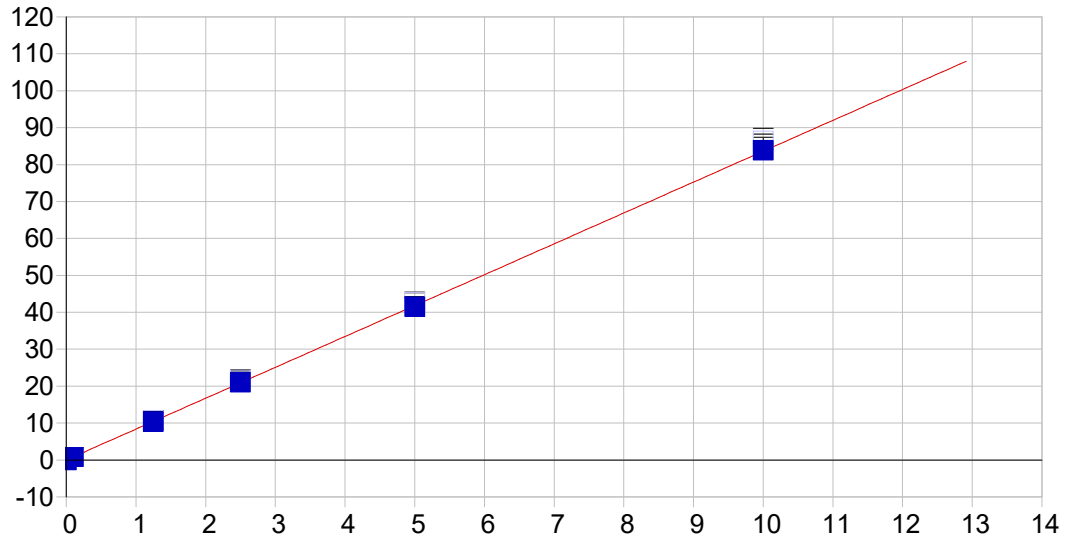
Ti 336.121 {100}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002097	Re-Slope:	1.000000
A1 (Gain):	0.388603	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.000173		
Predicted MDL:	0.004024		
Predicted MQL:	0.013415		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00210	.002	1
S1	.10000	.09714	-.003	-2.86	.03985	.002	1
S2	1.2500	1.2373	-.013	-1.02	.48291	.004	1
S3	2.5000	2.5026	.003	.103	.97461	.005	1
S4	5.0000	4.9439	-.056	-1.12	1.9233	.008	1
S5	10.000	10.069	.069	.691	3.9150	.005	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5



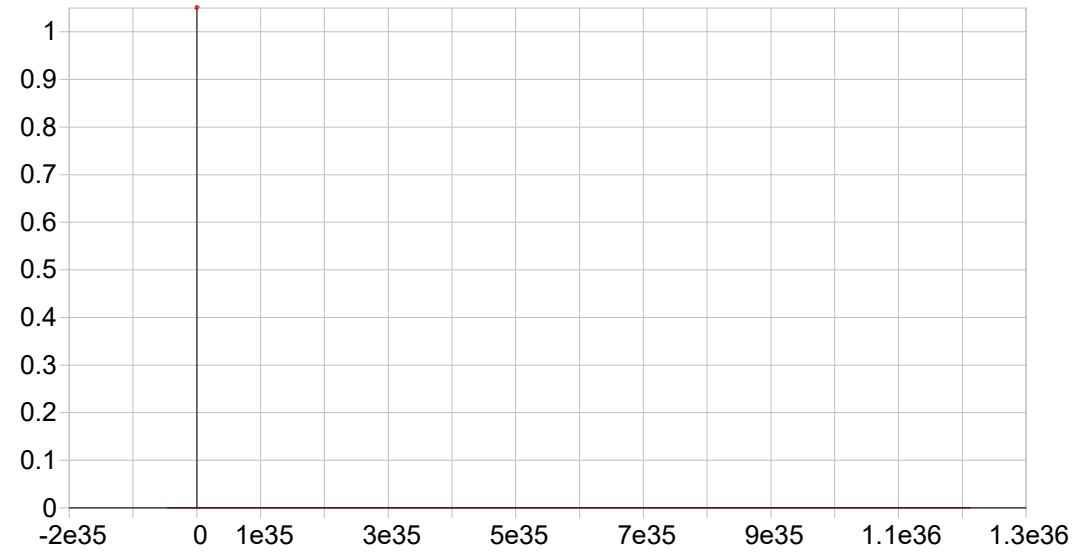
Sr 407.771 { 83}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001176	Re-Slope:	1.000000
A1 (Gain):	8.362116	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.002942		
Predicted MDL:	0.000258		
Predicted MQL:	0.000859		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00120	.002	1
S1	.10000	.10392	.004	3.92	.86866	.004	1
S2	1.2500	1.2398	-.010	-.818	10.680	.048	1
S3	2.5000	2.5160	.016	.639	21.665	.084	1
S4	5.0000	4.9568	-.043	-.864	42.702	.098	1
S5	10.000	10.034	.034	.336	86.410	.786	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

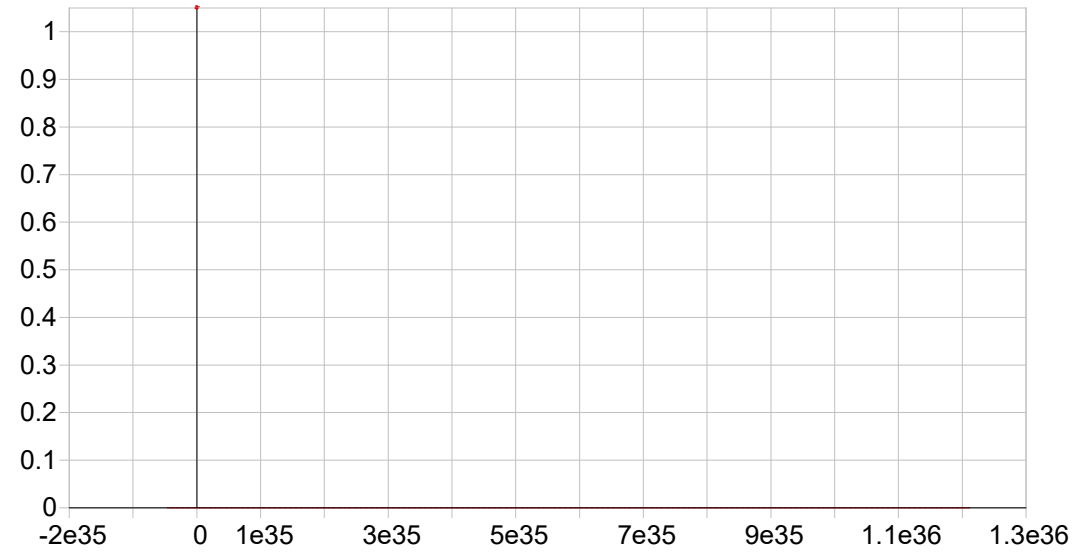


Y 224.306 {450}*

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



Y 360.073 { 94}*

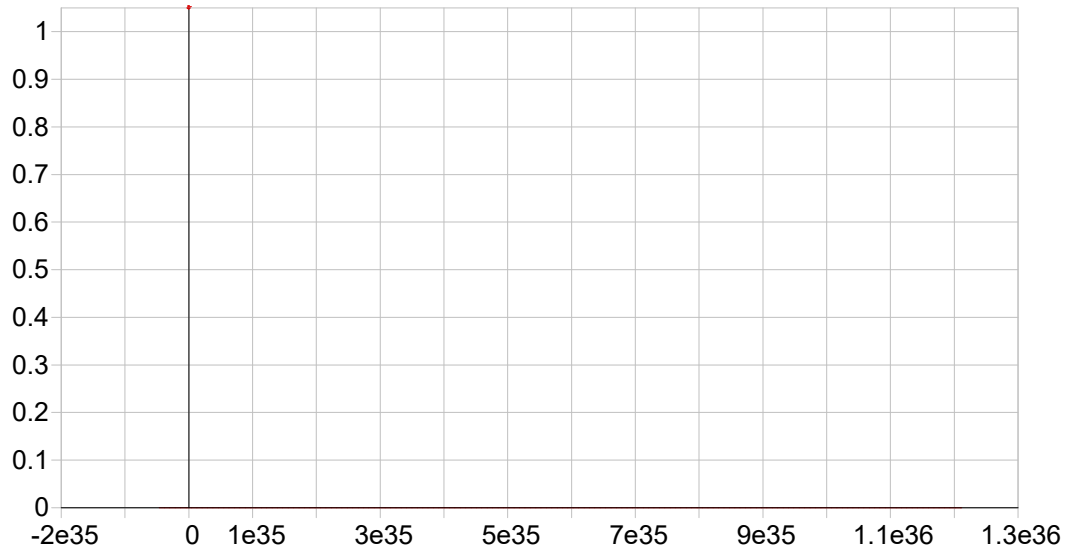
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

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



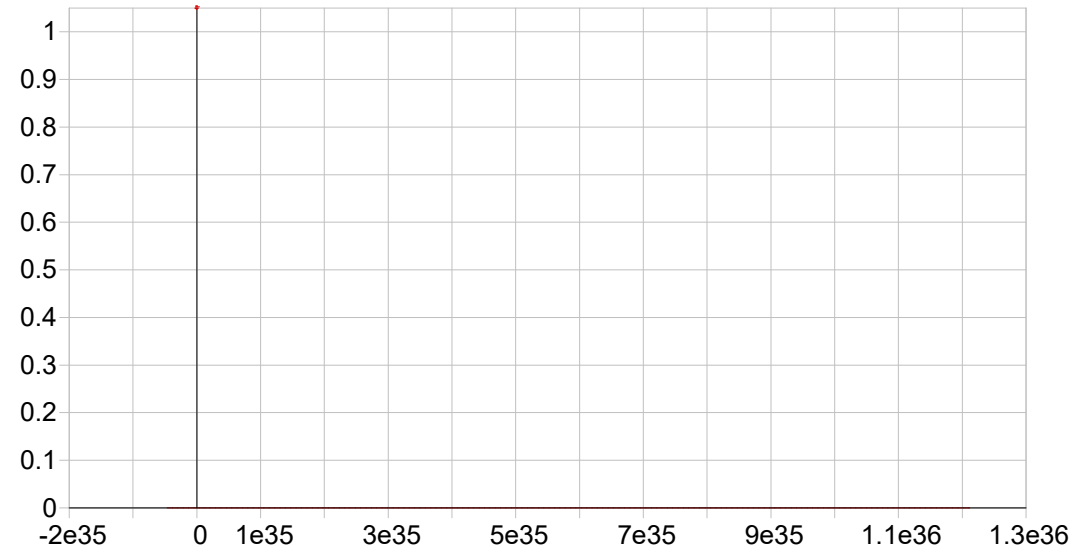
Y 371.030 { 91}*

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:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

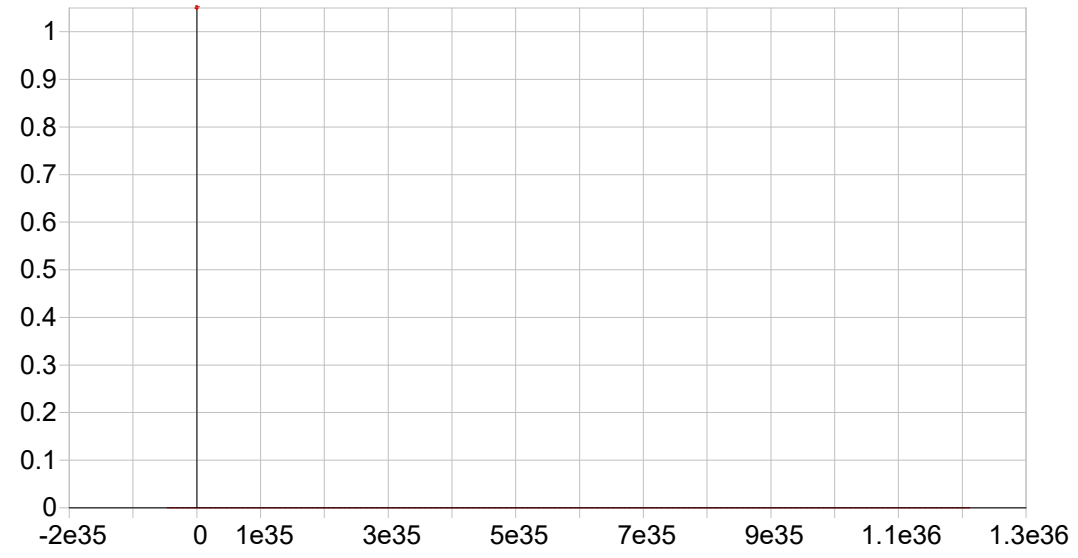


Y 224.306 {150}*

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}*

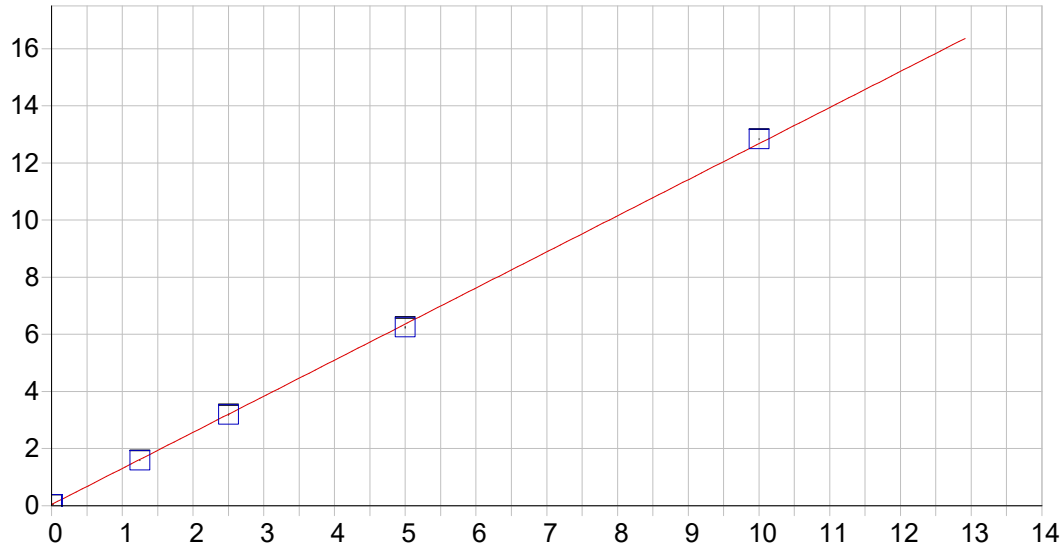
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

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Inst Id :P5

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



Li 670.784 { 50}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042925	Re-Slope:	1.000000
A1 (Gain):	1.263612	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999886	Status:	OK.
Std Error of Est:	0.000391		
Predicted MDL:	0.003626		
Predicted MQL:	0.012087		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.04293	.005	1
S5	10.000	10.124	.124	1.24	12.836	.010	1
S4	5.0000	4.9118	-.088	-1.76	6.2495	.028	1
S3	2.5000	2.4909	-.009	-.366	3.1904	.024	1
S2	1.2500	1.2263	-.024	-1.90	1.5925	.008	1
S1	.01500	.01181	-.003	-21.3	.05784	.004	1

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/30/2024 18:31:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	.48771	-.00018	.00023	-.00007	-.00031	.00088	.05361	-.00018
Stddev	.36601	.00012	.00021	.00027	.00041	.00428	.00201	.00143
%RSD	75.047	67.224	89.359	364.32	132.22	488.47	3.7550	802.64
#1	.06555	-.00021	.00000	-.00036	-.00052	.00551	.05197	-.00104
#2	.68158	-.00028	.00040	.00017	-.00057	.00005	.05301	.00147
#3	.71602	-.00004	.00030	-.00003	.00016	-.00293	.05586	-.00096

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00015	.00524	-.00012	-.00044	.00070	.00033	.00001	-.00117
Stddev	.00040	.00019	.00013	.00009	.00090	.00069	.00067	.00112
%RSD	262.17	3.5611	104.42	20.663	128.77	205.07	10345.	95.638
#1	-.00013	.00509	-.00026	-.00047	.00018	.00054	-.00042	-.00004
#2	.00061	.00517	-.00010	-.00034	.00173	-.00043	.00078	-.00228
#3	-.00002	.00545	-.00001	-.00052	.00018	.00090	-.00034	-.00120

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00102	.00038	.00809	-.00000	.07052	.06356	-.00395	.00654
Stddev	.00048	.00014	.00777	.00033	.00026	.00290	.00010	.00228
%RSD	46.986	36.901	96.117	20248.	.36704	4.5598	2.4303	34.807
#1	-.00067	.00026	.00212	-.00009	.07040	.06675	-.00386	.00500
#2	-.00156	.00035	.01687	.00036	.07082	.06108	-.00405	.00548
#3	-.00082	.00053	.00526	-.00028	.07035	.06285	-.00395	.00916

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00002	.00010	.01311	.00080	.00210	-.00120	.04293
Stddev	.00026	.00038	.00263	.00017	.00218	.00183	.00544
%RSD	1113.1	381.33	20.034	20.718	103.87	152.07	12.677
#1	-.00003	-.00018	.01612	.00095	-.00037	.00088	.03678
#2	-.00028	-.00005	.01127	.00063	.00376	-.00256	.04711
#3	.00024	.00053	.01194	.00081	.00290	-.00193	.04490

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/30/2024 18:31:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	1639.6	20600.	2264.6	1361.8	1934.7
Stddev	5.3	91.	17.0	1.3	3.6
%RSD	.32023	.44136	.75257	.09292	.18563
#1	1634.2	20686.	2256.6	1363.2	1930.9
#2	1640.1	20609.	2284.2	1360.7	1935.3
#3	1644.6	20504.	2253.0	1361.4	1938.0

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/30/2024 18:36:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1.3820	.00228	.00285	.00179	.00864	.02336	.91421	.05540
Stddev	.5105	.00020	.00007	.00027	.00094	.00350	.00047	.00156
%RSD	36.939	8.7924	2.4382	15.327	10.933	14.998	.05156	2.8150
#1	.91488	.00250	.00292	.00170	.00917	.01942	.91368	.05582
#2	1.3043	.00211	.00284	.00157	.00755	.02612	.91459	.05671
#3	1.9270	.00223	.00278	.00210	.00921	.02453	.91434	.05368

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01982	.27139	.00303	.05588	.00505	.00216	.00658	.05527
Stddev	.00013	.00313	.00013	.00053	.00057	.00051	.00029	.00039
%RSD	.67127	1.1522	4.2074	.94534	11.267	23.597	4.4785	.70442
#1	.01972	.27257	.00311	.05647	.00515	.00182	.00692	.05545
#2	.01976	.26785	.00288	.05574	.00556	.00191	.00639	.05552
#3	.01997	.27376	.00309	.05544	.00444	.00274	.00643	.05482

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02468	.00354	1.3441	.00552	.21769	.20177	-.00333	.00318
Stddev	.00051	.00015	.0179	.00181	.00266	.00354	.00036	.00070
%RSD	2.0528	4.3105	1.3288	32.737	1.2220	1.7551	10.706	22.053
#1	.02490	.00361	1.3612	.00540	.21973	.20077	-.00372	.00391
#2	.02503	.00336	1.3256	.00377	.21468	.20571	-.00326	.00251
#3	.02410	.00365	1.3456	.00738	.21865	.19884	-.00301	.00313

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00721	.00417	.40085	.00148	.03985	.86866	.05784
Stddev	.00039	.00007	.00346	.00015	.00199	.00369	.00355
%RSD	5.3484	1.7529	.86390	9.9932	4.9955	.42486	6.1326
#1	.00703	.00422	.40047	.00156	.04171	.86598	.05417
#2	.00766	.00421	.39760	.00131	.03775	.86714	.05811
#3	.00695	.00409	.40449	.00157	.04009	.87287	.06125

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/30/2024 18:36:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1671.7	20999.	2283.5	1389.8	1978.9
Stddev	3.6	63.	10.6	2.1	3.5
%RSD	.21736	.29841	.46504	.15268	.17545
#1	1675.6	21058.	2276.4	1387.8	1982.8
#2	1668.5	21006.	2295.7	1392.0	1977.7
#3	1670.9	20933.	2278.4	1389.6	1976.2

Reviewed By:kareem
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Inst Id :P5

Sample Name: S2 Acquired: 12/30/2024 18:40:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	155.29	.11676	1.5375	.07522	.19415	4.3239	10.483	1.3341
Stddev	.35	.00025	.0019	.00060	.00043	.0220	.032	.0058
%RSD	.22466	.21246	.12189	.79447	.22352	.50772	.30081	.43554
#1	155.69	.11648	1.5358	.07477	.19376	4.3037	10.449	1.3279
#2	155.04	.11694	1.5395	.07500	.19407	4.3472	10.512	1.3395
#3	155.13	.11686	1.5373	.07590	.19462	4.3207	10.488	1.3347

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.4778	3.3576	1.1657	.69992	.51094	.89583	1.5779	.68914
Stddev	.0030	.0093	.0009	.00131	.00134	.00271	.0046	.00014
%RSD	.11954	.27582	.08027	.18775	.26195	.30272	.28911	.02071
#1	2.4744	3.3473	1.1667	.69960	.51028	.89678	1.5769	.68919
#2	2.4798	3.3601	1.1652	.70137	.51248	.89794	1.5829	.68898
#3	2.4793	3.3653	1.1650	.69880	.51006	.89277	1.5740	.68924

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.41069	.09221	11.757	.06640	9.2194	1.1148	.09121	.94803
Stddev	.00021	.00018	.037	.00087	.0742	.0031	.00018	.00121
%RSD	.05046	.19289	.31262	1.3055	.80526	.28113	.20013	.12792
#1	.41046	.09242	11.725	.06627	9.1533	1.1119	.09141	.94672
#2	.41074	.09212	11.749	.06560	9.2053	1.1143	.09115	.94911
#3	.41086	.09210	11.797	.06732	9.2997	1.1181	.09106	.94826

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.90680	.05422	2.0855	.15689	.48291	10.680	1.5925
Stddev	.00351	.00016	.0051	.00050	.00362	.048	.0083
%RSD	.38728	.28681	.24254	.31819	.74884	.45263	.51824
#1	.90315	.05404	2.0798	.15638	.48191	10.624	1.5836
#2	.90709	.05433	2.0875	.15738	.48692	10.710	1.5939
#3	.91015	.05428	2.0893	.15691	.47990	10.705	1.6000

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/30/2024 18:40:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	1617.5	20628.	2283.7	1343.4	1841.2
Stddev	3.5	54.	7.9	8.8	2.7
%RSD	.21621	.26008	.34596	.65207	.14665
#1	1621.4	20585.	2290.9	1349.6	1842.2
#2	1616.3	20688.	2284.9	1347.3	1838.1
#3	1614.7	20613.	2275.2	1333.4	1843.2

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/30/2024 18:44:01 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	305.05	.23407	3.1049	.15399	.39614	8.7538	21.221	2.6568
Stddev	.38	.00207	.0328	.00135	.00427	.0517	.147	.0054
%RSD	.12356	.88581	1.0574	.87878	1.0792	.59121	.69510	.20348
#1	304.94	.23416	3.1080	.15400	.39737	8.6985	21.061	2.6621
#2	304.74	.23610	3.1361	.15534	.39967	8.7621	21.248	2.6568
#3	305.47	.23195	3.0707	.15263	.39139	8.8010	21.353	2.6513

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.9981	6.7287	2.3102	1.4001	1.0172	1.8044	3.1852	1.3888
Stddev	.0564	.0274	.0024	.0156	.0064	.0107	.0221	.0120
%RSD	1.1286	.40670	.10165	1.1133	.62877	.59271	.69314	.86705
#1	4.9991	6.6994	2.3076	1.4019	1.0100	1.7924	3.1681	1.3825
#2	5.0539	6.7330	2.3112	1.4147	1.0191	1.8080	3.1773	1.3812
#3	4.9411	6.7537	2.3120	1.3837	1.0223	1.8128	3.2101	1.4027

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.83212	.18601	25.506	.13479	18.539	2.2209	.19237	1.8972
Stddev	.00905	.00123	.035	.00094	.042	.0073	.00163	.0064
%RSD	1.0876	.66380	.13767	.69406	.22900	.32713	.84583	.33568
#1	.83279	.18482	25.474	.13378	18.502	2.2126	.19226	1.8977
#2	.84081	.18728	25.543	.13494	18.585	2.2247	.19404	1.9034
#3	.82275	.18592	25.502	.13564	18.529	2.2255	.19079	1.8907

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.8440	.11217	4.1051	.31856	.97461	21.665	3.1904
Stddev	.0137	.00121	.0066	.00312	.00538	.084	.0242
%RSD	.74473	1.0793	.15964	.97865	.55245	.38935	.75691
#1	1.8446	.11220	4.0977	.31816	.96887	21.573	3.1671
#2	1.8574	.11336	4.1073	.32186	.97540	21.682	3.1887
#3	1.8299	.11094	4.1102	.31567	.97955	21.739	3.2154

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/30/2024 18:44:01 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	1561.5	20211.	2259.2	1295.9	1763.7
Stddev	14.8	50.	3.7	3.4	19.6
%RSD	.94807	.24650	.16502	.26284	1.1134
#1	1556.8	20266.	2263.4	1299.2	1760.1
#2	1549.5	20199.	2256.3	1292.3	1746.1
#3	1578.0	20168.	2257.9	1296.1	1784.9

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/30/2024 18:47:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	594.19	.45709	6.1967	.30702	.79786	17.276	41.889	5.1591
Stddev	.80	.00152	.0186	.00115	.00133	.046	.180	.0428
%RSD	.13396	.33317	.29951	.37504	.16721	.26773	.42994	.83007
#1	595.10	.45637	6.1879	.30758	.79926	17.301	41.967	5.1630
#2	593.84	.45607	6.1843	.30570	.79772	17.304	42.017	5.1999
#3	593.63	.45884	6.2181	.30778	.79660	17.223	41.683	5.1145

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.8590	13.106	4.4874	2.7476	1.9943	3.5140	6.1778	2.7148
Stddev	.0270	.057	.0355	.0083	.0067	.0095	.0271	.0097
%RSD	.27331	.43262	.79189	.30304	.33537	.27053	.43881	.35654
#1	9.8472	13.153	4.4478	2.7459	1.9980	3.5192	6.1949	2.7128
#2	9.8401	13.121	4.5164	2.7403	1.9982	3.5197	6.1918	2.7254
#3	9.8899	13.043	4.4979	2.7567	1.9865	3.5030	6.1465	2.7064

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.6487	.36987	54.039	.26526	36.707	4.3628	.39050	3.6790
Stddev	.0030	.00289	.366	.00083	.266	.0167	.00113	.0250
%RSD	.18373	.78165	.67732	.31359	.72487	.38380	.28878	.67872
#1	1.6498	.36654	54.230	.26437	36.426	4.3779	.39131	3.6739
#2	1.6452	.37175	54.269	.26602	36.955	4.3658	.38921	3.7062
#3	1.6510	.37132	53.617	.26539	36.739	4.3448	.39098	3.6570

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.7042	.22798	7.8905	.63628	1.9233	42.702	6.2495
Stddev	.0076	.00053	.0662	.00239	.0082	.098	.0279
%RSD	.20655	.23070	.83839	.37525	.42790	.23019	.44639
#1	3.7083	.22767	7.8990	.63532	1.9317	42.771	6.2568
#2	3.6954	.22769	7.9520	.63452	1.9230	42.747	6.2731
#3	3.7089	.22859	7.8205	.63900	1.9152	42.590	6.2187

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/30/2024 18:47:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	1499.0	19874.	2261.1	1243.3	1699.6
Stddev	2.1	76.	21.0	5.2	5.5
%RSD	.14157	.38012	.92956	.41884	.32074
#1	1499.2	19938.	2247.1	1246.4	1702.5
#2	1501.0	19790.	2251.0	1237.3	1702.9
#3	1496.8	19892.	2285.3	1246.3	1693.3

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/30/2024 18:51:37 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1140.1	.91411	12.710	.64451	1.7283	35.581	85.807	10.350
Stddev	.8	.00117	.018	.00139	.0041	.036	.127	.101
%RSD	.06710	.12806	.14539	.21644	.23912	.10092	.14769	.97868
#1	1140.6	.91279	12.712	.64489	1.7289	35.589	85.952	10.467
#2	1139.2	.91455	12.691	.64297	1.7239	35.541	85.717	10.289
#3	1140.4	.91500	12.728	.64568	1.7321	35.612	85.752	10.294

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.915	26.494	9.0146	5.5637	4.0585	7.0366	12.402	5.5028
Stddev	.032	.078	.0211	.0124	.0091	.0226	.029	.0155
%RSD	.16066	.29331	.23397	.22230	.22492	.32061	.23783	.28171
#1	19.915	26.566	9.0291	5.5589	4.0661	7.0627	12.430	5.5199
#2	19.883	26.411	9.0243	5.5544	4.0484	7.0235	12.371	5.4895
#3	19.947	26.504	8.9904	5.5777	4.0611	7.0236	12.404	5.4992

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.3480	.76795	115.22	.53839	76.348	8.9808	.81379	7.2723
Stddev	.0110	.00063	.53	.00057	.417	.0254	.00315	.0670
%RSD	.32868	.08189	.45805	.10559	.54574	.28279	.38680	.92133
#1	3.3518	.76856	115.58	.53830	75.968	9.0094	.81357	7.3478
#2	3.3356	.76730	114.61	.53900	76.283	8.9609	.81076	7.2198
#3	3.3567	.76799	115.47	.53787	76.794	8.9720	.81704	7.2493

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.9177	.47640	15.717	1.3024	3.9150	86.410	12.836
Stddev	.0191	.00174	.129	.0025	.0053	.786	.010
%RSD	.24092	.36460	.81948	.19257	.13590	.90961	.08134
#1	7.9092	.47744	15.866	1.3014	3.9211	85.799	12.841
#2	7.9043	.47439	15.633	1.3006	3.9121	87.297	12.824
#3	7.9396	.47735	15.653	1.3052	3.9117	86.134	12.843

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/30/2024 18:51:37 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1332.0	18781.	2196.3	1101.3	1563.0
Stddev	2.4	13.	15.3	7.2	2.4
%RSD	.18182	.06791	.69769	.65430	.15263
#1	1334.3	18789.	2179.4	1108.8	1565.2
#2	1332.3	18767.	2209.2	1100.8	1563.4
#3	1329.5	18788.	2200.5	1094.4	1560.5

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: S6 Acquired: 12/30/2024 18:55:40 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S06 Custom ID2: Custom ID3:
Comment:

Elem	Al3961	Ca3736	Fe2598	Mg2790	Na8183
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	91.561	41.699	18.101	8.6628	323.85
Stddev	.340	.136	.066	.0251	1.50
%RSD	.37135	.32567	.36613	.28962	.46347
#1	91.559	41.747	18.130	8.6725	323.18
#2	91.222	41.546	18.025	8.6343	325.57
#3	91.902	41.804	18.148	8.6815	322.80

Int. Std.	Y_3710
Units	Cts/S
Avg	2140.5
Stddev	2.6
%RSD	.12357
#1	2140.0
#2	2138.1
#3	2143.3

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICV005 Acquired: 12/30/2024 19:07:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.080223	1.029759	.9950504	1.002528	.9538177	2.512872
Stddev	.006231	.003851	.0014438	.008291	.0025610	.031874
%RSD	.5768535	.3739331	.1450981	.8270506	.2684958	1.268415
#1	1.082836	1.025542	.9966301	1.005659	.9542617	2.496117
#2	1.084722	1.033088	.9937991	.993127	.9510637	2.549629
#3	1.073110	1.030647	.9947220	1.008797	.9561276	2.492870

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5410605	.5418135	.5131480	10.63053	.5619677	.5137286
Stddev	.0115337	.0093399	.0007659	.23816	.0075221	.0001505
%RSD	2.131690	1.723813	.1492525	2.240294	1.338531	.0292946
#1	.5376641	.5380958	.5125968	10.49550	.5688669	.5137301
#2	.5539110	.5524397	.5128248	10.90551	.5539483	.5135774
#3	.5316063	.5349049	.5140226	10.49057	.5630878	.5138784

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5330611	10.90618	.5503640	6.441025	.5209222	.2501392
Stddev	.0036034	.24624	.0084662	.095550	.0004804	.0025269
%RSD	.6759847	2.257772	1.538295	1.483457	.0922211	1.010200
#1	.5304848	10.74570	.5479440	6.414045	.5208427	.2518996
#2	.5371788	11.18969	.5597768	6.547164	.5204865	.2472438
#3	.5315195	10.78315	.5433713	6.361866	.5214374	.2512741

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.432906	.5373080	.9847268	9.838333	F -.002858	F -.022855
Stddev	.115921	.0244940	.0156095	.112916	.003258	.000228
%RSD	1.228903	4.558655	1.585158	1.147713	113.9792	.9955645
#1	9.380408	.5333702	.9967002	9.732140	-.002683	-.022994
#2	9.565789	.5635324	.9670725	9.956945	-.006200	-.022980
#3	9.352522	.5150214	.9904077	9.825915	.000309	-.022593

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICV005 Acquired: 12/30/2024 19:07:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0007553	F .0103732	F .0002918	F .0014187	F .0004416	F -.009780
Stddev	.0001869	.0019412	.0008796	.0004184	.0046983	.000215
%RSD	24.73849	18.71314	301.4705	29.49398	1063.990	2.193752
#1	.0008575	.0119618	.0009212	.0010072	-.001756	-.009668
#2	.0005397	.0082095	.0006675	.0014052	.005836	-.010027
#3	.0008688	.0109484	-.000713	.0018437	-.002755	-.009644

Elem	Li6707
Units	ppm
Avg	F .0206045
Stddev	.0063842
%RSD	30.98433
#1	.0166640
#2	.0279703
#3	.0171792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1665.388	20948.27	2254.700	1386.999	1953.339
Stddev	.951	323.02	30.597	26.015	1.037
%RSD	.0571213	1.541967	1.357019	1.875631	.0530879
#1	1665.616	20722.96	2275.379	1370.115	1952.328
#2	1666.205	21318.35	2219.552	1416.958	1954.400
#3	1664.344	20803.51	2269.169	1373.925	1953.288

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICB005 Acquired: 12/30/2024 19:11:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004422	-.000055	.0006760	.0094432	.0032602	-.017424
Stddev	.000589	.003508	.0012038	.0063903	.0008928	.034597
%RSD	13.31514	6376.647	178.0634	67.67020	27.38489	198.5532
#1	-.005050	.002086	.0020641	.0092697	.0039381	-.005690
#2	-.003883	-.004103	.0000456	.0159185	.0035939	.009779
#3	-.004332	.001852	-.000082	.0031415	.0022486	-.056362

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018960	.0001969	.0000913	.0117123	-.000236	-.000205
Stddev	.0008401	.0001511	.0000552	.0144878	.000398	.000308
%RSD	44.30695	76.73582	60.39428	123.6977	169.0779	150.1010
#1	.0028649	.0002296	.0001479	-.004512	-.000642	-.000371
#2	.0013708	.0003289	.0000377	.016291	-.000219	.000150
#3	.0014524	.0000321	.0000884	.023357	.000154	-.000395

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061687	-.023173	-.000546	.0481811	-.000764	.0008865
Stddev	.0089478	.014484	.001420	.0353511	.000402	.0011057
%RSD	145.0504	62.50541	260.2503	73.37118	52.61609	124.7215
#1	.0147270	-.030691	-.001316	.0120598	-.001218	.0020471
#2	-.003123	-.006475	.001093	.0497756	-.000623	-.000155
#3	.006903	-.032352	-.001414	.0827080	-.000452	.000767

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0262150	-.007058	.0006547	.1011701	-.001412	-.001380
Stddev	.0123692	.006383	.0000754	.1566626	.001358	.001677
%RSD	47.18383	90.43841	11.51386	154.8506	96.17765	121.5110
#1	.0197096	-.004658	.0005681	.0568419	-.002017	-.000752
#2	.0184559	-.002222	.0007059	.2752204	.000143	-.000108
#3	.0404793	-.014293	.0006900	-.028552	-.002363	-.003281

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICB005 Acquired: 12/30/2024 19:11:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004424	.0011069	.0001734	.0008751	-.001252	-.000130
Stddev	.0004210	.0022354	.0010305	.0010993	.002767	.000249
%RSD	95.15588	201.9442	594.1416	125.6246	220.9722	190.6955
#1	.0008973	-.000199	-.000174	.0021129	.000030	-.000046
#2	.0003632	.003688	-.000639	.0000127	.000641	.000065
#3	.0000667	-.000168	.001333	.0004996	-.004428	-.000410

Elem	Li6707
Units	ppm
Avg	F .0201766
Stddev	.0028008
%RSD	13.88160
#1	.0217487
#2	.0218383
#3	.0169429

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.831	20661.87	2244.670	1370.334	1905.590
Stddev	21.190	131.88	16.038	8.275	24.201
%RSD	1.309759	.6382684	.7144734	.6038481	1.270015
#1	1639.371	20747.44	2226.211	1377.092	1929.791
#2	1597.010	20728.18	2252.616	1372.805	1881.389
#3	1617.111	20510.00	2255.183	1361.106	1905.590

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICSA005 Acquired: 12/30/2024 19:15:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019224	.0064219	.0070429	-.006256	.0029989	247.5376
Stddev	.0056777	.0073943	.0009340	.004508	.0029282	.4298
%RSD	295.3463	115.1420	13.26176	72.06210	97.64188	.1736117
#1	-.001574	.0017314	.0059875	-.010565	.0016897	247.6627
#2	-.001133	.0149457	.0073784	-.006632	.0063534	247.8909
#3	.008474	.0025885	.0077629	-.001572	.0009537	247.0592

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069434	.0014372	.0009415	254.8073	.0546590	.0362012
Stddev	.0003974	.0000756	.0000864	.1908	.0008419	.0006535
%RSD	5.723151	5.260761	9.175395	.0748799	1.540249	1.805307
#1	.0067619	.0014009	.0009821	254.9558	.0554176	.0356354
#2	.0066692	.0013865	.0010001	254.8739	.0548062	.0360516
#3	.0073992	.0015241	.0008423	254.5921	.0537533	.0369166

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040628	104.5612	.0081151	265.9305	.0072743	-.005853
Stddev	.0140723	.1068	.0005219	1.0380	.0008964	.000520
%RSD	346.3688	.1021870	6.431323	.3903212	12.32247	8.889388
#1	.0195258	104.6501	.0087000	265.8863	.0062648	-.006372
#2	-.007993	104.5908	.0076968	266.9899	.0079770	-.005331
#3	.000656	104.4426	.0079487	264.9154	.0075810	-.005857

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1246495	.0057452	-.022565	-.217994	.0058272	F -.244283
Stddev	.0361432	.0033235	.000251	.046698	.0041154	.005263
%RSD	28.99587	57.84806	1.110835	21.42165	70.62349	2.154508
#1	.1481180	.0049062	-.022385	-.242136	.0014085	-.245926
#2	.1428025	.0094078	-.022459	-.164167	.0095507	-.238395
#3	.0830279	.0029216	-.022851	-.247679	.0065225	-.248529

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICSA005 Acquired: 12/30/2024 19:15:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024792	.0159462	-.001970	F .0146502	-.005251	.0039033
Stddev	.0005627	.0087397	.000571	.0010760	.001646	.0003420
%RSD	22.69673	54.80710	28.99347	7.344695	31.34462	8.762206
#1	.0030583	.0091696	-.001514	.0143841	-.003557	.0036702
#2	.0019344	.0128584	-.001786	.0158343	-.006845	.0037439
#3	.0024449	.0258106	-.002611	.0137322	-.005351	.0042960

Elem	Li6707
Units	ppm
Avg	F .0249194
Stddev	.0031040
%RSD	12.45628
#1	.0228785
#2	.0284916
#3	.0233883

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1570.153	19536.80	2239.211	1305.365	1734.218
Stddev	7.818	110.80	17.790	3.274	4.926
%RSD	.4979338	.5671282	.7944773	.2508457	.2840742
#1	1572.784	19553.67	2219.631	1305.838	1737.591
#2	1576.317	19418.53	2254.383	1301.879	1736.499
#3	1561.358	19638.20	2243.618	1308.377	1728.565

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICSAB005 Acquired: 12/30/2024 19:50:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1018566	.0998692	.0576695	.0392489	.5991666	231.7798
Stddev	.0087626	.0051157	.0041732	.0025021	.0026822	.8584
%RSD	8.602880	5.122373	7.236340	6.374888	.4476521	.3703320
#1	.1117581	.0953886	.0624386	.0397611	.5994371	230.8086
#2	.0987096	.0987759	.0558827	.0414552	.5963595	232.4369
#3	.0951021	.1054432	.0546873	.0365303	.6017033	232.0938

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5424965	.5405325	1.061315	240.3109	.6203899	.5472687
Stddev	.0017840	.0053971	.002727	.5044	.0016266	.0016058
%RSD	.3288520	.9984758	.2569782	.2099028	.2621899	.2934155
#1	.5405982	.5416880	1.060308	239.7791	.6217169	.5463216
#2	.5427530	.5452582	1.059235	240.3713	.6208775	.5463618
#3	.5441385	.5346512	1.064403	240.7825	.6185753	.5491228

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4965447	98.16970	.5467131	248.7891	1.054149	.2109795
Stddev	.0148174	.29137	.0034264	.7576	.002468	.0013625
%RSD	2.984093	.2968029	.6267227	.3045110	.2341084	.6457770
#1	.5081233	98.05458	.5436099	247.9197	1.053344	.2123633
#2	.5016645	97.95347	.5461391	249.1404	1.052183	.2096394
#3	.4798464	98.50104	.5503902	249.3074	1.056918	.2109358

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0714130	.5313850	1.008942	-.628636	.0017804	F -.238675
Stddev	.0119023	.0095604	.004816	.200760	.0048004	.004835
%RSD	16.66690	1.799156	.4773220	31.93583	269.6189	2.025929
#1	.0682484	.5208842	1.013824	-.672055	.0000757	-.243424
#2	.0614127	.5336856	1.008806	-.804135	-.001935	-.238844
#3	.0845777	.5395853	1.004195	-.409720	.007201	-.233757

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: ICSAB005 Acquired: 12/30/2024 19:50:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025634	.0324169	.0005468	F .0112974	-.007134	.0036982
Stddev	.0003400	.0051773	.0016273	.0012809	.000854	.0006773
%RSD	13.26177	15.97086	297.6038	11.33775	11.96583	18.31451
#1	.0029113	.0275147	.0018078	.0106119	-.006225	.0038987
#2	.0025470	.0319049	.0011228	.0127751	-.007257	.0042526
#3	.0022320	.0378311	-.001290	.0105052	-.007919	.0029433

Elem	Li6707
Units	ppm
Avg	.0008555
Stddev	.0034199
%RSD	399.7545
#1	-.003093
#2	.002809
#3	.002850

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1577.431	19662.38	2278.562	1311.421	1746.493
Stddev	1.087	25.04	14.844	5.340	3.671
%RSD	.0688916	.1273550	.6514606	.4071694	.2101737
#1	1577.503	19633.49	2272.191	1305.447	1749.292
#2	1578.480	19675.91	2267.967	1315.730	1747.850
#3	1576.310	19677.75	2295.528	1313.085	1742.337

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV049 Acquired: 12/30/2024 19:54:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV049 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.954220	4.820814	24.67484	4.928340	4.904377	403.6664
Stddev	.007127	.007446	.03523	.013375	.003710	.9030
%RSD	.1438658	.1544526	.1427659	.2713935	.0756367	.2236967
#1	4.945997	4.816615	24.64162	4.915678	4.901798	404.7090
#2	4.958622	4.829411	24.67113	4.942329	4.902706	403.1340
#3	4.958041	4.816416	24.71178	4.927014	4.908629	403.1561

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.08487	.5058581	2.489382	410.2640	15.50336	2.486900
Stddev	.01531	.0032236	.003768	1.2386	.01266	.004228
%RSD	.1518013	.6372583	.1513674	.3019055	.0816549	.1700255
#1	10.10234	.5086082	2.485410	411.6817	15.48968	2.483209
#2	10.07379	.5066555	2.489831	409.7188	15.51465	2.485977
#3	10.07847	.5023106	2.492906	409.3915	15.50576	2.491513

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.10156	409.0644	15.03071	403.3444	2.512215	1.264303
Stddev	.05823	1.4306	.04156	1.3341	.003856	.000396
%RSD	.3856014	.3497168	.2765299	.3307560	.1535020	.0312870
#1	15.16880	410.7104	15.07272	404.3779	2.510054	1.264560
#2	15.06804	408.3616	15.02979	403.8170	2.509923	1.264502
#3	15.06784	408.1212	14.98961	401.8384	2.516667	1.263848

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	408.0286	2.487329	14.90307	152.7635	4.894061	F 4.350231
Stddev	.7441	.021434	.10303	.5062	.004398	.025270
%RSD	.1823611	.8617170	.6913187	.3313353	.0898542	.5808821
#1	408.6593	2.511326	14.84620	153.3260	4.892494	4.378696
#2	407.2079	2.480575	14.84100	152.6196	4.890661	4.341554
#3	408.2185	2.470086	15.02200	152.3448	4.899027	4.330443

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV049 Acquired: 12/30/2024 19:54:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV049 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.808307	4.977871	4.974573	5.033391	5.032397	4.821186
Stddev	.010329	.002191	.032792	.003314	.003508	.011616
%RSD	.2148122	.0440048	.6592003	.0658485	.0697171	.2409266
#1	4.811806	4.979539	5.007911	5.029929	5.034703	4.833882
#2	4.796683	4.978684	4.973453	5.036535	5.028359	4.818582
#3	4.816432	4.975390	4.942354	5.033709	5.034128	4.811094

Elem	Li6707
Units	ppm
Avg	5.079033
Stddev	.007151
%RSD	.1407868
#1	5.080603
#2	5.071227
#3	5.085268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1433.484	18782.51	2183.176	1178.744	1607.459
Stddev	3.230	15.63	13.211	8.838	2.571
%RSD	.2253068	.0832173	.6051132	.7497961	.1599591
#1	1429.774	18799.28	2169.567	1183.743	1604.982
#2	1435.017	18779.90	2184.012	1183.950	1607.281
#3	1435.662	18768.35	2195.949	1168.539	1610.116

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB049 Acquired: 12/30/2024 19:58:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB049 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000949	-.003074	.0029558	.0010957	-.000451	.0226319	.0009061
Stddev	.005150	.001956	.0013712	.0069894	.003450	.0108423	.0008298
%RSD	542.9495	63.64263	46.38867	637.8645	765.5776	47.90740	91.57721
#1	-.003628	-.003773	.0014111	-.006901	.003000	.0296089	.0018244
#2	.004989	-.000864	.0040290	.004148	-.000451	.0101407	.0002100
#3	-.004206	-.004585	.0034273	.006040	-.003900	.0281460	.0006840

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001324	.0001528	.0424126	.0006210	-.000032	.0018386	.0400512
Stddev	.0000846	.0001138	.0206334	.0004698	.000216	.0055688	.0126412
%RSD	63.92587	74.50172	48.64930	75.64381	679.4934	302.8769	31.56255
#1	.0001725	.0000235	.0655014	.0000787	-.000154	-.003238	.0263144
#2	.0001895	.0002381	.0359590	.0008831	.000218	.000959	.0426450
#3	.0000352	.0001968	.0257773	.0009013	-.000160	.007795	.0511944

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004557	.0982321	-.000608	.0011610	.0644596	.0010683	.0026544
Stddev	.0013445	.0577988	.000352	.0010077	.0186929	.0105502	.0011254
%RSD	295.0460	58.83898	57.95804	86.79613	28.99945	987.5905	42.39569
#1	.0002183	.1615614	-.000987	.0000443	.0763259	.0035315	.0039440
#2	.0019031	.0848089	-.000546	.0014362	.0741412	-.010496	.0021476
#3	-.000754	.0483261	-.000290	.0020026	.0429118	.010169	.0018716

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0807830	-.002732	.0110931	.0006819	-.000283	.0009773	.0000654
Stddev	.1041563	.002413	.0038659	.0008693	.002653	.0009751	.0027229
%RSD	128.9334	88.34133	34.84942	127.4760	938.4186	99.77931	4164.445
#1	.0028219	-.000841	.0066842	.0016815	.002056	.0020288	.0013661
#2	.0404535	-.005450	.0126923	.0002610	.000261	.0001028	.0018940
#3	.1990736	-.001904	.0139028	.0001032	-.003166	.0008003	-.003064

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB049 Acquired: 12/30/2024 19:58:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB049 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002024	.0001103	.0129394
Stddev	.002339	.0001582	.0023618
%RSD	115.5596	143.4285	18.25233
#1	-.000220	.0001140	.0156661
#2	-.004667	.0002665	.0115308
#3	-.001186	-.000050	.0116215

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1682.786	21083.90	2236.699	1399.218	1981.144
Stddev	16.505	315.78	29.053	22.991	19.347
%RSD	.9808192	1.497727	1.298921	1.643165	.9765643
#1	1692.481	20723.13	2211.502	1372.684	1991.795
#2	1692.148	21310.08	2268.478	1413.235	1992.826
#3	1663.728	21218.51	2230.118	1411.735	1958.812

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-07DLX2 Acquired: 12/30/2024 20:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0434769	.0152753	.1535327	-.010542	-.001019	29.50271	.4568861
Stddev	.0048016	.0029561	.0011148	.005923	.003943	.31674	.0036984
%RSD	11.04408	19.35199	.7260735	56.18337	386.9164	1.073607	.8094768
#1	.0379325	.0130014	.1523278	-.010729	.003094	29.15822	.4527649
#2	.0462272	.0186169	.1545273	-.004528	-.001386	29.56854	.4579774
#3	.0462710	.0142076	.1537431	-.016369	-.004765	29.78136	.4599161

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026668	.0024728	521.4104	.0505103	.0832344	.1460967	87.91561
Stddev	.0000291	.0000549	4.6044	.0017262	.0004957	.0130964	.91273
%RSD	1.090688	2.219615	.8830671	3.417497	.5954972	8.964195	1.038185
#1	.0026796	.0024948	516.1791	.0486272	.0829271	.1423857	86.94671
#2	.0026873	.0024104	523.2038	.0520178	.0838062	.1606481	88.04091
#3	.0026335	.0025133	524.8482	.0508858	.0829698	.1352562	88.75921

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.524421	200.4422	.0989303	-.003429	.9743230	.0839301	.2318832
Stddev	.097009	1.9120	.0008919	.000394	.0052467	.0091151	.0049619
%RSD	1.018526	.9539038	.9015509	11.49256	.5384931	10.86034	2.139806
#1	9.413764	198.3301	.0999109	-.002977	.9701377	.0747330	.2298778
#2	9.564687	200.9413	.0981674	-.003613	.9726224	.0840964	.2375338
#3	9.594812	202.0551	.0987127	-.003698	.9802091	.0929610	.2282378

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.548820	3.422686	-.159906	.0023690	.8012198	5.040831	.0129702
Stddev	.085756	.015837	.001230	.0005166	.0048860	.048420	.0014488
%RSD	1.545490	.4627029	.7689385	21.80501	.6098213	.9605602	11.17050
#1	5.458350	3.407501	-.160379	.0018836	.7968836	5.014882	.0125860
#2	5.559190	3.421455	-.158510	.0023115	.8002620	5.010916	.0145725
#3	5.628920	3.439102	-.160828	.0029119	.8065137	5.096695	.0117522

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-07DLX2 Acquired: 12/30/2024 20:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5939829	.2956660	.0803411
Stddev	.0070245	.0017308	.0042452
%RSD	1.182609	.5854063	5.283919
#1	.5865940	.2938127	.0850147
#2	.5947796	.2972405	.0792846
#3	.6005750	.2959447	.0767239

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1728.204	21664.23	2489.576	1417.586	1697.679
Stddev	4.479	392.98	16.633	24.680	3.417
%RSD	.2591981	1.813954	.6680963	1.740962	.2012988
#1	1728.233	21884.92	2505.587	1430.153	1700.772
#2	1723.710	21210.51	2490.756	1389.152	1694.010
#3	1732.669	21897.26	2472.385	1433.453	1698.256

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-13DLX2 Acquired: 12/30/2024 20:06:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0580937	.0103484	.3262740	.0004320	.0024288	35.08406	.6049268
Stddev	.0075167	.0069200	.0012861	.0050586	.0029262	.45199	.0071075
%RSD	12.93890	66.87013	.3941804	1170.952	120.4785	1.288309	1.174929
#1	.0499609	.0081716	.3276401	-.001468	.0008137	34.62289	.5968587
#2	.0647858	.0047785	.3250865	.006165	.0006661	35.10301	.6076588
#3	.0595343	.0180950	.3260956	-.003402	.0058066	35.52627	.6102629

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038395	.0033934	611.7892	.0581775	.0864383	.2000040	90.97233
Stddev	.0001401	.0001222	5.1209	.0005526	.0004154	.0069012	.86534
%RSD	3.650095	3.600275	.8370397	.9498399	.4805242	3.450527	.9512107
#1	.0039182	.0033591	606.3923	.0585159	.0869176	.2079120	90.04368
#2	.0036777	.0035290	612.3951	.0584768	.0861829	.1951990	91.11724
#3	.0039227	.0032920	616.5802	.0575398	.0862145	.1969009	91.75606

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.010547	53.02422	.0939538	-.003085	.5768913	.0843874	.4749167
Stddev	.058443	.75308	.0005495	.000601	.0148632	.0056459	.0011618
%RSD	.9723470	1.420248	.5848752	19.47017	2.576421	6.690417	.2446370
#1	5.951096	52.21052	.0945861	-.002747	.5651840	.0891141	.4740317
#2	6.012616	53.16547	.0935926	-.003778	.5936132	.0859123	.4762324
#3	6.067928	53.69666	.0936825	-.002729	.5718768	.0781357	.4744861

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.485326	4.069600	-.160573	.0030091	1.050995	5.453320	.0341282
Stddev	.204710	.013572	.002359	.0001781	.006494	.033933	.0013950
%RSD	2.734821	.3334896	1.468907	5.917778	.6178887	.6222391	4.087527
#1	7.253695	4.077374	-.159185	.0030318	1.057830	5.420552	.0356846
#2	7.641965	4.053929	-.163296	.0028208	1.044906	5.451102	.0337094
#3	7.560318	4.077498	-.159237	.0031748	1.050247	5.488308	.0329905

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-13DLX2 Acquired: 12/30/2024 20:06:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3202627	.4610435	.0675465
Stddev	.0078198	.0040460	.0038397
%RSD	2.441697	.8775810	5.684528
#1	.3123699	.4567498	.0662864
#2	.3204108	.4615956	.0644952
#3	.3280075	.4647852	.0718579

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1795.661	22722.39	2559.554	1486.537	1727.095
Stddev	3.799	82.70	10.815	2.342	4.158
%RSD	.2115717	.3639530	.4225368	.1575140	.2407441
#1	1792.971	22655.16	2570.484	1486.775	1724.240
#2	1800.007	22697.27	2559.321	1484.085	1731.865
#3	1794.004	22814.73	2548.858	1488.750	1725.180

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-14DLX2 Acquired: 12/30/2024 20:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0536274	.0148332	.2585458	-.004387	-.003227	29.99283	.3959171
Stddev	.0023569	.0047180	.0024000	.000456	.005561	.11192	.0026728
%RSD	4.394880	31.80682	.9282750	10.39385	172.3572	.3731402	.6750995
#1	.0559850	.0095077	.2566094	-.004895	-.009373	29.88220	.3937628
#2	.0536259	.0184903	.2577971	-.004014	-.001763	29.99032	.3950803
#3	.0512712	.0165016	.2612309	-.004252	.001456	30.10599	.3989082

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028649	.0036196	623.0600	.0485587	.0883845	.1831172	85.88856
Stddev	.0000623	.0000840	3.1653	.0008382	.0001652	.0100484	.53369
%RSD	2.175552	2.321185	.5080301	1.726099	.1869100	5.487426	.6213797
#1	.0028248	.0035238	619.4597	.0494535	.0885734	.1946696	85.36017
#2	.0029367	.0036809	624.3147	.0477918	.0883133	.1782780	85.87810
#3	.0028331	.0036540	625.4057	.0484309	.0882668	.1764040	86.42741

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.477869	69.85676	.0918938	-.002459	.8027131	.0815111	.6663326
Stddev	.031825	.14128	.0006842	.000544	.0158954	.0061581	.0034675
%RSD	.4255852	.2022404	.7445482	22.14581	1.980208	7.554919	.5203904
#1	7.450154	69.74537	.0926451	-.003002	.7880935	.0760294	.6688004
#2	7.470827	69.80922	.0917299	-.001913	.8196335	.0803296	.6678293
#3	7.512624	70.01567	.0913064	-.002460	.8004121	.0881743	.6623681

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.190310	7.601224	-.156952	.0045916	.9077847	5.228611	.0282725
Stddev	.049401	.018547	.002428	.0006528	.0100594	.013119	.0012023
%RSD	.9517936	.2440014	1.547161	14.21664	1.108131	.2508984	4.252690
#1	5.198329	7.597071	-.159332	.0053030	.8970923	5.235675	.0282632
#2	5.137391	7.585105	-.157045	.0040202	.9092005	5.236683	.0270748
#3	5.235212	7.621495	-.154478	.0044516	.9170612	5.213474	.0294795

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-14DLX2 Acquired: 12/30/2024 20:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5137295	.5452238	.0636905
Stddev	.0047193	.0042832	.0023767
%RSD	.9186420	.7855931	3.731565
#1	.5106212	.5402833	.0652205
#2	.5114074	.5478920	.0648985
#3	.5191600	.5474963	.0609525

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1805.903	22559.84	2587.391	1486.042	1716.802
Stddev	2.963	28.31	8.721	4.404	1.289
%RSD	.1640700	.1254694	.3370761	.2963247	.0751095
#1	1809.175	22577.33	2580.987	1482.940	1718.290
#2	1803.403	22527.18	2583.862	1484.104	1716.024
#3	1805.129	22575.01	2597.324	1491.082	1716.091

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-15DLX2 Acquired: 12/30/2024 20:14:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0397766	.0214879	.0636681	-.028189	-.006000	20.26041	.3428308
Stddev	.0032157	.0034830	.0009764	.007246	.004547	.21154	.0045712
%RSD	8.084387	16.20930	1.533518	25.70389	75.78489	1.044117	1.333363
#1	.0374935	.0253014	.0643190	-.034807	-.000803	20.01685	.3375799
#2	.0434542	.0184745	.0641397	-.020447	-.007951	20.39831	.3449910
#3	.0383822	.0206880	.0625454	-.029314	-.009245	20.36608	.3459215

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019996	.0023251	488.6351	.0426390	.0764463	.0999365	55.65061
Stddev	.0001177	.0000686	5.2570	.0009071	.0006889	.0041684	.50736
%RSD	5.887339	2.948742	1.075858	2.127479	.9011329	4.171097	.9116953
#1	.0019872	.0022598	483.0047	.0416904	.0758919	.1034186	55.15670
#2	.0018885	.0023965	493.4150	.0427288	.0772175	.1010733	56.17044
#3	.0021230	.0023189	489.4857	.0434980	.0762295	.0953175	55.62467

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.087665	21.79728	.0624460	-.002048	.4227535	.0352964	.1798317
Stddev	.047357	.24424	.0004281	.000772	.0282039	.0083330	.0007123
%RSD	.9308200	1.120508	.6854650	37.70840	6.671489	23.60871	.3960772
#1	5.034833	21.51658	.0627520	-.002937	.3960661	.0332751	.1792574
#2	5.126300	21.96131	.0626291	-.001540	.4199324	.0281600	.1806287
#3	5.101862	21.91394	.0619568	-.001667	.4522620	.0444541	.1796088

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.121523	4.171243	-.099240	.0063253	.5335168	5.210184	.0111181
Stddev	.082212	.001566	.002993	.0003920	.0102113	.017358	.0013447
%RSD	1.605224	.0375308	3.016094	6.197428	1.913960	.3331575	12.09420
#1	5.027332	4.169517	-.099389	.0064739	.5289737	5.227764	.0119587
#2	5.158381	4.171640	-.102155	.0066212	.5452113	5.209731	.0095673
#3	5.178856	4.172572	-.096174	.0058807	.5263655	5.193057	.0118284

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-15DLX2 Acquired: 12/30/2024 20:14:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3487715	.3187374	.0430200
Stddev	.0069614	.0043855	.0103670
%RSD	1.995965	1.375906	24.09804
#1	.3412551	.3142136	.0315729
#2	.3500624	.3229701	.0517763
#3	.3549971	.3190286	.0457106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1726.894	21797.32	2438.080	1434.772	1783.644
Stddev	4.017	61.86	7.247	6.717	3.558
%RSD	.2326077	.2838074	.2972258	.4681483	.1994687
#1	1722.960	21748.48	2440.621	1437.250	1779.543
#2	1730.989	21776.60	2429.905	1427.169	1785.906
#3	1726.733	21866.88	2443.714	1439.898	1785.482

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-17DLX2 Acquired: 12/30/2024 20:17:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079321	.0337417	.0386367	-.059444	-.018527	3.740971
Stddev	.0114662	.0014946	.0042286	.009310	.002611	.066382
%RSD	144.5538	4.429439	10.94447	15.66139	14.09221	1.774458
#1	-.004804	.0328219	.0379551	-.048759	-.021542	3.668964
#2	.011168	.0354662	.0347903	-.063767	-.017077	3.799729
#3	.017433	.0329371	.0431646	-.065807	-.016964	3.754220

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0277708	.0010782	.0007658	F 1291.503	.0262064	.0522824
Stddev	.0009119	.0001410	.0001223	18.833	.0004479	.0009197
%RSD	3.283762	13.07839	15.97090	1.458204	1.709138	1.759164
#1	.0276415	.0010044	.0008354	1276.726	.0256947	.0512208
#2	.0287405	.0012408	.0006246	1312.708	.0263969	.0528386
#3	.0269304	.0009895	.0008374	1285.074	.0265275	.0527879

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090678	20.46903	.6691677	58.89462	.0353388	-.000910
Stddev	.0058597	.19135	.0088488	.87453	.0014202	.000790
%RSD	64.62119	.9348162	1.322356	1.484913	4.018701	86.75671
#1	.0050774	20.27878	.6609195	58.06866	.0349869	-.001762
#2	.0157952	20.66146	.6785145	59.81074	.0369019	-.000202
#3	.0063308	20.46687	.6680691	58.80447	.0341277	-.000767

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8174411	.0145783	.1079640	2.374843	.6524216	-.020310
Stddev	.0291345	.0043222	.0010407	.191902	.0080907	.000868
%RSD	3.564107	29.64852	.9638850	8.080637	1.240107	4.274847
#1	.8256493	.0195646	.1086629	2.242627	.6610866	-.020378
#2	.8415910	.0122692	.1084610	2.594950	.6511138	-.021143
#3	.7850831	.0119010	.1067680	2.286952	.6450645	-.019410

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-17DLX2 Acquired: 12/30/2024 20:17:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035319	14.62169	3.029351	.0095312	-.006435	.8529834
Stddev	.0005418	.00605	.042751	.0024568	.003908	.0125724
%RSD	15.33919	.0414111	1.411241	25.77666	60.72842	1.473931
#1	.0041423	14.62175	3.013964	.0122624	-.006502	.8435726
#2	.0031080	14.62772	3.077666	.0075011	-.002495	.8672618
#3	.0033454	14.61561	2.996424	.0088301	-.010310	.8481157

Elem	Li6707
Units	ppm
Avg	.0280142
Stddev	.0041455
%RSD	14.79784
#1	.0233026
#2	.0296381
#3	.0311020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.581	20640.60	2344.226	1346.883	1680.756
Stddev	2.730	47.84	36.256	11.887	3.247
%RSD	.1671928	.2317875	1.546627	.8825209	.1931767
#1	1630.399	20592.64	2354.377	1338.215	1677.752
#2	1631.702	20640.84	2303.976	1342.001	1680.314
#3	1635.642	20688.32	2374.325	1360.433	1684.200

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-10DLX2 Acquired: 12/30/2024 20:21:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099155	.0282640	.1234359	-.039048	-.013768	13.80895	.0394042
Stddev	.0077967	.0040048	.0023295	.008539	.002835	.08496	.0009147
%RSD	78.63110	14.16932	1.887180	21.86694	20.58887	.6152685	2.321239
#1	.0184939	.0290579	.1207508	-.034615	-.011918	13.72200	.0385738
#2	.0032607	.0318125	.1246415	-.033638	-.012355	13.89178	.0403846
#3	.0079919	.0239217	.1249155	-.048892	-.017032	13.81307	.0392542

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020148	.0012205	664.8337	.0303679	.0640053	.0483471	44.01879
Stddev	.0000135	.0000434	2.1724	.0003129	.0003882	.0048560	.20499
%RSD	.6709663	3.552208	.3267559	1.030422	.6065352	10.04413	.4656945
#1	.0020190	.0012613	662.4755	.0306623	.0644355	.0534603	43.79456
#2	.0019997	.0012251	666.7533	.0304021	.0638991	.0437974	44.19659
#3	.0020258	.0011750	665.2723	.0300393	.0636812	.0477837	44.06521

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.804957	353.4758	.0538243	-.000828	.9238745	.0251931	.2590000
Stddev	.013877	1.1816	.0009372	.001622	.0219556	.0041600	.0014751
%RSD	.4947297	.3342905	1.741151	195.8841	2.376465	16.51264	.5695509
#1	2.792372	352.3520	.0527422	-.002031	.9055718	.0282370	.2595826
#2	2.819839	354.7079	.0543681	.001017	.9482181	.0268893	.2573225
#3	2.802659	353.3675	.0543628	-.001470	.9178336	.0204529	.2600948

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.878635	.9125984	-.008169	.0010382	14.73552	3.720595	.0088576
Stddev	.023876	.0046350	.001282	.0004899	.02213	.018239	.0018952
%RSD	.3030461	.5078873	15.69439	47.19164	.1501866	.4902282	21.39584
#1	7.881162	.9116064	-.009125	.0015860	14.74983	3.735316	.0097863
#2	7.853596	.9176491	-.008669	.0006420	14.74671	3.726279	.0066772
#3	7.901147	.9085398	-.006712	.0008865	14.71003	3.700191	.0101093

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-10DLX2 Acquired: 12/30/2024 20:21:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0285731	.3295543	.0411102
Stddev	.0031601	.0013356	.0020419
%RSD	11.05980	.4052687	4.966913
#1	.0249340	.3308906	.0414462
#2	.0301595	.3295530	.0389212
#3	.0306257	.3282194	.0429633

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1624.802	20526.58	2355.912	1348.661	1677.547
Stddev	2.356	118.46	10.060	6.754	1.405
%RSD	.1450070	.5770826	.4270281	.5008092	.0837770
#1	1623.557	20474.69	2349.845	1345.722	1675.937
#2	1627.520	20662.13	2350.365	1356.387	1678.173
#3	1623.330	20442.92	2367.525	1343.875	1678.530

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-11DLX2 Acquired: 12/30/2024 20:25:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0132751	.0237057	.4183176	-.047361	-.015705	11.51761
Stddev	.0069128	.0047474	.0051107	.007936	.001714	.04682
%RSD	52.07335	20.02622	1.221728	16.75684	10.91130	.4064997
#1	.0207022	.0279905	.4129686	-.047522	-.017487	11.46983
#2	.0070288	.0245243	.4231509	-.039346	-.015559	11.51959
#3	.0120943	.0186023	.4188335	-.055216	-.014070	11.56341

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0762997	.0018489	.0046122	F 980.1238	.0396173	.0651560
Stddev	.0012679	.0000684	.0001681	5.8294	.0004047	.0004667
%RSD	1.661688	3.702034	3.645842	.5947644	1.021472	.7162679
#1	.0767460	.0019275	.0047697	973.9092	.0399855	.0656627
#2	.0772841	.0018019	.0046316	980.9914	.0396823	.0650615
#3	.0748691	.0018174	.0044351	985.4708	.0391840	.0647437

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0372822	49.46481	3.400884	546.0403	.0516490	-.001937
Stddev	.0044612	.34471	.019516	3.7657	.0003041	.000922
%RSD	11.96612	.6968756	.5738424	.6896381	.5887212	47.59868
#1	.0416542	49.12683	3.385600	541.7315	.0517257	-.002913
#2	.0374556	49.45174	3.394185	547.6886	.0513140	-.001080
#3	.0327368	49.81587	3.422867	548.7008	.0519074	-.001819

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.242105	.0246641	1.053924	6.025246	.9894511	-.030828
Stddev	.008639	.0099360	.002231	.121126	.0045213	.004440
%RSD	.6954976	40.28507	.2116611	2.010313	.4569520	14.40228
#1	1.241038	.0295428	1.051366	5.885702	.9851893	-.027933
#2	1.234050	.0312176	1.054942	6.086829	.9941935	-.035939
#3	1.251228	.0132319	1.055464	6.103209	.9889706	-.028610

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-11DLX2 Acquired: 12/30/2024 20:25:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014203	23.13428	4.065107	.0118491	.0440856	.3987235
Stddev	.0004455	.05831	.022290	.0020197	.0037497	.0005899
%RSD	31.36310	.2520637	.5483309	17.04546	8.505502	.1479418
#1	.0017508	23.08523	4.086760	.0128482	.0473398	.3980432
#2	.0009137	23.19875	4.066330	.0131745	.0399850	.3990929
#3	.0015964	23.11884	4.042230	.0095245	.0449319	.3990343

Elem	Li6707
Units	ppm
Avg	.0386572
Stddev	.0035001
%RSD	9.054083
#1	.0359129
#2	.0374600
#3	.0425988

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1569.136	20072.83	2313.992	1309.722	1599.604
Stddev	3.915	89.30	3.102	4.862	6.248
%RSD	.2495198	.4448587	.1340532	.3712410	.3906086
#1	1573.647	20172.40	2310.552	1315.185	1606.676
#2	1567.148	20046.25	2314.849	1305.869	1594.831
#3	1566.615	19999.85	2316.575	1308.112	1597.305

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-12DLX2 Acquired: 12/30/2024 20:29:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0139581	.0184250	1.320186	-.030378	-.015268	7.831066
Stddev	.0068813	.0028345	.006263	.009291	.003939	.056578
%RSD	49.29929	15.38391	.4744334	30.58491	25.79714	.7224861
#1	.0110913	.0189728	1.327416	-.035122	-.011023	7.775362
#2	.0089738	.0209456	1.316731	-.036339	-.015977	7.829357
#3	.0218093	.0153566	1.316411	-.019672	-.018804	7.888480

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0827917	.0018233	.0149798	F 1186.411	.0270655	.0647188
Stddev	.0017558	.0001719	.0000864	2.317	.0007065	.0006972
%RSD	2.120712	9.427094	.5768160	.1952601	2.610241	1.077263
#1	.0809817	.0019124	.0148811	1184.916	.0265242	.0645299
#2	.0829058	.0019324	.0150421	1185.238	.0268076	.0654910
#3	.0844877	.0016251	.0150160	1189.080	.0278647	.0641356

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0287839	64.44469	4.157253	658.3639	.0480961	.0001920
Stddev	.0020681	.27404	.015962	2.1741	.0006457	.0007423
%RSD	7.185083	.4252286	.3839627	.3302249	1.342453	386.6879
#1	.0263958	64.19094	4.146466	657.2610	.0481405	-.000590
#2	.0299776	64.40783	4.149704	656.9624	.0487185	.000887
#3	.0299783	64.73529	4.175590	660.8684	.0474294	.000278

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.379398	.0242053	2.846177	4.635684	.5260061	-.074999
Stddev	.037123	.0085664	.012328	.083860	.0010464	.000998
%RSD	2.691229	35.39077	.4331429	1.809003	.1989386	1.330101
#1	1.347015	.0249107	2.853031	4.541336	.5248038	-.073928
#2	1.419912	.0323972	2.853555	4.663984	.5267114	-.075169
#3	1.371267	.0153079	2.831945	4.701733	.5265032	-.075901

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-12DLX2 Acquired: 12/30/2024 20:29:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027165	46.25797	3.479757	.0146657	.0028766	.3902675
Stddev	.0006830	.13947	.007084	.0009196	.0023667	.0009279
%RSD	25.14276	.3015130	.2035771	6.270662	82.27489	.2377526
#1	.0024866	46.36837	3.487106	.0144319	.0007099	.3906663
#2	.0034847	46.10122	3.479195	.0156796	.0054023	.3892069
#3	.0021780	46.30432	3.472971	.0138855	.0025175	.3909293

Elem	Li6707
Units	ppm
Avg	.0323806
Stddev	.0051898
%RSD	16.02741
#1	.0280897
#2	.0309032
#3	.0381488

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.197	19939.72	2317.757	1300.962	1608.703
Stddev	1.953	48.34	.200	6.159	5.213
%RSD	.1236641	.2424114	.0086139	.4734091	.3240273
#1	1577.107	19991.61	2317.865	1303.415	1603.872
#2	1580.976	19931.58	2317.527	1293.955	1614.228
#3	1579.507	19895.97	2317.880	1305.517	1608.011

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-05DLX2 Acquired: 12/30/2024 20:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0770724	.0033416	.7826234	.0140419	.0047378	25.27143	.4440852
Stddev	.0017154	.0032902	.0044737	.0037181	.0044356	.06604	.0019360
%RSD	2.225745	98.46227	.5716230	26.47864	93.62064	.2613083	.4359589
#1	.0752149	-.000382	.7780979	.0172540	.0002977	25.26987	.4447446
#2	.0774055	.004551	.7870433	.0099689	.0047468	25.33823	.4419056
#3	.0785969	.005856	.7827290	.0149027	.0091688	25.20619	.4456055

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032986	.0033047	500.3123	.0442720	.0852953	.1430900	120.8493
Stddev	.0001285	.0001650	1.0184	.0004290	.0001596	.0026940	.2605
%RSD	3.896336	4.993477	.2035547	.9690156	.1871070	1.882756	.2155533
#1	.0031502	.0034917	501.4792	.0446253	.0853740	.1417935	120.6355
#2	.0033700	.0031798	499.8549	.0443962	.0854002	.1461872	120.7730
#3	.0033757	.0032425	499.6027	.0437946	.0851116	.1412894	121.1394

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.84621	114.6830	.0879194	-.002805	.5255535	.1084705	.7475267
Stddev	.01516	.2248	.0004793	.000183	.0102150	.0016305	.0045001
%RSD	.1279482	.1959923	.5451420	6.530899	1.943668	1.503214	.6019943
#1	11.83278	114.4791	.0876714	-.003016	.5307921	.1079658	.7490828
#2	11.84320	114.6460	.0876149	-.002687	.5137820	.1071520	.7424551
#3	11.86265	114.9240	.0884719	-.002713	.5320866	.1102938	.7510421

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.986135	6.336467	-.257005	.0093522	.9374934	6.271100	.0444684
Stddev	.033090	.009986	.002850	.0006558	.0069375	.057718	.0010467
%RSD	.8301333	.1575959	1.108820	7.012561	.7400091	.9203868	2.353931
#1	3.949194	6.335281	-.258024	.0096959	.9295431	6.256880	.0437553
#2	3.996147	6.327126	-.253786	.0097646	.9423193	6.221820	.0439798
#3	4.013062	6.346992	-.259205	.0085959	.9406178	6.334599	.0456701

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-05DLX2 Acquired: 12/30/2024 20:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2472109	.2789600	.0341459
Stddev	.0018939	.0024150	.0024274
%RSD	.7661223	.8657037	7.108789
#1	.2492080	.2811007	.0367440
#2	.2469841	.2794373	.0337576
#3	.2454406	.2763421	.0319361

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1773.122	22228.83	2527.614	1468.094	1763.451
Stddev	3.298	105.07	16.976	5.184	4.678
%RSD	.1860158	.4726662	.6716319	.3530789	.2652730
#1	1776.053	22114.44	2530.512	1465.385	1768.750
#2	1773.763	22251.05	2542.955	1474.071	1761.712
#3	1769.551	22321.02	2509.376	1464.827	1759.892

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-06DLX2 Acquired: 12/30/2024 20:37:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0454914	.0092931	.1679383	.0210328	.0084297	17.85559	.3801514
Stddev	.0041856	.0049218	.0011188	.0066006	.0019761	.06434	.0002456
%RSD	9.200885	52.96243	.6661972	31.38256	23.44260	.3603509	.0645943
#1	.0406607	.0038805	.1691334	.0209610	.0079906	17.91975	.3803039
#2	.0480396	.0104984	.1669158	.0144684	.0105884	17.79107	.3798681
#3	.0477739	.0135003	.1677659	.0276691	.0067100	17.85597	.3802821

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027346	.0027336	738.7848	.0344801	.0877611	.0899887	137.1512
Stddev	.0000870	.0000986	1.1225	.0006409	.0005969	.0072776	.2225
%RSD	3.181220	3.606688	.1519347	1.858798	.6801738	8.087266	.1622510
#1	.0028316	.0028467	740.0044	.0349499	.0881241	.0982950	137.1802
#2	.0027084	.0026654	737.7950	.0337500	.0880870	.0869397	136.9156
#3	.0026636	.0026888	738.5552	.0347403	.0870722	.0847316	137.3579

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.96692	257.4808	.0799205	-.002821	.5501284	.0675911	.1689408
Stddev	.00196	.2861	.0009620	.001572	.0295603	.0091498	.0018169
%RSD	.0093349	.1111140	1.203765	55.72495	5.373344	13.53705	1.075436
#1	20.96891	257.7070	.0809241	-.004230	.5379337	.0772087	.1672516
#2	20.96687	257.1592	.0790062	-.003108	.5286163	.0665699	.1687080
#3	20.96499	257.5763	.0798312	-.001125	.5838351	.0589947	.1708629

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.704808	5.085254	-.285505	.0085040	1.013741	4.799894	.0208530
Stddev	.028134	.009515	.005393	.0009204	.005308	.051741	.0015745
%RSD	.7594003	.1871033	1.889000	10.82378	.5235637	1.077953	7.550634
#1	3.677961	5.095814	-.290367	.0087271	1.010120	4.839060	.0224419
#2	3.702390	5.082600	-.286445	.0074925	1.019834	4.819382	.0208237
#3	3.734074	5.077348	-.279704	.0092924	1.011269	4.741239	.0192933

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-06DLX2 Acquired: 12/30/2024 20:37:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0787777	.3343793	.0224111
Stddev	.0031238	.0012373	.0039873
%RSD	3.965382	.3700451	17.79146
#1	.0818263	.3357756	.0215035
#2	.0755837	.3339433	.0189558
#3	.0789232	.3334189	.0267739

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1736.095	22004.85	2510.868	1446.496	1675.222
Stddev	4.671	200.93	22.243	10.925	3.934
%RSD	.2690569	.9131091	.8858703	.7552747	.2348463
#1	1730.776	22080.76	2495.331	1457.304	1670.683
#2	1737.982	22156.77	2500.925	1446.728	1677.347
#3	1739.528	21777.03	2536.348	1435.457	1677.637

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-07DLX2 Acquired: 12/30/2024 20:41:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225109	.0183794	.1544769	-.020227	-.004532	26.61781	.1549077
Stddev	.0027230	.0036411	.0047593	.003099	.002609	.07247	.0006017
%RSD	12.09625	19.81096	3.080933	15.31898	57.57210	.2722725	.3884293
#1	.0256351	.0142118	.1599046	-.017490	-.005565	26.62658	.1544726
#2	.0206416	.0209441	.1525091	-.019599	-.006467	26.54135	.1546560
#3	.0212560	.0199824	.1510171	-.023591	-.001565	26.68550	.1555943

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026252	.0017444	454.9794	.0394921	.0725077	.1531952	72.16054
Stddev	.0001152	.0000236	1.5380	.0005689	.0016365	.0055206	.20303
%RSD	4.388236	1.355728	.3380467	1.440639	2.257009	3.603648	.2813588
#1	.0026406	.0017635	454.6024	.0391640	.0740166	.1476189	72.19669
#2	.0025030	.0017519	453.6648	.0391632	.0727383	.1586584	71.94186
#3	.0027319	.0017180	456.6708	.0401490	.0707681	.1533082	72.34307

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.231090	77.22059	.0747605	-.001191	.5365697	.0533780	.2307199
Stddev	.022636	.40271	.0012001	.000709	.0266241	.0097242	.0015537
%RSD	.4327213	.5215110	1.605304	59.55821	4.961903	18.21761	.6733903
#1	5.242429	77.32538	.0760734	-.001481	.5654201	.0501415	.2315400
#2	5.205025	76.77584	.0744883	-.000383	.5129476	.0643078	.2289280
#3	5.245815	77.56054	.0737199	-.001710	.5313412	.0456848	.2316916

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.474017	5.052149	-.141566	.0030094	.6717474	5.744468	.0122768
Stddev	.090821	.063899	.000753	.0003273	.0114627	.014676	.0011029
%RSD	2.029974	1.264782	.5318473	10.87556	1.706400	.2554737	8.983163
#1	4.576283	5.123569	-.140929	.0028928	.6846117	5.757097	.0131126
#2	4.443002	5.032484	-.142397	.0033790	.6680127	5.747939	.0110268
#3	4.402766	5.000394	-.141373	.0027564	.6626178	5.728368	.0126911

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5032-07DLX2 Acquired: 12/30/2024 20:41:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2432369	.3379085	.0332405
Stddev	.0056709	.0024015	.0017321
%RSD	2.331429	.7106931	5.210922
#1	.2367189	.3353149	.0352274
#2	.2470400	.3383558	.0320483
#3	.2459518	.3400550	.0324459

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1778.983	22298.23	2503.955	1470.102	1799.133
Stddev	11.860	140.83	10.782	9.242	17.477
%RSD	.6666931	.6315528	.4305875	.6286880	.9714174
#1	1766.395	22177.32	2491.681	1462.385	1780.870
#2	1780.606	22452.85	2508.290	1480.345	1800.831
#3	1789.948	22264.51	2511.895	1467.576	1815.700

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-08DLX2 Acquired: 12/30/2024 20:45:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0634160	.0136663	1.959905	-.019193	-.000209	20.61737
Stddev	.0066322	.0046554	.001871	.006520	.001296	.04412
%RSD	10.45819	34.06502	.0954765	33.97145	620.2637	.2140078
#1	.0675340	.0177737	1.960570	-.014255	-.001668	20.58538
#2	.0557653	.0146159	1.957792	-.026584	.000235	20.59902
#3	.0669488	.0086093	1.961354	-.016739	.000807	20.66771

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6078060	.0026273	.0056857	F 843.6060	.0887184	.0768290
Stddev	.0014942	.0003511	.0001732	1.3564	.0007726	.0007677
%RSD	.2458344	13.36471	3.046171	.1607891	.8708318	.9992197
#1	.6093473	.0022257	.0056456	843.8503	.0878277	.0772933
#2	.6063638	.0028762	.0058754	842.1441	.0892076	.0759429
#3	.6077069	.0027800	.0055361	844.8238	.0891198	.0772508

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2850232	83.49426	5.504634	89.58710	.0798922	-.000390
Stddev	.0091863	.17901	.011707	.43554	.0007460	.000293
%RSD	3.222993	.2143977	.2126670	.4861654	.9337006	75.15432
#1	.2896272	83.44674	5.504041	89.56565	.0806165	-.000482
#2	.2744454	83.34380	5.493235	89.16268	.0799338	-.000627
#3	.2909971	83.69223	5.516625	90.03297	.0791263	-.000062

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8581375	.0627088	1.842426	2.452147	4.688598	-.166963
Stddev	.0261034	.0097875	.011573	.123907	.011505	.003088
%RSD	3.041868	15.60784	.6281568	5.052996	.2453920	1.849426
#1	.8315414	.0541821	1.829321	2.471790	4.689351	-.164544
#2	.8591524	.0605483	1.851246	2.565060	4.676734	-.170441
#3	.8837186	.0733961	1.846710	2.319592	4.699708	-.165904

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-08DLX2 Acquired: 12/30/2024 20:45:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038855	1.490180	5.274852	.1265216	.2355107	.4962138
Stddev	.0003162	.002763	.022640	.0034918	.0047611	.0005658
%RSD	8.138927	.1853969	.4292016	2.759853	2.021591	.1140262
#1	.0042422	1.486990	5.253960	.1226009	.2304300	.4968669
#2	.0036395	1.491783	5.271689	.1276676	.2398698	.4959008
#3	.0037748	1.491768	5.298907	.1292965	.2362322	.4958736

Elem	Li6707
Units	ppm
Avg	.0182313
Stddev	.0048088
%RSD	26.37646
#1	.0147637
#2	.0162093
#3	.0237209

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.519	21389.38	2416.140	1402.580	1700.717
Stddev	4.471	32.28	11.237	2.573	3.063
%RSD	.2662237	.1509093	.4650725	.1834792	.1801277
#1	1680.920	21420.46	2415.857	1401.039	1702.617
#2	1674.515	21356.03	2427.515	1401.150	1697.183
#3	1683.122	21391.66	2405.047	1405.551	1702.351

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-15DLX2 Acquired: 12/30/2024 20:49:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053926	.0280241	.5031683	-.048235	-.015576	14.28467
Stddev	.0046193	.0039805	.0019336	.005264	.003064	.37632
%RSD	85.65936	14.20389	.3842742	10.91286	19.67327	2.634448
#1	.0020573	.0268247	.5049732	-.044206	-.018622	14.04388
#2	.0106650	.0324663	.5011277	-.054191	-.015612	14.09180
#3	.0034554	.0247811	.5034039	-.046309	-.012494	14.71833

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1344386	.0014276	.0044984	F 816.2273	.0378147	.0584548
Stddev	.0027996	.0000944	.0001460	20.0560	.0009451	.0007025
%RSD	2.082398	6.611780	3.246169	2.457155	2.499254	1.201723
#1	.1330253	.0015366	.0045352	804.2233	.0367393	.0580360
#2	.1326274	.0013742	.0046225	805.0779	.0381920	.0592658
#3	.1376631	.0013720	.0043375	839.3807	.0385129	.0580626

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0444772	44.53398	4.484706	426.0423	.0521107	-.001059
Stddev	.0028881	1.00019	.090887	9.7870	.0008413	.001612
%RSD	6.493417	2.245902	2.026601	2.297179	1.614380	152.2564
#1	.0443547	43.94730	4.422797	420.1048	.0512099	.000392
#2	.0416522	43.96579	4.442271	420.6838	.0528760	-.002795
#3	.0474245	45.68885	4.589049	437.3384	.0522461	-.000775

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9040362	.0631643	.7896274	1.390576	1.570580	-.069388
Stddev	.0274835	.0141980	.0003363	.137071	.005195	.001358
%RSD	3.040084	22.47781	.0425925	9.857156	.3307499	1.956566
#1	.8943037	.0470049	.7898370	1.234666	1.565067	-.070945
#2	.8827434	.0688490	.7898058	1.444922	1.575383	-.068769
#3	.9350616	.0736391	.7892395	1.492142	1.571290	-.068450

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-15DLX2 Acquired: 12/30/2024 20:49:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019945	8.043955	4.990583	.0188539	.1558197	.2568009
Stddev	.0001103	.026470	.075587	.0014504	.0041502	.0065996
%RSD	5.531631	.3290730	1.514583	7.692858	2.663458	2.569926
#1	.0019002	8.031929	4.975626	.0192133	.1511173	.2529223
#2	.0019675	8.074304	4.923594	.0172576	.1573709	.2530594
#3	.0021159	8.025633	5.072530	.0200909	.1589708	.2644211

Elem	Li6707
Units	ppm
Avg	.0147990
Stddev	.0030531
%RSD	20.63069
#1	.0114527
#2	.0174330
#3	.0155114

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1560.669	20027.93	2341.868	1307.430	1615.540
Stddev	2.532	50.96	32.709	2.463	4.714
%RSD	.1622164	.2544595	1.396707	.1883934	.2918171
#1	1562.418	20084.72	2349.269	1308.117	1619.328
#2	1557.766	20012.92	2370.243	1309.477	1610.260
#3	1561.822	19986.16	2306.093	1304.697	1617.033

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-16DLX2 Acquired: 12/30/2024 20:52:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029864	.0255793	.0849543	-.044734	-.012702	21.27622	.1400296
Stddev	.0032890	.0029423	.0025299	.004127	.005681	.05809	.0014023
%RSD	110.1320	11.50285	2.978002	9.225657	44.72717	.2730293	1.001407
#1	.0022149	.0275081	.0875208	-.044404	-.018978	21.22852	.1412808
#2	.0065926	.0221927	.0848797	-.040782	-.011219	21.25923	.1402940
#3	.0001517	.0270371	.0824626	-.049016	-.007910	21.34091	.1385139

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015998	.0014411	546.9444	.0313501	.0513613	.0366131	38.28404
Stddev	.0001026	.0001294	1.9124	.0002843	.0004488	.0085183	.15091
%RSD	6.410088	8.977170	.3496536	.9069317	.8738381	23.26574	.3941888
#1	.0016164	.0013687	544.7362	.0312523	.0511343	.0269523	38.11230
#2	.0016930	.0013642	548.0640	.0316705	.0518782	.0430442	38.39549
#3	.0014899	.0015905	548.0329	.0311277	.0510713	.0398430	38.34432

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.282624	161.4135	.0436045	-.000267	.6727229	.0482201	.2448848
Stddev	.005032	1.0795	.0013277	.001376	.0196005	.0052965	.0043340
%RSD	.2204330	.6687586	3.044815	515.6868	2.913601	10.98402	1.769801
#1	2.279386	160.1931	.0446685	-.001320	.6504544	.0543354	.2495484
#2	2.280066	162.2433	.0440283	.001290	.6803552	.0452313	.2409810
#3	2.288421	161.8040	.0421166	-.000770	.6873591	.0450935	.2441248

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3993125	.9733149	-.046410	.0097707	8.695395	8.016388	.0089174
Stddev	.0243001	.0018993	.001427	.0003401	.012616	.095511	.0004181
%RSD	6.085483	.1951373	3.074020	3.480362	.1450911	1.191443	4.688864
#1	.3932328	.9742995	-.046401	.0094381	8.684867	7.955385	.0093810
#2	.3786295	.9711254	-.044988	.0097562	8.691939	8.126459	.0085689
#3	.4260751	.9745197	-.047841	.0101177	8.709379	7.967319	.0088022

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-16DLX2 Acquired: 12/30/2024 20:52:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7076012	.3179595	-.000214
Stddev	.0075973	.0020838	.004818
%RSD	1.073670	.6553703	2255.818
#1	.7028159	.3156286	-.005657
#2	.7163613	.3196422	.003504
#3	.7036263	.3186077	.001513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1621.301	20368.22	2317.090	1340.072	1727.695
Stddev	1.598	292.72	25.114	20.025	3.967
%RSD	.0985580	1.437117	1.083864	1.494358	.2296241
#1	1620.454	20030.29	2330.700	1318.279	1732.250
#2	1620.304	20531.08	2288.108	1357.663	1725.839
#3	1623.144	20543.28	2332.461	1344.275	1724.995

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-17DLX2 Acquired: 12/30/2024 20:56:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075128	.0234952	.2616126	-.034675	-.016475	10.34350
Stddev	.0047675	.0033565	.0038328	.002862	.001391	.09691
%RSD	63.45779	14.28585	1.465071	8.252492	8.440226	.9368828
#1	.0123353	.0196332	.2577278	-.036787	-.015883	10.23455
#2	.0074010	.0257091	.2617188	-.031418	-.018063	10.42008
#3	.0028023	.0251432	.2653912	-.035820	-.015478	10.37586

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1287838	.0015244	.0036256	F 923.7737	.0304536	.0577709
Stddev	.0018038	.0002228	.0000467	5.1276	.0004648	.0009056
%RSD	1.400657	14.61291	1.289135	.5550748	1.526328	1.567548
#1	.1308564	.0012686	.0036530	918.4027	.0307274	.0567316
#2	.1279261	.0016752	.0035716	928.6172	.0307165	.0581906
#3	.1275688	.0016296	.0036521	924.3012	.0299169	.0583905

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0371568	51.87307	4.382138	484.1897	.0550607	-.001239
Stddev	.0003913	.32179	.028551	3.5968	.0011709	.000344
%RSD	1.053038	.6203349	.6515364	.7428452	2.126539	27.76803
#1	.0371051	51.57112	4.350902	481.2790	.0553616	-.001130
#2	.0367939	52.21157	4.406889	488.2107	.0537687	-.001625
#3	.0375713	51.83651	4.388625	483.0793	.0560517	-.000963

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.014865	.0397610	.6794441	1.801885	1.174292	-.076643
Stddev	.038947	.0007508	.0032089	.062267	.002563	.001680
%RSD	3.837621	1.888243	.4722851	3.455659	.2182750	2.192155
#1	1.058431	.0389059	.6758230	1.740358	1.172354	-.075093
#2	.983419	.0403124	.6805742	1.864867	1.177199	-.076409
#3	1.002745	.0400645	.6819350	1.800429	1.173324	-.078428

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-17DLX2 Acquired: 12/30/2024 20:56:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033913	18.05706	4.748546	.0138660	.0816691	.3860318
Stddev	.0004546	.03144	.023876	.0020503	.0051282	.0029790
%RSD	13.40428	.1741242	.5027997	14.78672	6.279213	.7716995
#1	.0030686	18.06534	4.721116	.0115484	.0791854	.3827620
#2	.0031942	18.02230	4.759860	.0154435	.0875662	.3867417
#3	.0039112	18.08353	4.764661	.0146062	.0782557	.3885918

Elem	Li6707
Units	ppm
Avg	.0078930
Stddev	.0010324
%RSD	13.07955
#1	.0090446
#2	.0070504
#3	.0075839

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1568.252	19863.95	2288.350	1296.868	1627.618
Stddev	3.759	93.18	9.977	7.367	1.161
%RSD	.2396701	.4690732	.4359783	.5680347	.0713292
#1	1565.371	19867.88	2282.983	1290.035	1627.863
#2	1572.504	19768.87	2282.205	1295.897	1628.636
#3	1566.881	19955.10	2299.861	1304.672	1626.354

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-18DLX2 Acquired: 12/30/2024 21:00:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0291530	.0203127	.9841245	-.037964	-.010297	15.99588	.3919684
Stddev	.0018559	.0018126	.0018713	.005516	.000648	.27176	.0065168
%RSD	6.365925	8.923543	.1901524	14.52870	6.293105	1.698947	1.662576
#1	.0278657	.0182463	.9820017	-.043728	-.011035	15.98078	.3932025
#2	.0283129	.0210575	.9855357	-.037429	-.010034	15.73198	.3849229
#3	.0312803	.0216342	.9848360	-.032736	-.009822	16.27488	.3977799

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021850	.0036962	637.0969	.0391334	.0623937	.1435112	52.19191
Stddev	.0000479	.0000321	10.9056	.0008952	.0000848	.0102101	1.00650
%RSD	2.190237	.8673086	1.711770	2.287589	.1358745	7.114487	1.928466
#1	.0021411	.0036806	636.9538	.0392009	.0624386	.1529262	52.07548
#2	.0022360	.0036749	626.2635	.0382064	.0622959	.1326585	51.24868
#3	.0021777	.0037330	648.0734	.0399930	.0624465	.1449488	53.25156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.324355	345.1545	.0600930	-.000418	.7514779	.0408389	.8246647
Stddev	.057897	5.6564	.0005642	.001434	.0204958	.0042839	.0022342
%RSD	1.741614	1.638812	.9388599	342.8604	2.727393	10.48977	.2709226
#1	3.320554	344.2341	.0607435	.001234	.7751041	.0442706	.8267059
#2	3.268451	340.0147	.0597372	-.001336	.7384706	.0360377	.8222778
#3	3.384058	351.2147	.0597983	-.001152	.7408590	.0422085	.8250105

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.314764	2.344334	-.091716	.0029708	12.28897	4.929067	.0355262
Stddev	.159795	.007968	.003075	.0003302	.04099	.053133	.0025013
%RSD	6.903289	.3398812	3.353013	11.11638	.3335181	1.077955	7.040850
#1	2.158133	2.352830	-.090500	.0032442	12.32729	4.930054	.0369344
#2	2.308612	2.343147	-.095214	.0030643	12.29385	4.875447	.0326382
#3	2.477545	2.337027	-.089435	.0026039	12.24575	4.981699	.0370060

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5038-18DLX2 Acquired: 12/30/2024 21:00:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1578239	1.062058	.0150609
Stddev	.0068493	.017883	.0042019
%RSD	4.339854	1.683792	27.89937
#1	.1635863	1.064856	.0127696
#2	.1596342	1.042941	.0125027
#3	.1502513	1.078376	.0199104

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.892	20796.31	2412.015	1361.372	1685.608
Stddev	3.466	38.42	25.718	2.069	2.721
%RSD	.2103034	.1847607	1.066255	.1519667	.1614362
#1	1643.991	20753.87	2410.463	1362.762	1683.109
#2	1650.613	20828.74	2438.474	1362.360	1685.207
#3	1649.074	20806.32	2387.107	1358.995	1688.507

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5266-18DLX2 Acquired: 12/30/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2903 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1067487	-.146903	3.182111	.3141003	.1539216	30.71852
Stddev	.0020422	.001521	.002721	.0084350	.0061007	.26068
%RSD	1.913141	1.035423	.0855123	2.685442	3.963494	.8486072
#1	.1056717	-.145150	3.182226	.3100620	.1472741	30.45363
#2	.1054704	-.147870	3.184773	.3237953	.1552264	30.72715
#3	.1091040	-.147689	3.179335	.3084436	.1592643	30.97477

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5271403	.0116709	.0174185	253.9450	1.233524	.0832770
Stddev	.0056068	.0003907	.0000900	2.1148	.004621	.0005748
%RSD	1.063621	3.347550	.5167791	.8327971	.3746383	.6902734
#1	.5207029	.0120472	.0175208	251.6748	1.233461	.0828709
#2	.5297631	.0116983	.0173835	254.3008	1.228935	.0830254
#3	.5309550	.0112672	.0173513	255.8593	1.238177	.0839348

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2286944	645.9123	23.01727	49.68624	.6391422	-.018644
Stddev	.0020967	5.1688	.19228	.51910	.0016359	.000880
%RSD	.9168304	.8002308	.8353848	1.044754	.2559491	4.721160
#1	.2262781	640.1354	22.81857	49.09344	.6386027	-.017652
#2	.2297710	647.5019	23.03081	49.90579	.6378442	-.019331
#3	.2300342	650.0996	23.20242	50.05949	.6409797	-.018950

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.027365	.1564128	5.828271	4.006914	4.286381	F -1.38618
Stddev	.030315	.0062955	.007730	.008702	.003580	.01184
%RSD	2.950748	4.024899	.1326349	.2171782	.0835180	.8543948
#1	1.044563	.1623423	5.831039	4.016318	4.284439	-1.39816
#2	1.045170	.1498062	5.834236	4.005276	4.290513	-1.37448
#3	.992362	.1570899	5.819538	3.999147	4.284193	-1.38592

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5266-18DLX2 Acquired: 12/30/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2903 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0451689	5.129105	6.596744	.0825551	1.119571	-.213817
Stddev	.0002293	.006092	.018785	.0014358	.016683	.002375
%RSD	.5076783	.1187664	.2847631	1.739237	1.490119	1.110908
#1	.0453730	5.133495	6.598706	.0826143	1.101430	-.211138
#2	.0449208	5.131670	6.577055	.0839604	1.123032	-.215665
#3	.0452128	5.122151	6.614471	.0810906	1.134253	-.214649

Elem	Li6707
Units	ppm
Avg	.0128837
Stddev	.0027529
%RSD	21.36715
#1	.0098556
#2	.0135604
#3	.0152352

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.636	20832.60	2340.940	1366.148	1867.286
Stddev	6.005	34.65	7.178	1.367	5.771
%RSD	.3644900	.1663111	.3066464	.1000298	.3090343
#1	1649.557	20820.93	2333.456	1364.590	1865.715
#2	1652.446	20871.58	2347.767	1366.712	1873.680
#3	1640.905	20805.30	2341.598	1367.142	1862.465

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-12DLX2 Acquired: 12/30/2024 21:08:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0410487	.0020017	.1032533	-.000247	.0063167	36.75294	.2973920
Stddev	.0028402	.0029388	.0010109	.007601	.0057849	.11721	.0023945
%RSD	6.918977	146.8141	.9790802	3082.408	91.58043	.3189212	.8051606
#1	.0411140	.0006816	.1044114	-.005499	.0094959	36.80036	.3000845
#2	.0381764	.0053692	.1025469	-.003709	.0098147	36.83902	.2965900
#3	.0438556	-.000045	.1028018	.008469	-.000361	36.61945	.2955014

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039659	.0021296	447.5727	.0796295	.0919373	.0912863	116.0985
Stddev	.0001371	.0000641	2.1404	.0006643	.0008293	.0024879	.2461
%RSD	3.457012	3.010461	.4782160	.8341909	.9020600	2.725384	.2119914
#1	.0038627	.0020721	449.1511	.0803461	.0910906	.0911008	116.1258
#2	.0041215	.0021178	448.4304	.0795083	.0927480	.0938618	116.3298
#3	.0039135	.0021987	445.1365	.0790343	.0919733	.0888964	115.8398

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.980082	67.79481	.1560311	-.004544	.5093130	.0992221	.4567266
Stddev	.013773	.24945	.0004078	.000441	.0039144	.0052871	.0044755
%RSD	.4621822	.3679461	.2613652	9.704281	.7685570	5.328576	.9799054
#1	2.983134	67.91532	.1560853	-.004792	.5113899	.1022834	.4608108
#2	2.992073	67.96112	.1564092	-.004035	.5047979	.1022660	.4574267
#3	2.965038	67.50799	.1555990	-.004805	.5117513	.0931171	.4519423

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.908013	2.496334	-.237939	.0246651	2.163766	4.091548	.0166429
Stddev	.071479	.004728	.002749	.0007738	.002247	.038645	.0022882
%RSD	1.209860	.1893933	1.155471	3.137341	.1038252	.9445156	13.74884
#1	5.957779	2.497739	-.236874	.0247730	2.163193	4.110517	.0142537
#2	5.826106	2.500201	-.241062	.0238429	2.166244	4.117043	.0188146
#3	5.940154	2.491063	-.235881	.0253792	2.161862	4.047083	.0168604

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-12DLX2 Acquired: 12/30/2024 21:08:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6752053	.4375542	.0516295
Stddev	.0043504	.0029441	.0055016
%RSD	.6443042	.6728533	10.65598
#1	.6720122	.4395370	.0482453
#2	.6734434	.4389542	.0579776
#3	.6801603	.4341713	.0486656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1711.977	21395.01	2427.246	1411.247	1794.023
Stddev	3.932	73.79	18.289	1.879	5.082
%RSD	.2296663	.3448725	.7534783	.1331645	.2832517
#1	1715.365	21422.17	2417.978	1410.540	1798.312
#2	1707.666	21451.36	2415.446	1409.823	1788.411
#3	1712.902	21311.49	2448.313	1413.377	1795.346

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-14DLX2 Acquired: 12/30/2024 21:12:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0257297	.0158750	.0522529	-.034082	-.005358	22.28767	.5343548
Stddev	.0033492	.0041541	.0014671	.001480	.002149	.04805	.0003219
%RSD	13.01701	26.16787	2.807637	4.341663	40.10078	.2155909	.0602387
#1	.0289516	.0110783	.0511774	-.035790	-.007734	22.33781	.5342577
#2	.0259712	.0183022	.0516571	-.033284	-.004791	22.24203	.5340926
#3	.0222662	.0182443	.0539241	-.033173	-.003550	22.28315	.5347140

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021861	.0020422	636.9479	.0521352	.0726791	.0817863	69.09924
Stddev	.0000367	.0001520	.4355	.0003949	.0006473	.0056178	.16975
%RSD	1.678184	7.441190	.0683745	.7575469	.8906631	6.868920	.2456547
#1	.0021837	.0019721	637.2931	.0520292	.0733778	.0847858	68.95541
#2	.0022239	.0019380	637.0919	.0525724	.0720997	.0753053	69.05584
#3	.0021507	.0022166	636.4586	.0518041	.0725599	.0852676	69.28647

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.702514	191.7388	.0998536	-.002194	.7244717	.0752231	.2116891
Stddev	.005504	.7007	.0005088	.000961	.0246390	.0032373	.0009575
%RSD	.3232676	.3654313	.5095343	43.79126	3.400967	4.303546	.4523176
#1	1.696164	191.2284	.0995103	-.002571	.7456907	.0762630	.2118205
#2	1.705490	191.4505	.0996124	-.002910	.6974488	.0715937	.2125741
#3	1.705890	192.5377	.1004382	-.001102	.7302756	.0778126	.2106727

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.809960	1.620362	-.124446	.0221179	21.08478	3.381853	.0162210
Stddev	.115897	.002162	.001991	.0006981	.04773	.013048	.0020587
%RSD	3.041939	.1334460	1.599746	3.156453	.2263615	.3858279	12.69138
#1	3.879419	1.617866	-.126600	.0213613	21.11776	3.396485	.0175803
#2	3.874295	1.621678	-.122673	.0227371	21.03005	3.377648	.0172303
#3	3.676167	1.621541	-.124065	.0222554	21.10653	3.371425	.0138525

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-14DLX2 Acquired: 12/30/2024 21:12:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5963156	3.878261	.0383796
Stddev	.0057778	.010296	.0014563
%RSD	.9689143	.2654866	3.794389
#1	.5899144	3.885715	.0399325
#2	.5978880	3.882555	.0381619
#3	.6011445	3.866512	.0370445

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.959	20587.88	2339.162	1349.385	1713.719
Stddev	2.458	32.00	10.974	2.906	3.331
%RSD	.1505288	.1554437	.4691257	.2153789	.1943960
#1	1635.225	20566.72	2327.947	1346.421	1716.153
#2	1633.306	20624.70	2339.662	1349.506	1715.081
#3	1630.346	20572.24	2349.878	1352.230	1709.922

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-20DLX2 Acquired: 12/30/2024 21:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0345750	.0051322	.0868962	-.001157	.0077393	35.98056	.3194953
Stddev	.0050978	.0018623	.0039299	.003895	.0018177	.07376	.0011171
%RSD	14.74413	36.28542	4.522509	336.5928	23.48622	.2050029	.3496347
#1	.0389139	.0041569	.0913836	.002614	.0063741	36.00578	.3190843
#2	.0289606	.0072796	.0840682	-.000920	.0070413	35.89749	.3186419
#3	.0358504	.0039603	.0852366	-.005165	.0098025	36.03840	.3207596

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036548	.0020840	442.6321	.1009184	.0857032	.0785578	103.7381
Stddev	.0001761	.0000807	1.2965	.0001421	.0008439	.0116285	.3594
%RSD	4.818970	3.874192	.2929126	.1408388	.9846860	14.80245	.3464227
#1	.0037222	.0021745	443.5389	.1007601	.0847627	.0670240	104.0600
#2	.0034550	.0020195	441.1470	.1009600	.0859527	.0902787	103.3504
#3	.0037874	.0020579	443.2103	.1010350	.0863943	.0783707	103.8041

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.248040	91.52643	.1418867	-.003996	.6070770	.0990389	.2669450
Stddev	.005727	.21113	.0002172	.000083	.0078287	.0051073	.0011519
%RSD	.2547351	.2306732	.1530495	2.081019	1.289578	5.156838	.4315200
#1	2.254264	91.56929	.1421010	-.003906	.5984443	.0939811	.2678880
#2	2.242995	91.29716	.1416668	-.004012	.6090701	.1041943	.2656611
#3	2.246862	91.71284	.1418923	-.004070	.6137164	.0989413	.2672859

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.044354	2.080542	-.204917	.0194831	13.95171	4.680108	.0153047
Stddev	.023267	.010955	.003675	.0001246	.02239	.064276	.0008478
%RSD	.3849417	.5265619	1.793358	.6395133	.1605080	1.373396	5.539317
#1	6.040846	2.080564	-.204244	.0193400	13.97164	4.695730	.0150753
#2	6.069177	2.069576	-.201625	.0195676	13.92748	4.609460	.0145953
#3	6.023041	2.091487	-.208882	.0195417	13.95600	4.735133	.0162436

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-20DLX2 Acquired: 12/30/2024 21:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5744581	.4362065	.0648738
Stddev	.0061910	.0008231	.0008392
%RSD	1.077705	.1886962	1.293611
#1	.5790810	.4357432	.0654327
#2	.5674244	.4357196	.0639088
#3	.5768689	.4371569	.0652800

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1680.234	21171.59	2374.523	1398.132	1776.844
Stddev	6.495	95.53	17.441	3.123	5.233
%RSD	.3865774	.4512224	.7344987	.2233984	.2945154
#1	1687.675	21214.78	2373.345	1400.285	1781.448
#2	1677.326	21062.09	2392.523	1394.549	1777.932
#3	1675.700	21237.89	2357.701	1399.561	1771.153

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV050 Acquired: 12/30/2024 21:20:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV050 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.930407	4.755433	24.38187	4.853586	4.817536	405.7120
Stddev	.012680	.017704	.02221	.006347	.002665	1.1653
%RSD	.2571817	.3722803	.0910836	.1307683	.0553172	.2872272
#1	4.919618	4.763208	24.40683	4.858729	4.820540	407.0282
#2	4.944374	4.735172	24.36432	4.855537	4.815454	404.8119
#3	4.927230	4.767919	24.37446	4.846493	4.816616	405.2958

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.08952	.5057314	2.458517	410.8749	15.54501	2.454927
Stddev	.03107	.0017709	.002232	.9893	.07757	.001727
%RSD	.3079492	.3501734	.0907894	.2407879	.4990315	.0703662
#1	10.12533	.5062945	2.460883	412.0156	15.58106	2.456715
#2	10.07357	.5037473	2.456449	410.3569	15.59800	2.453267
#3	10.06967	.5071523	2.458219	410.2520	15.45597	2.454799

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.11072	410.3914	15.09348	406.5694	2.478886	1.270489
Stddev	.01697	1.2363	.05527	1.8722	.004997	.007213
%RSD	.1122846	.3012546	.3661736	.4604811	.2015657	.5677577
#1	15.13001	411.5252	15.14285	408.7105	2.483938	1.274938
#2	15.09813	409.0733	15.03377	405.2403	2.473946	1.274362
#3	15.10401	410.5757	15.10381	405.7575	2.478775	1.262166

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	411.6580	2.496128	14.88302	153.0550	4.840022	F 4.342615
Stddev	2.0127	.008435	.10032	.5002	.009217	.026418
%RSD	.4889211	.3379367	.6740562	.3268316	.1904419	.6083376
#1	413.8177	2.503812	14.94422	153.5571	4.847120	4.357642
#2	409.8348	2.497470	14.93759	152.5566	4.829604	4.312111
#3	411.3214	2.487102	14.76724	153.0512	4.843341	4.358091

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV050 Acquired: 12/30/2024 21:20:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV050 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.741539	4.896273	4.989297	4.958816	5.035435	4.817609
Stddev	.002921	.005074	.024250	.008498	.014905	.001469
%RSD	.0616049	.1036201	.4860467	.1713659	.2959975	.0304991
#1	4.744570	4.898217	5.002633	4.967723	5.052528	4.816192
#2	4.738742	4.900087	4.961305	4.957930	5.025150	4.819125
#3	4.741304	4.890515	5.003952	4.950797	5.028627	4.817510

Elem	Li6707
Units	ppm
Avg	5.098836
Stddev	.016850
%RSD	.3304710
#1	5.118282
#2	5.088553
#3	5.089674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1450.215	18782.35	2187.450	1181.685	1623.867
Stddev	1.667	111.06	8.985	7.505	3.376
%RSD	.1149380	.5913116	.4107414	.6351358	.2079259
#1	1448.479	18726.11	2179.399	1176.276	1622.102
#2	1451.803	18710.66	2197.142	1178.525	1627.760
#3	1450.363	18910.28	2185.808	1190.253	1621.740

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB050 Acquired: 12/30/2024 21:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB050 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004040	-.001370	.0019890	.0058435	.0031484	-.005453	.0003322
Stddev	.003737	.001575	.0014023	.0008808	.0025574	.014416	.0002500
%RSD	92.48369	114.9977	70.50250	15.07339	81.22782	264.3788	75.25992
#1	-.008346	-.002566	.0011955	.0054665	.0002673	-.002279	.0000851
#2	-.001650	.000415	.0011634	.0068500	.0051497	-.021191	.0005850
#3	-.002124	-.001958	.0036082	.0052139	.0040283	.007111	.0003263

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002629	.0002408	.0315557	.0015187	.0002469	.0046798	.0331732
Stddev	.0001338	.0000635	.0167619	.0003598	.0003221	.0169227	.0209174
%RSD	50.90596	26.36111	53.11856	23.69057	130.4840	361.6109	63.05512
#1	.0001087	.0001908	.0124726	.0018508	.0000356	.0241286	.0149953
#2	.0003306	.0002195	.0382974	.0015687	.0006176	-.003405	.0284886
#3	.0003493	.0003122	.0438971	.0011365	.0000874	-.006684	.0560358

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014178	.1034333	-.000251	.0011397	.0496476	-.005387	.0026383
Stddev	.0013226	.1081158	.000504	.0017556	.0414117	.015561	.0003657
%RSD	93.29096	104.5271	200.6833	154.0462	83.41121	288.8813	13.86144
#1	.0028277	.1558833	-.000222	.0030770	.0755412	.012239	.0029454
#2	.0002045	.1753195	-.000769	-.000346	.0715156	-.011174	.0027357
#3	.0012211	-.020903	.000237	.000688	.0018860	-.017225	.0022338

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0735260	-.001480	.0110022	.0003556	.0002746	.0006148	-.000521
Stddev	.0634451	.001999	.0037062	.0002370	.0064710	.0003893	.000985
%RSD	86.28931	135.0790	33.68658	66.63705	2356.769	63.31914	188.9918
#1	.0321205	-.003623	.0110308	.0005939	.0038421	.0007603	-.001512
#2	.0418889	-.001149	.0146940	.0001200	-.007195	.0009105	-.000510
#3	.1465687	.000333	.0072817	.0003529	.004177	.0001737	.000458

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB050 Acquired: 12/30/2024 21:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB050 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001931	.0003255	.0078899
Stddev	.003138	.0004216	.0050451
%RSD	162.5736	129.5471	63.94317
#1	.000594	.0006628	.0102695
#2	-.005444	-.000147	.0020952
#3	-.000941	.000461	.0113051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1651.730	20850.48	2251.576	1384.177	1947.192
Stddev	6.904	94.67	5.754	5.521	7.634
%RSD	.4179809	.4540331	.2555520	.3988694	.3920541
#1	1646.487	20742.01	2246.961	1378.163	1938.630
#2	1649.150	20893.01	2249.743	1385.350	1949.655
#3	1659.552	20916.43	2258.023	1389.016	1953.290

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-21DLX2 Acquired: 12/30/2024 21:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0472713	-.001421	.0846425	.0136016	.0067599	40.21872	.4002722
Stddev	.0019219	.003701	.0032681	.0027167	.0017306	.14471	.0026561
%RSD	4.065731	260.5287	3.861020	19.97337	25.60110	.3597986	.6635767
#1	.0494805	-.000156	.0839746	.0158917	.0060364	40.28333	.4030257
#2	.0459840	-.005588	.0881929	.0143132	.0087348	40.31985	.4000654
#3	.0463494	.001483	.0817600	.0105999	.0055084	40.05296	.3977255

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041700	.0021671	469.1640	.0797140	.0951847	.1035088	126.6536
Stddev	.0001817	.0001565	1.9314	.0001737	.0005556	.0053117	.6402
%RSD	4.358180	7.221764	.4116775	.2179137	.5837354	5.131653	.5054864
#1	.0040613	.0023234	469.8347	.0796332	.0952900	.1093803	127.0251
#2	.0040690	.0020104	470.6707	.0795954	.0956802	.0990372	127.0214
#3	.0043799	.0021675	466.9866	.0799134	.0945840	.1021089	125.9144

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.562981	87.31283	.1637734	-.006056	.7673971	.1038018	.2965723
Stddev	.012715	.74950	.0019455	.000653	.0224742	.0112209	.0030604
%RSD	.4961020	.8584098	1.187910	10.78162	2.928624	10.80994	1.031913
#1	2.565184	87.43352	.1627333	-.006594	.7728895	.0916688	.2978745
#2	2.574451	87.99467	.1660178	-.005330	.7866160	.1138056	.2930762
#3	2.549309	86.51031	.1625690	-.006245	.7426859	.1059309	.2987661

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.727975	2.360819	-.244155	.0428434	15.36509	4.339354	.0214743
Stddev	.096861	.006641	.003741	.0010481	.01330	.034299	.0011498
%RSD	1.439681	.2813109	1.532162	2.446382	.0865398	.7904180	5.354453
#1	6.628651	2.353567	-.244365	.0428693	15.35508	4.366907	.0202856
#2	6.822169	2.366605	-.247787	.0438784	15.36001	4.350216	.0225809
#3	6.733106	2.362284	-.240314	.0417826	15.38018	4.300939	.0215563

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5259-21DLX2 Acquired: 12/30/2024 21:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7330896	.5536875	.0800161
Stddev	.0033373	.0012088	.0040159
%RSD	.4552367	.2183161	5.018880
#1	.7366577	.5531788	.0794734
#2	.7325661	.5550675	.0762991
#3	.7300449	.5528163	.0842757

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1696.449	21428.75	2405.428	1414.515	1772.072
Stddev	4.408	17.18	17.436	8.209	2.121
%RSD	.2598657	.0801559	.7248772	.5803419	.1196917
#1	1699.423	21420.00	2392.753	1407.429	1774.480
#2	1691.384	21417.71	2398.217	1423.510	1770.481
#3	1698.540	21448.54	2425.313	1412.605	1771.256

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-02DLX2 Acquired: 12/30/2024 21:31:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0620528	-.004552	.0797783	.0006889	.0070645	35.99263	.2725931
Stddev	.0063219	.001033	.0018143	.0102650	.0024089	.08928	.0014902
%RSD	10.18790	22.68752	2.274132	1490.057	34.09908	.2480564	.5466817
#1	.0589162	-.003660	.0806169	.0088032	.0042832	35.93683	.2731054
#2	.0693296	-.004314	.0776965	.0041142	.0084893	35.94546	.2737596
#3	.0579125	-.005683	.0810217	-.010851	.0084211	36.09560	.2709143

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038469	.0016051	528.5826	.0633168	.0834776	.0969392	117.2804
Stddev	.0002872	.0000917	1.3788	.0000917	.0001994	.0103807	.2157
%RSD	7.464891	5.714384	.2608413	.1448077	.2388350	10.70848	.1839027
#1	.0035694	.0014993	528.1853	.0633964	.0837072	.0872978	117.4484
#2	.0038283	.0016535	527.4461	.0632165	.0833779	.1079277	117.3556
#3	.0041429	.0016625	530.1164	.0633374	.0833478	.0955922	117.0372

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.619622	77.36733	.1371995	-.004442	.6425915	.0787613	.2543927
Stddev	.003650	.18067	.0003919	.000434	.0120451	.0065343	.0016320
%RSD	.2253869	.2335160	.2856096	9.780490	1.874450	8.296288	.6415240
#1	1.617174	77.57518	.1373958	-.003944	.6458127	.0860928	.2562264
#2	1.623818	77.27888	.1374544	-.004636	.6526984	.0735516	.2530997
#3	1.617874	77.24794	.1367483	-.004745	.6292633	.0766396	.2538519

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.634520	2.480943	-.237681	.0213714	.9443148	5.289131	.0183065
Stddev	.041980	.004026	.003861	.0008050	.0033315	.033953	.0002344
%RSD	.7450564	.1622902	1.624291	3.766803	.3527962	.6419318	1.280399
#1	5.613762	2.485335	-.241502	.0215189	.9407733	5.321602	.0183423
#2	5.606963	2.480070	-.233782	.0220925	.9447848	5.291921	.0180563
#3	5.682836	2.477425	-.237758	.0205029	.9473864	5.253869	.0185210

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-02DLX2 Acquired: 12/30/2024 21:31:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8099812	.6556978	.0546099
Stddev	.0044953	.0043532	.0033777
%RSD	.5549861	.6639095	6.185173
#1	.8113769	.6532449	.0531739
#2	.8049536	.6531244	.0521874
#3	.8136130	.6607240	.0584683

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1699.797	21469.23	2386.188	1413.632	1773.067
Stddev	2.184	141.19	12.114	9.484	2.095
%RSD	.1284712	.6576617	.5076679	.6708608	.1181445
#1	1702.053	21427.84	2373.874	1405.327	1775.467
#2	1699.643	21626.50	2386.598	1423.965	1771.609
#3	1697.694	21353.36	2398.091	1411.603	1772.124

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-03DLX2 Acquired: 12/30/2024 21:35:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0152049	.0256635	.0516055	-.029314	-.007544	23.66781	.6052085
Stddev	.0062026	.0023910	.0012159	.009241	.001679	.06333	.0019913
%RSD	40.79329	9.316790	2.356227	31.52301	22.26284	.2675737	.3290344
#1	.0179780	.0239659	.0530074	-.025240	-.008693	23.59549	.6029584
#2	.0195371	.0283979	.0509710	-.022811	-.005616	23.71337	.6059238
#3	.0080996	.0246267	.0508381	-.039892	-.008322	23.69456	.6067435

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023656	.0019266	798.9207	.0523173	.0701217	.0564589	58.65355
Stddev	.0000826	.0001810	1.0124	.0007460	.0006982	.0099661	.22730
%RSD	3.493343	9.397244	.1267191	1.425871	.9957454	17.65200	.3875353
#1	.0023264	.0021355	797.8874	.0519234	.0699016	.0478826	58.52527
#2	.0024605	.0018164	798.9639	.0518509	.0709035	.0541018	58.91599
#3	.0023098	.0018278	799.9108	.0531777	.0695601	.0673923	58.51939

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.334500	328.4756	.0944756	-.002377	.8358044	.0858686	.1810534
Stddev	.005285	.4297	.0006302	.001075	.0216423	.0068611	.0004912
%RSD	.3960360	.1308241	.6670883	45.22483	2.589398	7.990280	.2713139
#1	1.340387	327.9919	.0939734	-.001258	.8460904	.0795216	.1813937
#2	1.332948	328.6219	.0942705	-.003401	.8109374	.0931484	.1812763
#3	1.330164	328.8132	.0951828	-.002471	.8503855	.0849356	.1804903

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.305930	1.420145	-.098990	.0257616	12.27692	4.688773	.0144577
Stddev	.099077	.015993	.002988	.0001837	.01267	.041019	.0031299
%RSD	2.300932	1.126174	3.018010	.7130623	.1031624	.8748280	21.64908
#1	4.418821	1.415499	-.098354	.0259317	12.28064	4.716574	.0126363
#2	4.233423	1.406988	-.096371	.0257864	12.26281	4.641663	.0180718
#3	4.265548	1.437946	-.102244	.0255668	12.28730	4.708081	.0126649

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-03DLX2 Acquired: 12/30/2024 21:35:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6108719	7.050066	.0455273
Stddev	.0013332	.015134	.0010009
%RSD	.2182416	.2146652	2.198374
#1	.6115448	7.034001	.0444130
#2	.6117345	7.064055	.0463499
#3	.6093364	7.052143	.0458190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1595.266	20166.36	2301.545	1319.423	1659.848
Stddev	6.329	59.95	10.373	3.552	6.286
%RSD	.3967265	.2972968	.4506925	.2692431	.3787067
#1	1594.484	20205.19	2298.680	1317.358	1661.440
#2	1601.950	20097.31	2313.049	1317.387	1665.185
#3	1589.365	20196.58	2292.906	1323.525	1652.919

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-08DLX2 Acquired: 12/30/2024 21:39:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0436121	-.018080	.2487736	.0388478	.0202248	44.17257	.4651570
Stddev	.0009179	.002506	.0004843	.0038496	.0027029	.03297	.0010411
%RSD	2.104765	13.86020	.1946691	9.909481	13.36410	.0746465	.2238246
#1	.0446679	-.018746	.2482194	.0401509	.0176520	44.21060	.4644300
#2	.0430030	-.020186	.2491149	.0345158	.0199810	44.15522	.4663497
#3	.0431654	-.015309	.2489867	.0418767	.0230412	44.15190	.4646912

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051728	.0035153	444.3647	.6193211	.0832892	.0946451	181.2196
Stddev	.0001534	.0001761	.3899	.0019825	.0006061	.0101688	.5515
%RSD	2.966155	5.009200	.0877422	.3201033	.7277596	10.74408	.3043263
#1	.0053019	.0033248	444.8134	.6197019	.0828037	.0947800	181.7550
#2	.0050031	.0036722	444.1729	.6210856	.0830952	.0844096	181.2505
#3	.0052133	.0035488	444.1079	.6171759	.0839686	.1047458	180.6533

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.62425	135.2717	.2621750	-.005116	.8142329	.2157034	.7485596
Stddev	.00702	.4700	.0013548	.000375	.0181501	.0038198	.0030849
%RSD	.0603882	.3474609	.5167427	7.329022	2.229104	1.770873	.4121163
#1	11.63222	135.8048	.2623907	-.005075	.8073543	.2200351	.7521199
#2	11.62158	134.9171	.2634090	-.004764	.8005276	.2142577	.7466804
#3	11.61897	135.0931	.2607253	-.005510	.8348169	.2128175	.7468784

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.725057	2.769844	-.355375	.0197220	4.149095	6.053384	.0325622
Stddev	.010478	.010644	.005571	.0003704	.001892	.050958	.0014179
%RSD	.1558068	.3842848	1.567684	1.877926	.0455889	.8418049	4.354529
#1	6.729988	2.778662	-.359787	.0195144	4.151154	6.094530	.0341238
#2	6.732161	2.758021	-.349115	.0195020	4.148696	5.996384	.0313553
#3	6.713024	2.772849	-.357222	.0201496	4.147435	6.069239	.0322076

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-08DLX2 Acquired: 12/30/2024 21:39:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.167871	.7497202	.0600868
Stddev	.011792	.0022764	.0038436
%RSD	1.009710	.3036305	6.396788
#1	1.155620	.7474179	.0587211
#2	1.168848	.7497731	.0571126
#3	1.179143	.7519697	.0644268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1675.154	21214.72	2397.722	1395.228	1766.680
Stddev	4.487	76.88	16.762	8.426	7.511
%RSD	.2678391	.3624119	.6990760	.6039413	.4251341
#1	1680.056	21177.37	2382.237	1385.963	1774.901
#2	1674.157	21163.64	2415.520	1397.288	1764.960
#3	1671.250	21303.14	2395.408	1402.433	1760.178

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-10DLX2 Acquired: 12/30/2024 21:43:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0655687	-.103169	.4832778	.2046957	.0857918	34.69360
Stddev	.0016019	.003566	.0034799	.0059507	.0036187	.03331
%RSD	2.443093	3.456936	.7200712	2.907115	4.217947	.0960100
#1	.0639209	-.107228	.4868896	.2110749	.0883663	34.71633
#2	.0656647	-.100536	.4829970	.1992946	.0873548	34.65537
#3	.0671204	-.101742	.4799468	.2037177	.0816543	34.70911

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5667293	.0083298	.0066299	638.1728	.8336270	.0838528
Stddev	.0017236	.0000897	.0001014	1.2776	.0027488	.0006587
%RSD	.3041381	1.076980	1.530046	.2002014	.3297381	.7855615
#1	.5687019	.0084100	.0067275	639.6091	.8367271	.0842896
#2	.5655134	.0083466	.0065250	637.1629	.8314873	.0830952
#3	.5659726	.0082329	.0066372	637.7464	.8326666	.0841737

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1204210	484.1999	19.04694	245.0276	.2690713	-.013950
Stddev	.0145137	.9846	.05544	.6363	.0006859	.001595
%RSD	12.05244	.2033470	.2910910	.2597031	.2549251	11.43625
#1	.1113763	485.1892	19.08574	245.4564	.2686850	-.015444
#2	.1371618	483.2201	18.98344	244.2965	.2686656	-.012269
#3	.1127248	484.1903	19.07164	245.3300	.2698633	-.014138

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.031115	.3282792	1.781497	3.098682	2.920257	F -1.11386
Stddev	.008327	.0051153	.003343	.131242	.005439	.00345
%RSD	.8075713	1.558217	.1876273	4.235401	.1862435	.3098428
#1	1.021994	.3274353	1.785348	2.975409	2.926182	-1.11113
#2	1.038309	.3337639	1.779802	3.083983	2.915491	-1.11773
#3	1.033043	.3236383	1.779342	3.236654	2.919097	-1.11271

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-10DLX2 Acquired: 12/30/2024 21:43:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0143375	5.781396	3.760924	.0510969	1.177303	1.553200
Stddev	.0002772	.015498	.018419	.0007092	.009074	.004531
%RSD	1.933455	.2680665	.4897515	1.387923	.7707020	.2917244
#1	.0141682	5.792871	3.781246	.0502847	1.186367	1.558369
#2	.0141870	5.787550	3.745329	.0514120	1.168220	1.549914
#3	.0146575	5.763766	3.756196	.0515938	1.177323	1.551318

Elem	Li6707
Units	ppm
Avg	.0354645
Stddev	.0034974
%RSD	9.861785
#1	.0315827
#2	.0383701
#3	.0364406

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.925	20516.68	2311.629	1343.515	1739.902
Stddev	6.574	54.40	13.853	1.179	5.959
%RSD	.4080749	.2651723	.5992740	.0877286	.3424711
#1	1616.428	20456.31	2295.981	1343.146	1746.669
#2	1612.701	20561.90	2322.326	1344.834	1737.596
#3	1603.645	20531.84	2316.580	1342.566	1735.442

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-11DLX2 Acquired: 12/30/2024 21:47:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0298745	.0055538	.1342092	-.004738	.0036748	36.41970	.2768377
Stddev	.0036547	.0053823	.0021739	.009655	.0000663	.23575	.0036001
%RSD	12.23352	96.91181	1.619780	203.7708	1.804584	.6473266	1.300434
#1	.0340011	.0020816	.1352301	.005837	.0037189	36.38060	.2765754
#2	.0285762	.0028259	.1317127	-.013083	.0037070	36.67256	.2805617
#3	.0270461	.0117539	.1356847	-.006968	.0035985	36.20594	.2733759

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038329	.0037703	455.6713	.1548305	.0790255	.0871220	105.0463
Stddev	.0000456	.0001758	2.7886	.0004926	.0000824	.0041519	.8745
%RSD	1.188412	4.662573	.6119866	.3181575	.1043253	4.765643	.8324733
#1	.0038508	.0037956	455.4129	.1548492	.0789304	.0918168	104.8201
#2	.0038667	.0039320	458.5802	.1543287	.0790768	.0856156	106.0117
#3	.0037811	.0035832	453.0209	.1553134	.0790692	.0839335	104.3072

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.803675	160.9573	.1313899	-.003167	.6479362	.1104206	.3946864
Stddev	.028370	1.3764	.0005198	.000668	.0209918	.0108570	.0033896
%RSD	.7458487	.8551483	.3956300	21.09884	3.239794	9.832429	.8588123
#1	3.791911	160.6046	.1319693	-.002484	.6710391	.1221085	.3973552
#2	3.836034	162.4757	.1312360	-.003820	.6427365	.1085032	.3958316
#3	3.783079	159.7915	.1309645	-.003199	.6300329	.1006499	.3908726

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.333094	2.253455	-.218318	.0135274	9.090645	5.668397	.0118866
Stddev	.091496	.018776	.002582	.0004724	.051884	.032812	.0012703
%RSD	2.111554	.8332011	1.182611	3.492288	.5707380	.5788636	10.68716
#1	4.262696	2.254782	-.218088	.0131646	9.133522	5.695421	.0125143
#2	4.436517	2.271533	-.215859	.0140616	9.105444	5.677884	.0127208
#3	4.300069	2.234052	-.221007	.0133560	9.032970	5.631887	.0104246

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-11DLX2 Acquired: 12/30/2024 21:47:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3802295	.6534186	.0525068
Stddev	.0035621	.0038711	.0023627
%RSD	.9368346	.5924442	4.499760
#1	.3839848	.6503183	.0500911
#2	.3798050	.6577575	.0526167
#3	.3768986	.6521801	.0548127

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1664.131	21106.66	2336.836	1386.828	1758.951
Stddev	8.185	121.08	22.671	11.165	7.990
%RSD	.4918657	.5736694	.9701694	.8050443	.4542533
#1	1658.649	21100.81	2331.109	1386.420	1754.589
#2	1660.205	20988.61	2317.577	1375.873	1754.090
#3	1673.540	21230.56	2361.821	1398.191	1768.172

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-12DLX2 Acquired: 12/30/2024 21:50:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0359000	-.006188	.1704069	.0353143	.0157568	35.89278	.3943828
Stddev	.0032786	.002379	.0014222	.0072221	.0029279	.03800	.0016666
%RSD	9.132663	38.44543	.8345958	20.45098	18.58158	.1058670	.4225922
#1	.0393691	-.008439	.1706041	.0330891	.0191340	35.93653	.3928787
#2	.0354783	-.003699	.1717201	.0294667	.0139326	35.86798	.3961745
#3	.0328527	-.006426	.1688963	.0433872	.0142038	35.87384	.3940953

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033945	.0023001	482.9991	.7824974	.0772708	.0997968	162.4807
Stddev	.0000308	.0001549	.7230	.0023379	.0005975	.0080647	.3571
%RSD	.9066548	6.735703	.1496883	.2987784	.7732474	8.081079	.2197921
#1	.0034258	.0021683	483.4784	.7813218	.0767933	.0938051	162.5253
#2	.0033643	.0022614	483.3515	.7851898	.0770783	.0966190	162.8134
#3	.0033934	.0024708	482.1675	.7809806	.0779408	.1089662	162.1033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.04905	177.9685	.2445837	-.004754	.6190464	.2679697	.4537720
Stddev	.03543	.2095	.0010291	.000590	.0259995	.0094868	.0024845
%RSD	.1962987	.1176935	.4207485	12.41262	4.199924	3.540266	.5475259
#1	18.07737	178.0329	.2448188	-.005242	.5945507	.2788557	.4559455
#2	18.06044	178.1381	.2434575	-.004921	.6463257	.2614678	.4543068
#3	18.00932	177.7344	.2454750	-.004098	.6162629	.2635855	.4510636

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.312877	2.660731	-.333755	.0157389	5.002442	6.198059	.0195721
Stddev	.109105	.009357	.000404	.0005271	.018361	.018130	.0024084
%RSD	3.293372	.3516659	.1209450	3.349248	.3670357	.2925115	12.30551
#1	3.279865	2.654129	-.333733	.0153009	4.987870	6.211300	.0201636
#2	3.434676	2.671439	-.334170	.0163239	4.996392	6.205482	.0216297
#3	3.224090	2.656624	-.333363	.0155920	5.023064	6.177396	.0169230

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-12DLX2 Acquired: 12/30/2024 21:50:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9866734	.6512038	.0440762
Stddev	.0055309	.0008807	.0026529
%RSD	.5605622	.1352452	6.018976
#1	.9912820	.6519622	.0410742
#2	.9805400	.6514114	.0450491
#3	.9881981	.6502379	.0461054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1640.869	20918.37	2337.432	1370.011	1746.729
Stddev	4.655	83.42	6.244	4.660	4.579
%RSD	.2836790	.3987947	.2671300	.3401483	.2621380
#1	1643.251	20968.62	2338.740	1370.990	1749.558
#2	1643.851	20822.07	2330.638	1364.939	1749.183
#3	1635.505	20964.42	2342.919	1374.104	1741.447

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-14DLX2 Acquired: 12/30/2024 21:58:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0989572	-.151520	2.083272	.3447981	.1457724	41.27661
Stddev	.0013153	.008851	.004644	.0183992	.0083482	1.39151
%RSD	1.329206	5.841683	.2229134	5.336226	5.726849	3.371177
#1	.0996554	-.152781	2.084761	.3638433	.1462542	41.96431
#2	.0974400	-.142105	2.078066	.3271213	.1371938	39.67515
#3	.0997762	-.159673	2.086988	.3434298	.1538693	42.19038

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6211474	.0111185	.0166347	408.0440	2.179901	.0778564
Stddev	.0230896	.0004327	.0004649	13.5430	.008681	.0010259
%RSD	3.717246	3.891878	2.794862	3.319004	.3982366	1.317691
#1	.6334021	.0111818	.0163096	414.6860	2.177794	.0787231
#2	.5945141	.0106576	.0171673	392.4622	2.189442	.0781225
#3	.6355260	.0115161	.0164273	416.9836	2.172468	.0767237

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1720125	704.6971	F 46.67829	73.52433	.5143280	-.025220
Stddev	.0056276	23.6323	1.56157	2.43938	.0006919	.002511
%RSD	3.271606	3.353544	3.345388	3.317790	.1345229	9.958395
#1	.1673068	716.4446	47.42436	74.63154	.5149510	-.023938
#2	.1704843	677.4930	44.88363	70.72771	.5144495	-.028113
#3	.1782463	720.1536	47.72689	75.21376	.5135834	-.023608

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.483725	.5846944	6.686058	4.125433	4.805451	F -1.55689
Stddev	.060162	.0164831	.015625	.357613	.016156	.04345
%RSD	4.054817	2.819102	.2336932	8.668495	.3362074	2.790566
#1	1.527128	.5852182	6.680695	4.093017	4.790522	-1.58103
#2	1.415049	.5679556	6.703658	3.785131	4.822604	-1.50673
#3	1.508998	.6009094	6.673821	4.498150	4.803227	-1.58291

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-14DLX2 Acquired: 12/30/2024 21:58:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0318705	4.395835	6.650357	.1043076	3.046175	.2379554
Stddev	.0001500	.012505	.216950	.0017369	.102032	.0085759
%RSD	.4706342	.2844799	3.262234	1.665147	3.349515	3.603986
#1	.0320437	4.384817	6.746970	.1032026	3.088250	.2414057
#2	.0317818	4.393260	6.401883	.1034106	2.929833	.2281917
#3	.0317861	4.409427	6.802218	.1063096	3.120441	.2442687

Elem	Li6707
Units	ppm
Avg	.0285478
Stddev	.0024739
%RSD	8.665985
#1	.0292964
#2	.0257861
#3	.0305610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.552	20407.64	2346.748	1333.894	1812.440
Stddev	4.548	113.14	69.268	8.653	4.571
%RSD	.2825361	.5544162	2.951677	.6487034	.2521874
#1	1607.109	20383.81	2307.020	1331.536	1808.137
#2	1606.748	20308.30	2426.732	1326.664	1811.945
#3	1614.799	20530.79	2306.494	1343.482	1817.238

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-15DLX2 Acquired: 12/30/2024 22:02:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0801370	-.099575	1.603064	.2095568	.0958661	54.18059
Stddev	.0024845	.006529	.002218	.0066471	.0056738	2.30199
%RSD	3.100301	6.556661	.1383385	3.171964	5.918500	4.248742
#1	.0787232	-.093030	1.604893	.2030497	.0896733	51.90536
#2	.0830058	-.099609	1.603702	.2092851	.1008144	54.12797
#3	.0786821	-.106088	1.600598	.2163355	.0971105	56.50844

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5141317	.0095931	.0119745	352.1083	1.965954	.0803627
Stddev	.0224418	.0000291	.0005512	15.4188	.008605	.0004715
%RSD	4.364986	.3027971	4.603531	4.378987	.4377222	.5866621
#1	.4923915	.0095619	.0126077	336.4600	1.974156	.0798557
#2	.5127889	.0096194	.0117143	352.5780	1.956996	.0804444
#3	.5372147	.0095980	.0116016	367.2869	1.966711	.0807879

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1768318	479.6143	28.39859	63.98487	.4506056	-.016000
Stddev	.0048138	19.9297	1.22858	2.56575	.0010449	.001633
%RSD	2.722252	4.155366	4.326194	4.009936	.2318809	10.20561
#1	.1721417	460.0272	27.19320	61.37336	.4496280	-.017885
#2	.1765934	478.9457	28.35346	64.07897	.4517067	-.015057
#3	.1817604	499.8699	29.64911	66.50227	.4504819	-.015057

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.543069	.4078499	4.776826	7.009490	3.633148	F -1.02071
Stddev	.049743	.0189953	.011219	.540103	.008780	.03805
%RSD	3.223668	4.657428	.2348727	7.705319	.2416736	3.728095
#1	1.488460	.3868974	4.788651	6.518217	3.642955	-.98147
#2	1.554952	.4127077	4.766331	6.922409	3.626017	-1.02321
#3	1.585794	.4239446	4.775497	7.587842	3.630473	-1.05745

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-15DLX2 Acquired: 12/30/2024 22:02:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0332107	3.654614	5.771964	.0751159	2.243606	.4070586
Stddev	.0006769	.007177	.210810	.0031025	.096890	.0202247
%RSD	2.038195	.1963695	3.652306	4.130228	4.318476	4.968509
#1	.0327977	3.650876	5.563411	.0754851	2.149027	.3850983
#2	.0328425	3.662888	5.767521	.0718453	2.239140	.4111577
#3	.0339919	3.650078	5.984960	.0780172	2.342652	.4249198

Elem	Li6707
Units	ppm
Avg	.0555015
Stddev	.0039650
%RSD	7.143906
#1	.0521489
#2	.0544776
#3	.0598780

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1645.795	20827.53	2419.693	1362.461	1812.400
Stddev	2.677	71.44	85.629	1.653	4.601
%RSD	.1626630	.3429894	3.538828	.1213058	.2538389
#1	1642.707	20797.19	2509.065	1364.212	1807.424
#2	1647.218	20909.13	2411.636	1362.243	1813.277
#3	1647.461	20776.27	2338.377	1360.928	1816.498

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-16DLX2 Acquired: 12/30/2024 22:06:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0746995	-.080025	1.935774	.1894079	.0788561	67.49574	.6709631
Stddev	.0044319	.006231	.008160	.0098367	.0058930	.50452	.0048464
%RSD	5.932992	7.786646	.4215206	5.193371	7.473063	.7474829	.7223006
#1	.0794210	-.082599	1.936148	.1856837	.0720753	67.30788	.6722380
#2	.0706292	-.072919	1.927434	.1819771	.0817545	67.11211	.6656067
#3	.0740481	-.084557	1.943741	.2005628	.0827386	68.06724	.6750446

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136216	.0114788	436.5258	1.478713	.0812625	.1828757	425.0692
Stddev	.0003201	.0002047	4.1576	.006333	.0002025	.0104183	3.7157
%RSD	2.349794	1.783379	.9524384	.4282775	.2492096	5.696910	.8741347
#1	.0139848	.0116108	436.0992	1.479425	.0814836	.1708998	424.8221
#2	.0133809	.0115825	432.5980	1.472054	.0810860	.1898500	421.4833
#3	.0134989	.0112430	440.8804	1.484660	.0812179	.1878774	428.9023

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.70454	106.8619	.5582515	-.011926	1.587650	.2878696	4.039165
Stddev	.18947	.8244	.0002757	.000629	.031475	.0067241	.039679
%RSD	.8729313	.7714336	.0493920	5.276151	1.982464	2.335830	.9823608
#1	21.69457	106.9869	.5585084	-.012054	1.622481	.2830425	4.081775
#2	21.52026	105.9821	.5582860	-.012481	1.561249	.2850165	4.003274
#3	21.89880	107.6165	.5579602	-.011242	1.579219	.2955499	4.032446

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.419586	3.168529	-.806927	.0448185	5.022106	6.557522	.0691507
Stddev	.117263	.004791	.004641	.0010207	.013149	.062082	.0019901
%RSD	1.826642	.1512006	.5751518	2.277474	.2618164	.9467333	2.877964
#1	6.335260	3.163631	-.811908	.0436399	5.032705	6.598127	.0711096
#2	6.553496	3.173205	-.802724	.0454156	5.007392	6.486057	.0692119
#3	6.370003	3.168752	-.806149	.0454001	5.026220	6.588382	.0671307

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-16DLX2 Acquired: 12/30/2024 22:06:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.579061	.5568599	.0673977
Stddev	.019972	.0063046	.0064160
%RSD	1.264827	1.132167	9.519658
#1	1.580248	.5550162	.0601081
#2	1.558521	.5516827	.0698975
#3	1.598413	.5638808	.0721877

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1720.003	21763.29	2455.877	1425.373	1793.207
Stddev	4.664	30.64	18.488	10.306	4.615
%RSD	.2711503	.1407721	.7528002	.7230574	.2573707
#1	1716.794	21754.17	2442.709	1413.939	1789.387
#2	1725.353	21797.46	2477.013	1433.948	1798.335
#3	1717.862	21738.26	2447.908	1428.232	1791.899

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-17DLX2 Acquired: 12/30/2024 22:09:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0691773	-.074282	1.849179	.1780454	.0755592	64.74697	.6429524
Stddev	.0036140	.004032	.008324	.0055563	.0034827	.15768	.0031946
%RSD	5.224282	5.427813	.4501473	3.120715	4.609218	.2435401	.4968605
#1	.0732973	-.070780	1.849403	.1731107	.0740210	64.67970	.6425664
#2	.0665428	-.073375	1.840746	.1840637	.0731105	64.63407	.6399684
#3	.0676917	-.078690	1.857390	.1769619	.0795462	64.92713	.6463225

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0129308	.0110097	416.7298	1.415950	.0785036	.1751125	406.6037
Stddev	.0000306	.0002434	1.0992	.000508	.0008385	.0030579	.9172
%RSD	.2366873	2.210886	.2637655	.0358935	1.068168	1.746220	.2255805
#1	.0129488	.0107820	416.6080	1.416104	.0787127	.1775510	406.0783
#2	.0128955	.0109810	415.6966	1.415382	.0775804	.1716817	406.0701
#3	.0129483	.0112662	417.8848	1.416363	.0792179	.1761047	407.6628

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.75424	102.5534	.5336907	-.013078	1.531801	.2717231	3.849011
Stddev	.03902	.0990	.0006804	.000662	.015975	.0147005	.009778
%RSD	.1880094	.0965464	.1274914	5.063232	1.042888	5.410087	.2540301
#1	20.71515	102.4835	.5343598	-.013842	1.549800	.2645106	3.859446
#2	20.75438	102.5101	.5329995	-.012694	1.526300	.2886368	3.847525
#3	20.79319	102.6667	.5337127	-.012697	1.519304	.2620219	3.840061

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.119095	3.021365	-.756311	.0430125	4.791702	6.336279	.0669855
Stddev	.097577	.005070	.016263	.0005786	.005771	.067869	.0020441
%RSD	1.594624	.1678160	2.150368	1.345161	.1204326	1.071123	3.051519
#1	6.131847	3.015684	-.773382	.0436788	4.791492	6.411058	.0687517
#2	6.209669	3.022977	-.754554	.0427216	4.797575	6.278583	.0674582
#3	6.015770	3.025433	-.740998	.0426371	4.786040	6.319196	.0647464

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-17DLX2 Acquired: 12/30/2024 22:09:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.512349	.5271318	.0611702
Stddev	.012290	.0028688	.0034037
%RSD	.8126625	.5442280	5.564289
#1	1.503457	.5259525	.0591617
#2	1.507216	.5250407	.0592488
#3	1.526373	.5304024	.0651001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1759.234	22238.06	2526.269	1459.718	1839.899
Stddev	1.214	46.49	18.688	.813	4.111
%RSD	.0689971	.2090346	.7397357	.0556749	.2234399
#1	1759.814	22290.19	2506.128	1458.908	1844.517
#2	1757.839	22223.04	2543.046	1459.712	1836.638
#3	1760.050	22200.93	2529.633	1460.533	1838.540

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-16LDLX10 Acquired: 12/30/2024 22:13:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063505	-.001416	.4055015	.0086659	.0088358	14.87211	.1482259
Stddev	.0050919	.004340	.0016988	.0052616	.0013874	.05134	.0015253
%RSD	80.18108	306.5469	.4189249	60.71637	15.70206	.3451818	1.029036
#1	.0108501	.001009	.4035411	.0129005	.0077195	14.82816	.1467043
#2	.0073784	-.006427	.4065408	.0103217	.0103891	14.85963	.1482184
#3	.0008231	.001170	.4064225	.0027756	.0083988	14.92853	.1497549

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032009	.0022573	95.69223	.3295771	.0348715	.0448146	94.12142
Stddev	.0000947	.0000807	.32734	.0014445	.0003165	.0093729	.50505
%RSD	2.960180	3.574531	.3420707	.4382761	.9075355	20.91485	.5365992
#1	.0033010	.0023403	95.55935	.3284875	.0352122	.0408719	93.54063
#2	.0031126	.0022524	95.45224	.3290282	.0348155	.0380571	94.45761
#3	.0031892	.0021791	96.06512	.3312155	.0345867	.0555148	94.36601

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.811781	23.61650	.1130093	-.001861	.3168605	.0709366	.8802200
Stddev	.015202	.19783	.0007317	.000761	.0071779	.0050663	.0047356
%RSD	.3159355	.8376826	.6474917	40.91669	2.265303	7.141976	.5380023
#1	4.794344	23.40371	.1136508	-.002736	.3170012	.0678117	.8850102
#2	4.818747	23.65091	.1131646	-.001495	.3239670	.0767820	.8755410
#3	4.822252	23.79486	.1122123	-.001351	.3096134	.0682161	.8801088

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.196017	.6275737	-.183450	.0110185	1.004855	1.886039	.0147048
Stddev	.090951	.0013933	.005072	.0001040	.011439	.034234	.0012580
%RSD	7.604517	.2220174	2.765005	.9439813	1.138333	1.815102	8.555018
#1	1.243067	.6291551	-.177881	.0109201	1.012169	1.908817	.0135450
#2	1.091179	.6265264	-.187807	.0110080	.991673	1.846671	.0160421
#3	1.253806	.6270396	-.184661	.0111273	1.010723	1.902629	.0145273

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-16LDLX10 Acquired: 12/30/2024 22:13:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3605445	.1182684	.0006471
Stddev	.0026214	.0011608	.0056823
%RSD	.7270533	.9814960	878.1404
#1	.3589726	.1193886	-.005530
#2	.3635706	.1170709	.001820
#3	.3590902	.1183457	.005651

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1682.148	21151.66	2329.112	1402.638	1909.937
Stddev	.835	53.08	7.060	2.015	.453
%RSD	.0496655	.2509602	.3031271	.1436505	.0237342
#1	1682.259	21187.03	2325.706	1401.903	1910.364
#2	1682.922	21090.62	2337.230	1404.917	1909.987
#3	1681.263	21177.34	2324.402	1401.094	1909.461

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-18DLX2 Acquired: 12/30/2024 22:17:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1149824	-.032801	1.918163	.2640540	.1671053	68.16601	2.556126
Stddev	.0030393	.003694	.006597	.0142767	.0004853	.15269	.005121
%RSD	2.643261	11.26099	.3439123	5.406730	.2903935	.2239950	.2003495
#1	.1152157	-.034953	1.925476	.2492051	.1673325	68.23568	2.557786
#2	.1178982	-.034915	1.912661	.2652771	.1674352	67.99091	2.550380
#3	.1118331	-.028536	1.916353	.2776797	.1665481	68.27144	2.560211

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0610758	.0610425	427.9620	1.648656	.5736895	.4021199	418.5131
Stddev	.0007270	.0001692	1.3407	.004715	.0009254	.0046638	.4019
%RSD	1.190314	.2772085	.3132761	.2860184	.1613125	1.159803	.0960357
#1	.0615498	.0610813	426.9513	1.653554	.5740845	.3991366	418.7561
#2	.0602388	.0608573	427.4518	1.648269	.5726321	.4074943	418.0492
#3	.0614388	.0611889	429.4829	1.644147	.5743519	.3997287	418.7340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.82415	104.9287	1.053552	.0250554	1.579294	.7759416	4.395766
Stddev	.00744	.2181	.000399	.0011704	.018908	.0074017	.011121
%RSD	.0341115	.2078200	.0378379	4.671069	1.197256	.9538993	.2529960
#1	21.83000	105.1297	1.053696	.0257395	1.585380	.7843493	4.408437
#2	21.81577	104.9596	1.053102	.0237040	1.558093	.7704082	4.387626
#3	21.82668	104.6969	1.053860	.0257227	1.594411	.7730673	4.391235

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.243177	3.095040	-.789260	.0437371	4.938149	6.386249	.0673428
Stddev	.068434	.002880	.007057	.0007240	.005305	.067379	.0011539
%RSD	1.096133	.0930623	.8940985	1.655371	.1074291	1.055071	1.713452
#1	6.166467	3.098290	-.796235	.0432393	4.938714	6.427427	.0685116
#2	6.297957	3.094028	-.782124	.0445676	4.932584	6.308491	.0662045
#3	6.265109	3.092802	-.789422	.0434043	4.943149	6.422829	.0673122

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-18DLX2 Acquired: 12/30/2024 22:17:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.550473	.5388811	.0596091
Stddev	.008114	.0056888	.0021353
%RSD	.5233248	1.055676	3.582192
#1	1.546688	.5334355	.0572015
#2	1.544943	.5384224	.0603523
#3	1.559788	.5447854	.0612735

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1726.463	21771.41	2464.899	1428.424	1801.288
Stddev	6.819	168.39	18.934	10.737	5.609
%RSD	.3949776	.7734632	.7681321	.7516728	.3113747
#1	1733.674	21713.37	2443.074	1422.771	1807.012
#2	1725.598	21639.71	2476.930	1421.694	1801.051
#3	1720.119	21961.15	2474.692	1440.807	1795.802

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-21DLX2 Acquired: 12/30/2024 22:21:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2488316	-.204089	3.785960	.4100899	.1980894	28.26455
Stddev	.0058147	.003140	.008036	.0041487	.0024224	.08670
%RSD	2.336807	1.538512	.2122598	1.011667	1.222868	.3067310
#1	.2441183	-.200537	3.792479	.4066164	.1960297	28.16918
#2	.2553295	-.206495	3.776981	.4089694	.1974802	28.28587
#3	.2470472	-.205235	3.788420	.4146838	.2007582	28.33859

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.659667	.0146116	.0187958	226.5920	1.956574	.0921555
Stddev	.005577	.0001949	.0002833	.8276	.004104	.0002133
%RSD	.3360579	1.333846	1.507364	.3652279	.2097715	.2314467
#1	1.653261	.0144017	.0188657	225.6764	1.960456	.0919100
#2	1.662298	.0147869	.0184841	226.8127	1.952279	.0922954
#3	1.663442	.0146462	.0190377	227.2868	1.956988	.0922612

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.666525	F 844.2688	19.30875	37.38711	1.093237	-.026725
Stddev	.024674	2.2920	.07262	.26930	.001967	.000743
%RSD	.3218415	.2714811	.3761077	.7203023	.1799670	2.781738
#1	7.649242	841.7105	19.23700	37.26100	1.092037	-.025867
#2	7.655552	844.9611	19.30704	37.20401	1.092166	-.027171
#3	7.694783	846.1350	19.38221	37.69632	1.095508	-.027138

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.231585	.1615026	10.23224	2.891987	3.082436	F -1.92654
Stddev	.013944	.0087981	.07120	.162470	.005806	.02496
%RSD	1.132172	5.447686	.6958564	5.617921	.1883587	1.295686
#1	1.245005	.1574521	10.17653	2.761564	3.086567	-1.91008
#2	1.217171	.1715964	10.31246	2.840413	3.075797	-1.95526
#3	1.232579	.1554592	10.20773	3.073983	3.084943	-1.91428

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-21DLX2 Acquired: 12/30/2024 22:21:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2064900	10.44184	5.589936	.2658563	.9946852	-.238619
Stddev	.0004501	.02780	.038947	.0034648	.0057434	.000530
%RSD	.2179586	.2662310	.6967257	1.303264	.5774074	.2223187
#1	.2059840	10.47212	5.564720	.2646431	.9881209	-.238020
#2	.2066404	10.41747	5.634792	.2631613	.9971498	-.239031
#3	.2068456	10.43594	5.570296	.2697646	.9987850	-.238804

Elem	Li6707
Units	ppm
Avg	.0175640
Stddev	.0011801
%RSD	6.718565
#1	.0186844
#2	.0176754
#3	.0163322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1657.032	21061.02	2368.928	1370.875	1905.059
Stddev	2.182	75.73	11.837	6.214	3.753
%RSD	.1316665	.3595733	.4996885	.4533057	.1969993
#1	1659.524	20976.17	2366.661	1371.250	1907.078
#2	1655.465	21121.78	2358.388	1364.481	1907.371
#3	1656.108	21085.10	2381.735	1376.893	1900.729

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-22DLX2 Acquired: 12/30/2024 22:25:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1772947	-.142069	2.477688	.2862318	.1356625	34.41898
Stddev	.0032452	.001283	.006171	.0057776	.0012650	.14162
%RSD	1.830403	.9027435	.2490607	2.018496	.9324578	.4114543
#1	.1758870	-.140738	2.471598	.2857867	.1343629	34.25632
#2	.1810061	-.143296	2.477530	.2806897	.1357348	34.48573
#3	.1749910	-.142172	2.483937	.2922191	.1368897	34.51489

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.749840	.0117589	.0120631	209.0280	1.405157	.0993235
Stddev	.007724	.0000733	.0001020	.6232	.001360	.0004128
%RSD	.4414067	.6229370	.8457377	.2981404	.0967914	.4155865
#1	1.741721	.0116964	.0120311	208.3316	1.406117	.0997919
#2	1.750700	.0117408	.0121773	209.2190	1.405752	.0991655
#3	1.757097	.0118395	.0119809	209.5333	1.403600	.0990130

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.847771	616.6116	14.20486	40.62340	.8360721	-.022259
Stddev	.021852	2.8771	.07819	.17497	.0017556	.000855
%RSD	.5679133	.4665945	.5504520	.4307070	.2099863	3.839808
#1	3.830115	613.3556	14.12538	40.42292	.8345864	-.022351
#2	3.840988	617.6684	14.20751	40.74533	.8356206	-.023064
#3	3.872211	618.8109	14.28169	40.70194	.8380094	-.021362

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9056905	.1660597	6.414393	4.052277	3.460842	F -1.43012
Stddev	.0204117	.0078056	.023382	.034182	.010782	.01091
%RSD	2.253719	4.700468	.3645311	.8435200	.3115405	.7629201
#1	.9243088	.1683099	6.426717	4.024674	3.451458	-1.43837
#2	.9088978	.1573762	6.429035	4.090511	3.458448	-1.43424
#3	.8838651	.1724930	6.387426	4.041645	3.472620	-1.41775

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5156-22DLX2 Acquired: 12/30/2024 22:25:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1462749	9.887408	6.041185	.1594482	.8825770	.0951648
Stddev	.0009214	.037216	.014446	.0018344	.0047931	.0017385
%RSD	.6299022	.3763948	.2391277	1.150445	.5430756	1.826855
#1	.1473387	9.875680	6.032678	.1587363	.8798489	.0971661
#2	.1457358	9.857469	6.057865	.1615318	.8797707	.0940276
#3	.1457500	9.929075	6.033011	.1580766	.8881113	.0943007

Elem	Li6707
Units	ppm
Avg	.0235481
Stddev	.0026331
%RSD	11.18185
#1	.0253584
#2	.0205274
#3	.0247584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1680.873	21370.58	2392.006	1398.278	1886.520
Stddev	2.085	50.15	4.927	6.105	2.867
%RSD	.1240347	.2346881	.2059797	.4366192	.1519846
#1	1682.790	21331.52	2391.284	1393.637	1889.824
#2	1678.653	21353.08	2387.479	1396.004	1885.060
#3	1681.177	21427.14	2397.254	1405.194	1884.678

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/30/2024 22:28:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001362	-.003624	-.002616	-.000886	-.001396	.0058362
Stddev	.004300	.003767	.000686	.004463	.003031	.0114976
%RSD	315.6879	103.9432	26.20407	503.8674	217.1385	197.0060
#1	-.001670	-.000671	-.003361	.001037	.001484	.0172301
#2	-.005500	-.007866	-.002475	.002293	-.004558	.0060407
#3	.003084	-.002335	-.002012	-.005987	-.001114	-.005762

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020385	.0002357	.0000258	.0029858	.0001356	-.000374
Stddev	.0022510	.0000816	.0000666	.0557031	.0003757	.000443
%RSD	110.4215	34.61925	258.6403	1865.622	277.0920	118.4038
#1	-.000096	.0002372	.0000605	.0591049	.0001724	-.000884
#2	.001821	.0001534	-.000051	.0021441	.0004916	-.000154
#3	.004390	.0003165	.000068	-.052292	-.000257	-.000084

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0109430	.0158310	.0019908	.0011576	-.000461	.0003400
Stddev	.0051393	.0122344	.0009555	.0903984	.000219	.0007250
%RSD	46.96393	77.28151	47.99710	7809.354	47.43172	213.2119
#1	.0105327	.0163468	.0010011	.0452284	-.000493	.0010684
#2	.0060212	.0277993	.0029081	.0610684	-.000228	-.000381
#3	.0162751	.0033468	.0020632	-.102824	-.000663	.000333

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.039332	-.003878	.0029053	-.417289	-.003336	-.004569
Stddev	.017951	.005247	.0007346	.082128	.002016	.002724
%RSD	45.64014	135.2970	25.28639	19.68141	60.44964	59.62588
#1	-.044899	-.003302	.0028588	-.353194	-.003709	-.006981
#2	-.019257	-.009389	.0036620	-.509867	-.001159	-.001614
#3	-.053840	.001057	.0021949	-.388805	-.005140	-.005113

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/30/2024 22:28:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000654	.0013822	.0005515	-.002579	-.004720	-.000231
Stddev	.0002026	.0022555	.0006624	.000593	.004025	.000096
%RSD	309.7062	163.1755	120.1104	22.99832	85.28335	41.73264
#1	-.000012	.0012962	.0011809	-.003095	-.000173	-.000161
#2	.000295	-.000829	-.000140	-.002711	-.006157	-.000341
#3	-.000087	.003680	.000613	-.001931	-.007828	-.000191

Elem	Li6707
Units	ppm
Avg	F -.022341
Stddev	.002972
%RSD	13.30348
#1	-.021106
#2	-.020186
#3	-.025732

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1654.712	20699.24	2253.207	1372.540	1948.299
Stddev	4.354	78.42	45.769	8.616	2.763
%RSD	.2631058	.3788339	2.031280	.6277429	.1418399
#1	1652.216	20750.17	2217.173	1374.303	1945.580
#2	1659.739	20608.94	2304.705	1363.178	1951.105
#3	1652.180	20738.60	2237.743	1380.138	1948.214

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: PB165326BS Acquired: 12/30/2024 22:32:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197018	.0503997	.0185482	.0600995	.1096520	.4105000
Stddev	.0018605	.0017362	.0040789	.0065169	.0029795	.0058362
%RSD	9.443475	3.444869	21.99078	10.84347	2.717243	1.421729
#1	.0213597	.0521485	.0148275	.0668098	.1124404	.4038626
#2	.0176896	.0486763	.0179075	.0537950	.1100031	.4148287
#3	.0200561	.0503744	.0229095	.0596937	.1065125	.4128086

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4090659	.0106733	.0099401	10.34428	.0214047	.1016843
Stddev	.0018470	.0002431	.0000244	.09343	.0002199	.0003688
%RSD	.4515155	2.277420	.2451098	.9031573	1.027479	.3626558
#1	.4111985	.0109053	.0099311	10.40394	.0212822	.1015167
#2	.4080151	.0104205	.0099677	10.39230	.0216586	.1021071
#3	.4079840	.0106942	.0099215	10.23661	.0212733	.1014290

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0584732	.2272363	.0320006	10.57722	.0787463	.0195321
Stddev	.0095398	.0441638	.0000239	.09815	.0007743	.0008130
%RSD	16.31481	19.43518	.0746805	.9279578	.9833283	4.162526
#1	.0543245	.2652089	.0320027	10.67285	.0781338	.0200047
#2	.0517102	.2377289	.0320233	10.58208	.0796167	.0185933
#3	.0693849	.1787712	.0319757	10.47673	.0784884	.0199983

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.349000	.1054393	.1208793	9.414014	.0172038	F -.005717
Stddev	.087998	.0096133	.0003216	.163348	.0020280	.001419
%RSD	1.197410	9.117339	.2660604	1.735156	11.78835	24.81160
#1	7.444716	.1123293	.1205249	9.596910	.0167607	-.007027
#2	7.271605	.1095315	.1209605	9.362495	.0194167	-.004210
#3	7.330679	.0944570	.1211525	9.282637	.0154339	-.005915

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: PB165326BS Acquired: 12/30/2024 22:32:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196597	.1843814	F .5037240	.0124246	.1978090	.2098771
Stddev	.0007285	.0037522	.0055492	.0012422	.0030285	.0013407
%RSD	3.705592	2.035038	1.101640	9.997677	1.531016	.6387958
#1	.0201213	.1882336	.5099466	.0120599	.1950485	.2113948
#2	.0188199	.1841726	.4992886	.0138083	.2010484	.2088539
#3	.0200380	.1807379	.5019367	.0114056	.1973300	.2093826

Elem	Li6707
Units	ppm
Avg	F .0071362
Stddev	.0017022
%RSD	23.85336
#1	.0054099
#2	.0088132
#3	.0071854

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1694.332	21251.32	2299.802	1419.981	1994.526
Stddev	2.533	81.86	25.323	3.383	1.158
%RSD	.1495166	.3851826	1.101116	.2382212	.0580387
#1	1692.211	21299.60	2271.132	1422.253	1995.230
#2	1697.137	21156.80	2309.152	1416.094	1995.158
#3	1693.648	21297.54	2319.120	1421.598	1993.190

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-10A Acquired: 12/30/2024 22:36:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1866791	.0264389	5.216219	.1217514	-.079311	74.62675
Stddev	.0082640	.0050524	.008408	.0019343	.005297	.36386
%RSD	4.426845	19.10971	.1611929	1.588735	6.678152	.4875730
#1	.1925779	.0309633	5.212396	.1236403	-.075109	74.47334
#2	.1772338	.0209870	5.225859	.1197747	-.077564	75.04219
#3	.1902257	.0273664	5.210401	.1218393	-.085261	74.36472

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.805254	.0073835	.0118945	174.8019	.1608553	.1167191
Stddev	.015712	.0001260	.0001001	.8473	.0002834	.0002164
%RSD	.5600760	1.706433	.8419606	.4847224	.1762020	.1853916
#1	2.801478	.0073585	.0119555	174.5499	.1607241	.1169404
#2	2.822510	.0072719	.0117789	175.7466	.1611806	.1167090
#3	2.791775	.0075202	.0119491	174.1091	.1606613	.1165080

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5773142	172.7262	8.124901	62.99952	.1814349	-.000359
Stddev	.0010451	1.2032	.037333	.43168	.0009515	.000166
%RSD	.1810299	.6965968	.4594839	.6852162	.5244078	46.29330
#1	.5784754	172.1644	8.106252	62.94859	.1804499	-.000194
#2	.5770185	174.1076	8.167883	63.45441	.1815060	-.000526
#3	.5764489	171.9067	8.100567	62.59557	.1823488	-.000357

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8965970	.2174821	2.880263	7.468761	F 13.65410	-.361341
Stddev	.0185992	.0117547	.012697	.086218	.01899	.004200
%RSD	2.074425	5.404916	.4408411	1.154383	.1390866	1.162446
#1	.8929476	.2135928	2.872508	7.434211	13.64545	-.365457
#2	.9167505	.2306885	2.873365	7.405177	13.67587	-.361503
#3	.8800930	.2081649	2.894916	7.566896	13.64096	-.357061

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5027-10A Acquired: 12/30/2024 22:36:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075655	3.206377	9.454857	F 10.54572	1.279501	.1256911
Stddev	.0003084	.003521	.070233	.01715	.011997	.0003368
%RSD	4.076599	.1098067	.7428222	.1626537	.9376296	.2679385
#1	.0074803	3.206578	9.493723	10.52921	1.273811	.1259980
#2	.0073087	3.209793	9.497065	10.56345	1.293284	.1253308
#3	.0079076	3.202760	9.373782	10.54451	1.271406	.1257443

Elem	Li6707
Units	ppm
Avg	.1090156
Stddev	.0031006
%RSD	2.844216
#1	.1084309
#2	.1062490
#3	.1123670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1979.200	24805.50	2758.975	1634.550	1836.302
Stddev	8.565	50.07	21.479	1.428	8.155
%RSD	.4327573	.2018566	.7785120	.0873727	.4440850
#1	1973.430	24775.65	2745.897	1632.903	1834.765
#2	1975.128	24777.53	2747.264	1635.450	1829.024
#3	1989.041	24863.31	2783.764	1635.296	1845.115

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-04A Acquired: 12/30/2024 22:40:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8102030	.0092744	5.131152	.1008665	.0428315	90.53762	1.296467
Stddev	.0036451	.0026681	.014628	.0019599	.0028697	.04832	.002697
%RSD	.4498963	28.76864	.2850915	1.943045	6.699908	.0533669	.2079923
#1	.8115674	.0062019	5.140935	.1012092	.0403769	90.53550	1.293353
#2	.8129691	.0106146	5.114335	.1026325	.0421311	90.58697	1.298039
#3	.8060726	.0110068	5.138186	.0987579	.0459866	90.49040	1.298008

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088750	.0119970	88.10440	.1395805	.1622330	.5299936	225.2793
Stddev	.0000753	.0001419	.02297	.0003383	.0004675	.0038686	.1396
%RSD	.8489372	1.182374	.0260670	.2423431	.2881432	.7299400	.0619833
#1	.0087891	.0121177	88.07881	.1399583	.1625875	.5337402	225.4308
#2	.0089064	.0118407	88.11119	.1394775	.1617032	.5260135	225.1558
#3	.0089296	.0120325	88.12321	.1393058	.1624084	.5302271	225.2512

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.05148	33.43719	.2755356	-.004214	.4595282	.2280493	1.327120
Stddev	.01012	.21716	.0016416	.000591	.0336477	.0072126	.004563
%RSD	.0593260	.6494439	.5957874	14.03370	7.322236	3.162753	.3438406
#1	17.04787	33.52255	.2759970	-.004306	.4758196	.2197212	1.327301
#2	17.06290	33.59869	.2737127	-.004755	.4819294	.2322809	1.322469
#3	17.04366	33.19032	.2768972	-.003583	.4208356	.2321456	1.331590

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.394391	8.829562	-.495377	.0091072	3.362036	12.65022	.0958894
Stddev	.101513	.028736	.006246	.0000728	.002575	.03975	.0014024
%RSD	1.080570	.3254512	1.260953	.7991735	.0765986	.3142384	1.462524
#1	9.455183	8.856103	-.500802	.0090684	3.359094	12.66544	.0974754
#2	9.450789	8.799045	-.488548	.0091912	3.363130	12.60511	.0953794
#3	9.277201	8.833537	-.496782	.0090621	3.363883	12.68011	.0948133

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: P5030-04A Acquired: 12/30/2024 22:40:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8834891	-.022660	.0692534
Stddev	.0019197	.000357	.0010948
%RSD	.2172893	1.575649	1.580897
#1	.8812803	-.022826	.0700352
#2	.8844315	-.022903	.0680021
#3	.8847555	-.022250	.0697228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2161.800	27121.87	2981.559	1797.822	1932.466
Stddev	5.849	143.50	2.015	5.349	6.693
%RSD	.2705560	.5290928	.0675927	.2975056	.3463529
#1	2162.596	27026.01	2979.761	1794.498	1929.682
#2	2167.209	27052.76	2983.737	1794.976	1940.102
#3	2155.593	27286.85	2981.179	1803.992	1927.614

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV051 Acquired: 12/30/2024 22:44:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV051 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.963584	4.808250	24.59269	4.877112	4.884009	403.3365
Stddev	.002968	.023034	.00928	.005381	.007553	3.1826
%RSD	.0597928	.4790453	.0377464	.1103286	.1546495	.7890643
#1	4.966914	4.825019	24.58204	4.871960	4.889856	399.7329
#2	4.961218	4.781987	24.59910	4.876681	4.875481	405.7620
#3	4.962619	4.817744	24.59693	4.882695	4.886690	404.5148

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.05596	.5035767	2.480096	408.7467	15.53174	2.470711
Stddev	.07387	.0084528	.001852	3.0474	.05621	.002399
%RSD	.7345445	1.678556	.0746610	.7455440	.3619110	.0971138
#1	9.97070	.4950859	2.480002	405.5172	15.49013	2.470243
#2	10.10086	.5119910	2.478293	411.5716	15.59569	2.468580
#3	10.09630	.5036533	2.481993	409.1514	15.50941	2.473310

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.02644	407.1909	15.00125	403.0701	2.502149	1.265768
Stddev	.14276	3.2687	.09726	3.4494	.001249	.005266
%RSD	.9500539	.8027476	.6483693	.8557763	.0499269	.4160299
#1	14.87406	403.5523	14.89015	399.0910	2.503535	1.260411
#2	15.15709	409.8791	15.07105	405.2119	2.501110	1.270938
#3	15.04819	408.1413	15.04254	404.9075	2.501802	1.265956

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	411.0752	2.466909	14.88631	152.5305	4.862851	F 4.309786
Stddev	7.3458	.006883	.08123	1.5327	.021167	.057171
%RSD	1.786968	.2790025	.5456741	1.004877	.4352796	1.326530
#1	402.8191	2.467721	14.81473	150.7616	4.877017	4.248537
#2	416.8881	2.459656	14.97459	153.3663	4.838518	4.361739
#3	413.5183	2.473349	14.86960	153.4638	4.873016	4.319082

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCV051 Acquired: 12/30/2024 22:44:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV051 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.787030	4.958011	4.945617	5.006629	5.022815	4.773429
Stddev	.010836	.015097	.069964	.002613	.052163	.033468
%RSD	.2263549	.3045031	1.414674	.0521976	1.038527	.7011369
#1	4.790969	4.942260	4.876130	5.005311	4.963270	4.738885
#2	4.774775	4.959416	5.016049	5.004937	5.044726	4.805706
#3	4.795345	4.972356	4.944672	5.009639	5.060449	4.775697

Elem	Li6707
Units	ppm
Avg	5.070041
Stddev	.041486
%RSD	.8182532
#1	5.022163
#2	5.092640
#3	5.095321

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1439.603	18742.58	2191.641	1182.392	1614.944
Stddev	1.150	12.08	24.030	3.177	1.044
%RSD	.0798821	.0644367	1.096451	.2686602	.0646521
#1	1438.292	18738.72	2216.395	1184.966	1616.024
#2	1440.442	18732.91	2168.407	1178.842	1613.940
#3	1440.076	18756.12	2190.121	1183.368	1614.868

Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB051 Acquired: 12/30/2024 22:48:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB051 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003973	-.000394	.0046388	-.002349	.0008410	-.009922	.0007284
Stddev	.002704	.004002	.0020895	.001064	.0032919	.026807	.0009245
%RSD	68.05094	1016.797	45.04310	45.30905	391.4435	270.1816	126.9326
#1	-.000973	-.000842	.0070513	-.001656	-.001330	.020834	.0015438
#2	-.006221	-.004152	.0034023	-.001816	-.000776	-.028332	-.000276
#3	-.004726	.003814	.0034629	-.003574	.004629	-.022267	.000917

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001749	.0003514	.0298803	.0019599	.0000307	.0025495	.0256376
Stddev	.0001202	.0000865	.0209884	.0002013	.0002449	.0023815	.0365193
%RSD	68.71728	24.61819	70.24159	10.27130	798.1942	93.41177	142.4444
#1	.0002821	.0002551	.0223559	.0021888	.0003125	.0006588	.0022789
#2	.0000450	.0004226	.0535937	.0018807	-.000130	.0017655	.0069124
#3	.0001977	.0003764	.0136913	.0018102	-.000090	.0052241	.0677214

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029602	.0434325	.0000199	.0009122	.0485208	-.006243	.0041225
Stddev	.0002381	.0071387	.0005241	.0014349	.0129373	.017392	.0001602
%RSD	8.045034	16.43640	2630.520	157.2977	26.66339	278.5759	3.886250
#1	.0029795	.0511006	.0006172	.0006998	.0556685	.013082	.0041435
#2	.0031881	.0422178	-.000363	.0024416	.0335867	-.011174	.0042712
#3	.0027130	.0369790	-.000194	-.000405	.0563073	-.020638	.0039528

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.278086	.0009659	.0100678	.0010046	.0015440	-.000123	-.005124
Stddev	.050492	.0028759	.0010910	.0000849	.0026273	.000950	.000823
%RSD	18.15698	297.7364	10.83601	8.452874	170.1594	769.7124	16.06499
#1	-.238724	.0024212	.0099970	.0010965	-.001313	.000468	-.004176
#2	-.335015	.0028233	.0090140	.0009291	.003856	.000381	-.005652
#3	-.260518	-.002347	.0111925	.0009882	.002090	-.001219	-.005545

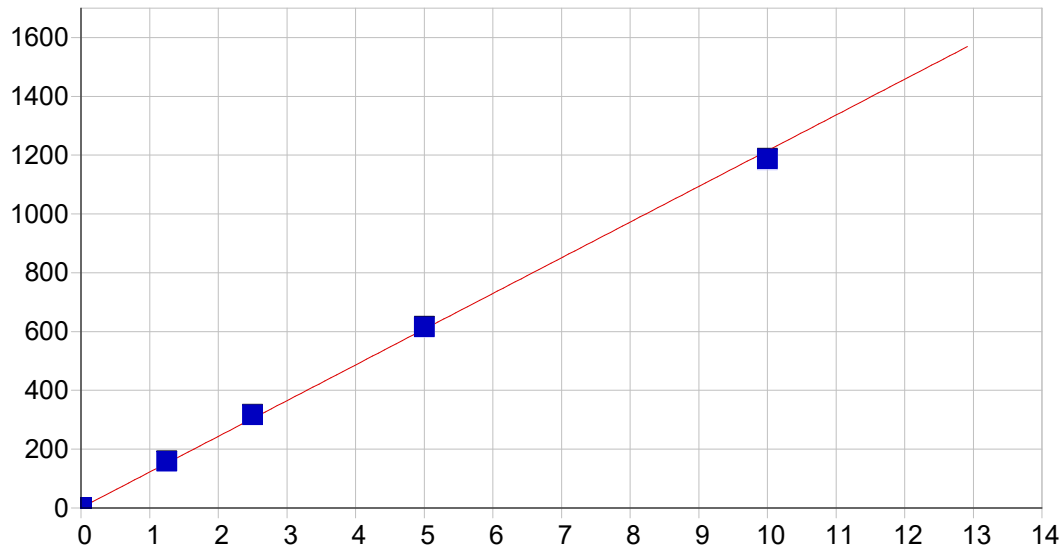
Reviewed By:kareem
On:1/2/2025 6:15:44 PM
Inst Id :P5

Sample Name: CCB051 Acquired: 12/30/2024 22:48:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB051 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001272	.0000973	.0026521
Stddev	.003603	.0001484	.0036077
%RSD	283.2239	152.4256	136.0324
#1	-.005427	.0002372	.0006676
#2	.000991	.0001132	.0004723
#3	.000619	-.000058	.0068164

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1656.804	20835.85	2254.904	1383.696	1951.205
Stddev	2.226	129.97	19.214	8.415	3.158
%RSD	.1343437	.6237947	.8521071	.6081732	.1618314
#1	1658.329	20985.90	2246.427	1393.117	1949.068
#2	1654.249	20763.27	2276.899	1381.048	1949.714
#3	1657.832	20758.37	2241.387	1376.924	1954.832

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



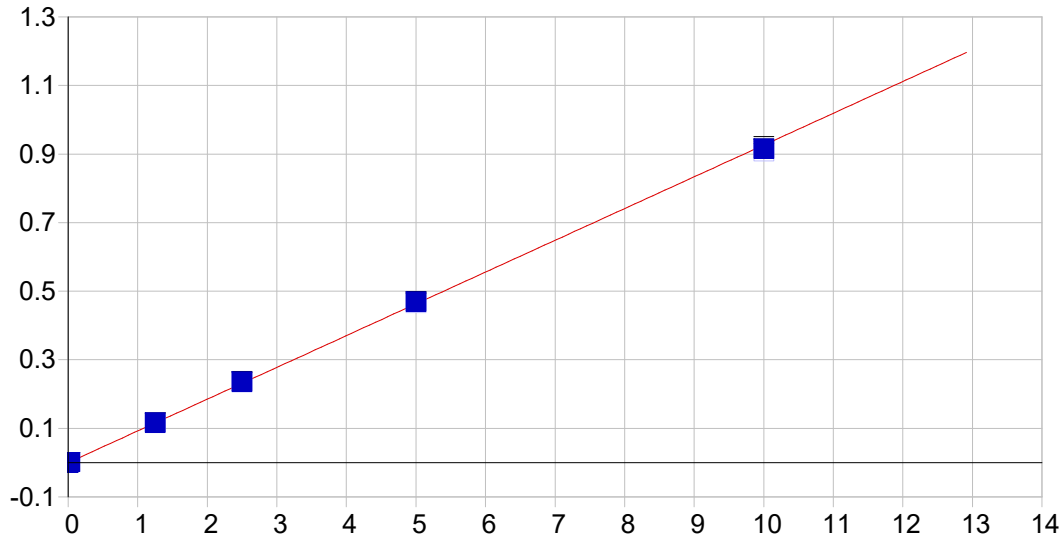
As 189.042 {478}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.701325	Re-Slope:	1.000000
A1 (Gain):	121.442660	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999659	Status:	OK.
Std Error of Est:	0.052980		
Predicted MDL:	0.006053		
Predicted MQL:	0.020176		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.70122	.351	1
S1	.01000	.01011	.000	1.14	1.9279	.620	1
S2	1.2500	1.3032	.053	4.26	158.33	.573	1
S3	2.5000	2.6058	.106	4.23	315.89	2.11	1
S4	5.0000	5.0661	.066	1.32	613.39	2.66	1
S5	10.000	9.7747	-.225	-2.25	1182.7	1.71	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



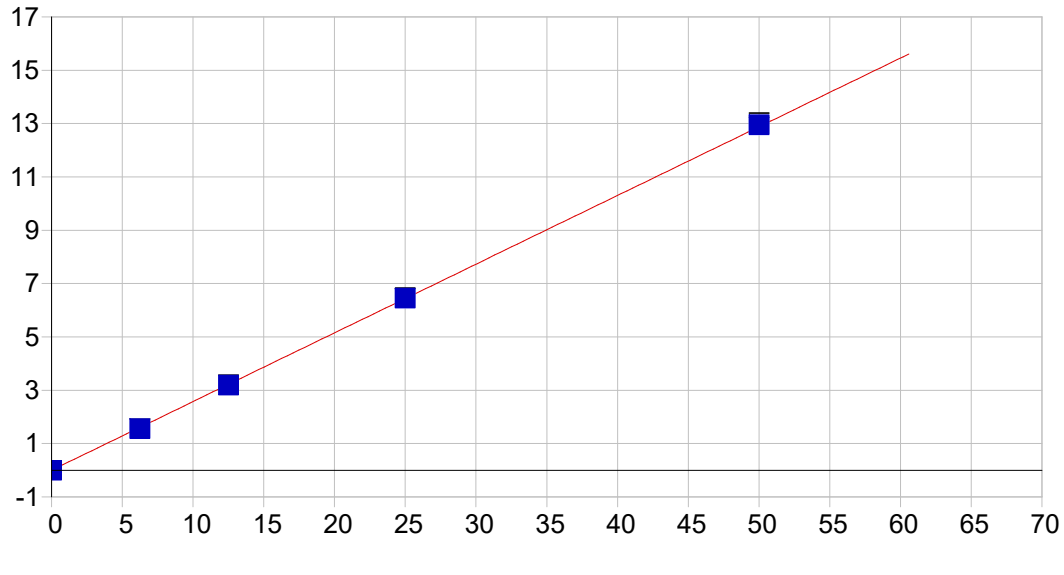
Tl 190.856 {477}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000135	Re-Slope:	1.000000
A1 (Gain):	0.092640	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.003429		
Predicted MQL:	0.011430		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00013	.000	1
S1	.02500	.02076	-.004	-17.0	.00171	.000	1
S2	1.2500	1.2550	.005	.404	.11514	.000	1
S3	2.5000	2.5477	.048	1.91	.23390	.001	1
S4	5.0000	5.0662	.066	1.32	.46522	.001	1
S5	10.000	9.8852	-.115	-1.15	.90768	.006	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



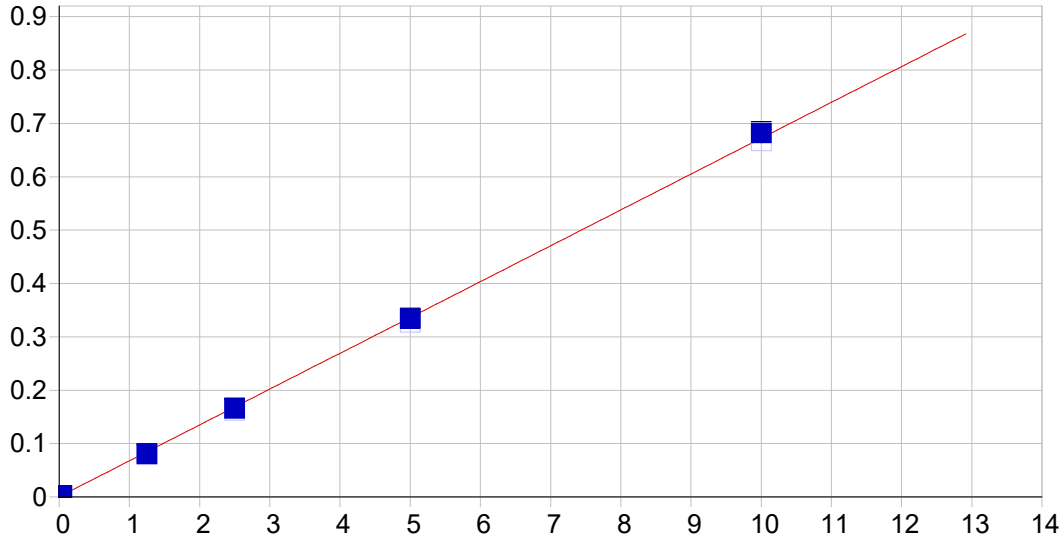
Pb 220.353 {453}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000160	Re-Slope:	1.000000
A1 (Gain):	0.257599	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000099		
Predicted MDL:	0.003204		
Predicted MQL:	0.010679		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00016	.000	1
S1	.01000	.00885	-.001	-11.5	.00210	.001	1
S2	6.2500	6.0398	-.210	-3.36	1.5536	.004	1
S3	12.500	12.388	-.112	-.898	3.1867	.011	1
S4	25.000	25.039	.039	.157	6.4414	.008	1
S5	50.000	50.284	.284	.569	12.936	.080	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



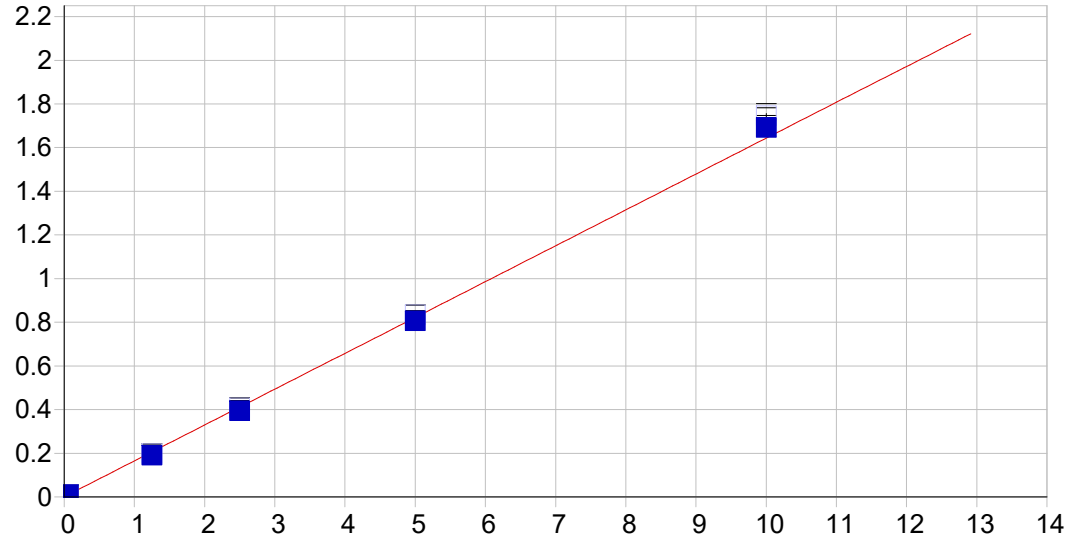
Se 196.090 {472}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000506	Re-Slope:	1.000000
A1 (Gain):	0.067168	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999755	Status:	OK.
Std Error of Est:	0.000046		
Predicted MDL:	0.006342		
Predicted MQL:	0.021138		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00051	.000	1
S1	.03500	.02447	-.011	-30.1	.00214	.000	1
S2	1.2500	1.1924	-.058	-4.61	.07871	.000	1
S3	2.5000	2.4574	-.043	-1.71	.16178	.001	1
S4	5.0000	4.9682	-.032	-.636	.32666	.001	1
S5	10.000	10.143	.143	1.43	.66666	.003	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



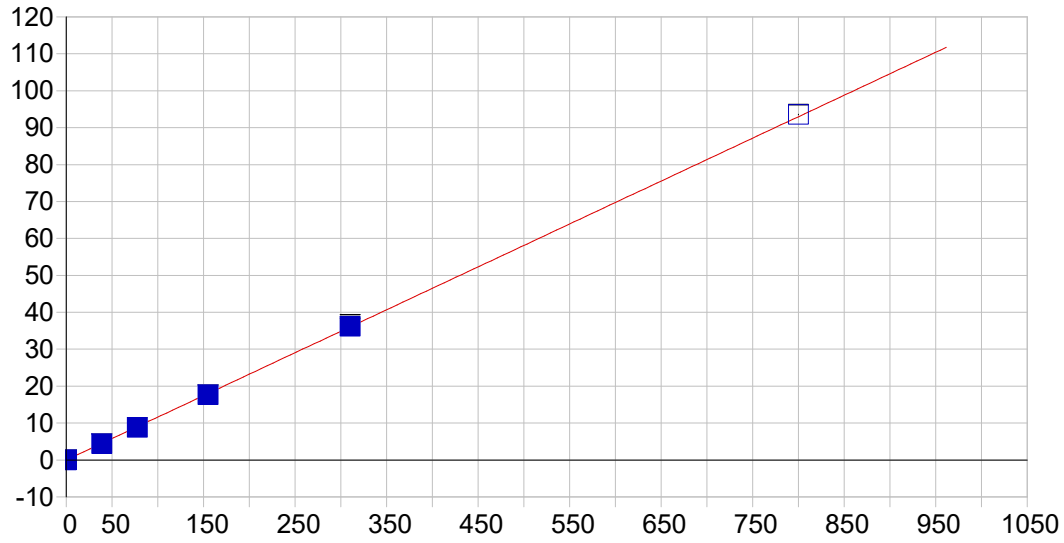
Sb 206.833 {463}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000618	Re-Slope:	1.000000
A1 (Gain):	0.164253	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999456	Status:	OK.
Std Error of Est:	0.000230		
Predicted MDL:	0.003533		
Predicted MQL:	0.011778		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00062	.000	1
S1	.06000	.05539	-.005	-7.68	.00972	.001	1
S2	1.2500	1.1582	-.092	-7.34	.19772	.001	1
S3	2.5000	2.3964	-.104	-4.14	.40797	.001	1
S4	5.0000	4.9049	-.095	-1.90	.83373	.001	1
S5	10.000	10.295	.295	2.95	1.7465	.010	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



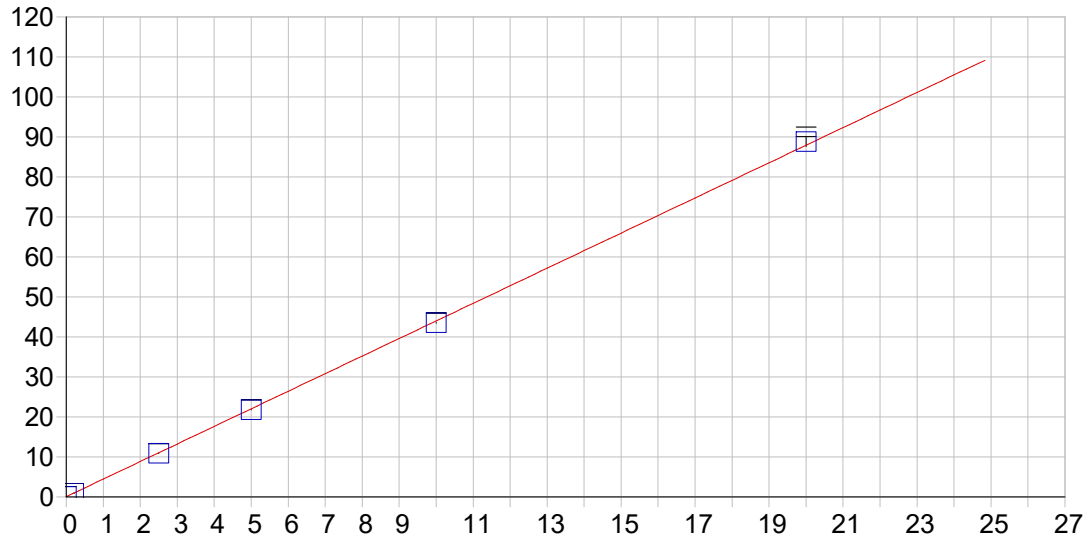
Al 396.152 { 85}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002383	Re-Slope:	1.000000
A1 (Gain):	0.116225	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.000826		
Predicted MDL:	0.026230		
Predicted MQL:	0.087434		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00238	.003	1
S1	.20000	.20246	.002	1.23	.02119	.001	1
S2	38.750	37.536	-1.21	-3.13	4.3652	.002	1
S3	77.500	75.773	-1.73	-2.23	8.8141	.020	1
S4	155.00	151.75	-3.25	-2.10	17.655	.043	1
S5	310.00	311.16	1.16	.373	36.201	.478	1
S6	800.00	805.04	5.04	.629	93.563	.087	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



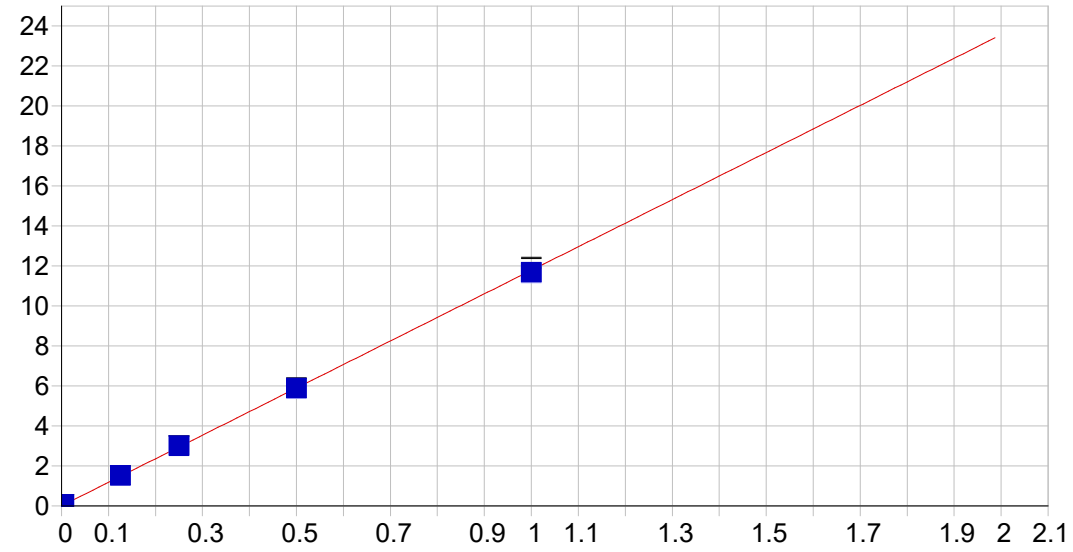
Ba 493.409 { 68}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.059957	Re-Slope:	1.000000
A1 (Gain):	4.393278	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999937	Status:	OK.
Std Error of Est:	0.005236		
Predicted MDL:	0.001498		
Predicted MQL:	0.004992		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.05997	.006	1
S1	.20000	.20324	.003	1.62	.95285	.005	1
S2	2.5000	2.4538	-.046	-1.85	10.840	.023	1
S3	5.0000	4.9465	-.054	-1.07	21.791	.030	1
S4	10.000	9.8919	-.108	-1.08	43.518	.066	1
S5	20.000	20.205	.205	1.02	88.824	1.19	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



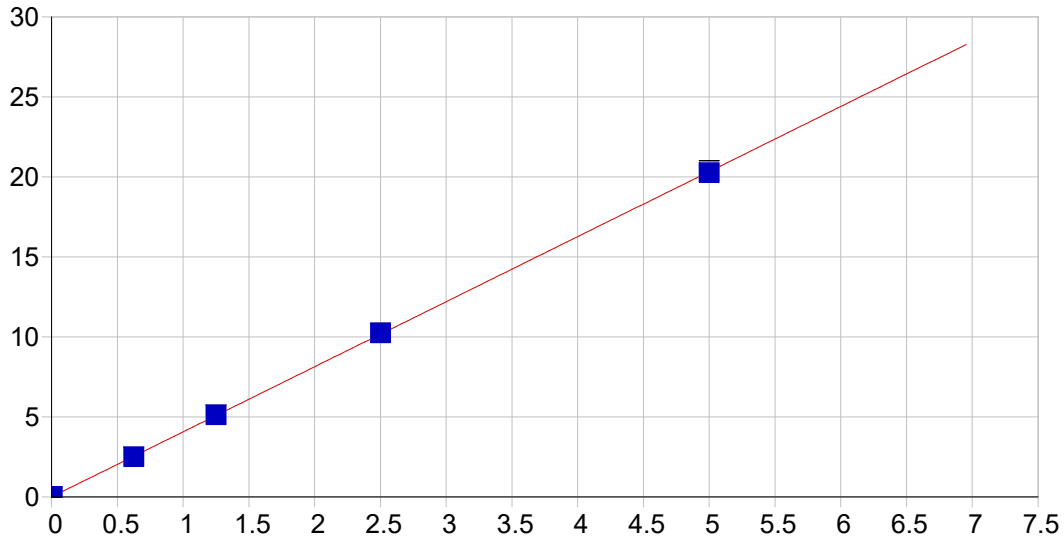
Be 234.861 {144}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003304	Re-Slope:	1.000000
A1 (Gain):	11.780982	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999923	Status:	OK.
Std Error of Est:	0.000546		
Predicted MDL:	0.000144		
Predicted MQL:	0.000482		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00330	.002	1
S1	.00500	.00532	.000	6.31	.06587	.001	1
S2	.12500	.12828	.003	2.62	1.5078	.005	1
S3	.25000	.25534	.005	2.14	2.9980	.016	1
S4	.50000	.49914	-.001	-.173	5.8566	.022	1
S5	1.0000	.99192	-.008	-.808	11.635	.248	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



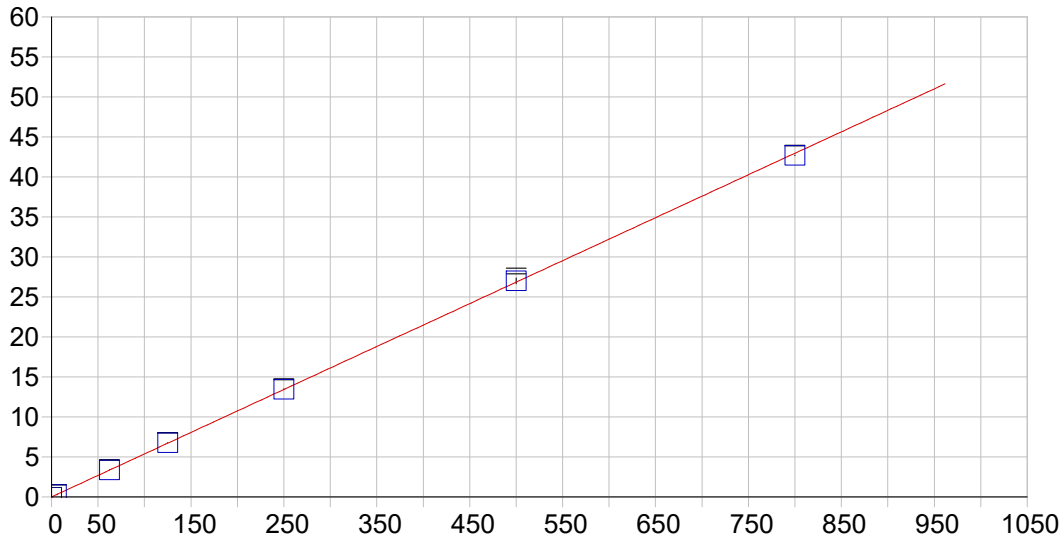
Cd 214.438 {457}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001108	Re-Slope:	1.000000
A1 (Gain):	4.066746	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.000227		
Predicted MDL:	0.000111		
Predicted MQL:	0.000372		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00111	.001	1
S1	.00500	.00489	-.000	-2.12	.02109	.000	1
S2	.62500	.61675	-.008	-1.32	2.5132	.004	1
S3	1.2500	1.2607	.011	.853	5.1357	.014	1
S4	2.5000	2.5181	.018	.724	10.257	.007	1
S5	5.0000	4.9796	-.020	-.408	20.283	.124	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



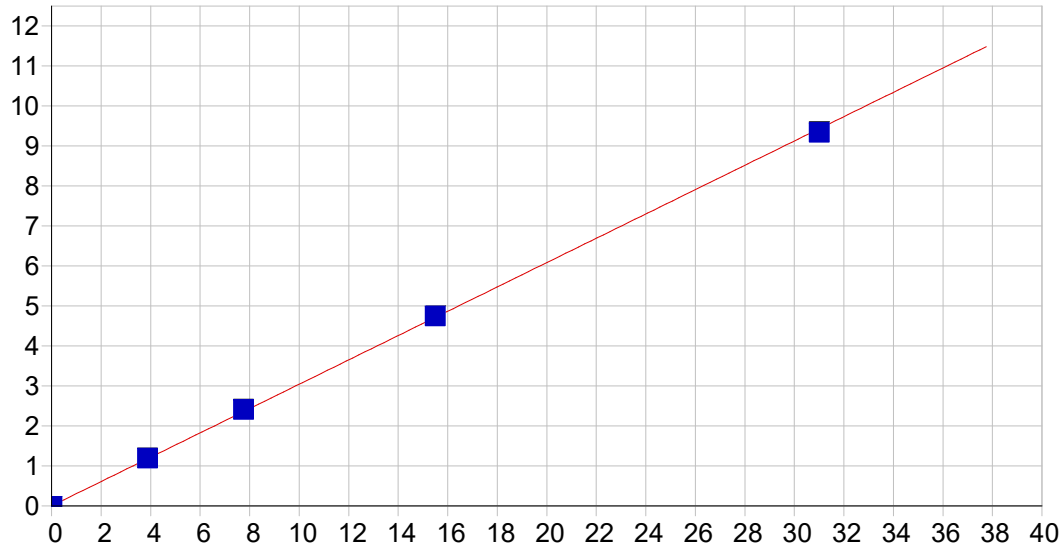
Ca 373.690 { 90}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005749	Re-Slope:	1.000000
A1 (Gain):	0.053687	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.001166		
Predicted MDL:	0.037921		
Predicted MQL:	0.126402		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00022	-.000	.000	.00574	.002	1
S1	5.0000	5.1407	.141	2.81	.28174	.003	1
S2	62.500	62.823	.323	.517	3.3785	.003	1
S3	125.00	126.16	1.16	.931	6.7791	.022	1
S4	250.00	250.61	.605	.242	13.460	.043	1
S5	500.00	502.89	2.89	.578	27.004	.349	1
S6	800.00	794.88	-5.12	-.640	42.680	.046	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



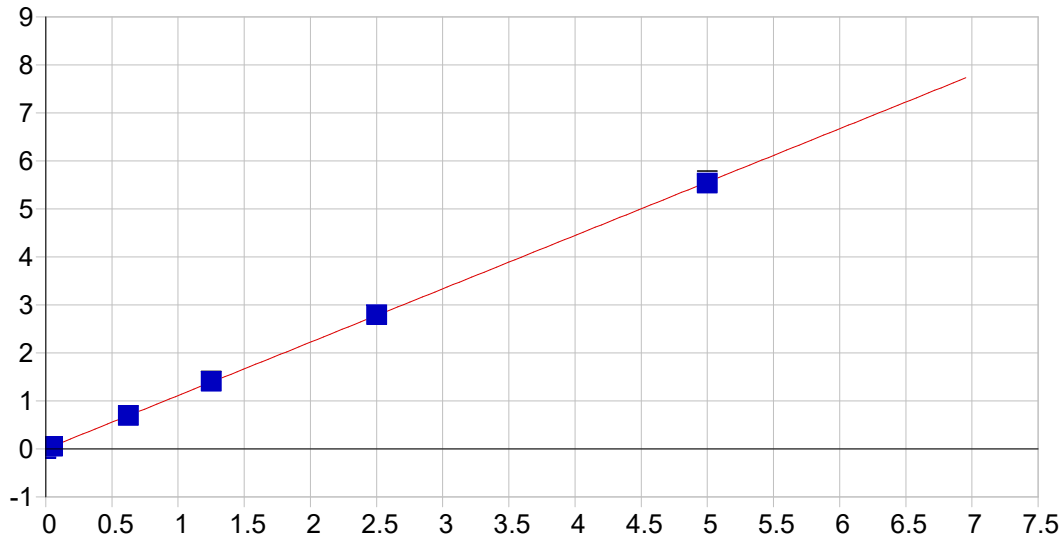
Cr 267.716 {126}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000422	Re-Slope:	1.000000
A1 (Gain):	0.304189	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.000103		
Predicted MDL:	0.000839		
Predicted MQL:	0.002798		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00042	.000	1
S1	.01000	.00957	-.000	-4.32	.00334	.000	1
S2	3.8750	3.9054	.030	.785	1.1893	.001	1
S3	7.7500	7.9159	.166	2.14	2.4102	.006	1
S4	15.500	15.609	.109	.706	4.7523	.012	1
S5	31.000	30.695	-.305	-.985	9.3447	.018	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



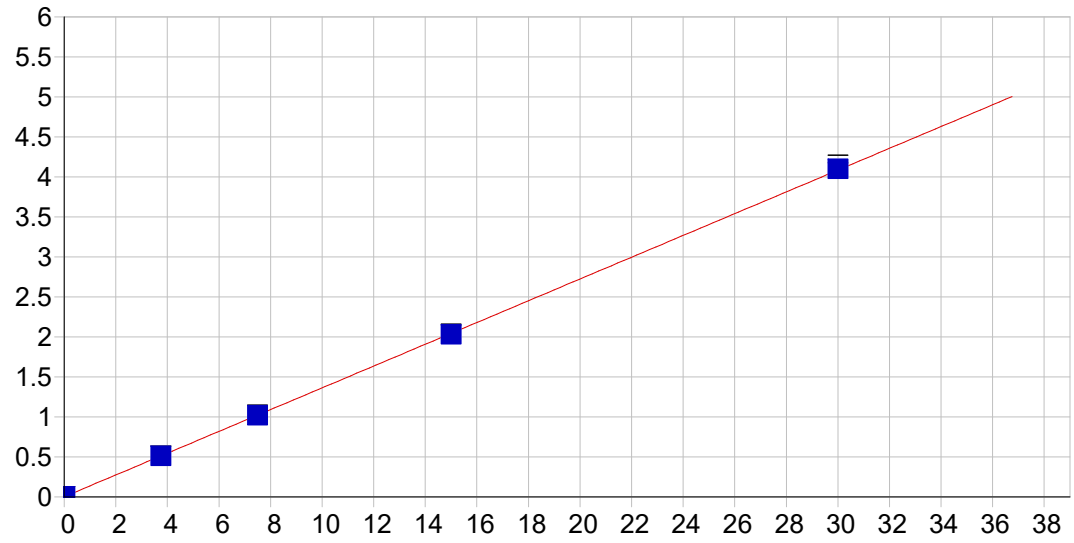
Co 228.616 {448}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000372	Re-Slope:	1.000000
A1 (Gain):	1.111775	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999984	Status:	OK.
Std Error of Est:	0.000167		
Predicted MDL:	0.000439		
Predicted MQL:	0.001464		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00037	.000	1
S1	.05000	.05096	.001	1.91	.05646	.000	1
S2	.62500	.62130	-.004	-.592	.69261	.001	1
S3	1.2500	1.2629	.013	1.04	1.4082	.005	1
S4	2.5000	2.5104	.010	.418	2.7996	.002	1
S5	5.0000	4.9794	-.021	-.413	5.5535	.034	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



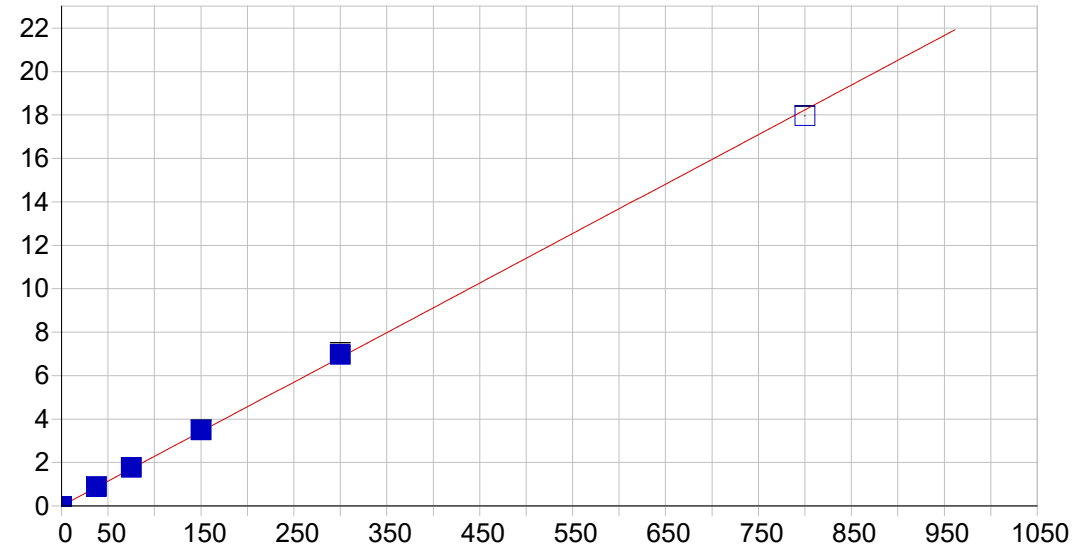
Cu 324.754 {104}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002278	Re-Slope:	1.000000
A1 (Gain):	0.136088	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999907	Status:	OK.
Std Error of Est:	0.000085		
Predicted MDL:	0.010581		
Predicted MQL:	0.035272		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.00228	.001	1
S1	.02500	.04038	.015	61.5	.00777	.002	1
S2	3.7500	3.7430	-.007	-.186	.51160	.001	1
S3	7.5000	7.4833	-.017	-.223	1.0206	.004	1
S4	15.000	14.904	-.096	-.637	2.0304	.005	1
S5	30.000	30.104	.104	.346	4.0986	.048	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



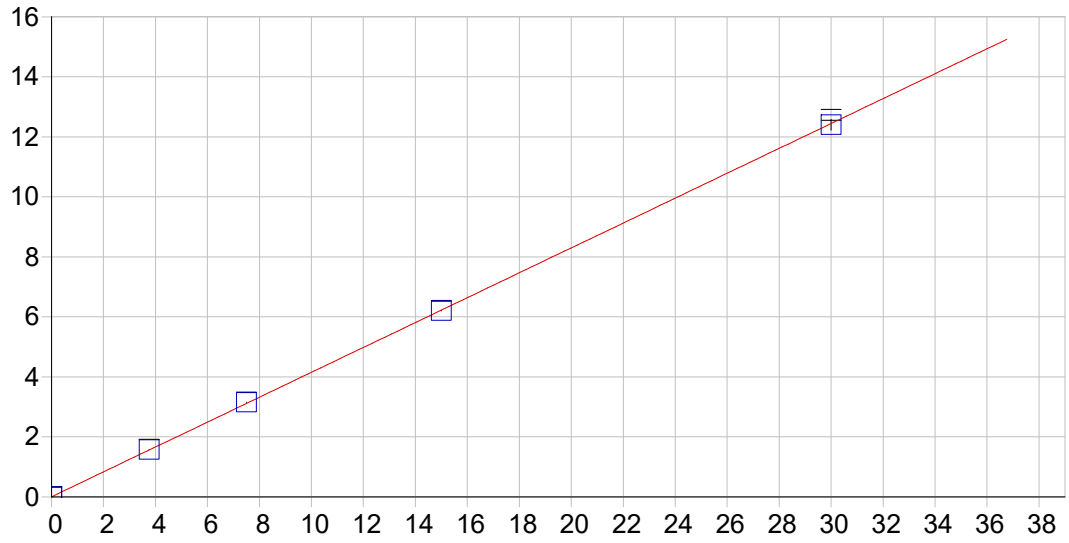
Fe 259.837 {130}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001631	Re-Slope:	1.000000
A1 (Gain):	0.022795	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999824	Status:	OK.
Std Error of Est:	0.000187		
Predicted MDL:	0.033702		
Predicted MQL:	0.112340		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00163	.001	1
S1	.10000	.08884	-.011	-11.2	.00366	.000	1
S2	37.500	38.818	1.32	3.51	.88667	.002	1
S3	75.000	77.397	2.40	3.20	1.7663	.001	1
S4	150.00	153.12	3.12	2.08	3.4928	.008	1
S5	300.00	305.49	5.49	1.83	6.9668	.087	1
S6	800.00	787.68	-12.3	-1.54	17.957	.014	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



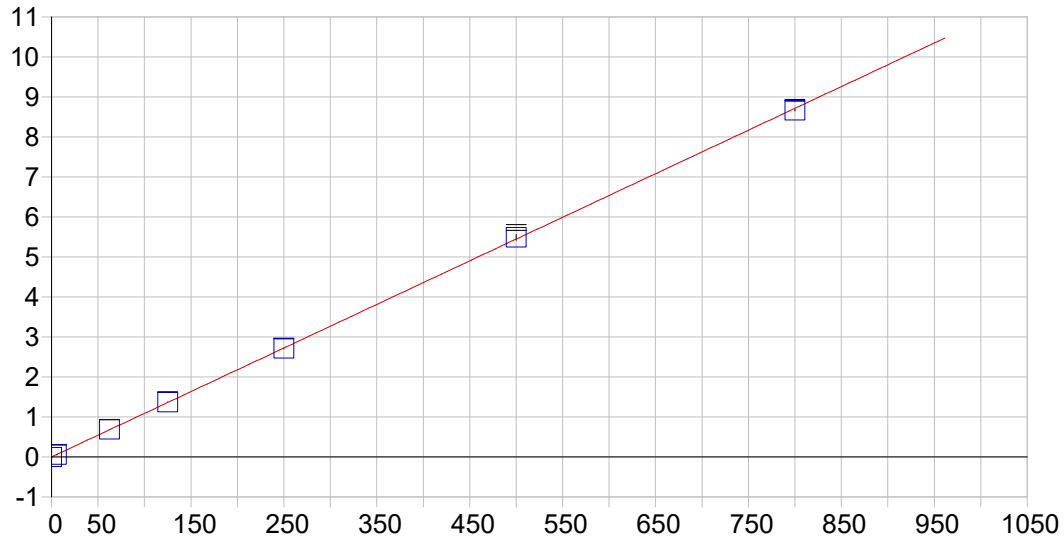
Mn 257.610 {131}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005245	Re-Slope:	1.000000
A1 (Gain):	0.414666	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000091		
Predicted MDL:	0.001843		
Predicted MQL:	0.006145		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00524	.001	1
S1	.01500	.01590	.001	6.01	.01184	.000	1
S2	3.7500	3.7986	.049	1.30	1.5804	.006	1
S3	7.5000	7.5882	.088	1.18	3.1518	.005	1
S4	15.000	14.962	-.038	-.251	6.2096	.009	1
S5	30.000	29.900	-.100	-.334	12.404	.183	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



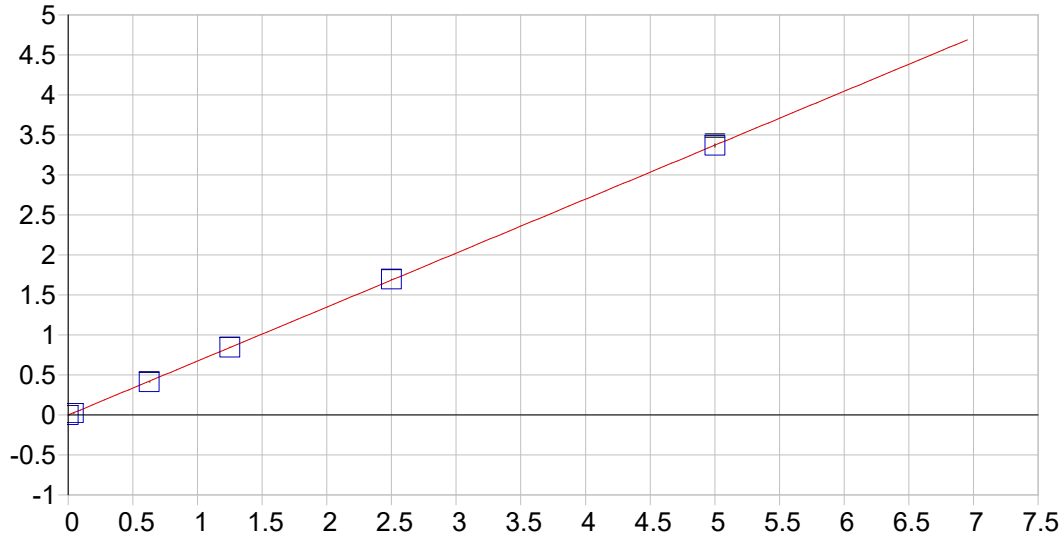
Mg 279.079 {121}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000885	Re-Slope:	1.000000
A1 (Gain):	0.010894	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000235		
Predicted MDL:	0.088784		
Predicted MQL:	0.295946		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	-.00089	.001	1
S1	5.0000	5.0563	.056	1.13	.05420	.001	1
S2	62.500	62.926	.426	.682	.68463	.003	1
S3	125.00	125.95	.947	.758	1.3712	.003	1
S4	250.00	249.22	-.777	-.311	2.7142	.007	1
S5	500.00	503.79	3.79	.759	5.4875	.072	1
S6	800.00	795.55	-4.45	-.556	8.6659	.019	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



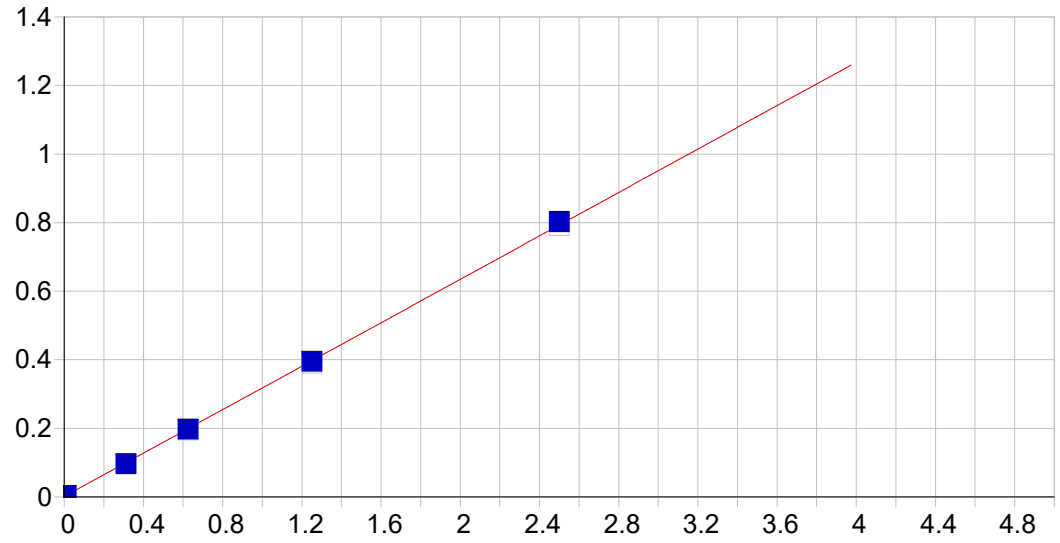
Ni 231.604 {446}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001170	Re-Slope:	1.000000
A1 (Gain):	0.674444	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.000107		
Predicted MDL:	0.000919		
Predicted MQL:	0.003064		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00117	.001	1
S1	.04000	.03923	-.001	-1.92	.02529	.000	1
S2	.62500	.61146	-.014	-2.17	.41123	.001	1
S3	1.2500	1.2556	.006	.447	.84566	.000	1
S4	2.5000	2.5144	.014	.577	1.6947	.002	1
S5	5.0000	4.9943	-.006	-.114	3.3672	.020	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



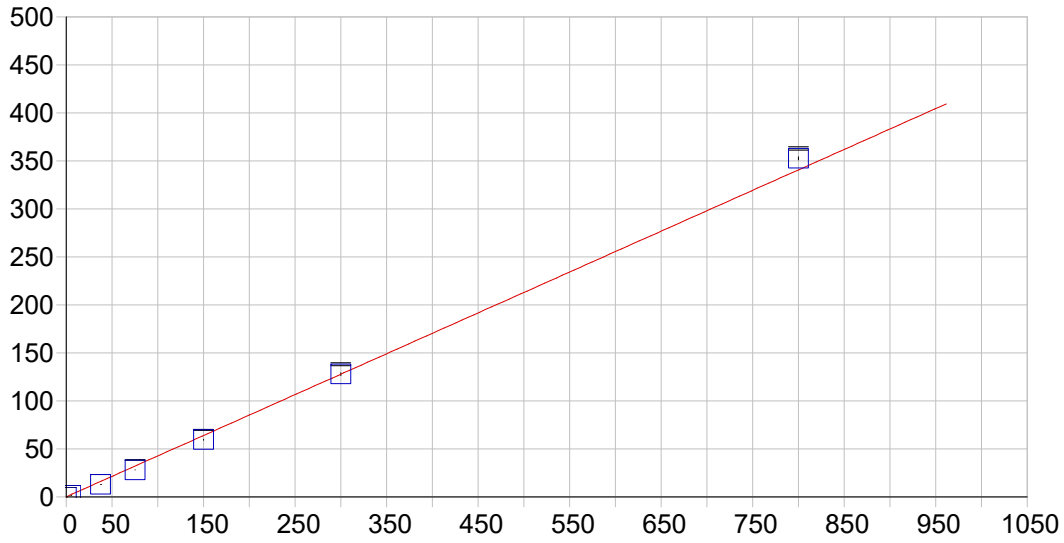
Ag 328.068 {103}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001266	Re-Slope:	1.000000
A1 (Gain):	0.316682	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999877	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.001410		
Predicted MQL:	0.004699		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00127	.000	1
S1	.01000	.00842	-.002	-15.8	.00393	.000	1
S2	.31250	.30040	-.012	-3.87	.09497	.000	1
S3	.62500	.61772	-.007	-1.16	.19404	.001	1
S4	1.2500	1.2439	-.006	-.490	.38948	.001	1
S5	2.5000	2.5271	.027	1.08	.79015	.002	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



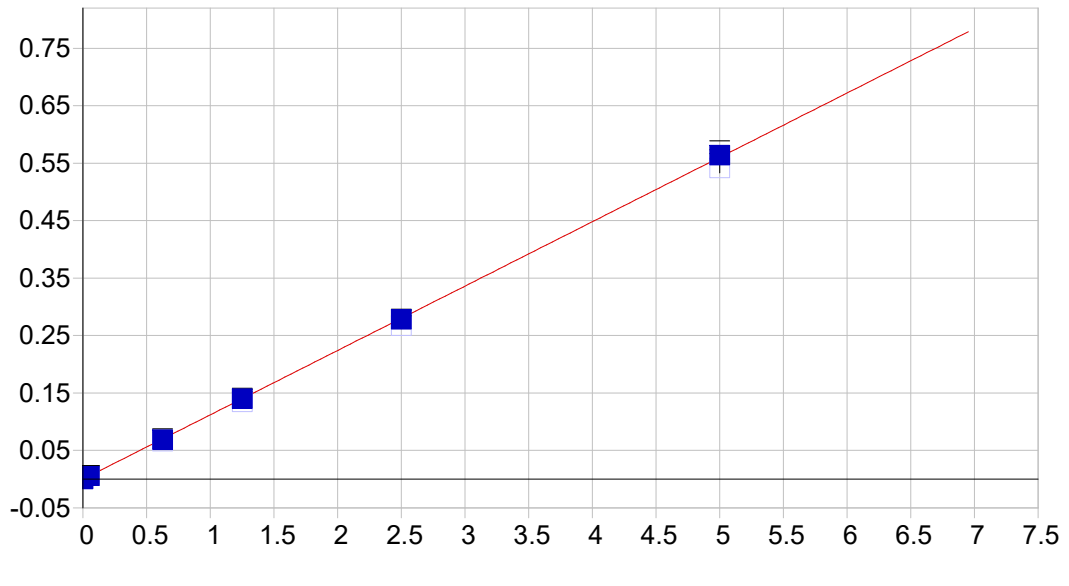
Na 818.326 { 41}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.145186	Re-Slope:	1.000000
A1 (Gain):	0.425644	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998291	Status:	OK.
Std Error of Est:	0.077045		
Predicted MDL:	0.025576		
Predicted MQL:	0.085253		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00330	.003	.000	.14659	.002	1
S1	5.0000	3.4307	-1.57	-31.4	1.6054	.018	1
S2	37.500	30.445	-7.05	-18.8	13.104	.026	1
S3	75.000	65.707	-9.29	-12.4	28.113	.153	1
S4	150.00	139.60	-10.4	-6.94	59.563	.413	1
S5	300.00	300.16	.163	.054	127.91	1.46	1
S6	800.00	828.16	28.2	3.52	352.65	1.61	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



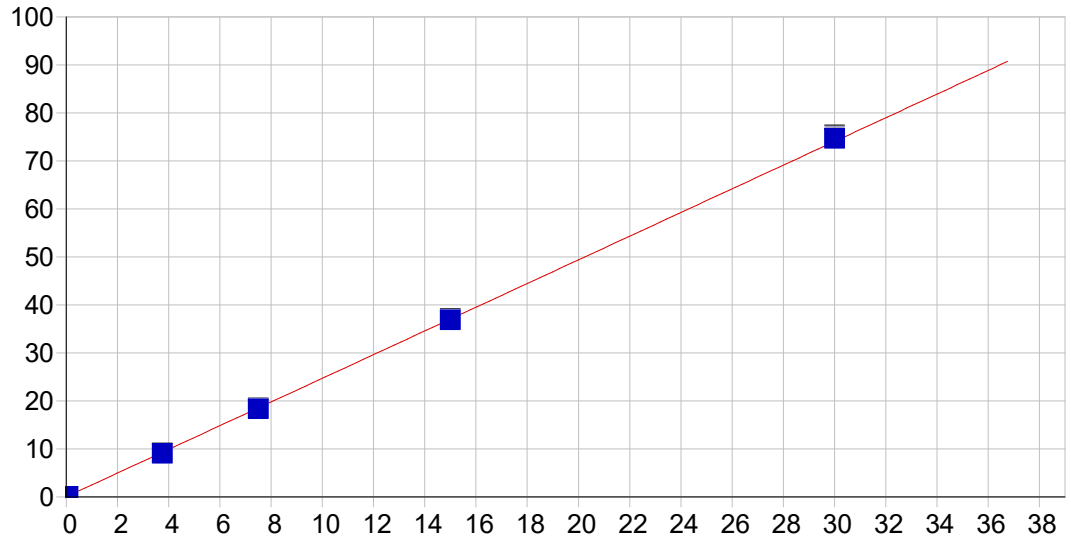
V 292.402 {115}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000038	Re-Slope:	1.000000
A1 (Gain):	0.112037	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999968	Status:	OK.
Std Error of Est:	0.000023		
Predicted MDL:	0.010512		
Predicted MQL:	0.035039		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00004	.002	1
S1	.05000	.04908	-.001	-1.85	.00544	.001	1
S2	.62500	.61438	-.011	-1.70	.06599	.002	1
S3	1.2500	1.2492	-.001	-.065	.13430	.001	1
S4	2.5000	2.4805	-.019	-.779	.26665	.001	1
S5	5.0000	5.0319	.032	.638	.54127	.008	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



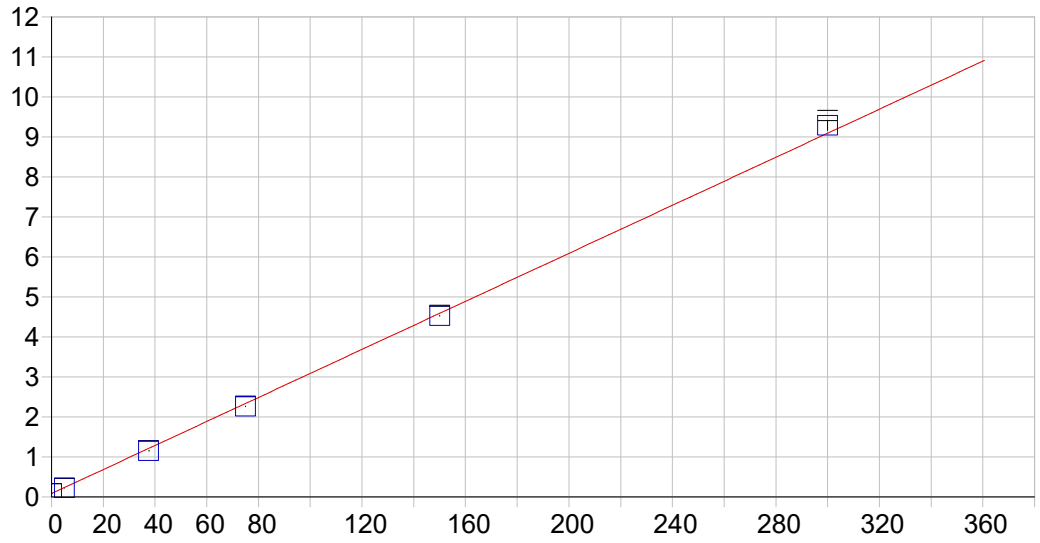
Zn 213.856 {158}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.037870	Re-Slope:	1.000000
A1 (Gain):	2.467046	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999941	Status:	OK.
Std Error of Est:	0.001918		
Predicted MDL:	0.000619		
Predicted MQL:	0.002064		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.03789	.004	1
S1	.06000	.05370	-.006	-10.5	.17081	.000	1
S2	3.7500	3.6518	-.098	-2.62	9.0923	.028	1
S3	7.5000	7.4262	-.074	-.985	18.449	.061	1
S4	15.000	14.916	-.084	-.559	37.018	.103	1
S5	30.000	30.262	.262	.874	75.058	.342	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



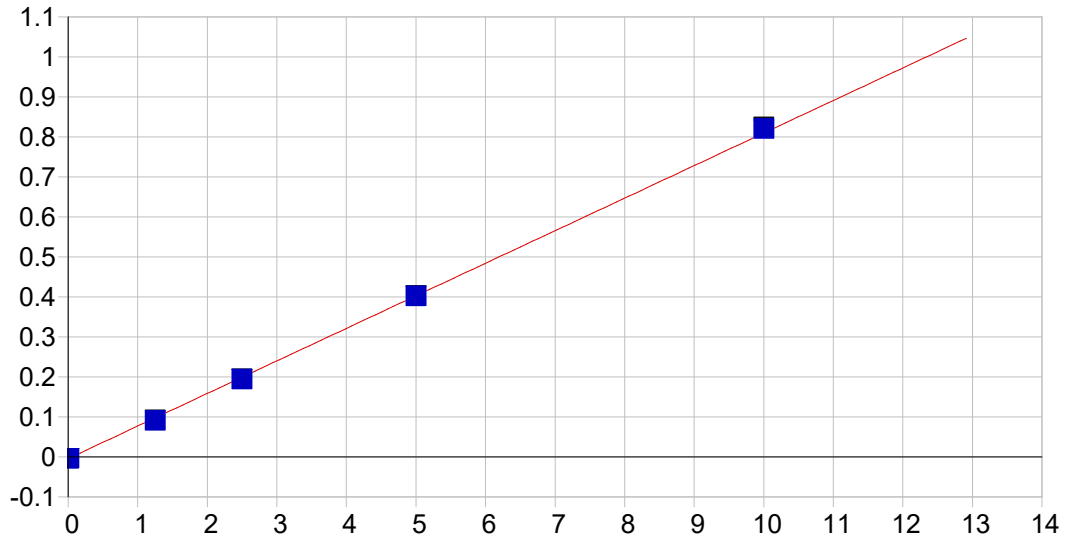
K 769.896 { 44}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.084576	Re-Slope:	1.000000
A1 (Gain):	0.030024	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999666	Status:	OK.
Std Error of Est:	0.001600		
Predicted MDL:	0.176191		
Predicted MQL:	0.587304		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00079	.001	.000	.08460	.006	1
S1	5.0000	4.5737	-.426	-8.53	.22190	.005	1
S2	37.500	35.563	-1.94	-5.17	1.1523	.003	1
S3	75.000	72.648	-2.35	-3.14	2.2658	.009	1
S4	150.00	148.11	-1.89	-1.26	4.5316	.013	1
S5	300.00	306.60	6.60	2.20	9.2900	.129	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



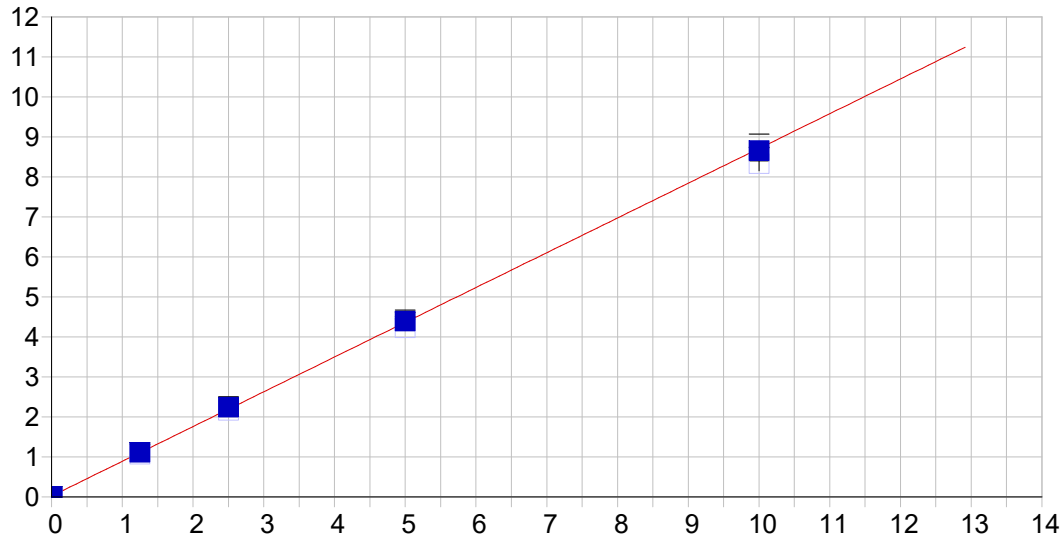
P 177.495 {490}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.004186	Re-Slope:	1.000000
A1 (Gain):	0.081379	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999778	Status:	OK.
Std Error of Est:	0.000029		
Predicted MDL:	0.003422		
Predicted MQL:	0.011405		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00419	.000	1
S1	.01000	.00831	-.002	-16.9	-.00351	.000	1
S2	1.2500	1.1736	-.076	-6.11	.09118	.001	1
S3	2.5000	2.4419	-.058	-2.32	.19424	.000	1
S4	5.0000	4.9950	-.005	-.099	.40171	.001	1
S5	10.000	10.141	.141	1.41	.81990	.004	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



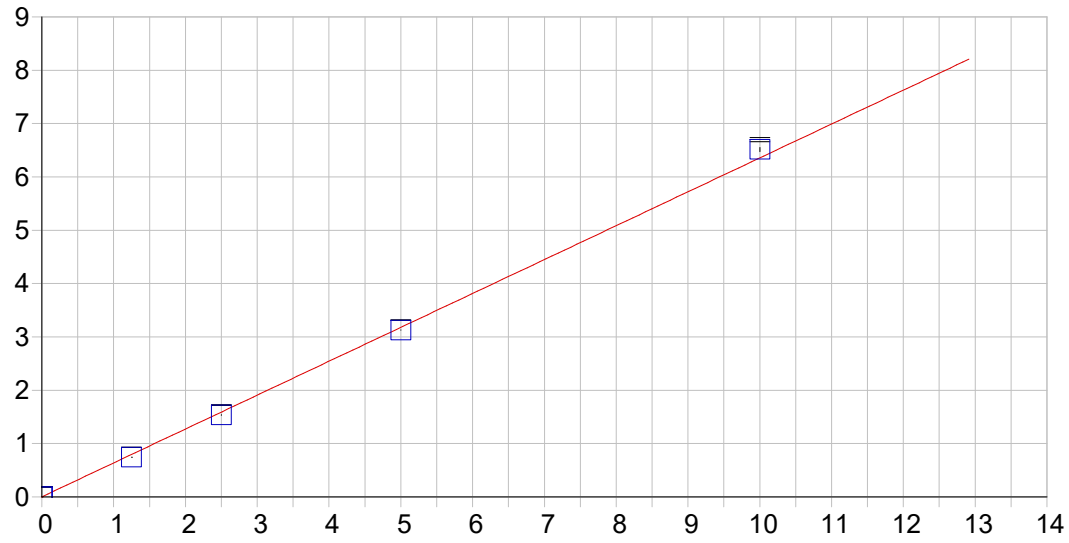
B 249.678 {135}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.021015	Re-Slope:	1.000000
A1 (Gain):	0.868994	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998268	Status:	OK.
Std Error of Est:	0.000826		
Predicted MDL:	0.002232		
Predicted MQL:	0.007439		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.02104	.002	1
S1	.01000	-.01416	-.024	-242.	.00866	.002	1
S2	1.2500	1.2513	.001	.103	1.0671	.002	1
S3	2.5000	2.5564	.056	2.26	2.1599	.010	1
S4	5.0000	5.0306	.031	.613	4.2274	.031	1
S5	10.000	9.9366	-.063	-.634	8.3254	.172	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



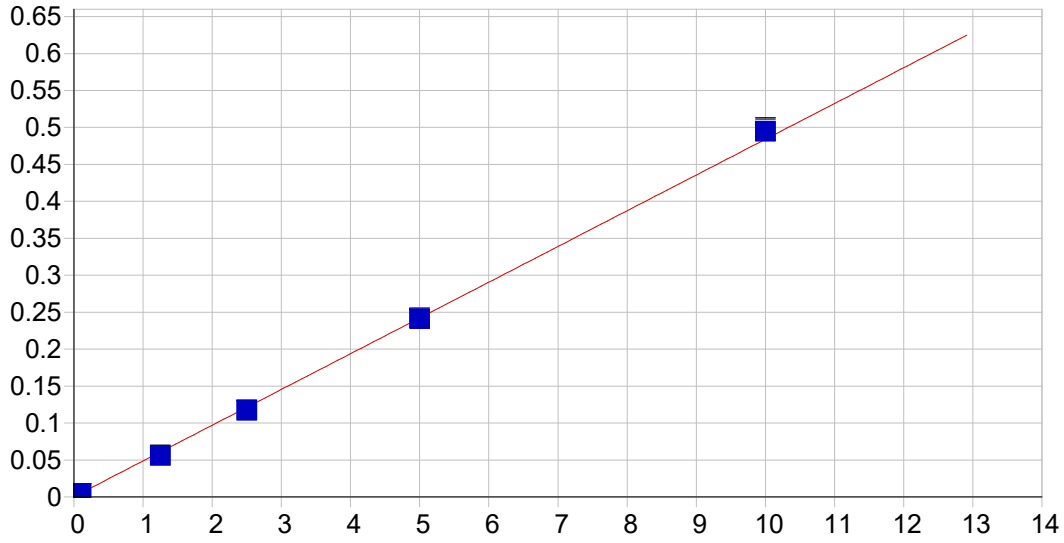
Mo 202.030 {467}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001919	Re-Slope:	1.000000
A1 (Gain):	0.635437	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999580	Status:	OK.
Std Error of Est:	0.000309		
Predicted MDL:	0.000741		
Predicted MQL:	0.002472		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00192	.000	1
S1	.01000	.00917	-.001	-8.32	.00774	.000	1
S2	1.2500	1.1691	-.081	-6.47	.74479	.001	1
S3	2.5000	2.4154	-.085	-3.39	1.5367	.004	1
S4	5.0000	4.9171	-.083	-1.66	3.1264	.003	1
S5	10.000	10.249	.249	2.49	6.5147	.040	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



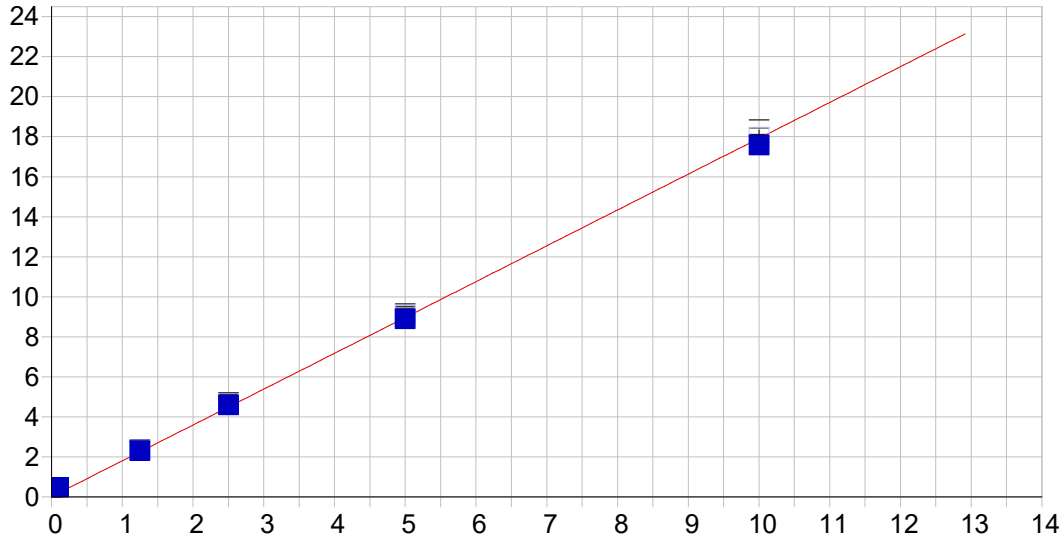
S 182.034 {485}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000327	Re-Slope:	1.000000
A1 (Gain):	0.048368	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999573	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.005066		
Predicted MQL:	0.016888		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00033	.000	1
S1	.10000	.09161	-.008	-8.39	.00476	.000	1
S2	1.2500	1.1525	-.098	-7.80	.05626	.000	1
S3	2.5000	2.4102	-.090	-3.59	.11729	.001	1
S4	5.0000	4.9815	-.018	-.369	.24205	.000	1
S5	10.000	10.214	.214	2.14	.49592	.004	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



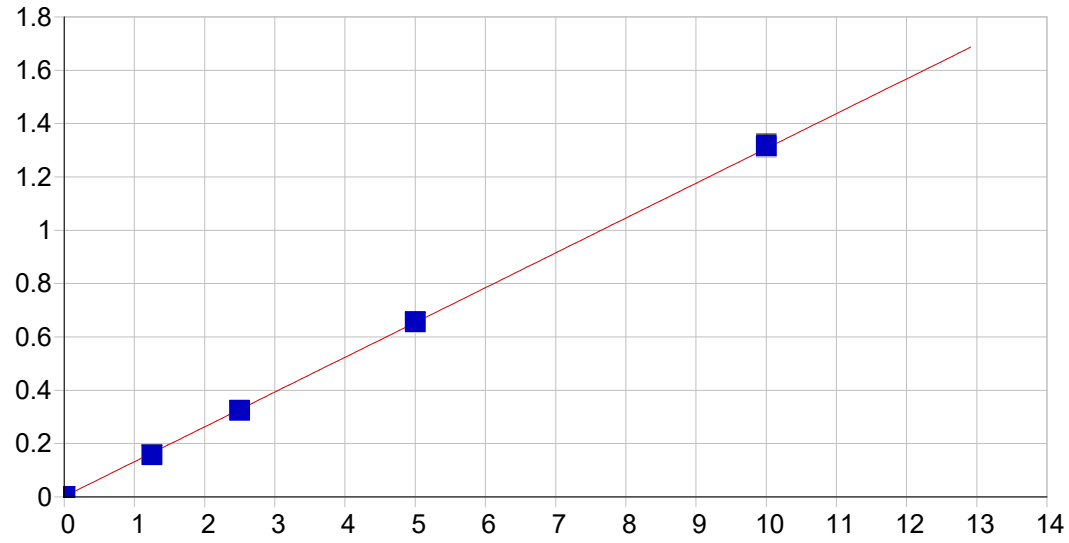
Si 251.611 {134}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013886	Re-Slope:	1.000000
A1 (Gain):	1.790648	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.993739	Status:	OK.
Std Error of Est:	0.010941		
Predicted MDL:	0.001120		
Predicted MQL:	0.003733		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00016	-.000	.000	.01360	.003	1
S1	.10000	.25586	.156	156.	.47457	.006	1
S2	1.2500	1.2799	.030	2.40	2.3566	.014	1
S3	2.5000	2.5534	.053	2.14	4.6878	.025	1
S4	5.0000	4.9552	-.045	-.896	9.0901	.056	1
S5	10.000	9.8069	-.193	-1.93	17.981	.361	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



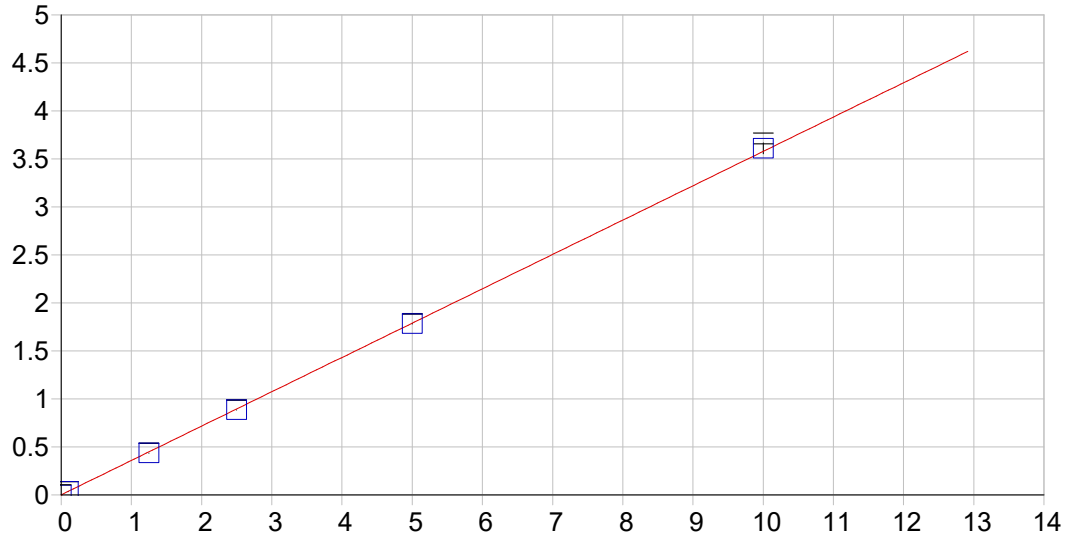
Sn 189.989 {478}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001564	Re-Slope:	1.000000
A1 (Gain):	0.130498	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999843	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.001688		
Predicted MQL:	0.005626		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00156	.000	1
S1	.00700	.00278	-.004	-60.3	.00189	.000	1
S2	1.2500	1.1943	-.056	-4.45	.15660	.000	1
S3	2.5000	2.4739	-.026	-1.04	.32277	.001	1
S4	5.0000	5.0162	.016	.324	.65290	.001	1
S5	10.000	10.070	.070	.696	1.3091	.008	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



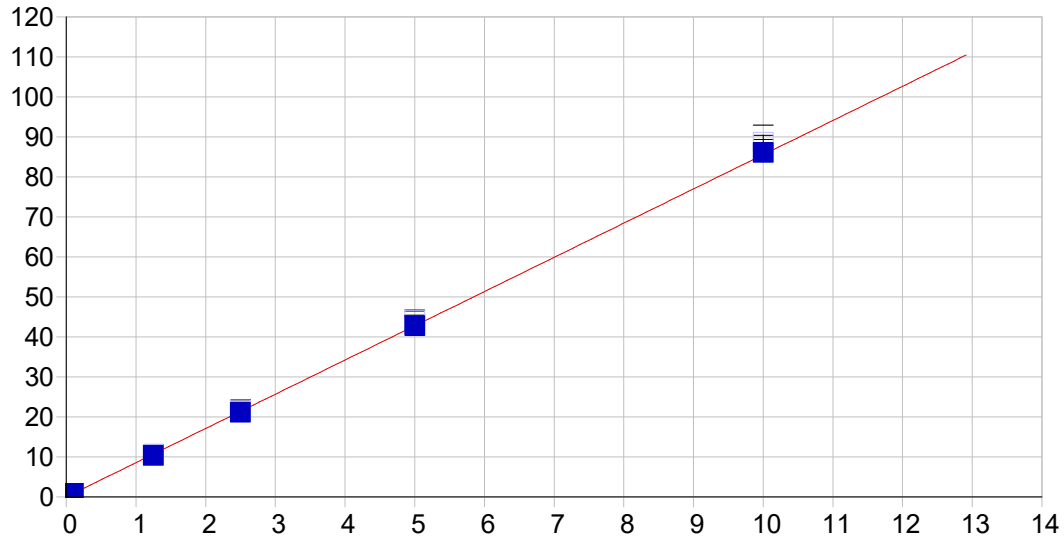
Ti 336.121 {100}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001301	Re-Slope:	1.000000
A1 (Gain):	0.357653	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999937	Status:	OK.
Std Error of Est:	0.000213		
Predicted MDL:	0.004534		
Predicted MQL:	0.015113		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00130	.001	1
S1	.10000	.09675	-.003	-3.25	.03590	.002	1
S2	1.2500	1.2131	-.037	-2.95	.43516	.001	1
S3	2.5000	2.4716	-.028	-1.14	.88528	.003	1
S4	5.0000	4.9811	-.019	-.379	1.7828	.003	1
S5	10.000	10.088	.088	.875	3.6091	.057	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



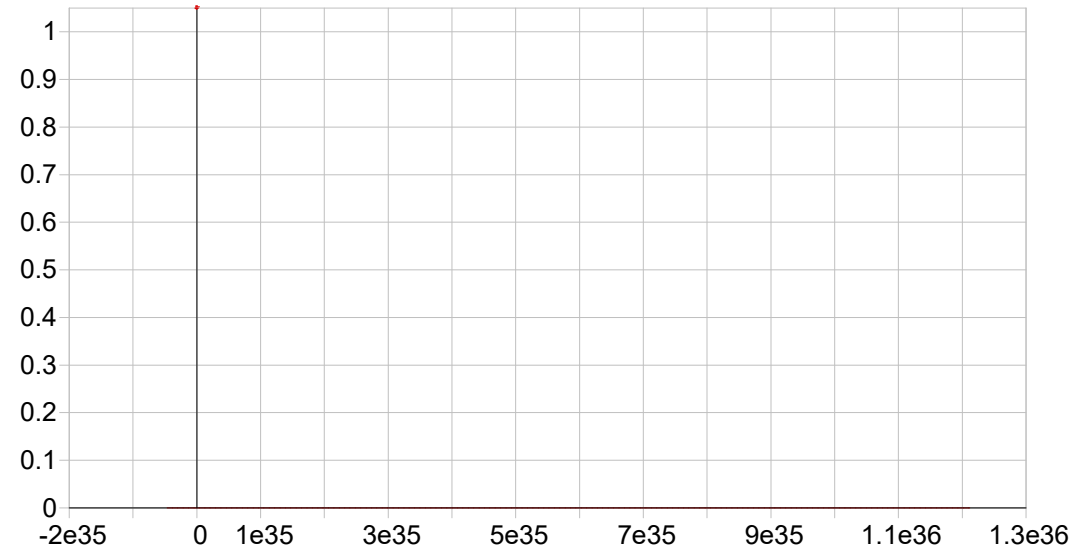
Sr 407.771 { 83}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002994	Re-Slope:	1.000000
A1 (Gain):	8.554425	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.005345		
Predicted MDL:	0.000272		
Predicted MQL:	0.000906		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00300	.002	1
S1	.10000	.10320	.003	3.20	.88669	.004	1
S2	1.2500	1.2032	-.047	-3.74	10.616	.018	1
S3	2.5000	2.4720	-.028	-1.12	21.791	.063	1
S4	5.0000	5.0061	.006	.122	44.110	.147	1
S5	10.000	10.066	.066	.656	88.674	1.81	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

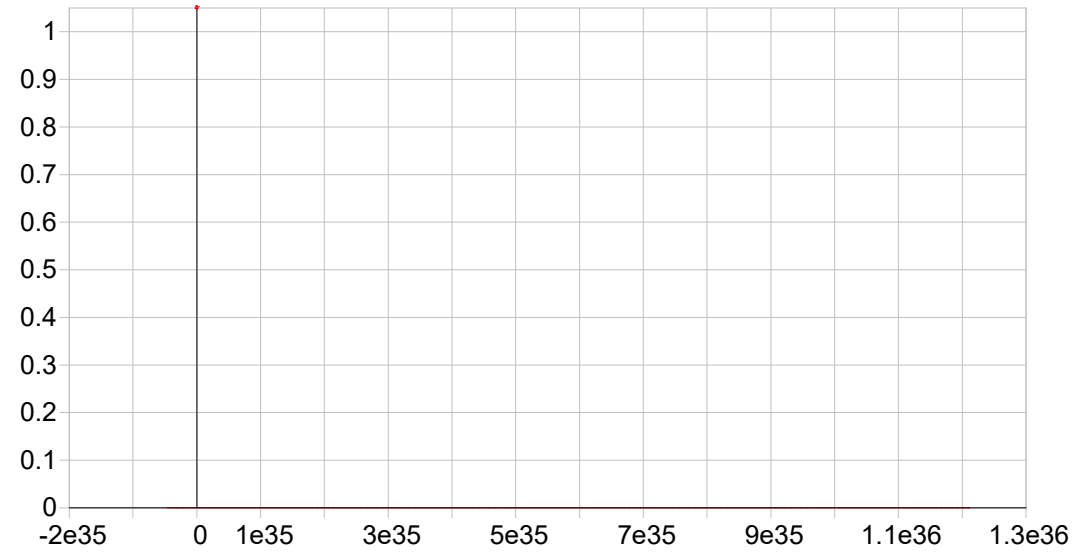


Y 224.306 {450}*

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



Y 360.073 { 94}*

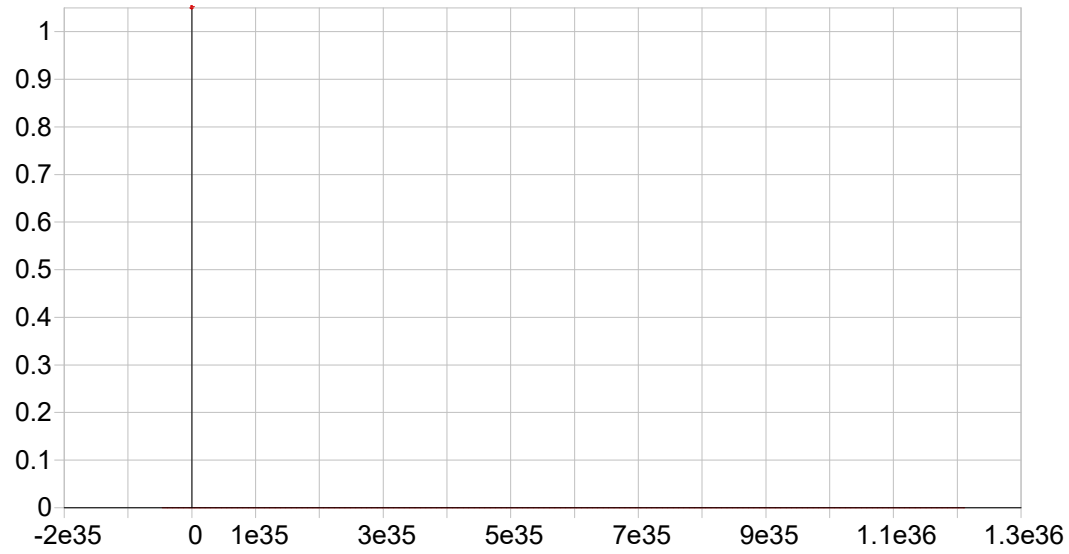
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

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



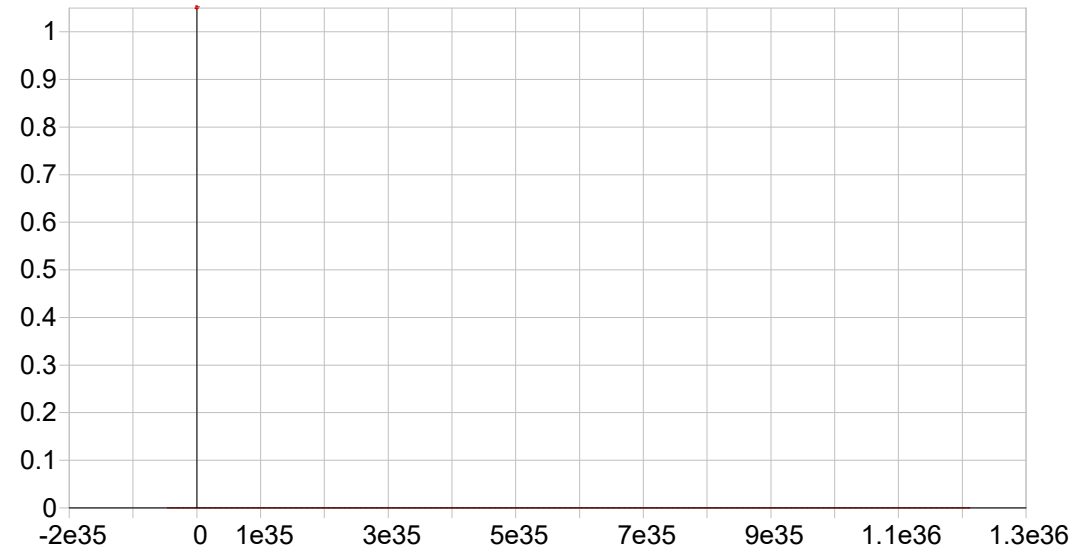
Y 371.030 { 91}*

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

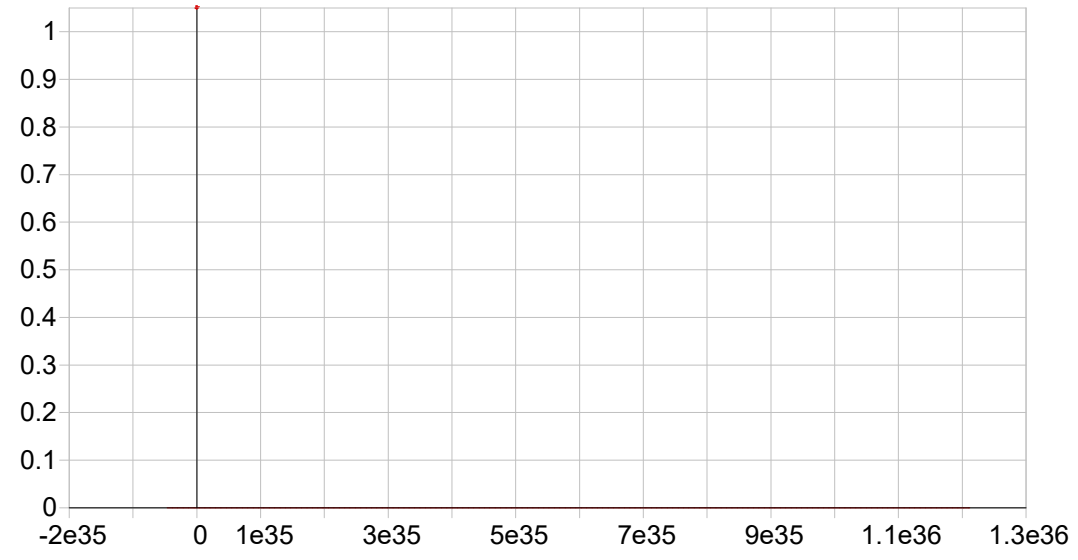
Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5



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



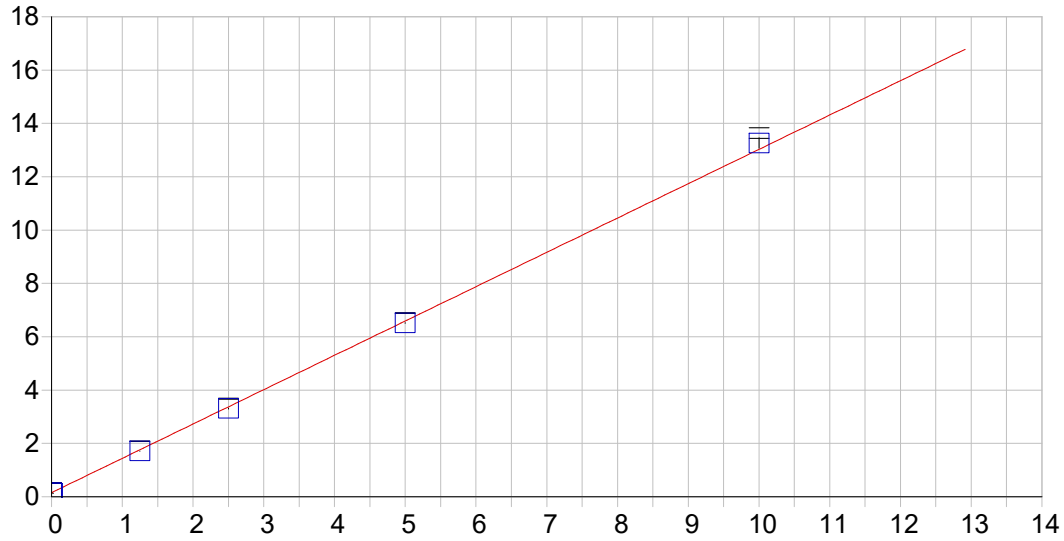
ln 230.606 {446}*

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:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

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



Li 670.784 { 50}

Date of Fit:	12/31/2024 12:50:58	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.153812	Re-Slope:	1.000000
A1 (Gain):	1.287354	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997962	Status:	OK.
Std Error of Est:	0.001690		
Predicted MDL:	0.003860		
Predicted MQL:	0.012866		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.15386	.004	1
S5	10.000	10.183	.183	1.83	13.263	.195	1
S4	5.0000	4.9387	-.061	-1.23	6.5116	.012	1
S3	2.5000	2.4517	-.048	-1.93	3.3100	.016	1
S2	1.2500	1.2089	-.041	-3.29	1.7101	.010	1
S1	.01500	-.01746	-.032	-216.	.13134	.005	1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/31/2024 12:16:41 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	.70122	-.00013	-.00016	.00051	.00062	-.00238	.05997	.00330
Stddev	.35094	.00016	.00029	.00016	.00010	.00318	.00567	.00206
%RSD	50.048	119.13	181.83	32.352	16.486	133.31	9.4554	62.493
#1	1.0423	-.00008	-.00049	.00034	.00067	-.00536	.06183	.00117
#2	.72021	-.00031	-.00002	.00066	.00050	.00096	.06448	.00528
#3	.34117	-.00001	.00003	.00052	.00069	-.00275	.05360	.00345

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00111	.00574	.00042	-.00037	.00228	.00163	.00524	-.00089
Stddev	.00055	.00192	.00011	.00029	.00065	.00054	.00079	.00101
%RSD	49.477	33.497	26.524	77.387	28.667	33.136	15.012	114.40
#1	.00062	.00788	.00033	-.00027	.00182	.00129	.00436	.00028
#2	.00170	.00516	.00039	-.00070	.00302	.00135	.00585	-.00159
#3	.00100	.00417	.00055	-.00015	.00199	.00225	.00552	-.00134

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00117	.00127	.14659	-.00004	.03789	.08460	-.00419	.02104
Stddev	.00065	.00009	.00248	.00155	.00412	.00641	.00027	.00171
%RSD	55.953	6.7247	1.6891	4091.8	10.881	7.5794	6.3351	8.1221
#1	-.00046	.00135	.14523	-.00182	.04265	.08209	-.00414	.02081
#2	-.00129	.00118	.14509	.00103	.03544	.09189	-.00395	.02285
#3	-.00175	.00126	.14945	.00067	.03558	.07982	-.00447	.01945

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00192	.00033	.01360	.00156	.00130	.00300	.15386
Stddev	.00040	.00018	.00273	.00021	.00126	.00210	.00363
%RSD	20.873	53.536	20.046	13.144	96.735	69.817	2.3565
#1	.00167	.00021	.01675	.00138	.00232	.00540	.15059
#2	.00238	.00024	.01191	.00179	.00170	.00156	.15776
#3	.00171	.00053	.01216	.00153	-.00011	.00204	.15321

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/31/2024 12:16:41 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	1646.4	20195.	1991.1	1362.2	1925.0
Stddev	2.8	45.	6.8	6.0	1.8
%RSD	.16929	.22523	.34041	.43782	.09273
#1	1649.6	20150.	1992.6	1355.3	1923.9
#2	1644.8	20194.	1983.7	1365.4	1927.1
#3	1644.8	20241.	1997.0	1365.9	1924.1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/31/2024 12:20:45 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1.9279	.00171	.00210	.00214	.00972	.02119	.95285	.06587
Stddev	.6195	.00009	.00071	.00022	.00073	.00072	.00524	.00140
%RSD	32.134	5.2245	33.978	10.319	7.5021	3.4125	.54969	2.1193
#1	2.0358	.00169	.00254	.00190	.00947	.02048	.95580	.06735
#2	1.2615	.00180	.00249	.00221	.01054	.02193	.95595	.06458
#3	2.4863	.00162	.00128	.00232	.00915	.02115	.94680	.06568

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02109	.28174	.00334	.05646	.00777	.00366	.01184	.05420
Stddev	.00036	.00261	.00015	.00046	.00219	.00019	.00032	.00101
%RSD	1.7294	.92559	4.3601	.81550	28.201	5.0747	2.6713	1.8690
#1	.02150	.28172	.00343	.05612	.01020	.00363	.01216	.05303
#2	.02096	.28436	.00317	.05698	.00715	.00385	.01153	.05485
#3	.02080	.27914	.00340	.05627	.00595	.00349	.01182	.05472

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02529	.00393	1.6054	.00544	.17081	.22190	-.00351	.00866
Stddev	.00016	.00020	.0185	.00104	.00020	.00548	.00017	.00245
%RSD	.64062	5.0299	1.1508	19.037	.11872	2.4693	4.8401	28.241
#1	.02516	.00414	1.6248	.00592	.17104	.22189	-.00338	.01016
#2	.02524	.00390	1.5880	.00615	.17067	.21642	-.00370	.00584
#3	.02547	.00375	1.6035	.00426	.17072	.22738	-.00344	.00999

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00774	.00476	.47457	.00189	.03590	.88669	.13134
Stddev	.00041	.00009	.00589	.00010	.00226	.00379	.00461
%RSD	5.2579	1.8221	1.2421	5.4586	6.2884	.42714	3.5127
#1	.00753	.00484	.47604	.00200	.03851	.88371	.13539
#2	.00749	.00467	.46808	.00181	.03456	.89095	.12632
#3	.00821	.00477	.47959	.00185	.03464	.88542	.13230

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/31/2024 12:20:45 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1645.2	20288.	1994.0	1361.5	1936.1
Stddev	2.1	117.	8.9	8.5	2.8
%RSD	.12586	.57851	.44725	.62119	.14460
#1	1643.5	20228.	1991.1	1352.9	1933.5
#2	1644.6	20212.	2004.0	1361.7	1935.6
#3	1647.5	20423.	1986.8	1369.8	1939.1

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/31/2024 12:24:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	158.33	.11514	1.5536	.07871	.19772	4.3652	10.840	1.5078
Stddev	.57	.00008	.0039	.00042	.00052	.0020	.023	.0045
%RSD	.36180	.07188	.25151	.53494	.26080	.04655	.21404	.30143
#1	157.85	.11506	1.5513	.07916	.19714	4.3630	10.856	1.5127
#2	158.18	.11513	1.5581	.07833	.19793	4.3670	10.851	1.5069
#3	158.97	.11523	1.5513	.07863	.19811	4.3656	10.814	1.5038

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.5132	3.3785	1.1893	.69261	.51160	.88667	1.5804	.68463
Stddev	.0035	.0028	.0008	.00128	.00139	.00216	.0063	.00298
%RSD	.14097	.08346	.06292	.18458	.27132	.24361	.40203	.43591
#1	2.5100	3.3800	1.1885	.69302	.51157	.88687	1.5848	.68675
#2	2.5170	3.3753	1.1894	.69363	.51023	.88872	1.5832	.68122
#3	2.5125	3.3803	1.1900	.69118	.51301	.88441	1.5731	.68593

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.41123	.09497	13.104	.06599	9.0923	1.1523	.09118	1.0671
Stddev	.00078	.00015	.026	.00176	.0279	.0027	.00057	.0019
%RSD	.18953	.15428	.19497	2.6601	.30636	.23329	.62823	.17836
#1	.41047	.09486	13.133	.06491	9.0843	1.1515	.09052	1.0673
#2	.41203	.09491	13.090	.06504	9.0693	1.1501	.09142	1.0651
#3	.41119	.09514	13.089	.06801	9.1232	1.1553	.09158	1.0688

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.74479	.05626	2.3566	.15660	.43516	10.616	1.7101
Stddev	.00076	.00031	.0140	.00020	.00136	.018	.0096
%RSD	.10240	.54558	.59494	.12722	.31250	.17041	.56195
#1	.74438	.05610	2.3726	.15661	.43401	10.613	1.7012
#2	.74432	.05608	2.3506	.15680	.43666	10.600	1.7203
#3	.74567	.05662	2.3466	.15640	.43480	10.636	1.7088

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/31/2024 12:24:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	1623.2	20114.	2017.4	1341.4	1847.4
Stddev	1.9	31.	8.5	5.0	3.6
%RSD	.11411	.15435	.42124	.37547	.19636
#1	1624.6	20103.	2007.6	1341.3	1847.8
#2	1621.1	20150.	2022.4	1346.5	1843.5
#3	1623.9	20091.	2022.2	1336.4	1850.7

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/31/2024 12:28:40 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	315.89	.23390	3.1867	.16178	.40797	8.8141	21.791	2.9980
Stddev	2.11	.00073	.0107	.00102	.00120	.0204	.030	.0156
%RSD	.66689	.31315	.33409	.63094	.29326	.23105	.13649	.51939
#1	313.48	.23321	3.1768	.16141	.40751	8.7993	21.796	3.0089
#2	316.79	.23383	3.1853	.16101	.40707	8.8057	21.759	2.9802
#3	317.39	.23467	3.1979	.16294	.40933	8.8373	21.818	3.0049

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.1357	6.7791	2.4102	1.4082	1.0206	1.7663	3.1518	1.3712
Stddev	.0135	.0224	.0057	.0051	.0043	.0010	.0050	.0034
%RSD	.26347	.33101	.23591	.36077	.42044	.05607	.15789	.24532
#1	5.1256	6.7731	2.4036	1.4030	1.0206	1.7658	3.1461	1.3746
#2	5.1305	6.7603	2.4131	1.4085	1.0163	1.7674	3.1542	1.3679
#3	5.1511	6.8039	2.4138	1.4132	1.0248	1.7656	3.1552	1.3711

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.84566	.19404	28.113	.13430	18.449	2.2658	.19424	2.1599
Stddev	.00039	.00109	.153	.00096	.061	.0095	.00016	.0101
%RSD	.04611	.56043	.54434	.71723	.32851	.41855	.08319	.46710
#1	.84530	.19281	28.196	.13407	18.514	2.2642	.19406	2.1646
#2	.84560	.19487	27.936	.13348	18.439	2.2572	.19439	2.1483
#3	.84607	.19444	28.206	.13536	18.394	2.2760	.19426	2.1668

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.5367	.11729	4.6878	.32277	.88528	21.791	3.3100
Stddev	.0044	.00059	.0249	.00079	.00292	.063	.0161
%RSD	.28565	.49955	.53111	.24462	.32950	.29133	.48724
#1	1.5344	.11662	4.6948	.32194	.88202	21.784	3.3090
#2	1.5340	.11754	4.6601	.32285	.88765	21.732	3.2944
#3	1.5418	.11771	4.7084	.32351	.88616	21.858	3.3266

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/31/2024 12:28:40 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	1562.6	19633.	2014.2	1286.9	1766.8
Stddev	6.8	94.	4.9	4.4	6.0
%RSD	.43412	.47668	.24572	.33985	.33781
#1	1557.1	19736.	2013.5	1289.4	1762.8
#2	1570.2	19553.	2019.5	1281.9	1773.6
#3	1560.7	19609.	2009.7	1289.4	1763.8

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/31/2024 12:32:18 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	613.39	.46522	6.4414	.32666	.83373	17.655	43.518	5.8566
Stddev	2.66	.00084	.0083	.00101	.00096	.043	.066	.0219
%RSD	.43444	.17962	.12857	.30864	.11549	.24123	.15153	.37401
#1	610.32	.46442	6.4454	.32583	.83478	17.648	43.524	5.8639
#2	614.99	.46516	6.4319	.32636	.83290	17.700	43.580	5.8739
#3	614.88	.46609	6.4469	.32778	.83349	17.615	43.449	5.8319

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.257	13.460	4.7523	2.7996	2.0304	3.4928	6.2096	2.7142
Stddev	.007	.043	.0124	.0017	.0049	.0085	.0089	.0067
%RSD	.07075	.32065	.26158	.06202	.24123	.24213	.14265	.24530
#1	10.254	13.482	4.7385	2.7993	2.0357	3.4959	6.1996	2.7132
#2	10.252	13.487	4.7626	2.7981	2.0293	3.4993	6.2164	2.7213
#3	10.265	13.410	4.7559	2.8015	2.0261	3.4832	6.2128	2.7081

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.6947	.38948	59.563	.26665	37.018	4.5316	.40171	4.2274
Stddev	.0017	.00091	.413	.00092	.103	.0126	.00109	.0311
%RSD	.09780	.23388	.69298	.34344	.27922	.27743	.27074	.73592
#1	1.6937	.38846	59.677	.26749	37.015	4.5256	.40102	4.2091
#2	1.6937	.38976	59.907	.26678	37.122	4.5461	.40297	4.2633
#3	1.6966	.39022	59.105	.26567	36.916	4.5232	.40116	4.2098

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.1264	.24205	9.0901	.65290	1.7828	44.110	6.5116
Stddev	.0034	.00025	.0562	.00075	.0031	.147	.0118
%RSD	.10917	.10528	.61797	.11487	.17450	.33409	.18130
#1	3.1303	.24231	9.0519	.65279	1.7839	44.148	6.5194
#2	3.1238	.24204	9.1546	.65221	1.7852	44.235	6.5174
#3	3.1252	.24180	9.0638	.65370	1.7793	43.948	6.4980

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/31/2024 12:32:18 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	1479.7	19121.	2012.6	1222.2	1675.7
Stddev	4.7	50.	14.3	6.4	4.4
%RSD	.32065	.25990	.70839	.52653	.25975
#1	1474.3	19080.	2004.3	1218.5	1671.2
#2	1483.3	19106.	2004.4	1218.4	1679.9
#3	1481.5	19176.	2029.0	1229.6	1676.0

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/31/2024 12:35:57 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1182.7	.90768	12.936	.66666	1.7465	36.201	88.824	11.635
Stddev	1.7	.00649	.080	.00317	.0098	.478	1.191	.248
%RSD	.14488	.71480	.61529	.47561	.56216	1.3209	1.3408	2.1354
#1	1181.6	.90047	12.847	.66318	1.7360	35.906	88.170	11.541
#2	1181.7	.90953	12.963	.66742	1.7479	35.944	88.104	11.447
#3	1184.6	.91304	12.999	.66939	1.7555	36.752	90.199	11.917

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	20.283	27.004	9.3447	5.5535	4.0986	6.9668	12.404	5.4875
Stddev	.124	.349	.0179	.0338	.0482	.0871	.184	.0723
%RSD	.61239	1.2938	.19104	.60807	1.1767	1.2495	1.4794	1.3170
#1	20.146	26.821	9.3651	5.5162	4.0725	6.9133	12.307	5.4432
#2	20.316	26.785	9.3369	5.5621	4.0690	6.9199	12.289	5.4484
#3	20.388	27.407	9.3321	5.5821	4.1543	7.0672	12.615	5.5709

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.3672	.79015	127.91	.54127	75.058	9.2900	.81990	8.3254
Stddev	.0198	.00199	1.46	.00793	.342	.1295	.00367	.1719
%RSD	.58838	.25155	1.1396	1.4656	.45601	1.3936	.44717	2.0645
#1	3.3453	.79208	128.32	.53589	74.958	9.2100	.81625	8.2570
#2	3.3726	.79026	126.29	.53754	74.777	9.2207	.81988	8.1983
#3	3.3838	.78811	129.11	.55038	75.440	9.4394	.82358	8.5210

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.5147	.49592	17.981	1.3091	3.6091	88.674	13.263
Stddev	.0399	.00385	.361	.0082	.0570	1.814	.195
%RSD	.61303	.77636	2.0061	.62887	1.5805	2.0451	1.4701
#1	6.4689	.49159	17.873	1.2998	3.5730	87.389	13.145
#2	6.5327	.49721	17.687	1.3119	3.5796	87.885	13.156
#3	6.5425	.49896	18.383	1.3155	3.6749	90.749	13.488

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/31/2024 12:35:57 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1362.1	18443.	1966.2	1113.1	1587.3
Stddev	6.7	116.	29.3	2.8	7.8
%RSD	.49450	.63028	1.4892	.24913	.49064
#1	1369.7	18430.	1982.6	1113.3	1596.3
#2	1357.0	18335.	1983.6	1110.2	1583.2
#3	1359.6	18566.	1932.4	1115.7	1582.4

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: S6 Acquired: 12/31/2024 12:39:52 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S06 Custom ID2: Custom ID3:
Comment:

Elem	Al3961	Ca3736	Fe2598	Mg2790	Na8183
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	93.563	42.680	17.957	8.6659	352.65
Stddev	.087	.046	.014	.0189	1.61
%RSD	.09258	.10856	.07931	.21809	.45691
#1	93.463	42.718	17.969	8.6689	354.48
#2	93.607	42.695	17.960	8.6832	351.98
#3	93.619	42.628	17.941	8.6457	351.47

Int. Std.	Y_3710
Units	Cts/S
Avg	1925.0
Stddev	8.2
%RSD	.42826
#1	1915.5
#2	1930.8
#3	1928.6

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICV006 Acquired: 12/31/2024 13:00:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV006 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.089046	1.030706	1.008777	.9997228	.9456896	2.474549
Stddev	.006995	.002053	.002243	.0067332	.0015387	.035710
%RSD	.6423464	.1991945	.2223017	.6735021	.1627098	1.443110
#1	1.092876	1.029139	1.009781	1.006521	.9474482	2.504249
#2	1.080972	1.029949	1.006208	.999591	.9450298	2.484471
#3	1.093290	1.033030	1.010343	.993056	.9445908	2.434927

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5320317	.5447920	.5239655	10.56470	.5657880	.5207834
Stddev	.0009374	.0038034	.0004907	.02469	.0006716	.0008964
%RSD	.1761901	.6981375	.0936528	.2337276	.1186924	.1721178
#1	.5310792	.5438503	.5241242	10.53970	.5656272	.5214423
#2	.5329532	.5489778	.5234151	10.58907	.5652114	.5197627
#3	.5320626	.5415479	.5243573	10.56533	.5665253	.5211453

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5215411	10.73883	.5357825	6.283708	.5306575	.2509477
Stddev	.0065030	.05556	.0077105	.144116	.0009307	.0010369
%RSD	1.246884	.5174174	1.439104	2.293488	.1753861	.4131890
#1	.5289771	10.69997	.5333970	6.324209	.5296787	.2503013
#2	.5187279	10.80248	.5444039	6.403239	.5307625	.2521437
#3	.5169183	10.71404	.5295468	6.123674	.5315312	.2503981

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.271686	.5331944	1.011492	9.813354	F -.001235	F -.045952
Stddev	.051277	.0111586	.004156	.167863	.000371	.002540
%RSD	.5530526	2.092774	.4108796	1.710554	30.04807	5.527346
#1	9.254016	.5322366	1.015683	9.909058	-.001009	-.044944
#2	9.329461	.5448010	1.011421	9.619528	-.001033	-.048841
#3	9.231580	.5225457	1.007372	9.911476	-.001664	-.044071

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICV006 Acquired: 12/31/2024 13:00:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV006 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.000297	F .0099096	F .0006762	F -.006855	F -.006255	F -.010071
Stddev	.000607	.0057819	.0014066	.001649	.003890	.000396
%RSD	204.3301	58.34626	208.0249	24.04870	62.19215	3.929916
#1	.000321	.0158665	-.000351	-.005793	-.010605	-.010438
#2	-.000892	.0043203	.000100	-.006018	-.003109	-.009652
#3	-.000319	.0095420	.002279	-.008754	-.005051	-.010122

Elem	Li6707
Units	ppm
Avg	F -.051132
Stddev	.003225
%RSD	6.307484
#1	-.053939
#2	-.051849
#3	-.047609

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1667.157	20438.47	2037.555	1372.724	1950.275
Stddev	5.306	12.82	14.688	5.149	4.893
%RSD	.3182902	.0627193	.7208683	.3751032	.2508832
#1	1661.346	20441.63	2041.737	1368.445	1944.679
#2	1668.378	20424.37	2021.229	1371.288	1952.397
#3	1671.746	20449.42	2049.698	1378.438	1953.748

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICB006 Acquired: 12/31/2024 13:04:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB006 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001819	-.001218	-.000785	-.011283	.0011402	.0151240
Stddev	.003745	.002731	.002772	.001425	.0019947	.0123717
%RSD	205.8805	224.1592	352.9684	12.62884	174.9425	81.80172
#1	.000690	.001161	.002374	-.012786	.0025231	.0091541
#2	-.000023	-.000616	-.001924	-.009951	-.001146	.0068693
#3	-.006124	-.004201	-.002807	-.011113	.002044	.0293486

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002732	-.000093	-.000115	.0310353	-.001025	-.000301
Stddev	.001729	.000033	.000081	.0374691	.000353	.000290
%RSD	63.27969	35.37168	70.58130	120.7306	34.41764	96.26138
#1	-.000745	-.000130	-.000075	.0741059	-.001064	-.000046
#2	-.003554	-.000069	-.000062	.0130526	-.000654	-.000241
#3	-.003896	-.000079	-.000208	.0059473	-.001356	-.000616

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000597	-.037756	-.009242	-.003645	-.000497	-.001428
Stddev	.009337	.021233	.000891	.093540	.000410	.000671
%RSD	1563.763	56.23655	9.641684	2566.441	82.57699	46.96258
#1	-.009326	-.055183	-.008708	.094150	-.000033	-.000709
#2	.009247	-.014108	-.008748	-.092251	-.000647	-.001539
#3	-.001712	-.043977	-.010271	-.012834	-.000810	-.002036

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.214856	-.008022	-.009948	-1.06299	.0002226	-.017557
Stddev	.021391	.003239	.000795	.09566	.0031200	.001886
%RSD	9.955918	40.36993	7.987051	8.998702	1401.370	10.74092
#1	-.230739	-.004859	-.009031	-1.14229	-.003360	-.019080
#2	-.190533	-.007877	-.010383	-1.08993	.002344	-.018144
#3	-.223297	-.011331	-.010431	-.95676	.001684	-.015448

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICB006 Acquired: 12/31/2024 13:04:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB006 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000879	-.001402	-.000133	F -.009394	-.001789	-.000313
Stddev	.000444	.005611	.001263	.001991	.006144	.000139
%RSD	50.58701	400.2257	947.5960	21.18916	343.3696	44.39530
#1	-.000549	.002282	-.001478	-.007297	.004321	-.000196
#2	-.001384	-.007860	.001027	-.009628	-.007967	-.000277
#3	-.000702	.001371	.000051	-.011257	-.001723	-.000467

Elem	Li6707
Units	ppm
Avg	F -.055338
Stddev	.002418
%RSD	4.368897
#1	-.053733
#2	-.058119
#3	-.054162

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1661.225	20361.03	2020.683	1373.358	1940.579
Stddev	6.251	121.68	6.867	8.838	7.209
%RSD	.3763164	.5975953	.3398249	.6435241	.3714619
#1	1654.110	20478.61	2027.010	1377.070	1932.589
#2	1663.731	20235.63	2021.659	1363.270	1942.553
#3	1665.835	20368.84	2013.381	1379.735	1946.595

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICSA006 Acquired: 12/31/2024 13:08:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA006 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070538	.0019532	-.009138	.0094582	.0134073	239.5197
Stddev	.0020733	.0030061	.001566	.0034547	.0059690	.7444
%RSD	29.39209	153.9039	17.14131	36.52569	44.52025	.3107720
#1	.0080391	.0021250	-.008232	.0133685	.0195118	239.7026
#2	.0084507	-.001135	-.010947	.0068193	.0075837	240.1556
#3	.0046716	.004870	-.008236	.0081870	.0131265	238.7010

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050243	.0012617	.0006473	247.5765	.0505345	.0352820
Stddev	.0014991	.0001429	.0001721	1.2754	.0006320	.0005699
%RSD	29.83717	11.32271	26.59221	.5151571	1.250645	1.615248
#1	.0065344	.0012250	.0008454	248.1014	.0500239	.0346346
#2	.0035364	.0011407	.0005353	248.5057	.0512414	.0357076
#3	.0050020	.0014193	.0005610	246.1224	.0503382	.0355039

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005230	101.0433	-.005332	257.5876	.0028720	-.005195
Stddev	.012617	.2839	.001937	.8456	.0003974	.000673
%RSD	241.2408	.2809217	36.32427	.3282723	13.83701	12.95027
#1	-.002090	101.1309	-.003704	257.8306	.0029744	-.004720
#2	-.019120	101.2730	-.007473	258.2851	.0024334	-.004901
#3	.005521	100.7260	-.004818	256.6472	.0032081	-.005965

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.173822	.0011820	-.044469	-1.46908	.0075606	F -.274589
Stddev	.015300	.0064069	.000858	.24032	.0029725	.003338
%RSD	8.802022	542.0196	1.929313	16.35832	39.31572	1.215690
#1	-.176133	-.003658	-.045324	-1.69874	.0051200	-.276783
#2	-.187834	-.001243	-.044474	-1.21937	.0108710	-.276237
#3	-.157498	.008447	-.043608	-1.48912	.0066908	-.270748

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICSA006 Acquired: 12/31/2024 13:08:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA006 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049187	.0145219	-.002508	.0023657	-.006865	.0039620
Stddev	.0011975	.0078259	.000946	.0002458	.004851	.0003023
%RSD	24.34659	53.89018	37.72209	10.39068	70.65791	7.628763
#1	.0038728	.0077197	-.001569	.0024888	-.010937	.0040453
#2	.0046583	.0230749	-.002494	.0025256	-.001498	.0042139
#3	.0062250	.0127711	-.003461	.0020827	-.008162	.0036269

Elem	Li6707
Units	ppm
Avg	F -.050169
Stddev	.004391
%RSD	8.751734
#1	-.055219
#2	-.047254
#3	-.048035

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1587.916	19455.58	2023.007	1312.804	1752.576
Stddev	5.967	60.63	12.344	4.776	7.447
%RSD	.3758065	.3116287	.6101934	.3638285	.4249010
#1	1591.431	19390.47	2013.570	1311.664	1757.658
#2	1581.026	19510.42	2036.977	1308.701	1744.028
#3	1591.291	19465.84	2018.474	1318.048	1756.042

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICSAB006 Acquired: 12/31/2024 13:27:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB006 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1028563	.1039387	.0455731	.0554643	.6083243	229.7453
Stddev	.0071214	.0003218	.0039942	.0092364	.0057364	.6324
%RSD	6.923609	.3095630	8.764362	16.65278	.9429915	.2752492
#1	.1045222	.1035916	.0478506	.0544356	.6076247	230.4730
#2	.1089971	.1042270	.0479076	.0651720	.6029697	229.3290
#3	.0950497	.1039975	.0409612	.0467854	.6143784	229.4340

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5412480	.5392485	1.066583	238.1908	.6109691	F .5543858
Stddev	.0034587	.0042281	.002920	.7467	.0036767	.0031954
%RSD	.6390220	.7840795	.2737866	.3134684	.6017787	.5763897
#1	.5446681	.5435293	1.064098	239.0472	.6125760	.5513914
#2	.5377520	.5350751	1.065852	237.8484	.6067626	.5540159
#3	.5413239	.5391411	1.069799	237.6766	.6135689	.5577501

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4811764	97.87285	.5291075	248.0745	1.057374	.2038909
Stddev	.0015251	.29796	.0047987	1.0182	.003094	.0015465
%RSD	.3169513	.3044407	.9069416	.4104340	.2926081	.7584747
#1	.4798275	98.03920	.5346371	249.2501	1.054938	.2040715
#2	.4828313	98.05050	.5266512	247.4994	1.056329	.2022621
#3	.4808705	97.52885	.5260342	247.4740	1.060855	.2053392

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.172990	.5259482	.9899038	-1.46931	.0063633	F -.256630
Stddev	.002257	.0063322	.0103828	.21629	.0035470	.002856
%RSD	1.304695	1.203966	1.048866	14.72069	55.74146	1.112912
#1	-.175566	.5323522	.9925705	-1.23129	.0028216	-.259717
#2	-.172039	.5196902	.9784477	-1.65384	.0063527	-.254081
#3	-.171363	.5258023	.9986931	-1.52281	.0099156	-.256092

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: ICSAB006 Acquired: 12/31/2024 13:27:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB006 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046991	.0226592	-.000200	.0012391	-.008923	.0034989
Stddev	.0001119	.0051669	.001628	.0014510	.004188	.0002028
%RSD	2.382252	22.80265	813.4583	117.1029	46.93368	5.796530
#1	.0047272	.0251860	-.000021	.0028134	-.006420	.0035131
#2	.0045758	.0260764	-.001911	-.000045	-.006590	.0032893
#3	.0047943	.0167152	.001331	.000949	-.013757	.0036942

Elem	Li6707
Units	ppm
Avg	F -.073183
Stddev	.004641
%RSD	6.341697
#1	-.078500
#2	-.069944
#3	-.071104

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.990	19506.61	2062.421	1319.740	1760.943
Stddev	8.572	101.13	6.730	9.889	8.477
%RSD	.5360633	.5184325	.3263003	.7493114	.4813991
#1	1597.956	19541.43	2054.766	1321.753	1761.023
#2	1608.031	19585.72	2067.404	1328.468	1769.380
#3	1590.982	19392.67	2065.094	1308.999	1752.426

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCV053 Acquired: 12/31/2024 13:32:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV053 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.881025	4.796540	24.43456	4.901896	4.886203	398.3969
Stddev	.030100	.012203	.02286	.006642	.008892	.8595
%RSD	.6166713	.2544159	.0935646	.1354935	.1819729	.2157478
#1	4.884540	4.800576	24.44125	4.894237	4.892925	397.9274
#2	4.909214	4.806214	24.45334	4.906072	4.889563	397.8743
#3	4.849322	4.782830	24.40911	4.905379	4.876121	399.3889

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.04313	.5066432	2.456092	403.5243	15.37062	2.484175
Stddev	.03814	.0025471	.005017	.0807	.04077	.005402
%RSD	.3797775	.5027354	.2042769	.0199875	.2652435	.2174539
#1	10.02030	.5088436	2.459450	403.4864	15.36202	2.485432
#2	10.02193	.5072331	2.458501	403.6169	15.41500	2.488838
#3	10.08716	.5038529	2.450325	403.4697	15.33484	2.478256

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.84459	406.6335	14.89803	402.8383	2.484295	1.250666
Stddev	.00193	1.4339	.04980	.8958	.004206	.001477
%RSD	.0130184	.3526220	.3342952	.2223777	.1693002	.1180634
#1	14.84477	406.7621	14.88776	402.4191	2.487599	1.251057
#2	14.84643	405.1396	14.85416	402.2289	2.485724	1.251907
#3	14.84258	407.9987	14.95217	403.8668	2.479560	1.249033

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	414.0266	2.485467	14.92695	151.6724	4.908805	F 4.308525
Stddev	.9293	.008362	.02451	.6795	.011402	.036620
%RSD	.2244539	.3364518	.1641712	.4480056	.2322863	.8499486
#1	415.0454	2.494205	14.92245	151.1793	4.910832	4.330902
#2	413.8088	2.477539	14.90501	151.3904	4.919058	4.328409
#3	413.2255	2.484657	14.95340	152.4475	4.896525	4.266264

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCV053 Acquired: 12/31/2024 13:32:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV053 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.833996	4.922661	4.976926	4.971301	4.889105	4.730855
Stddev	.003139	.015048	.034369	.011921	.024991	.006389
%RSD	.0649305	.3056961	.6905601	.2397882	.5111646	.1350509
#1	4.831390	4.908848	5.007573	4.983553	4.915564	4.733021
#2	4.837480	4.938697	4.983438	4.970607	4.885850	4.735880
#3	4.833118	4.920437	4.939768	4.959742	4.865901	4.723665

Elem	Li6707
Units	ppm
Avg	5.004156
Stddev	.018886
%RSD	.3773997
#1	4.991258
#2	4.995377
#3	5.025833

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1441.063	18444.52	1954.426	1176.366	1622.454
Stddev	2.405	63.39	2.661	7.190	1.070
%RSD	.1669073	.3436863	.1361307	.6112445	.0659514
#1	1443.048	18506.87	1951.618	1180.073	1623.189
#2	1441.752	18446.58	1956.910	1180.947	1622.946
#3	1438.388	18380.13	1954.749	1168.079	1621.227

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCB053 Acquired: 12/31/2024 13:36:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB053 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004078	-.002526	.0007140	-.001742	-.000123	.0795269
Stddev	.001481	.003234	.0012002	.003707	.005240	.0034545
%RSD	36.31843	128.0496	168.0931	212.8590	4274.527	4.343755
#1	-.005391	-.002314	.0019258	.001037	-.001450	.0812487
#2	-.002473	.000598	.0006903	-.000310	-.004571	.0755499
#3	-.004371	-.005860	-.000474	-.005951	.005653	.0817821

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000830	-.000063	.0000487	.0257046	-.000985	-.000024
Stddev	.001093	.000140	.0000385	.0514801	.000419	.000167
%RSD	131.6768	221.8492	79.15387	200.2757	42.53835	697.5533
#1	-.000346	-.000042	.0000930	-.009817	-.000560	.000164
#2	-.002081	.000065	.0000295	.002187	-.000997	-.000155
#3	-.000062	-.000213	.0000235	.084743	-.001399	-.000080

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021942	.0090784	-.006004	.0361114	-.000348	-.001215
Stddev	.0034226	.0367746	.000315	.0935890	.000439	.001775
%RSD	155.9848	405.0789	5.244396	259.1672	126.0592	146.0438
#1	.0061102	.0288202	-.005643	.0674972	-.000190	.000834
#2	-.000225	.0317660	-.006146	.1099735	-.000844	-.002274
#3	.000697	-.033351	-.006222	-.069136	-.000010	-.002206

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.140026	.0005662	-.001450	-.971571	.0012164	-.005594
Stddev	.037380	.0092889	.000789	.115605	.0012868	.000751
%RSD	26.69476	1640.574	54.44720	11.89876	105.7878	13.42026
#1	-.100625	.0046723	-.000547	-.884832	.0000552	-.005980
#2	-.144464	-.010068	-.002013	-.927066	.0009941	-.004729
#3	-.174988	.007094	-.001789	-1.10281	.0025998	-.006074

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCB053 Acquired: 12/31/2024 13:36:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB053 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000996	-.005542	.0002223	F -.009201	-.003482	-.000306
Stddev	.000620	.006517	.0010156	.000820	.002995	.000189
%RSD	62.23858	117.5841	456.8530	8.911339	86.02583	61.60976
#1	-.000596	-.012384	.0010407	-.009689	-.005206	-.000432
#2	-.000682	.000591	.0005404	-.008254	-.000023	-.000398
#3	-.001711	-.004834	-.000914	-.009660	-.005217	-.000089

Elem	Li6707
Units	ppm
Avg	F -.043545
Stddev	.003351
%RSD	7.695341
#1	-.046959
#2	-.040261
#3	-.043415

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1636.860	20107.71	1990.915	1357.963	1914.044
Stddev	2.596	111.51	7.732	11.427	4.963
%RSD	.1586167	.5545632	.3883824	.8414974	.2592932
#1	1638.072	20085.92	1981.998	1357.766	1914.605
#2	1638.628	20008.70	1994.994	1346.636	1918.703
#3	1633.879	20228.50	1995.754	1369.488	1908.825

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5027-17DLX4 Acquired: 12/31/2024 13:40:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003800	.0324690	.0191170	-.054347	-.008354	1.978990	.0124115
Stddev	.007098	.0042427	.0014133	.006456	.001499	.024128	.0016396
%RSD	186.7681	13.06703	7.392861	11.87842	17.94499	1.219232	13.20991
#1	-.011993	.0281485	.0200019	-.061714	-.006847	2.001253	.0139070
#2	.000493	.0326291	.0198620	-.049676	-.008371	1.982365	.0106584
#3	.000099	.0366295	.0174871	-.051652	-.009845	1.953351	.0126691

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003264	.0002212	660.1017	.0126323	.0430820	.0141696	10.65215
Stddev	.0001395	.0001171	7.1529	.0012713	.0006082	.0094962	.12400
%RSD	42.73362	52.93115	1.083603	10.06351	1.411738	67.01763	1.164083
#1	.0004127	.0002177	663.2009	.0134797	.0424040	.0250077	10.57170
#2	.0004011	.0001059	665.1823	.0111706	.0435794	.0073089	10.79495
#3	.0001655	.0003399	651.9219	.0132467	.0432627	.0101923	10.58980

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3414058	30.74151	.0143074	-.001909	.2067475	.0016823	.0466965
Stddev	.0016254	.45969	.0001028	.000133	.0098993	.0081648	.0008397
%RSD	.4760937	1.495335	.7188023	6.989317	4.788120	485.3212	1.798108
#1	.3432061	31.10008	.0142438	-.001870	.2157192	-.001647	.0474831
#2	.3409650	30.90118	.0144261	-.002057	.2083957	.010986	.0467941
#3	.3400462	30.22328	.0142524	-.001799	.1961275	-.004291	.0458123

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1440025	.3327827	-.025286	.0038138	7.161828	1.617223	-.000340
Stddev	.0585857	.0044315	.002379	.0006014	.018346	.013433	.002051
%RSD	40.68383	1.331640	9.406699	15.76841	.2561655	.8306214	604.1369
#1	.1304928	.3280687	-.024382	.0037471	7.140813	1.617865	.001774
#2	.0933517	.3334158	-.023492	.0044457	7.174647	1.630325	-.002323
#3	.2081629	.3368635	-.027985	.0032485	7.170025	1.603482	-.000470

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5027-17DLX4 Acquired: 12/31/2024 13:40:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.005669	.4351944	-.043662
Stddev	.004677	.0048337	.005897
%RSD	82.50784	1.110706	13.50503
#1	-.010893	.4378487	-.050444
#2	-.001870	.4381195	-.040790
#3	-.004243	.4296151	-.039752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1640.949	20292.33	2076.806	1353.876	1778.182
Stddev	1.362	7.33	18.200	8.665	1.066
%RSD	.0829992	.0361406	.8763299	.6399889	.0599529
#1	1642.488	20296.74	2071.670	1347.039	1779.093
#2	1639.898	20283.86	2061.726	1350.968	1777.009
#3	1640.461	20296.39	2097.021	1363.621	1778.443

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5030-11DLX4 Acquired: 12/31/2024 13:44:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000433	.0294349	.2239496	-.045288	-.003542	6.002304	.0397708
Stddev	.005963	.0045020	.0043825	.002722	.003006	.024848	.0018414
%RSD	1376.776	15.29461	1.956893	6.010294	84.87925	.4139784	4.630029
#1	-.006079	.0345665	.2283248	-.042989	-.004944	5.990952	.0412116
#2	-.001024	.0275886	.2239640	-.044581	-.000091	5.985159	.0404045
#3	.005804	.0261497	.2195600	-.048293	-.005591	6.030801	.0376962

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008836	.0021634	513.7030	.0199313	.0501240	.0280812	26.42671
Stddev	.0000701	.0001158	2.0982	.0003892	.0004903	.0063227	.09986
%RSD	7.937759	5.351641	.4084449	1.952640	.9780837	22.51565	.3778748
#1	.0008165	.0021776	511.4837	.0202628	.0499876	.0279754	26.38215
#2	.0009565	.0022714	513.9710	.0195028	.0506680	.0344561	26.35688
#3	.0008779	.0020412	515.6543	.0200283	.0497163	.0218121	26.54109

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.799217	288.9608	.0231469	-.001989	.3852054	.0083630	.5457908
Stddev	.007334	1.3472	.0009736	.001462	.0067028	.0036725	.0075137
%RSD	.4076280	.4662228	4.206022	73.50087	1.740062	43.91375	1.376670
#1	1.795668	287.4146	.0232586	-.003499	.3881562	.0111935	.5448657
#2	1.794332	289.5867	.0221223	-.001888	.3899265	.0042131	.5387824
#3	1.807650	289.8813	.0240598	-.000580	.3775334	.0096823	.5537242

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.085237	.5126596	-.032264	.0035070	11.60372	2.195296	-.002355
Stddev	.151714	.0009566	.003437	.0011412	.03580	.024222	.001891
%RSD	7.275626	.1865935	10.65290	32.54022	.3084945	1.103344	80.29890
#1	1.921970	.5121508	-.028602	.0047689	11.59596	2.181918	-.003653
#2	2.221871	.5120649	-.032769	.0025474	11.57243	2.180714	-.003228
#3	2.111870	.5137631	-.035420	.0032048	11.64275	2.223256	-.000185

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5030-11DLX4 Acquired: 12/31/2024 13:44:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0227289	.2080877	-.043319
Stddev	.0028878	.0010984	.007057
%RSD	12.70539	.5278497	16.29047
#1	.0194267	.2068295	-.051355
#2	.0239788	.2085785	-.040468
#3	.0247812	.2088552	-.038133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1590.393	19756.29	2067.903	1313.204	1686.991
Stddev	3.985	70.01	17.269	12.058	1.993
%RSD	.2505467	.3543801	.8351210	.9182490	.1181418
#1	1594.994	19717.68	2078.388	1307.842	1688.711
#2	1588.158	19837.11	2077.350	1327.013	1687.457
#3	1588.028	19714.08	2047.971	1304.756	1684.807

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-04 Acquired: 12/31/2024 13:48:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098832	.0054448	.0877611	-.009601	.0070269	11.88336	.1846593
Stddev	.0068932	.0013429	.0020245	.003186	.0029359	.06568	.0006605
%RSD	69.74660	24.66480	2.306826	33.18142	41.78037	.5526735	.3577055
#1	.0098596	.0043369	.0858208	-.009638	.0093849	11.82153	.1848598
#2	.0167882	.0069384	.0876020	-.006396	.0037386	11.87624	.1839218
#3	.0030019	.0050591	.0898604	-.012767	.0079572	11.95231	.1851964

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012407	.0010691	70.06305	.0425080	.0416687	.0386128	42.28636
Stddev	.0001311	.0001093	.08333	.0004289	.0000699	.0069861	.23177
%RSD	10.56814	10.22249	.1189400	1.009095	.1677743	18.09270	.5480907
#1	.0013120	.0011650	69.97071	.0428061	.0416684	.0399464	42.01948
#2	.0010894	.0009501	70.13265	.0420164	.0417387	.0310560	42.43711
#3	.0013208	.0010921	70.08581	.0427014	.0415989	.0448359	42.40248

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.590159	33.43669	.0525114	-.003556	-.101865	.0350008	.1709466
Stddev	.010562	.14753	.0002561	.001404	.003448	.0042004	.0003003
%RSD	.6642248	.4412308	.4877326	39.49088	3.384870	12.00094	.1756824
#1	1.584229	33.38482	.0525461	-.002333	-.098540	.0311008	.1707968
#2	1.583895	33.32211	.0522397	-.003246	-.101630	.0394480	.1712924
#3	1.602354	33.60316	.0527484	-.005090	-.105424	.0344534	.1707507

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9079919	.8874031	-.103600	.0048430	1.054259	3.406308	.0001905
Stddev	.0341324	.0042596	.005449	.0006611	.006440	.010190	.0006161
%RSD	3.759111	.4800062	5.259662	13.64963	.6108995	.2991638	323.4587
#1	.9378310	.8859624	-.107371	.0041114	1.047818	3.417492	.0003182
#2	.8707734	.8921962	-.106076	.0050201	1.060699	3.403885	.0007327
#3	.9153713	.8840507	-.097353	.0053974	1.054260	3.397548	-.000479

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-04 Acquired: 12/31/2024 13:48:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2041877	.0336330	-.041908
Stddev	.0020905	.0008132	.006128
%RSD	1.023812	2.417725	14.62273
#1	.2027619	.0338714	-.048981
#2	.2032138	.0343003	-.038190
#3	.2065875	.0327273	-.038553

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1709.428	20941.26	2134.245	1413.334	1917.960
Stddev	2.185	76.12	12.440	3.486	1.694
%RSD	.1278038	.3635122	.5828617	.2466856	.0883278
#1	1707.082	20976.34	2120.602	1412.590	1916.111
#2	1711.405	20993.51	2144.959	1417.132	1919.437
#3	1709.795	20853.92	2137.175	1410.279	1918.333

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5030-12DLX4 Acquired: 12/31/2024 13:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000628	.0255780	.6940298	-.041632	-.004838	4.081580	.0416302
Stddev	.006284	.0030916	.0019621	.000848	.002404	.041409	.0015819
%RSD	1001.215	12.08686	.2827109	2.037253	49.69854	1.014544	3.799803
#1	.006625	.0247122	.6954767	-.041754	-.007612	4.125254	.0406796
#2	-.004044	.0230115	.6948162	-.042413	-.003351	4.042886	.0434562
#3	-.004464	.0290101	.6917965	-.040730	-.003551	4.076600	.0407547

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009810	.0075818	623.3021	.0131735	.0500936	.0139665	34.31310
Stddev	.0000861	.0000455	2.5335	.0008816	.0004542	.0136692	.06693
%RSD	8.782375	.5999699	.4064571	6.692281	.9066507	97.87171	.1950462
#1	.0009330	.0075349	624.5000	.0137547	.0505015	.0072517	34.27219
#2	.0010804	.0076257	620.3918	.0136068	.0501752	.0296945	34.27677
#3	.0009295	.0075850	625.0145	.0121591	.0496042	.0049533	34.39033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.189468	347.3603	.0215010	-.002740	.4607727	.0111031	1.501990
Stddev	.014951	1.2751	.0002280	.001111	.0339484	.0104471	.006801
%RSD	.6828654	.3670898	1.060557	40.53093	7.367701	94.09197	.4528320
#1	2.178509	347.0426	.0214066	-.003502	.4985111	.0032968	1.498789
#2	2.183396	346.2740	.0217610	-.003252	.4510878	.0229711	1.509801
#3	2.206500	348.7642	.0213352	-.001466	.4327192	.0070415	1.497380

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.262165	.2739190	-.058351	.0041121	23.72229	1.880849	.0010863
Stddev	.167063	.0015422	.001589	.0009434	.04545	.007040	.0019978
%RSD	13.23621	.5630211	2.722429	22.94106	.1916045	.3742780	183.9100
#1	1.455068	.2754954	-.058043	.0050189	23.67203	1.882946	-.000076
#2	1.166838	.2724134	-.060071	.0031360	23.76052	1.872999	-.000058
#3	1.164589	.2738482	-.056940	.0041812	23.73433	1.886602	.003393

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5030-12DLX4 Acquired: 12/31/2024 13:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002447	.2038388	-.055925
Stddev	.005358	.0007502	.001090
%RSD	219.0074	.3680140	1.948944
#1	.003696	.2040794	-.054730
#2	-.004877	.2029979	-.056864
#3	-.006159	.2044392	-.056182

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.537	19482.63	2054.956	1293.955	1668.975
Stddev	2.590	95.47	14.210	2.116	2.670
%RSD	.1642626	.4900048	.6914768	.1635562	.1599562
#1	1573.581	19436.81	2052.928	1292.516	1666.098
#2	1578.406	19592.37	2070.070	1296.385	1669.455
#3	1577.625	19418.71	2041.869	1292.965	1671.371

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-08DLX4 Acquired: 12/31/2024 13:56:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0264742	.0245734	1.067590	-.040247	.0026816	10.94717	.3241727
Stddev	.0004164	.0026734	.004167	.007970	.0017518	.26309	.0092168
%RSD	1.573013	10.87938	.3902847	19.80137	65.32459	2.403259	2.843175
#1	.0266154	.0224163	1.072390	-.048641	.0044316	10.77874	.3185009
#2	.0260055	.0275644	1.065467	-.032784	.0009281	10.81243	.3192097
#3	.0268016	.0237395	1.064912	-.039318	.0026852	11.25034	.3348075

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014857	.0029060	455.4437	.0495965	.0567201	.1502859	45.33175
Stddev	.0002417	.0000283	11.8302	.0008493	.0004512	.0030968	1.09563
%RSD	16.26583	.9732321	2.597511	1.712496	.7954388	2.060575	2.416910
#1	.0014325	.0029180	447.9509	.0486380	.0571176	.1499074	44.60922
#2	.0012751	.0028738	449.2984	.0502557	.0562297	.1535545	44.79365
#3	.0017496	.0029264	469.0819	.0498957	.0568129	.1473958	46.59238

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.952169	48.19181	.0384208	-.001191	.1731869	.0152063	1.030317
Stddev	.078361	1.32089	.0003844	.000849	.0192493	.0062439	.001466
%RSD	2.654365	2.740894	1.000509	71.25898	11.11473	41.06140	.1422460
#1	2.894166	47.49030	.0380783	-.000217	.1631882	.0082203	1.028891
#2	2.921028	47.36968	.0388366	-.001775	.1609946	.0171554	1.030242
#3	3.041315	49.71545	.0383476	-.001581	.1953779	.0202432	1.031819

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1033982	2.522004	-.115339	.0042851	.8165599	3.009158	.0610297
Stddev	.0200615	.015929	.003917	.0005019	.0070877	.089815	.0024677
%RSD	19.40212	.6315987	3.396220	11.71242	.8679984	2.984729	4.043433
#1	.0838796	2.539665	-.114791	.0044063	.8233960	2.980487	.0638777
#2	.1239617	2.508726	-.111725	.0047152	.8170388	2.937178	.0595270
#3	.1023534	2.517620	-.119501	.0037337	.8092449	3.109808	.0596844

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-08DLX4 Acquired: 12/31/2024 13:56:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1225312	.2738025	-.065630
Stddev	.0056006	.0071532	.001670
%RSD	4.570787	2.612532	2.544447
#1	.1273751	.2690850	-.067146
#2	.1163985	.2702895	-.065905
#3	.1238199	.2820329	-.063840

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1637.462	20105.54	2126.837	1349.678	1745.057
Stddev	3.686	33.78	62.995	4.364	4.612
%RSD	.2251196	.1680265	2.961891	.3233556	.2642931
#1	1633.762	20143.10	2146.861	1349.685	1740.225
#2	1641.134	20095.86	2177.385	1354.038	1745.536
#3	1637.488	20077.65	2056.264	1345.309	1749.411

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-15DLX4 Acquired: 12/31/2024 14:00:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002636	.0303729	.2519694	-.040020	-.005691	7.291642	.0666394
Stddev	.004403	.0013996	.0011912	.007538	.004927	.043243	.0002333
%RSD	167.0332	4.608217	.4727620	18.83607	86.57636	.5930442	.3501514
#1	.000231	.0291852	.2522688	-.036944	-.007203	7.328061	.0669089
#2	-.000434	.0300176	.2529824	-.048610	-.000185	7.303016	.0665034
#3	-.007705	.0319160	.2506571	-.034507	-.009683	7.243849	.0665060

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005818	.0019674	419.4810	.0182363	.0447758	.0180939	23.06495
Stddev	.0001775	.0001125	3.0808	.0004670	.0008908	.0063345	.13566
%RSD	30.50807	5.720104	.7344314	2.560731	1.989442	35.00912	.5881765
#1	.0007296	.0020968	419.3856	.0187312	.0455425	.0140589	23.00568
#2	.0006310	.0019121	422.6083	.0181744	.0449864	.0148279	23.22017
#3	.0003849	.0018932	416.4489	.0178034	.0437987	.0253948	22.96902

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.319808	219.2315	.0221542	-.003101	.1793148	.0306607	.3877055
Stddev	.010123	.9494	.0002294	.000791	.0242645	.0065781	.0016690
%RSD	.4363848	.4330412	1.035515	25.51980	13.53177	21.45445	.4304877
#1	2.314114	218.4832	.0220773	-.002838	.1755755	.0358293	.3895042
#2	2.331497	220.2994	.0219731	-.003991	.2052319	.0232561	.3862068
#3	2.313815	218.9119	.0224122	-.002475	.1571371	.0328968	.3874055

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.595990	.7697766	-.055349	.0048587	3.870765	2.698446	.0020901
Stddev	.118778	.0051946	.003962	.0009893	.040372	.027962	.0008898
%RSD	19.92948	.6748132	7.158001	20.36086	1.043007	1.036239	42.57152
#1	-.464329	.7757554	-.053628	.0054154	3.915702	2.683494	.0023471
#2	-.695096	.7663699	-.059880	.0037165	3.837553	2.730706	.0011001
#3	-.628545	.7672047	-.052538	.0054443	3.859039	2.681139	.0028232

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-15DLX4 Acquired: 12/31/2024 14:00:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0792748	.1324022	-.067275
Stddev	.0042128	.0007921	.004392
%RSD	5.314241	.5982526	6.528793
#1	.0768648	.1323285	-.071987
#2	.0768202	.1332285	-.066541
#3	.0841393	.1316495	-.063295

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1614.619	19883.04	2034.944	1319.113	1736.333
Stddev	8.885	61.56	17.908	3.642	11.801
%RSD	.5502855	.3096215	.8800077	.2760780	.6796389
#1	1604.463	19815.89	2038.445	1315.212	1722.857
#2	1618.441	19936.81	2015.545	1322.424	1741.321
#3	1620.954	19896.41	2050.843	1319.702	1744.821

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-17DLX4 Acquired: 12/31/2024 14:03:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006904	.0288132	.1291879	-.040550	-.005424	5.227399	.0600920
Stddev	.001918	.0047051	.0041331	.005282	.000756	.043723	.0005643
%RSD	27.78265	16.32954	3.199307	13.02641	13.93746	.8364258	.9390743
#1	-.008628	.0341530	.1275558	-.035416	-.005084	5.202345	.0596464
#2	-.007246	.0252759	.1261201	-.040265	-.004898	5.201966	.0607265
#3	-.004838	.0270107	.1338879	-.045969	-.006291	5.277886	.0599031

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006726	.0016121	457.6930	.0139451	.0455523	.0231454	26.35929
Stddev	.0001755	.0001406	.6053	.0006957	.0002349	.0062048	.11621
%RSD	26.09838	8.723054	.1322566	4.988511	.5157251	26.80786	.4408528
#1	.0005988	.0015235	457.5146	.0147257	.0457007	.0188356	26.30804
#2	.0008729	.0017742	457.1969	.0133906	.0452814	.0203436	26.27752
#3	.0005460	.0015385	458.3675	.0137190	.0456746	.0302570	26.49231

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.203204	244.4404	.0233515	-.002568	.2507822	.0161737	.3328478
Stddev	.003048	.4860	.0009486	.001551	.0291086	.0016320	.0025377
%RSD	.1383464	.1988201	4.062485	60.39221	11.60714	10.09053	.7624114
#1	2.205334	243.9763	.0242790	-.004338	.2255078	.0142971	.3302152
#2	2.204566	244.3993	.0233924	-.001922	.2826084	.0169630	.3352784
#3	2.199713	244.9457	.0223831	-.001445	.2442304	.0172609	.3330500

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.193722	.5888737	-.057366	.0051002	8.766186	2.583124	-.001139
Stddev	.222251	.0047981	.001620	.0009038	.012859	.005192	.001575
%RSD	114.7270	.8147974	2.823821	17.72047	.1466863	.2010044	138.2794
#1	-.070014	.5863970	-.056824	.0060807	8.769991	2.586517	-.002824
#2	-.450301	.5858201	-.059188	.0049195	8.751854	2.585709	-.000890
#3	-.060851	.5944041	-.056088	.0043005	8.776712	2.577147	.000296

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5038-17DLX4 Acquired: 12/31/2024 14:03:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0456703	.1889456	-.071139
Stddev	.0008884	.0004638	.001841
%RSD	1.945252	.2454607	2.588257
#1	.0459088	.1892805	-.072256
#2	.0464151	.1884162	-.072148
#3	.0446870	.1891400	-.069014

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1590.659	19778.11	2030.457	1313.764	1710.694
Stddev	7.070	58.38	14.137	2.513	5.565
%RSD	.4444753	.2951568	.6962236	.1912786	.3253274
#1	1598.240	19721.28	2017.343	1313.337	1717.047
#2	1589.491	19775.11	2045.432	1311.491	1708.352
#3	1584.245	19837.92	2028.596	1316.462	1706.682

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-13DLX4 Acquired: 12/31/2024 14:07:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0315667	-.036662	1.058968	.0918198	.0498617	28.35091	.3846743
Stddev	.0058256	.004491	.021922	.0079974	.0062805	.12102	.0020824
%RSD	18.45483	12.24905	2.070162	8.709916	12.59587	.4268599	.5413426
#1	.0377917	-.041300	1.081639	.0923654	.0568687	28.29612	.3823760
#2	.0306620	-.032335	1.037881	.0835636	.0447390	28.26697	.3852109
#3	.0262464	-.036350	1.057383	.0995305	.0479775	28.48963	.3864358

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045393	.0065383	228.1203	.7935076	.0624256	.1551291	239.7627
Stddev	.0001649	.0002784	.8628	.0013871	.0009327	.0079988	1.1896
%RSD	3.632392	4.258504	.3782165	.1748026	1.494022	5.156219	.4961512
#1	.0047271	.0068595	227.6543	.7926107	.0634944	.1583656	238.6886
#2	.0044186	.0063895	227.5908	.7928069	.0620059	.1460192	239.5583
#3	.0044721	.0063658	229.1159	.7951052	.0617766	.1610024	241.0413

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.68159	45.92620	.2832807	-.009297	.3728112	.2490998	2.243067
Stddev	.09230	.35761	.0064484	.000221	.0048841	.0038307	.002215
%RSD	.5533177	.7786720	2.276345	2.378131	1.310063	1.537822	.0987682
#1	16.62337	45.59949	.2907175	-.009269	.3727956	.2452841	2.242618
#2	16.63340	45.87085	.2798835	-.009091	.3679349	.2490701	2.245473
#3	16.78802	46.30826	.2792411	-.009531	.3777030	.2529453	2.241111

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.589449	2.586668	-.496022	.0208101	3.051924	3.850413	.0209344
Stddev	.112423	.051323	.005031	.0011432	.053502	.008425	.0009635
%RSD	4.341595	1.984135	1.014273	5.493494	1.753067	.2188010	4.602337
#1	2.474780	2.645295	-.495702	.0212192	3.113634	3.850772	.0210102
#2	2.594082	2.549857	-.491159	.0216924	3.018539	3.841815	.0218577
#3	2.699483	2.564852	-.501206	.0195186	3.023599	3.858653	.0199353

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-13DLX4 Acquired: 12/31/2024 14:07:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.051006	.3108103	-.050560
Stddev	.004109	.0019875	.001868
%RSD	.3909322	.6394412	3.695612
#1	1.054740	.3090870	-.051580
#2	1.046604	.3103595	-.051696
#3	1.051672	.3129844	-.048403

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1680.158	20562.40	2104.312	1379.685	1865.410
Stddev	25.656	64.33	7.518	6.066	29.770
%RSD	1.526983	.3128637	.3572733	.4396366	1.595901
#1	1650.550	20523.42	2099.203	1377.300	1831.219
#2	1695.826	20636.66	2112.945	1386.581	1885.592
#3	1694.098	20527.13	2100.787	1375.175	1879.417

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-14DLX4 Acquired: 12/31/2024 14:11:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0457595	-.073048	1.109881	.1659278	.0799146	21.09860	.3207138
Stddev	.0006400	.001609	.004058	.0006302	.0029800	.03433	.0027176
%RSD	1.398594	2.202501	.3656676	.3797969	3.728999	.1627067	.8473532
#1	.0450619	-.072001	1.105626	.1666520	.0797056	21.06981	.3218358
#2	.0458969	-.072242	1.113710	.1656267	.0770445	21.13659	.3226908
#3	.0463196	-.074900	1.110308	.1655046	.0829935	21.08939	.3176149

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055911	.0081632	209.8331	1.121035	.0538253	.0891267	368.7790
Stddev	.0002371	.0001100	.7817	.017815	.0007143	.0091226	1.0391
%RSD	4.240596	1.348035	.3725456	1.589184	1.327080	10.23557	.2817548
#1	.0057553	.0080447	210.6897	1.100563	.0537062	.0934453	369.9787
#2	.0056987	.0081829	209.6513	1.133023	.0545917	.0786467	368.1710
#3	.0053193	.0082621	209.1582	1.129518	.0531781	.0952882	368.1871

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.38333	38.17744	.2592607	-.011472	.4561941	.2942578	3.459605
Stddev	.04543	.15696	.0009507	.001166	.0190893	.0087388	.057237
%RSD	.1863302	.4111324	.3666876	10.16487	4.184475	2.969790	1.654433
#1	24.42662	38.31855	.2595727	-.010142	.4515548	.3037290	3.395850
#2	24.38737	38.00838	.2581933	-.012320	.4398520	.2925370	3.506565
#3	24.33602	38.20538	.2600163	-.011954	.4771754	.2865074	3.476402

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9467570	2.535539	-.838350	.0214311	2.281156	3.543816	.0473739
Stddev	.2553235	.012541	.003803	.0010262	.024446	.014382	.0039285
%RSD	26.96822	.4946035	.4536744	4.788277	1.071642	.4058317	8.292619
#1	.9264258	2.524671	-.834171	.0216812	2.254216	3.527230	.0480207
#2	1.211638	2.532686	-.839272	.0203030	2.287325	3.552831	.0431622
#3	.702207	2.549261	-.841608	.0223090	2.301926	3.551386	.0509390

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-14DLX4 Acquired: 12/31/2024 14:11:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.578001	.1144416	-.065126
Stddev	.001418	.0020296	.002629
%RSD	.0898796	1.773483	4.037259
#1	1.577563	.1165127	-.068128
#2	1.579587	.1143560	-.064017
#3	1.576854	.1124562	-.063233

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.516	20437.91	2107.165	1368.151	1868.737
Stddev	5.324	243.55	6.422	14.741	6.040
%RSD	.3231456	1.191653	.3047870	1.077414	.3231995
#1	1647.521	20715.92	2100.124	1385.088	1871.782
#2	1642.189	20262.16	2112.701	1358.220	1861.781
#3	1652.837	20335.65	2108.670	1361.144	1872.648

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-21DLX4 Acquired: 12/31/2024 14:15:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1300433	-.099967	2.059814	.2206012	.1112122	14.87154
Stddev	.0027509	.002771	.024394	.0067652	.0005865	.03232
%RSD	2.115360	2.771819	1.184275	3.066729	.5273790	.2173530
#1	.1298514	-.102125	2.069890	.2132298	.1118535	14.85583
#2	.1328851	-.100933	2.077555	.2220475	.1107031	14.90871
#3	.1273934	-.096842	2.031996	.2265264	.1110800	14.85007

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8850536	.0075910	.0097080	120.3605	1.048874	.0596842
Stddev	.0024544	.0001294	.0000455	.2483	.007360	.0004741
%RSD	.2773173	1.704934	.4681863	.2063231	.7016630	.7943067
#1	.8843947	.0076549	.0097398	120.2498	1.057291	.0598559
#2	.8829958	.0074421	.0097282	120.1868	1.043648	.0600484
#3	.8877702	.0076761	.0096559	120.6449	1.045684	.0591481

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.121089	454.2923	10.34166	19.99993	.5838892	-.014658
Stddev	.004966	.2651	.01266	.10702	.0061293	.001081
%RSD	.1205107	.0583520	.1223862	.5351114	1.049731	7.376947
#1	4.116118	454.3290	10.32709	19.90672	.5871481	-.013545
#2	4.121097	454.0107	10.34798	19.97627	.5877005	-.014726
#3	4.126051	454.5371	10.34991	20.11680	.5768189	-.015704

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3183445	.0883595	5.562530	.4395154	1.687409	F -1.07870
Stddev	.0183022	.0146055	.025374	.1805256	.014088	.01011
%RSD	5.749194	16.52966	.4561653	41.07378	.8349182	.9369848
#1	.3390403	.1026252	5.588491	.2329529	1.698114	-1.06703
#2	.3117025	.0734363	5.561313	.5185387	1.692665	-1.08457
#3	.3042906	.0890171	5.537787	.5670545	1.671448	-1.08450

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5156-21DLX4 Acquired: 12/31/2024 14:15:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1147841	5.642023	3.125200	.1341814	.5204155	-.131391
Stddev	.0014926	.075023	.017379	.0021492	.0050705	.001238
%RSD	1.300319	1.329724	.5560941	1.601722	.9743238	.9422556
#1	.1155299	5.687600	3.105134	.1334611	.5262703	-.132498
#2	.1157568	5.683035	3.135032	.1365982	.5175270	-.131620
#3	.1130657	5.555434	3.135434	.1324848	.5174492	-.130054

Elem	Li6707
Units	ppm
Avg	-.069078
Stddev	.001209
%RSD	1.750528
#1	-.070367
#2	-.067969
#3	-.068896

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1636.001	20204.06	2069.248	1352.583	1880.832
Stddev	16.529	183.85	5.617	9.288	18.485
%RSD	1.010325	.9099639	.2714643	.6866834	.9828205
#1	1625.243	20028.24	2075.667	1342.429	1868.388
#2	1627.727	20395.00	2065.230	1360.650	1872.035
#3	1655.033	20188.94	2066.848	1354.670	1902.072

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5035-05DLX4 Acquired: 12/31/2024 14:19:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005948	.0263871	.0847880	-.052036	-.004754	4.978162	.0373164
Stddev	.004900	.0013674	.0030916	.005889	.003165	.014908	.0018599
%RSD	82.37164	5.182228	3.646259	11.31674	66.58423	.2994692	4.984124
#1	-.004857	.0256528	.0817412	-.045504	-.008180	4.961207	.0359833
#2	-.001687	.0279648	.0847003	-.056938	-.001938	4.989218	.0365248
#3	-.011302	.0255436	.0879225	-.053667	-.004143	4.984060	.0394412

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007277	.0004975	479.0560	.0117676	.0457551	.0201660	18.32048
Stddev	.0000805	.0000730	1.3922	.0003925	.0005397	.0115188	.06322
%RSD	11.05968	14.66503	.2906174	3.335813	1.179511	57.11990	.3450871
#1	.0006352	.0004214	479.9943	.0113173	.0451733	.0182779	18.25612
#2	.0007657	.0005043	479.7174	.0120378	.0462394	.0097079	18.32284
#3	.0007821	.0005669	477.4564	.0119477	.0458526	.0325122	18.38249

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7835978	74.96872	.0193682	-.002884	.1731935	.0137889	.0764980
Stddev	.0057162	.23846	.0007759	.000916	.0080607	.0035753	.0006671
%RSD	.7294781	.3180831	4.006207	31.77448	4.654139	25.92911	.8720859
#1	.7892745	75.14841	.0195889	-.001846	.1668033	.0157582	.0765014
#2	.7836760	75.05956	.0185059	-.003583	.1822494	.0159467	.0771634
#3	.7778429	74.69819	.0200099	-.003223	.1705279	.0096619	.0758292

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147006	.6514461	-.042791	.0028000	6.899106	1.812889	-.000798
Stddev	.1283716	.0058785	.001172	.0001593	.005314	.012303	.001207
%RSD	873.2383	.9023686	2.738559	5.690259	.0770268	.6786489	151.2586
#1	-.124593	.6483788	-.044018	.0026323	6.905011	1.819628	.000578
#2	.040448	.6477357	-.041683	.0029495	6.897600	1.820350	-.001675
#3	.128247	.6582238	-.042674	.0028181	6.894708	1.798688	-.001297

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5035-05DLX4 Acquired: 12/31/2024 14:19:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0385139	.2904714	-.078942
Stddev	.0062326	.0015276	.003497
%RSD	16.18282	.5258904	4.429309
#1	.0313616	.2902724	-.080471
#2	.0413975	.2920887	-.081413
#3	.0427826	.2890531	-.074941

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1613.363	19827.91	2052.263	1331.711	1745.346
Stddev	4.625	104.09	4.540	6.606	4.190
%RSD	.2866632	.5249670	.2212057	.4960419	.2400673
#1	1608.062	19746.81	2050.568	1334.288	1741.007
#2	1616.578	19945.28	2048.815	1324.206	1749.369
#3	1615.448	19791.63	2057.407	1336.640	1745.661

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5035-20DLX4 Acquired: 12/31/2024 14:23:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKN9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084673	.0260002	.1720645	-.029362	-.001609	13.80186	.4726193
Stddev	.0057406	.0032777	.0068529	.004664	.002495	.04791	.0011704
%RSD	67.79805	12.60634	3.982734	15.88401	155.0432	.3471607	.2476387
#1	.0117929	.0258942	.1690545	-.032763	-.003719	13.75230	.4713323
#2	.0117704	.0293295	.1672318	-.024046	.001145	13.80535	.4736198
#3	.0018386	.0227768	.1799073	-.031278	-.002254	13.84794	.4729059

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013684	.0012128	711.2622	.0232965	.0573391	.0869314	38.06416
Stddev	.0000739	.0001019	3.7295	.0007137	.0005328	.0117021	.11691
%RSD	5.400450	8.402736	.5243555	3.063509	.9292039	13.46125	.3071287
#1	.0014313	.0013233	707.4153	.0237923	.0567879	.0882971	37.95714
#2	.0012870	.0011926	711.5091	.0236186	.0573780	.0746064	38.18892
#3	.0013868	.0011225	714.8621	.0224785	.0578513	.0978907	38.04642

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.127546	18.96818	.0401025	-.001919	.1258170	.0198297	.1328963
Stddev	.012505	.10821	.0006059	.000938	.0083133	.0086666	.0018368
%RSD	.2040839	.5704567	1.510870	48.89529	6.607437	43.70499	1.382165
#1	6.113107	18.89875	.0396207	-.002189	.1195291	.0290214	.1339522
#2	6.134658	19.09286	.0399041	-.002693	.1352424	.0118070	.1339615
#3	6.134874	18.91293	.0407827	-.000875	.1226794	.0186607	.1307753

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1778068	2.193340	-.096687	.0021647	1.031138	2.958849	.0120152
Stddev	.1537237	.029475	.002436	.0012638	.011913	.017088	.0016126
%RSD	86.45547	1.343819	2.519208	58.38273	1.155305	.5775119	13.42104
#1	.3017529	2.161073	-.094756	.0007358	1.022971	2.972099	.0107267
#2	.2258746	2.200098	-.095881	.0031360	1.025636	2.964886	.0138236
#3	.0057929	2.218849	-.099423	.0026222	1.044807	2.939562	.0114953

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5035-20DLX4 Acquired: 12/31/2024 14:23:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKN9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0581649	.5852816	-.071911
Stddev	.0027909	.0022428	.000767
%RSD	4.798231	.3831927	1.066707
#1	.0607526	.5830829	-.072787
#2	.0552076	.5851960	-.071361
#3	.0585346	.5875660	-.071584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1737.839	21006.25	2138.847	1405.864	1801.079
Stddev	13.369	145.72	4.644	11.454	16.044
%RSD	.7692748	.6937168	.2171261	.8147398	.8908105
#1	1750.500	20945.32	2135.133	1398.516	1818.160
#2	1739.158	20900.89	2137.353	1400.015	1798.751
#3	1723.860	21172.56	2144.054	1419.062	1786.325

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-19DLX2 Acquired: 12/31/2024 14:27:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0945857	-.124394	2.276943	.2771759	.1455144	21.97759
Stddev	.0015131	.006237	.002560	.0028408	.0039209	.07929
%RSD	1.599697	5.013736	.1124276	1.024906	2.694497	.3607615
#1	.0960094	-.121150	2.273988	.2740285	.1417589	21.88764
#2	.0929968	-.120447	2.278374	.2779492	.1495820	22.03733
#3	.0947510	-.131584	2.278469	.2795499	.1452024	22.00779

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5552448	.0090763	.0142989	205.7816	1.412705	.0767081
Stddev	.0017450	.0002246	.0001906	.7668	.005576	.0000358
%RSD	.3142705	2.474681	1.333079	.3726460	.3947160	.0466177
#1	.5536064	.0090893	.0145106	204.9237	1.418923	.0767428
#2	.5550483	.0092940	.0141410	206.4004	1.408147	.0766713
#3	.5570797	.0088454	.0142450	206.0207	1.411047	.0767101

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1571730	569.7218	21.66007	39.15932	.6649587	-.019756
Stddev	.0068527	2.6403	.06790	.06839	.0015768	.001704
%RSD	4.359949	.4634358	.3134770	.1746555	.2371282	8.623056
#1	.1611492	567.0802	21.58404	39.09516	.6659787	-.018381
#2	.1611095	572.3608	21.71467	39.23128	.6631425	-.021662
#3	.1492602	569.7242	21.68151	39.15152	.6657548	-.019225

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5822262	.1517358	4.904724	1.937559	3.240904	F -1.25901
Stddev	.0094978	.0223037	.018882	.074136	.008528	.01002
%RSD	1.631298	14.69906	.3849770	3.826270	.2631234	.7956053
#1	.5749398	.1529346	4.887660	2.009643	3.250672	-1.26960
#2	.5929680	.1734159	4.925009	1.941506	3.234941	-1.25776
#3	.5787708	.1288568	4.901501	1.861529	3.237100	-1.24968

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-19DLX2 Acquired: 12/31/2024 14:27:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0462203	4.237703	4.773594	.0639728	1.063310	-.235953
Stddev	.0009356	.015755	.030562	.0016232	.004300	.001088
%RSD	2.024219	.3717829	.6402395	2.537316	.4043575	.4611057
#1	.0463480	4.251278	4.759929	.0656752	1.066651	-.234770
#2	.0470855	4.241405	4.808605	.0624425	1.058459	-.236910
#3	.0452274	4.220427	4.752248	.0638008	1.064819	-.236178

Elem	Li6707
Units	ppm
Avg	-.070224
Stddev	.003149
%RSD	4.484182
#1	-.073808
#2	-.067902
#3	-.068962

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1689.865	21192.71	2162.722	1407.989	1924.793
Stddev	1.340	108.38	13.655	1.222	2.219
%RSD	.0792906	.5114191	.6313878	.0868101	.1152859
#1	1688.867	21072.60	2163.317	1408.013	1922.320
#2	1689.340	21283.23	2148.779	1406.756	1926.609
#3	1691.388	21222.29	2176.070	1409.200	1925.451

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-19DL2X4 Acquired: 12/31/2024 14:31:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0459531	-.064376	1.213278	.1391438	.0780658	11.65628	.2950265
Stddev	.0045583	.000725	.007294	.0060985	.0050184	.11053	.0020261
%RSD	9.919560	1.126457	.6011577	4.382883	6.428417	.9482278	.6867433
#1	.0426829	-.063870	1.213958	.1460930	.0838211	11.57838	.2929292
#2	.0511600	-.065207	1.220207	.1346824	.0757726	11.78278	.2969730
#3	.0440164	-.064052	1.205668	.1366560	.0746037	11.60769	.2951772

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048821	.0073548	110.6288	.7586649	.0512265	.0965097	306.0011
Stddev	.0002131	.0000209	.3959	.0032369	.0005367	.0090928	1.6558
%RSD	4.365857	.2847103	.3579011	.4266586	1.047755	9.421634	.5411178
#1	.0046685	.0073582	110.1806	.7575560	.0512730	.0869969	304.8145
#2	.0048829	.0073738	110.9308	.7623105	.0506681	.1051143	307.8928
#3	.0050948	.0073323	110.7750	.7561282	.0517385	.0974179	305.2961

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.66046	20.90623	.3489515	-.008988	.1273030	.0777234	2.625407
Stddev	.06177	.14380	.0012533	.000139	.0103024	.0078822	.000509
%RSD	.5297740	.6878536	.3591516	1.543336	8.092834	10.14132	.0193859
#1	11.62252	20.81770	.3485018	-.009146	.1154083	.0699587	2.625840
#2	11.73174	21.07216	.3479852	-.008933	.1334156	.0857180	2.624847
#3	11.62713	20.82884	.3503676	-.008885	.1330851	.0774935	2.625535

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5645247	1.704253	-.699168	.0257740	2.243612	2.593286	.0275590
Stddev	.1562814	.003943	.015949	.0006438	.009234	.023355	.0002043
%RSD	27.68371	.2313698	2.281152	2.497712	.4115828	.9006011	.7413242
#1	.6717675	1.702358	-.682574	.0253317	2.243994	2.566762	.0276479
#2	.3852128	1.701615	-.714383	.0265125	2.252649	2.610770	.0277039
#3	.6365939	1.708786	-.700547	.0254778	2.234192	2.602326	.0273253

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: P5266-19DL2X4 Acquired: 12/31/2024 14:31:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5646556	-.128630	-.077189
Stddev	.0055691	.001123	.001850
%RSD	.9862863	.8731020	2.396888
#1	.5584293	-.128851	-.077691
#2	.5663758	-.129625	-.078737
#3	.5691616	-.127412	-.075140

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1682.580	20739.81	2095.506	1389.905	1928.665
Stddev	7.618	138.74	11.202	10.472	8.209
%RSD	.4527290	.6689708	.5345961	.7534404	.4256268
#1	1683.919	20636.15	2101.620	1380.503	1929.709
#2	1674.382	20685.85	2082.577	1388.020	1919.984
#3	1689.440	20897.43	2102.322	1401.191	1936.302

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: PB165641TB Acquired: 12/31/2024 14:34:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LEB641 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002626	-.005215	-.002787	-.008627	-.005237	.0003317
Stddev	.001343	.003099	.000954	.004121	.002400	.0239813
%RSD	51.12321	59.43305	34.22525	47.77246	45.82990	7230.244
#1	-.003478	-.008388	-.002174	-.007133	-.003516	-.002189
#2	-.001078	-.002195	-.003886	-.013286	-.007978	-.022290
#3	-.003322	-.005061	-.002300	-.005460	-.004216	.025474

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000252	-.000068	-.000249	.0104940	-.001288	-.000218
Stddev	.000470	.000067	.000024	.0426095	.001196	.000139
%RSD	186.7488	97.73968	9.454933	406.0365	92.86800	63.64867
#1	.000192	-.000006	-.000272	.0572591	-.000495	-.000139
#2	-.000202	-.000139	-.000225	-.026130	-.002664	-.000137
#3	-.000745	-.000059	-.000250	.000353	-.000705	-.000379

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001172	.0138942	-.013480	-.007719	.0003252	-.003419
Stddev	.003350	.0252427	.001058	.060444	.0009988	.000532
%RSD	285.9862	181.6784	7.851926	783.0039	307.1577	15.55764
#1	-.003299	.0072801	-.014696	-.075978	.0013618	-.003292
#2	-.002906	-.007383	-.012769	.039020	.0002446	-.002963
#3	.002691	.041785	-.012975	.013800	-.000631	-.004003

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 125.6561	-.000039	-.014795	-3.42174	.0007467	-.021520
Stddev	1.4045	.005135	.000103	.13090	.0028322	.000802
%RSD	1.117711	13321.11	.6953011	3.825518	379.2730	3.727624
#1	127.1030	.005795	-.014716	-3.56844	-.002442	-.022156
#2	125.5671	-.002036	-.014758	-3.37995	.001711	-.020619
#3	124.2983	-.003874	-.014911	-3.31685	.002971	-.021785

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: PB165641TB Acquired: 12/31/2024 14:34:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LEB641 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002335	.0044224	-.001017	F -.012185	-.001329	-.000911
Stddev	.000563	.0013578	.000247	.002663	.000919	.000280
%RSD	24.12562	30.70336	24.26994	21.85478	69.12167	30.72767
#1	-.002979	.0036082	-.001252	-.014969	-.002374	-.001176
#2	-.002094	.0059898	-.000760	-.011922	-.000649	-.000618
#3	-.001932	.0036690	-.001039	-.009663	-.000964	-.000940

Elem	Li6707
Units	ppm
Avg	F -.135333
Stddev	.003251
%RSD	2.402138
#1	-.138938
#2	-.132625
#3	-.134437

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1747.226	21198.10	2129.632	1440.558	2008.167
Stddev	4.344	122.02	16.405	8.606	5.926
%RSD	.2486173	.5756059	.7703106	.5973912	.2950726
#1	1751.990	21332.65	2119.436	1450.429	2014.571
#2	1746.204	21094.63	2120.905	1436.613	2007.051
#3	1743.484	21167.02	2148.556	1434.631	2002.879

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCV054 Acquired: 12/31/2024 14:38:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV054 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.925860	4.862763	24.81602	4.959981	4.955038	400.7819
Stddev	.030183	.008654	.09062	.014906	.012443	.3535
%RSD	.6127446	.1779656	.3651815	.3005286	.2511209	.0882058
#1	4.891046	4.853990	24.71845	4.949320	4.940683	400.6615
#2	4.941856	4.863008	24.83206	4.953608	4.962758	400.5043
#3	4.944679	4.871293	24.89756	4.977014	4.961672	401.1799

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.10964	.5090965	2.494837	406.3816	15.58085	2.519728
Stddev	.01272	.0020176	.008706	.3634	.00870	.005870
%RSD	.1257778	.3963071	.3489795	.0894150	.0558474	.2329772
#1	10.12326	.5099092	2.485828	405.9767	15.58301	2.513783
#2	10.09808	.5105811	2.495479	406.6794	15.58826	2.519882
#3	10.10758	.5067994	2.503205	406.4888	15.57127	2.525520

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.98732	407.7238	14.87931	401.2043	2.518931	1.263819
Stddev	.02277	.9231	.02475	.3844	.004735	.001372
%RSD	.1519162	.2263937	.1663506	.0958065	.1879781	.1085378
#1	14.98409	408.2358	14.85279	400.9700	2.515719	1.264562
#2	14.96635	408.2775	14.90181	401.6479	2.516704	1.264659
#3	15.01154	406.6582	14.88332	400.9950	2.524369	1.262236

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	410.5884	2.476493	15.02436	152.7336	4.989324	F 4.360410
Stddev	.5616	.012921	.10563	.2097	.003509	.024943
%RSD	.1367863	.5217308	.7030718	.1373167	.0703277	.5720332
#1	409.9491	2.488373	15.14201	152.4950	4.989488	4.364847
#2	410.8135	2.478368	14.99343	152.8887	4.985736	4.382837
#3	411.0026	2.462737	14.93765	152.8170	4.992748	4.333546

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCV054 Acquired: 12/31/2024 14:38:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV054 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.901850	5.045769	5.027893	5.035179	4.980724	4.818841
Stddev	.023539	.005138	.022321	.018786	.003409	.000811
%RSD	.4802118	.1018357	.4439391	.3731002	.0684386	.0168282
#1	4.876443	5.040286	5.035560	5.021819	4.981762	4.819197
#2	4.906188	5.046547	5.045369	5.027058	4.983493	4.819413
#3	4.922919	5.050474	5.002749	5.056659	4.976916	4.817913

Elem	Li6707
Units	ppm
Avg	5.116431
Stddev	.017295
%RSD	.3380282
#1	5.096896
#2	5.122606
#3	5.129792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1431.690	18282.00	1952.154	1168.175	1610.351
Stddev	1.567	57.51	6.137	3.200	1.973
%RSD	.1094242	.3145868	.3143564	.2739366	.1225360
#1	1430.714	18344.90	1957.251	1164.491	1608.927
#2	1433.497	18269.01	1945.342	1169.773	1612.603
#3	1430.858	18232.10	1953.868	1170.262	1609.523

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

Sample Name: CCB054 Acquired: 12/31/2024 14:42:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB054 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005127	-.002325	-.001849	-.006353	-.001893	.0177330
Stddev	.002439	.002321	.002403	.003164	.003173	.0239922
%RSD	47.56325	99.83897	129.9111	49.79678	167.6053	135.2969
#1	-.007706	.000000	-.004249	-.009901	-.000585	.0219219
#2	-.002857	-.002333	-.001855	-.005335	.000416	-.008078
#3	-.004820	-.004642	.000556	-.003824	-.005511	.039355

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001030	-.000051	-.000008	.0644016	-.001148	-.000290
Stddev	.000384	.000150	.000082	.0190060	.000721	.000305
%RSD	37.29436	292.4517	1043.846	29.51164	62.79831	105.2146
#1	-.000963	-.000221	-.000102	.0767135	-.001671	-.000364
#2	-.001443	-.000000	.000025	.0739790	-.001446	-.000550
#3	-.000683	.000067	.000053	.0425123	-.000326	.000045

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043702	.0072050	-.003768	-.038241	-.000548	-.001826
Stddev	.0083907	.0380346	.001705	.101384	.000957	.001388
%RSD	191.9985	527.8927	45.23938	265.1155	174.6995	75.99849
#1	.0005305	.0295268	-.004676	.024379	-.001385	-.000688
#2	.0139937	-.036712	-.004828	.016109	-.000755	-.001418
#3	-.001414	.028800	-.001802	-.155212	.000496	-.003372

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.165922	-.000839	.0019417	-.249597	-.000764	-.005279
Stddev	.017958	.006916	.0019580	.086368	.002965	.003056
%RSD	10.82304	823.9209	100.8386	34.60289	388.1573	57.90035
#1	-.148831	-.006010	.0039240	-.263596	-.002593	-.002152
#2	-.184637	-.003525	.0018922	-.328111	.002658	-.008259
#3	-.164297	.007017	.0000089	-.157085	-.002357	-.005426

Reviewed By:kareem
On:1/2/2025 6:18:26 PM
Inst Id :P5

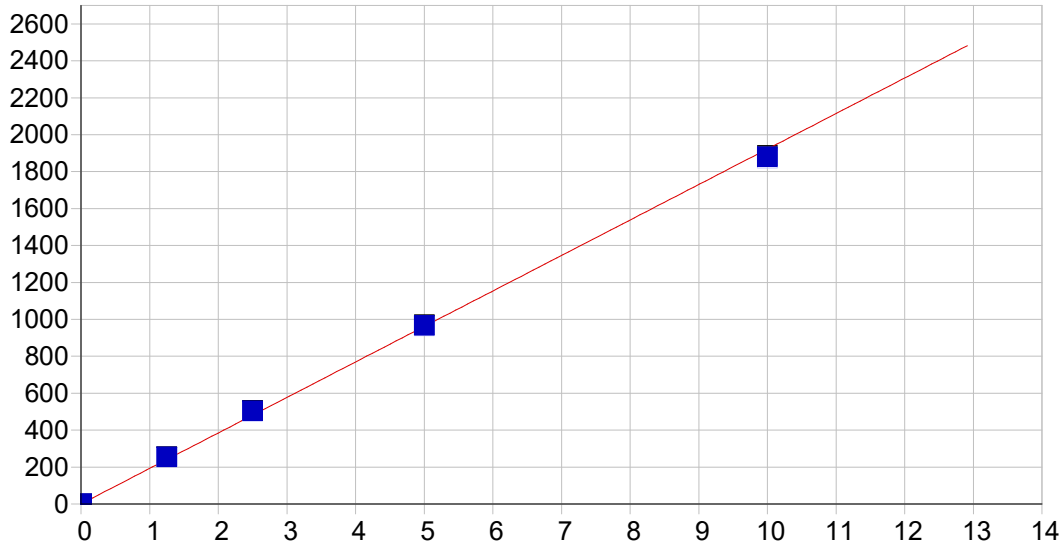
Sample Name: CCB054 Acquired: 12/31/2024 14:42:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v58) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB054 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000882	-.000622	.0002733	-.005485	-.001294	-.000170
Stddev	.000255	.002400	.0008811	.000794	.001924	.000207
%RSD	28.95481	385.7138	322.3994	14.47261	148.6699	121.6795
#1	-.000830	.000579	.0003308	-.006054	.000906	-.000311
#2	-.001160	.000940	-.000635	-.004578	-.002658	-.000267
#3	-.000657	-.003385	.001124	-.005823	-.002130	.000068

Elem	Li6707
Units	ppm
Avg	F -.017085
Stddev	.003252
%RSD	19.03256
#1	-.017877
#2	-.013511
#3	-.019869

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1642.644	20010.31	2019.176	1351.380	1922.084
Stddev	1.410	23.51	7.786	2.806	4.035
%RSD	.0858589	.1174932	.3855792	.2076560	.2099071
#1	1641.948	19983.89	2010.196	1354.080	1918.240
#2	1644.267	20018.13	2024.023	1351.583	1921.728
#3	1641.718	20028.92	2023.311	1348.478	1926.285

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

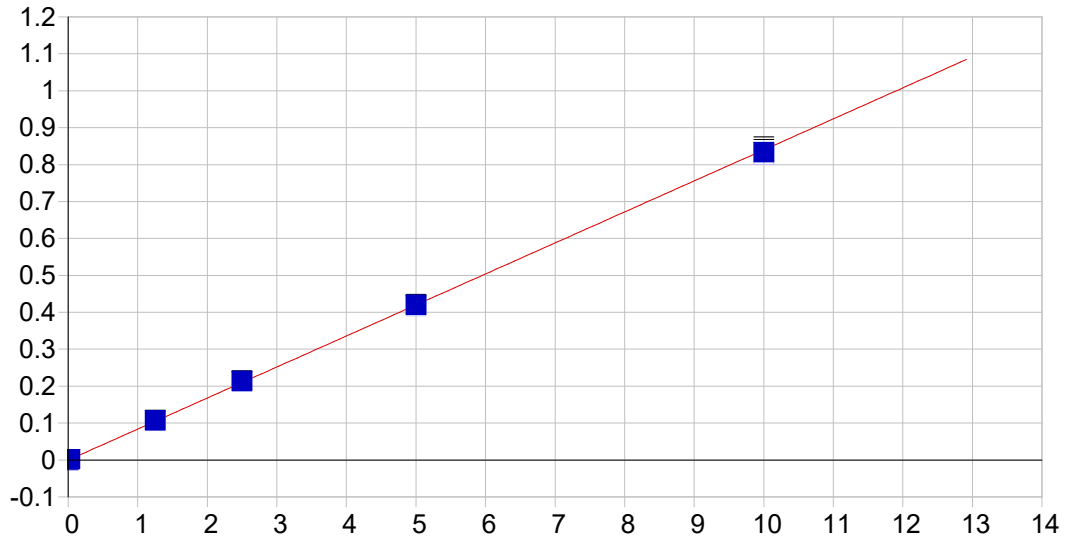


As 189.042 {478}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.342213	Re-Slope:	1.000000
A1 (Gain):	192.201021	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999604	Status:	OK.
Std Error of Est:	0.090335		
Predicted MDL:	0.004332		
Predicted MQL:	0.014442		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.34199	.275	1
S1	.01000	.01027	.000	2.72	2.3138	.707	1
S2	1.2500	1.3209	.071	5.67	253.22	.144	1
S3	2.5000	2.6180	.118	4.72	501.52	3.35	1
S4	5.0000	5.0326	.033	.653	963.58	2.84	1
S5	10.000	9.7781	-.222	-2.22	1871.6	8.00	1



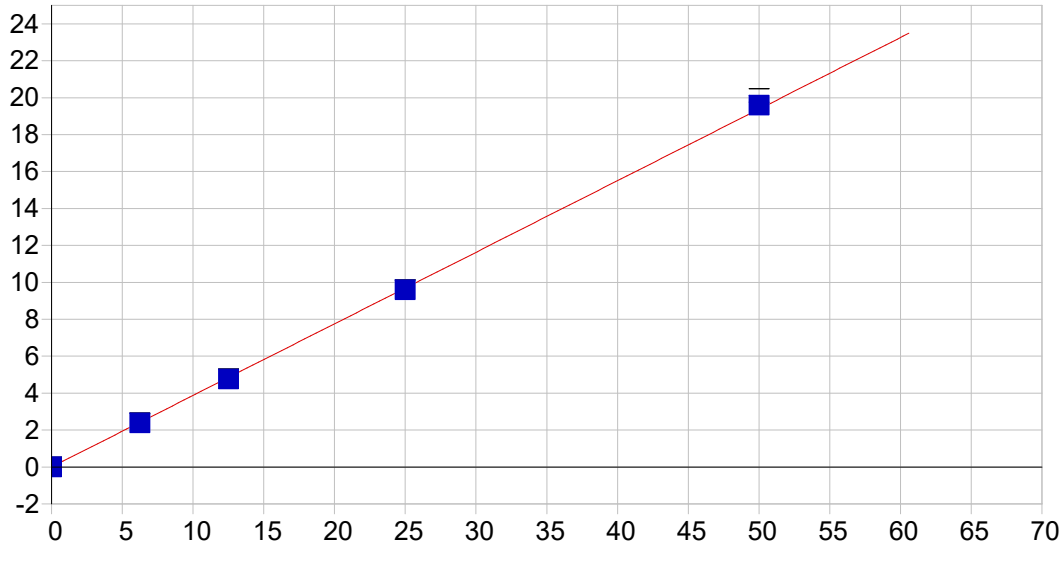
Tl 190.856 {477}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000276	Re-Slope:	1.000000
A1 (Gain):	0.084016	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999938	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.003633		
Predicted MQL:	0.012111		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00028	.000	1
S1	.02500	.02634	.001	5.36	.00186	.000	1
S2	1.2500	1.2812	.031	2.49	.10646	.000	1
S3	2.5000	2.5455	.046	1.82	.21179	.001	1
S4	5.0000	4.9990	-.001	-.019	.41612	.002	1
S5	10.000	9.9230	-.077	-.770	.82621	.015	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



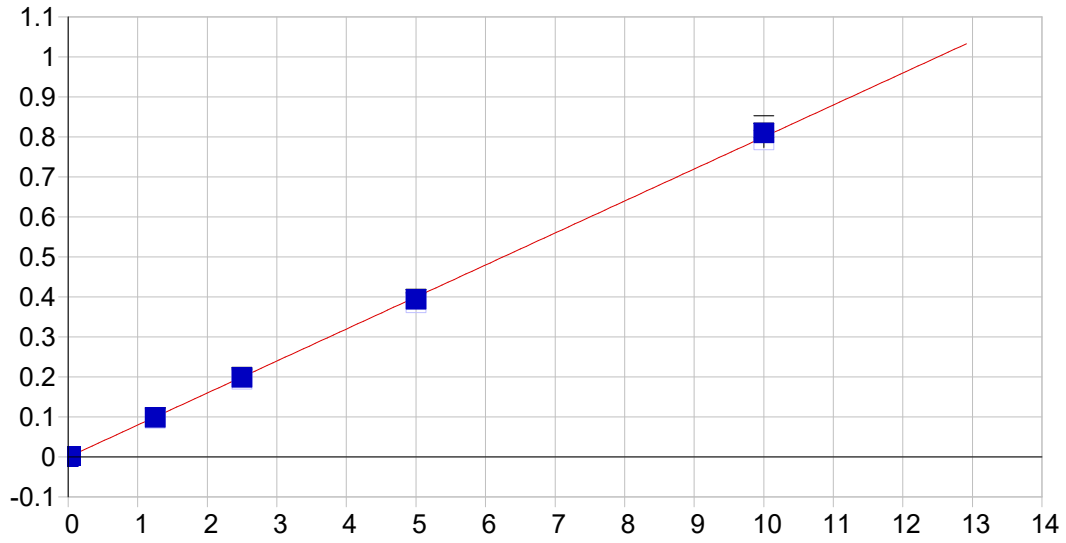
Pb 220.353 {453}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000192	Re-Slope:	1.000000
A1 (Gain):	0.387604	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000178		
Predicted MDL:	0.002377		
Predicted MQL:	0.007922		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00019	.001	1
S1	.01000	.01083	.001	8.29	.00437	.001	1
S2	6.2500	6.1366	-.113	-1.81	2.3756	.003	1
S3	12.500	12.294	-.206	-1.65	4.7588	.021	1
S4	25.000	24.761	-.239	-.958	9.5847	.017	1
S5	50.000	50.558	.558	1.12	19.571	.366	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



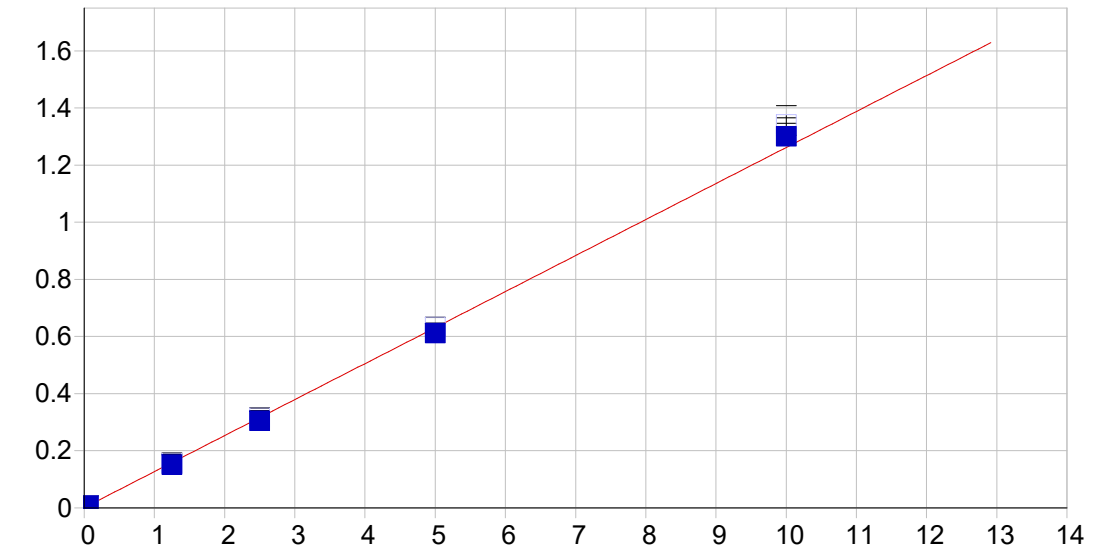
Se 196.090 {472}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000176	Re-Slope:	1.000000
A1 (Gain):	0.080001	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.000035		
Predicted MDL:	0.005445		
Predicted MQL:	0.018149		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00018	.000	1
S1	.03500	.03074	-.004	-12.2	.00228	.000	1
S2	1.2500	1.2280	-.022	-1.76	.09581	.000	1
S3	2.5000	2.4780	-.022	-.878	.19357	.001	1
S4	5.0000	4.9251	-.075	-1.50	.38484	.000	1
S5	10.000	10.123	.123	1.23	.79169	.018	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



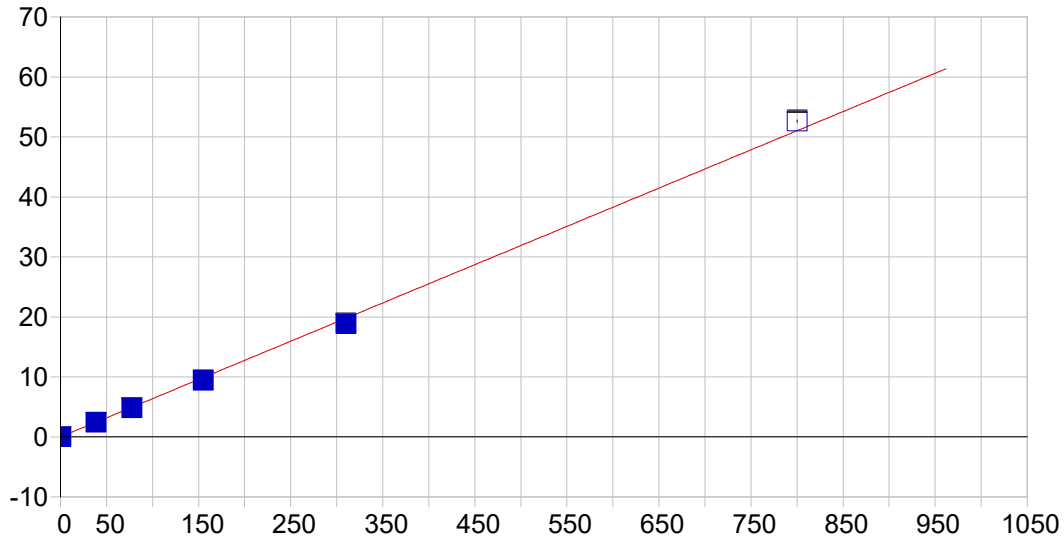
Sb 206.833 {463}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000965	Re-Slope:	1.000000
A1 (Gain):	0.126073	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999485	Status:	OK.
Std Error of Est:	0.000172		
Predicted MDL:	0.004247		
Predicted MQL:	0.014155		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00097	.000	1
S1	.06000	.05467	-.005	-8.88	.00786	.000	1
S2	1.2500	1.1948	-.055	-4.41	.15687	.001	1
S3	2.5000	2.4082	-.092	-3.67	.31511	.001	1
S4	5.0000	4.8435	-.157	-3.13	.63267	.000	1
S5	10.000	10.309	.309	3.09	1.3427	.031	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



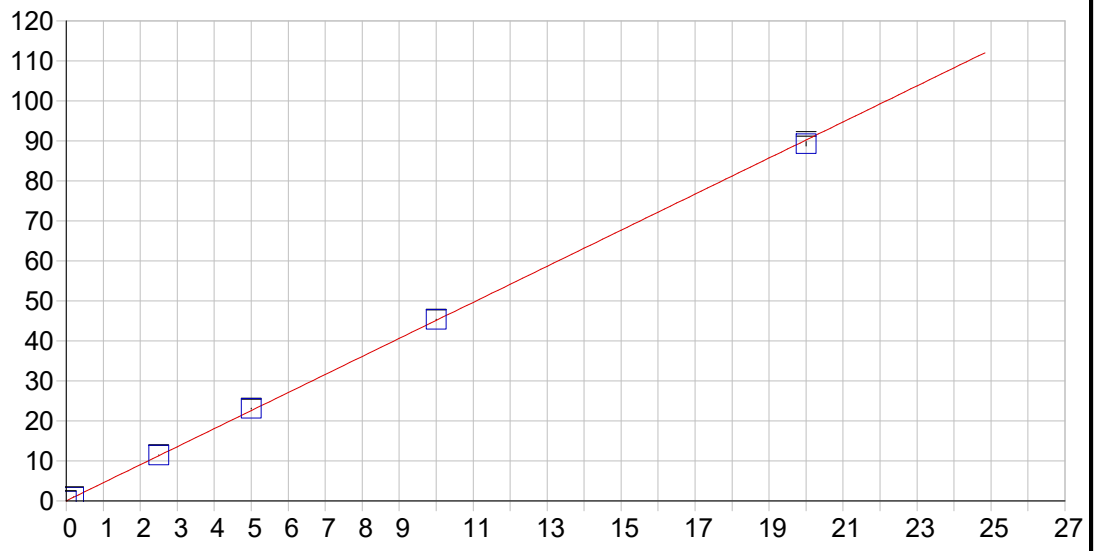
Al 396.152 { 85}

Date of Fit:	01/02/2025 14:35:19	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000689	Re-Slope:	1.000000
A1 (Gain):	0.063798	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999306	Status:	OK.
Std Error of Est:	0.001479		
Predicted MDL:	0.070477		
Predicted MQL:	0.234923		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00069	.004	1
S1	.20000	.21481	.015	7.40	.01304	.003	1
S2	38.750	37.656	-1.09	-2.82	2.4044	.012	1
S3	77.500	75.895	-1.60	-2.07	4.8467	.046	1
S4	155.00	147.18	-7.82	-5.05	9.3997	.061	1
S5	310.00	295.50	-14.5	-4.68	18.873	.092	1
S6	800.00	825.03	25.0	3.13	52.635	.207	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



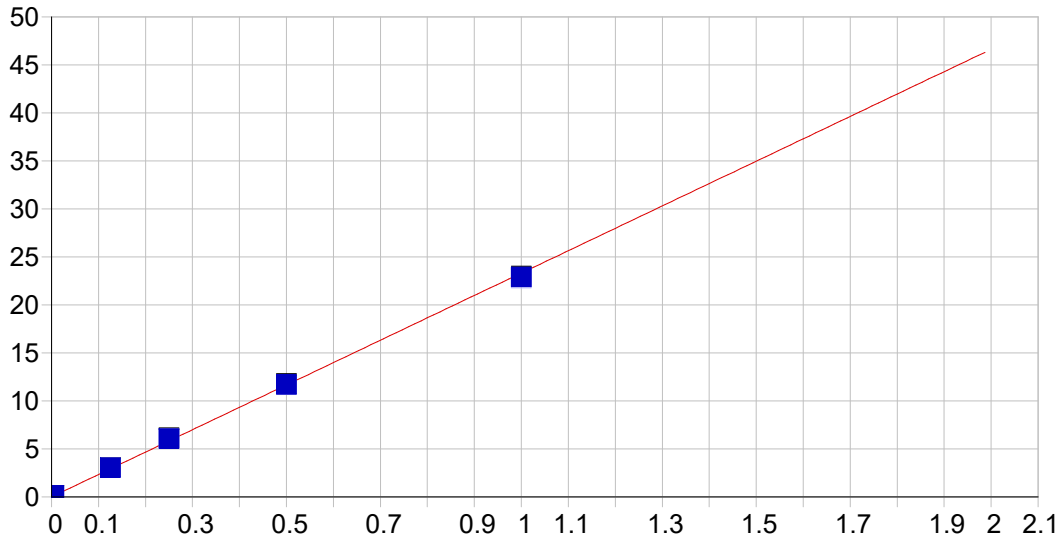
Ba 493.409 { 68}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.026735	Re-Slope:	1.000000
A1 (Gain):	4.510209	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999907	Status:	OK.
Std Error of Est:	0.006522		
Predicted MDL:	0.002272		
Predicted MQL:	0.007573		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	.02664	.015	1
S1	.20000	.21532	.015	7.66	.99788	.014	1
S2	2.5000	2.5387	.039	1.55	11.477	.025	1
S3	5.0000	5.1146	.115	2.29	23.095	.109	1
S4	10.000	10.048	.048	.479	45.345	.104	1
S5	20.000	19.783	-.217	-1.08	89.254	.568	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



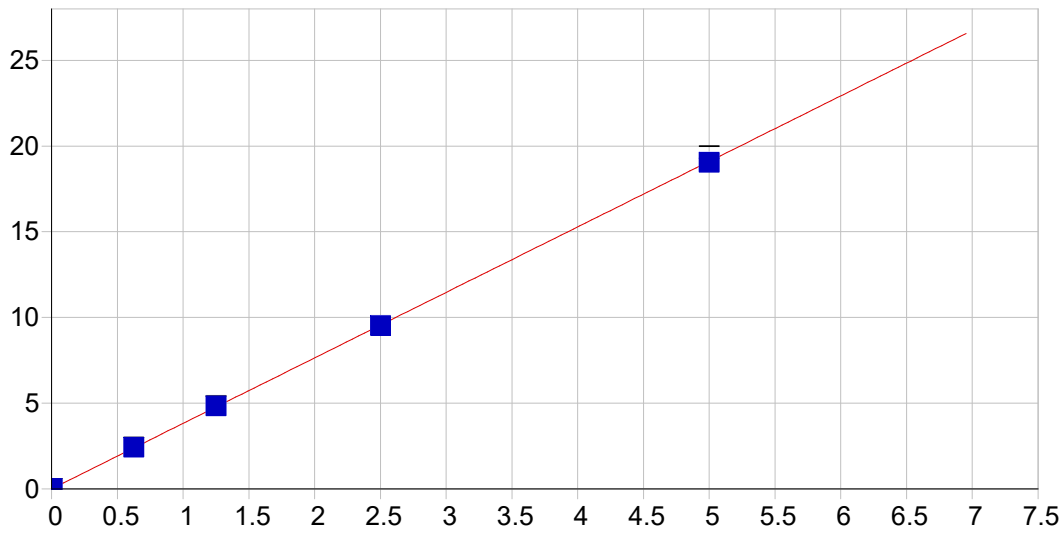
Be 234.861 {144}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005877	Re-Slope:	1.000000
A1 (Gain):	23.309573	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999725	Status:	OK.
Std Error of Est:	0.002043		
Predicted MDL:	0.000172		
Predicted MQL:	0.000573		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00586	.001	1
S1	.00500	.00541	.000	8.20	.13188	.004	1
S2	.12500	.13002	.005	4.01	3.0231	.026	1
S3	.25000	.26054	.011	4.22	6.0523	.069	1
S4	.50000	.50234	.002	.468	11.662	.075	1
S5	1.0000	.98169	-.018	-1.83	22.782	.112	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



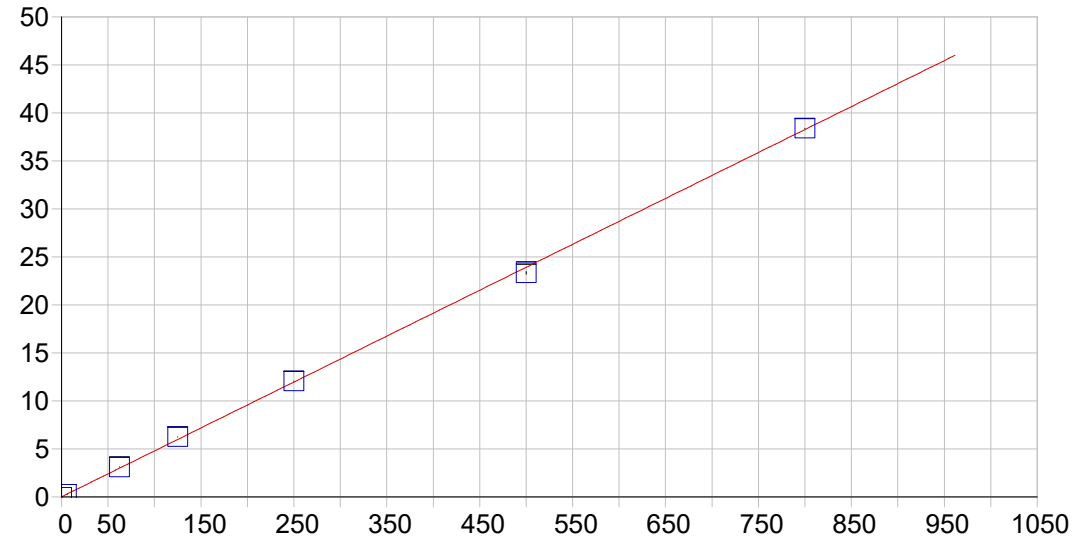
Cd 214.438 {457}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000519	Re-Slope:	1.000000
A1 (Gain):	3.821092	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.000207		
Predicted MDL:	0.000115		
Predicted MQL:	0.000382		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00052	.000	1
S1	.00500	.00527	.000	5.42	.02073	.000	1
S2	.62500	.63363	.009	1.38	2.4253	.002	1
S3	1.2500	1.2650	.015	1.20	4.8416	.024	1
S4	2.5000	2.4909	-.009	-.363	9.5332	.010	1
S5	5.0000	4.9852	-.015	-.297	19.079	.352	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



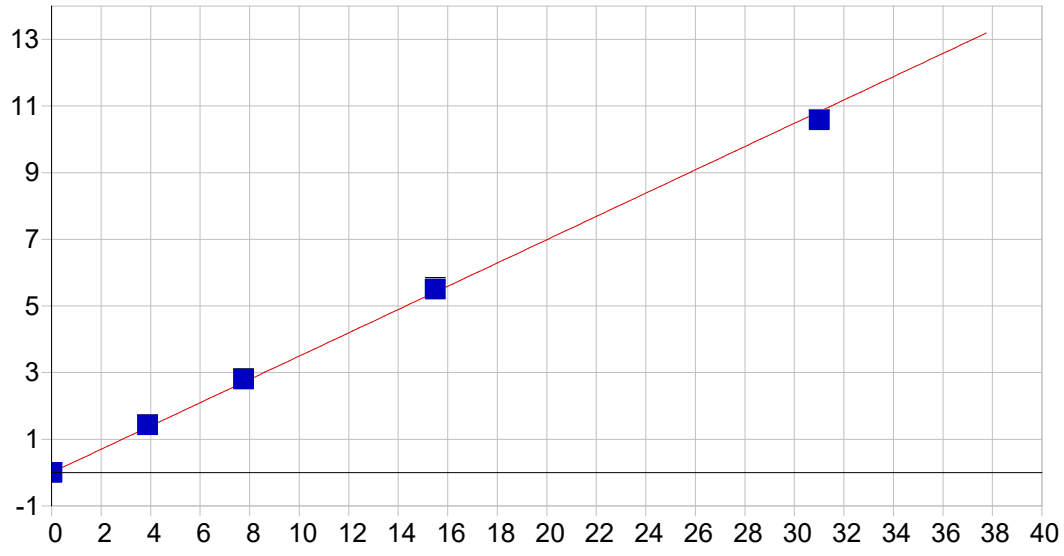
Ca 373.690 { 90}

Date of Fit:	01/02/2025 14:35:19	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.009728	Re-Slope:	1.000000
A1 (Gain):	0.047826	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999801	Status:	OK.
Std Error of Est:	0.003327		
Predicted MDL:	0.067128		
Predicted MQL:	0.223760		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00062	-.001	.000	.00970	.003	1
S1	5.0000	5.2879	.288	5.76	.26262	.006	1
S2	62.500	64.797	2.30	3.67	3.1087	.016	1
S3	125.00	130.61	5.61	4.49	6.2562	.023	1
S4	250.00	251.80	1.80	.719	12.052	.018	1
S5	500.00	487.40	-12.6	-2.52	23.320	.131	1
S6	800.00	802.61	2.61	.326	38.395	.017	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



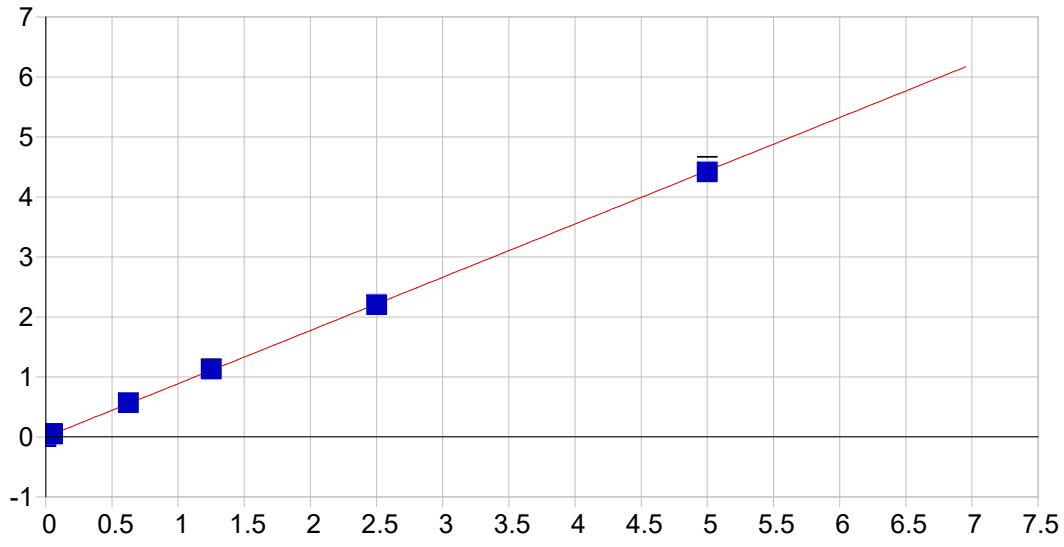
Cr 267.716 {126}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000084	Re-Slope:	1.000000
A1 (Gain):	0.349411	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999649	Status:	OK.
Std Error of Est:	0.000273		
Predicted MDL:	0.000843		
Predicted MQL:	0.002809		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00008	.000	1
S1	.01000	.01088	.001	8.81	.00389	.000	1
S2	3.8750	4.0832	.208	5.37	1.4279	.007	1
S3	7.7500	8.0138	.264	3.40	2.8023	.008	1
S4	15.500	15.747	.247	1.59	5.5064	.042	1
S5	31.000	30.280	-.720	-2.32	10.589	.011	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



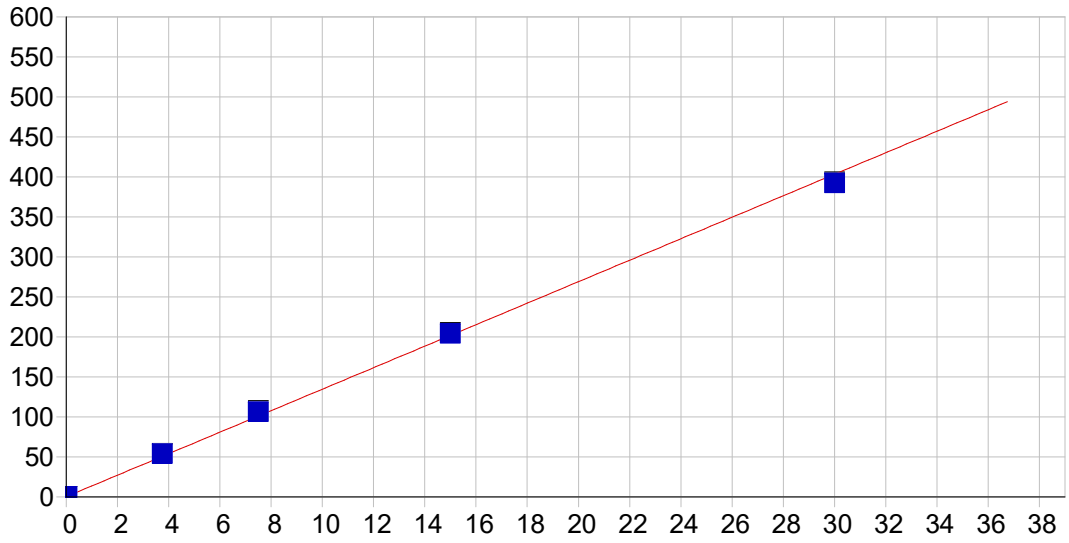
Co 228.616 {448}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000349	Re-Slope:	1.000000
A1 (Gain):	0.887172	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999927	Status:	OK.
Std Error of Est:	0.000285		
Predicted MDL:	0.000492		
Predicted MQL:	0.001641		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00035	.000	1
S1	.05000	.05420	.004	8.40	.04788	.000	1
S2	.62500	.64223	.017	2.76	.57121	.001	1
S3	1.2500	1.2698	.020	1.59	1.1298	.004	1
S4	2.5000	2.4824	-.018	-.703	2.2091	.002	1
S5	5.0000	4.9763	-.024	-.474	4.4288	.082	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



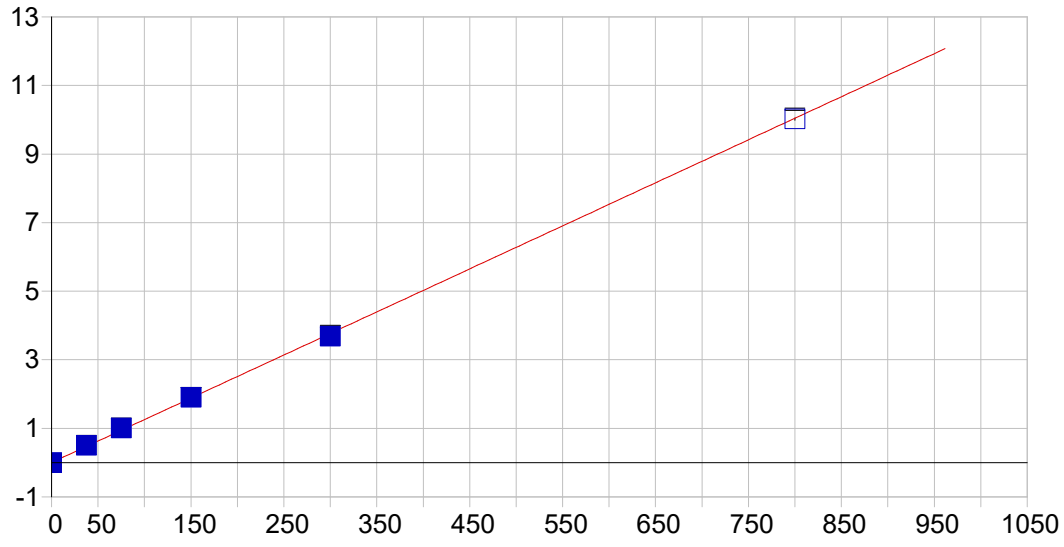
Cu 324.754 {104}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.313326	Re-Slope:	1.000000
A1 (Gain):	13.433793	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999459	Status:	OK.
Std Error of Est:	0.020301		
Predicted MDL:	0.000733		
Predicted MQL:	0.002444		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.31327	.006	1
S1	.02500	.02646	.001	5.85	.66836	.003	1
S2	3.7500	3.9829	.233	6.21	53.814	.407	1
S3	7.5000	7.9060	.406	5.41	106.51	.980	1
S4	15.000	15.178	.178	1.18	204.19	.875	1
S5	30.000	29.182	-.818	-2.73	392.29	1.41	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



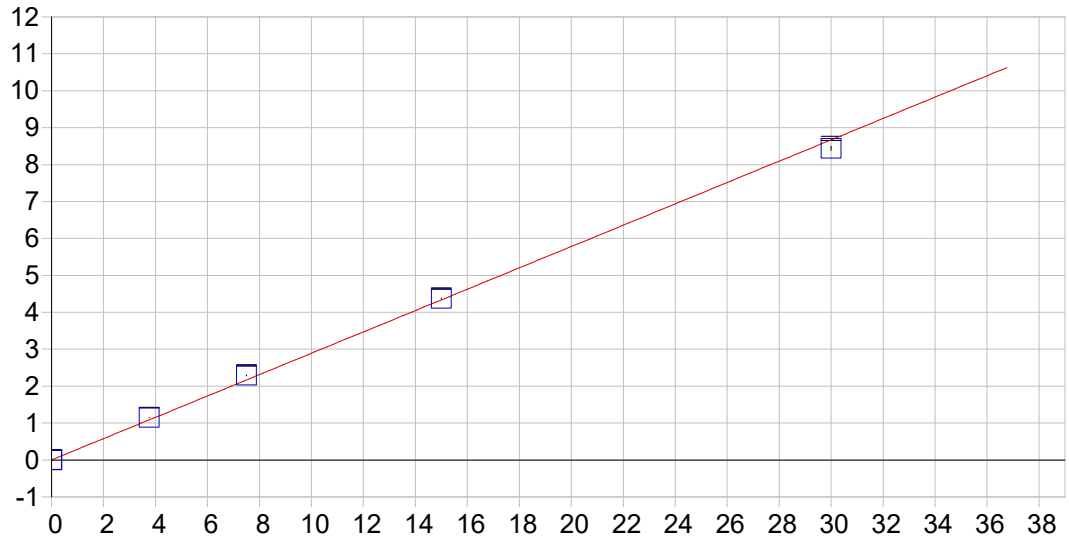
Fe 259.837 {130}

Date of Fit:	01/02/2025 14:35:19	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000240	Re-Slope:	1.000000
A1 (Gain):	0.012555	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999745	Status:	OK.
Std Error of Est:	0.000124		
Predicted MDL:	0.099341		
Predicted MQL:	0.331136		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00008	-.000	.000	.00024	.001	1
S1	.10000	.17152	.072	71.5	.00239	.001	1
S2	37.500	40.077	2.58	6.87	.50353	.002	1
S3	75.000	79.828	4.83	6.44	1.0027	.006	1
S4	150.00	151.17	1.17	.780	1.8986	.008	1
S5	300.00	293.45	-6.55	-2.18	3.6855	.027	1
S6	800.00	797.90	-2.10	-.262	10.018	.032	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



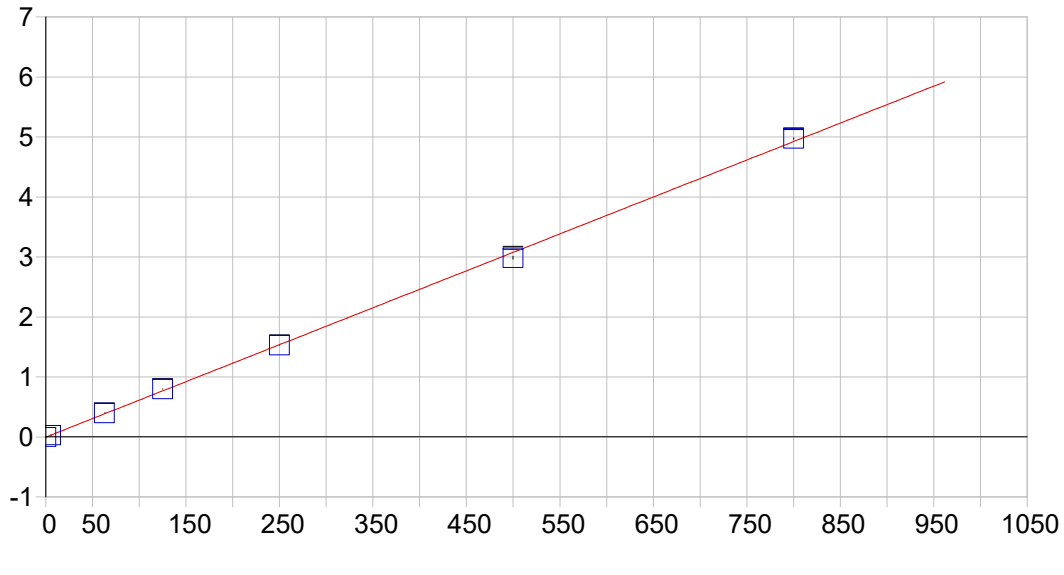
Mn 257.610 {131}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000152	Re-Slope:	1.000000
A1 (Gain):	0.289043	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999443	Status:	OK.
Std Error of Est:	0.000343		
Predicted MDL:	0.004620		
Predicted MQL:	0.015401		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00015	.001	1
S1	.01500	.01966	.005	31.1	.00553	.002	1
S2	3.7500	3.9803	.230	6.14	1.1503	.006	1
S3	7.5000	7.9311	.431	5.75	2.2923	.017	1
S4	15.000	15.131	.131	.872	4.3733	.016	1
S5	30.000	29.203	-.797	-2.66	8.4408	.058	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



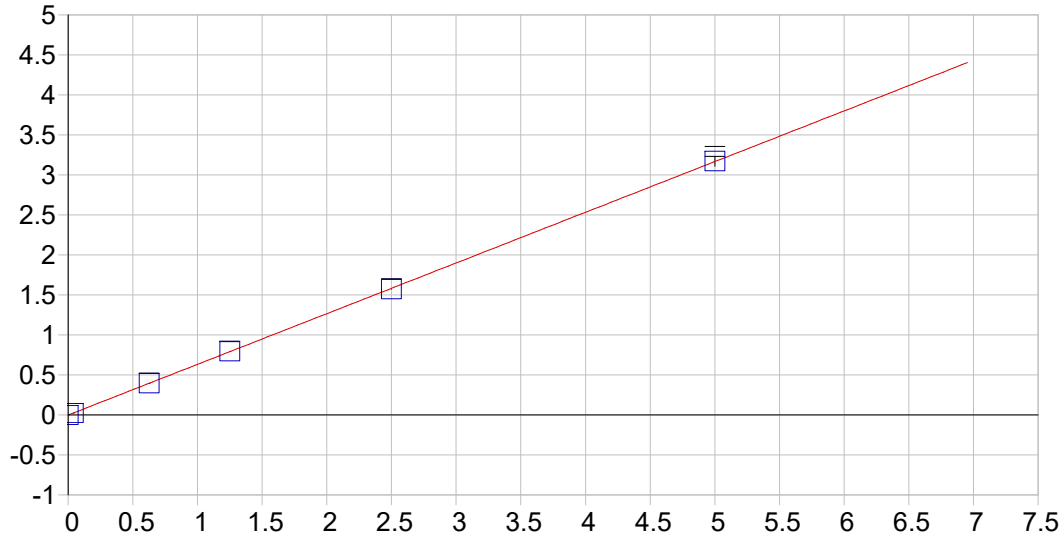
Mg 279.079 {121}

Date of Fit:	01/02/2025 14:35:19	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002459	Re-Slope:	1.000000
A1 (Gain):	0.006156	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999761	Status:	OK.
Std Error of Est:	0.000469		
Predicted MDL:	0.236661		
Predicted MQL:	0.788869		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00056	-.001	.000	-.00246	.001	1
S1	5.0000	5.2894	.289	5.79	.03010	.001	1
S2	62.500	64.830	2.33	3.73	.39663	.002	1
S3	125.00	130.18	5.18	4.15	.79893	.004	1
S4	250.00	248.84	-1.16	-.463	1.5294	.002	1
S5	500.00	485.37	-14.6	-2.93	2.9854	.023	1
S6	800.00	807.98	7.98	.998	4.9714	.014	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



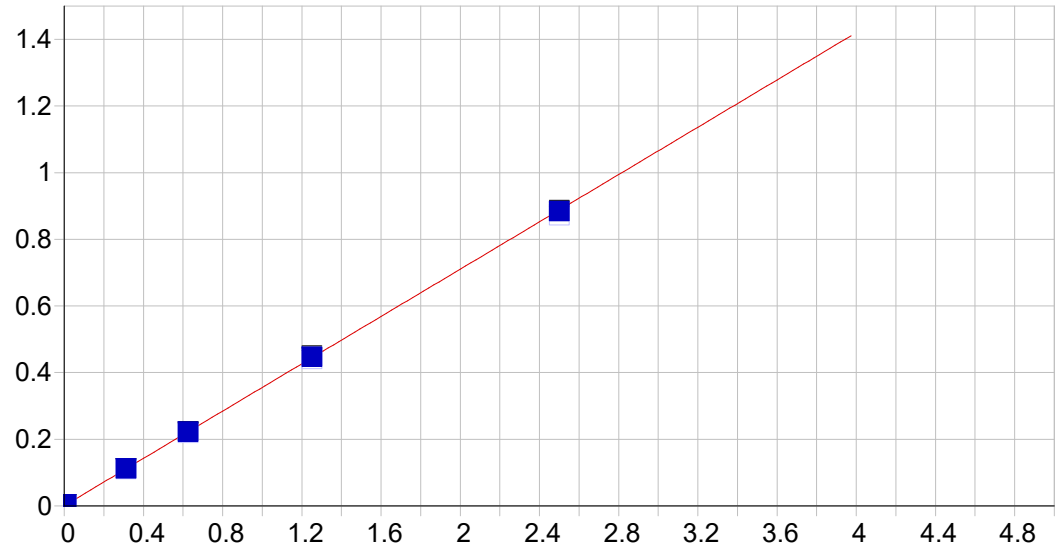
Ni 231.604 {446}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001411	Re-Slope:	1.000000
A1 (Gain):	0.633527	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000064		
Predicted MDL:	0.000943		
Predicted MQL:	0.003142		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00141	.000	1
S1	.04000	.04135	.001	3.39	.02479	.001	1
S2	.62500	.62541	.000	.065	.39480	.000	1
S3	1.2500	1.2565	.007	.522	.79463	.002	1
S4	2.5000	2.4856	-.014	-.577	1.5733	.003	1
S5	5.0000	5.0061	.006	.123	3.1701	.061	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



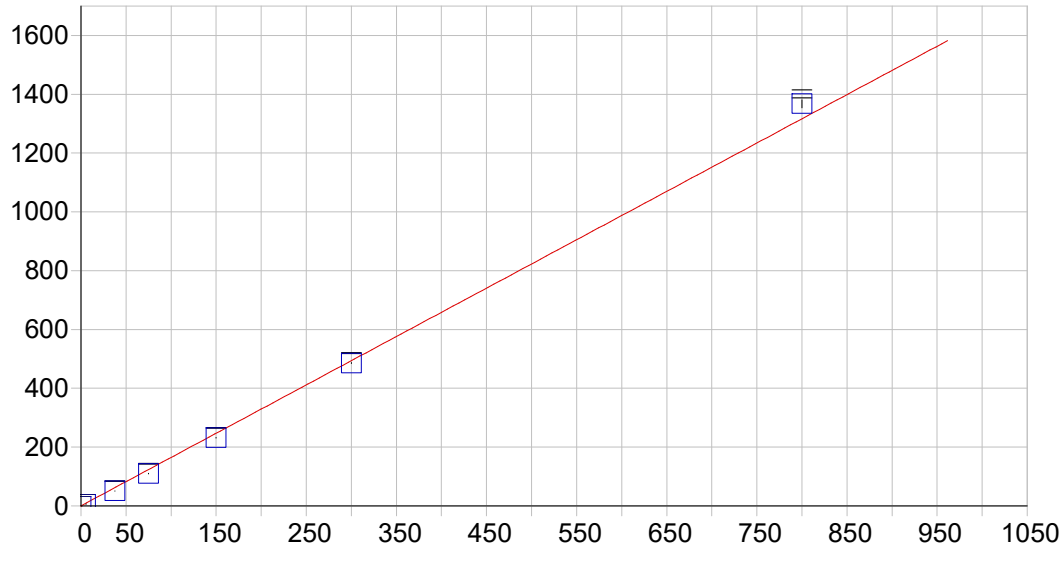
Ag 328.068 {103}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000735	Re-Slope:	1.000000
A1 (Gain):	0.354907	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.001435		
Predicted MQL:	0.004784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00073	.000	1
S1	.01000	.01020	.000	2.02	.00435	.000	1
S2	.31250	.31325	.001	.241	.11031	.001	1
S3	.62500	.62499	-.000	-.002	.21935	.001	1
S4	1.2500	1.2578	.008	.621	.44074	.004	1
S5	2.5000	2.4913	-.009	-.348	.87213	.002	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



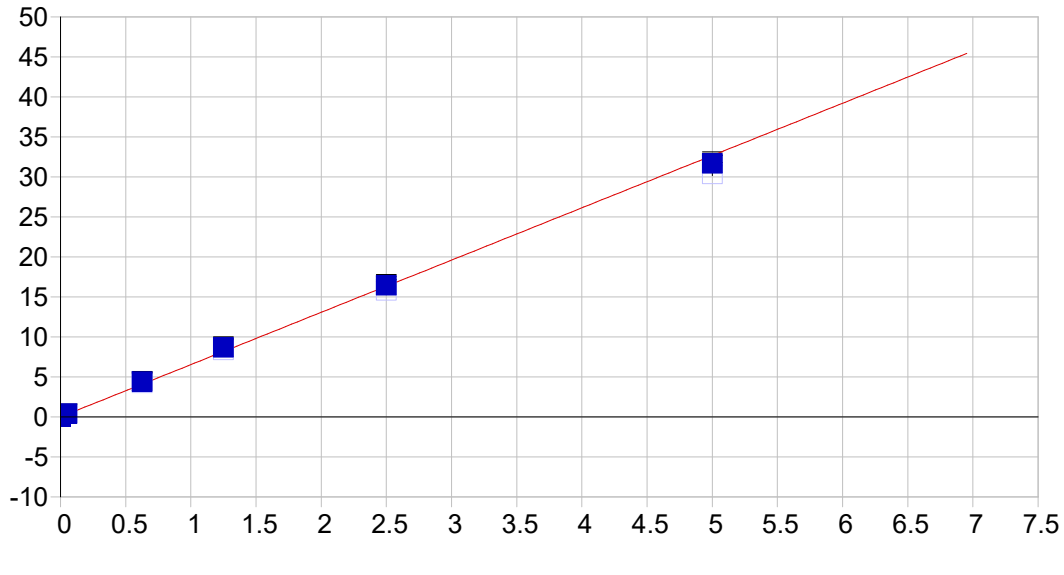
Na 818.326 { 41}

Date of Fit:	01/02/2025 14:35:19	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.252901	Re-Slope:	1.000000
A1 (Gain):	1.645423	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998363	Status:	OK.
Std Error of Est:	0.291428		
Predicted MDL:	0.019739		
Predicted MQL:	0.065797		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00308	.003	.000	.25797	.044	1
S1	5.0000	3.5981	-1.40	-28.0	6.1734	.023	1
S2	37.500	30.692	-6.81	-18.2	50.754	.418	1
S3	75.000	66.424	-8.58	-11.4	109.55	1.04	1
S4	150.00	140.65	-9.35	-6.23	231.69	.947	1
S5	300.00	295.02	-4.98	-1.66	485.68	1.79	1
S6	800.00	831.12	31.1	3.89	1367.8	13.8	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



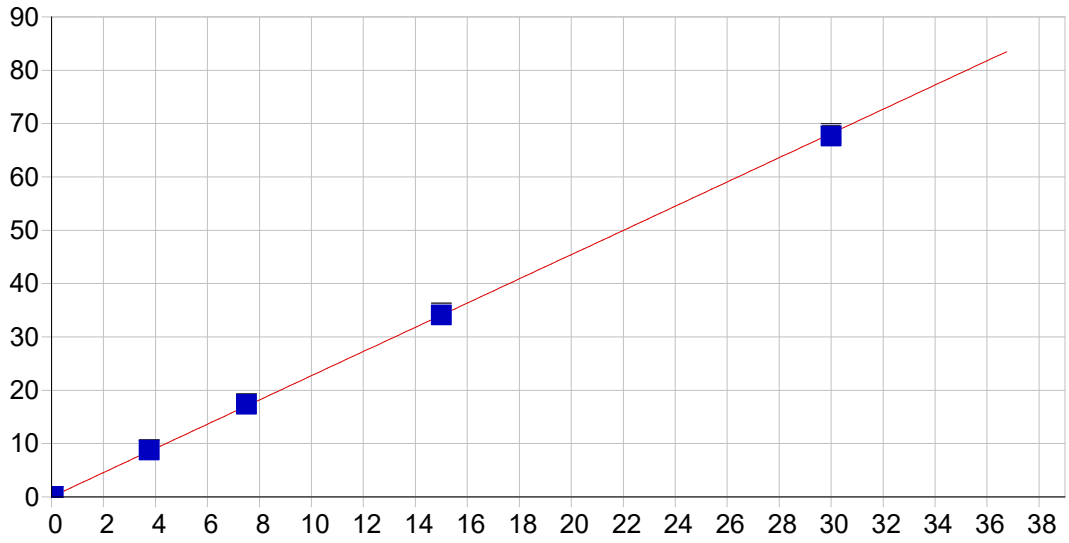
V 292.402 {115}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000382	Re-Slope:	1.000000
A1 (Gain):	6.534514	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999139	Status:	OK.
Std Error of Est:	0.006923		
Predicted MDL:	0.001052		
Predicted MQL:	0.003506		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00028	.007	1
S1	.05000	.05921	.009	18.4	.38636	.015	1
S2	.62500	.67142	.046	7.43	4.2241	.038	1
S3	1.2500	1.3290	.079	6.32	8.3572	.082	1
S4	2.5000	2.5185	.019	.740	15.803	.109	1
S5	5.0000	4.8465	-.153	-3.07	30.361	.211	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



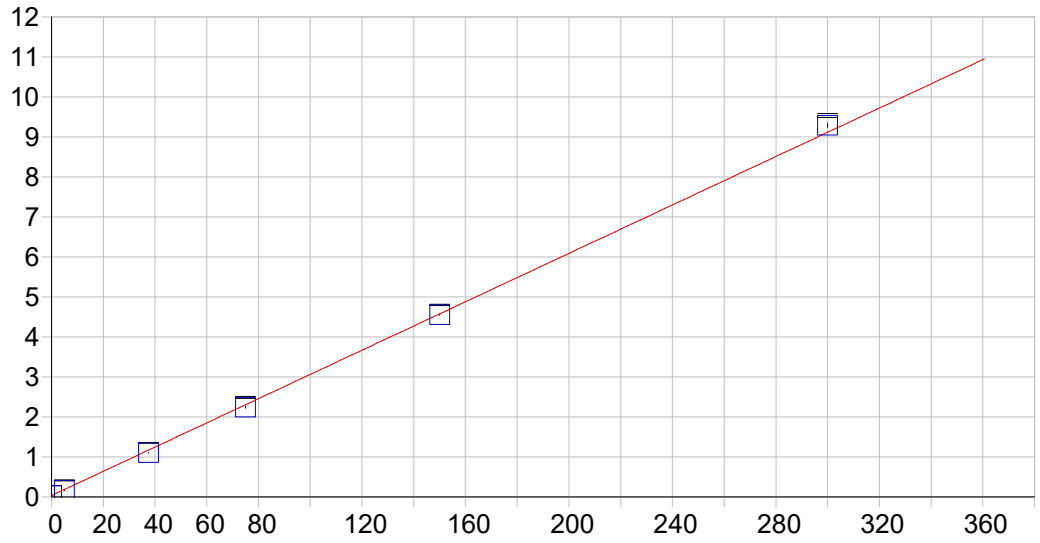
Zn 213.856 {158}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013343	Re-Slope:	1.000000
A1 (Gain):	2.270869	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999941	Status:	OK.
Std Error of Est:	0.001757		
Predicted MDL:	0.000667		
Predicted MQL:	0.002222		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.01333	.001	1
S1	.06000	.06319	.003	5.31	.15725	.001	1
S2	3.7500	3.8460	.096	2.56	8.7887	.054	1
S3	7.5000	7.6302	.130	1.74	17.424	.099	1
S4	15.000	15.001	.001	.009	34.246	.257	1
S5	30.000	29.769	-.231	-.769	67.949	.126	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



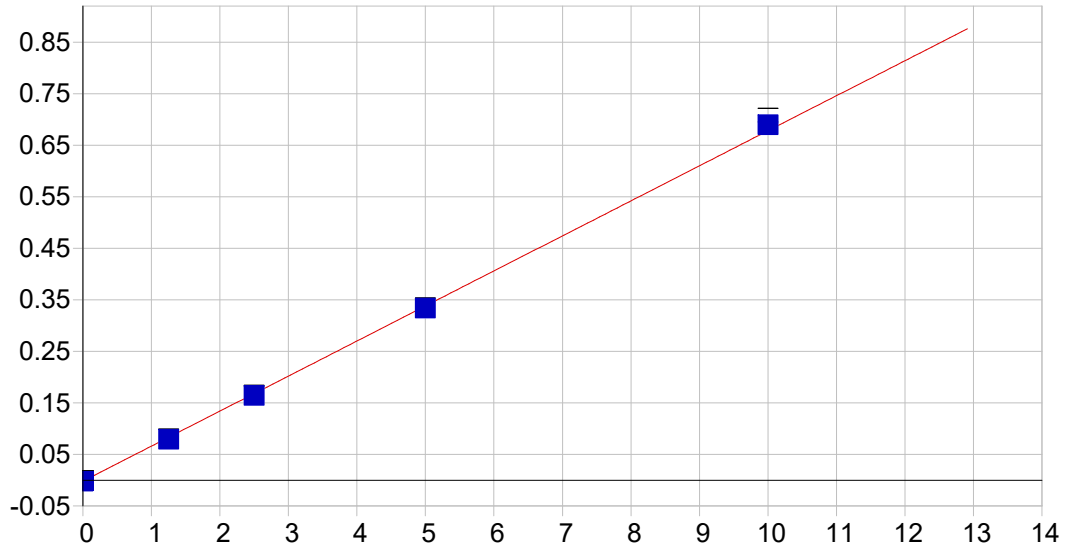
K 769.896 { 44}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.035214	Re-Slope:	1.000000
A1 (Gain):	0.030269	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999668	Status:	OK.
Std Error of Est:	0.001608		
Predicted MDL:	0.300524		
Predicted MQL:	1.001748		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00100	.001	.000	.03524	.005	1
S1	5.0000	4.3565	-.643	-12.9	.16708	.012	1
S2	37.500	35.380	-2.12	-5.65	1.1062	.008	1
S3	75.000	72.880	-2.12	-2.83	2.2412	.024	1
S4	150.00	149.15	-.845	-.563	4.5500	.018	1
S5	300.00	305.73	5.73	1.91	9.2894	.046	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



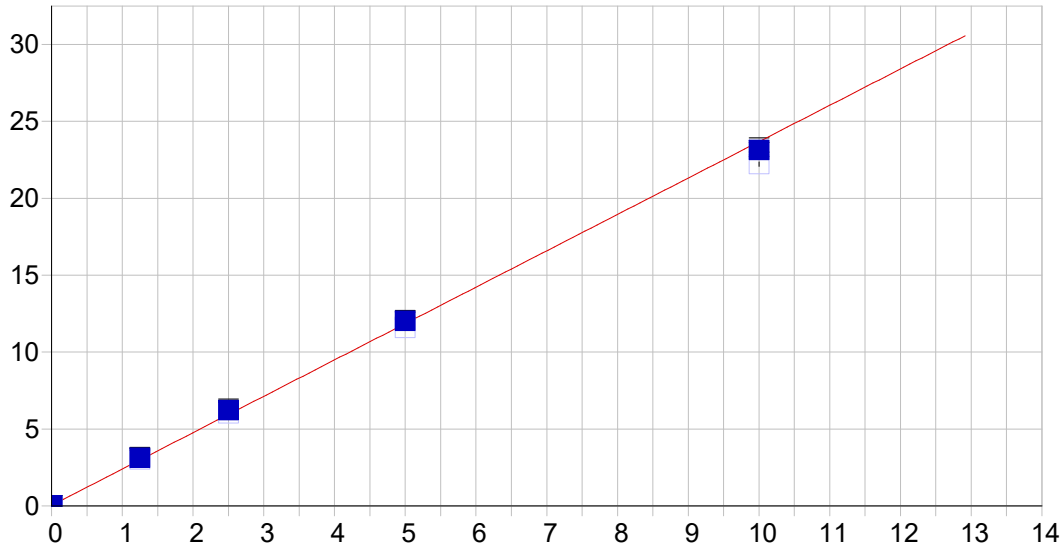
P 177.495 {490}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002005	Re-Slope:	1.000000
A1 (Gain):	0.068032	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999806	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.003629		
Predicted MQL:	0.012097		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00200	.000	1
S1	.01000	.00967	-.000	-3.33	-.00134	.000	1
S2	1.2500	1.1979	-.052	-4.17	.07937	.000	1
S3	2.5000	2.4433	-.057	-2.27	.16397	.001	1
S4	5.0000	4.9361	-.064	-1.28	.33331	.001	1
S5	10.000	10.173	.173	1.73	.68910	.013	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

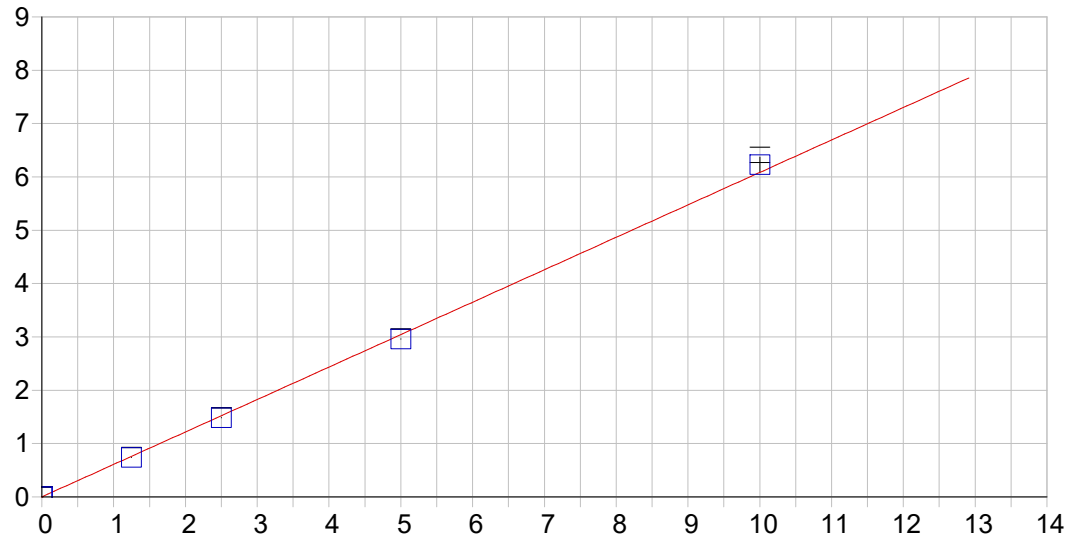


B 249.678 {135}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.031765	Re-Slope:	1.000000
A1 (Gain):	2.365005	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999174	Status:	OK.
Std Error of Est:	0.001551		
Predicted MDL:	0.002071		
Predicted MQL:	0.006903		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.03179	.006	1
S1	.01000	-.00177	-.012	-118.	.02744	.005	1
S2	1.2500	1.3069	.057	4.56	3.0103	.031	1
S3	2.5000	2.6205	.121	4.82	6.0045	.067	1
S4	5.0000	5.0688	.069	1.38	11.570	.059	1
S5	10.000	9.7659	-.234	-2.34	22.229	.146	1



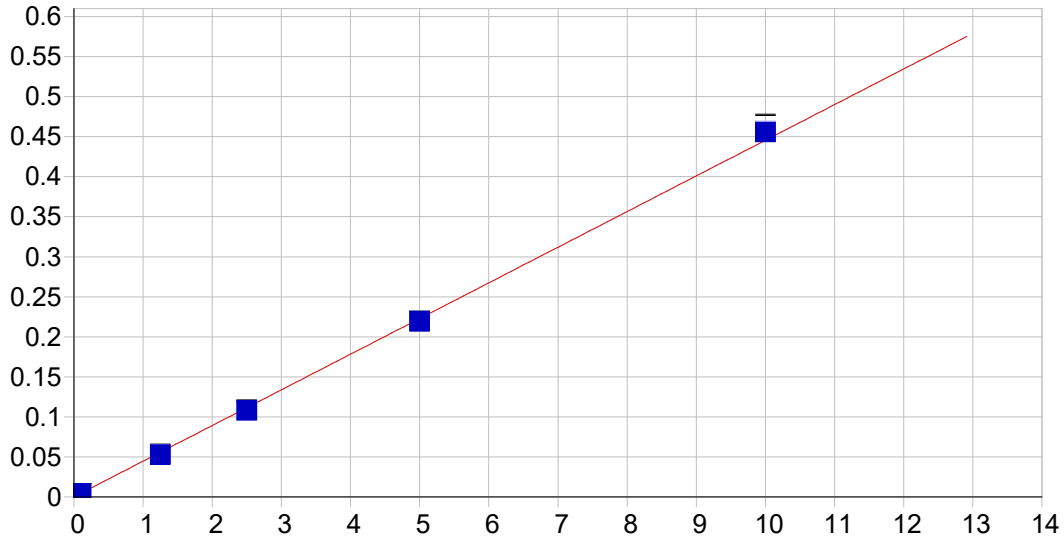
Mo 202.030 {467}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000834	Re-Slope:	1.000000
A1 (Gain):	0.608353	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999685	Status:	OK.
Std Error of Est:	0.000256		
Predicted MDL:	0.000755		
Predicted MQL:	0.002515		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00083	.000	1
S1	.01000	.01031	.000	3.05	.00710	.001	1
S2	1.2500	1.2137	-.036	-2.90	.73920	.002	1
S3	2.5000	2.4375	-.062	-2.50	1.4837	.003	1
S4	5.0000	4.8641	-.136	-2.72	2.9599	.002	1
S5	10.000	10.234	.234	2.34	6.2270	.146	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



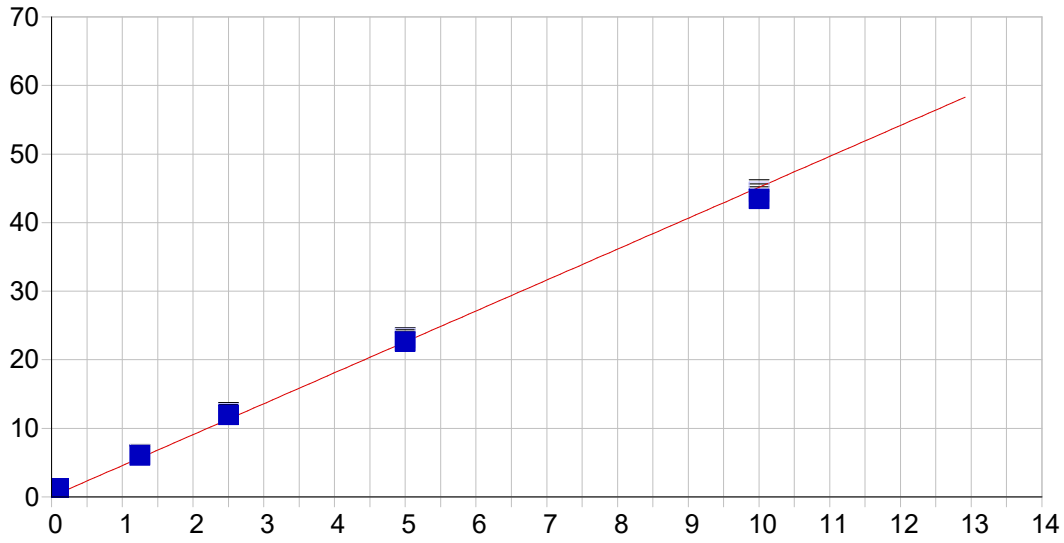
S 182.034 {485}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000143	Re-Slope:	1.000000
A1 (Gain):	0.044536	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999669	Status:	OK.
Std Error of Est:	0.000061		
Predicted MDL:	0.005324		
Predicted MQL:	0.017745		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00014	.000	1
S1	.10000	.09742	-.003	-2.58	.00448	.000	1
S2	1.2500	1.1858	-.064	-5.14	.05313	.000	1
S3	2.5000	2.4209	-.079	-3.16	.10832	.001	1
S4	5.0000	4.9158	-.084	-1.68	.21979	.000	1
S5	10.000	10.230	.230	2.30	.45718	.008	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



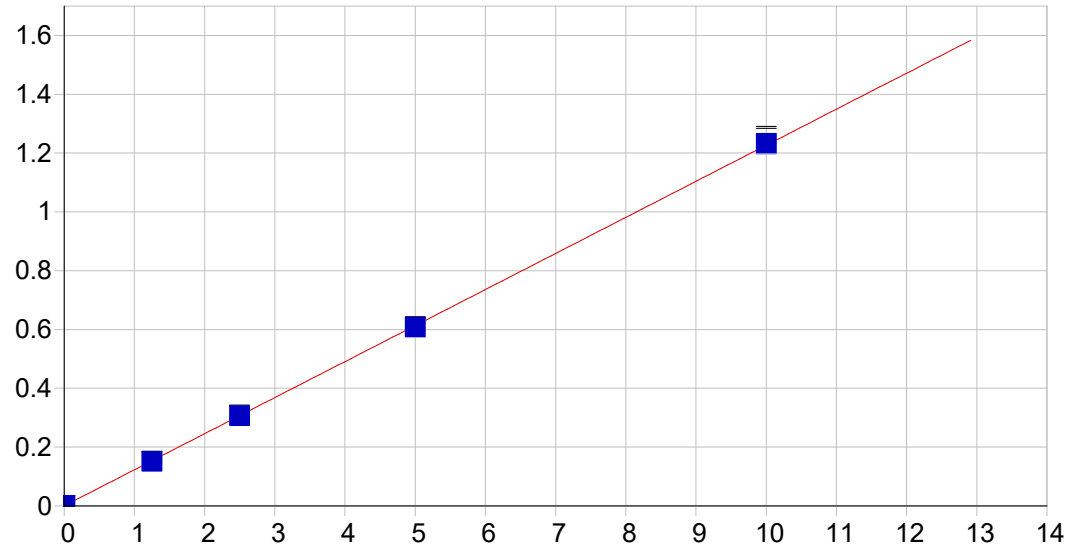
Si 251.611 {134}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.063398	Re-Slope:	1.000000
A1 (Gain):	4.508709	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.992531	Status:	OK.
Std Error of Est:	0.030115		
Predicted MDL:	0.001118		
Predicted MQL:	0.003725		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00017	-.000	.000	.06262	.006	1
S1	.10000	.26489	.165	165.	1.2641	.008	1
S2	1.2500	1.3263	.076	6.10	6.1711	.050	1
S3	2.5000	2.6317	.132	5.27	12.185	.128	1
S4	5.0000	5.0024	.002	.049	23.130	.102	1
S5	10.000	9.6261	-.374	-3.74	44.488	.292	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



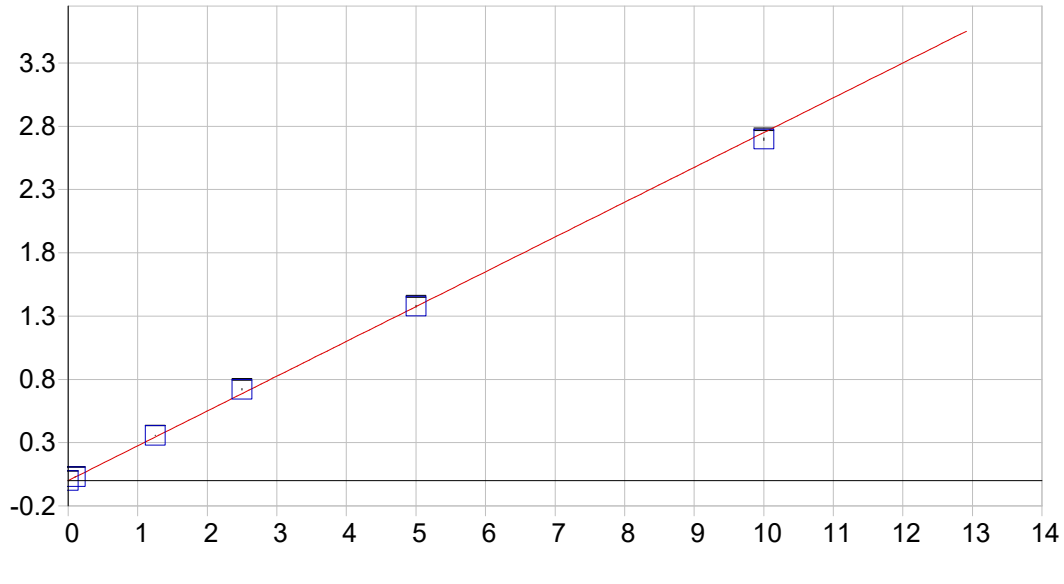
Sn 189.989 {478}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000335	Re-Slope:	1.000000
A1 (Gain):	0.122613	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.001735		
Predicted MQL:	0.005783		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00034	.000	1
S1	.00700	.00419	-.003	-40.2	.00081	.000	1
S2	1.2500	1.2346	-.015	-1.23	.15095	.000	1
S3	2.5000	2.5032	.003	.126	.30572	.002	1
S4	5.0000	4.9591	-.041	-.818	.60532	.001	1
S5	10.000	10.056	.056	.558	1.2272	.023	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



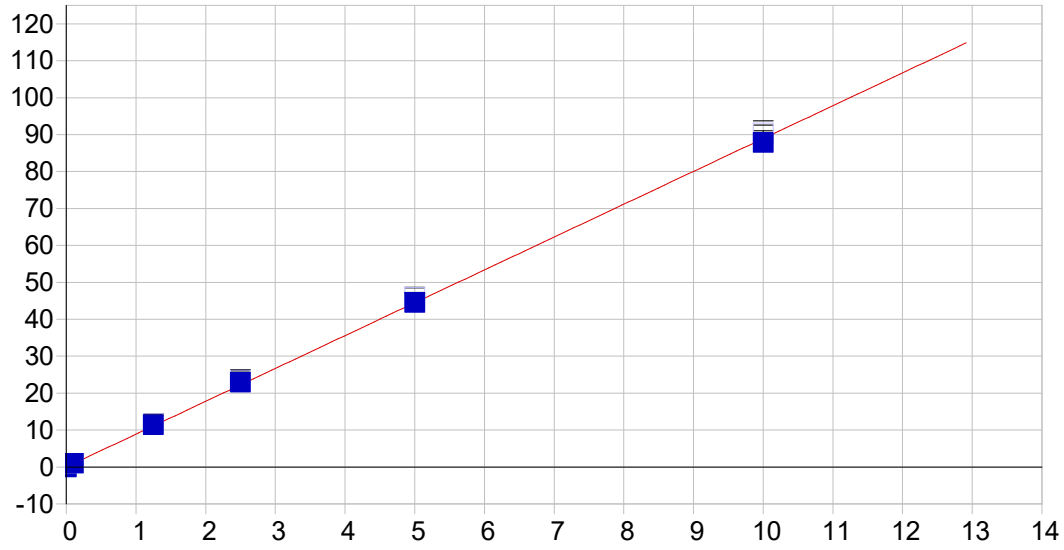
Ti 336.121 {100}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000173	Re-Slope:	1.000000
A1 (Gain):	0.274983	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999677	Status:	OK.
Std Error of Est:	0.000371		
Predicted MDL:	0.009155		
Predicted MQL:	0.030517		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00017	.002	1
S1	.10000	.10749	.007	7.49	.02973	.003	1
S2	1.2500	1.2988	.049	3.90	.35731	.002	1
S3	2.5000	2.6236	.124	4.94	.72162	.005	1
S4	5.0000	5.0093	.009	.187	1.3777	.007	1
S5	10.000	9.8108	-.189	-1.89	2.6980	.010	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



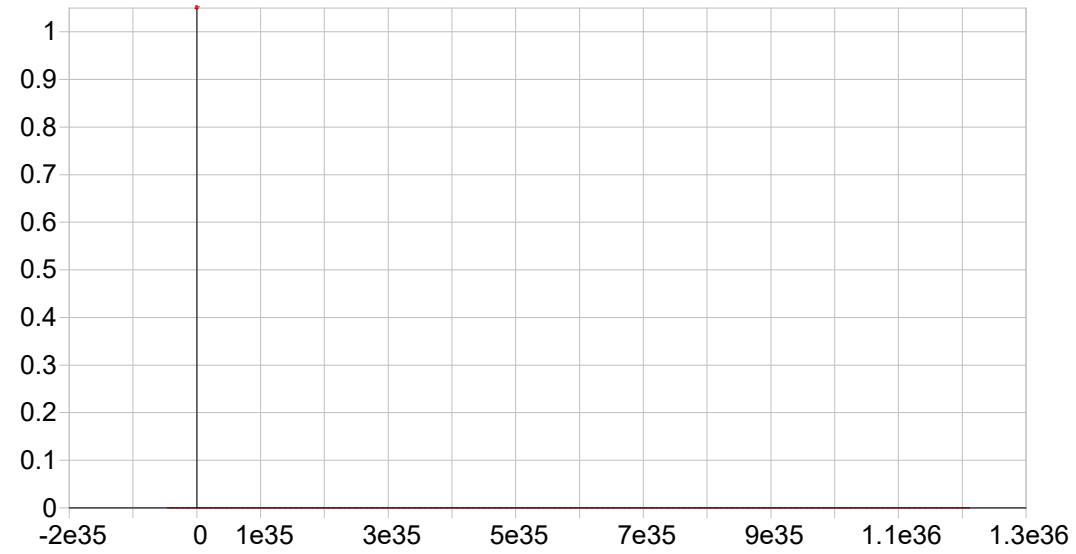
Sr 407.771 { 83}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.007866	Re-Slope:	1.000000
A1 (Gain):	8.893481	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999848	Status:	OK.
Std Error of Est:	0.008491		
Predicted MDL:	0.000430		
Predicted MQL:	0.001432		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00002	-.000	.000	-.00800	.004	1
S1	.10000	.11110	.011	11.1	.98108	.006	1
S2	1.2500	1.2827	.033	2.62	11.734	.045	1
S3	2.5000	2.5766	.077	3.07	23.574	.121	1
S4	5.0000	5.0076	.008	.151	45.861	.086	1
S5	10.000	9.8723	-.128	-1.28	90.459	.591	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

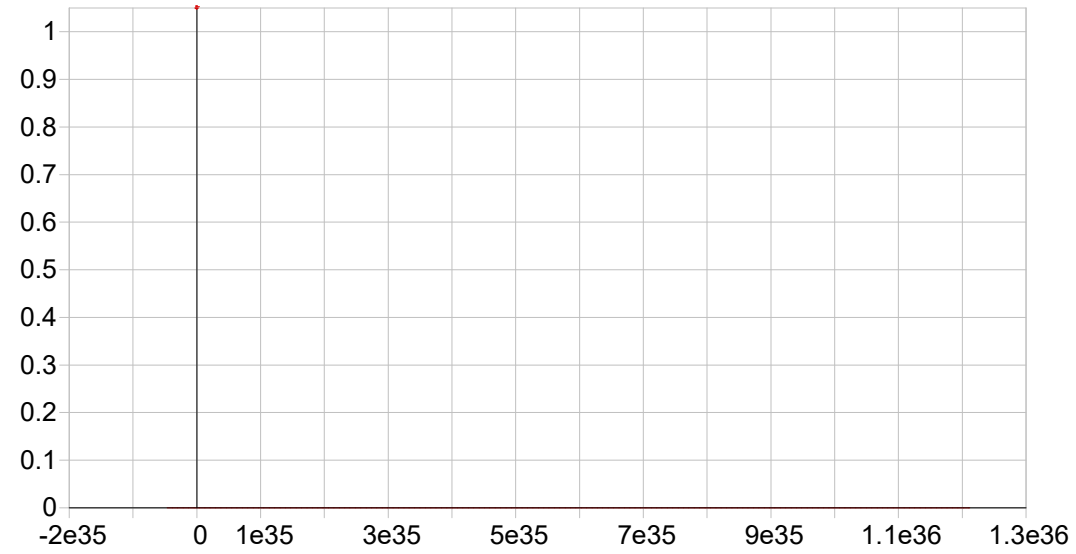


Y 224.306 {450}*

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



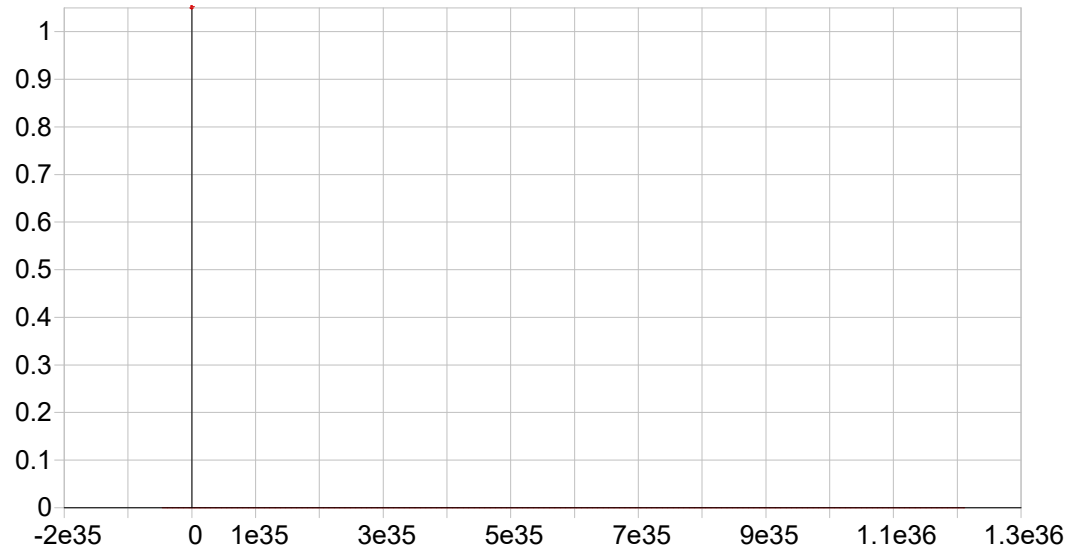
Y 360.073 { 94}*

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

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

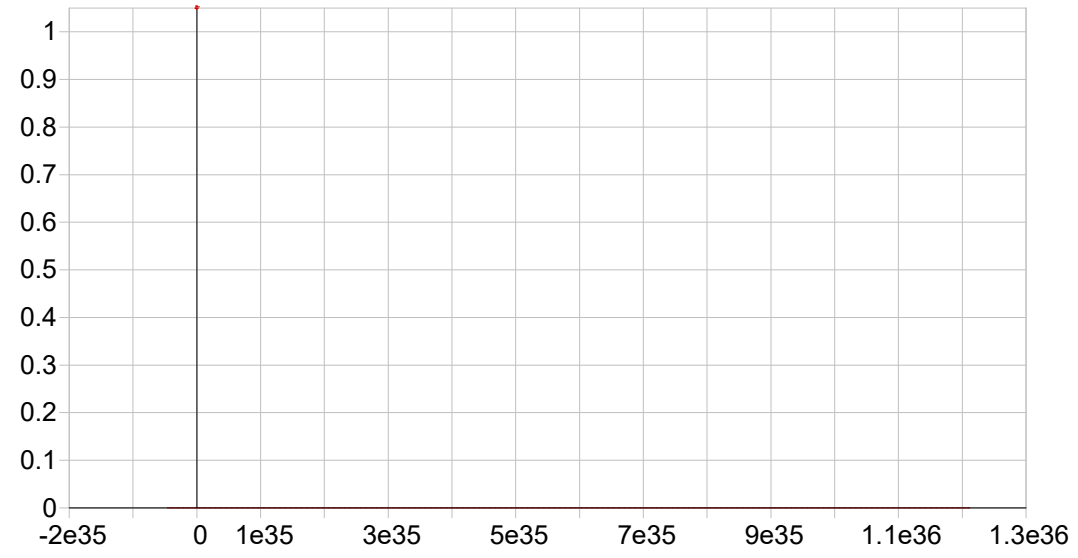


Y 371.030 { 91}*

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

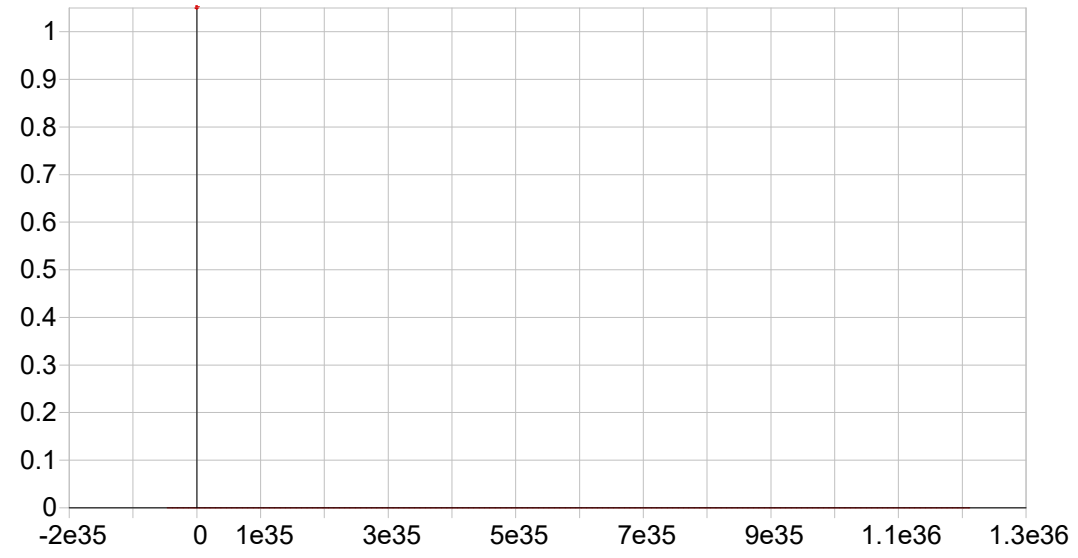
Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5



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



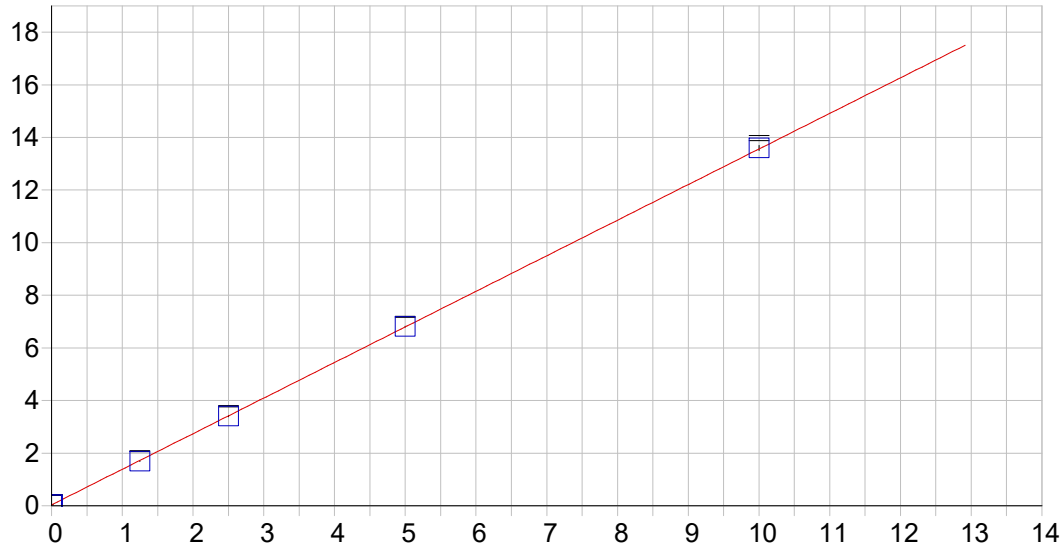
In 230.606 {446}*

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:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

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



Li 670.784 { 50}

Date of Fit:	01/02/2025 14:31:06	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.034422		Re-Slope:	1.000000	
A1 (Gain):	1.352669		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999716	Status:	OK.		
Std Error of Est:	0.000662				
Predicted MDL:	0.005962				
Predicted MQL:	0.019874				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.03444	.007	1
S5	10.000	10.030	.030	.302	13.602	.100	1
S4	5.0000	5.0088	.009	.177	6.8097	.018	1
S3	2.5000	2.4952	-.005	-.194	3.4095	.023	1
S2	1.2500	1.2281	-.022	-1.75	1.6957	.022	1
S1	.01500	.00265	-.012	-82.3	.03801	.004	1

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S0 Acquired: 01/02/2025 14:07:24 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	.34199	-.00028	.00019	-.00018	.00097	-.00069	.02664	.00586
Stddev	.27546	.00024	.00077	.00028	.00014	.00411	.01472	.00148
%RSD	80.546	88.049	403.23	160.07	14.276	597.39	55.267	25.304
#1	.17442	.00000	.00027	.00010	.00089	-.00156	.01110	.00740
#2	.65991	-.00042	.00092	-.00046	.00089	-.00429	.04038	.00444
#3	.19164	-.00041	-.00062	-.00017	.00113	.00379	.02842	.00574

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00052	.00970	.00008	-.00035	.31327	.00163	.00031	-.00246
Stddev	.00021	.00272	.00020	.00025	.00595	.00149	.00103	.00126
%RSD	39.870	28.027	233.96	70.568	1.8980	91.687	328.87	51.244
#1	.00053	.00773	.00021	-.00060	.31886	.00172	-.00087	-.00108
#2	.00072	.01280	.00019	-.00010	.31394	.00308	.00102	-.00355
#3	.00031	.00856	-.00014	-.00036	.30702	.00009	.00079	-.00275

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00141	.00073	.25797	-.00009	.01333	.03524	-.00200	.03179
Stddev	.00019	.00040	.04353	.00535	.00127	.00491	.00017	.00555
%RSD	13.765	54.884	16.872	5644.3	9.5041	13.933	8.3121	17.469
#1	-.00151	.00036	.23791	.00603	.01460	.03561	-.00187	.02660
#2	-.00154	.00068	.30791	-.00246	.01207	.03016	-.00219	.03112
#3	-.00119	.00116	.22810	-.00386	.01333	.03996	-.00195	.03765

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00083	.00014	.06262	.00034	.00017	-.00800	.03444
Stddev	.00022	.00014	.00617	.00018	.00238	.00408	.00705
%RSD	26.689	99.308	9.8578	52.885	1410.3	50.963	20.483
#1	.00100	.00003	.05555	.00053	-.00258	-.00430	.02649
#2	.00092	.00009	.06536	.00029	.00161	-.01237	.03996
#3	.00058	.00030	.06695	.00019	.00148	-.00734	.03686

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S0 Acquired: 01/02/2025 14:07:24 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 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	1681.6	17247.	791.38	1334.2	1979.5
Stddev	1.1	41.	6.52	13.7	4.0
%RSD	.06520	.24054	.82417	1.0292	.20190
#1	1680.4	17199.	787.02	1319.4	1974.9
#2	1681.7	17275.	788.26	1346.6	1982.0
#3	1682.6	17265.	798.88	1336.7	1981.6

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S1 Acquired: 01/02/2025 14:11:30 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	2.3138	.00186	.00437	.00228	.00786	.01304	.99788	.13188
Stddev	.7073	.00011	.00084	.00023	.00013	.00269	.01400	.00368
%RSD	30.570	5.7058	19.190	10.299	1.6004	20.646	1.4026	2.7879
#1	2.6102	.00189	.00385	.00245	.00796	.01199	1.0111	.13506
#2	2.8246	.00195	.00392	.00201	.00790	.01103	.99933	.13273
#3	1.5065	.00175	.00533	.00238	.00772	.01610	.98322	.12785

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02073	.26262	.00389	.04788	.66836	.00300	.00571	.03010
Stddev	.00031	.00550	.00028	.00029	.00329	.00100	.00067	.00091
%RSD	1.5114	2.0947	7.1326	.60082	.49240	33.252	11.819	3.0123
#1	.02038	.26806	.00404	.04797	.67190	.00365	.00493	.03024
#2	.02099	.25706	.00406	.04756	.66540	.00185	.00614	.02914
#3	.02083	.26276	.00357	.04811	.66777	.00350	.00606	.03093

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02479	.00435	6.1734	.48233	.15725	.16708	-.00134	.02744
Stddev	.00058	.00008	.0229	.01938	.00119	.01192	.00016	.00479
%RSD	2.3504	1.8273	.37039	4.0178	.75364	7.1335	11.557	17.453
#1	.02449	.00444	6.1997	.50371	.15843	.15344	-.00124	.02369
#2	.02546	.00430	6.1613	.46593	.15726	.17231	-.00152	.03284
#3	.02442	.00431	6.1590	.47734	.15606	.17550	-.00127	.02580

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00710	.00448	1.2641	.00081	.02973	.98108	.03801
Stddev	.00055	.00019	.0079	.00017	.00285	.00609	.00439
%RSD	7.8131	4.3116	.62329	20.379	9.6002	.62095	11.551
#1	.00754	.00468	1.2732	.00081	.02951	.98709	.04298
#2	.00648	.00429	1.2591	.00098	.02699	.97491	.03467
#3	.00730	.00447	1.2600	.00065	.03269	.98123	.03639

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S1 Acquired: 01/02/2025 14:11:30 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 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	1722.5	17593.	805.34	1361.6	2035.5
Stddev	2.6	61.	4.56	2.4	3.7
%RSD	.15339	.34724	.56600	.17783	.18076
#1	1723.7	17522.	800.29	1359.1	2034.1
#2	1724.4	17632.	809.16	1363.9	2039.7
#3	1719.5	17624.	806.57	1361.8	2032.8

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S2 Acquired: 01/02/2025 14:15:38 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	253.22	.10646	2.3756	.09581	.15687	2.4044	11.477	3.0231
Stddev	.14	.00040	.0030	.00037	.00086	.0122	.025	.0258
%RSD	.05696	.37207	.12708	.38985	.54896	.50589	.21498	.85239
#1	253.06	.10649	2.3728	.09617	.15606	2.3948	11.460	2.9946
#2	253.33	.10605	2.3751	.09542	.15777	2.4003	11.505	3.0448
#3	253.26	.10684	2.3788	.09585	.15678	2.4181	11.466	3.0300

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.4253	3.1087	1.4279	.57121	53.814	.47969	1.1501	.39663
Stddev	.0021	.0157	.0070	.00082	.407	.00241	.0063	.00174
%RSD	.08555	.50418	.48972	.14357	.75569	.50170	.55164	.43863
#1	2.4251	3.0926	1.4268	.57128	53.356	.48053	1.1445	.39492
#2	2.4233	3.1095	1.4215	.57036	54.133	.48155	1.1570	.39839
#3	2.4275	3.1239	1.4353	.57199	53.953	.47697	1.1488	.39657

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.39480	.11031	50.754	5.3407	8.7887	1.1062	.07937	3.0103
Stddev	.00037	.00082	.418	.0453	.0536	.0080	.00028	.0314
%RSD	.09437	.74736	.82408	.84870	.60965	.72786	.35029	1.0416
#1	.39523	.11042	50.288	5.2886	8.8368	1.0973	.07932	2.9741
#2	.39465	.10944	51.096	5.3711	8.7310	1.1131	.07912	3.0294
#3	.39453	.11108	50.878	5.3623	8.7985	1.1080	.07967	3.0273

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.73920	.05313	6.1711	.15095	.35731	11.734	1.6957
Stddev	.00213	.00041	.0495	.00031	.00178	.045	.0216
%RSD	.28867	.76976	.80222	.20308	.49935	.38765	1.2728
#1	.74000	.05269	6.1173	.15075	.35855	11.681	1.6708
#2	.73678	.05322	6.2148	.15080	.35527	11.759	1.7095
#3	.74081	.05349	6.1811	.15130	.35812	11.761	1.7067

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S2 Acquired: 01/02/2025 14:15:38 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 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	1633.1	16803.	791.52	1290.8	1871.1
Stddev	1.1	13.	7.06	4.4	.8
%RSD	.06758	.07761	.89238	.34016	.04301
#1	1633.6	16811.	797.79	1285.7	1872.0
#2	1633.8	16809.	783.87	1293.7	1870.9
#3	1631.8	16788.	792.91	1292.9	1870.5

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S3 Acquired: 01/02/2025 14:19:32 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	501.52	.21179	4.7588	.19357	.31511	4.8467	23.095	6.0523
Stddev	3.35	.00062	.0211	.00113	.00119	.0458	.109	.0686
%RSD	.66792	.29433	.44293	.58376	.37800	.94542	.47377	1.1331
#1	504.01	.21248	4.7792	.19431	.31552	4.8953	23.142	6.0731
#2	497.71	.21127	4.7603	.19414	.31377	4.8043	23.173	6.1080
#3	502.83	.21162	4.7371	.19227	.31605	4.8404	22.970	5.9757

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.8416	6.2562	2.8023	1.1298	106.51	.95495	2.2905	.79893
Stddev	.0243	.0232	.0075	.0036	.98	.00440	.0193	.00361
%RSD	.50269	.37009	.26881	.31804	.92057	.46092	.84219	.45204
#1	4.8613	6.2793	2.8109	1.1333	106.71	.95982	2.3127	.80271
#2	4.8492	6.2563	2.7968	1.1300	107.37	.95376	2.2816	.79857
#3	4.8144	6.2330	2.7992	1.1261	105.44	.95127	2.2773	.79552

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.79463	.21935	109.55	10.600	17.424	2.2412	.16397	6.0045
Stddev	.00225	.00065	1.04	.096	.099	.0244	.00082	.0674
%RSD	.28265	.29820	.95001	.90815	.56958	1.0879	.49790	1.1231
#1	.79609	.22003	109.91	10.631	17.395	2.2489	.16386	6.0318
#2	.79575	.21872	110.36	10.677	17.534	2.2609	.16484	6.0540
#3	.79204	.21931	108.38	10.492	17.342	2.2139	.16321	5.9277

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.4837	.10832	12.185	.30572	.72162	23.574	3.4095
Stddev	.0033	.00051	.128	.00182	.00527	.121	.0227
%RSD	.22533	.46964	1.0526	.59382	.73082	.51411	.66726
#1	1.4875	.10851	12.246	.30710	.72746	23.677	3.4322
#2	1.4824	.10871	12.271	.30640	.71720	23.605	3.4098
#3	1.4812	.10774	12.037	.30366	.72020	23.441	3.3867

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S3 Acquired: 01/02/2025 14:19:32 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 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	1602.3	16731.	785.55	1266.9	1813.3
Stddev	.4	119.	6.94	3.8	3.2
%RSD	.02309	.71311	.88369	.29734	.17512
#1	1602.5	16612.	779.89	1263.9	1810.8
#2	1602.5	16850.	783.46	1265.8	1812.2
#3	1601.9	16730.	793.29	1271.2	1816.9

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S4 Acquired: 01/02/2025 14:23:21 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	963.58	.41612	9.5847	.38484	.63267	9.3997	45.345	11.662
Stddev	2.84	.00190	.0171	.00041	.00031	.0611	.104	.075
%RSD	.29425	.45730	.17802	.10656	.04834	.64965	.22948	.63892
#1	966.78	.41743	9.5954	.38524	.63234	9.3296	45.406	11.747
#2	961.36	.41699	9.5937	.38485	.63294	9.4278	45.225	11.624
#3	962.61	.41394	9.5650	.38442	.63273	9.4415	45.403	11.613

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.5332	12.052	5.5064	2.2091	204.19	1.8136	4.3669	1.5294
Stddev	.0100	.018	.0424	.0020	.87	.0040	.0174	.0024
%RSD	.10493	.15136	.76976	.09249	.42832	.22227	.39929	.15776
#1	9.5354	12.065	5.5411	2.2070	205.10	1.8155	4.3523	1.5266
#2	9.5419	12.031	5.5189	2.2094	203.36	1.8089	4.3622	1.5309
#3	9.5223	12.060	5.4591	2.2111	204.10	1.8163	4.3862	1.5306

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.5733	.44074	231.69	19.890	34.246	4.5500	.33331	11.570
Stddev	.0030	.00352	.95	.157	.257	.0177	.00067	.059
%RSD	.19353	.79843	.40859	.78962	.75052	.39014	.20038	.50589
#1	1.5764	.44283	231.66	19.835	34.343	4.5445	.33400	11.612
#2	1.5704	.44271	230.76	19.768	33.954	4.5357	.33328	11.503
#3	1.5730	.43667	232.65	20.067	34.440	4.5699	.33266	11.594

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.9599	.21979	23.130	.60532	1.3777	45.861	6.8097
Stddev	.0023	.00008	.102	.00097	.0068	.086	.0176
%RSD	.07639	.03507	.44159	.16097	.49390	.18752	.25854
#1	2.9598	.21982	23.214	.60581	1.3806	45.762	6.8144
#2	2.9622	.21985	23.016	.60594	1.3699	45.915	6.7902
#3	2.9577	.21970	23.159	.60419	1.3825	45.906	6.8245

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S4 Acquired: 01/02/2025 14:23:21 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 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	1512.3	16040.	777.11	1196.0	1713.5
Stddev	4.8	99.	.99	4.1	5.1
%RSD	.31620	.61965	.12755	.34550	.29541
#1	1516.4	15987.	776.13	1193.9	1716.4
#2	1507.1	15978.	778.11	1200.7	1707.6
#3	1513.4	16155.	777.07	1193.3	1716.4

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S5 Acquired: 01/02/2025 14:27:07 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1871.6	.82621	19.571	.79169	1.3427	18.873	89.254	22.782
Stddev	8.0	.01514	.366	.01821	.0306	.092	.568	.112
%RSD	.42767	1.8329	1.8678	2.3007	2.2817	.48657	.63654	.49198
#1	1870.5	.80872	19.149	.77067	1.3074	18.851	88.697	22.903
#2	1880.1	.83485	19.793	.80165	1.3613	18.975	89.833	22.759
#3	1864.2	.83505	19.772	.80276	1.3595	18.795	89.233	22.683

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.079	23.320	10.589	4.4288	392.29	3.5462	8.4296	2.9854
Stddev	.352	.131	.011	.0816	1.41	.0260	.0566	.0228
%RSD	1.8433	.56096	.10348	1.8423	.35973	.73351	.67195	.76368
#1	18.673	23.232	10.581	4.3347	391.05	3.5285	8.4373	2.9768
#2	19.294	23.470	10.584	4.4798	391.99	3.5761	8.4820	3.0113
#3	19.269	23.258	10.601	4.4719	393.83	3.5340	8.3695	2.9683

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.1701	.87213	485.68	37.977	67.949	9.2894	.68910	22.229
Stddev	.0606	.00196	1.79	.245	.126	.0458	.01312	.146
%RSD	1.9123	.22452	.36910	.64380	.18511	.49295	1.9045	.65492
#1	3.1001	.86987	487.22	38.245	67.809	9.2479	.67395	22.378
#2	3.2066	.87334	486.10	37.921	67.986	9.3385	.69699	22.220
#3	3.2036	.87319	483.71	37.766	68.052	9.2816	.69636	22.088

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.2270	.45718	44.488	1.2272	2.6980	90.459	13.602
Stddev	.1457	.00849	.292	.0234	.0099	.591	.100
%RSD	2.3399	1.8574	.65579	1.9089	.36592	.65315	.73788
#1	6.0589	.44738	44.786	1.2001	2.6945	89.986	13.505
#2	6.3169	.46231	44.475	1.2405	2.7091	91.121	13.706
#3	6.3052	.46185	44.203	1.2409	2.6903	90.270	13.595

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S5 Acquired: 01/02/2025 14:27:07 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 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	1387.7	15985.	780.77	1121.8	1614.4
Stddev	31.6	56.	2.93	3.0	30.2
%RSD	2.2772	.35278	.37574	.26433	1.8732
#1	1424.0	16035.	777.56	1125.0	1649.1
#2	1372.9	15995.	781.45	1121.3	1600.7
#3	1366.2	15924.	783.30	1119.1	1593.5

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: S6 Acquired: 01/02/2025 14:31:11 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S06 Custom ID2: Custom ID3:
Comment:

Elem	Al3961	Ca3736	Fe2598	Mg2790	Na8183
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	52.635	38.395	9.5695	4.9714	1367.8
Stddev	.207	.017	.0269	.0137	13.8
%RSD	.39266	.04354	.28126	.27469	1.0068
#1	52.872	38.400	9.5968	4.9849	1382.5
#2	52.490	38.409	9.5686	4.9717	1365.6
#3	52.543	38.377	9.5430	4.9576	1355.3

Int. Std.	Y_3710
Units	Cts/S
Avg	756.10
Stddev	3.79
%RSD	.50104
#1	752.88
#2	755.15
#3	760.27

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICV007 Acquired: 01/02/2025 14:58:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV007 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.067848	1.016511	.9892466	.9973911	1.027788	2.366696
Stddev	.004696	.000394	.0029128	.0060908	.000280	.069070
%RSD	.4397943	.0387133	.2944481	.6106720	.0272241	2.918398
#1	1.063628	1.016118	.9861538	.9933896	1.027654	2.361515
#2	1.067009	1.016905	.9919378	.9943830	1.028110	2.300363
#3	1.072907	1.016509	.9896483	1.004401	1.027600	2.438211

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5325256	.5437108	.5121265	10.44248	.5666764	.5103494
Stddev	.0015572	.0052203	.0008749	.06117	.0009908	.0017930
%RSD	.2924168	.9601236	.1708355	.5858235	.1748370	.3513299
#1	.5325989	.5377911	.5111935	10.47261	.5660619	.5087893
#2	.5340449	.5476551	.5122575	10.48274	.5678193	.5099508
#3	.5309331	.5456862	.5129285	10.37208	.5661478	.5123082

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5319906	10.72711	.5482377	6.222497	.5196213	.2538817
Stddev	.0018857	.15600	.0059048	.123815	.0015066	.0018844
%RSD	.3544577	1.454241	1.077057	1.989789	.2899405	.7422297
#1	.5300397	10.62993	.5454898	6.128146	.5180948	.2525706
#2	.5338035	10.64436	.5550157	6.176648	.5196619	.2560411
#3	.5321285	10.90705	.5442075	6.362696	.5211072	.2530333

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.05008	.4607932	1.007548	10.80885	F .0054743	F .0029043
Stddev	.03308	.0018208	.005308	.15647	.0030143	.0040711
%RSD	.3291370	.3951393	.5268636	1.447604	55.06281	140.1780
#1	10.01734	.4592210	1.006499	10.98952	.0072791	.0045625
#2	10.04940	.4627882	1.013302	10.71713	.0019945	-.001734
#3	10.08349	.4603705	1.002841	10.71990	.0071492	.005885

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICV007 Acquired: 01/02/2025 14:58:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV007 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0008948	F .0122109	F .0003174	F .0036226	F .0036802	F -.009613
Stddev	.0005720	.0068886	.0009235	.0005689	.0087172	.000163
%RSD	63.92356	56.41346	290.9860	15.70468	236.8663	1.697759
#1	.0011356	.0081899	.0005264	.0033515	.0062117	-.009639
#2	.0002418	.0201650	.0011185	.0032400	.0108515	-.009438
#3	.0013071	.0082778	-.000693	.0042764	-.006023	-.009762

Elem	Li6707
Units	ppm
Avg	F .0090051
Stddev	.0077654
%RSD	86.23334
#1	.0147758
#2	.0001762
#3	.0120633

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.192	17034.21	780.4242	1341.793	1976.381
Stddev	5.989	68.99	5.7605	9.216	3.650
%RSD	.3566687	.4050118	.7381184	.6868273	.1846871
#1	1672.328	17036.99	786.1725	1344.610	1973.099
#2	1683.358	16963.88	774.6517	1331.497	1980.312
#3	1681.890	17101.77	780.4483	1349.271	1975.731

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICB007 Acquired: 01/02/2025 15:28:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB007 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004632	-.000051	-.000217	-.000685	-.002275	.0344323	-.000656
Stddev	.001762	.001785	.001877	.001423	.005124	.0450329	.000834
%RSD	38.04872	3511.132	863.9657	207.6340	225.1924	130.7868	127.0954
#1	-.002719	.001200	-.001585	-.000991	-.000027	.0059555	-.001618
#2	-.006189	.000742	-.000990	.000866	-.008139	.0109910	-.000133
#3	-.004988	-.002095	.001923	-.001930	.001340	.0863505	-.000217

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000725	.0000372	.1101527	-.000044	-.000649	-.002134	.0415198
Stddev	.0002528	.0000361	.0309166	.000254	.000231	.000613	.0366448
%RSD	348.6682	96.95645	28.06705	579.4838	35.66879	28.74367	88.25855
#1	.0002554	.0000547	.0746658	.000139	-.000916	-.002797	.0490238
#2	.0001781	-.000004	.1245278	-.000334	-.000529	-.002021	.0738317
#3	-.000216	.000061	.1312645	.000063	-.000502	-.001586	.0017039

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076405	-.211852	.0002456	.0006057	-.010943	-.000667	-.003042
Stddev	.0011865	.161176	.0007375	.0008231	.008213	.000677	.000814
%RSD	15.52856	76.07978	300.3015	135.8936	75.05008	101.4432	26.76248
#1	.0087837	-.156928	-.000603	.0013743	-.020419	-.001439	-.003352
#2	.0064151	-.085316	.000733	-.000263	-.006510	-.000174	-.002118
#3	.0077226	-.393312	.000607	.000706	-.005899	-.000389	-.003655

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.366517	.0023307	-.006831	-.000132	-.004276	-.002563	-.002867
Stddev	.093012	.0004601	.002670	.000638	.004958	.000887	.000713
%RSD	25.37729	19.74220	39.08934	482.7958	115.9418	34.61705	24.85699
#1	-.441023	.0018128	-.009886	.000596	.001126	-.002191	-.003343
#2	-.262272	.0024868	-.004941	-.000399	-.008618	-.001923	-.003210
#3	-.396255	.0026924	-.005666	-.000594	-.005337	-.003576	-.002048

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICB007 Acquired: 01/02/2025 15:28:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB007 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.006598	.0004026	-.007093
Stddev	.007881	.0000936	.001370
%RSD	119.4357	23.24400	19.31040
#1	-.008830	.0004480	-.008553
#2	-.013123	.0004649	-.006890
#3	.002157	.0002950	-.005837

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1661.688	16945.71	764.4753	1308.451	1959.295
Stddev	8.248	88.16	5.8932	8.418	10.640
%RSD	.4963498	.5202641	.7708815	.6433356	.5430573
#1	1654.726	16998.06	759.2183	1317.026	1953.859
#2	1670.797	16843.92	770.8458	1300.200	1971.556
#3	1659.542	16995.15	763.3617	1308.127	1952.472

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICSA007 Acquired: 01/02/2025 15:44:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA007 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091271	.0096030	.0031429	.0184897	.0094758	232.7766
Stddev	.0015455	.0034992	.0004962	.0034565	.0049925	2.2671
%RSD	16.93297	36.43904	15.78832	18.69429	52.68654	.9739214
#1	.0098076	.0127302	.0037152	.0203917	.0072398	235.3730
#2	.0102157	.0102553	.0028815	.0144999	.0151954	231.1889
#3	.0073582	.0058235	.0028321	.0205776	.0059921	231.7679

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069539	.0029129	.0021667	243.2667	.0521295	.0491956
Stddev	.0007761	.0002605	.0003224	2.1492	.0000301	.0001742
%RSD	11.16122	8.942255	14.88099	.8834741	.0577013	.3540171
#1	.0074064	.0031742	.0019167	245.7473	.0520983	.0493119
#2	.0060577	.0029114	.0020528	241.9612	.0521320	.0489954
#3	.0073976	.0026532	.0025306	242.0918	.0521583	.0492795

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.016416	100.8948	.0050509	257.3366	.0037924	-.003430
Stddev	.000570	.9475	.0044563	2.7497	.0010411	.001799
%RSD	3.470267	.9391424	88.22785	1.068537	27.45328	52.44301
#1	-.016549	101.8466	.0007674	260.4359	.0036710	-.003696
#2	-.015792	99.9515	.0047234	255.1894	.0048889	-.005082
#3	-.016908	100.8864	.0096618	256.3846	.0028172	-.001513

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2321922	.0053887	-.032976	-.568182	.0048076	F .0294362
Stddev	.0169515	.0009930	.000444	.205638	.0033111	.0010701
%RSD	7.300632	18.42666	1.345889	36.19224	68.87172	3.635308
#1	.2385179	.0045973	-.033473	-.804294	.0017205	.0289087
#2	.2450712	.0065028	-.032834	-.428320	.0043978	.0306677
#3	.2129874	.0050659	-.032620	-.471933	.0083044	.0287323

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICSA007 Acquired: 01/02/2025 15:44:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA007 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062924	.0264301	-.004270	F .0121870	.0024093	.0054021
Stddev	.0005809	.0044548	.000810	.0014328	.0044602	.0009405
%RSD	9.231440	16.85514	18.96404	11.75679	185.1225	17.41054
#1	.0057571	.0293861	-.004965	.0105341	.0075299	.0044736
#2	.0069100	.0213063	-.003381	.0130741	.0003268	.0063542
#3	.0062100	.0285979	-.004464	.0129530	-.000629	.0053784

Elem	Li6707
Units	ppm
Avg	.0042855
Stddev	.0030908
%RSD	72.12151
#1	.0007368
#2	.0063884
#3	.0057313

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1613.756	16319.24	783.2479	1271.822	1780.294
Stddev	2.247	119.21	3.9325	9.631	.904
%RSD	.1392457	.7304964	.5020809	.7572257	.0507787
#1	1612.355	16353.24	779.2597	1270.796	1781.337
#2	1612.565	16417.76	783.3616	1281.924	1779.727
#3	1616.348	16186.72	787.1223	1262.745	1779.818

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICSAB007 Acquired: 01/02/2025 15:53:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB007 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1143682	.1149605	.0550744	.0708960	.5922772	219.5727
Stddev	.0023869	.0038679	.0029742	.0057769	.0092095	1.9989
%RSD	2.087028	3.364586	5.400380	8.148387	1.554928	.9103511
#1	.1157679	.1119421	.0525916	.0674364	.5830056	217.5094
#2	.1116122	.1136187	.0583708	.0775650	.6014233	221.5002
#3	.1157246	.1193206	.0542609	.0676865	.5924025	219.7084

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5302080	.5300331	1.058652	231.9214	.5950584	.4624724
Stddev	.0035673	.0029543	.028486	1.1807	.0008381	.0115808
%RSD	.6728118	.5573864	2.690775	.5090875	.1408494	2.504103
#1	.5265693	.5269161	1.025791	230.7054	.5956062	.4491008
#2	.5336993	.5327922	1.073841	233.0633	.5940935	.4690388
#3	.5303554	.5303908	1.076325	231.9955	.5954755	.4692777

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4849853	96.37101	.5424474	243.8862	1.048439	.2030887
Stddev	.0033363	.73767	.0058518	1.9222	.028028	.0014863
%RSD	.6879177	.7654486	1.078787	.7881630	2.673330	.7318643
#1	.4811460	95.84612	.5367763	242.5131	1.016095	.2041388
#2	.4871807	97.21443	.5484646	246.0830	1.063629	.2037392
#3	.4866291	96.05249	.5421013	243.0626	1.065594	.2013880

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2059100	.5493980	.9850458	-.855499	.0077577	F .0272579
Stddev	.0210907	.0036781	.0031304	.186733	.0018163	.0015362
%RSD	10.24268	.6694831	.3177957	21.82739	23.41350	5.635791
#1	.1914211	.5458061	.9833872	-1.02621	.0057818	.0262032
#2	.1962025	.5531567	.9830936	-.65607	.0081365	.0265502
#3	.2301065	.5492312	.9886565	-.88421	.0093547	.0290204

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: ICSAB007 Acquired: 01/02/2025 15:53:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB007 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057174	.0251254	-.002720	F .0098517	-.000778	.0046656
Stddev	.0007386	.0054923	.000712	.0020595	.007455	.0007672
%RSD	12.91782	21.85953	26.17886	20.90525	958.2831	16.44271
#1	.0048846	.0287309	-.001910	.0089489	.007367	.0037992
#2	.0059744	.0278410	-.003247	.0122084	-.007263	.0049391
#3	.0062930	.0188043	-.003003	.0083977	-.002438	.0052586

Elem	Li6707
Units	ppm
Avg	-.006439
Stddev	.000757
%RSD	11.75025
#1	-.006990
#2	-.005577
#3	-.006752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1640.218	17203.57	825.1474	1345.549	1813.583
Stddev	29.585	60.31	5.4764	.649	38.900
%RSD	1.803729	.3505806	.6636843	.0482688	2.144923
#1	1673.996	17140.73	830.0722	1344.899	1858.320
#2	1618.907	17208.99	819.2499	1345.549	1787.727
#3	1627.750	17260.99	826.1202	1346.198	1794.702

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCV055 Acquired: 01/02/2025 16:02:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV055 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.949851	4.823003	24.66610	4.972359	4.909994	399.2742	10.21191
Stddev	.012672	.004065	.04341	.015815	.007712	.6468	.05472
%RSD	.2560026	.0842905	.1759849	.3180586	.1570739	.1619897	.5358333
#1	4.948341	4.818374	24.62430	4.956543	4.911983	399.3747	10.24714
#2	4.938002	4.825991	24.66305	4.972360	4.916517	399.8649	10.14888
#3	4.963210	4.824646	24.71095	4.988173	4.901482	398.5831	10.23973

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5202236	2.483925	412.1974	15.71734	2.504099	15.34519	413.7850
Stddev	.0027592	.000807	.8264	.06906	.001493	.06640	1.5513
%RSD	.5303820	.0325088	.2004946	.4393816	.0596394	.4326900	.3749155
#1	.5233126	2.484409	413.1036	15.73156	2.503062	15.40871	414.9053
#2	.5180035	2.482993	411.4852	15.64228	2.503423	15.27625	414.4354
#3	.5193546	2.484373	412.0036	15.77819	2.505810	15.35061	412.0143

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.34145	407.2856	2.502335	1.278167	417.8745	2.542652	15.11136
Stddev	.04703	2.0820	.003109	.007799	2.3771	.002836	.07451
%RSD	.3065391	.5111809	.1242437	.6101768	.5688627	.1115498	.4931034
#1	15.38941	409.5028	2.502233	1.286053	415.3902	2.545473	15.03342
#2	15.29541	406.9820	2.505493	1.270457	418.1057	2.539801	15.11878
#3	15.33953	405.3722	2.499277	1.277990	420.1275	2.542680	15.18190

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	156.4246	4.973756	5.144123	4.884100	4.991553	5.118982	5.016006
Stddev	.9657	.006879	.010439	.003977	.007477	.023926	.002258
%RSD	.6173477	.1383054	.2029372	.0814330	.1497919	.4673985	.0450096
#1	156.9004	4.966396	5.151920	4.888521	4.998289	5.144666	5.018187
#2	155.3134	4.980023	5.132263	4.880812	4.983508	5.097325	5.016153
#3	157.0601	4.974850	5.148186	4.882968	4.992863	5.114956	5.013679

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCV055 Acquired: 01/02/2025 16:02:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV055 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.100706	4.840849	5.156940
Stddev	.009852	.016956	.006869
%RSD	.1931576	.3502630	.1331915
#1	5.100337	4.858156	5.159336
#2	5.110738	4.824268	5.149194
#3	5.091044	4.840123	5.162290

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1471.500	15707.49	764.6645	1172.747	1652.249
Stddev	2.396	80.97	1.9527	11.663	2.839
%RSD	.1628199	.5154612	.2553683	.9944861	.1718082
#1	1472.537	15791.39	766.8604	1186.213	1653.934
#2	1468.760	15701.26	763.1231	1166.150	1648.971
#3	1473.203	15629.82	764.0100	1165.878	1653.840

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCB055 Acquired: 01/02/2025 16:06:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB055 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000782	-.000175	.0005253	-.000622	-.007098	.0005753
Stddev	.002408	.004336	.0010131	.002865	.005220	.0408037
%RSD	307.9302	2473.301	192.8787	460.9721	73.54566	7093.227
#1	.000918	.004344	.0015393	.000901	-.001622	-.045580
#2	-.003538	-.004302	-.000487	-.003927	-.007655	.015456
#3	.000274	-.000568	.000524	.001161	-.012018	.031850

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000359	.0000027	.0000857	-.009120	.0008925	-.000377
Stddev	.000427	.0001946	.0000505	.122314	.0004320	.000384
%RSD	119.1577	7126.758	58.96276	1341.218	48.40205	101.7198
#1	.000022	-.000144	.0001431	-.130756	.0013403	-.000482
#2	-.000276	.000223	.0000481	.113861	.0008587	-.000698
#3	-.000821	-.000071	.0000657	-.010464	.0004783	.000048

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000614	.0991899	.0078800	-.043116	.0007188	.0009279
Stddev	.000798	.2040339	.0011487	.224855	.0003086	.0014164
%RSD	129.9607	205.7003	14.57695	521.5129	42.94000	152.6405
#1	-.000252	.1576114	.0089973	-.279914	.0010549	-.000547
#2	-.001529	.2676406	.0079404	-.016939	.0006536	.002278
#3	-.000061	-.127682	.0067024	.167505	.0004480	.001052

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0769327	-.000265	.0041083	-.250474	.0006025	.0154073
Stddev	.0048349	.000560	.0010780	.195152	.0013857	.0025736
%RSD	6.284536	211.1312	26.23888	77.91319	229.9671	16.70364
#1	.0729274	-.000498	.0053390	-.451361	-.000966	.0161418
#2	.0755671	-.000670	.0033315	-.061612	.001660	.0175337
#3	.0823034	.000373	.0036544	-.238449	.001113	.0125463

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCB055 Acquired: 01/02/2025 16:06:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB055 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006805	-.001102	-.003224	.0024538	.0017979	.0006852
Stddev	.0000731	.003447	.001027	.0008053	.0036049	.0001426
%RSD	10.73611	312.7307	31.83752	32.81788	200.5032	20.81192
#1	.0007648	-.001112	-.002511	.0033820	.0059504	.0005304
#2	.0006354	-.004545	-.004401	.0020375	-.000529	.0007141
#3	.0006412	.002350	-.002761	.0019419	-.000028	.0008113

Elem	Li6707
Units	ppm
Avg	F .0183747
Stddev	.0039256
%RSD	21.36419
#1	.0202814
#2	.0209828
#3	.0138600

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1675.343	16908.90	772.8253	1340.637	1975.945
Stddev	4.754	97.97	3.7908	.756	2.646
%RSD	.2837447	.5794005	.4905100	.0564259	.1338855
#1	1670.381	17012.67	777.2025	1339.949	1972.894
#2	1675.793	16818.01	770.6367	1341.447	1977.336
#3	1679.856	16896.03	770.6367	1340.514	1977.605

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04 Acquired: 01/02/2025 16:10:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3013696	.0078836	.0942614	.0298663	.0075625	1.228383
Stddev	.0022558	.0048222	.0009093	.0011165	.0098353	.096546
%RSD	.7485033	61.16703	.9647116	3.738447	130.0530	7.859571
#1	.3038774	.0070328	.0943201	.0286949	.0154751	1.154891
#2	.3007253	.0130745	.0933241	.0299857	.0106616	1.192532
#3	.2995061	.0035435	.0951399	.0309184	-.003449	1.337725

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6548655	.0018407	.0003417	98.64322	.0003637	.0491483
Stddev	.0042525	.0002567	.0000441	.33102	.0002749	.0003175
%RSD	.6493679	13.94816	12.91663	.3355699	75.57151	.6460759
#1	.6499711	.0019620	.0003591	98.41554	.0001835	.0487999
#2	.6569706	.0015457	.0002915	99.02294	.0002276	.0494214
#3	.6576548	.0020142	.0003744	98.49117	.0006801	.0492238

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081645	81.29112	.4978344	84.92974	.0273165	-.003456
Stddev	.0003721	.16355	.0067274	.20050	.0010827	.000852
%RSD	4.557545	.2011960	1.351333	.2360792	3.963529	24.65380
#1	.0077932	81.12990	.4903083	84.69884	.0278290	-.004357
#2	.0081629	81.45692	.5032637	85.03052	.0280477	-.003348
#3	.0085374	81.28654	.4999313	85.05986	.0260727	-.002663

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1821.713	.0120883	1.504211	49.65532	5.994379	1.837908
Stddev	20.473	.0010366	.001253	.20308	.019596	.009638
%RSD	1.123830	8.575238	.0833301	.4089748	.3269050	.5243931
#1	1842.220	.0124026	1.502977	49.88759	6.016302	1.841401
#2	1821.644	.0129314	1.504174	49.51127	5.978567	1.845313
#3	1801.274	.0109309	1.505483	49.56710	5.988269	1.827011

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04 Acquired: 01/02/2025 16:10:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058717	49.80906	7.362360	.0200885	.0168788	1.058163
Stddev	.0008383	.13399	.054864	.0006655	.0066969	.004610
%RSD	14.27637	.2690085	.7451978	3.312730	39.67614	.4356407
#1	.0064857	49.92553	7.386782	.0208432	.0110725	1.054622
#2	.0062127	49.66262	7.400773	.0198363	.0153590	1.063375
#3	.0049167	49.83903	7.299526	.0195860	.0242050	1.056491

Elem	Li6707
Units	ppm
Avg	.0300084
Stddev	.0007890
%RSD	2.629296
#1	.0291903
#2	.0307647
#3	.0300702

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1715.579	16987.15	832.6943	1352.664	1851.849
Stddev	9.802	50.91	5.0455	1.700	8.145
%RSD	.5713268	.2997109	.6059252	.1256892	.4398216
#1	1705.406	17045.72	831.9799	1354.620	1842.795
#2	1724.962	16953.53	828.0441	1351.545	1858.580
#3	1716.369	16962.19	838.0589	1351.826	1854.174

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-05 Acquired: 01/02/2025 16:14:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3020659	.0091150	.0949416	.0293681	.0072937	1.566465
Stddev	.0045684	.0063045	.0007386	.0031797	.0009820	.047774
%RSD	1.512386	69.16600	.7779364	10.82702	13.46334	3.049788
#1	.2989046	.0023496	.0948950	.0257856	.0073399	1.604021
#2	.3073037	.0148256	.0957023	.0304632	.0062894	1.512694
#3	.2999894	.0101699	.0942274	.0318556	.0082517	1.582679

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6656032	.0022560	.0002624	100.2344	.0000050	.0499725
Stddev	.0029323	.0000755	.0000752	.3006	.0006922	.0009778
%RSD	.4405417	3.346208	28.66864	.2999286	13843.84	1.956760
#1	.6687194	.0023153	.0002252	99.9435	.0004386	.0497021
#2	.6651918	.0021710	.0002130	100.5439	-.000793	.0491583
#3	.6628983	.0022816	.0003490	100.2157	.000370	.0510571

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083152	82.95758	.5066306	86.15819	.0291717	-.003202
Stddev	.0006380	.23805	.0091871	.23902	.0003327	.001545
%RSD	7.672459	.2869589	1.813364	.2774165	1.140388	48.26466
#1	.0076011	82.69418	.4968169	85.88239	.0287875	-.004399
#2	.0085154	83.15737	.5150262	86.30518	.0293623	-.003749
#3	.0088290	83.02118	.5080486	86.28698	.0293651	-.001457

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1815.564	.0125425	1.547525	49.86070	6.106701	1.869599
Stddev	11.547	.0011585	.006066	.05440	.054578	.006539
%RSD	.6360073	9.236845	.3919942	.1091118	.8937405	.3497672
#1	1804.951	.0138803	1.541763	49.81511	6.054625	1.862225
#2	1827.861	.0118749	1.546956	49.84606	6.102000	1.871880
#3	1813.881	.0118724	1.553855	49.92093	6.163477	1.874692

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-05 Acquired: 01/02/2025 16:14:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065825	51.01736	8.247524	.0177647	.0323432	1.076729
Stddev	.0009510	.45226	.033955	.0010430	.0019772	.005893
%RSD	14.44737	.8864817	.4117027	5.871084	6.113077	.5473408
#1	.0075119	50.61936	8.209516	.0189279	.0319485	1.070517
#2	.0056113	50.92355	8.274864	.0169128	.0344880	1.082242
#3	.0066242	51.50917	8.258192	.0174535	.0305932	1.077428

Elem	Li6707
Units	ppm
Avg	.0293244
Stddev	.0008648
%RSD	2.949185
#1	.0286389
#2	.0290383
#3	.0302960

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1704.460	17050.01	834.1265	1340.786	1829.498
Stddev	7.035	23.18	3.0976	5.406	9.013
%RSD	.4127522	.1359746	.3713552	.4031943	.4926304
#1	1708.260	17036.32	837.4261	1346.129	1837.333
#2	1708.779	17076.78	831.2811	1340.909	1831.511
#3	1696.342	17036.94	833.6722	1335.319	1819.649

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04LX5 Acquired: 01/02/2025 16:18:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0590840	.0083104	.0186600	.0074343	-.003360	.1847445	.1436003
Stddev	.0050689	.0045255	.0005013	.0032069	.002393	.0064319	.0003709
%RSD	8.579086	54.45538	2.686682	43.13609	71.21965	3.481507	.2582695
#1	.0562211	.0088688	.0181313	.0078209	-.000925	.1915552	.1433548
#2	.0649365	.0035317	.0187201	.0040517	-.005709	.1787740	.1440269
#3	.0560942	.0125308	.0191286	.0104304	-.003446	.1839042	.1434192

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006663	.0000867	21.53903	-.000083	.0189201	.0045929	17.99266
Stddev	.0001959	.0000685	.03333	.000217	.0005176	.0006738	.13043
%RSD	29.40979	79.00083	.1547495	259.6584	2.735949	14.67106	.7249024
#1	.0008105	.0000076	21.50980	-.000321	.0183748	.0052420	17.85705
#2	.0004432	.0001265	21.57533	.000103	.0194047	.0046400	18.11720
#3	.0007451	.0001258	21.53197	-.000032	.0189807	.0038968	18.00374

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1134097	18.45797	.0041162	-.000043	408.6698	.0046842	.3248342
Stddev	.0029191	.26608	.0005827	.002124	.5028	.0016975	.0035169
%RSD	2.573974	1.441527	14.15573	4941.253	.1230438	36.23795	1.082663
#1	.1162606	18.52578	.0042547	-.002379	409.2499	.0036586	.3229122
#2	.1135416	18.16455	.0034768	.001771	408.3999	.0037504	.3288932
#3	.1104268	18.68358	.0046172	.000479	408.3595	.0066435	.3226971

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.36529	1.223911	.4387584	.0017411	10.25765	1.576974	.0044132
Stddev	.69633	.006806	.0029971	.0002819	.02140	.021995	.0028161
%RSD	5.209974	.5561253	.6830876	16.19097	.2086627	1.394772	63.80942
#1	13.92657	1.230533	.4365324	.0016072	10.27890	1.555543	.0051348
#2	13.58324	1.224264	.4421662	.0020650	10.23609	1.575886	.0067983
#3	12.58606	1.216934	.4375767	.0015511	10.25795	1.599493	.0013066

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04LX5 Acquired: 01/02/2025 16:18:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0082353	.2306568	.0973087
Stddev	.0093683	.0019885	.0117760
%RSD	113.7585	.8621141	12.10165
#1	.0184923	.2284461	.0990563
#2	.0001300	.2322996	.1081132
#3	.0060835	.2312246	.0847566

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1648.558	16705.65	785.5883	1292.222	1865.870
Stddev	4.920	183.35	2.1342	10.149	6.598
%RSD	.2984399	1.097527	.2716680	.7853750	.3536087
#1	1643.071	16493.95	784.3825	1281.369	1858.471
#2	1652.576	16813.59	784.3300	1293.820	1871.143
#3	1650.027	16809.40	788.0525	1301.477	1867.995

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-06 Acquired: 01/02/2025 16:22:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3465902	.0478964	.1150328	.1272852	.0992755	3.038203
Stddev	.0038632	.0053142	.0021412	.0057478	.0033451	.076462
%RSD	1.114645	11.09515	1.861410	4.515653	3.369542	2.516691
#1	.3470765	.0457104	.1154747	.1333550	.1003969	2.960489
#2	.3501872	.0539549	.1127051	.1265751	.1019158	3.113349
#3	.3425068	.0440239	.1169186	.1219254	.0955137	3.040770

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.702625	.0531522	.0528092	102.2861	.2137126	.5633910
Stddev	.003100	.0000152	.0002850	.5259	.0017587	.0040235
%RSD	.1147016	.0285573	.5395937	.5141414	.8229334	.7141520
#1	2.699338	.0531652	.0526442	101.7008	.2157400	.5606324
#2	2.705495	.0531558	.0526453	102.4388	.2128010	.5615328
#3	2.703044	.0531355	.0531383	102.7188	.2125968	.5680077

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2469481	85.60011	1.027461	88.02175	.5505404	.0352853
Stddev	.0022187	.43485	.008317	.78675	.0051450	.0018045
%RSD	.8984432	.5080058	.8094275	.8938143	.9345297	5.114135
#1	.2484164	85.11043	1.018475	87.12782	.5468184	.0361591
#2	.2480321	85.94115	1.034887	88.32857	.5483914	.0364866
#3	.2443958	85.74877	1.029022	88.60886	.5564115	.0332102

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1856.309	.5554349	2.100665	50.45410	6.273381	1.912249
Stddev	7.511	.0023272	.010708	.24617	.042888	.008665
%RSD	.4046204	.4189848	.5097287	.4878994	.6836566	.4531206
#1	1856.707	.5540920	2.113014	50.70615	6.249470	1.914036
#2	1863.613	.5581221	2.095021	50.44187	6.247779	1.919880
#3	1848.607	.5540906	2.093960	50.21428	6.322895	1.902830

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-06 Acquired: 01/02/2025 16:22:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062276	52.32276	7.153552	.0177711	.0204750	1.097077
Stddev	.0010165	.39895	.044791	.0012506	.0099095	.004148
%RSD	16.32231	.7624826	.6261426	7.037017	48.39788	.3781117
#1	.0054768	52.08600	7.171051	.0181162	.0293023	1.092427
#2	.0073843	52.09891	7.186953	.0188129	.0223667	1.100397
#3	.0058215	52.78337	7.102653	.0163842	.0097561	1.098408

Elem	Li6707
Units	ppm
Avg	.0257776
Stddev	.0021441
%RSD	8.317614
#1	.0253831
#2	.0280915
#3	.0238581

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1677.320	16764.01	817.5208	1315.400	1798.895
Stddev	11.524	37.88	3.0480	5.232	9.539
%RSD	.6870425	.2259771	.3728289	.3977335	.5302467
#1	1682.984	16722.66	817.7679	1311.055	1802.197
#2	1684.915	16797.04	814.3568	1321.207	1806.344
#3	1664.060	16772.35	820.4376	1313.937	1788.144

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165641TB Acquired: 01/02/2025 16:31:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LEB641 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000262	-.000831	-.002421	-.000699	-.007369	.0153489
Stddev	.002338	.000851	.001313	.000384	.002869	.0571836
%RSD	891.7096	102.4047	54.21860	54.94491	38.93051	372.5589
#1	-.002881	-.001743	-.003529	-.001114	-.009247	.0662084
#2	.000479	-.000058	-.000971	-.000355	-.004067	-.046549
#3	.001616	-.000693	-.002762	-.000630	-.008792	.026387

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000795	.0000743	-.000078	-.013235	-.000272	-.000106
Stddev	.001856	.0002305	.000084	.032679	.000861	.000246
%RSD	233.4951	310.2331	108.4674	246.9083	316.0887	232.8950
#1	-.002464	.0003371	.000012	.021538	.000232	-.000217
#2	.001204	-.000094	-.000155	-.017932	-.001266	.000176
#3	-.001125	-.000020	-.000091	-.043312	.000217	-.000277

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.012434	.0481859	-.003807	-.214505	.0011850	-.000824
Stddev	.001213	.1040484	.002730	.112990	.0009329	.001933
%RSD	9.754533	215.9310	71.71727	52.67477	78.72355	234.5011
#1	-.011085	.1468395	-.001104	-.095788	.0002263	-.001237
#2	-.012783	.0582450	-.003752	-.226998	.0020898	.001282
#3	-.013434	-.060527	-.006564	-.320729	.0012390	-.002518

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 129.4640	-.000686	-.004819	-2.05559	.0016288	.0049112
Stddev	2.0508	.000585	.000264	.29425	.0033103	.0010648
%RSD	1.584091	85.19804	5.488427	14.31454	203.2342	21.68140
#1	131.7612	-.000173	-.005113	-2.38618	.0012554	.0057758
#2	127.8173	-.001322	-.004742	-1.82236	.0051100	.0052358
#3	128.8136	-.000563	-.004601	-1.95823	-.001479	.0037218

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165641TB Acquired: 01/02/2025 16:31:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LEB641 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000088	.0171092	-.005110	-.004457	.0043262	.0000373
Stddev	.000674	.0060431	.000663	.001555	.0066494	.0003100
%RSD	763.6470	35.32036	12.97828	34.88827	153.7008	830.2334
#1	.000468	.0227637	-.004745	-.003889	.0049104	-.000312
#2	.000104	.0178230	-.005876	-.006217	-.002596	.000144
#3	-.000837	.0107410	-.004711	-.003266	.010664	.000280

Elem	Li6707
Units	ppm
Avg	F -.022075
Stddev	.003876
%RSD	17.55787
#1	-.019699
#2	-.026548
#3	-.019978

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1733.366	17702.25	814.9697	1383.257	2003.371
Stddev	3.706	124.44	10.1181	5.128	4.057
%RSD	.2137968	.7029711	1.241533	.3706963	.2024976
#1	1737.155	17844.35	803.7533	1383.238	2008.050
#2	1733.192	17649.68	823.4100	1378.139	2001.227
#3	1729.749	17612.72	817.7458	1388.395	2000.836

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5027-10A Acquired: 01/02/2025 16:35:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1895192	.0349037	5.289109	.2399657	-.045910	74.12400
Stddev	.0020968	.0056792	.025452	.0034955	.001672	.46681
%RSD	1.106397	16.27113	.4812114	1.456672	3.642836	.6297675
#1	.1871058	.0291272	5.316740	.2437782	-.044424	74.66215
#2	.1905573	.0351038	5.283963	.2392074	-.045583	73.88142
#3	.1908944	.0404803	5.266623	.2369116	-.047721	73.82842

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.908857	.0090109	.0120190	179.1963	.1655470	.1293060
Stddev	.025848	.0000702	.0001083	1.0812	.0009605	.0013618
%RSD	.8886020	.7794326	.9008083	.6033452	.5801918	1.053137
#1	2.908455	.0089683	.0118989	179.5692	.1650345	.1307797
#2	2.934904	.0090920	.0121090	180.0417	.1666550	.1280941
#3	2.883212	.0089725	.0120491	177.9781	.1649514	.1290443

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6230968	175.9909	8.361832	64.15714	.1787166	-.000732
Stddev	.0029606	.9984	.031953	.38323	.0017142	.000605
%RSD	.4751421	.5672793	.3821254	.5973239	.9591905	82.66457
#1	.6223737	177.0693	8.350442	64.11874	.1806935	-.000163
#2	.6263519	175.8047	8.397919	64.55812	.1778139	-.001368
#3	.6205647	175.0988	8.337136	63.79456	.1776423	-.000665

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.985633	.2172485	7.184036	9.560721	F 13.69103	.1202914
Stddev	.395137	.0021723	.010334	.318903	.06453	.0043084
%RSD	7.925509	.9998924	.1438500	3.335555	.4713343	3.581652
#1	5.371188	.2192665	7.195961	9.526301	13.76400	.1250710
#2	5.004146	.2175295	7.178454	9.895438	13.66764	.1167061
#3	4.581566	.2149494	7.177694	9.260424	13.64146	.1190972

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5027-10A Acquired: 01/02/2025 16:35:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0115934	3.276591	9.737051	F 10.72066	1.310928	.1377444
Stddev	.0011093	.019059	.067665	.05143	.007911	.0012253
%RSD	9.568228	.5816573	.6949203	.4796984	.6034439	.8895251
#1	.0104873	3.298349	9.745466	10.77795	1.319119	.1378529
#2	.0127058	3.268572	9.800114	10.70557	1.303331	.1389118
#3	.0115870	3.262852	9.665572	10.67847	1.310334	.1364685

Elem	Li6707
Units	ppm
Avg	.1510636
Stddev	.0022722
%RSD	1.504115
#1	.1487899
#2	.1533342
#3	.1510665

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1965.746	20079.94	928.5628	1555.824	1834.732
Stddev	7.733	57.85	9.9767	9.705	11.224
%RSD	.3934101	.2880833	1.074422	.6237711	.6117559
#1	1956.959	20049.23	923.6122	1548.927	1822.430
#2	1968.763	20043.93	922.0296	1551.623	1837.349
#3	1971.516	20146.67	940.0466	1566.921	1844.416

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5027-19 Acquired: 01/02/2025 16:39:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK29 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1365385	.0032350	2.151791	.0496238	.0085661	59.30648
Stddev	.0008273	.0030879	.008813	.0031327	.0024837	.03898
%RSD	.6059105	95.45349	.4095483	6.312860	28.99393	.0657274
#1	.1373005	.0038606	2.143373	.0461061	.0080252	59.30019
#2	.1366563	-.000118	2.160952	.0521129	.0112757	59.27102
#3	.1356586	.005962	2.151047	.0506523	.0063975	59.34822

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.892806	.0070208	.0080631	691.8879	.0962887	.1424874
Stddev	.004074	.0001073	.0001396	.2817	.0014570	.0005056
%RSD	.2152349	1.529087	1.730676	.0407085	1.513165	.3548471
#1	1.896637	.0071331	.0079062	691.5850	.0978385	.1427178
#2	1.893255	.0069191	.0081733	691.9370	.0960809	.1428368
#3	1.888526	.0070103	.0081100	692.1418	.0949468	.1419076

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2994889	144.6251	16.04587	237.4924	.1720537	-.002015
Stddev	.0008728	.3358	.04293	1.2228	.0017613	.000659
%RSD	.2914342	.2321587	.2675757	.5148921	1.023680	32.70744
#1	.3004965	144.2400	16.01726	236.0812	.1700242	-.001264
#2	.2990015	144.7787	16.02512	238.1563	.1731827	-.002286
#3	.2989686	144.8566	16.09524	238.2396	.1729541	-.002496

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.461131	.0782570	1.045159	10.45132	F 13.49618	.1859538
Stddev	.064838	.0023155	.011620	.03463	.02051	.0010304
%RSD	1.003515	2.958810	1.111795	.3313547	.1519703	.5541149
#1	6.535133	.0809153	1.032546	10.41518	13.48214	.1852950
#2	6.433969	.0771759	1.047501	10.48421	13.51971	.1871412
#3	6.414291	.0766798	1.055429	10.45457	13.48667	.1854251

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5027-19 Acquired: 01/02/2025 16:39:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK29 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0126237	11.34971	10.88734	.0883451	1.034764	.9405529
Stddev	.0004183	.02008	.04916	.0021485	.007324	.0019531
%RSD	3.313460	.1769254	.4515552	2.432000	.7078308	.2076486
#1	.0122113	11.32886	10.91771	.0892764	1.041376	.9402669
#2	.0126121	11.36893	10.83062	.0898709	1.026891	.9387585
#3	.0130476	11.35133	10.91368	.0858880	1.036025	.9426331

Elem	Li6707
Units	ppm
Avg	.0900055
Stddev	.0032771
%RSD	3.641036
#1	.0862238
#2	.0917784
#3	.0920142

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1834.745	18849.68	905.5747	1467.289	1678.380
Stddev	4.276	32.75	1.7986	16.230	2.826
%RSD	.2330708	.1737517	.1986176	1.106114	.1683548
#1	1838.662	18866.15	904.9086	1485.967	1679.473
#2	1835.392	18811.97	907.6113	1456.627	1680.496
#3	1830.183	18870.93	904.2041	1459.272	1675.171

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04A Acquired: 01/02/2025 16:43:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4283729	.0046055	.0615343	.0177930	.0055818	1.262530
Stddev	.0041108	.0012117	.0007700	.0040758	.0062047	.071250
%RSD	.9596269	26.30848	1.251331	22.90683	111.1595	5.643398
#1	.4318150	.0032749	.0620382	.0210390	-.000388	1.285784
#2	.4294825	.0048966	.0606479	.0191213	.005135	1.182558
#3	.4238212	.0056451	.0619167	.0132188	.011998	1.319247

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8238329	.0017917	.0003393	62.97612	-.000281	.0527591
Stddev	.0113334	.0002068	.0001035	.53058	.000749	.0002856
%RSD	1.375694	11.54196	30.49850	.8425064	266.6677	.5413186
#1	.8169919	.0017453	.0004517	62.60927	-.001035	.0530852
#2	.8175917	.0016121	.0003184	62.73459	.000462	.0526389
#3	.8369150	.0020178	.0002479	63.58449	-.000269	.0525533

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0116213	62.31888	.4034580	63.71450	.0330743	.0192539
Stddev	.0013696	.51279	.0067223	.50951	.0015603	.0008248
%RSD	11.78486	.8228436	1.666178	.7996797	4.717414	4.283876
#1	.0129971	62.21321	.3981876	63.70080	.0347618	.0200442
#2	.0102581	61.86716	.4011580	63.21198	.0327772	.0183984
#3	.0116086	62.87627	.4110285	64.23073	.0316840	.0193190

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1798.630	.0136055	2.041666	38.11925	3.433000	1.393106
Stddev	10.650	.0005150	.008212	.39435	.016432	.013675
%RSD	.5921385	3.785188	.4022146	1.034507	.4786534	.9815918
#1	1801.688	.0139082	2.041857	38.14475	3.448393	1.385991
#2	1786.785	.0130108	2.049780	37.71278	3.434911	1.384455
#3	1807.417	.0138974	2.033360	38.50023	3.415696	1.408871

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-04A Acquired: 01/02/2025 16:43:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074959	40.35808	5.290463	.0127888	.0228558	.7462681
Stddev	.0006223	.17592	.053590	.0018378	.0058048	.0055883
%RSD	8.301535	.4358901	1.012957	14.37017	25.39760	.7488333
#1	.0079018	40.53729	5.291714	.0111154	.0265857	.7426890
#2	.0067794	40.35130	5.236257	.0147557	.0258139	.7434077
#3	.0078064	40.18565	5.343416	.0124955	.0161678	.7527075

Elem	Li6707
Units	ppm
Avg	.0135288
Stddev	.0055695
%RSD	41.16773
#1	.0186707
#2	.0076127
#3	.0143029

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1702.562	16883.69	823.5111	1331.689	1835.076
Stddev	6.473	5.65	7.4155	4.783	4.381
%RSD	.3801720	.0334562	.9004681	.3591483	.2387305
#1	1697.322	16880.28	824.8475	1331.705	1831.390
#2	1700.567	16890.21	830.1675	1326.898	1833.919
#3	1709.797	16880.57	815.5183	1336.464	1839.920

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 01/02/2025 16:55:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002693	-.001598	-.001163	.0040783	-.006637	-.021530
Stddev	.001031	.003057	.002639	.0046308	.001224	.087360
%RSD	38.29620	191.3295	226.9557	113.5462	18.44629	405.7602
#1	-.002368	.001258	-.001612	.0093329	-.005231	-.071415
#2	-.003847	-.004822	-.003549	.0023093	-.007209	.079342
#3	-.001863	-.001228	.001672	.0005929	-.007470	-.072517

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019963	.0000529	-.000136	.0862280	-.000533	-.000278
Stddev	.0019052	.0002005	.000121	.0545953	.000305	.000616
%RSD	95.43963	378.6371	89.10696	63.31502	57.25560	221.7574
#1	.0031437	.0000680	-.000262	.0484265	-.000708	.000415
#2	.0030481	.0002455	-.000020	.1488200	-.000181	-.000765
#3	-.000203	-.000155	-.000127	.0614375	-.000710	-.000483

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003799	.0625887	.0045800	-.051681	.0001178	-.000790
Stddev	.000298	.0798182	.0091974	.139753	.0014106	.000961
%RSD	7.839864	127.5282	200.8162	270.4123	1197.355	121.5528
#1	-.004108	.0141916	-.003780	-.102612	.0001110	-.000202
#2	-.003514	.0188590	.003088	-.158826	-.001289	-.001899
#3	-.003776	.1547154	.014432	.106394	.001532	-.000270

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6443873	.0006647	-.004317	-.602762	.0024243	-.004461
Stddev	.0280833	.0006257	.000205	.168443	.0036830	.001851
%RSD	4.358134	94.11988	4.746207	27.94515	151.9183	41.48472
#1	.6767533	.0012767	-.004084	-.612495	.0036638	-.005305
#2	.6264710	.0006912	-.004401	-.429664	.0053276	-.005740
#3	.6299377	.0000263	-.004467	-.766127	-.001719	-.002339

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165326BL Acquired: 01/02/2025 16:55:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000003	.0007435	-.002492	F .0147042	.0026300	.0003449
Stddev	.000372	.0053889	.000784	.0008605	.0077984	.0003207
%RSD	14520.79	724.8358	31.46036	5.852197	296.5213	92.97402
#1	.000351	-.005470	-.002088	.0137716	.0115314	.0004527
#2	.000031	.003560	-.001992	.0148736	-.002999	.0005977
#3	-.000390	.004140	-.003395	.0154674	-.000643	-.000016

Elem	Li6707
Units	ppm
Avg	-.000150
Stddev	.002768
%RSD	1843.601
#1	-.002864
#2	-.000256
#3	.002670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1722.805	17408.71	784.1589	1352.490	2017.396
Stddev	38.869	183.19	6.8602	18.311	43.707
%RSD	2.256153	1.052261	.8748542	1.353845	2.166485
#1	1691.851	17219.95	776.6467	1331.461	1981.756
#2	1710.135	17420.42	785.7383	1361.106	2004.271
#3	1766.428	17585.76	790.0917	1364.904	2066.162

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165326BS Acquired: 01/02/2025 16:59:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0228580	.0521296	.0189525	.0647518	.1114142	.4031509
Stddev	.0012415	.0041017	.0021320	.0030888	.0039174	.0656733
%RSD	5.431208	7.868222	11.24921	4.770230	3.516104	16.29000
#1	.0241193	.0545839	.0169572	.0626976	.1154916	.3308056
#2	.0216373	.0473945	.0211989	.0683039	.1110717	.4590110
#3	.0228175	.0544105	.0187014	.0632539	.1076792	.4196359

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4203621	.0109651	.0102562	10.56097	.0211336	.1079885
Stddev	.0032087	.0000797	.0000460	.01815	.0002901	.0007066
%RSD	.7633269	.7267337	.4482207	.1718675	1.372784	.6543052
#1	.4224357	.0110571	.0102221	10.54220	.0208190	.1078235
#2	.4219843	.0109171	.0102380	10.56229	.0211913	.1087630
#3	.4166661	.0109211	.0103085	10.57843	.0213905	.1073790

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0510530	.2572461	.0302401	10.79314	.0825522	.0214503
Stddev	.0002908	.0253981	.0065892	.22322	.0007123	.0001905
%RSD	.5695842	9.873069	21.78964	2.068165	.8628215	.8880310
#1	.0507179	.2791383	.0275497	10.85203	.0829716	.0215993
#2	.0512017	.2632001	.0254217	10.98101	.0817298	.0215159
#3	.0512393	.2293999	.0377487	10.54638	.0829551	.0212357

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.055050	.1175423	.1250861	9.123283	.0209929	F -.004011
Stddev	.048586	.0010374	.0011456	.183820	.0026285	.001794
%RSD	.6031709	.8825996	.9158727	2.014841	12.52110	44.74046
#1	8.096267	.1164692	.1240050	9.280944	.0234728	-.005495
#2	8.067403	.1185399	.1262868	9.167525	.0212685	-.004520
#3	8.001480	.1176177	.1249665	8.921380	.0182374	-.002017

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165326BS Acquired: 01/02/2025 16:59:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0213348	.1938364	F .5191851	F .0297190	.2121569	.2204348
Stddev	.0009714	.0029788	.0032582	.0017997	.0185084	.0012791
%RSD	4.552933	1.536778	.6275687	6.055630	8.723901	.5802494
#1	.0215617	.1946022	.5223446	.0278438	.2051779	.2194276
#2	.0202700	.1963575	.5158363	.0314322	.1981527	.2218739
#3	.0221725	.1905494	.5193744	.0298809	.2331401	.2200028

Elem	Li6707
Units	ppm
Avg	.0261470
Stddev	.0037878
%RSD	14.48665
#1	.0222624
#2	.0298300
#3	.0263485

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1688.743	17180.94	792.3833	1338.824	1982.122
Stddev	.695	65.87	4.6211	10.592	1.815
%RSD	.0411778	.3833753	.5831861	.7911498	.0915675
#1	1689.038	17256.95	787.5442	1348.791	1980.376
#2	1687.948	17140.60	796.7500	1327.701	1981.991
#3	1689.241	17145.28	792.8558	1339.980	1983.999

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165673BL Acquired: 01/02/2025 17:03:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBW673 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001918	.0011006	-.003207	.0056101	-.005077	-.046872	.0016937
Stddev	.002927	.0015624	.000966	.0033870	.001821	.043989	.0011499
%RSD	152.6232	141.9611	30.12899	60.37282	35.86622	93.84994	67.89517
#1	.001444	.0026829	-.002109	.0089409	-.006869	-.059844	.0026250
#2	-.003905	-.000441	-.003929	.0021696	-.005133	-.082916	.0004084
#3	-.003293	.001060	-.003582	.0057198	-.003229	.002145	.0020476

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000983	-.000036	.0294324	-.000715	-.000353	-.004455	.0634952
Stddev	.0001613	.000058	.1014596	.000996	.000279	.000617	.0841776
%RSD	164.0102	160.3851	344.7204	139.2222	79.04095	13.84756	132.5731
#1	.0001629	-.000077	.0638804	-.001224	-.000035	-.004952	.1567784
#2	.0002174	-.000063	.1091829	.000432	-.000470	-.003765	.0405084
#3	-.000085	.000031	-.084766	-.001354	-.000554	-.004648	-.006801

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054381	.0081955	.0002054	-.000533	.4749204	.0002918	-.003906
Stddev	.0045433	.1246086	.0002762	.000580	.0143851	.0011953	.000534
%RSD	83.54532	1520.445	134.4321	108.9334	3.028947	409.6351	13.67839
#1	.0064902	-.116757	-.000069	-.000963	.4605920	.0013550	-.003528
#2	.0093630	.008887	.000483	.000127	.4748077	.0005223	-.004517
#3	.0004611	.132457	.000202	-.000763	.4893615	-.001002	-.003673

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.245617	-.002319	-.005727	-.000361	.0048044	-.002342	-.001579
Stddev	.360421	.001665	.000769	.000213	.0061080	.000859	.000444
%RSD	146.7412	71.80368	13.43627	59.04574	127.1341	36.67340	28.14999
#1	-.585539	-.000936	-.005100	-.000592	.0086698	-.003316	-.001773
#2	-.283606	-.001854	-.006585	-.000171	.0079805	-.002014	-.001070
#3	.132294	-.004167	-.005495	-.000321	-.002237	-.001695	-.001893

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165673BL Acquired: 01/02/2025 17:03:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBW673 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002944	.0007577	.0036765
Stddev	.001530	.0002673	.0026239
%RSD	51.98257	35.27719	71.36959
#1	-.003643	.0007625	.0026272
#2	-.004000	.0004881	.0017396
#3	-.001189	.0010227	.0066627

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1727.344	17635.96	811.1206	1380.430	2027.706
Stddev	3.997	86.24	13.3338	9.975	6.564
%RSD	.2314163	.4889832	1.643871	.7226345	.3237311
#1	1731.626	17726.09	826.1767	1390.846	2033.638
#2	1726.696	17627.57	800.8042	1379.482	2028.827
#3	1723.710	17554.23	806.3808	1370.963	2020.654

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165673BS Acquired: 01/02/2025 17:12:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCW673 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0245414	.0536427	.0199569	.0647495	.1050569	.4025533
Stddev	.0008622	.0021267	.0004731	.0020628	.0025989	.0387681
%RSD	3.513084	3.964595	2.370646	3.185763	2.473805	9.630547
#1	.0254012	.0512117	.0194956	.0626083	.1080474	.4455191
#2	.0245460	.0551591	.0199340	.0667237	.1037789	.3701882
#3	.0236769	.0545573	.0204410	.0649164	.1033444	.3919527

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4077397	.0106778	.0099966	10.17811	.0207272	.1058668
Stddev	.0114705	.0002934	.0000706	.22401	.0008836	.0006848
%RSD	2.813182	2.747913	.7065434	2.200887	4.263206	.6469022
#1	.3945789	.0103687	.0099344	9.92015	.0217377	.1051343
#2	.4130298	.0107123	.0100734	10.32362	.0200992	.1059749
#3	.4156105	.0109525	.0099819	10.29055	.0203447	.1064912

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486616	F .2838736	.0326159	9.896887	.0800971	.0197998
Stddev	.0018842	.0561601	.0064382	.403055	.0003675	.0001906
%RSD	3.872092	19.78348	19.73951	4.072539	.4588431	.9625567
#1	.0467424	.3450398	.0259498	9.484768	.0797333	.0198564
#2	.0505088	.2719447	.0387991	10.29022	.0804682	.0195873
#3	.0487337	.2346363	.0330988	9.91567	.0800897	.0199556

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.768810	.1137870	.1216072	8.506197	.0230037	F -.005729
Stddev	.209447	.0034259	.0008546	.509154	.0018022	.001836
%RSD	2.696000	3.010832	.7027817	5.985684	7.834483	32.04176
#1	7.542160	.1102224	.1217672	7.921064	.0245444	-.007241
#2	7.955213	.1170549	.1223705	8.848283	.0210219	-.003687
#3	7.809058	.1140838	.1206839	8.749244	.0234447	-.006258

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: PB165673BS Acquired: 01/02/2025 17:12:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCW673 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0206971	.1868144	F .5078853	F .0297838	.2092747	.2109454
Stddev	.0004497	.0044065	.0140369	.0004660	.0134133	.0076056
%RSD	2.172973	2.358770	2.763800	1.564693	6.409449	3.605484
#1	.0210467	.1858209	.4925838	.0295252	.1950185	.2022429
#2	.0201897	.1829895	.5201656	.0303218	.2111599	.2163188
#3	.0208549	.1916329	.5109065	.0295045	.2216457	.2142744

Elem	Li6707
Units	ppm
Avg	.0281536
Stddev	.0026545
%RSD	9.428487
#1	.0255622
#2	.0280316
#3	.0308669

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.408	17053.41	788.7272	1336.421	1976.279
Stddev	1.746	15.73	18.5478	5.608	1.888
%RSD	.1039703	.0922535	2.351612	.4196054	.0955453
#1	1678.323	17061.47	809.0633	1334.902	1974.949
#2	1678.479	17063.47	772.7408	1331.729	1978.440
#3	1681.422	17035.28	784.3775	1342.632	1975.447

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-01 Acquired: 01/02/2025 17:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1167144	.0369225	.4295145	-.026276	.1779553	.6499901
Stddev	.0002840	.0015075	.0025539	.001631	.0050843	.0552234
%RSD	.2432928	4.082985	.5946022	6.205952	2.857079	8.496037
#1	.1164947	.0351889	.4282278	-.024631	.1725387	.6149693
#2	.1166135	.0379260	.4278599	-.026306	.1787025	.7136500
#3	.1170350	.0376527	.4324558	-.027892	.1826247	.6213509

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4375750	.0005265	.0080921	165.6639	.0020219	.0937941
Stddev	.0004968	.0002356	.0000968	.1235	.0003350	.0002985
%RSD	.1135375	44.74718	1.195726	.0745200	16.56806	.3182230
#1	.4371932	.0004565	.0081197	165.8064	.0024061	.0936501
#2	.4381367	.0007892	.0079846	165.5925	.0017904	.0935948
#3	.4373952	.0003339	.0081721	165.5927	.0018694	.0941372

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3852452	.7772131	.2016733	42.89694	.0601638	-.000056
Stddev	.0022727	.0456256	.0089934	.20905	.0009089	.001499
%RSD	.5899265	5.870412	4.459379	.4873420	1.510660	2659.724
#1	.3873247	.7270924	.2120400	42.97897	.0592422	-.000180
#2	.3828192	.7882155	.1970180	43.05254	.0601898	-.001489
#3	.3855918	.8163316	.1959619	42.65931	.0610593	.001500

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1591.019	.0010984	7.209193	24.54261	.0610357	.5921474
Stddev	4.294	.0012873	.039088	.22933	.0038552	.0035719
%RSD	.2699137	117.1919	.5421930	.9344158	6.316338	.6032134
#1	1593.992	.0008513	7.171467	24.43340	.0650359	.5892371
#2	1592.968	.0024913	7.249513	24.80614	.0573440	.5910716
#3	1586.095	-.000047	7.206600	24.38830	.0607272	.5961336

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-01 Acquired: 01/02/2025 17:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0117065	28.05162	3.702541	.0079539	-.002352	1.219179
Stddev	.0008565	.19893	.024402	.0020031	.010233	.006714
%RSD	7.316171	.7091699	.6590621	25.18375	435.0782	.5506616
#1	.0122981	27.92457	3.726398	.0056487	-.008367	1.224799
#2	.0107244	27.94941	3.677628	.0092704	.009463	1.220994
#3	.0120970	28.28088	3.703598	.0089426	-.008151	1.211745

Elem	Li6707
Units	ppm
Avg	.0152740
Stddev	.0019119
%RSD	12.51717
#1	.0161374
#2	.0166018
#3	.0130827

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1694.334	16903.06	838.0543	1342.289	1824.830
Stddev	11.162	132.67	2.9590	10.091	10.386
%RSD	.6587940	.7849166	.3530755	.7517751	.5691355
#1	1701.082	16933.98	834.6483	1351.360	1829.597
#2	1700.470	16757.65	839.9919	1331.420	1831.976
#3	1681.450	17017.54	839.5226	1344.086	1812.916

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-02 Acquired: 01/02/2025 17:20:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032248	.0481669	.0107905	-.041165	-.006286	.1881360
Stddev	.0060910	.0031052	.0019025	.010098	.000896	.0225365
%RSD	188.8769	6.446768	17.63107	24.53003	14.25631	11.97881
#1	.0024496	.0447860	.0093861	-.038004	-.005989	.1622076
#2	-.002441	.0488230	.0129556	-.052466	-.005576	.1991822
#3	.009666	.0508916	.0100298	-.033026	-.007293	.2030183

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5188754	.0000493	.0013929	773.0205	.0017718	.0564779
Stddev	.0033677	.0001852	.0001449	4.6415	.0007743	.0012626
%RSD	.6490311	375.6764	10.40338	.6004389	43.70226	2.235554
#1	.5224457	-.000164	.0012750	777.7851	.0021279	.0563577
#2	.5184246	.000150	.0013490	772.7636	.0023041	.0577962
#3	.5157558	.000162	.0015547	768.5128	.0008835	.0552796

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001202	.1146690	.8768272	17.07896	.0113767	-.000539
Stddev	.000365	.0758440	.0144600	.14862	.0000348	.000535
%RSD	30.36568	66.14173	1.649124	.8701939	.3061689	99.25725
#1	-.001068	.0550057	.8858548	16.94083	.0113370	.000078
#2	-.000923	.0889800	.8844775	17.05983	.0113908	-.000828
#3	-.001615	.2000212	.8601492	17.23622	.0114022	-.000866

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1444.730	.0092444	.2839370	12.13770	.1031042	.1304009
Stddev	5.132	.0008090	.0024212	.10815	.0066896	.0019015
%RSD	.3552106	8.751177	.8527259	.8909986	6.488158	1.458210
#1	1448.855	.0090419	.2811574	12.14014	.0954272	.1283092
#2	1446.351	.0085559	.2850669	12.24461	.1062019	.1320251
#3	1438.983	.0101354	.2855868	12.02835	.1076834	.1308683

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-02 Acquired: 01/02/2025 17:20:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033165	7.176121	1.468838	.0091662	-.022340	7.064617
Stddev	.0001463	.008984	.011299	.0012832	.000326	.042265
%RSD	4.409988	.1251931	.7692147	13.99876	1.459101	.5982652
#1	.0033384	7.180230	1.478336	.0102698	-.022616	7.104059
#2	.0031605	7.165817	1.471834	.0077582	-.021981	7.069787
#3	.0034505	7.182315	1.456343	.0094705	-.022424	7.020004

Elem	Li6707
Units	ppm
Avg	.0044700
Stddev	.0003620
%RSD	8.098193
#1	.0041579
#2	.0048669
#3	.0043853

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1635.043	16531.45	812.8682	1283.835	1730.494
Stddev	1.788	78.54	4.4159	10.195	1.747
%RSD	.1093440	.4750923	.5432443	.7940947	.1009437
#1	1633.402	16621.87	808.3416	1295.604	1728.533
#2	1634.779	16480.18	813.0986	1278.141	1731.065
#3	1636.948	16492.30	817.1643	1277.758	1731.884

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-03 Acquired: 01/02/2025 17:24:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3006404	.0317860	.0324690	-.000422	.1641313	.1276842
Stddev	.0054883	.0012863	.0033464	.003977	.0011298	.0127849
%RSD	1.825530	4.046788	10.30645	942.3558	.6883705	10.01287
#1	.3069669	.0313221	.0286472	.002978	.1635088	.1178158
#2	.2971558	.0332399	.0348733	.000551	.1654355	.1231098
#3	.2977986	.0307960	.0338867	-.004795	.1634496	.1421270

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4165946	.0011551	.0002413	538.5917	-.003580	.2417328
Stddev	.0017970	.0001067	.0000918	2.3021	.001028	.0015287
%RSD	.4313595	9.233157	38.03601	.4274206	28.72906	.6324081
#1	.4148422	.0010336	.0002433	536.0495	-.004591	.2401236
#2	.4184331	.0012330	.0001486	539.1902	-.003612	.2431658
#3	.4165083	.0011988	.0003321	540.5354	-.002535	.2419091

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.017323	63.65800	4.495784	106.8505	.0533912	-.001410
Stddev	.000803	.53831	.046900	.9419	.0010908	.001049
%RSD	4.637063	.8456251	1.043195	.8815062	2.043115	74.43478
#1	-.017076	63.24093	4.456759	106.7644	.0529734	-.002347
#2	-.016672	63.46740	4.482780	105.9546	.0546292	-.001606
#3	-.018220	64.26568	4.547814	107.8325	.0525711	-.000276

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1759.166	-.012410	4.538165	62.14149	.0468237	1.026117
Stddev	6.461	.001120	.206538	.24372	.0046369	.011813
%RSD	.3673027	9.028314	4.551138	.3922027	9.902926	1.151262
#1	1756.329	-.011361	4.432640	62.37148	.0449785	1.013020
#2	1766.561	-.013590	4.776148	62.16696	.0433934	1.035968
#3	1754.609	-.012280	4.405708	61.88604	.0520992	1.029363

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: P5169-03 Acquired: 01/02/2025 17:24:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0120298	32.58440	12.42605	.0345384	-.005775	4.573504
Stddev	.0009043	.28181	.17467	.0019872	.006503	.029483
%RSD	7.517208	.8648646	1.405674	5.753558	112.5931	.6446447
#1	.0115219	32.26041	12.22795	.0362031	-.000389	4.541167
#2	.0130738	32.72006	12.55794	.0323384	-.012999	4.580454
#3	.0114936	32.77272	12.49224	.0350737	-.003938	4.598891

Elem	Li6707
Units	ppm
Avg	.0324916
Stddev	.0074662
%RSD	22.97897
#1	.0240004
#2	.0380290
#3	.0354456

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1666.706	16808.64	823.0460	1291.308	1770.439
Stddev	10.306	677.98	4.2370	49.107	9.932
%RSD	.6183325	4.033497	.5147908	3.802907	.5610019
#1	1677.567	17047.39	827.7667	1305.056	1781.460
#2	1665.488	16043.59	821.7985	1236.792	1767.677
#3	1657.063	17334.95	819.5729	1332.077	1762.180

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCV056 Acquired: 01/02/2025 17:28:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV056 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.101314	5.012893	25.60983	5.165617	5.126274	416.7205	10.42349
Stddev	.009786	.024946	.11165	.027745	.027682	2.1450	.07834
%RSD	.1918342	.4976328	.4359556	.5371053	.5399979	.5147392	.7515902
#1	5.109336	4.991012	25.52380	5.171427	5.114834	417.5775	10.45401
#2	5.090410	5.007610	25.56970	5.135428	5.106145	414.2795	10.33449
#3	5.104195	5.040057	25.73600	5.189997	5.157842	418.3046	10.48198

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5262627	2.585496	423.3236	15.93874	2.604966	15.59347	431.3949
Stddev	.0039996	.012793	3.3970	.06689	.010302	.08921	1.8161
%RSD	.7599930	.4947879	.8024483	.4196805	.3954573	.5720825	.4209884
#1	.5220973	2.575089	424.0141	15.91249	2.597587	15.53727	432.0571
#2	.5266180	2.581622	419.6345	16.01478	2.600575	15.54681	429.3406
#3	.5300727	2.599778	426.3223	15.88896	2.616735	15.69633	432.7869

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.93402	423.9057	2.601858	1.292723	425.3827	2.616631	15.98627
Stddev	.08278	3.3839	.010972	.005976	3.3185	.012164	.01652
%RSD	.5195324	.7982599	.4216972	.4622888	.7801314	.4648692	.1033266
#1	16.00559	424.5119	2.595031	1.291963	426.0777	2.607436	15.97238
#2	15.84336	420.2597	2.596029	1.299043	421.7717	2.612033	15.98191
#3	15.95310	426.9455	2.614514	1.287163	428.2986	2.630424	16.00454

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	160.5822	5.184374	5.289058	5.081677	5.252441	5.221087	5.240871
Stddev	1.7596	.032237	.028528	.022145	.020026	.035668	.024391
%RSD	1.095756	.6218026	.5393791	.4357889	.3812636	.6831474	.4654056
#1	160.8053	5.152188	5.264027	5.068911	5.242786	5.201516	5.222653
#2	158.7217	5.184272	5.283029	5.068872	5.239072	5.199489	5.231378
#3	162.2196	5.216661	5.320119	5.107248	5.275465	5.262256	5.268581

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCV056 Acquired: 01/02/2025 17:28:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV056 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.297113	5.001347	5.281371
Stddev	.029869	.034605	.038937
%RSD	.5638738	.6919202	.7372555
#1	5.331357	5.024833	5.277687
#2	5.283547	4.961607	5.244407
#3	5.276434	5.017602	5.322020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1461.014	15740.20	767.4530	1142.764	1637.974
Stddev	4.538	102.69	4.4678	5.230	6.160
%RSD	.3105837	.6523976	.5821627	.4576203	.3760700
#1	1464.587	15651.00	764.5842	1136.843	1644.171
#2	1462.547	15717.13	772.6008	1146.750	1637.900
#3	1455.909	15852.45	765.1741	1144.700	1631.852

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCB056 Acquired: 01/02/2025 17:32:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB056 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002322	-.000187	.0019001	.0041179	-.002507	.0161693
Stddev	.002176	.000295	.0021753	.0050227	.004007	.1035210
%RSD	93.69711	158.0219	114.4854	121.9747	159.8109	640.2299
#1	-.000361	-.000258	-.000025	-.001536	-.002583	.0675694
#2	-.001943	.000137	.001466	.008065	-.006476	-.102993
#3	-.004663	-.000439	.004260	.005824	.001537	.083931

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000083	.0000609	.0002086	.0622563	.0004561	-.000034
Stddev	.000848	.0001607	.0000950	.0735506	.0001945	.000452
%RSD	1023.144	263.7806	45.51209	118.1416	42.63249	1325.078
#1	.000850	.0000810	.0002690	-.008716	.0005546	.000215
#2	-.000808	-.000109	.0002577	.057345	.0005816	.000238
#3	-.000290	.000211	.0000992	.138139	.0002321	-.000556

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000321	.0311124	.0045169	-.171621	-.000060	.0003712
Stddev	.000124	.0915011	.0061456	.263663	.000544	.0008511
%RSD	38.51685	294.0989	136.0593	153.6314	898.8222	229.3156
#1	-.000349	-.016623	.0033512	.125791	.000558	.0006698
#2	-.000186	-.026650	-.000962	-.263952	-.000462	-.000589
#3	-.000428	.136610	.011162	-.376701	-.000278	.001033

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.266510	-.000329	.0044877	1.067208	.0015947	.0217648
Stddev	.111104	.001095	.0002030	.426001	.0028646	.0038086
%RSD	4.902008	332.8136	4.523152	39.91733	179.6308	17.49871
#1	2.384214	.000854	.0047057	1.437025	.0039185	.0261620
#2	2.251857	-.000534	.0044531	1.163196	.0024714	.0196249
#3	2.163459	-.001307	.0043042	.601402	-.001606	.0195074

Reviewed By:Mohan
On:1/2/2025 7:09:33 PM
Inst Id :P5

Sample Name: CCB056 Acquired: 01/02/2025 17:32:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v63) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB056 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003778	.0052945	-.002629	F .0176134	.0031088	.0006613
Stddev	.0009995	.0024924	.000402	.0007440	.0118587	.0002260
%RSD	264.5673	47.07517	15.30673	4.224252	381.4520	34.18123
#1	-.000750	.0052777	-.002283	.0172821	-.006960	.0005248
#2	.001154	.0028105	-.003071	.0170926	.016180	.0009222
#3	.000729	.0077952	-.002533	.0184655	.000106	.0005368

Elem	Li6707
Units	ppm
Avg	F .0227122
Stddev	.0067474
%RSD	29.70847
#1	.0184824
#2	.0191605
#3	.0304936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1669.861	17330.83	787.4456	1345.844	1944.110
Stddev	3.140	163.06	8.1256	10.139	3.915
%RSD	.1880617	.9408418	1.031891	.7533544	.2013932
#1	1670.617	17156.96	786.7325	1335.139	1939.677
#2	1672.554	17355.18	795.9042	1347.092	1945.557
#3	1666.411	17480.34	779.7000	1355.301	1947.095

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Prep Standard - Chemical Standard Summary

Order ID : P5027

Test : Metals CLP Full

Prepbatch ID : PB165326,

Sequence ID/Qc Batch ID: LB134114,LB134132,LB134139,LB134151,

Standard ID :
MP83122,MP83134,MP83141,MP83147,MP83500,MP83501,MP83502,MP83503,MP83504,MP83505,MP83506,MP83507,MP83508,MP83509,MP83510,MP83511,MP83513,MP83514,MP83726,MP83836,

Chemical ID :
M5130,M5218,M5223,M5289,M5295,M5296,M5390,M5393,M5429,M5473,M5476,M5496,M5497,M5498,M5513,M5515,M5519,M5658,M5697,M5698,M5751,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5816,M5817,M5818,M5819,M5820,M5875,M5891,M5959,M5960,M5962,M5970,M5976,M5978,M5982,M5985,M5990,M5999,M6021,M6023,M6025,M6028,M6030,M6033,M6111,M6116,M6117,M6121,M6124,M6125,M6126,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP83122	11/07/2024	12/06/2024	Janvi Patel	None	None	Sarabjit Jaswal 11/07/2024

FROM 1000.00000ml of M6116 + 1000.00000ml of W3112 = 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)	MP83134	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 125.00000ml of M6111 + 2350.00000ml of W3112 + 25.00000ml of M6117 = 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
994	ICPAES ISM01.2 S1 (CONC.)	MP83141	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 0.02000ml of M5815 + 0.03000ml of M5429 + 0.10000ml of M5798 + 0.10000ml of M6028 + 0.14000ml of M5799 + 0.20000ml of M5476 + 0.20000ml of M5515 + 0.20000ml of M5658 + 0.20000ml of M5801 + 0.20000ml of M5817 + 0.20000ml of M5976 + 0.20000ml of M6025 + 0.20000ml of M6030 + 0.30000ml of M5698 + 0.40000ml of M6033 + 0.50000ml of M5751 + 0.50000ml of M6023 + 0.70000ml of M5962 + 0.80000ml of M5960 + 1.00000ml of M5800 + 1.00000ml of M6021 + 1.20000ml of M5802 + 1.20000ml of M5819 + 10.00000ml of M5498 + 10.00000ml of M5519 + 10.00000ml of M5768 + 10.00000ml of M5806 + 10.00000ml of M5818 + 2.00000ml of M5978 + 4.00000ml of M5390 + 34.24000ml of MP83134 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
921	ICPAES SPIKE SOL#6	MP83147	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 2.50000ml of M5962 + 50.00000ml of M5990 + 50.00000ml of M5999 + 147.50000ml of MP83134 = 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
902	ICP AES CAL BLK (SO/ICB/CCB)	MP83500	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2480	ICP AES STD 6 ISM01.3	MP83501	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 4.00000ml of M5289 + 4.00000ml of M5498 + 4.00000ml of M5515 + 4.00000ml of M5768 + 4.00000ml of M5806 + 30.00000ml of MP83500 = 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
1004	ICPAES ISM01.2 (S5)	MP83502	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.25000ml of M5798 + 0.50000ml of M5429 + 0.50000ml of M5473 + 0.50000ml of M5815 + 0.50000ml of M5817 + 12.50000ml of M5519 + 12.50000ml of M5698 + 12.50000ml of M5806 + 12.50000ml of M5819 + 13.75000ml of M5697 + 14.50000ml of M5496 + 14.50000ml of M5515 + 14.50000ml of M5658 + 2.00000ml of M5513 + 22.50000ml of M5497 + 22.50000ml of M5768 + 5.00000ml of M5296 + 5.00000ml of M5393 + 5.00000ml of M5802 + 5.00000ml of M5818 + 5.00000ml of M5875 + 303.50000ml of MP83500 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1005	ICPAES ISM01.2(S4)	MP83503	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 250.00000ml of MP83500 + 250.00000ml of MP83502 = 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
1007	ICPAES ISM01.2(S3)	MP83504	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 25.00000ml of MP83502 + 75.00000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1008	ICPAES ISM01.2(S2)	MP83505	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 12.50000ml of MP83502 + 87.50000ml of MP83500 = 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
994	ICPAES ISM01.2 S1 (CONC.)	MP83506	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.02000ml of M5815 + 0.03000ml of M5429 + 0.10000ml of M5798 + 0.10000ml of M6028 + 0.14000ml of M5799 + 0.20000ml of M5473 + 0.20000ml of M5515 + 0.20000ml of M5658 + 0.20000ml of M5801 + 0.20000ml of M5817 + 0.20000ml of M5976 + 0.20000ml of M6025 + 0.20000ml of M6030 + 0.30000ml of M5698 + 0.40000ml of M5496 + 0.50000ml of M5697 + 0.50000ml of M6023 + 0.70000ml of M5962 + 0.80000ml of M5960 + 1.00000ml of M5800 + 1.00000ml of M6021 + 1.20000ml of M5802 + 1.20000ml of M5819 + 10.00000ml of M5498 + 10.00000ml of M5519 + 10.00000ml of M5769 + 10.00000ml of M5806 + 10.00000ml of M5818 + 2.00000ml of M5978 + 4.00000ml of M5390 + 34.24000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1003	ICPAES ISM01.2 S1	MP83507	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.50000ml of MP83506 + 99.50000ml of MP83500 = 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
2054	ICV-ICPAES	MP83508	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.50000ml of M5218 + 0.50000ml of M5816 + 0.50000ml of M5820 + 0.50000ml of M5970 + 0.50000ml of M5982 + 10.00000ml of M5295 + 87.50000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP83509	12/09/2024	01/06/2025	Kareem Khairalla	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 12/09/2024

FROM 10.00000ml of M5130 + 90.00000ml of MP83500 = 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
905	ICP AES ICSAB SOLN	MP83510	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 10.00000ml of M5130 + 10.00000ml of M5223 + 80.00000ml of MP83500 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1119	ICPAES ISM01.2(CCV)	MP83511	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.75000ml of M5497 + 0.75000ml of M5769 + 1.22500ml of M5496 + 1.25000ml of M5515 + 1.25000ml of M5806 + 19.77500ml of MP83500 + 25.00000ml of MP83502 = 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	MP83513	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6126 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
513	RINSE SOLN	MP83514	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 200.00000ml of M6126 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3559	SE 100PPM	MP83726	12/18/2024	01/06/2025	Sarabjit Jaswal	None	None	Mohan Bera 12/20/2024

FROM 1.00000ml of M5962 + 9.00000ml of MP83500 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3816	TL-10PPM	MP83836	11/25/2024	01/06/2025	Sarabjit Jaswal	None	None	Mohan Bera 01/02/2025

FROM 0.10000ml of M6023 + 9.90000ml of MP83500 = Final Quantity: 10.000 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 #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	01/31/2025	05/20/2024 / jaswal	04/20/2021 / bin	M5130

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	01/31/2025	05/20/2024 / jaswal	04/20/2021 / bin	M5223

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Aluminum (Al) 10,000PPM	070622	07/06/2025	09/02/2022 / jaswal	07/12/2022 / jaswal	M5289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	04/20/2021 / bin	M5295

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	S2-MEB711673	11/02/2026	09/19/2022 / jaswal	08/20/2022 / jaswal	M5296

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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.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB714159	01/13/2027	10/12/2022 / bin	09/19/2022 / bin	M5393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	03/16/2023 / jaswal	03/16/2023 / jaswal	M5473

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

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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.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

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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.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	102623	10/26/2026	04/18/2024 / jaswal	10/27/2023 / jaswal	M5698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

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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.	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.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

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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	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	122023	12/20/2026	03/06/2024 / jaswal	02/09/2024 / jaswal	M5818

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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 #
Inorganic Ventures	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	T2-MEB714417	01/27/2027	04/19/2024 / jaswal	02/22/2024 / jaswal	M5875

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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-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	240415	11/06/2024	05/10/2024 / Al-Terek	05/07/2024 / Al-Terek	M5891

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	02/20/2029	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/03/2024 / kareem	06/11/2024 / kareem	M5960

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.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5976

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	031524	03/15/2027	07/01/2024 / Jaswal	06/11/2024 / Jaswal	M5982

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-SPK-5 / CLP Spike Standard 5	V2-MEB742037	03/12/2029	10/04/2024 / Jaswal	02/22/2024 / Jaswal	M5990

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-SPK-1 / SOIL/WATER SPIKE SOLN 1, 125mL	T2-MEB721963	07/27/2027	09/04/2024 / Jaswal	02/22/2024 / kareem	M5999

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

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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.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	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.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

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)	22F0762009	05/09/2027	11/04/2024 / Eman	09/29/2024 / Janvi	M6111

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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-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	05/03/2025	11/04/2024 / Janvi	09/29/2024 / Eman	M6116

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	05/06/2025	11/06/2024 / Janvi	09/29/2024 / Eman	M6117

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)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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	05/22/2025	11/22/2024 / Janvi	10/22/2024 / Janvi	M6124

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1403 / Hydrogen Peroxide, 30% 1 gal	820803	05/25/2025	11/26/2024 / Eman	11/22/2024 / Eman	M6125

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	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

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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	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

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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:	CLPP-SPK-5
Lot Number:	V2-MEB742037
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	100 µg/mL ea: Antimony,
	50 µg/mL ea: Selenium, Cadmium, Thallium,
	40 µg/mL ea: Arsenic,
	20 µg/mL ea: Lead

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	100.0 ± 0.7 µg/mL	Arsenic, As	40.00 ± 0.26 µg/mL
Cadmium, Cd	49.99 ± 0.22 µg/mL	Lead, Pb	19.99 ± 0.09 µg/mL
Selenium, Se	50.00 ± 0.23 µg/mL	Thallium, Tl	50.00 ± 0.22 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

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ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	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)

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

March 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

- March 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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R 8/5/24

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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		

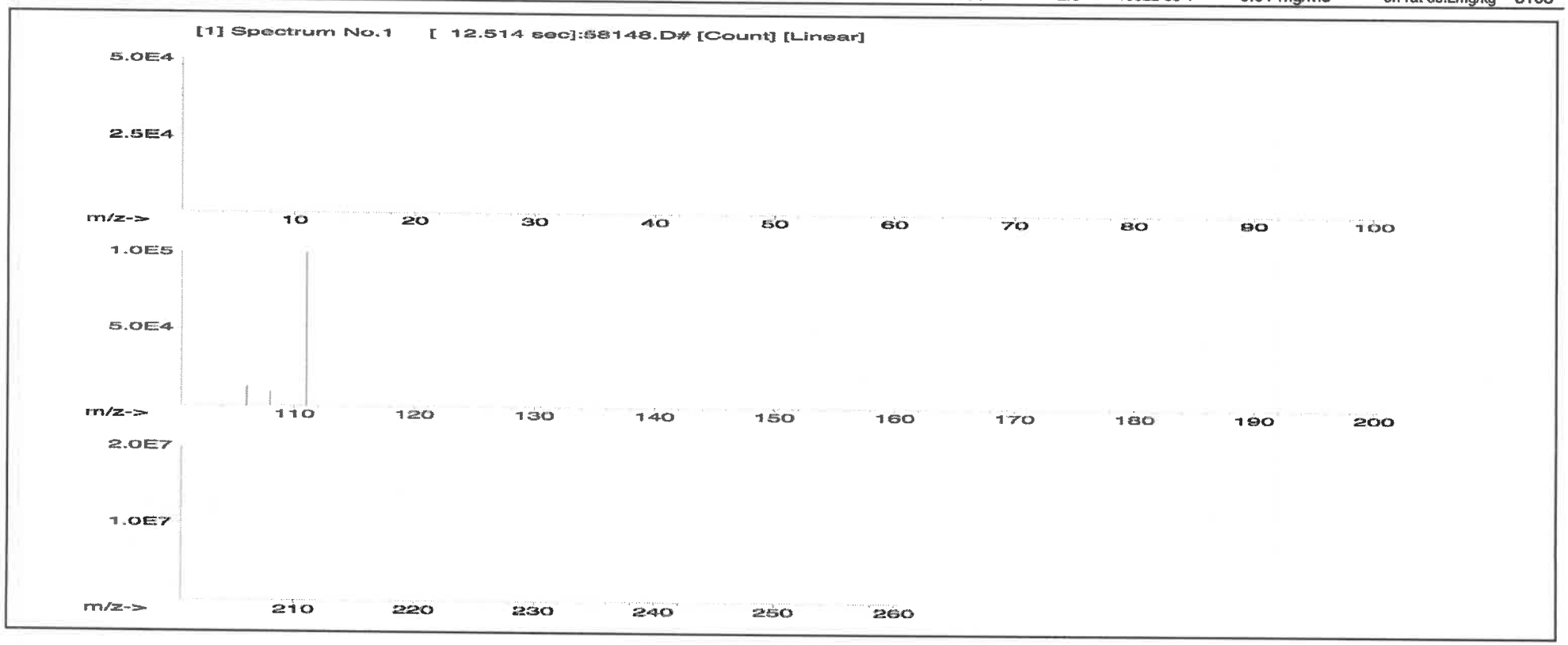
Aleah O'Brady

Formulated By:	Aleah O'Brady	070124

Pedro Rentas

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



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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:

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).

M5296 OP: 09/19/2022 BH

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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:	CHEM-CLP-4
Lot Number:	S2-MEB711673
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 ± 6 µg/mL**	**Molybdenum, Mo**	**1 000 ± 6 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 6 µg/mL**
Titanium, Ti	**1 000 ± 7 µg/mL**		

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

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

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

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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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

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

11.2 Lot Expiration Date

- **November 02, 2026**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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:	CLPP-CAL-1
Lot Number:	T2-MEB714417
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	**50.00 ± 0.26 µg/mL**	**Calcium, Ca**	**5 000 ± 22 µg/mL**
Chromium, Cr	**200.0 ± 1.0 µg/mL**	**Cobalt, Co**	**500.0 ± 2.4 µg/mL**
Copper, Cu	**250.0 ± 1.0 µg/mL**	**Iron, Fe**	**1 000 ± 4 µg/mL**
Magnesium, Mg	**5 000 ± 20 µg/mL**	**Manganese, Mn**	**500.0 ± 2.0 µg/mL**
Nickel, Ni	**500.0 ± 2.2 µg/mL**	**Potassium, K**	**5 000 ± 19 µg/mL**
Silver, Ag	**250.0 ± 1.1 µg/mL**	**Sodium, Na**	**5 000 ± 18 µg/mL**
Vanadium, V	**499.7 ± 2.2 µg/mL**	**Zinc, Zn**	**500.0 ± 2.2 µg/mL**

Density: 1.118 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
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

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

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

X_a = mean of Assay Method A with

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 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

- **January 27, 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

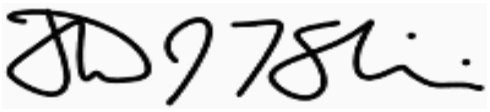
- Sealed TCT Bag Open Date: _____

- 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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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-MEB714159
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 ± 8 µg/mL**	**Cadmium, Cd**	**500.0 ± 2.1 µg/mL**
Lead, Pb	**1 000 ± 5 µg/mL**	**Selenium, Se**	**1 000 ± 8 µg/mL**
Thallium, Tl	**1 000 ± 7 µg/mL**		

Density: 1.043 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

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.

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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:

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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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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

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u_{bb} = bottle to bottle homogeneity standard uncertainty

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u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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- 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.

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- 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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 13, 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

- **January 13, 2027**

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

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

11.3 Period of Validity

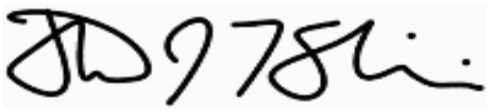
- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/5/24 M6025

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

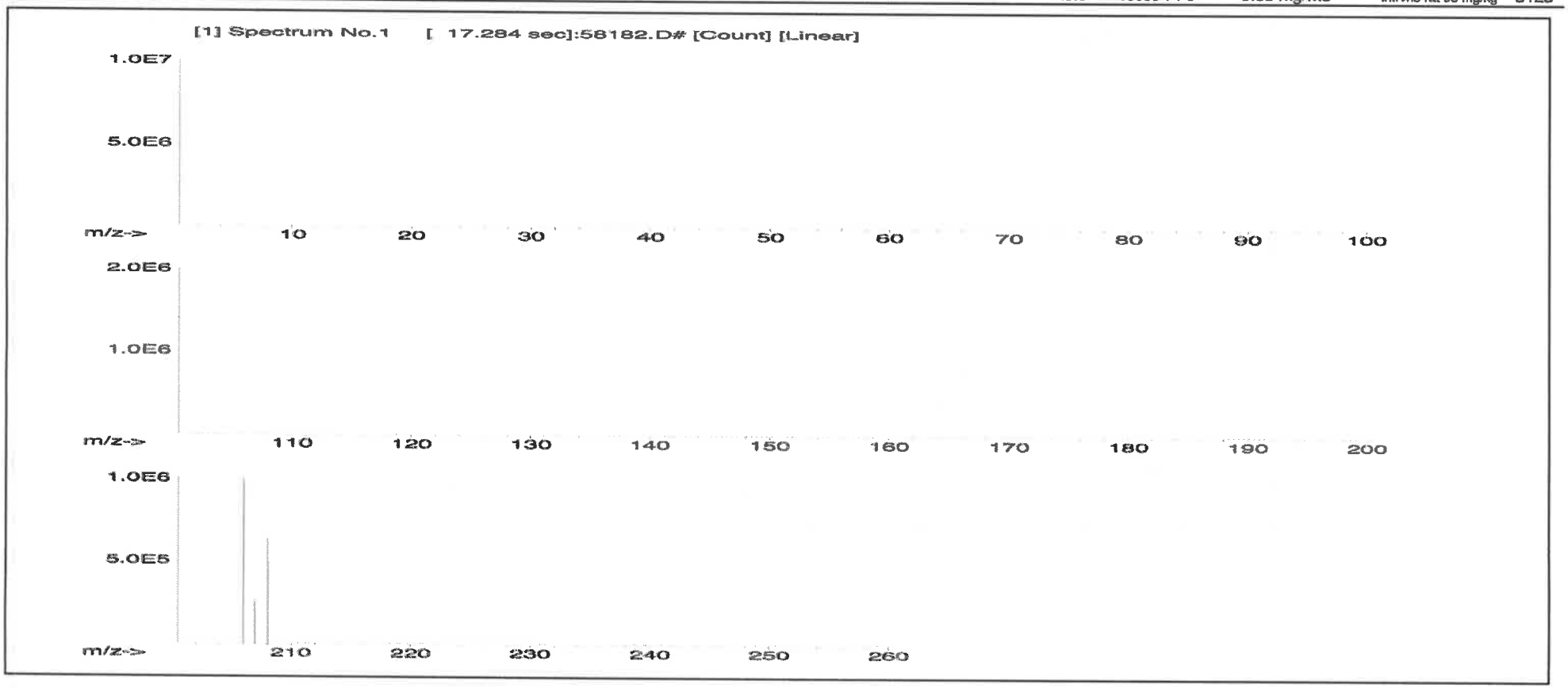
Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

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

(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,



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

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

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.

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 7 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

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

642

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

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

11.2 Lot Expiration Date

- **November 02, 2026**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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

(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,

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

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

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.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5289 R: 07/12/22 (BH)

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58113
Lot Number: 070622
Description: Aluminum (Al)

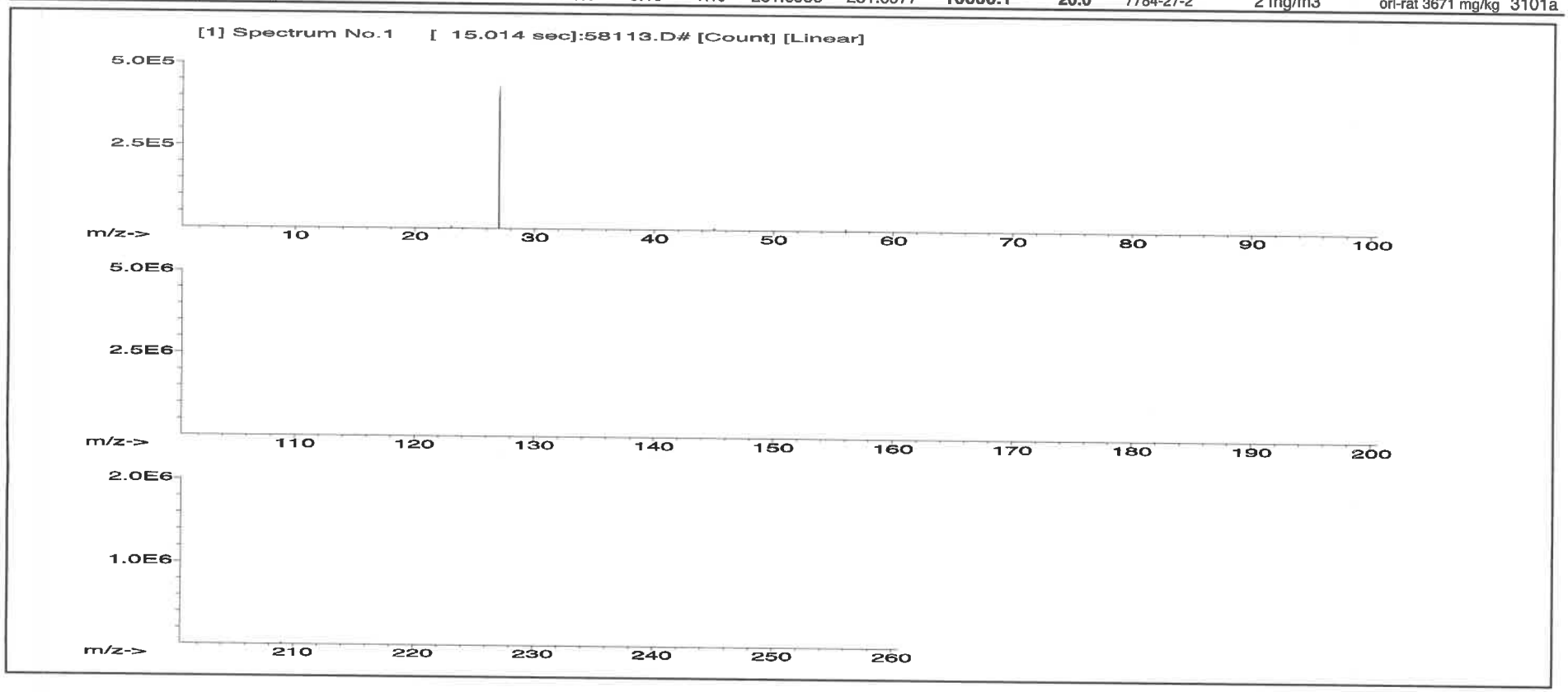
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	20370011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALD012021A1	10000	99.999	0.10	7.10	281.6956	281.6977	**10000.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	T	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<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).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

M5291
M5292
M5293
M5294
M5295

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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651

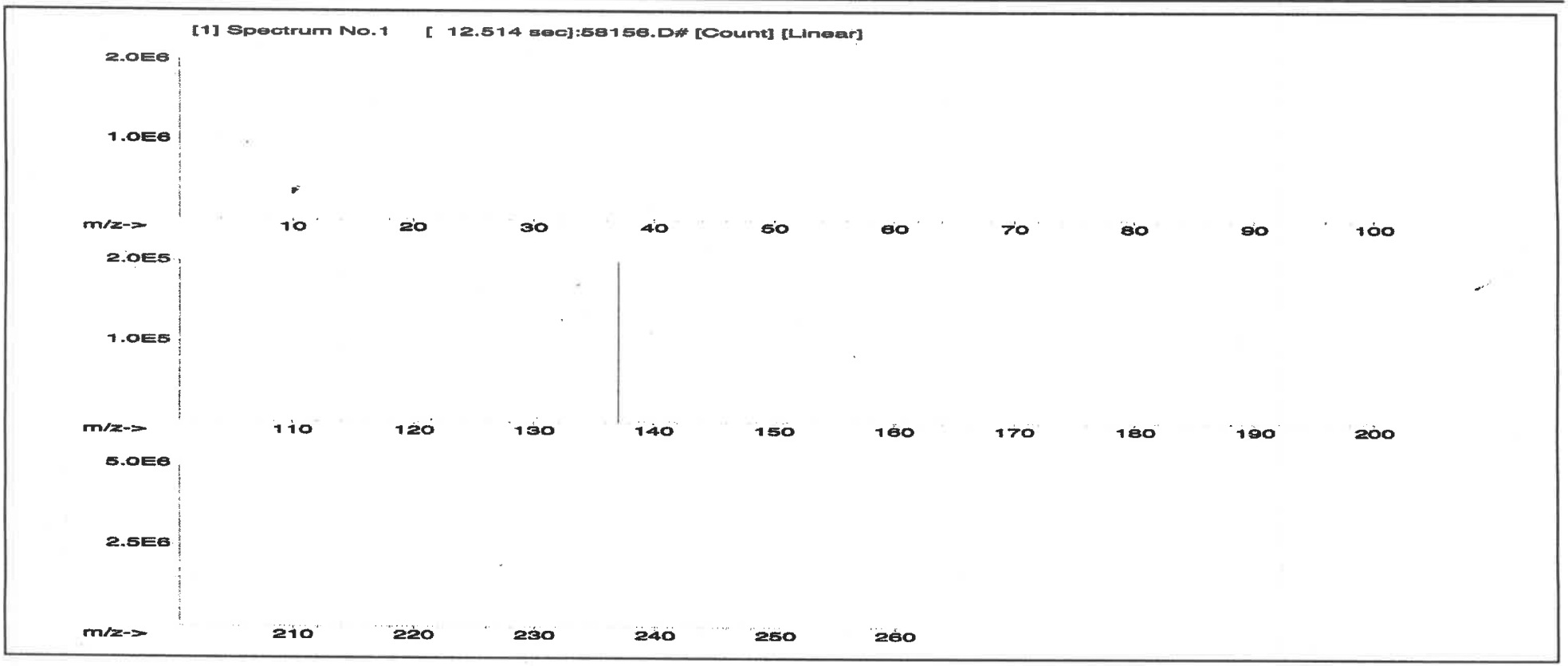
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

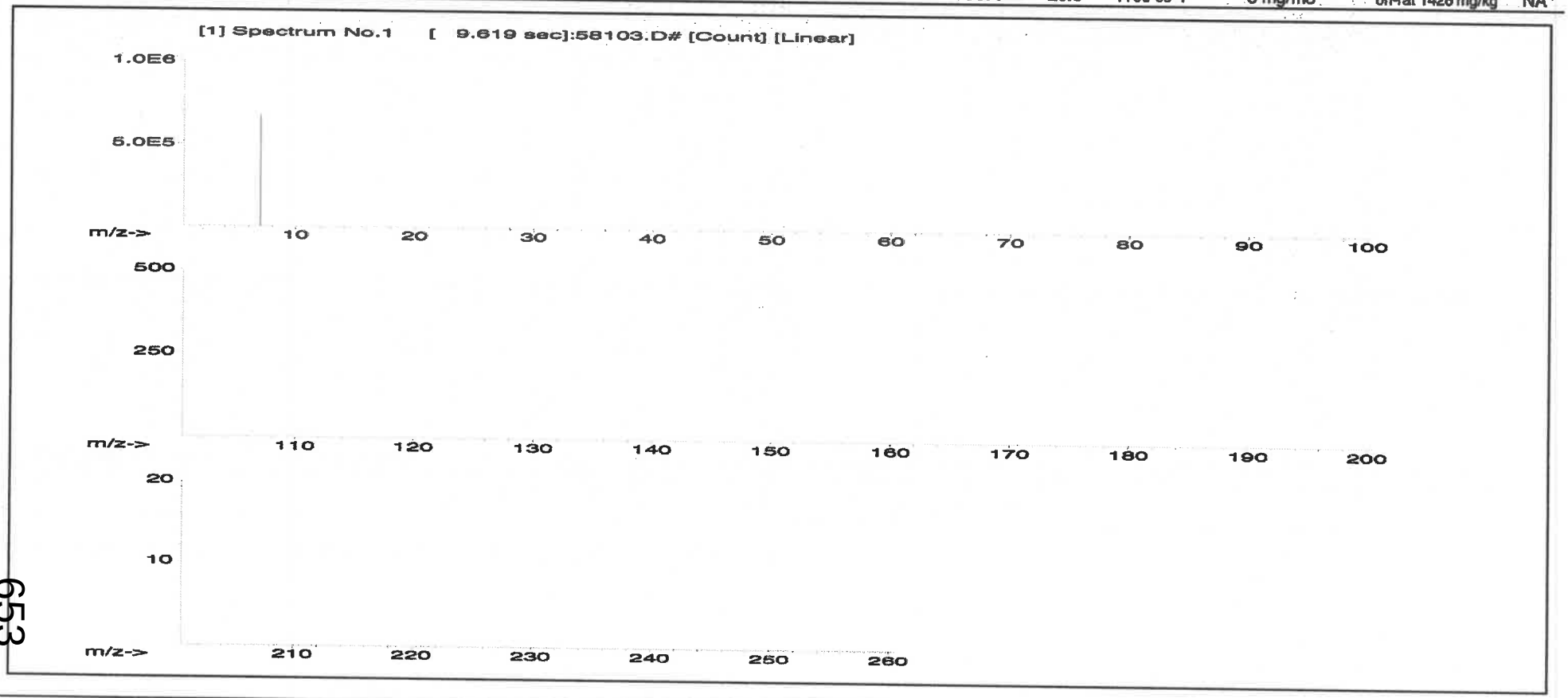
Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	± 5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 070622
Reviewed By: Pedro L. Rentas 070622

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. Lithium nitrate (Li)	IN019	LIZ042018A1	10000	99.999	0.10	10.0	100.0134	100.0173	**10000.4**	**20.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



653

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	T	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.

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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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* 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).

654

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 0.058 Flask Uncertainty

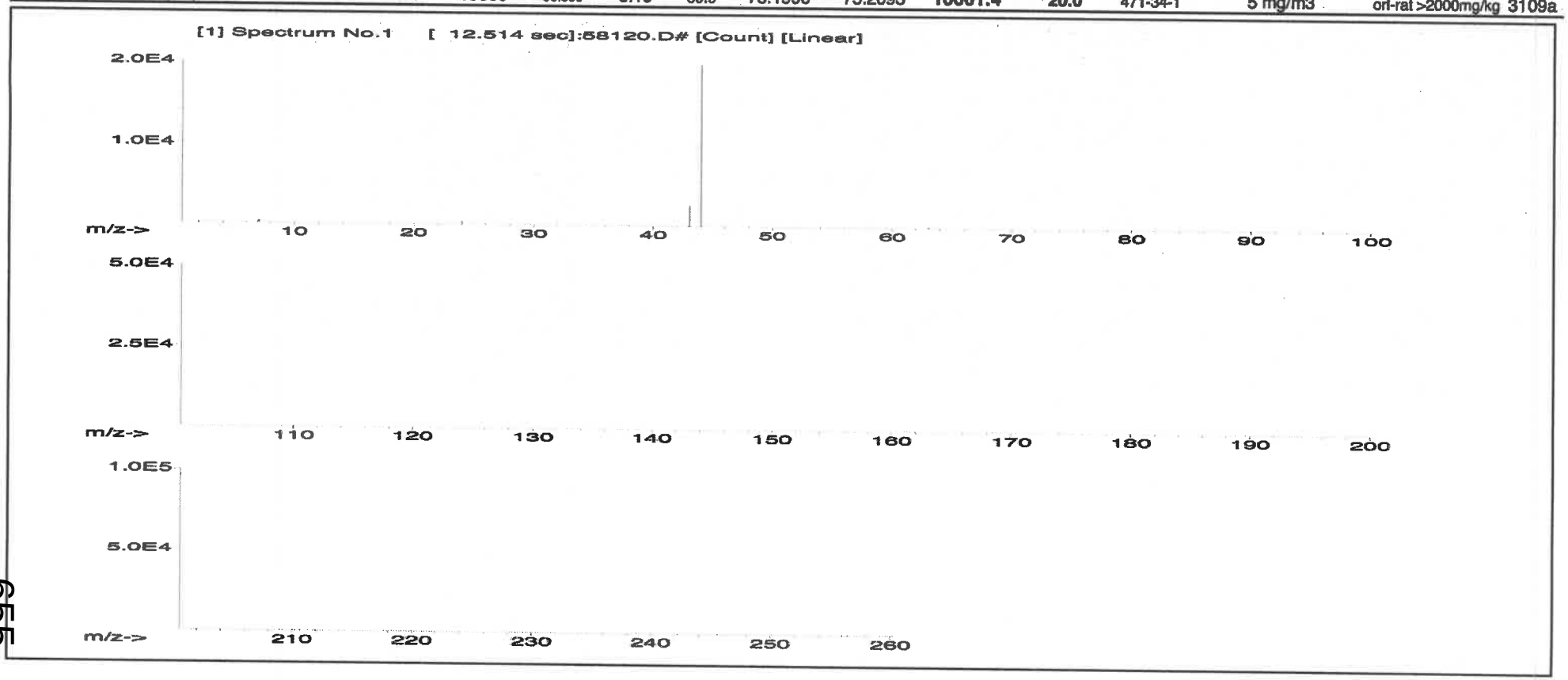
	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



655

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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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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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

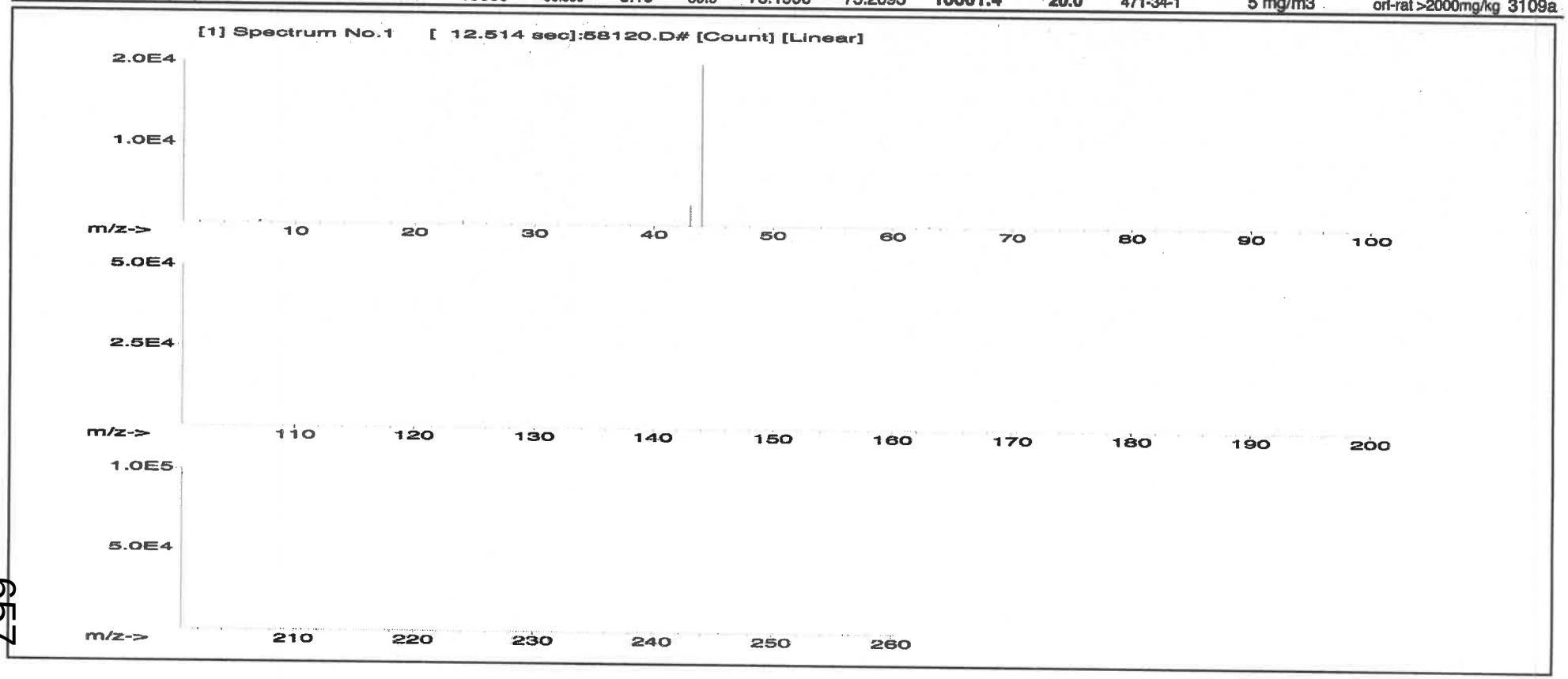
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 031523

Pedro Rentas
Reviewed By: Pedro L. Rentas 031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



657

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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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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MS513 R:03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

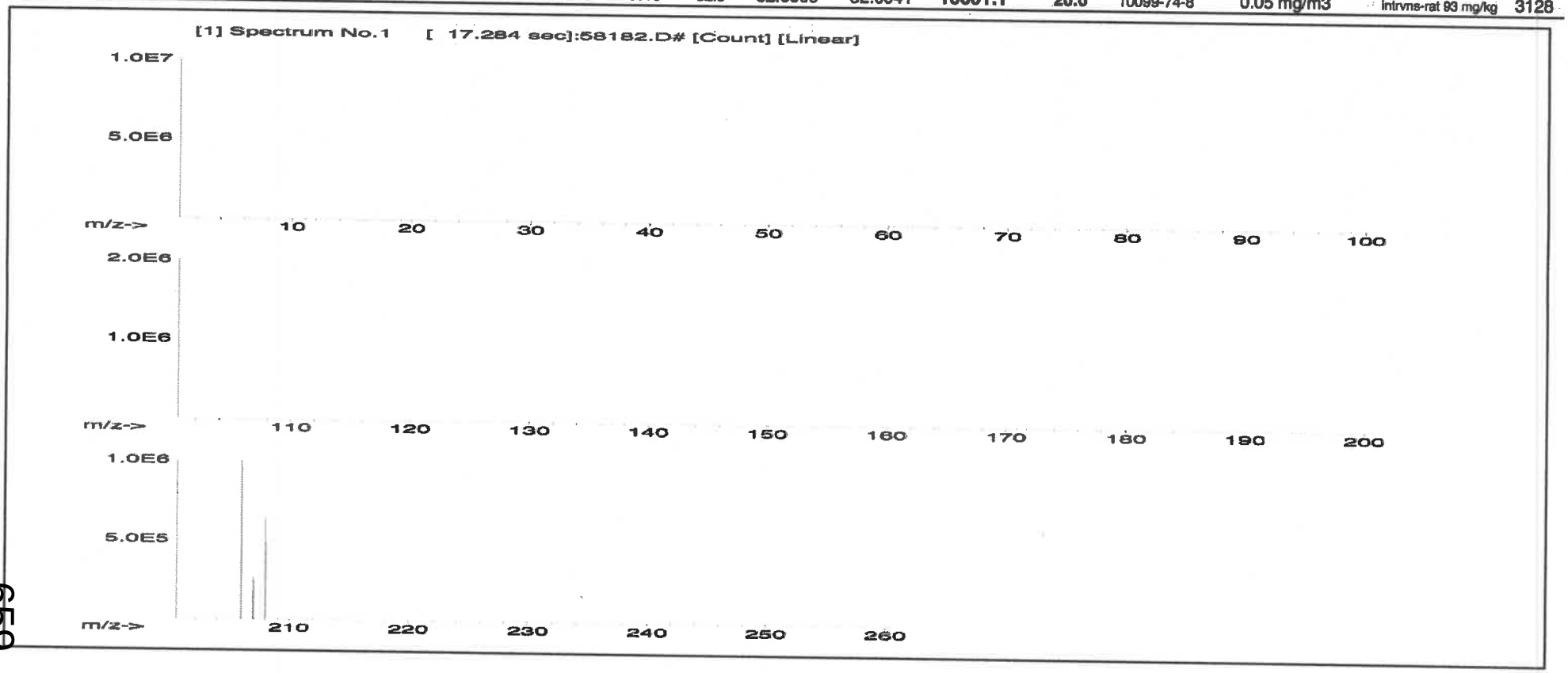
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



659

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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* 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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M5514 , M5515 R: 03/17/23

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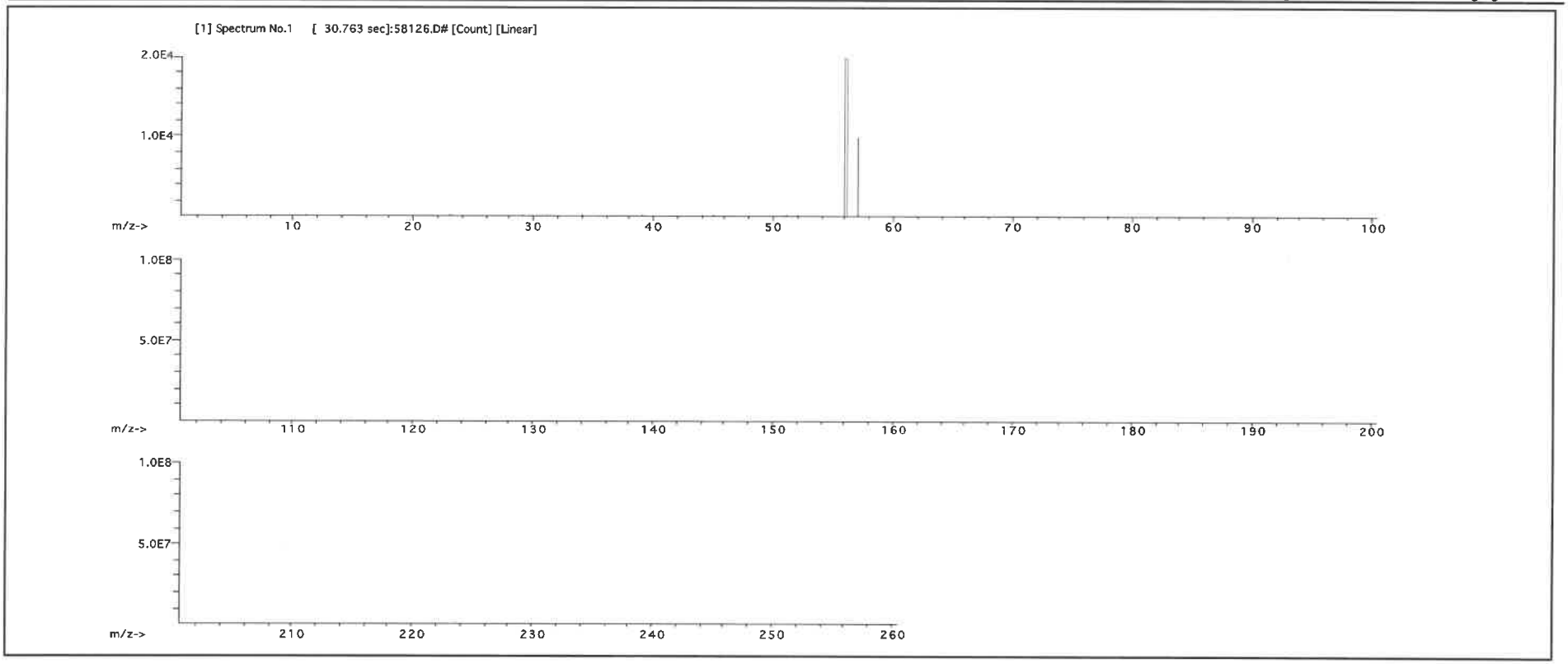
CERTIFIED WEIGHT REPORT:

Part Number:	**58126**		**Lot #**		
Lot Number:	**092122**		**Solvent:**	20510011	Nitric Acid
Description:	**Iron (Fe)**				
			7.0%	350.0 (mL)	Nitric Acid
Expiration Date:	092125				
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):	5000.1	0.12	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	092122
Reviewed By:	Pedro L. Rentas	092122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2224912-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.05
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

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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M5519. M5520 (BH) R:03/17/23

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663

CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

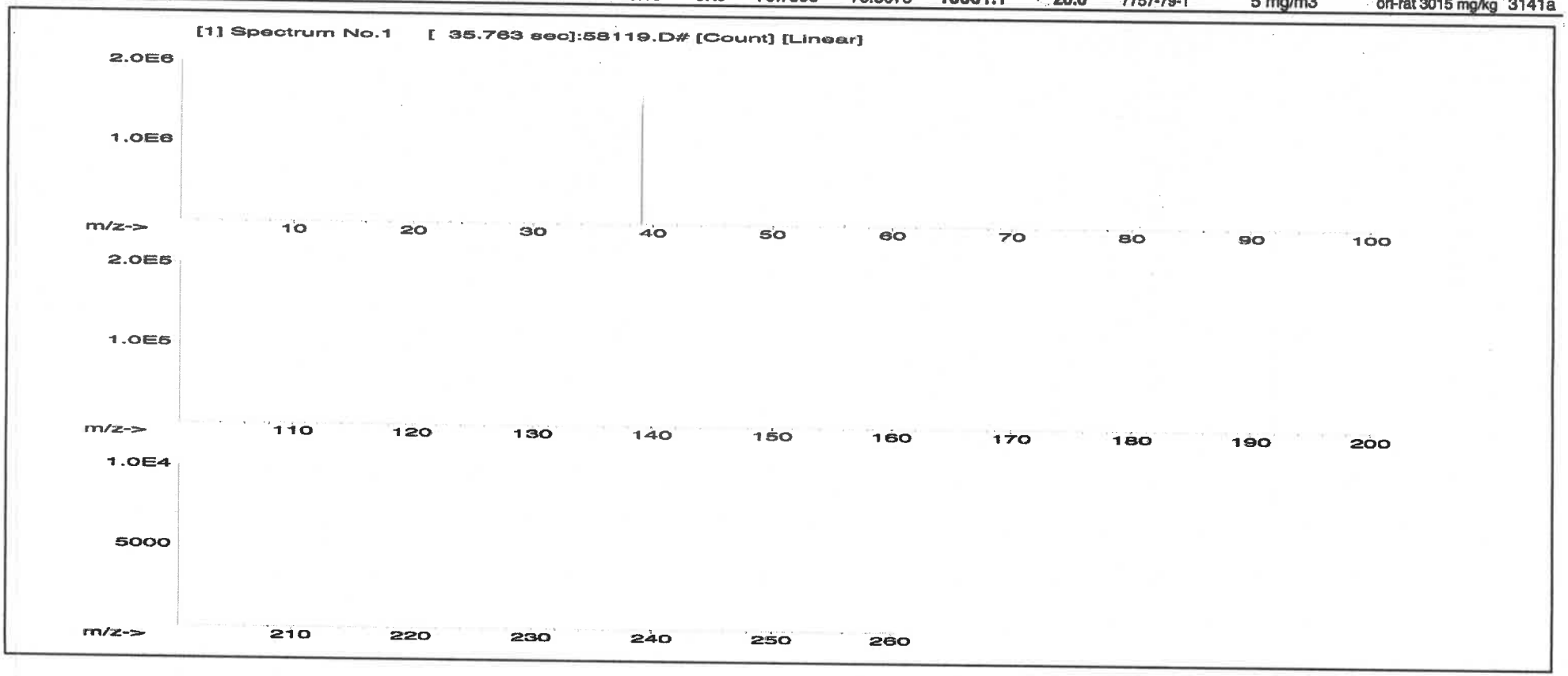
Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

		Lot #		
Solvent:	20510011	Nitric Acid		
2%	60.0 (mL)	Nitric Acid		
	5E-05	Balance Uncertainty		
	0.06	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	120822
Reviewed By:	Pedro L. Rentas	120822

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	79.7990	79.8075	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



664

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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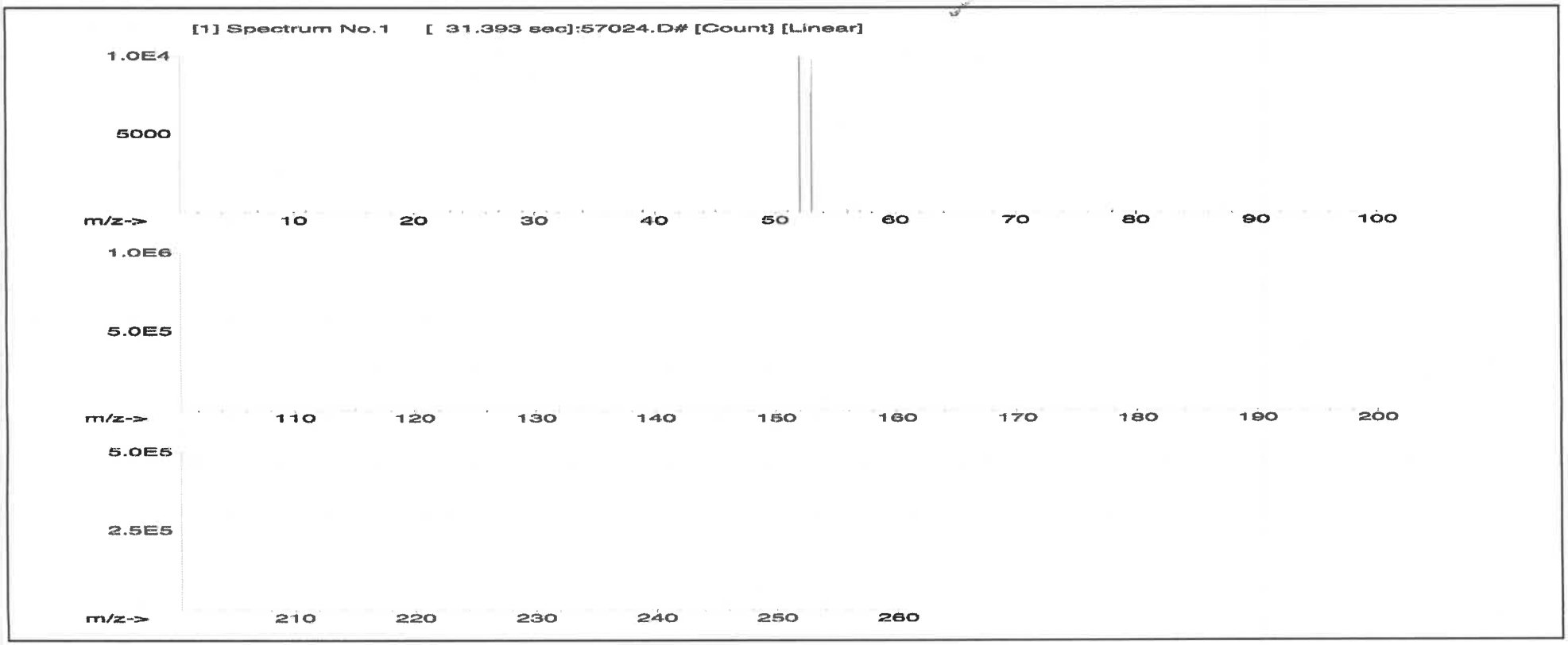
CERTIFIED WEIGHT REPORT:

		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

665

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



999

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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* 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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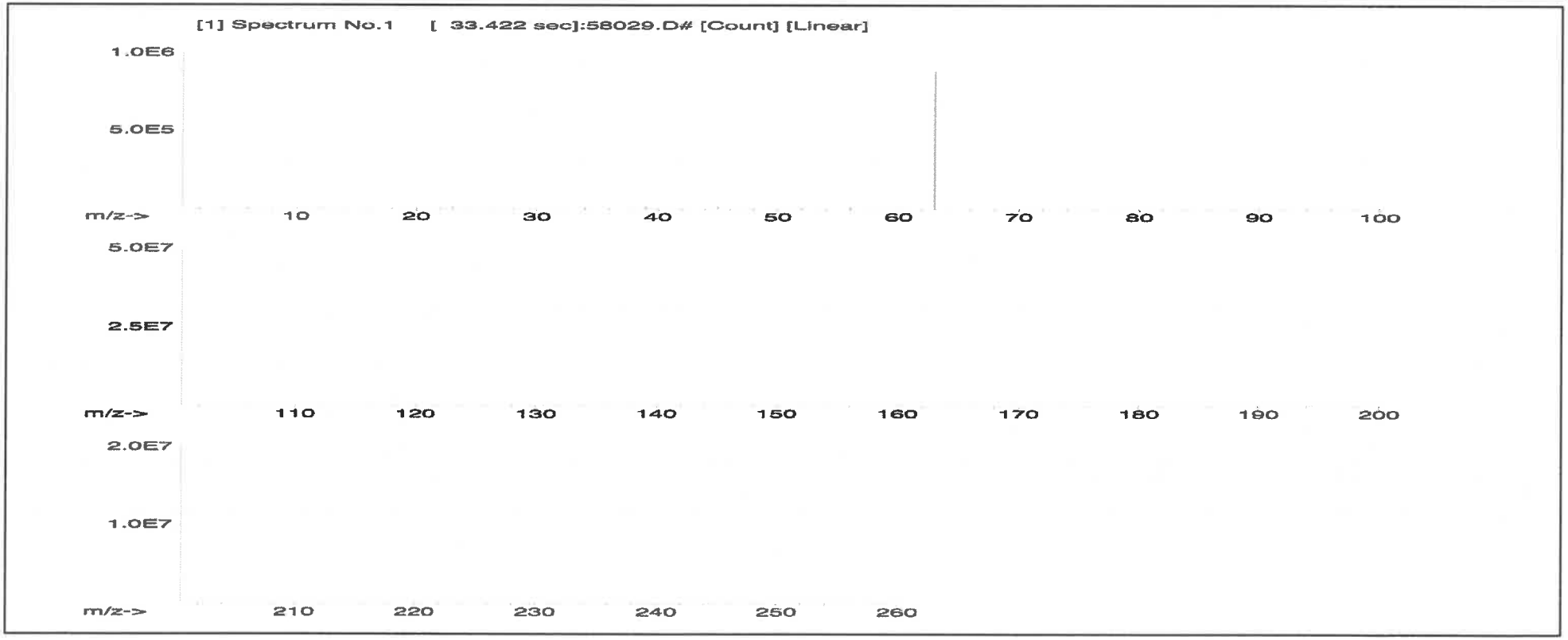
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**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

997

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



899

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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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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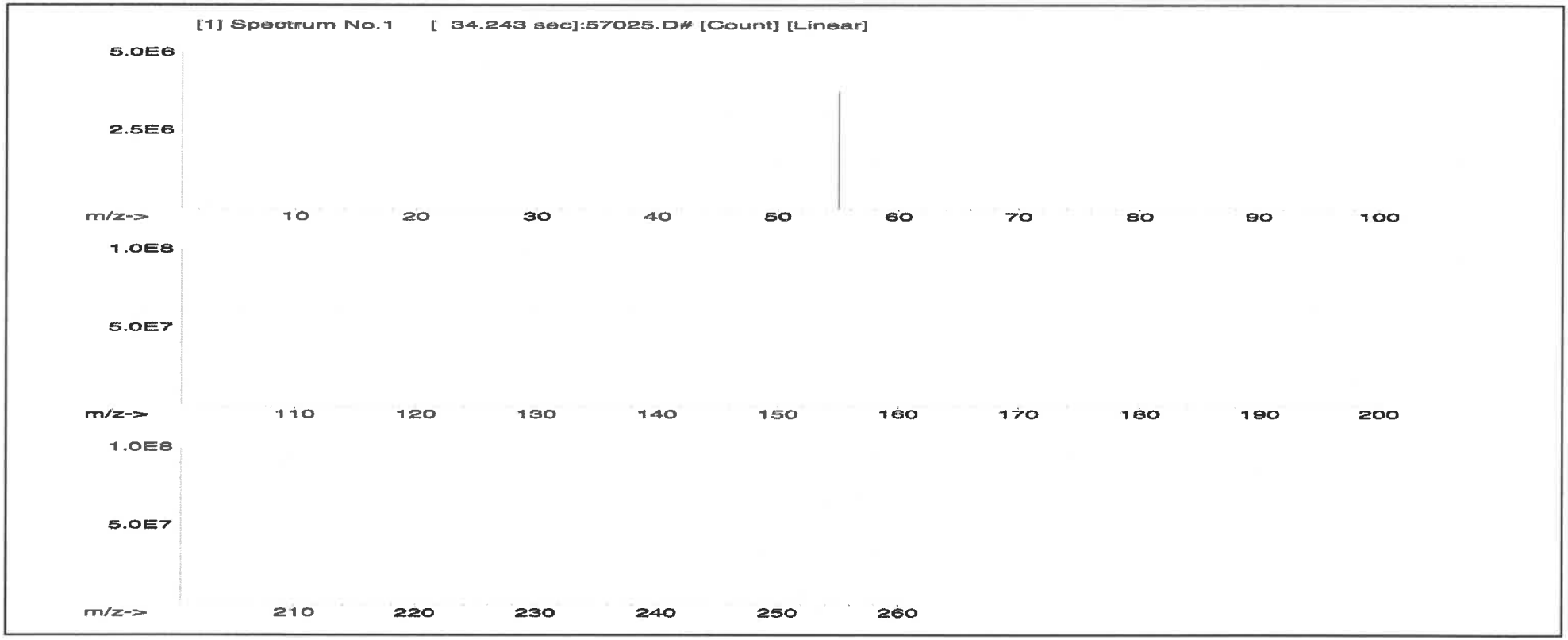
699

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	**1000.0**	**2.1**	20694-39-7	5 mg/m3	orl-rat >300mg/kg	3132



670

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the balances that are calibrated with weights traceable to NIST (see above).
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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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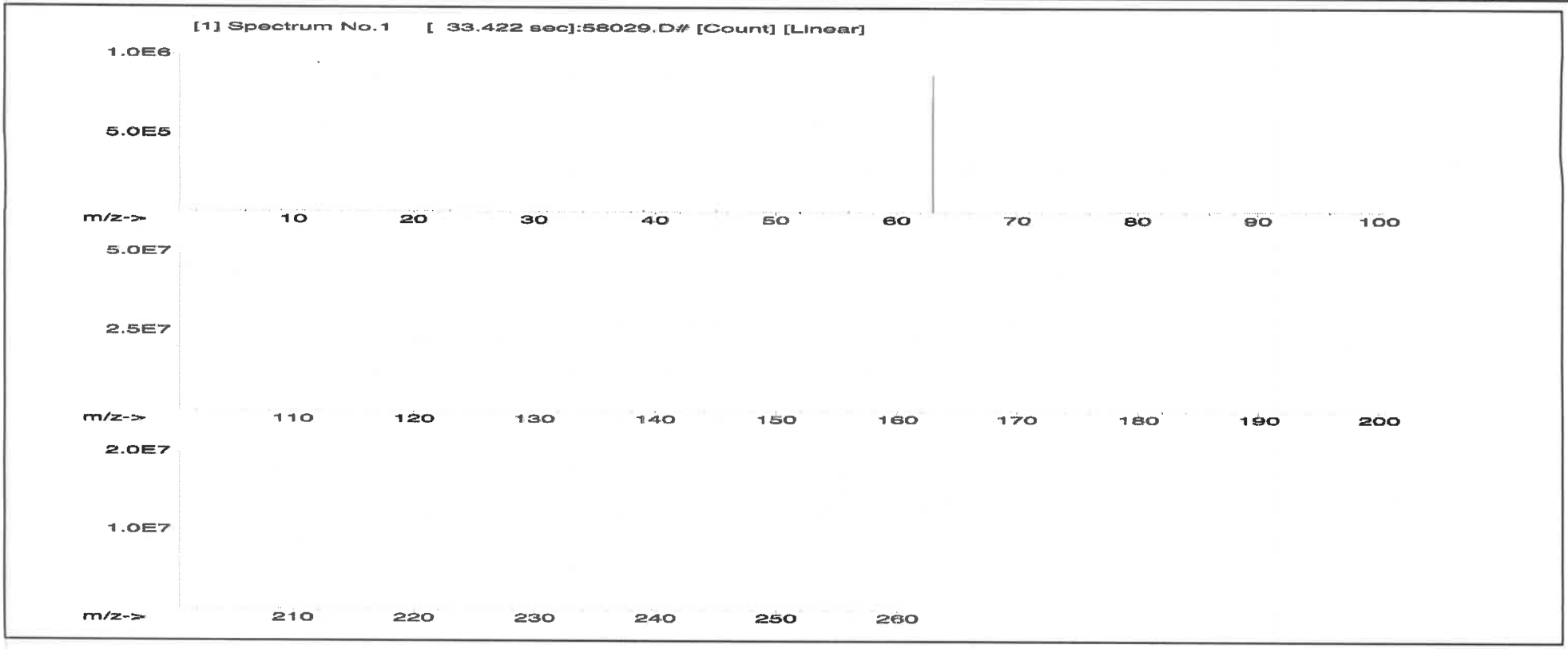
671

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
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	071723
Reviewed By:	Pedro L. Rentas	071723

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	022723	0.1000	200.0	0.084	1000	10000.5	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



672

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:

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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* 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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M5768 M5769 BP R:1/3/24

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673

CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

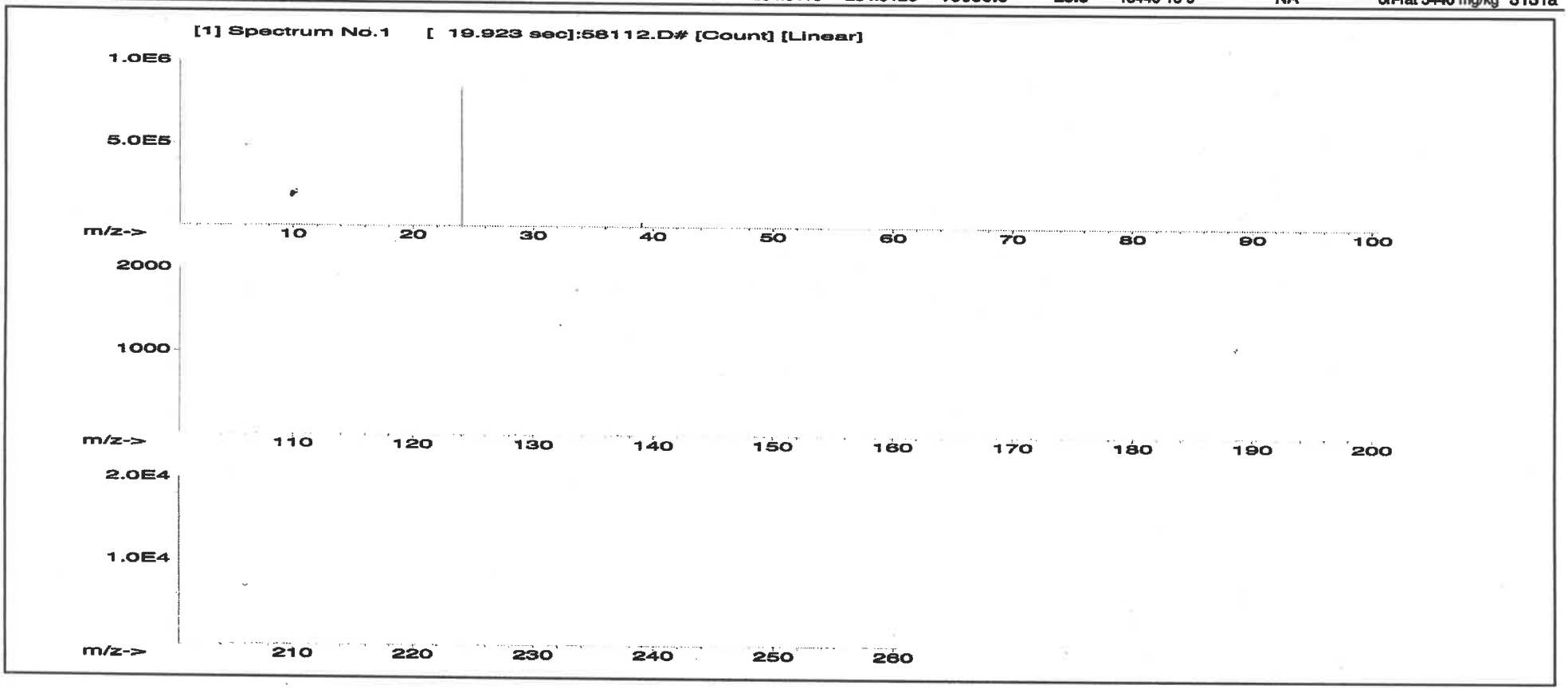
5E-05 Balance Uncertainty

M5768, M5769 BP R: 1/3/24

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



674

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.
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* 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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M5768 M5769 (BP) R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

		Lot #	
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

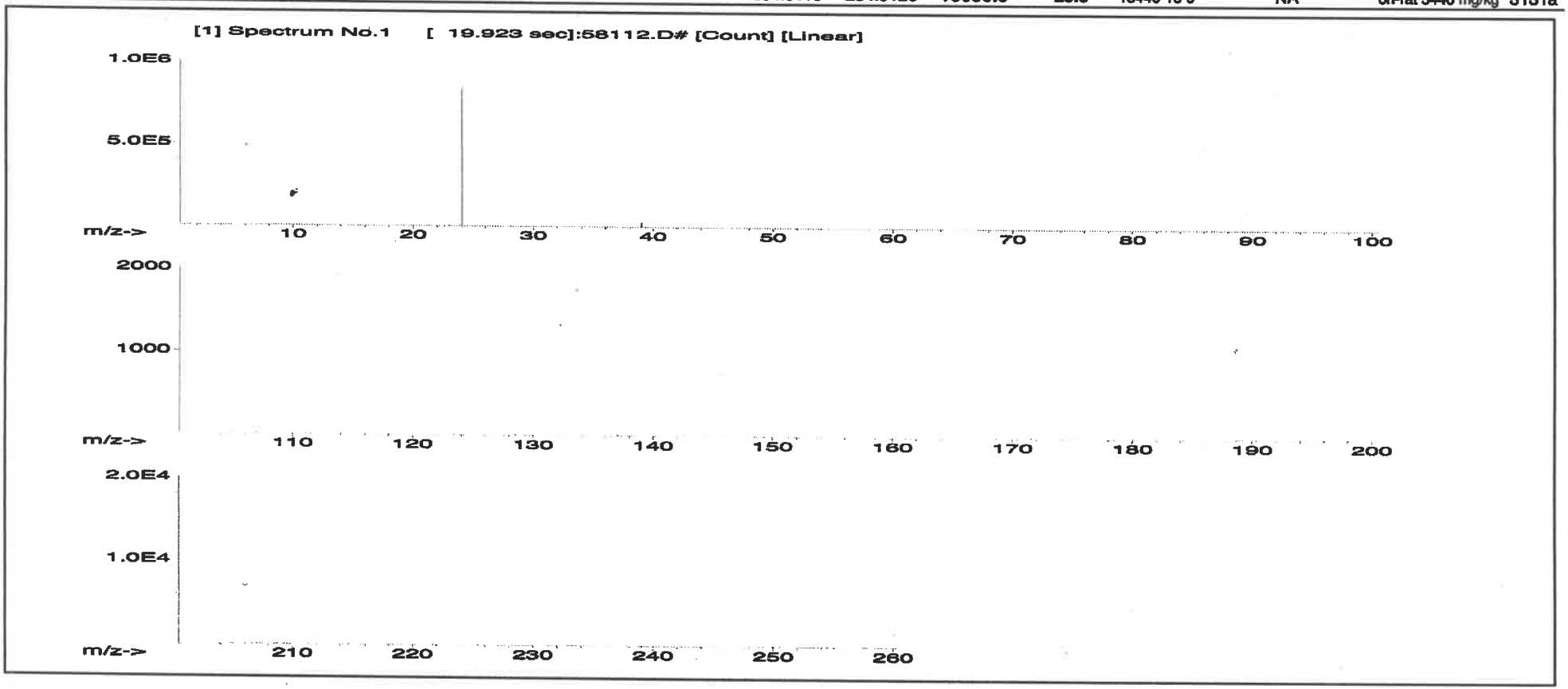
5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



679

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:

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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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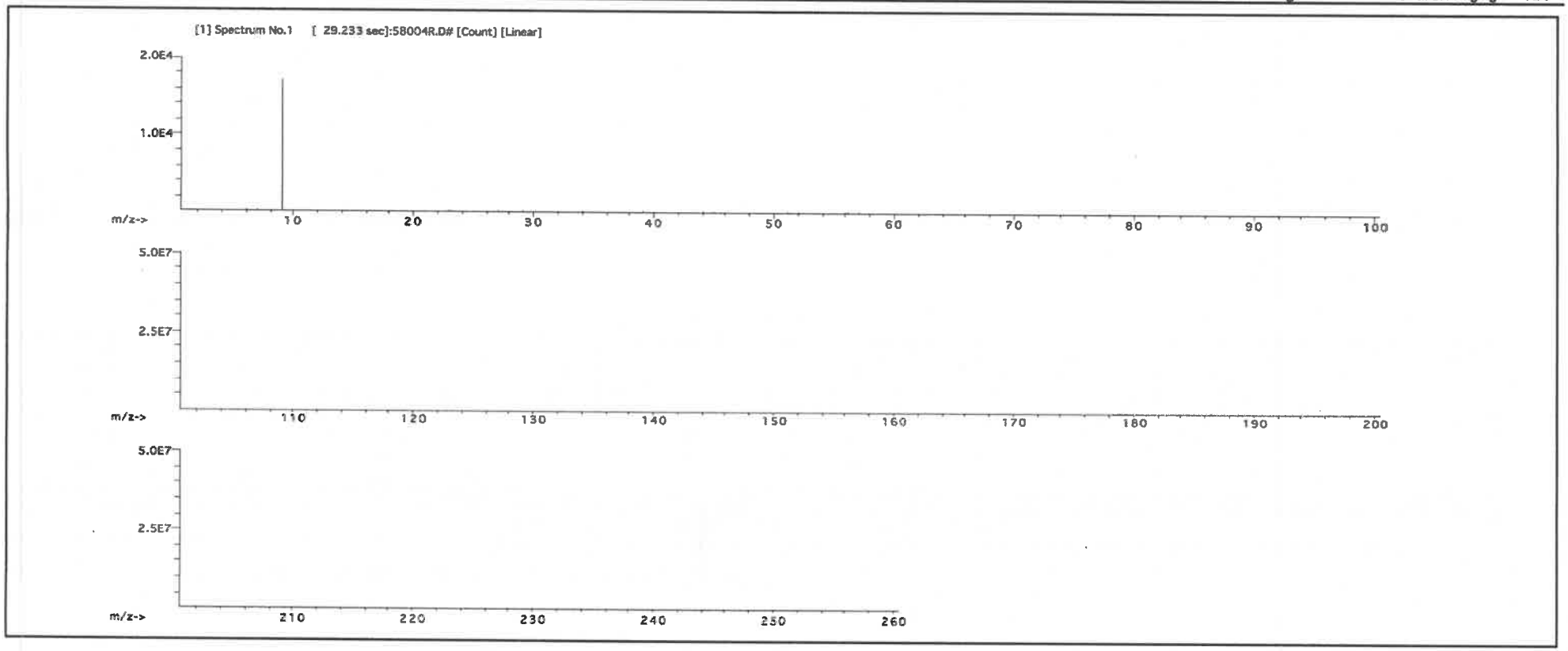
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CERTIFIED WEIGHT REPORT:

		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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* 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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679

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

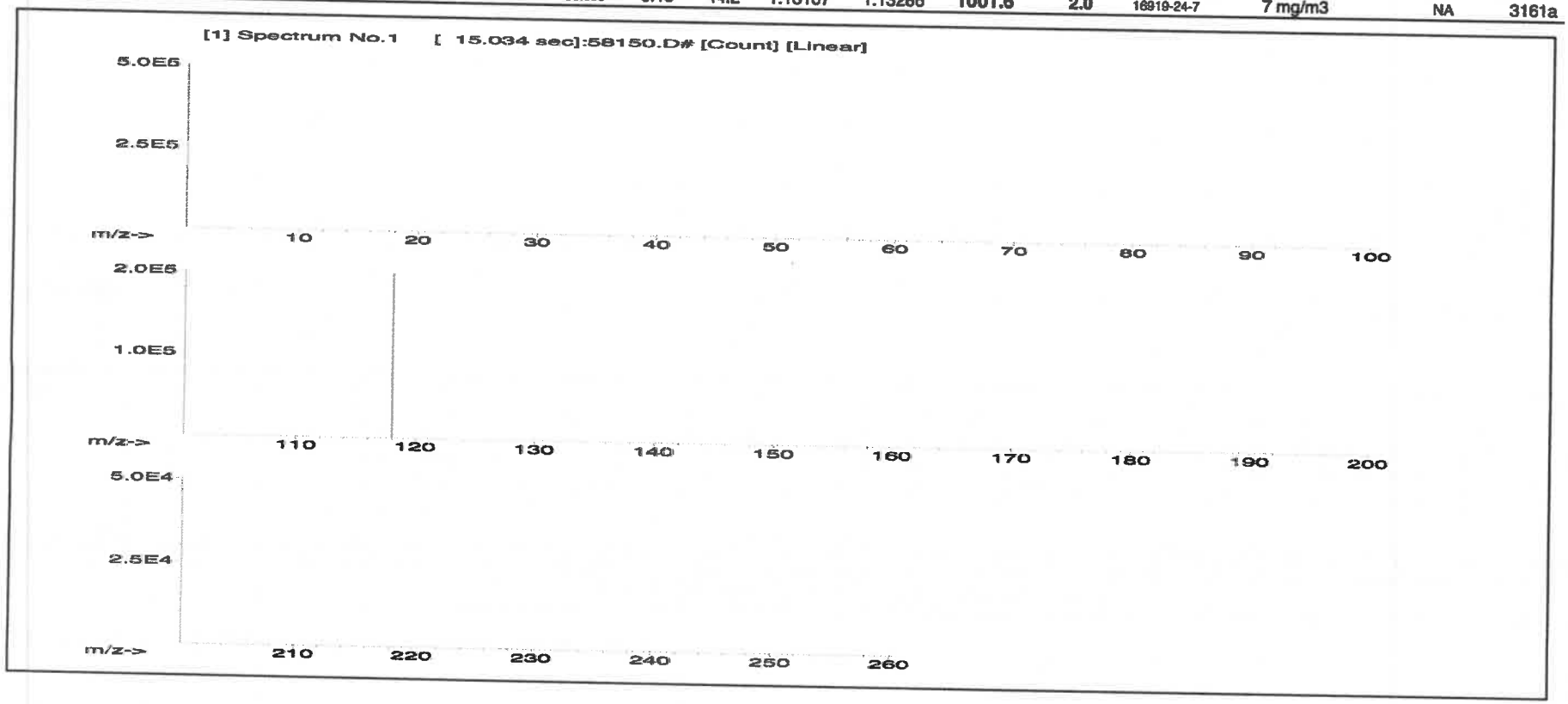
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



089

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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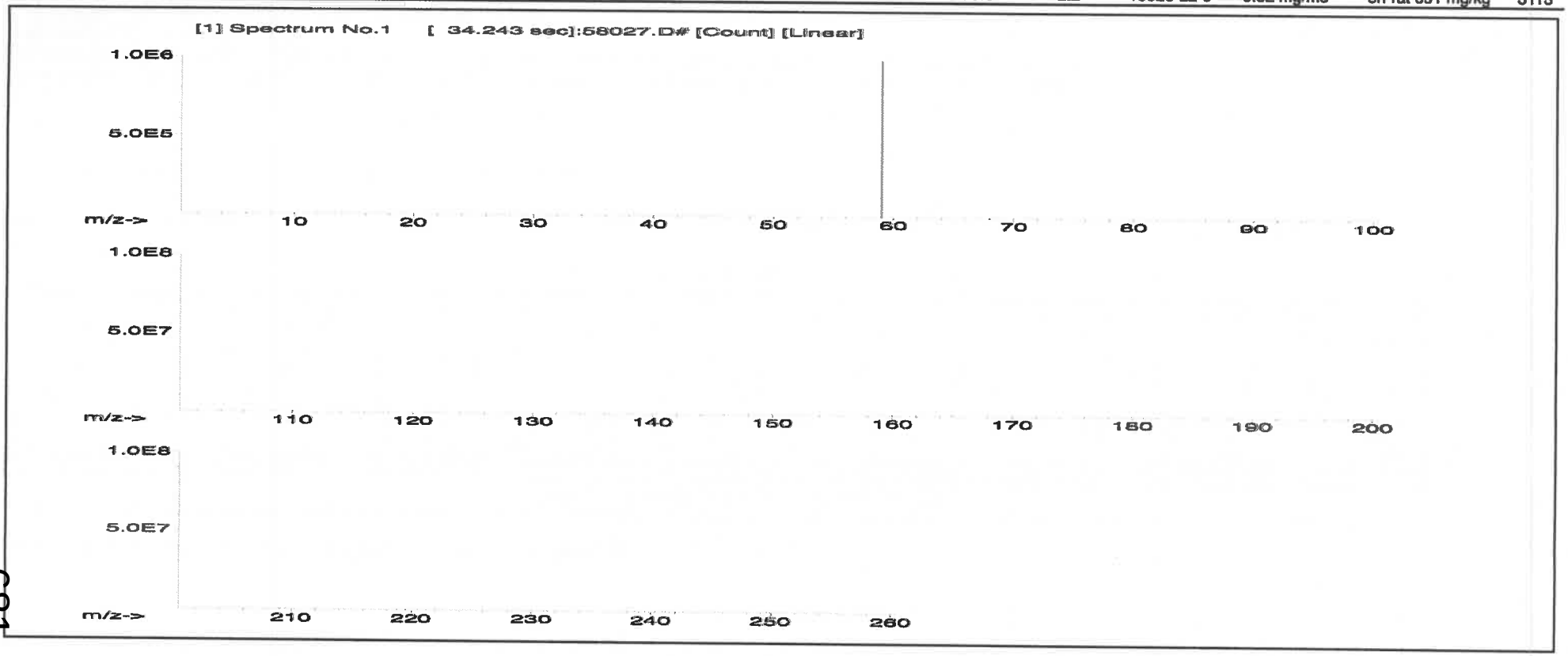
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CERTIFIED WEIGHT REPORT:

		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



681

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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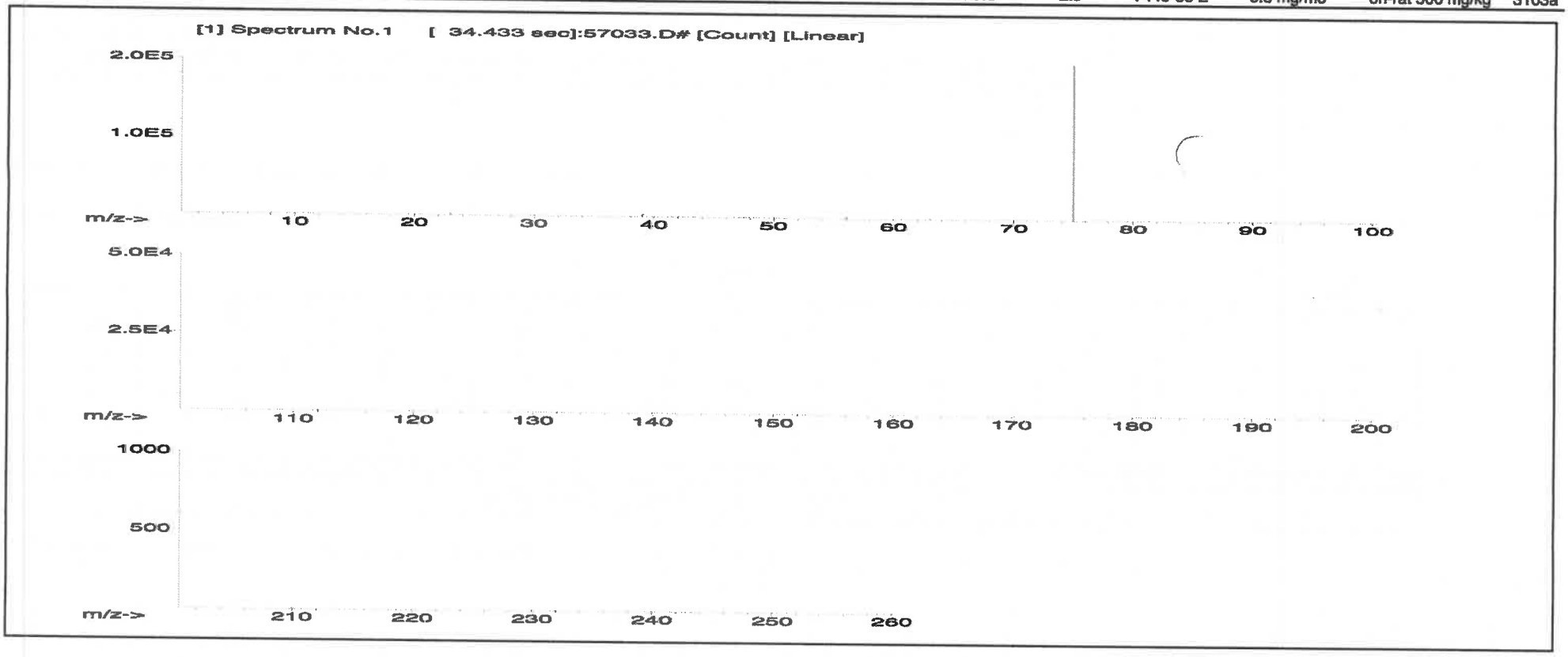
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
Description:	**Arsenic (As)**				
		2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By: Lawrence Barry 111323

Reviewed By: Pedro L. Rentas 111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



684

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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* 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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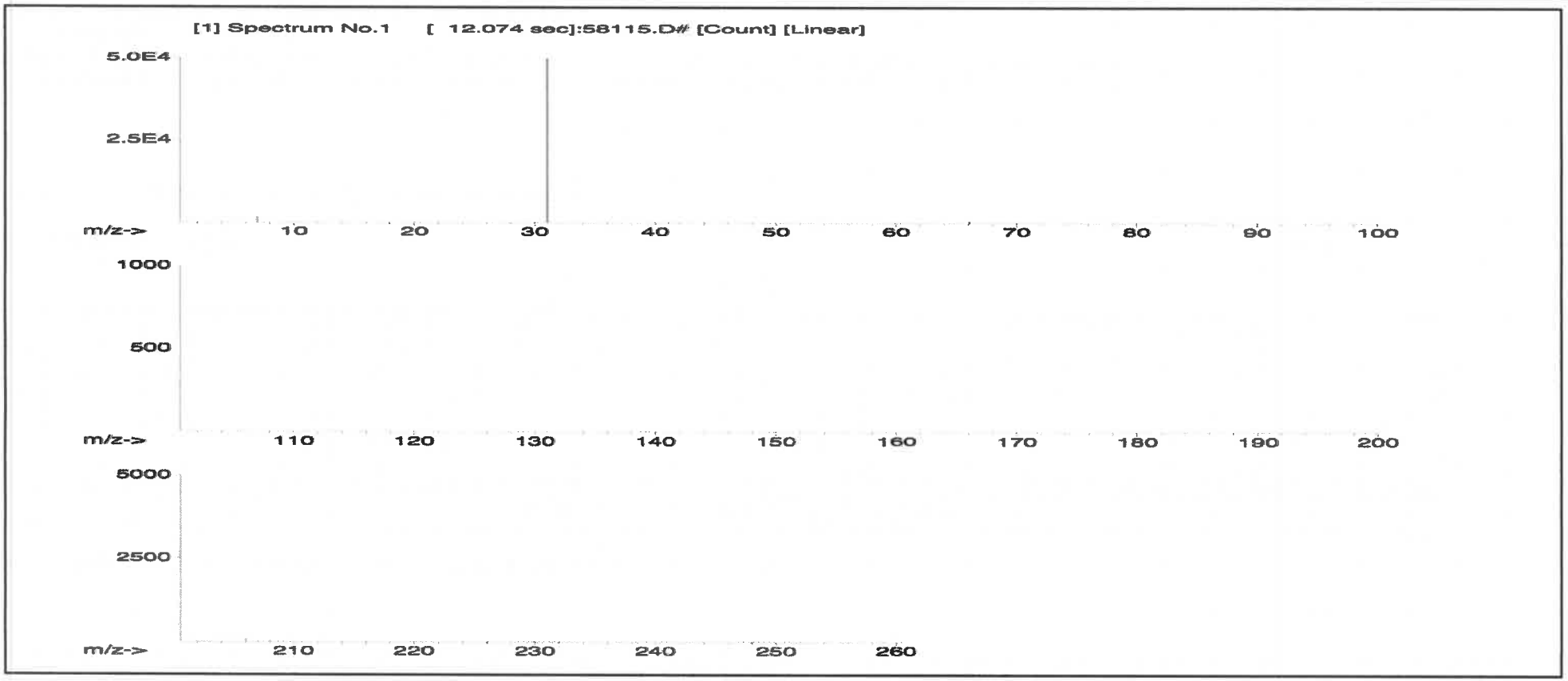
685

CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**57115**	**Solvent:**	21110221	Nitric Acid
Lot Number:	**041723**			
Description:	**Phosphorous (P)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**10000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



689

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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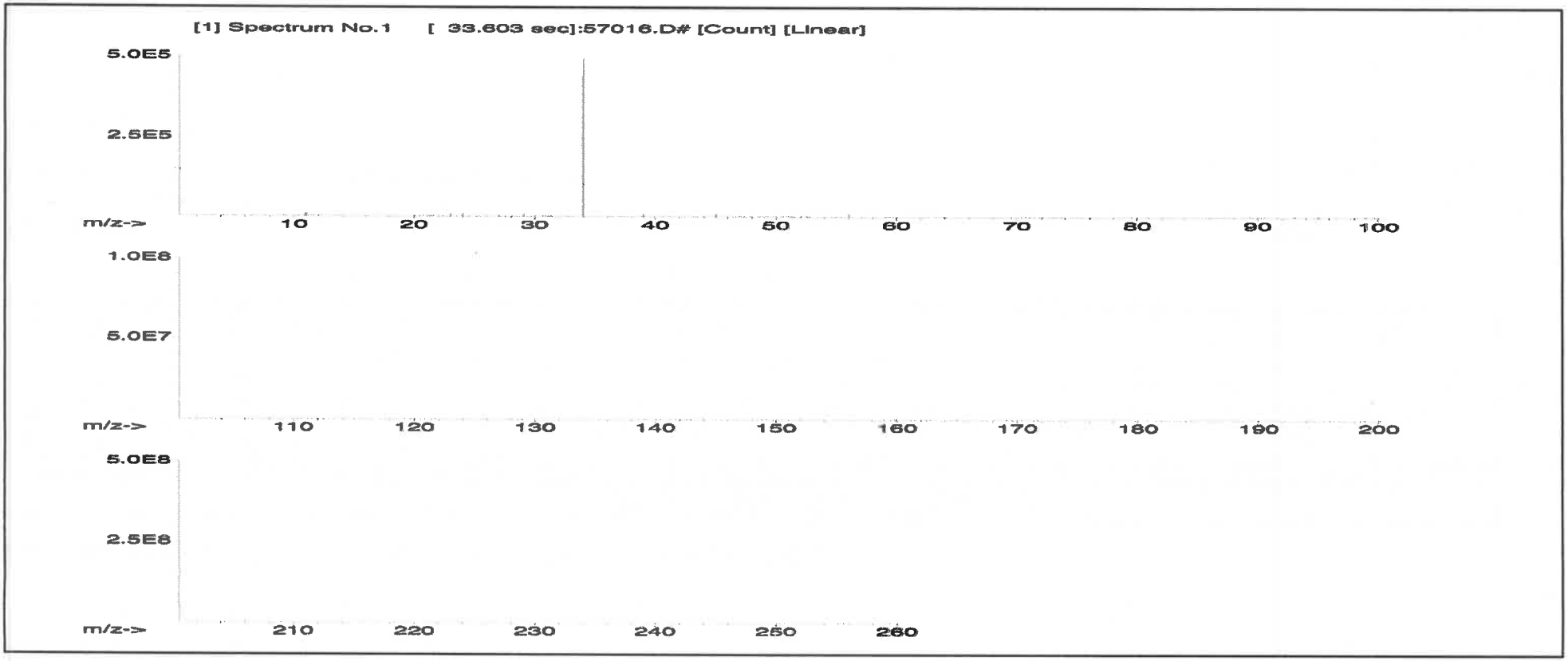
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 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	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

687

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



889

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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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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689

CERTIFIED WEIGHT REPORT:

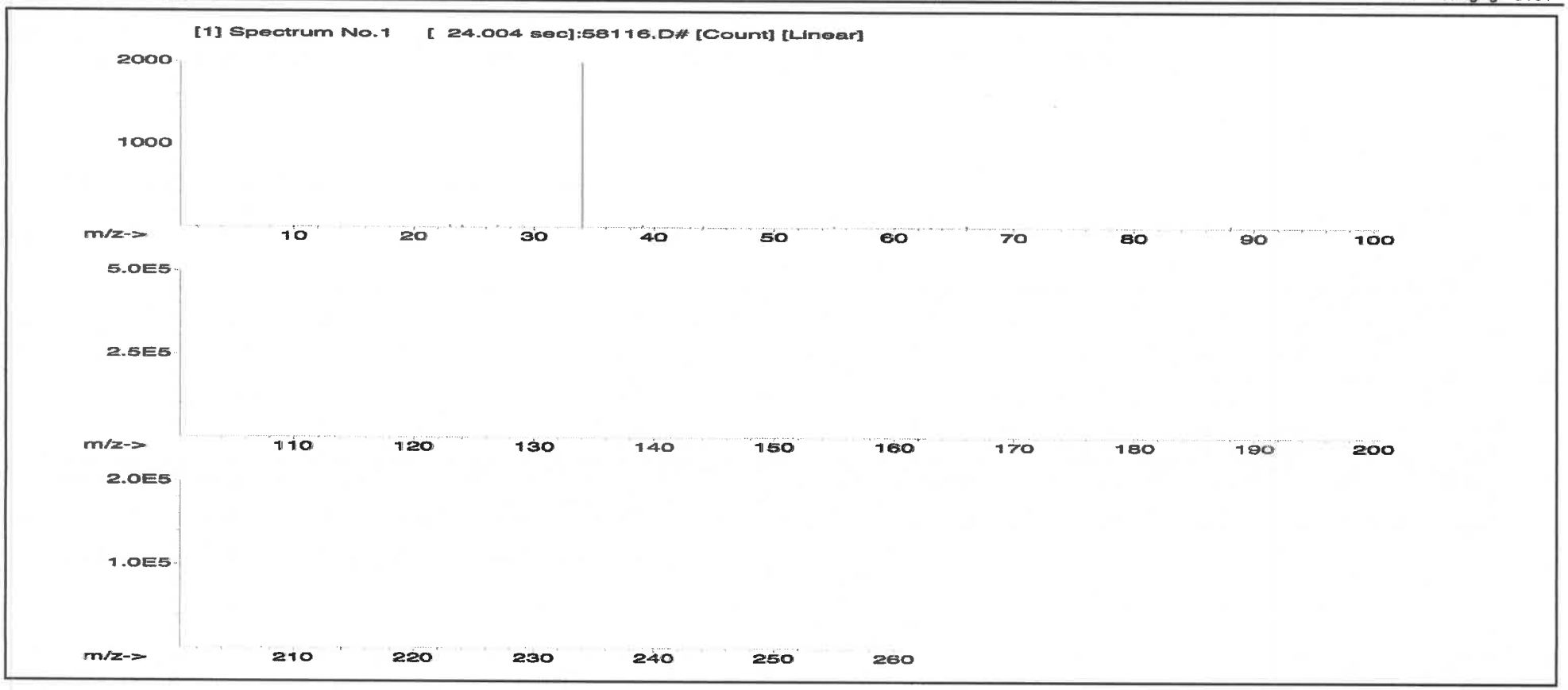
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	ori-rat 4250mg/kg	3181



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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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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691

CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Solvent: 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

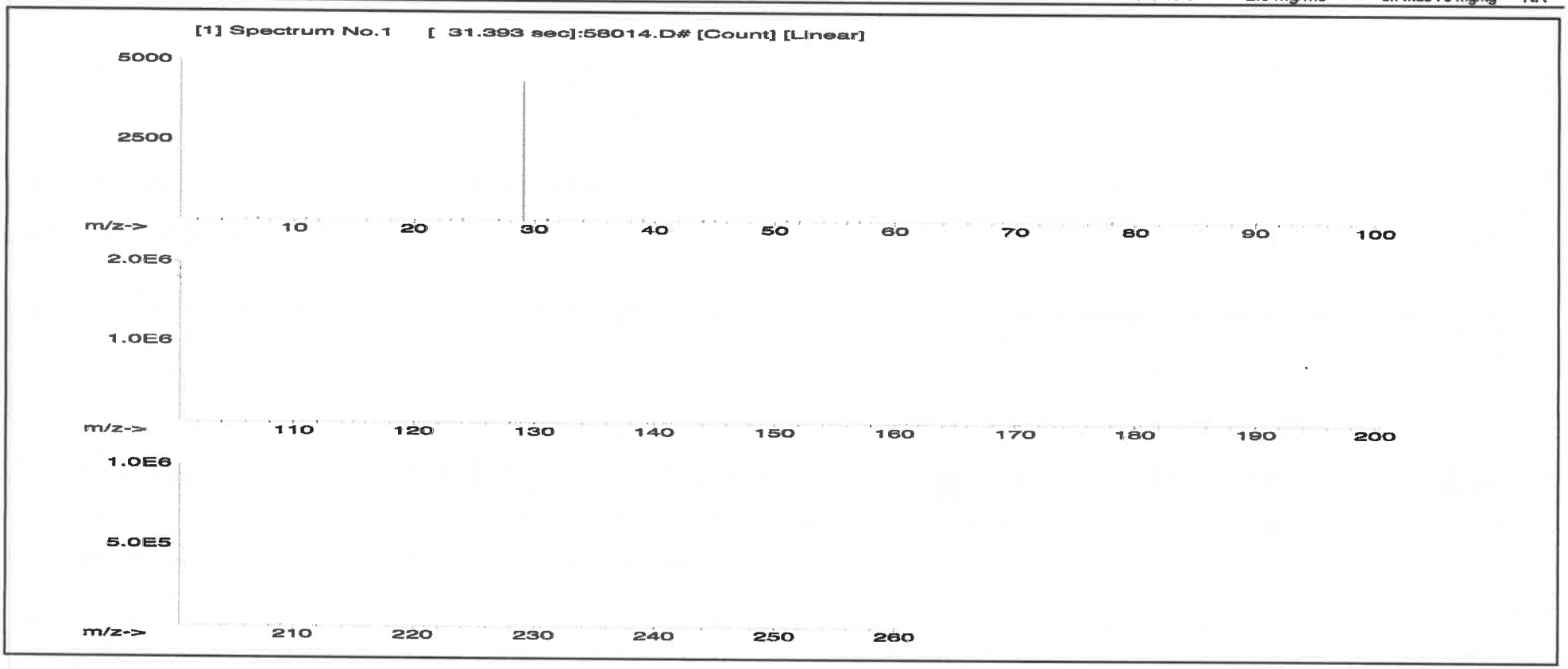
Aleah O'Brady

Formulated By: Aleah O'Brady 122023

Pedro Rentas

Reviewed By: Pedro L. Rentas 122023

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorosilicate (Si)	IN009	SID082022A1	1000	99.999	0.10	14.4	13.8854	13.8855	**1000.0**	**2.0**	16919-19-0	2.5 mg/m3	orl-mus 70 mg/kg	NA



692

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	T	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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).

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693

CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

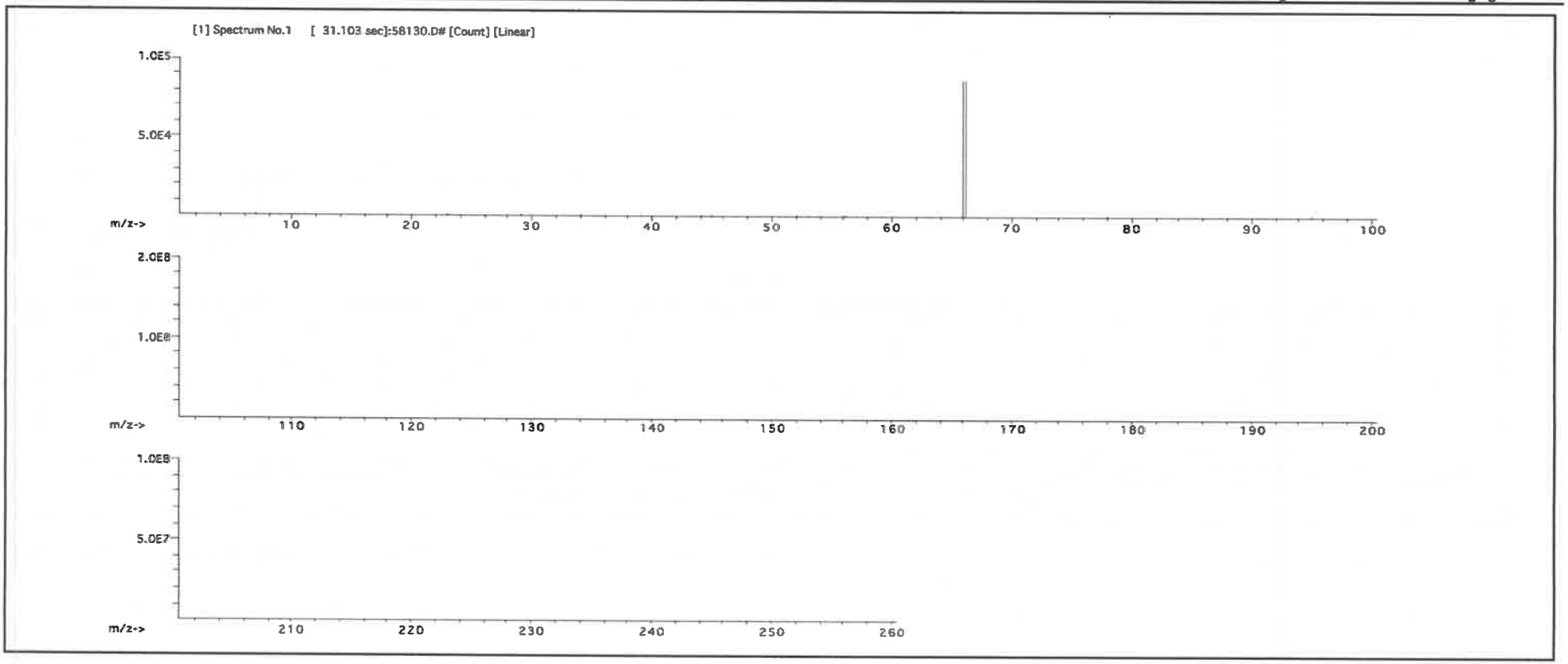
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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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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* 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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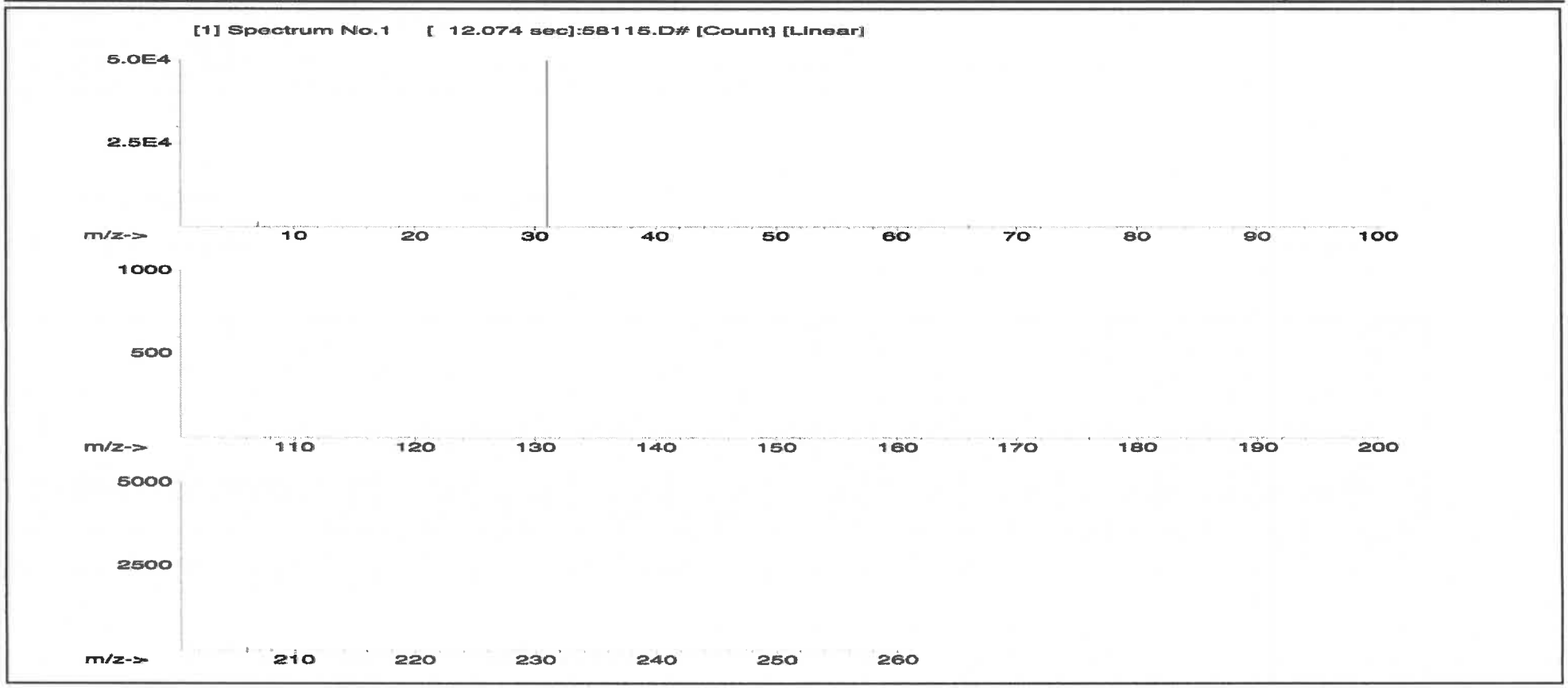
695

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



999

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.

* 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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M5959 R: 6/14/24.

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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:	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



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Certified Reference Material CRM

M5960 KK R. 6/11/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57028
Lot Number: 041124
Description: Nickel (Ni)

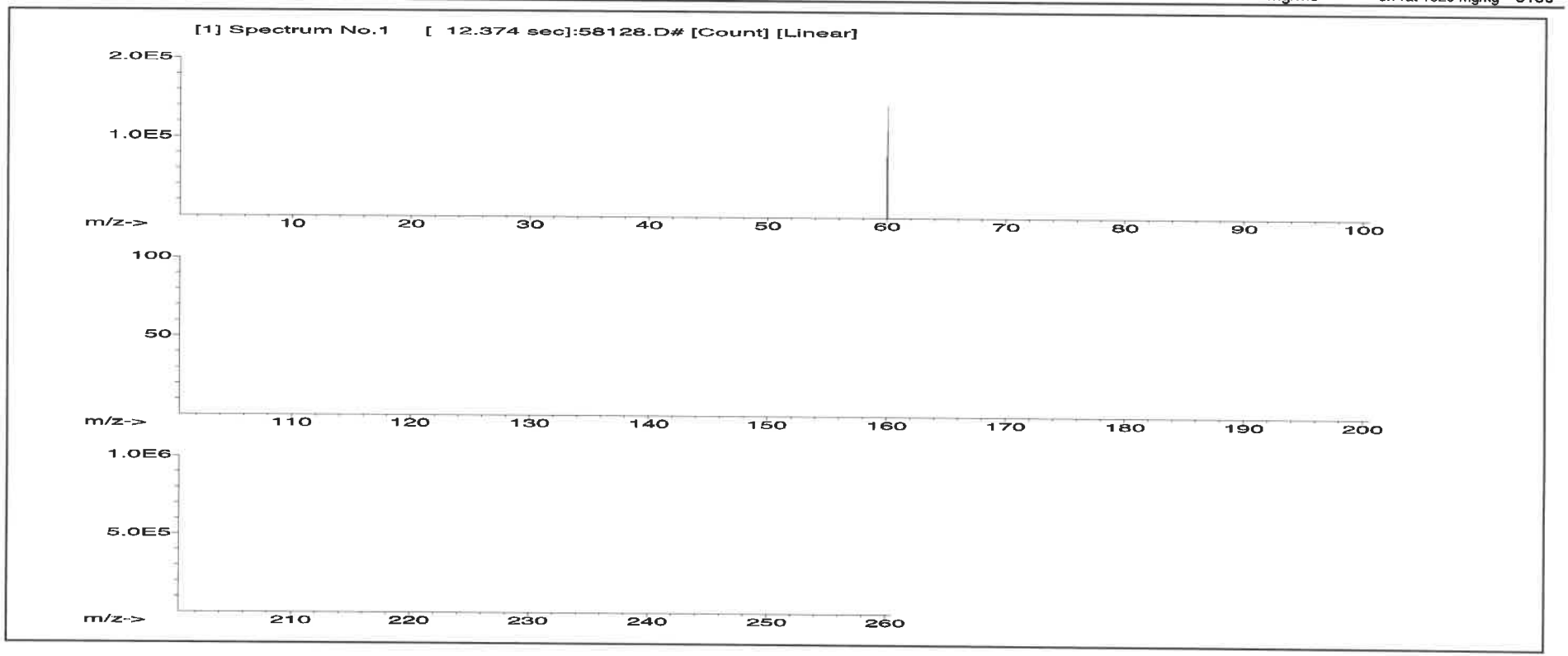
Expiration Date: 041127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 249.85

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.002 Flask Uncertainty

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



701

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	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).

702

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M5962 R! 06/14/24.

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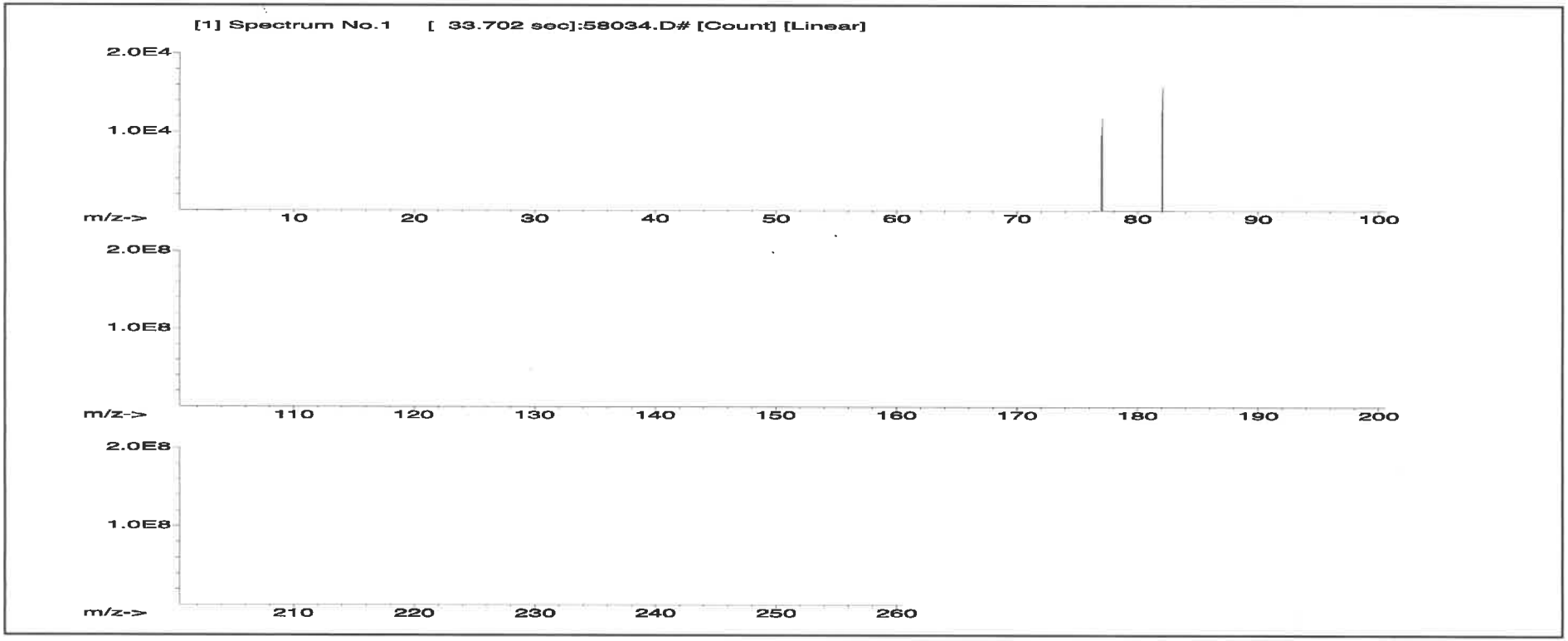
703

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



704

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

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CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

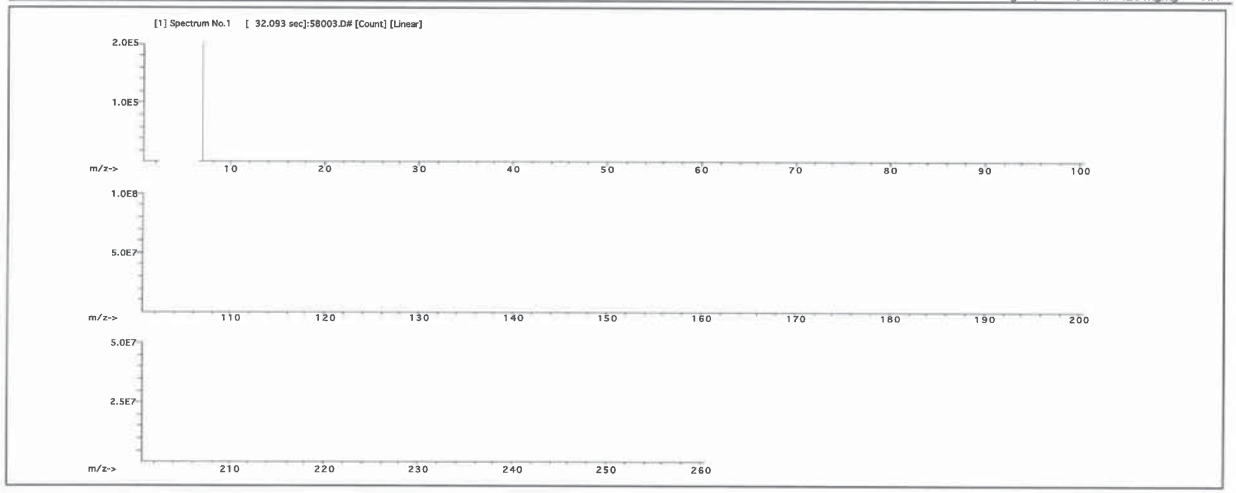
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
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



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
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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).

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Certificate of Analysis

M5976, M5977
R: 02/22/24

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

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

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

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

11.2 Lot Expiration Date

- July 17, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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M5978, M5979

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300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/24

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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) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

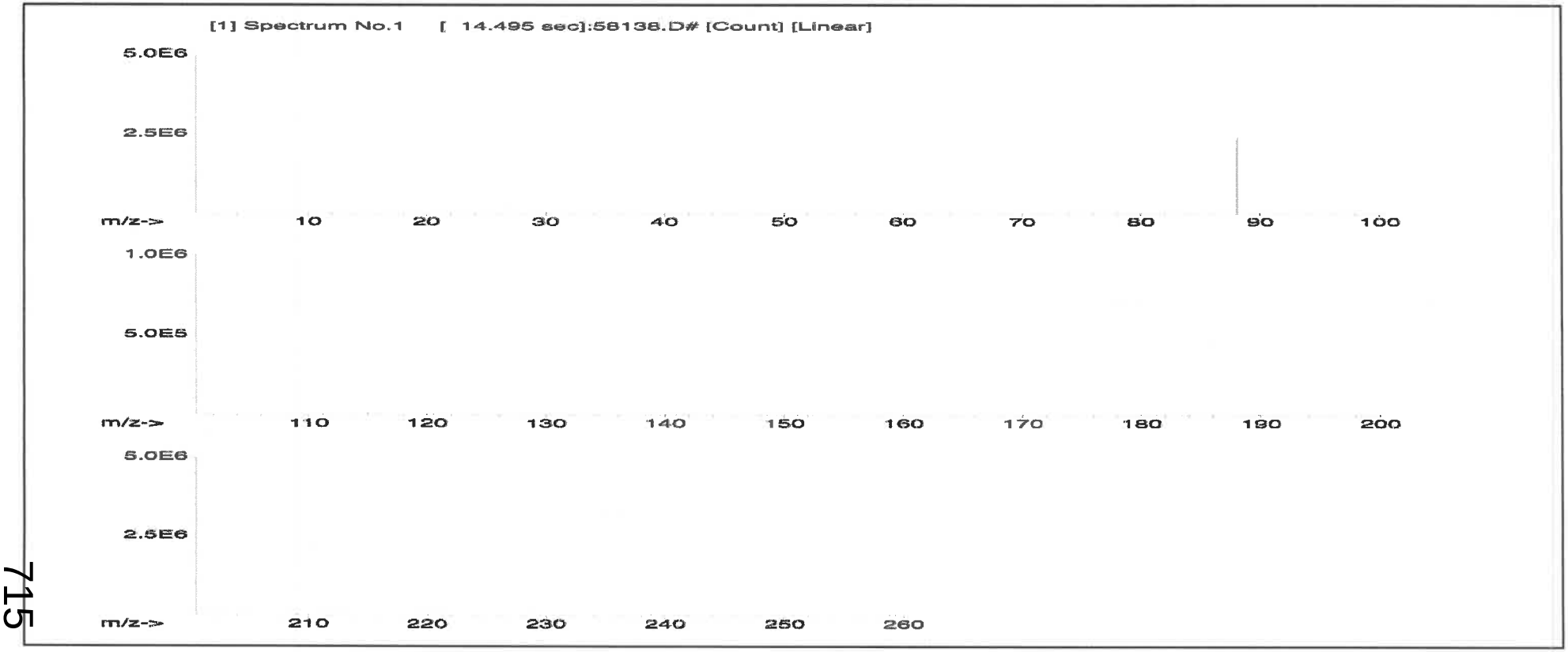
45982 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:	**57038**		**Lot #**		
Lot Number:	**031524**	**Solvent:**	24002546	Nitric Acid	
Description:	**Strontium (Sr)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	031527				
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	031524
Reviewed By:	Pedro L. Rentas	031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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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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info@inorganicventures.com

MS985
R: 6/14/24

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 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

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 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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Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/2024
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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:	CLPP-SPK-1
Lot Number:	T2-MEB721963
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Manganese, Nickel, Vanadium, Zinc, Cobalt, 250 µg/mL ea: Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium, Silver

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	50.00 ± 0.26 µg/mL	Chromium, Cr	200.0 ± 1.1 µg/mL
Cobalt, Co	500.0 ± 2.4 µg/mL	Copper, Cu	250.0 ± 1.0 µg/mL
Iron, Fe	1 000 ± 4 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Silver, Ag	50.00 ± 0.22 µg/mL
Vanadium, V	500.0 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.070 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 27, 2022

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

11.2 Lot Expiration Date

- July 27, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M6033

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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CERTIFIED WEIGHT REPORT:

Part Number:	**58113**			**Lot #**	
Lot Number:	**011623**		**Solvent:**	20510011	Nitric Acid
Description:	**Aluminum (Al)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

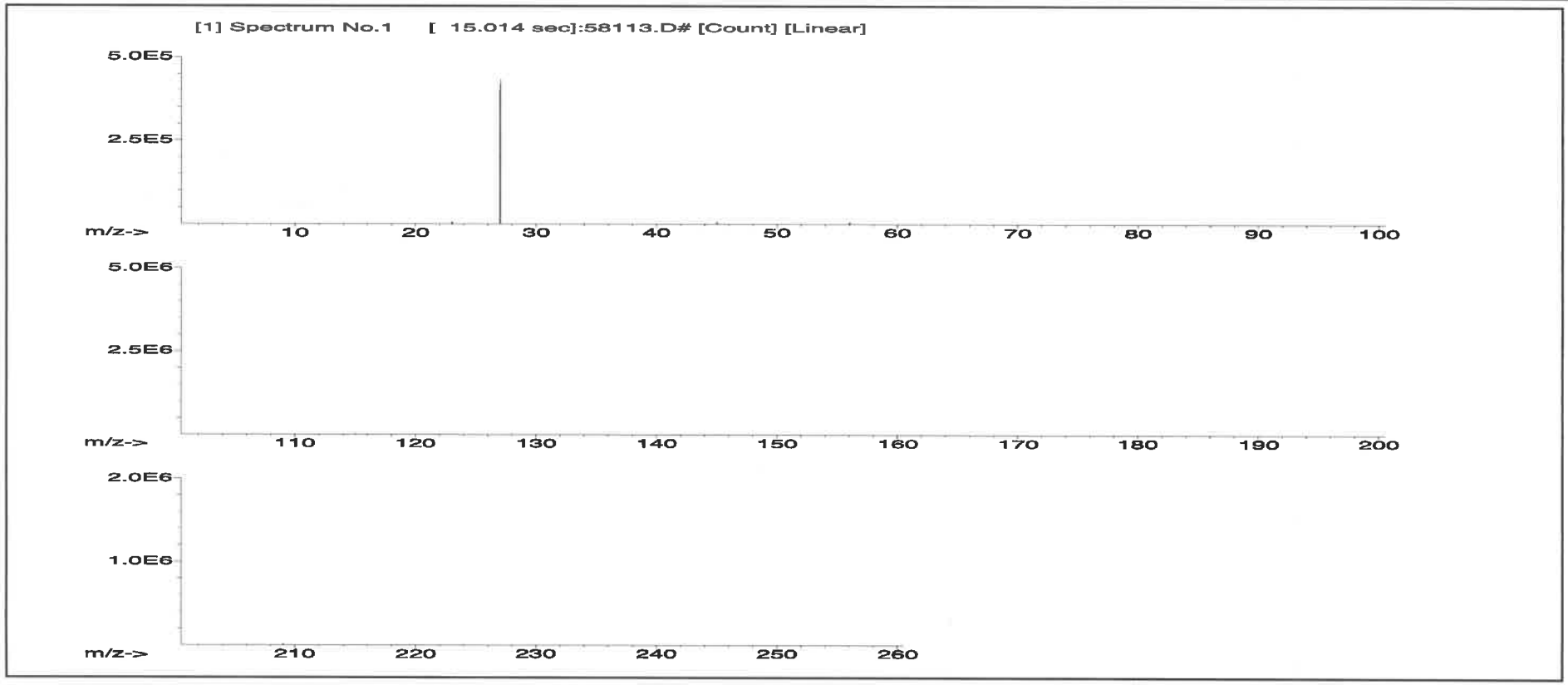
Giovanni Esposito

Formulated By:	Giovanni Esposito	011623

Pedro Rentas

Reviewed By:	Pedro L. Rentas	011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

M6109
M6110
M6111

Received date 9/29/24 Met dig.

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009
Manufactured Date: 2022-05-10
Retest Date: 2027-05-09
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	1.190
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	0.8 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	14.9 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	< 0.4 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	0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855 282 6867 or +1 610 386 1700

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009

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	0.8 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	< 0.2 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	1.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	0.7 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	< 0.8 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	0.8 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.: 22F0762009

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

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.6 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	< 0.2 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.6 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	< 0.2 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

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
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS – Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

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

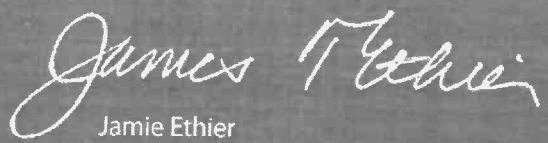
735

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



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

736

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R:- 10/22/24

MG124

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count - 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

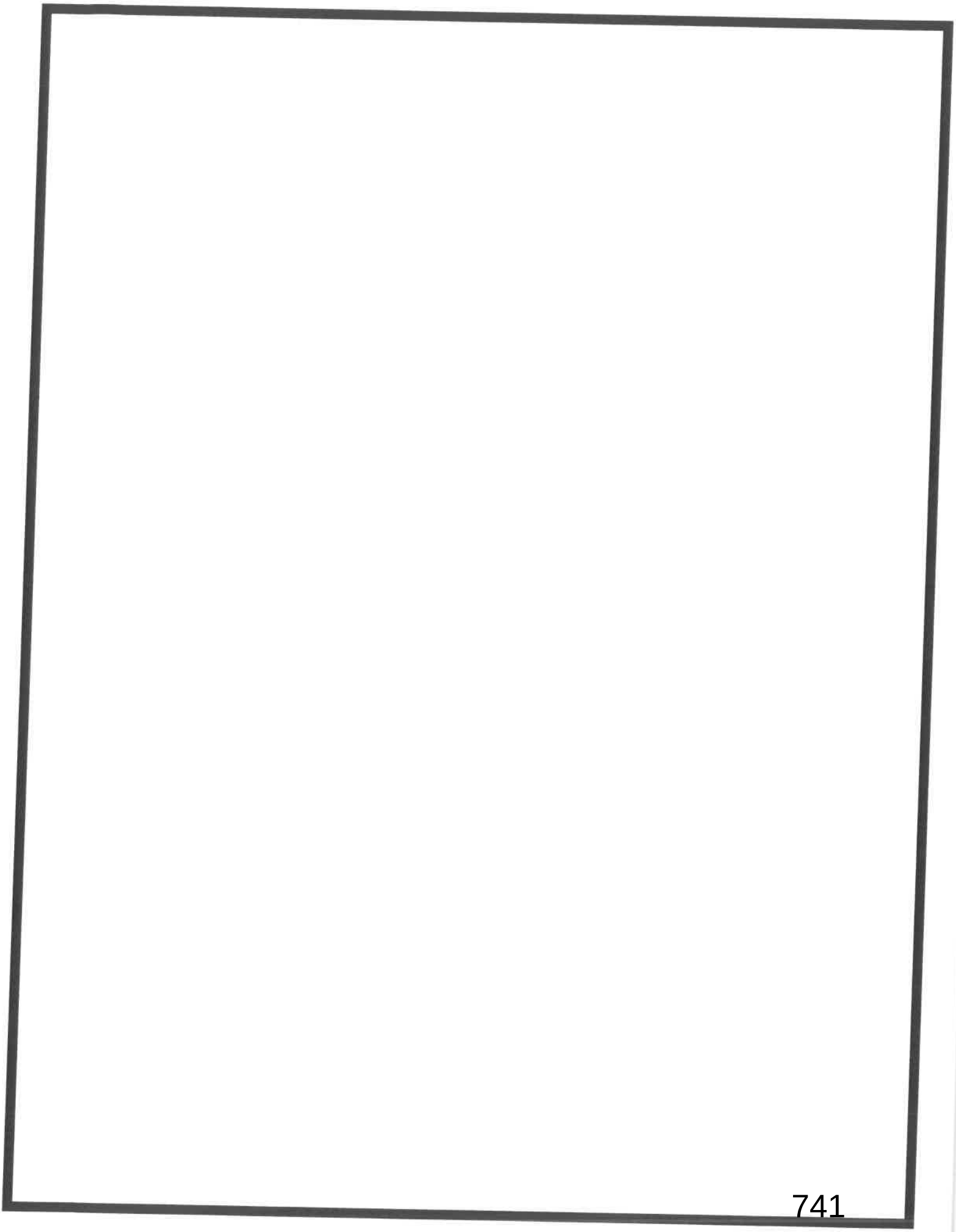
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

Phone: 215-295-5006
Fax: 215-295-0781

Hydrogen Peroxide 30%, ACS

Reagent Grade

SPECIFICATION	MAXIMUM LIMITS
Appearance	Colorless and free from suspended matter or sediment
Assay	29-32%
Color (APHA)	10
Residue after Evaporation	0.002%
Titratable Acid	0.0006 meq/g
Chloride (Cl)	3 ppm
Nitrate (NO_3)	2 ppm
Phosphate	2 ppm
Sulfate (SO_4)	5 ppm
Ammonium (NH_4)	5 ppm
Heavy Metals (as Pb)	1 ppm
Iron (Fe)	0.5 ppm



Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

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

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5806, M5807

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

744

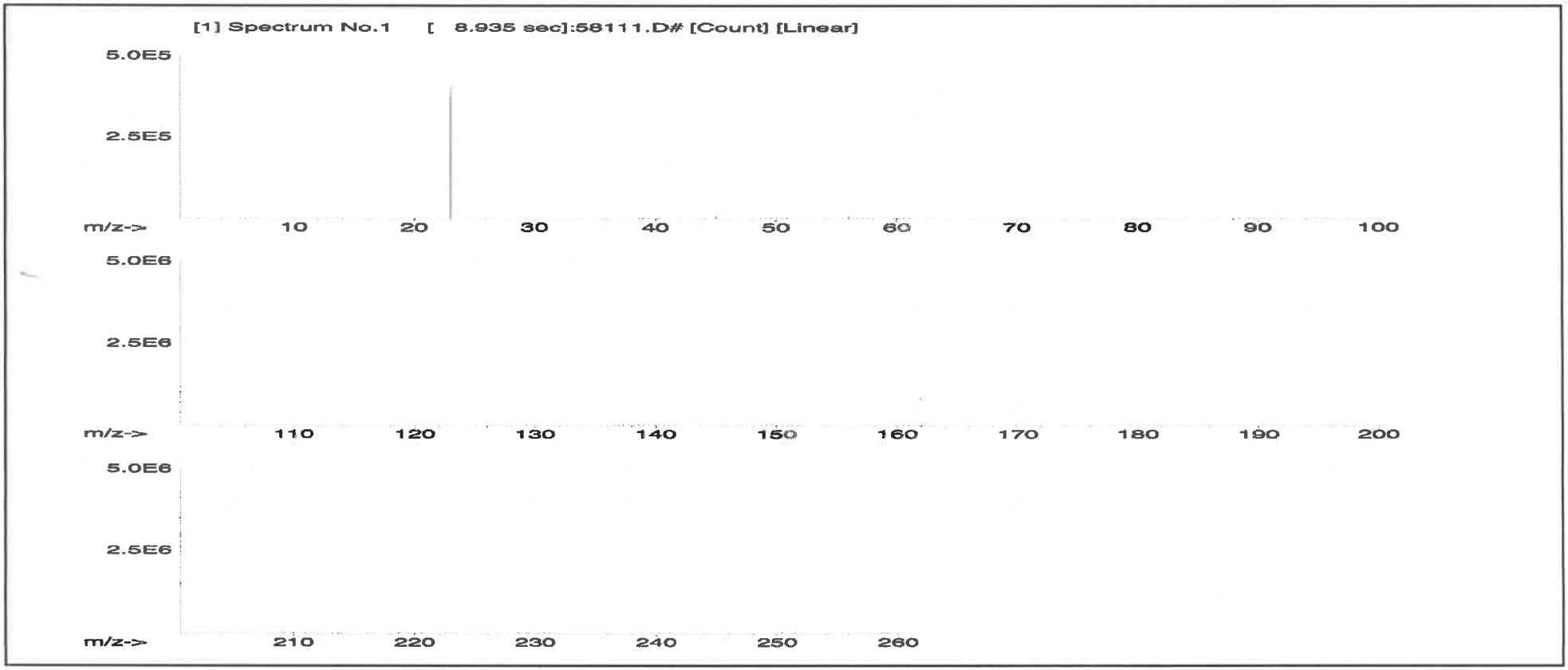
CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**58111**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**122223**			
Description:	**Sodium (Na)**	2%	60.0 (mL)	Nitric Acid
Expiration Date:	122226			
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):	3000.4	0.06	Flask Uncertainty	

Aleah O'Brady

Formulated By:	Aleah O'Brady	122223
Reviewed By:	Pedro L. Rentas	122223

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



745

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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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R: 01/03/24 M5802, M5803

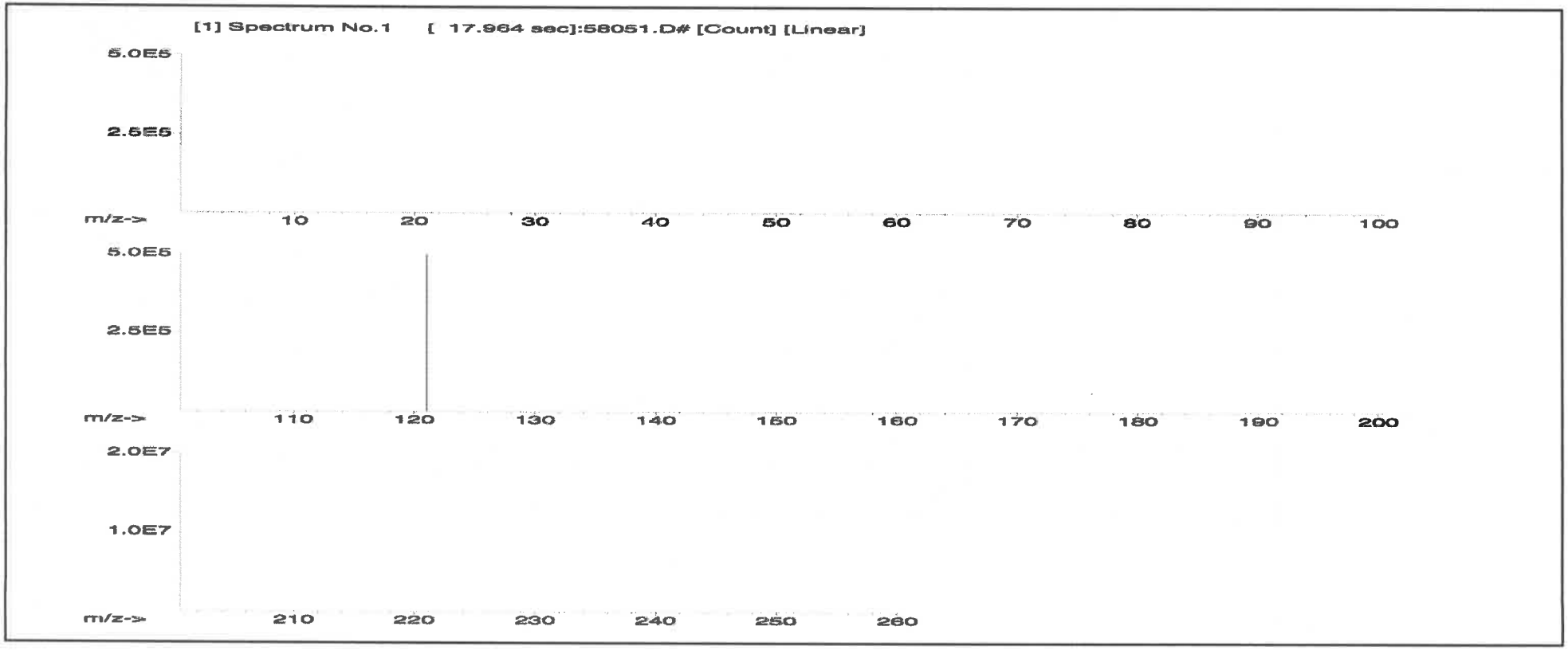
746

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**120523**			
Description:	**Antimony (Sb)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	120526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rentas	120523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	100923	0.1000	300.0	0.084	1000	10001.4	**1000.0**	2.1	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



747

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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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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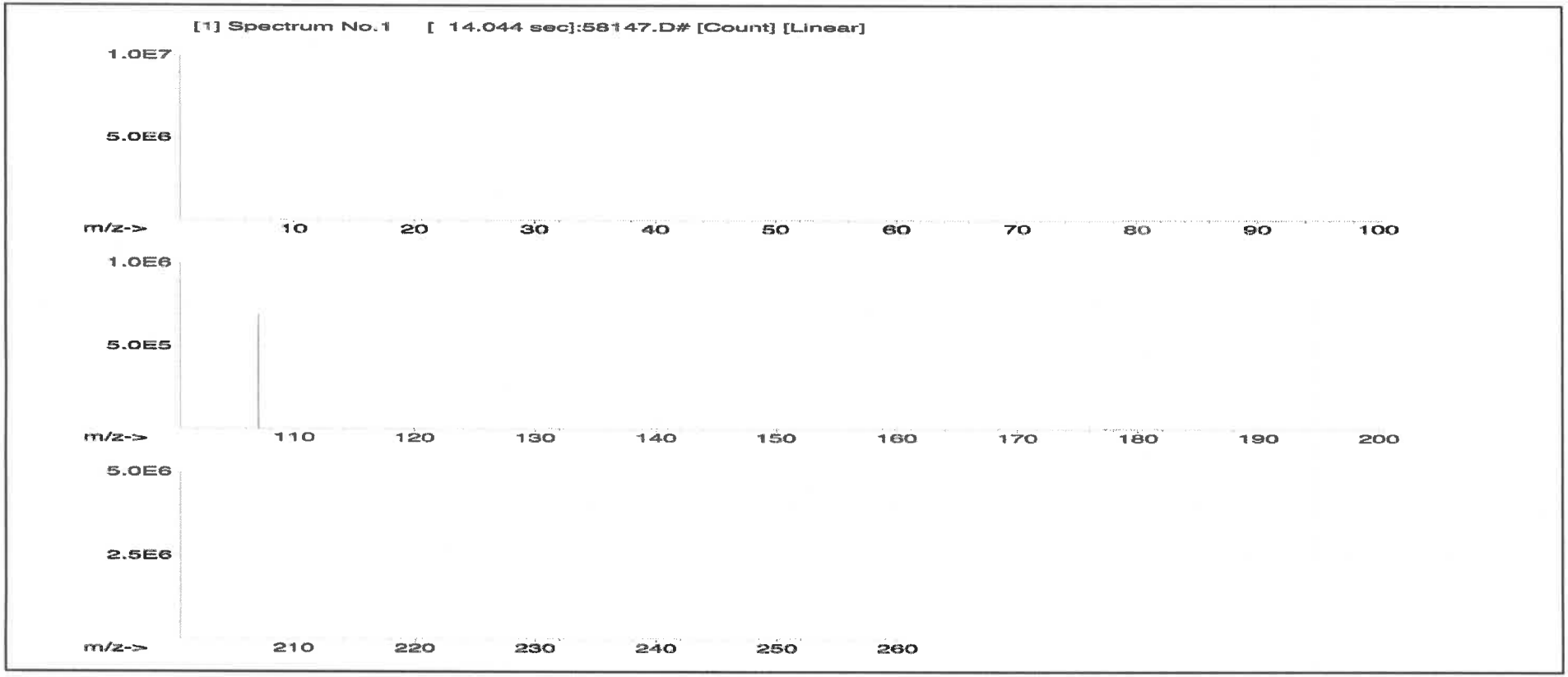
748

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



749

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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R: 03/16/23 M5473, M5474, M5475, M5476

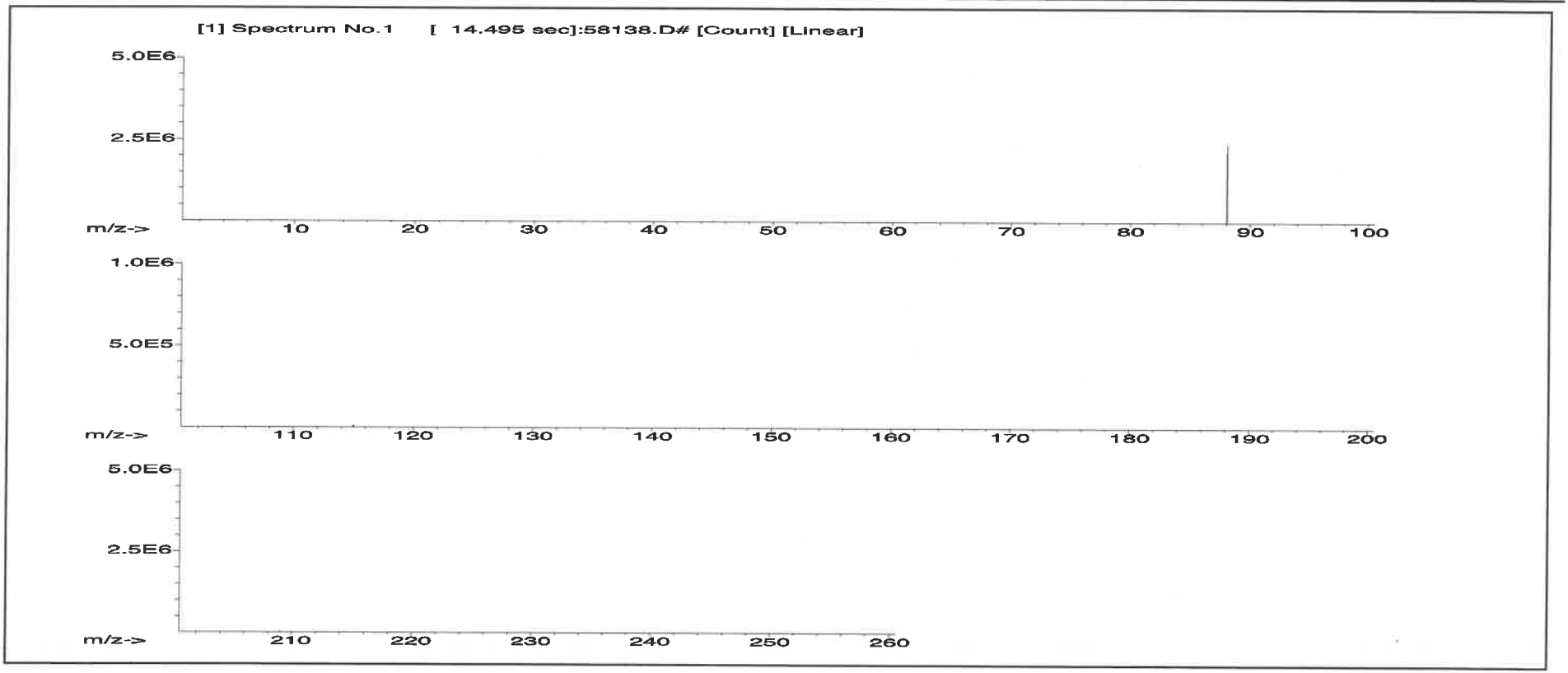
750

CERTIFIED WEIGHT REPORT:

Part Number:	**56138**		**Lot #**		
Lot Number:	**082922**	**Solvent:**	20510011	Nitric Acid	
Description:	**Strontium (Sr)**				
		2%	20.0 (mL)	Nitric Acid	
Expiration Date:	082925				
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):	1000.12	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	**SDS Information** (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



751

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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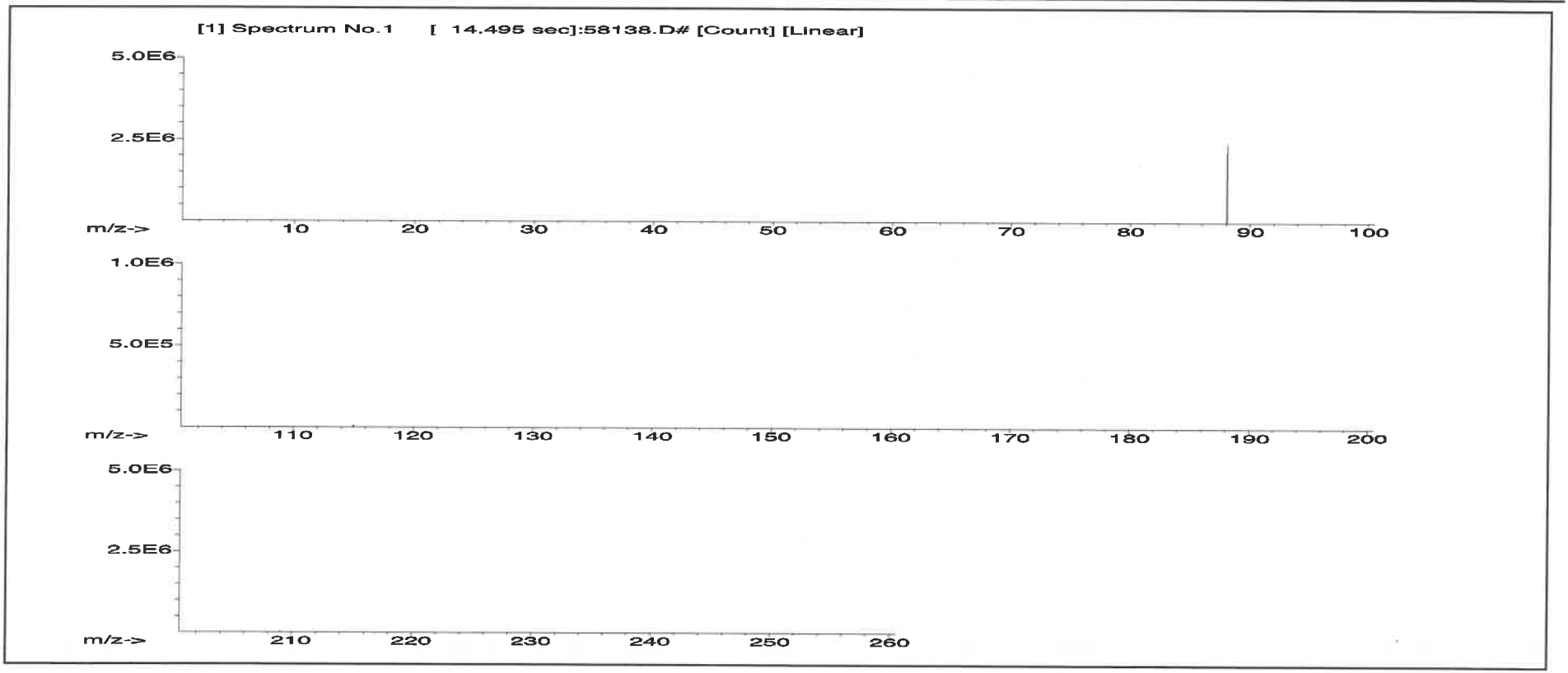
752

CERTIFIED WEIGHT REPORT:

Part Number:	**56138**		**Lot #**		
Lot Number:	**082922**	**Solvent:**	20510011	Nitric Acid	
Description:	**Strontium (Sr)**	2%	20.0 (mL)	Nitric Acid	
Expiration Date:	082925				
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):	1000.12	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



753

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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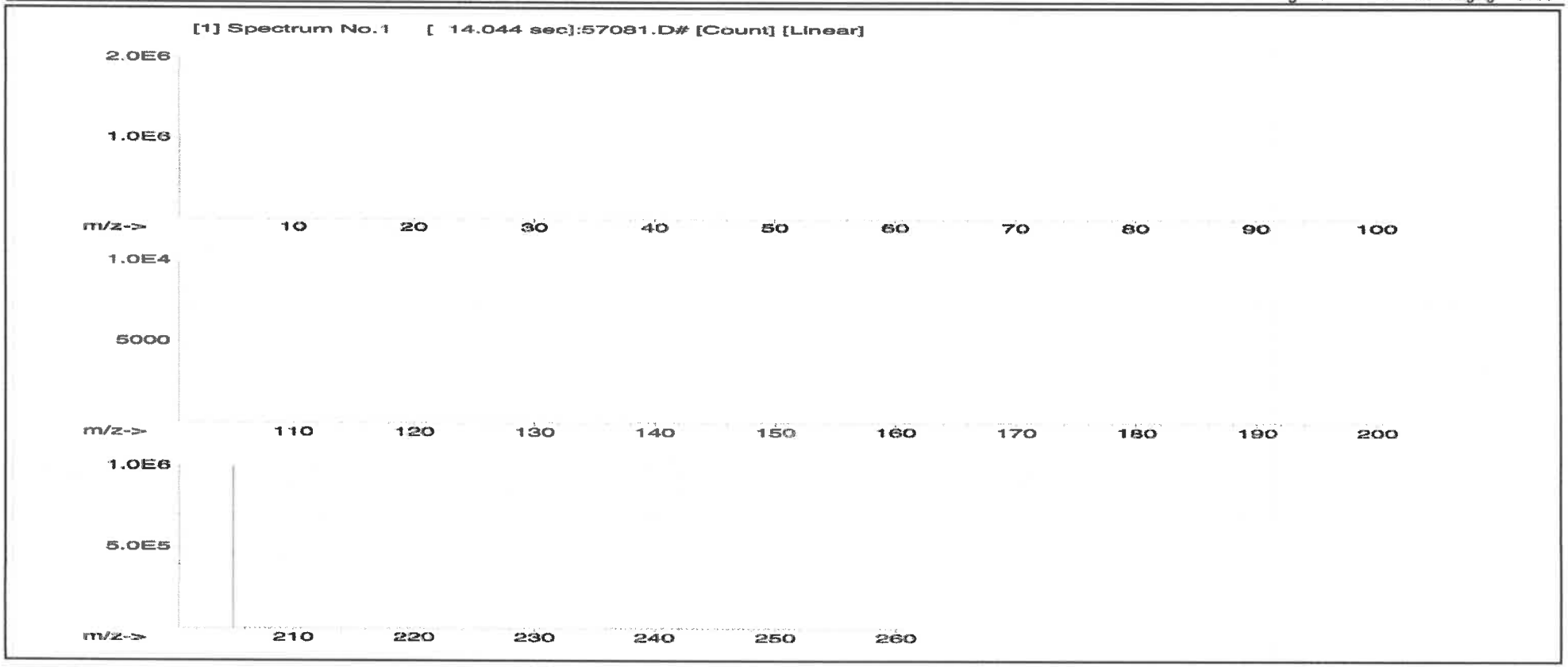
CERTIFIED WEIGHT REPORT:

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



755

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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756

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**	24002546	Nitric Acid	
Lot Number:	**062424**			
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	

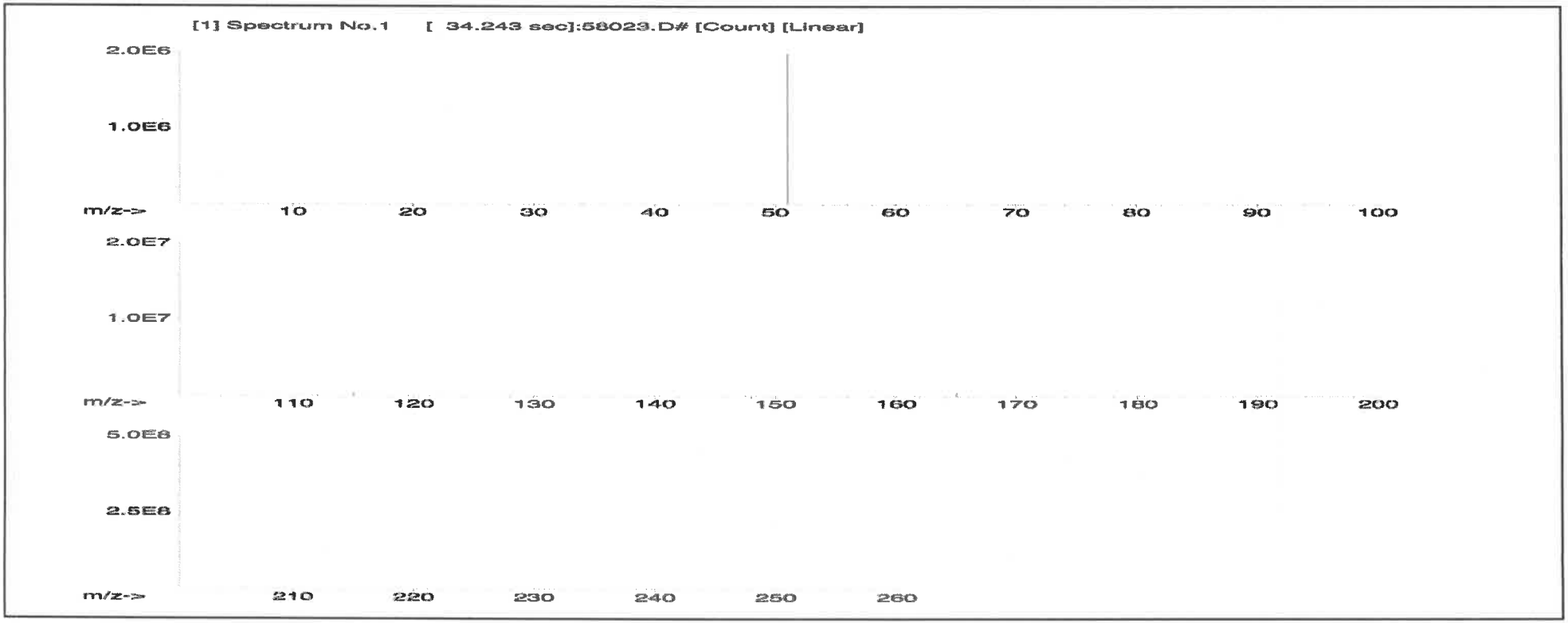
Aleah O'Brady

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



757

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	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB165326

SOP ID : M3050B-Digestion-20, MSFAM01.1-Trace Metals-2

SDG No : MBHJJ2

Matrix : SOIL

Pippete ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #3 2. N/A

Start Digest Date: 12/02/2024 **Time :** 13:00 **Temp :** 96 °C

End Digest Date: 12/02/2024 **Time :** 15:10 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. # 3

Dig Technician Signature: JPP

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LCSS	1.00	MP83141
Spike Sol 6	1.00	MP83147
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
1:1 HNO3	10.00	MP83122
Conc. HNO3	5.00	M6124
30% H2O2	3.00	M6125
Conc. HCL	10.00	M6121
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 #3 CELL #34 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/2/24 15:20	JPP Met dig	Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB165326

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P5027-01	MBHJJ2	N/A	1.23	100	Brown	Yellow	Medium	N/A	N/A	1
P5027-02	MBHK14	N/A	1.25	100	Brown	Yellow	Medium	N/A	N/A	2
P5027-03	MBHK15	N/A	1.33	100	Brown	Yellow	Medium	N/A	N/A	3
P5027-04	MBHK16	N/A	1.36	100	Brown	Yellow	Medium	N/A	N/A	4
P5027-05	MBHK17	N/A	1.44	100	Brown	Yellow	Medium	N/A	N/A	5
P5027-06	MBHK18	N/A	1.26	100	Brown	Yellow	Medium	N/A	N/A	6
P5027-07	MBHK19	N/A	1.38	100	Brown	Yellow	Medium	N/A	N/A	7
P5027-08	MBHK20	N/A	1.25	100	Black	Yellow	Medium	N/A	N/A	8
P5027-09	MBHK21	N/A	1.28	100	Black	Yellow	Medium	N/A	N/A	9
P5027-10	MBHK22	N/A	1.24	100	Brown	Yellow	Medium	N/A	N/A	10
P5027-11	MBHK22D	N/A	1.31	100	Brown	Yellow	Medium	N/A	N/A	11
P5027-12	MBHK22S	N/A	1.17	100	Brown	Yellow	Medium	N/A	MP83147	12
P5027-13	MBHK23	N/A	1.48	100	Brown	Yellow	Medium	N/A	N/A	13
P5027-14	MBHK24	N/A	1.23	100	Brown	Yellow	Medium	N/A	N/A	14
P5027-15	MBHK25	N/A	1.37	100	Brown	Yellow	Medium	N/A	N/A	15
P5027-16	MBHK26	N/A	1.38	100	Brown	Yellow	Medium	N/A	N/A	16
P5027-17	MBHK27	N/A	1.27	100	Brown	Yellow	Medium	N/A	N/A	17
P5027-18	MBHK28	N/A	1.38	100	Brown	Yellow	Medium	N/A	N/A	18
P5027-19	MBHK29	N/A	1.28	100	Brown	Yellow	Medium	N/A	N/A	19
P5027-20	MBHK30	N/A	1.40	100	Brown	Yellow	Medium	N/A	N/A	20
P5027-21	MBHK31	N/A	1.32	100	Brown	Brown	Medium	N/A	N/A	21
P5027-22	MBHK32	N/A	1.43	100	Brown	Brown	Medium	N/A	N/A	22
PB165326BL	PBS326	N/A	1.00	100	Colorless	Colorless	Fine	N/A	N/A	23
PB165326BS	LCS326	N/A	1.00	100	Colorless	Colorless	Fine	N/A	MP83141	24

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/27/24 12:22		Kareem	OK
2	S1	S01	CAL2	12/27/24 12:27		Kareem	OK
3	S2	S02	CAL3	12/27/24 12:31		Kareem	OK
4	S3	S03	CAL4	12/27/24 12:34		Kareem	OK
5	S4	S04	CAL5	12/27/24 12:38		Kareem	OK
6	S5	S05	CAL6	12/27/24 12:42		Kareem	OK
7	S6	S06	CAL7	12/27/24 12:46		Kareem	OK
8	ICV003	ICV003	ICV	12/27/24 13:33		Kareem	OK
9	ICB003	ICB003	ICB	12/27/24 13:37		Kareem	OK
10	ICSA003	ICSA003	ICSA	12/27/24 13:41		Kareem	OK
11	ICSAB003	ICSAB003	ICSAB	12/27/24 13:45		Kareem	OK
12	CCV019	CCV019	CCV	12/27/24 13:49		Kareem	OK
13	CCB019	CCB019	CCB	12/27/24 13:53		Kareem	OK
14	P5172-20ADL	MYCZ38A	PS	12/27/24 13:57	Not Use	Kareem	Not Ok
15	P5184-20ADL	MYCZF8A	PS	12/27/24 14:01	Not Use	Kareem	Not Ok
16	PB165326BL	PBS326	MB	12/27/24 14:05	Not Use	Kareem	Not Ok
17	PB165326BSRE	LCS326	SAM	12/27/24 14:09	Not Use	Kareem	Not Ok
18	PB165695BL	PBS695	MB	12/27/24 14:13		Kareem	OK

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Instrument ID: P5

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

19	PB165695BS	LCS695	LCS	12/27/24 14:21		Kareem	OK
20	PB165571BL	PBS571	MB	12/27/24 14:25		Kareem	OK
21	PB165571BS	LCS571	LCS	12/27/24 14:29		Kareem	OK
22	PB165726BL	PBS726	MB	12/27/24 14:33	Not Use	Kareem	Not Ok
23	PB165726BSRE	LCS726	SAM	12/27/24 14:37	Not Use	Kareem	Not Ok
24	PB165817BL	PBS817	MB	12/27/24 14:41		Kareem	OK
25	PB165817BS	LCS817	LCS	12/27/24 14:45		Kareem	OK
26	PB165572BL	PBS572	MB	12/27/24 14:49		Kareem	OK
27	PB165572BS	LCS572	LCS	12/27/24 14:53		Kareem	OK
28	PB165829BL	PBS829	MB	12/27/24 14:57		Kareem	OK
29	PB165829BS	LCS829	LCS	12/27/24 15:01		Kareem	OK
30	PB165788BL	PBS788	MB	12/27/24 15:05		Kareem	OK
31	PB165788BS	LCS788	LCS	12/27/24 15:09		Kareem	OK
32	P5027-11	MBHK22D	DUP	12/27/24 15:13		Kareem	OK
33	P5027-10L	MBHK22L	SD	12/27/24 15:17		Kareem	OK
34	CCV020	CCV020	CCV	12/27/24 15:31		Kareem	OK
35	CCB020	CCB020	CCB	12/27/24 15:36		Kareem	OK
36	P5027-12	MBHK22S	MS	12/27/24 15:40	MS Fail For Sb,Se(BeloW RL),Ag,Tl(BeloW RL),Zn(631.18ppb)	Kareem	OK
37	P5082-06	MBHLL6	SAM	12/27/24 15:44		Kareem	OK

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

38	P5082-07	MBHLL6D	DUP	12/27/24 15:54		Kareem	OK
39	P5082-06L	MBHLL6L	SD	12/27/24 15:58		Kareem	OK
40	P5082-08	MBHLL6S	MS	12/27/24 16:02	MS Fail for Sb,As(131.26ppb),Ag,Tl(Be loW RL)	Kareem	OK
41	P5082-09	MBHLL7	SAM	12/27/24 16:06		Kareem	OK
42	P5079-10	MBHLF8	SAM	12/27/24 16:10		Kareem	OK
43	P5079-11	MBHLF8D	DUP	12/27/24 16:14		Kareem	OK
44	P5079-10L	MBHLF8L	SD	12/27/24 16:18		Kareem	OK
45	P5079-12	MBHLF8S	MS	12/27/24 16:22	MS Fail For Sb,Cu(227.43ppb),Se(Belo W RL),Ag,Tl(BeloW RL),Zn(595.65ppb)	Kareem	OK
46	P5087-06	MBHLY4	SAM	12/27/24 16:26		Kareem	OK
47	P5087-07	MBHLY4D	DUP	12/27/24 16:29		Kareem	OK
48	P5087-06L	MBHLY4L	SD	12/27/24 16:33		Kareem	OK
49	P5087-08	MBHLY4S	MS	12/27/24 16:38	MS Fail For Sb,Ba(987.50ppb),Be(7.40 ppb),Cu(364.68ppb),Se(89. 66ppb),Ag,Tl(BeloW RL),Zn(808.12ppb)	Kareem	OK
50	P5266-04	ME28Y9	SAM	12/27/24 16:41		Kareem	OK
51	P5266-19	ME28Y9D	DUP	12/27/24 16:45		Kareem	OK
52	P5266-04L	ME28Y9L	SD	12/27/24 16:49		Kareem	OK
53	P5266-20	ME28Y9S	MS	12/27/24 16:53		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

54	P5080-10	MBHLE8	SAM	12/27/24 16:57		Kareem	OK
55	P5080-11	MBHLE8D	DUP	12/27/24 17:01		Kareem	OK
56	CCV021	CCV021	CCV	12/27/24 17:05		Kareem	OK
57	CCB021	CCB021	CCB	12/27/24 17:09		Kareem	OK
58	P5080-10L	MBHLE8L	SD	12/27/24 17:13		Kareem	OK
59	P5080-12	MBHLE8S	MS	12/27/24 17:17	MS Fail For Sb,As(213.94ppb),Se(92.65ppb),Ag,Tl(BeloW RL)	Kareem	OK
60	P5335-19	ME2923	SAM	12/27/24 17:21		Kareem	OK
61	P5335-20	ME2923D	DUP	12/27/24 17:25		Kareem	OK
62	P5335-19L	ME2923L	SD	12/27/24 17:29		Kareem	OK
63	P5335-21	ME2923S	MS	12/27/24 17:33		Kareem	OK
64	P5131-07	MBHMM6	SAM	12/27/24 17:37		Kareem	OK
65	P5131-08	MBHMM6D	DUP	12/27/24 17:41		Kareem	OK
66	P5131-07L	MBHMM6L	SD	12/27/24 17:45		Kareem	OK
67	P5131-09	MBHMM6S	MS	12/27/24 17:49	MS Fail For Sb,As(213.12ppb),Cu(346.78ppb),Se(110.91ppb),Ag,Tl(Belw RL),Zn(2752.14ppb)	Kareem	OK
68	P5027-01	MBHJJ2	SAM	12/27/24 17:53		Kareem	OK
69	P5027-02	MBHK14	SAM	12/27/24 17:57		Kareem	OK
70	P5027-03	MBHK15	SAM	12/27/24 18:01		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

71	P5027-04	MBHK16	SAM	12/27/24 18:05		Kareem	OK
72	P5027-05	MBHK17	SAM	12/27/24 18:09		Kareem	OK
73	P5027-06	MBHK18	SAM	12/27/24 18:13		Kareem	OK
74	P5027-07	MBHK19	SAM	12/27/24 18:17	Ca High	Kareem	Dilution
75	P5027-08	MBHK20	SAM	12/27/24 18:21		Kareem	OK
76	P5027-09	MBHK21	SAM	12/27/24 18:25		Kareem	OK
77	P5027-10	MBHK22	SAM	12/27/24 18:29		Kareem	OK
78	CCV022	CCV022	CCV	12/27/24 18:33		Kareem	OK
79	CCB022	CCB022	CCB	12/27/24 18:36		Kareem	OK
80	P5027-13	MBHK23	SAM	12/27/24 18:40	Ca High	Kareem	Dilution
81	P5027-14	MBHK24	SAM	12/27/24 18:44	Ca High	Kareem	Dilution
82	P5027-15	MBHK25	SAM	12/27/24 18:48	Ca High	Kareem	Dilution
83	P5027-16	MBHK26	SAM	12/27/24 18:52		Kareem	OK
84	P5027-17	MBHK27	SAM	12/27/24 18:56	Ca High	Kareem	Dilution
85	P5027-18	MBHK28	SAM	12/27/24 19:00		Kareem	OK
86	P5027-19	MBHK29	SAM	12/27/24 19:04	Not use	Kareem	Not Ok
87	P5027-20	MBHK30	SAM	12/27/24 19:08		Kareem	OK
88	P5027-21	MBHK31	SAM	12/27/24 19:12		Kareem	OK
89	P5027-22	MBHK32	SAM	12/27/24 19:16		Kareem	OK
90	P5082-01	MBHLL1	SAM	12/27/24 19:20		Kareem	OK

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

91	P5082-02	MBHLL2	SAM	12/27/24 19:24		Kareem	OK
92	P5082-03	MBHLL3	SAM	12/27/24 19:28	Ca High	Kareem	Dilution
93	P5082-04	MBHLL4	SAM	12/27/24 19:32		Kareem	OK
94	P5082-05	MBHLL5	SAM	12/27/24 19:40		Kareem	OK
95	P5082-10	MBHLL8	SAM	12/27/24 19:44		Kareem	OK
96	P5082-11	MBHLT9	SAM	12/27/24 19:48		Kareem	OK
97	P5082-12	MBHLW0	SAM	12/27/24 19:52		Kareem	OK
98	P5082-13	MBHLW1	SAM	12/27/24 19:56		Kareem	OK
99	P5082-14	MBHLW2	SAM	12/27/24 20:00		Kareem	OK
100	CCV023	CCV023	CCV	12/27/24 20:04		Kareem	OK
101	CCB023	CCB023	CCB	12/27/24 20:07		Kareem	OK
102	P5082-15	MBHLW3	SAM	12/27/24 20:12		Kareem	OK
103	P5082-16	MBHLW4	SAM	12/27/24 20:15		Kareem	OK
104	P5082-17	MBHLW5	SAM	12/27/24 20:19		Kareem	OK
105	P5082-18	MBHM31	SAM	12/27/24 20:23		Kareem	OK
106	P5082-19	MBHM41	SAM	12/27/24 20:27		Kareem	OK
107	P5079-01	MBHLE9	SAM	12/27/24 20:31		Kareem	OK
108	P5079-02	MBHLF0	SAM	12/27/24 20:35		Kareem	OK
109	P5079-03	MBHLF1	SAM	12/27/24 20:39		Kareem	OK
110	P5079-04	MBHLF2	SAM	12/27/24 20:43		Kareem	OK

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

111	P5079-05	MBHLF3	SAM	12/27/24 20:47		Kareem	OK
112	P5079-06	MBHLF4	SAM	12/27/24 20:51	Ca High	Kareem	Dilution
113	P5079-07	MBHLF5	SAM	12/27/24 20:55		Kareem	OK
114	P5079-08	MBHLF6	SAM	12/27/24 20:59		Kareem	OK
115	P5079-09	MBHLF7	SAM	12/27/24 21:03		Kareem	OK
116	P5079-13	MBHLF9	SAM	12/27/24 21:07		Kareem	OK
117	P5079-14	MBHLG7	SAM	12/27/24 21:10		Kareem	OK
118	P5079-15	MBHLG8	SAM	12/27/24 21:14		Kareem	OK
119	P5079-16	MBHLG9	SAM	12/27/24 21:18		Kareem	OK
120	P5079-17	MBHLH0	SAM	12/27/24 21:22		Kareem	OK
121	P5079-18	MBHLH1	SAM	12/27/24 21:26		Kareem	OK
122	CCV024	CCV024	CCV	12/27/24 21:30		Kareem	OK
123	CCB024	CCB024	CCB	12/27/24 21:34		Kareem	OK
124	P5079-19	MBHLH2	SAM	12/27/24 21:38		Kareem	OK
125	P5079-20	MBHLH3	SAM	12/27/24 21:42		Kareem	OK
126	P5079-21	MBHLH4	SAM	12/27/24 21:46	Ba High	Kareem	Dilution
127	P5079-22	MBHLH5	SAM	12/27/24 21:50		Kareem	OK
128	P5087-01	MBHLQ3	SAM	12/27/24 21:54		Kareem	OK
129	P5087-02	MBHLY0	SAM	12/27/24 21:58		Kareem	OK
130	P5087-03	MBHLY1	SAM	12/27/24 22:02		Kareem	OK

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

131	P5087-04	MBHLY2	SAM	12/27/24 22:06		Kareem	OK
132	P5087-05	MBHLY3	SAM	12/27/24 22:09		Kareem	OK
133	P5087-09	MBHLY5	SAM	12/27/24 22:13		Kareem	OK
134	P5087-10	MBHLY6	SAM	12/27/24 22:17		Kareem	OK
135	P5087-11	MBHLY7	SAM	12/27/24 22:21		Kareem	OK
136	P5087-12	MBHLY8	SAM	12/27/24 22:25		Kareem	OK
137	P5087-13	MBHLY9	SAM	12/27/24 22:29		Kareem	OK
138	P5087-14	MBHLZ0	SAM	12/27/24 22:33		Kareem	OK
139	P5087-15	MBHLZ1	SAM	12/27/24 22:36		Kareem	OK
140	P5087-16	MBHLZ2	SAM	12/27/24 22:40		Kareem	OK
141	P5087-17	MBHLZ3	SAM	12/27/24 22:44		Kareem	OK
142	P5087-18	MBHM34	SAM	12/27/24 22:48	Ca High	Kareem	Dilution
143	P5087-19	MBHM35	SAM	12/27/24 22:52		Kareem	OK
144	CCV025	CCV025	CCV	12/27/24 22:56		Kareem	OK
145	CCB025	CCB025	CCB	12/27/24 23:00		Kareem	OK
146	P5266-01	ME28Y6	SAM	12/27/24 23:04		Kareem	OK
147	P5266-02	ME28Y7	SAM	12/27/24 23:07		Kareem	OK
148	P5266-03	ME28Y8	SAM	12/27/24 23:11		Kareem	OK
149	P5266-05	ME28Z0	SAM	12/27/24 23:15		Kareem	OK
150	P5266-06	ME28Z1	SAM	12/27/24 23:19		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

151	P5266-07	ME28Z2	SAM	12/27/24 23:23		Kareem	OK
152	P5266-08	ME28Z3	SAM	12/27/24 23:26		Kareem	OK
153	P5266-09	ME28Z4	SAM	12/27/24 23:30		Kareem	OK
154	P5266-10	ME28Z5	SAM	12/27/24 23:34		Kareem	OK
155	P5266-11	ME28Z6	SAM	12/27/24 23:38		Kareem	OK
156	P5266-12	ME28Z7	SAM	12/27/24 23:41		Kareem	OK
157	P5266-13	ME28Z8	SAM	12/27/24 23:45		Kareem	OK
158	P5266-14	ME28Z9	SAM	12/27/24 23:49		Kareem	OK
159	P5266-15	ME2900	SAM	12/27/24 23:53		Kareem	OK
160	P5266-16	ME2901	SAM	12/27/24 23:57		Kareem	OK
161	P5266-17	ME2902	SAM	12/28/24		Kareem	OK
162	P5266-18	ME2903	SAM	12/28/24 00:04	Fe High	Kareem	Dilution
163	P5080-01	MBHLD9	SAM	12/28/24 00:08		Kareem	OK
164	P5080-02	MBHLE0	SAM	12/28/24 00:12		Kareem	OK
165	P5080-03	MBHLE1	SAM	12/28/24 00:16		Kareem	OK
166	CCV026	CCV026	CCV	12/28/24 00:19		Kareem	OK
167	CCB026	CCB026	CCB	12/28/24 00:23		Kareem	OK
168	P5080-04	MBHLE2	SAM	12/28/24 00:27	Not Use	Kareem	Not Ok
169	P5080-05	MBHLE3	SAM	12/28/24 00:31	Not Use	Kareem	Not Ok
170	P5080-06	MBHLE4	SAM	12/28/24 00:35	Not Use	Kareem	Not Ok

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

171	P5080-07	MBHLE5	SAM	12/28/24 00:39	Not Use	Kareem	Not Ok
172	P5080-08	MBHLE6	SAM	12/28/24 00:43	Not Use	Kareem	Not Ok
173	P5080-09	MBHLE7	SAM	12/28/24 00:46	Not Use	Kareem	Not Ok
174	P5080-13	MBHLH6	SAM	12/28/24 00:50	Not Use	Kareem	Not Ok
175	P5080-14	MBHLH7	SAM	12/28/24 00:54	Not Use	Kareem	Not Ok
176	P5080-15	MBHLH8	SAM	12/28/24 00:58	Not Use	Kareem	Not Ok
177	P5080-16	MBHLH9	SAM	12/28/24 01:02	Not Use	Kareem	Not Ok
178	P5080-17	MBHLJ0	SAM	12/28/24 01:05	Not Use	Kareem	Not Ok
179	P5080-18	MBHM29	SAM	12/28/24 01:09	Not Use	Kareem	Not Ok
180	P5080-19	MBHM30	SAM	12/28/24 01:13	Not Use	Kareem	Not Ok
181	P5335-01	ME2904	SAM	12/28/24 01:17		Kareem	OK
182	P5335-02	ME2905	SAM	12/28/24 01:21		Kareem	OK
183	P5335-03	ME2906	SAM	12/28/24 01:25	Fe High	Kareem	Dilution
184	P5335-04	ME2907	SAM	12/28/24 01:28		Kareem	OK
185	P5335-05	ME2908	SAM	12/28/24 01:32		Kareem	OK
186	P5335-06	ME2909	SAM	12/28/24 01:36		Kareem	OK
187	P5335-07	ME2910	SAM	12/28/24 01:40		Kareem	OK
188	CCV027	CCV027	CCV	12/28/24 01:44	Sb Fail	Kareem	OK
189	CCB027	CCB027	CCB	12/28/24 01:47		Kareem	OK
190	P5335-08	ME2911	SAM	12/28/24 01:51		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

191	P5335-09	ME2912	SAM	12/28/24 01:55	Fe High	Kareem	Dilution
192	P5335-10	ME2913	SAM	12/28/24 01:59		Kareem	OK
193	P5335-11	ME2914	SAM	12/28/24 02:03	Fe High	Kareem	Dilution
194	P5335-12	ME2915	SAM	12/28/24 02:06	Fe High	Kareem	Dilution
195	P5335-13	ME2916	SAM	12/28/24 02:10		Kareem	OK
196	P5335-14	ME2917	SAM	12/28/24 02:14	Fe High	Kareem	Dilution
197	P5335-15	ME2918	SAM	12/28/24 02:18	Fe High	Kareem	Dilution
198	P5335-16	ME2919	SAM	12/28/24 02:21	Fe High	Kareem	Dilution
199	P5335-17	ME2920	SAM	12/28/24 02:25	Fe High	Kareem	Dilution
200	P5335-18	ME2921	SAM	12/28/24 02:29		Kareem	OK
201	P5131-01	MBHMM0	SAM	12/28/24 02:33	Not Use	Kareem	Not Ok
202	P5131-02	MBHMM1	SAM	12/28/24 02:37	Not Use	Kareem	Not Ok
203	P5131-03	MBHMM2	SAM	12/28/24 02:40	Not Use	Kareem	Not Ok
204	P5131-04	MBHMM3	SAM	12/28/24 02:44	Not Use	Kareem	Not Ok
205	P5131-05	MBHMM4	SAM	12/28/24 02:48	Not Use	Kareem	Not Ok
206	P5131-06	MBHMM5	SAM	12/28/24 02:52	Not Use	Kareem	Not Ok
207	P5131-10	MBHMM7	SAM	12/28/24 02:56	Not Use	Kareem	Not Ok
208	P5131-11	MBHMN2	SAM	12/28/24 02:59	Not Use	Kareem	Not Ok
209	P5131-12	MBHMN3	SAM	12/28/24 03:03	Not Use	Kareem	Not Ok
210	CCV028	CCV028	CCV	12/28/24 03:07		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

211	CCB028	CCB028	CCB	12/28/24 03:11		Kareem	OK
212	P5092-01	MBHLP0	SAM	12/28/24 03:15		Kareem	OK
213	P5092-02	MBHLP1	SAM	12/28/24 03:19		Kareem	OK
214	P5092-03	MBHLP2	SAM	12/28/24 03:22		Kareem	OK
215	P5092-04	MBHLP3	SAM	12/28/24 03:26		Kareem	OK
216	P5092-05	MBHLP3D	DUP	12/28/24 03:30		Kareem	OK
217	P5092-04L	MBHLP3L	SD	12/28/24 03:34		Kareem	OK
218	P5092-06	MBHLP3S	MS	12/28/24 03:38	MS Fail for Sb,Se(81.62ppb),Ag,Tl(Below RL),Zn(895.10ppb)	Kareem	OK
219	P5092-07	MBHLP4	SAM	12/28/24 03:42		Kareem	OK
220	P5092-08	MBHLP5	SAM	12/28/24 03:45		Kareem	OK
221	P5092-09	MBHLP6	SAM	12/28/24 03:49	Ca High	Kareem	Dilution
222	P5092-10	MBHLR1	SAM	12/28/24 03:53		Kareem	OK
223	P5092-11	MBHLR2	SAM	12/28/24 03:57		Kareem	OK
224	P5092-12	MBHLR3	SAM	12/28/24 04:01		Kareem	OK
225	P5092-13	MBHLT4	SAM	12/28/24 04:05		Kareem	OK
226	P5092-14	MBHLT5	SAM	12/28/24 04:08		Kareem	OK
227	P5092-15	MBHLT6	SAM	12/28/24 04:12		Kareem	OK
228	P5092-16	MBHLT7	SAM	12/28/24 04:16	Ca High	Kareem	Dilution
229	P5092-17	MBHLT8	SAM	12/28/24 04:20		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

230	P5092-18	MBHM38	SAM	12/28/24 04:24		Kareem	OK
231	P5092-19	MBHM39	SAM	12/28/24 04:27		Kareem	OK
232	CCV029	CCV029	CCV	12/28/24 04:31		Kareem	OK
233	CCB029	CCB029	CCB	12/28/24 04:35		Kareem	OK
234	PB165741BL	PBS741	MB	12/28/24 04:39	Not Use	Kareem	Not Ok
235	PB165741BS	LCS741	LCS	12/28/24 04:43	Not Use	Kareem	Not Ok
236	P5132-01	MBHME1	SAM	12/28/24 04:47	Not Use	Kareem	Not Ok
237	P5132-02	MBHME2	SAM	12/28/24 04:51	Not Use	Kareem	Not Ok
238	P5132-03	MBHME3	SAM	12/28/24 04:55	Not Use	Kareem	Not Ok
239	P5132-04	MBHMG0	SAM	12/28/24 04:58	Not Use	Kareem	Not Ok
240	P5132-05	MBHMG1	SAM	12/28/24 05:02	Not Use	Kareem	Not Ok
241	P5132-06	MBHMG2	SAM	12/28/24 05:06	Not Use	Kareem	Not Ok
242	P5132-07	MBHMH6	SAM	12/28/24 05:10	Not Use	Kareem	Not Ok
243	P5132-08	MBHMH7	SAM	12/28/24 05:14	Not Use	Kareem	Not Ok
244	P5132-09	MBHMH8	SAM	12/28/24 05:18	Not Use	Kareem	Not Ok
245	P5132-10	MBHMH9	SAM	12/28/24 05:21	Not Use	Kareem	Not Ok
246	P5132-11	MBHMJ0	SAM	12/28/24 05:25	Not Use	Kareem	Not Ok
247	P5132-12	MBHMJ1	SAM	12/28/24 05:29	Not Use	Kareem	Not Ok
248	P5132-13	MBHMJ2	SAM	12/28/24 05:33	Not Use	Kareem	Not Ok
249	P5132-14	MBHMJ3	SAM	12/28/24 05:37	Not Use	Kareem	Not Ok

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134114

Review By	Kareem Khairalla	Review On	12/31/2024 7:52:37 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:14 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

250	P5132-15	MBHMJ4	SAM	12/28/24 05:41	Not Use	Kareem	Not Ok
251	P5132-16	MBHMJ5	SAM	12/28/24 05:44	Not Use	Kareem	Not Ok
252	P5132-17	MBHMJ6	SAM	12/28/24 05:48	Not Use	Kareem	Not Ok
253	P5132-18	MBHMJ6D	DUP	12/28/24 05:52	Not Use	Kareem	Not Ok
254	CCV030	CCV030	CCV	12/28/24 05:56	Sb Fail	Kareem	OK
255	CCB030	CCB030	CCB	12/28/24 06:00		Kareem	OK
256	P5132-17L	MBHMJ6L	SD	12/28/24 06:04	Not Use	Kareem	Not Ok
257	P5132-19	MBHMJ6S	MS	12/28/24 06:07	Not Use	Kareem	Not Ok
258	P5132-20	MBHMN4	SAM	12/28/24 06:11	Not Use	Kareem	Not Ok
259	PB165787BL	PBS787	MB	12/28/24 06:15	Not Use	Kareem	Not Ok
260	PB165787BS	LCS787	LCS	12/28/24 06:19	Not Use	Kareem	Not Ok
261	PB165726BS	LCS726	LCS	12/28/24 06:23	Not Use	Kareem	Not Ok
262	PB165326BS	LCS326	LCS	12/28/24 06:27	Not Use	Kareem	Not Ok
263	CCV031	CCV031	CCV	12/28/24 06:31	Sb Fail	Kareem	OK
264	CCB031	CCB031	CCB	12/28/24 06:35		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:15:44 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/30/24 18:31		Kareem	OK
2	S1	S01	CAL2	12/30/24 18:36		Kareem	OK
3	S2	S02	CAL3	12/30/24 18:40		Kareem	OK
4	S3	S03	CAL4	12/30/24 18:44		Kareem	OK
5	S4	S04	CAL5	12/30/24 18:47		Kareem	OK
6	S5	S05	CAL6	12/30/24 18:51		Kareem	OK
7	S6	S06	CAL7	12/30/24 18:55		Kareem	OK
8	ICV005	ICV005	ICV	12/30/24 19:07	Inst. paused for calibration review	Kareem	OK
9	ICB005	ICB005	ICB	12/30/24 19:11		Kareem	OK
10	ICSA005	ICSA005	ICSA	12/30/24 19:15		Kareem	OK
11	ICSAB005	ICSAB005	ICSAB	12/30/24 19:50	Inst. paused for review	Kareem	OK
12	CCV049	CCV049	CCV	12/30/24 19:54		Kareem	OK
13	CCB049	CCB049	CCB	12/30/24 19:58		Kareem	OK
14	P5027-07DL	MBHK19	SAM	12/30/24 20:02	2x for Ca	Kareem	Confirms
15	P5027-13DL	MBHK23	SAM	12/30/24 20:06	2x for Ca	Kareem	Confirms
16	P5027-14DL	MBHK24	SAM	12/30/24 20:10	2x for Ca	Kareem	Confirms
17	P5027-15DL	MBHK25	SAM	12/30/24 20:14	2x for Ca	Kareem	Confirms
18	P5027-17DL	MBHK27	SAM	12/30/24 20:17	2x for Ca, Still Ca high	Kareem	Dilution

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:15:44 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

19	P5030-10DL	MBHK48	SAM	12/30/24 20:21	2x for Ca	Kareem	Confirms
20	P5030-11DL	MBHK49	SAM	12/30/24 20:25	2x for Ca,Mg, Still Ca high	Kareem	Dilution
21	P5030-12DL	MBHK50	SAM	12/30/24 20:29	2x for Ca,Mg, Still Ca high	Kareem	Dilution
22	P5032-05DL	MBHK59	SAM	12/30/24 20:33	2x for Ca	Kareem	Confirms
23	P5032-06DL	MBHK60	SAM	12/30/24 20:37	2x for Ca,Mn	Kareem	Confirms
24	P5032-07DL	MBHK61	SAM	12/30/24 20:41	2x for Ca	Kareem	Confirms
25	P5038-08DL	MBHK88	SAM	12/30/24 20:45	Not Use	Kareem	Not Ok
26	P5038-15DL	MBHKA6	SAM	12/30/24 20:49	2x for Ca,Mg, Still Ca high	Kareem	Dilution
27	P5038-16DL	MBHKA7	SAM	12/30/24 20:52	2x for Ca	Kareem	Confirms
28	P5038-17DL	MBHKA8	SAM	12/30/24 20:56	2x for Ca,Mg, Still Ca high	Kareem	Dilution
29	P5038-18DL	MBHKA9	SAM	12/30/24 21:00	2x for Ca	Kareem	Confirms
30	P5266-18DL	ME2903	SAM	12/30/24 21:04	2x for Fe	Kareem	Confirms
31	P5259-12DL	ME28X6	SAM	12/30/24 21:08	2x for Ca	Kareem	Confirms
32	P5259-14DL	ME28X8	SAM	12/30/24 21:12	2x for Ca	Kareem	Confirms
33	P5259-20DL	ME28Y4	SAM	12/30/24 21:16	2x for Ca	Kareem	Confirms
34	CCV050	CCV050	CCV	12/30/24 21:20		Kareem	OK
35	CCB050	CCB050	CCB	12/30/24 21:23		Kareem	OK
36	P5259-21DL	ME28Y5	SAM	12/30/24 21:27	2x for Ca	Kareem	Confirms
37	P5156-02DL	ME28Q7	SAM	12/30/24 21:31	2x for Ca	Kareem	Confirms
38	P5156-03DL	ME28Q8	SAM	12/30/24 21:35	2x for Ca	Kareem	Confirms

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

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:15:44 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

39	P5156-08DL	ME28T4	SAM	12/30/24 21:39	2x for Ca	Kareem	Confirms
40	P5156-10DL	ME28T6	SAM	12/30/24 21:43	2x for Ca	Kareem	Confirms
41	P5156-11DL	ME28T7	SAM	12/30/24 21:47	2x for Ca	Kareem	Confirms
42	P5156-12DL	ME28T8	SAM	12/30/24 21:50	2x for Ca	Kareem	Confirms
43	P5156-13DL	ME28T9	SAM	12/30/24 21:54	2x for Ca,Fe	Kareem	Confirms
44	P5156-14DL	ME28W0	SAM	12/30/24 21:58	2x for Fe	Kareem	Confirms
45	P5156-15DL	ME28W1	SAM	12/30/24 22:02	2x for Fe	Kareem	Confirms
46	P5156-16DL	ME28W2	SAM	12/30/24 22:06	2x for Fe	Kareem	Confirms
47	P5156-17DL	ME28W2D	DUP	12/30/24 22:09	2x for Fe	Kareem	Confirms
48	P5156-16LDL	ME28W2L	SD	12/30/24 22:13	10x for Fe	Kareem	Confirms
49	P5156-18DL	ME28W2S	MS	12/30/24 22:17	2x for Fe	Kareem	Confirms
50	P5156-21DL	ME28W5	SAM	12/30/24 22:21	Not Use	Kareem	Not Ok
51	P5156-22DL	ME28W6	SAM	12/30/24 22:25	2x for Fe	Kareem	Confirms
52	PB165326BL	PBS326	MB	12/30/24 22:28	Not Use	Kareem	Not Ok
53	PB165326BS	LCS326	LCS	12/30/24 22:32	Not Use	Kareem	Not Ok
54	P5027-10A	MBHK22A	PS	12/30/24 22:36	Not used	Kareem	Not Ok
55	P5030-04A	MBHK44A	PS	12/30/24 22:40	PS For As,Tl-(As-0.0054ml m5801,Tl-0.05 ml mp83836-10 ml Sample)-10ml Sample	Kareem	OK
56	CCV051	CCV051	CCV	12/30/24 22:44		Kareem	OK

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:15:44 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

57	CCB051	CCB051	CCB	12/30/24 22:48		Kareem	OK
58	P5032-18A	MBHK72A	PS	12/30/24 22:52	PS For Cu,Se,Tl - (0.0038ml m5751,0.019ml mp83726,0.05 ml mp83836 - 10ml Sample)	Kareem	OK
59	P5036-07A	MBHKF8A	PS	12/30/24 22:56	PS For Pb,Tl-(0.0023ml m6025,0.05ml mp83836-10 ml Sample)	Kareem	OK
60	P5038-02A	MBHK84A	PS	12/30/24 22:59	PS For Tl-0.05ml mp83836 - 10ml Sample	Kareem	OK
61	P5169-04	MJNLH4	SAM	12/30/24 23:03	Not Use	Kareem	Not Ok
62	P5169-05	MJNLH4D	DUP	12/30/24 23:07	Not Use	Kareem	Not Ok
63	P5169-04L	MJNLH4L	SD	12/30/24 23:11	Not Use	Kareem	Not Ok
64	P5169-06	MJNLH4S	MS	12/30/24 23:15	Not Use	Kareem	Not Ok
65	PB165673BL	PBW673	MB	12/30/24 23:23	Not Use	Kareem	Not Ok
66	PB165673BS	LCS673	LCS	12/30/24 23:27	Not Use	Kareem	Not Ok
67	P5035-05DL	MBHKM6	SAM	12/30/24 23:31	Not Use	Kareem	Not Ok
68	P5035-06DL	MBHKM7	SAM	12/30/24 23:35	2X For Ca	Kareem	Confirms
69	P5035-07DL	MBHKM8	SAM	12/30/24 23:39	2X For Ca	Kareem	Confirms
70	P5035-20DL	MBHKN9	SAM	12/30/24 23:43	Not Use	Kareem	Not Ok
71	P5035-08A	MBHKM9A	PS	12/30/24 23:47	PS For Tl - 0.05ml mp83836-10ml Sample	Kareem	OK
72	P5266-19	ME28Y9D	DUP	12/30/24 23:51	NOT USE	Kareem	Not Ok
73	CCV052	CCV052	CCV	12/30/24 23:54		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:15:44 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

74	CCB052	CCB052	CCB	12/30/24 23:58		Kareem	OK

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134139

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:07 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:18:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/31/24 12:16		Kareem	OK
2	S1	S01	CAL2	12/31/24 12:20		Kareem	OK
3	S2	S02	CAL3	12/31/24 12:24		Kareem	OK
4	S3	S03	CAL4	12/31/24 12:28		Kareem	OK
5	S4	S04	CAL5	12/31/24 12:32		Kareem	OK
6	S5	S05	CAL6	12/31/24 12:35		Kareem	OK
7	S6	S06	CAL7	12/31/24 12:39		Kareem	OK
8	ICV006	ICV006	ICV	12/31/24 13:00	Inst. paused for calibration review	Kareem	OK
9	ICB006	ICB006	ICB	12/31/24 13:04		Kareem	OK
10	ICSA006	ICSA006	ICSA	12/31/24 13:08		Kareem	OK
11	ICSAB006	ICSAB006	ICSAB	12/31/24 13:27	Inst. paused for review	Kareem	OK
12	CCV053	CCV053	CCV	12/31/24 13:32		Kareem	OK
13	CCB053	CCB053	CCB	12/31/24 13:36		Kareem	OK
14	P5027-17DL	MBHK27	SAM	12/31/24 13:40	4X For Ca	Kareem	Confirms
15	P5030-11DL	MBHK49	SAM	12/31/24 13:44	4X For Ca	Kareem	Confirms
16	P5266-04	ME28Y9	SAM	12/31/24 13:48	Not Use	Kareem	Not Ok
17	P5030-12DL	MBHK50	SAM	12/31/24 13:52	4X For Ca	Kareem	Confirms
18	P5038-08DL	MBHK88	SAM	12/31/24 13:56	4X For Ca	Kareem	Confirms

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134139

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:07 AM
Supervise By	Kareem Khairalla	Supervise On	1/2/2025 6:18:26 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	
Chk Standard	MP83513,MP83514

19	P5038-15DL	MBHKA6	SAM	12/31/24 14:00	4X For Ca	Kareem	Confirms
20	P5038-17DL	MBHKA8	SAM	12/31/24 14:03	4X For Ca	Kareem	Confirms
21	P5156-13DL	ME28T9	SAM	12/31/24 14:07	Not Use	Kareem	Not Ok
22	P5156-14DL	ME28W0	SAM	12/31/24 14:11	Not Use	Kareem	Not Ok
23	P5156-21DL	ME28W5	SAM	12/31/24 14:15	4X for Fe	Kareem	Confirms
24	P5035-05DL	MBHKM6	SAM	12/31/24 14:19	4X For Ca	Kareem	Confirms
25	P5035-20DL	MBHKN9	SAM	12/31/24 14:23	4X For Ca	Kareem	Confirms
26	P5266-19DL	ME28Y9D	DUP	12/31/24 14:27	Not Use	Kareem	Not Ok
27	P5266-19DL2	ME28Y9D	DUP	12/31/24 14:31	Not Use	Kareem	Not Ok
28	PB165641TB	LEB641	MB	12/31/24 14:34	Not Use	Kareem	Not Ok
29	CCV054	CCV054	CCV	12/31/24 14:38		Kareem	OK
30	CCB054	CCB054	CCB	12/31/24 14:42		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134151

Review By	Sarabjit Jaswal	Review On	1/2/2025 7:08:28 PM
Supervise By	Mohan Bera	Supervise On	1/2/2025 7:09:33 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83141
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	01/02/25 14:07		Kareem	OK
2	S1	S01	CAL2	01/02/25 14:11		Kareem	OK
3	S2	S02	CAL3	01/02/25 14:15		Kareem	OK
4	S3	S03	CAL4	01/02/25 14:19		Kareem	OK
5	S4	S04	CAL5	01/02/25 14:23		Kareem	OK
6	S5	S05	CAL6	01/02/25 14:27		Kareem	OK
7	S6	S06	CAL7	01/02/25 14:31		Kareem	OK
8	ICV007	ICV007	ICV	01/02/25 14:58	Instrument paused for calibration review	Kareem	OK
9	ICB007	ICB007	ICB	01/02/25 15:28	Instrument paused for review	Kareem	OK
10	ICSA007	ICSA007	ICSA	01/02/25 15:44	Instrument paused for review	Kareem	OK
11	ICSAB007	ICSAB007	ICSAB	01/02/25 15:53	Instrument paused for review	Kareem	OK
12	CCV055	CCV055	CCV	01/02/25 16:02	Instrument paused for review	Kareem	OK
13	CCB055	CCB055	CCB	01/02/25 16:06		Kareem	OK
14	P5169-04	MJNLH4	SAM	01/02/25 16:10		Kareem	OK
15	P5169-05	MJNLH4D	DUP	01/02/25 16:14		Kareem	OK
16	P5169-04L	MJNLH4L	SD	01/02/25 16:18		Kareem	OK
17	P5169-06	MJNLH4S	MS	01/02/25 16:22		Kareem	OK

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Fax : 908 789 8922

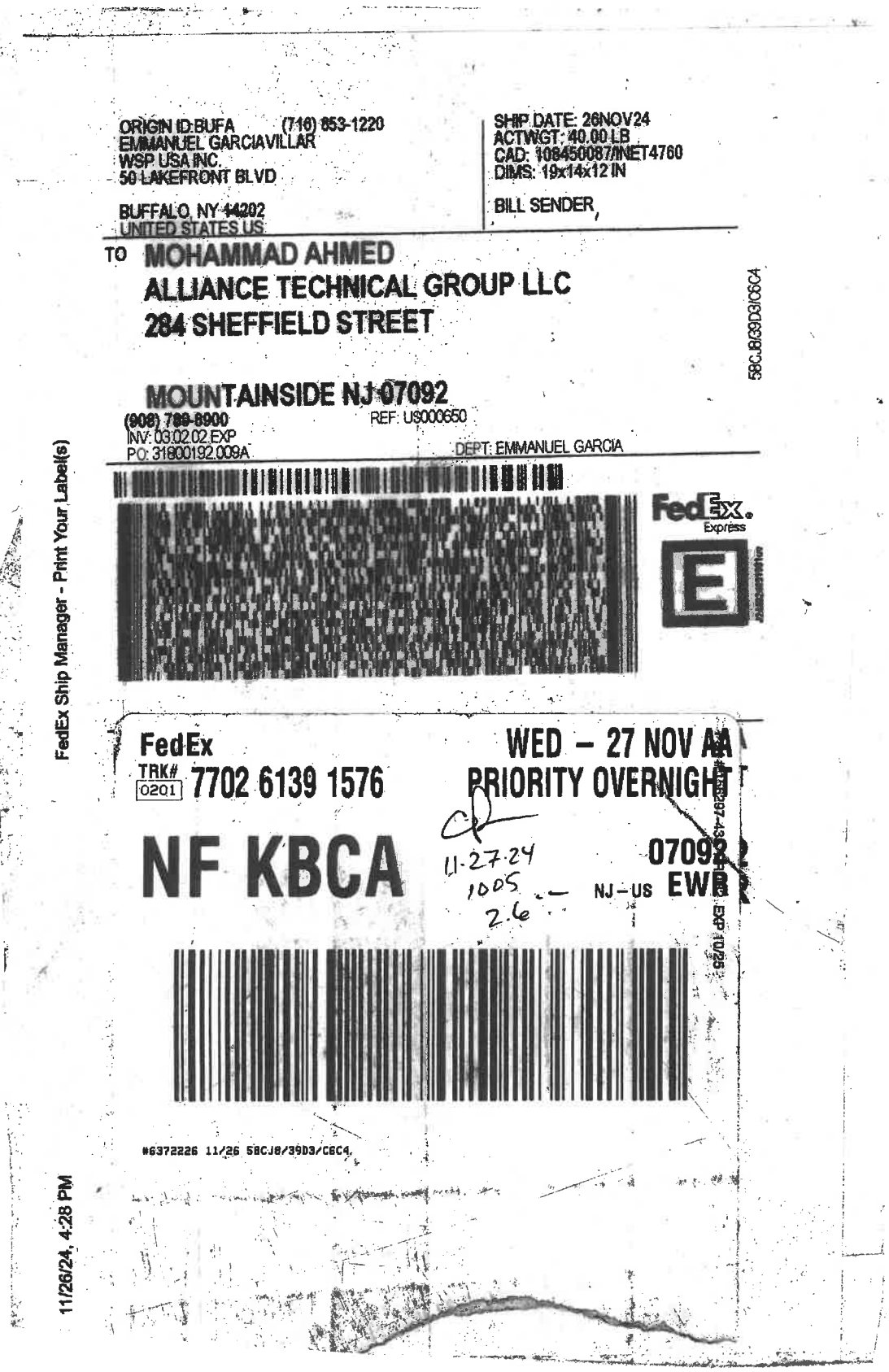
Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134151

Review By	Sarabjit Jaswal	Review On	1/2/2025 7:08:28 PM
Supervise By	Mohan Bera	Supervise On	1/2/2025 7:09:33 PM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83141
Chk Standard	MP83513,MP83514

18	PB165641TB	LEB641	MB	01/02/25 16:31		Kareem	OK
19	P5027-10A	MBHK22A	PS	01/02/25 16:35	PS for Se(0.019ml mp83726),Tl(0.05 ml mp83836),Zn(0.054ml m5819)-10ml	Kareem	OK
20	P5027-19	MBHK29	SAM	01/02/25 16:39		Kareem	OK
21	P5169-04A	MJNLH4A	PS	01/02/25 16:43	Not use	Kareem	Not Ok
22	PB165326BL	PBS326	MB	01/02/25 16:55		Kareem	OK
23	PB165326BS	LCS326	LCS	01/02/25 16:59		Kareem	OK
24	PB165673BL	PBW673	MB	01/02/25 17:03		Kareem	OK
25	PB165673BS	LCS673	LCS	01/02/25 17:12		Kareem	OK
26	P5169-01	MJNLH1	SAM	01/02/25 17:16		Kareem	OK
27	P5169-02	MJNLH2	SAM	01/02/25 17:20		Kareem	OK
28	P5169-03	MJNLH5	SAM	01/02/25 17:24		Kareem	OK
29	CCV056	CCV056	CCV	01/02/25 17:28		Kareem	OK
30	CCB056	CCB056	CCB	01/02/25 17:32		Kareem	OK



ORIGIN ID:BUFA (716) 853-1220
EMMANUEL GARCIAVILLAR
WSP USA INC.
50 LAKEFRONT BLVD

BUFFALO, NY 14202
UNITED STATES US

SHIP DATE: 26NOV24
ACTWGT: 40.00 LB
CAD: 108450087/INET4760
DIMS: 19x14x12 IN

BILL SENDER,

TO MOHAMMAD AHMED
ALLIANCE TECHNICAL GROUP LLC
284 SHEFFIELD STREET

MOUNTAINSIDE NJ 07092
(908) 789-8900 REF: US000650
INV: 03.02.02.EXP
PO: 31800192.009A DEPT: EMMANUEL GARCIA

58CJ8/39D3/C6C4

FedEx Express

FedEx
TRK# 0201 7702 6139 1576

WED – 27 NOV AA
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07092
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#6372226 11/26 58CJ8/39D3/C6C4

FedEx Ship Manager - Print Your Label(s)

11/26/24, 4:28 PM

Alliance TECHNICAL GROUP 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Login Summary Report

Order ID :	P5027	Order Date :	11/27/2024 10:05:00 AM	Project Mgr :	Deepak
Client :	USEPA CLP SMO	Project :	51879	Report Type :	USEPA CLP
Contact :	Anita Kapadia	Receive Date :	11/27/2024 10:05:00 AM	EDD Type :	EPA CLP
Date Sign Off :	11/27/2024 1:20:35 PM				

Sample ID	Client ID	Matrix	Sampling Date	Test	Test Group	Method	TAT Days	Fax Due Date	HC Due Date
P5027-01	MBHJJ2	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-02	MBHK14	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-03	MBHK15	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-04	MBHK16	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-05	MBHK17	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-06	MBHK18	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-07	MBHK19	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-08	MBHK20	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-09	MBHK21	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-10	MBHK22	Solid	11/20/2024						
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025

P5027-11	MBHK22D	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-12	MBHK22S	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-13	MBHK23	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-14	MBHK24	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-15	MBHK25	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-16	MBHK26	Solid	11/20/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-17	MBHK27	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-18	MBHK28	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-19	MBHK29	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-20	MBHK30	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-21	MBHK31	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025
P5027-22	MBHK32	Solid	11/21/2024					
				Metals CLP Full	SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids	Chemtech -SOP	15	01/01/2025	01/01/2025

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB165326 **WorkList ID :** 185893 **Department :** Digestion **Date :** 12-02-2024 10:33:36

7869

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5027-01	MBHJJ2	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-02	MBHK14	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-03	MBHK15	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-04	MBHK16	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-05	MBHK17	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-06	MBHK18	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-07	MBHK19	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-08	MBHK20	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-09	MBHK21	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-10	MBHK22	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-11	MBHK22D	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-12	MBHK22S	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-13	MBHK23	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-14	MBHK24	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-15	MBHK25	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-16	MBHK26	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/20/2024	SFAM_AES
P5027-17	MBHK27	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES
P5027-18	MBHK28	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES
P5027-19	MBHK29	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES
P5027-20	MBHK30	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES
P5027-21	MBHK31	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES

Date/Time 12/2/24 12:00

Raw Sample Received by: JSP Courier diff

Raw Sample Relinquished by: [signature]

Date/Time 12/2/24 13:00

Raw Sample Received by: [signature]

Raw Sample Relinquished by: JSP Courier diff

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB165326 **WorkList ID :** 185893 **Department :** Digestion **Date :** 12-02-2024 10:33:36

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5027-22	MBHK32	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C11	11/21/2024	SFAM_AES

787

Date/Time 12/2/24 12:00

Raw Sample Received by: jsp (Met dig)

Raw Sample Relinquished by: CP Sm

Date/Time 12/2/24 13:00

Raw Sample Received by: CP Sm

Raw Sample Relinquished by: jsp (Met dig)