SDG COVER PAGE

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

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHK34

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHK34	P5028-01	X			
MBHK35	P5028-02	X			
MBHK36	P5028-03	X			
MBHK37	P5028-04	X			
MBHK38	P5028-05	X			
MBHK39	P5028-06	X			
MBHK40	P5028-07	X			
MBHK40D	P5028-08	X			
MBHK40S	P5028-09	X			
MBHKD2	P5028-10	X			
MBHKD3	P5028-11	X			
MBHKD4	P5028-12	X			
MBHKE5	P5028-13	X			
MBHKE6	P5028-14	X			
MBHKE7	P5028-15	X			
MBHKE8	P5028-16	X			
MBHKE9	P5028-17	X			
MBHKF0	P5028-18	X			
MBHKF1	P5028-19	X			
MBHKF2	P5028-20	X			
MBHKG2	P5028-21	X			
MBHKG3	P5028-22	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 # MBHK34

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-112624-102130-0027

DateShipped: 11/26/2024
CarrierName: FedEx
AirbillNo: 7702 6139 3270

Case #: 51879
Cooler #: 2

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

2

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P175-SB-03-Z00-02	MBHK34	Soil/		ICP-AES(35)	4721 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z02-06	MBHK35	Soil/		ICP-AES(35)	4722 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z06-12	MBHK36	Soil/		ICP-AES(35)	4723 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z12-18	MBHK37	Soil/		ICP-AES(35)	4724 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z18-24	MBHK38	Soil/		ICP-AES(35)	4725 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z24-30	MBHK39	Soil/		ICP-AES(35)	4726 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	
P175-SB-03-Z30-36	MBHK40	Soil/		ICP-AES(35)	4727 (Wet ice < 6 C) (1)	P175-SB-03	11/20/2024 14:15	QC
P175-SB-21-Z00-02	MBHKD2	Soil/		ICP-AES(35)	4857 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	
P175-SB-21-Z02-06	MBHKD3	Soil/		ICP-AES(35)	4858 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	
P175-SB-21-Z06-12	MBHKD4	Soil/		ICP-AES(35)	4859 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	

Sample(s) to be used for Lab QC: P175-SB-03-Z30-36 Tag 4727 - Special Instructions: Samples MBHK40 and MBHKD6 are MS/MSDs.	**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	[signature] CLP	11/26/24 1645	[signature]	1005 11-27-24	FR Cust #1 2.8°C
					Custody Seal Intact
			N/A [signature]		Temp Blank present
			11/26/24		

68HERH20D0011

SDG # MBHK34

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-112624-102130-0027

DateShipped: 11/26/2024
CarrierName: FedEx
AirbillNo: 7702 6139 3270

Case #: 51879
Cooler #: 2

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

3

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P175-SB-22-Z30-36	MBHKE5	Soil/		ICP-AES(35)	4840 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-23-Z00-02	MBHKE6	Soil/		ICP-AES(35)	4841 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z02-06	MBHKE7	Soil/		ICP-AES(35)	4842 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z06-12	MBHKE8	Soil/		ICP-AES(35)	4843 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z12-18	MBHKE9	Soil/		ICP-AES(35)	4844 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z18-24	MBHKF0	Soil/		ICP-AES(35)	4845 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z24-30	MBHKF1	Soil/		ICP-AES(35)	4846 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z30-36	MBHKF2	Soil/		ICP-AES(35)	4847 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-23-Z18-24-FD	MBHKG2	Soil/		ICP-AES(35)	5493 (Wet ice < 6 C) (1)	P175-SB-23	11/20/2024 14:50	
P175-SB-22-Z24-30-FD	MBHKG3	Soil/		ICP-AES(35)	5494 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
				11/26/24 N/A				

Special Instructions: Samples MBHK40 and MBHKD6 are MS/MSDs.

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	CESP	11/26/24 1645		1005 11-27-24	Ice Cooler 2.8 C
		N/A		11/26/24	Custody Seal Intact
					Temp Blank present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassanova Rene		Log-in Date **11/27/2024**
Received By (Signature)		
Case Number 51879	SDG No. MBHK34	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.	770261393270 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.8 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	MBHK34	N/A	4721	P5028-01	Intact
2	MBHK35	N/A	4722	P5028-02	Intact
3	MBHK36	N/A	4723	P5028-03	Intact
4	MBHK37	N/A	4724	P5028-04	Intact
5	MBHK38	N/A	4725	P5028-05	Intact
6	MBHK39	N/A	4726	P5028-06	Intact
7	MBHK40	N/A	4727	P5028-07	Intact
8	MBHK40D	N/A	4727	P5028-08	Intact
9	MBHK40S	N/A	4727	P5028-09	Intact
10	MBHKD2	N/A	4857	P5028-10	Intact
11	MBHKD3	N/A	4858	P5028-11	Intact
12	MBHKD4	N/A	4859	P5028-12	Intact
13	MBHKE5	N/A	4840	P5028-13	Intact
14	MBHKE6	N/A	4841	P5028-14	Intact
15	MBHKE7	N/A	4842	P5028-15	Intact
16	MBHKE8	N/A	4843	P5028-16	Intact
17	MBHKE9	N/A	4844	P5028-17	Intact
18	MBHKF0	N/A	4845	P5028-18	Intact
19	MBHKF1	N/A	4846	P5028-19	Intact
20	MBHKF2	N/A	4847	P5028-20	Intact
21	MBHKG2	N/A	5493	P5028-21	Intact
22	MBHKG3	N/A	5494	P5028-22	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.	**MBHK34**
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	591	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	592	745	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	746	747	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	748	775	✓	
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)	776	776	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	777	778	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	779	780	✓	
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 # MBHK34
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5028

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: 2.8^{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.

284 Sheffield Street
Mountainside, NJ 07092

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 MBHK34 For Arsenic:

If C = 0.0458291 ppm
Vf = 100 ml
W = 1.23 g
S = 0.826(82.6/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0458291 \times \frac{100}{1.23 \times 0.826} \times 1$$

$$= 4.51082 \text{ mg/kg}$$

= 4.5 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. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Chromium, Cobalt, Magnesium, Manganese, Zinc.

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: 12:50
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: 07:55
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: LB133672

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
P5028-01	MBHK34	1	1.12	8.46	9.58	8.11	82.6	
P5028-02	MBHK35	2	1.15	8.58	9.73	8.75	88.6	
P5028-03	MBHK36	3	1.15	8.48	9.63	8.43	85.8	
P5028-04	MBHK37	4	1.12	8.65	9.77	8.61	86.6	
P5028-05	MBHK38	5	1.16	8.65	9.81	8.86	89.0	
P5028-06	MBHK39	6	1.15	8.63	9.78	8.92	90.0	
P5028-07	MBHK40	7	1.16	8.45	9.61	8.63	88.4	
P5028-08	MBHK40D	8	1.16	8.45	9.61	8.63	88.4	
P5028-09	MBHK40S	9	1.16	8.45	9.61	8.63	88.4	
P5028-10	MBHKD2	10	1.18	8.40	9.58	7.43	74.4	
P5028-11	MBHKD3	11	1.19	8.61	9.8	7.95	78.5	
P5028-12	MBHKD4	12	1.15	8.39	9.54	7.89	80.3	
P5028-13	MBHKE5	13	1.16	8.43	9.59	8.8	90.6	
P5028-14	MBHKE6	14	1.19	8.62	9.81	7.74	76.0	
P5028-15	MBHKE7	15	1.16	8.72	9.88	8.32	82.1	
P5028-16	MBHKE8	16	1.19	8.50	9.69	8.35	84.2	
P5028-17	MBHKE9	17	1.17	8.60	9.77	8.87	89.5	
P5028-18	MBHKF0	18	1.19	8.42	9.61	8.78	90.1	
P5028-19	MBHKF1	19	1.13	8.54	9.67	8.77	89.5	
P5028-20	MBHKF2	20	1.15	8.83	9.98	9.16	90.7	
P5028-21	MBHKG2	21	1.18	8.64	9.82	8.94	89.8	
P5028-22	MBHKG3	22	1.16	8.72	9.88	9.00	89.9	

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

WORKLIST(Hardcopy Internal Chain)

WB 133672

WorkList Name : %1-p5028 **WorkList ID :** 185861 **Department :** Wet-Chemistry **Date :** 11-28-2024 08:49:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5028-01	MBHK34	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-02	MBHK35	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-03	MBHK36	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-04	MBHK37	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-05	MBHK38	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-06	MBHK39	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-07	MBHK40	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-08	MBHK40D	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-09	MBHK40S	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-10	MBHKD2	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-11	MBHKD3	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-12	MBHKD4	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-13	MBHKE5	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-14	MBHKE6	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-15	MBHKE7	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-16	MBHKE8	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-17	MBHKE9	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-18	MBHKF0	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-19	MBHKF1	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-20	MBHKF2	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5028-21	MBHKG2	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO

12

Date/Time 11-28-24 12:25

Raw Sample Received by: JB CWC

Raw Sample Relinquished by: CP SM

Date/Time 11-28-24 13:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JB CWC

WORKLIST(Hardcopy Internal Chain)

VM 133672

WorkList Name : %1-p5028 **WorkList ID :** 185861 **Department :** Wet-Chemistry **Date :** 11-28-2024 08:49:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5028-22	MBHKG3	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO

13

Date/Time 11.26.24 12:25

Raw Sample Received by: YB WC

Raw Sample Relinquished by: CP SM

Date/Time 11.28.24 13:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: YB WC

EPA SAMPLE NO.

MBHK34

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-01

% Solids: 82.6 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	3000		12/16/2024	0144
7440-36-0	Antimony	5.9	U*	12/16/2024	0144
7440-38-2	Arsenic	4.5		12/16/2024	0144
7440-39-3	Barium	46		12/16/2024	0144
7440-41-7	Beryllium	0.28	J	12/16/2024	0144
7440-43-9	Cadmium	0.48	J	12/16/2024	0144
7440-70-2	Calcium	120000	D	12/23/2024	1537
7440-47-3	Chromium	6.5	*	12/16/2024	0144
7440-48-4	Cobalt	8.8	*	12/16/2024	0144
7440-50-8	Copper	11		12/16/2024	0144
7439-89-6	Iron	9100		12/16/2024	0144
7439-92-1	Lead	78		12/16/2024	0144
7439-95-4	Magnesium	51000	*	12/16/2024	0144
7439-96-5	Manganese	720	*	12/16/2024	0144
7440-02-0	Nickel	8.8		12/16/2024	0144
7440-09-7	Potassium	750		12/16/2024	0144
7782-49-2	Selenium	3.4	U*	12/16/2024	0144
7440-22-4	Silver	0.98	U*	12/16/2024	0144
7440-23-5	Sodium	490	U	12/16/2024	0144
7440-28-0	Thallium	4.0		12/16/2024	0144
7440-62-2	Vanadium	6.9		12/16/2024	0144
7440-66-6	Zinc	75	*	12/16/2024	0144

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

Comments:

EPA SAMPLE NO.

MBHK35

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-02

% Solids: 88.6 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	4700		12/16/2024	0148
7440-36-0	Antimony	0.97	J*	12/16/2024	0148
7440-38-2	Arsenic	6.8		12/16/2024	0148
7440-39-3	Barium	83		12/16/2024	0148
7440-41-7	Beryllium	0.43		12/16/2024	0148
7440-43-9	Cadmium	0.73		12/16/2024	0148
7440-70-2	Calcium	97000	D	12/23/2024	1541
7440-47-3	Chromium	8.9	*	12/16/2024	0148
7440-48-4	Cobalt	9.9	*	12/16/2024	0148
7440-50-8	Copper	22		12/16/2024	0148
7439-89-6	Iron	12000		12/16/2024	0148
7439-92-1	Lead	150		12/16/2024	0148
7439-95-4	Magnesium	38000	*	12/16/2024	0148
7439-96-5	Manganese	950	*	12/16/2024	0148
7440-02-0	Nickel	13		12/16/2024	0148
7440-09-7	Potassium	690		12/16/2024	0148
7782-49-2	Selenium	3.0	U*	12/16/2024	0148
7440-22-4	Silver	0.84	U*	12/16/2024	0148
7440-23-5	Sodium	420	U	12/16/2024	0148
7440-28-0	Thallium	3.5		12/16/2024	0148
7440-62-2	Vanadium	11		12/16/2024	0148
7440-66-6	Zinc	120	*	12/16/2024	0148

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

Comments:

EPA SAMPLE NO.

MBHK36

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-03

% Solids: 85.8 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	9100		12/16/2024	0152
7440-36-0	Antimony	3.7	J*	12/16/2024	0152
7440-38-2	Arsenic	29		12/16/2024	0152
7440-39-3	Barium	92		12/16/2024	0152
7440-41-7	Beryllium	0.81		12/16/2024	0152
7440-43-9	Cadmium	0.92		12/16/2024	0152
7440-70-2	Calcium	15000		12/16/2024	0152
7440-47-3	Chromium	11	*	12/16/2024	0152
7440-48-4	Cobalt	17	*	12/16/2024	0152
7440-50-8	Copper	40		12/16/2024	0152
7439-89-6	Iron	23000		12/16/2024	0152
7439-92-1	Lead	68		12/16/2024	0152
7439-95-4	Magnesium	3200	*	12/16/2024	0152
7439-96-5	Manganese	1300	*	12/16/2024	0152
7440-02-0	Nickel	23		12/16/2024	0152
7440-09-7	Potassium	830		12/16/2024	0152
7782-49-2	Selenium	3.5	U*	12/16/2024	0152
7440-22-4	Silver	1.0	U*	12/16/2024	0152
7440-23-5	Sodium	500	U	12/16/2024	0152
7440-28-0	Thallium	2.7		12/16/2024	0152
7440-62-2	Vanadium	17		12/16/2024	0152
7440-66-6	Zinc	67	*	12/16/2024	0152

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

Comments:

EPA SAMPLE NO.

MBHK37

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-04

% Solids: 86.6 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	7500		12/16/2024	0156
7440-36-0	Antimony	3.1	J*	12/16/2024	0156
7440-38-2	Arsenic	14		12/16/2024	0156
7440-39-3	Barium	75		12/16/2024	0156
7440-41-7	Beryllium	0.65		12/16/2024	0156
7440-43-9	Cadmium	0.63		12/16/2024	0156
7440-70-2	Calcium	4300		12/16/2024	0156
7440-47-3	Chromium	9.8	*	12/16/2024	0156
7440-48-4	Cobalt	13	*	12/16/2024	0156
7440-50-8	Copper	27		12/16/2024	0156
7439-89-6	Iron	19000		12/16/2024	0156
7439-92-1	Lead	39		12/16/2024	0156
7439-95-4	Magnesium	2200	*	12/16/2024	0156
7439-96-5	Manganese	1500	*	12/16/2024	0156
7440-02-0	Nickel	17		12/16/2024	0156
7440-09-7	Potassium	530		12/16/2024	0156
7782-49-2	Selenium	1.5	J*	12/16/2024	0156
7440-22-4	Silver	0.88	U*	12/16/2024	0156
7440-23-5	Sodium	440	U	12/16/2024	0156
7440-28-0	Thallium	2.0	J	12/16/2024	0156
7440-62-2	Vanadium	16		12/16/2024	0156
7440-66-6	Zinc	40	*	12/16/2024	0156

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

Comments:

EPA SAMPLE NO.

MBHK38

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-05

% Solids: 89 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	7200		12/16/2024	0159
7440-36-0	Antimony	2.5	J*	12/16/2024	0159
7440-38-2	Arsenic	7.8		12/16/2024	0159
7440-39-3	Barium	76		12/16/2024	0159
7440-41-7	Beryllium	0.57		12/16/2024	0159
7440-43-9	Cadmium	0.51		12/16/2024	0159
7440-70-2	Calcium	8100		12/16/2024	0159
7440-47-3	Chromium	8.9	*	12/16/2024	0159
7440-48-4	Cobalt	11	*	12/16/2024	0159
7440-50-8	Copper	14		12/16/2024	0159
7439-89-6	Iron	15000		12/16/2024	0159
7439-92-1	Lead	69		12/16/2024	0159
7439-95-4	Magnesium	2800	*	12/16/2024	0159
7439-96-5	Manganese	1100	*	12/16/2024	0159
7440-02-0	Nickel	11		12/16/2024	0159
7440-09-7	Potassium	300	J	12/16/2024	0159
7782-49-2	Selenium	3.1	U*	12/16/2024	0159
7440-22-4	Silver	0.87	U*	12/16/2024	0159
7440-23-5	Sodium	440	U	12/16/2024	0159
7440-28-0	Thallium	1.8	J	12/16/2024	0159
7440-62-2	Vanadium	15		12/16/2024	0159
7440-66-6	Zinc	56	*	12/16/2024	0159

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

Comments:

EPA SAMPLE NO.

MBHK39

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-06

% 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	8500		12/16/2024	0203
7440-36-0	Antimony	3.0	J*	12/16/2024	0203
7440-38-2	Arsenic	8.2		12/16/2024	0203
7440-39-3	Barium	60		12/16/2024	0203
7440-41-7	Beryllium	0.63		12/16/2024	0203
7440-43-9	Cadmium	0.38	J	12/16/2024	0203
7440-70-2	Calcium	2500		12/16/2024	0203
7440-47-3	Chromium	9.6	*	12/16/2024	0203
7440-48-4	Cobalt	9.7	*	12/16/2024	0203
7440-50-8	Copper	13		12/16/2024	0203
7439-89-6	Iron	16000		12/16/2024	0203
7439-92-1	Lead	49		12/16/2024	0203
7439-95-4	Magnesium	1800	*	12/16/2024	0203
7439-96-5	Manganese	990	*	12/16/2024	0203
7440-02-0	Nickel	11		12/16/2024	0203
7440-09-7	Potassium	240	J	12/16/2024	0203
7782-49-2	Selenium	1.1	J*	12/16/2024	0203
7440-22-4	Silver	0.86	U*	12/16/2024	0203
7440-23-5	Sodium	430	U	12/16/2024	0203
7440-28-0	Thallium	0.88	J	12/16/2024	0203
7440-62-2	Vanadium	16		12/16/2024	0203
7440-66-6	Zinc	51	*	12/16/2024	0203

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

Comments:

EPA SAMPLE NO.

MBHK40

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-07

% Solids: 88.4 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	8300		12/16/2024	0207
7440-36-0	Antimony	3.2	J*	12/16/2024	0207
7440-38-2	Arsenic	12		12/16/2024	0207
7440-39-3	Barium	66		12/16/2024	0207
7440-41-7	Beryllium	0.68		12/16/2024	0207
7440-43-9	Cadmium	0.60		12/16/2024	0207
7440-70-2	Calcium	7000		12/16/2024	0207
7440-47-3	Chromium	12	*	12/16/2024	0207
7440-48-4	Cobalt	12	*	12/16/2024	0207
7440-50-8	Copper	23		12/16/2024	0207
7439-89-6	Iron	19000		12/16/2024	0207
7439-92-1	Lead	87		12/16/2024	0207
7439-95-4	Magnesium	2600	*	12/16/2024	0207
7439-96-5	Manganese	1300	*	12/16/2024	0207
7440-02-0	Nickel	16		12/16/2024	0207
7440-09-7	Potassium	350	J	12/16/2024	0207
7782-49-2	Selenium	0.81	J*	12/16/2024	0207
7440-22-4	Silver	0.78	U*	12/16/2024	0207
7440-23-5	Sodium	390	U	12/16/2024	0207
7440-28-0	Thallium	2.1		12/16/2024	0207
7440-62-2	Vanadium	17		12/16/2024	0207
7440-66-6	Zinc	75	*	12/16/2024	0207

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

Comments:

EPA SAMPLE NO.

MBHKD2

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-10

% Solids: 74.4 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	7700		12/16/2024	0236
7440-36-0	Antimony	2.8	J*	12/16/2024	0236
7440-38-2	Arsenic	8.5		12/16/2024	0236
7440-39-3	Barium	180		12/16/2024	0236
7440-41-7	Beryllium	0.69		12/16/2024	0236
7440-43-9	Cadmium	0.99		12/16/2024	0236
7440-70-2	Calcium	16000		12/16/2024	0236
7440-47-3	Chromium	17	*	12/16/2024	0236
7440-48-4	Cobalt	12	*	12/16/2024	0236
7440-50-8	Copper	43		12/16/2024	0236
7439-89-6	Iron	17000		12/16/2024	0236
7439-92-1	Lead	260		12/16/2024	0236
7439-95-4	Magnesium	3800	*	12/16/2024	0236
7439-96-5	Manganese	670	*	12/16/2024	0236
7440-02-0	Nickel	25		12/16/2024	0236
7440-09-7	Potassium	1300		12/16/2024	0236
7782-49-2	Selenium	3.4	U*	12/16/2024	0236
7440-22-4	Silver	0.97	U*	12/16/2024	0236
7440-23-5	Sodium	490	U	12/16/2024	0236
7440-28-0	Thallium	1.7	J	12/16/2024	0236
7440-62-2	Vanadium	20		12/16/2024	0236
7440-66-6	Zinc	210	*	12/16/2024	0236

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

Comments:

EPA SAMPLE NO.

MBHKD3

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-11

% Solids: 78.5 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	7400		12/16/2024	0240
7440-36-0	Antimony	5.3	J*	12/16/2024	0240
7440-38-2	Arsenic	10		12/16/2024	0240
7440-39-3	Barium	180		12/16/2024	0240
7440-41-7	Beryllium	0.87		12/16/2024	0240
7440-43-9	Cadmium	1.1		12/16/2024	0240
7440-70-2	Calcium	18000		12/16/2024	0240
7440-47-3	Chromium	28	*	12/16/2024	0240
7440-48-4	Cobalt	14	*	12/16/2024	0240
7440-50-8	Copper	51		12/16/2024	0240
7439-89-6	Iron	28000		12/16/2024	0240
7439-92-1	Lead	230		12/16/2024	0240
7439-95-4	Magnesium	3300	*	12/16/2024	0240
7439-96-5	Manganese	700	*	12/16/2024	0240
7440-02-0	Nickel	28		12/16/2024	0240
7440-09-7	Potassium	940		12/16/2024	0240
7782-49-2	Selenium	3.5	U*	12/16/2024	0240
7440-22-4	Silver	1.0	U*	12/16/2024	0240
7440-23-5	Sodium	510	U	12/16/2024	0240
7440-28-0	Thallium	1.2	J	12/16/2024	0240
7440-62-2	Vanadium	22		12/16/2024	0240
7440-66-6	Zinc	200	*	12/16/2024	0240

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

Comments:

EPA SAMPLE NO.

MBHKD4

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-12

% Solids: 80.3 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		12/16/2024	0244
7440-36-0	Antimony	3.9	J*	12/16/2024	0244
7440-38-2	Arsenic	8.9		12/16/2024	0244
7440-39-3	Barium	160		12/16/2024	0244
7440-41-7	Beryllium	0.64		12/16/2024	0244
7440-43-9	Cadmium	0.74		12/16/2024	0244
7440-70-2	Calcium	12000		12/16/2024	0244
7440-47-3	Chromium	15	*	12/16/2024	0244
7440-48-4	Cobalt	11	*	12/16/2024	0244
7440-50-8	Copper	37		12/16/2024	0244
7439-89-6	Iron	15000		12/16/2024	0244
7439-92-1	Lead	200		12/16/2024	0244
7439-95-4	Magnesium	3100	*	12/16/2024	0244
7439-96-5	Manganese	640	*	12/16/2024	0244
7440-02-0	Nickel	21		12/16/2024	0244
7440-09-7	Potassium	890		12/16/2024	0244
7782-49-2	Selenium	3.4	U*	12/16/2024	0244
7440-22-4	Silver	0.96	U*	12/16/2024	0244
7440-23-5	Sodium	480	U	12/16/2024	0244
7440-28-0	Thallium	1.9	J	12/16/2024	0244
7440-62-2	Vanadium	19		12/16/2024	0244
7440-66-6	Zinc	160	*	12/16/2024	0244

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

Comments:

EPA SAMPLE NO.

MBHKE5

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-13

% Solids: 90.6 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	4600		12/16/2024	0312
7440-36-0	Antimony	1.6	J*	12/16/2024	0312
7440-38-2	Arsenic	7.2		12/16/2024	0312
7440-39-3	Barium	45		12/16/2024	0312
7440-41-7	Beryllium	0.43	J	12/16/2024	0312
7440-43-9	Cadmium	0.30	J	12/16/2024	0312
7440-70-2	Calcium	47000		12/16/2024	0312
7440-47-3	Chromium	7.3	*	12/16/2024	0312
7440-48-4	Cobalt	11	*	12/16/2024	0312
7440-50-8	Copper	25		12/16/2024	0312
7439-89-6	Iron	15000		12/16/2024	0312
7439-92-1	Lead	14		12/16/2024	0312
7439-95-4	Magnesium	11000	*	12/16/2024	0312
7439-96-5	Manganese	510	*	12/16/2024	0312
7440-02-0	Nickel	15		12/16/2024	0312
7440-09-7	Potassium	380	J	12/16/2024	0312
7782-49-2	Selenium	3.1	U*	12/16/2024	0312
7440-22-4	Silver	0.88	U*	12/16/2024	0312
7440-23-5	Sodium	440	U	12/16/2024	0312
7440-28-0	Thallium	2.2		12/16/2024	0312
7440-62-2	Vanadium	17		12/16/2024	0312
7440-66-6	Zinc	31	*	12/16/2024	0312

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

Comments:

EPA SAMPLE NO.

MBHKE6

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-14

% 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	7400		12/16/2024	0316
7440-36-0	Antimony	2.8	J*	12/16/2024	0316
7440-38-2	Arsenic	7.8		12/16/2024	0316
7440-39-3	Barium	110		12/16/2024	0316
7440-41-7	Beryllium	0.66		12/16/2024	0316
7440-43-9	Cadmium	0.57		12/16/2024	0316
7440-70-2	Calcium	6700		12/16/2024	0316
7440-47-3	Chromium	14	*	12/16/2024	0316
7440-48-4	Cobalt	10	*	12/16/2024	0316
7440-50-8	Copper	25		12/16/2024	0316
7439-89-6	Iron	16000		12/16/2024	0316
7439-92-1	Lead	210		12/16/2024	0316
7439-95-4	Magnesium	3100	*	12/16/2024	0316
7439-96-5	Manganese	700	*	12/16/2024	0316
7440-02-0	Nickel	19		12/16/2024	0316
7440-09-7	Potassium	940		12/16/2024	0316
7782-49-2	Selenium	3.4	U*	12/16/2024	0316
7440-22-4	Silver	0.97	U*	12/16/2024	0316
7440-23-5	Sodium	480	U	12/16/2024	0316
7440-28-0	Thallium	1.1	J	12/16/2024	0316
7440-62-2	Vanadium	18		12/16/2024	0316
7440-66-6	Zinc	100	*	12/16/2024	0316

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

Comments:

EPA SAMPLE NO.

MBHKE7

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-15

% Solids: 82.1 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	7600		12/16/2024	0320
7440-36-0	Antimony	3.2	J*	12/16/2024	0320
7440-38-2	Arsenic	11		12/16/2024	0320
7440-39-3	Barium	150		12/16/2024	0320
7440-41-7	Beryllium	0.70		12/16/2024	0320
7440-43-9	Cadmium	0.66		12/16/2024	0320
7440-70-2	Calcium	6300		12/16/2024	0320
7440-47-3	Chromium	13	*	12/16/2024	0320
7440-48-4	Cobalt	11	*	12/16/2024	0320
7440-50-8	Copper	21		12/16/2024	0320
7439-89-6	Iron	18000		12/16/2024	0320
7439-92-1	Lead	72		12/16/2024	0320
7439-95-4	Magnesium	3000	*	12/16/2024	0320
7439-96-5	Manganese	850	*	12/16/2024	0320
7440-02-0	Nickel	19		12/16/2024	0320
7440-09-7	Potassium	800		12/16/2024	0320
7782-49-2	Selenium	3.2	U*	12/16/2024	0320
7440-22-4	Silver	0.92	U*	12/16/2024	0320
7440-23-5	Sodium	460	U	12/16/2024	0320
7440-28-0	Thallium	1.2	J	12/16/2024	0320
7440-62-2	Vanadium	20		12/16/2024	0320
7440-66-6	Zinc	82	*	12/16/2024	0320

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

Comments:

EPA SAMPLE NO.

MBHKE8

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-16

% Solids: 84.2 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	7600		12/16/2024	0324
7440-36-0	Antimony	2.8	J*	12/16/2024	0324
7440-38-2	Arsenic	7.5		12/16/2024	0324
7440-39-3	Barium	150		12/16/2024	0324
7440-41-7	Beryllium	0.65		12/16/2024	0324
7440-43-9	Cadmium	0.55		12/16/2024	0324
7440-70-2	Calcium	9800		12/16/2024	0324
7440-47-3	Chromium	12	*	12/16/2024	0324
7440-48-4	Cobalt	11	*	12/16/2024	0324
7440-50-8	Copper	9.0		12/16/2024	0324
7439-89-6	Iron	18000		12/16/2024	0324
7439-92-1	Lead	37		12/16/2024	0324
7439-95-4	Magnesium	3000	*	12/16/2024	0324
7439-96-5	Manganese	970	*	12/16/2024	0324
7440-02-0	Nickel	16		12/16/2024	0324
7440-09-7	Potassium	610		12/16/2024	0324
7782-49-2	Selenium	2.9	U*	12/16/2024	0324
7440-22-4	Silver	0.83	U*	12/16/2024	0324
7440-23-5	Sodium	410	U	12/16/2024	0324
7440-28-0	Thallium	1.9	J	12/16/2024	0324
7440-62-2	Vanadium	19		12/16/2024	0324
7440-66-6	Zinc	44	*	12/16/2024	0324

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

Comments:

EPA SAMPLE NO.

MBHKE9

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-17

% Solids: 89.5 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	4700		12/16/2024	0328
7440-36-0	Antimony	1.2	J*	12/16/2024	0328
7440-38-2	Arsenic	3.3		12/16/2024	0328
7440-39-3	Barium	49		12/16/2024	0328
7440-41-7	Beryllium	0.38	J	12/16/2024	0328
7440-43-9	Cadmium	0.25	J	12/16/2024	0328
7440-70-2	Calcium	41000		12/16/2024	0328
7440-47-3	Chromium	7.3	*	12/16/2024	0328
7440-48-4	Cobalt	9.5	*	12/16/2024	0328
7440-50-8	Copper	6.4		12/16/2024	0328
7439-89-6	Iron	12000		12/16/2024	0328
7439-92-1	Lead	11		12/16/2024	0328
7439-95-4	Magnesium	7000	*	12/16/2024	0328
7439-96-5	Manganese	560	*	12/16/2024	0328
7440-02-0	Nickel	13		12/16/2024	0328
7440-09-7	Potassium	570		12/16/2024	0328
7782-49-2	Selenium	2.8	U*	12/16/2024	0328
7440-22-4	Silver	0.81	U*	12/16/2024	0328
7440-23-5	Sodium	410	U	12/16/2024	0328
7440-28-0	Thallium	2.3		12/16/2024	0328
7440-62-2	Vanadium	11		12/16/2024	0328
7440-66-6	Zinc	19	*	12/16/2024	0328

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

Comments:

EPA SAMPLE NO.

MBHKF0

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-18

% Solids: 90.1 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	4400		12/16/2024	0332
7440-36-0	Antimony	0.95	J*	12/16/2024	0332
7440-38-2	Arsenic	2.7		12/16/2024	0332
7440-39-3	Barium	41		12/16/2024	0332
7440-41-7	Beryllium	0.35	J	12/16/2024	0332
7440-43-9	Cadmium	0.20	J	12/16/2024	0332
7440-70-2	Calcium	37000		12/16/2024	0332
7440-47-3	Chromium	6.9	*	12/16/2024	0332
7440-48-4	Cobalt	9.6	*	12/16/2024	0332
7440-50-8	Copper	6.8		12/16/2024	0332
7439-89-6	Iron	11000		12/16/2024	0332
7439-92-1	Lead	8.6		12/16/2024	0332
7439-95-4	Magnesium	7100	*	12/16/2024	0332
7439-96-5	Manganese	530	*	12/16/2024	0332
7440-02-0	Nickel	12		12/16/2024	0332
7440-09-7	Potassium	610		12/16/2024	0332
7782-49-2	Selenium	2.9	U*	12/16/2024	0332
7440-22-4	Silver	0.83	U*	12/16/2024	0332
7440-23-5	Sodium	420	U	12/16/2024	0332
7440-28-0	Thallium	2.3		12/16/2024	0332
7440-62-2	Vanadium	11		12/16/2024	0332
7440-66-6	Zinc	17	*	12/16/2024	0332

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

Comments:

EPA SAMPLE NO.

MBHKF1

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-19

% Solids: 89.5 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	4500		12/16/2024	0336
7440-36-0	Antimony	1.4	J*	12/16/2024	0336
7440-38-2	Arsenic	2.8		12/16/2024	0336
7440-39-3	Barium	55		12/16/2024	0336
7440-41-7	Beryllium	0.34	J	12/16/2024	0336
7440-43-9	Cadmium	0.23	J	12/16/2024	0336
7440-70-2	Calcium	37000		12/16/2024	0336
7440-47-3	Chromium	7.2	*	12/16/2024	0336
7440-48-4	Cobalt	9.6	*	12/16/2024	0336
7440-50-8	Copper	9.5		12/16/2024	0336
7439-89-6	Iron	12000		12/16/2024	0336
7439-92-1	Lead	8.8		12/16/2024	0336
7439-95-4	Magnesium	5900	*	12/16/2024	0336
7439-96-5	Manganese	680	*	12/16/2024	0336
7440-02-0	Nickel	14		12/16/2024	0336
7440-09-7	Potassium	570		12/16/2024	0336
7782-49-2	Selenium	2.9	U*	12/16/2024	0336
7440-22-4	Silver	0.83	U*	12/16/2024	0336
7440-23-5	Sodium	410	U	12/16/2024	0336
7440-28-0	Thallium	2.4		12/16/2024	0336
7440-62-2	Vanadium	11		12/16/2024	0336
7440-66-6	Zinc	18	*	12/16/2024	0336

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

Comments:

EPA SAMPLE NO.

MBHKF2

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-20

% Solids: 90.7 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		12/16/2024	0340
7440-36-0	Antimony	0.50	J*	12/16/2024	0340
7440-38-2	Arsenic	2.5		12/16/2024	0340
7440-39-3	Barium	37		12/16/2024	0340
7440-41-7	Beryllium	0.34	J	12/16/2024	0340
7440-43-9	Cadmium	0.19	J	12/16/2024	0340
7440-70-2	Calcium	39000		12/16/2024	0340
7440-47-3	Chromium	7.3	*	12/16/2024	0340
7440-48-4	Cobalt	9.4	*	12/16/2024	0340
7440-50-8	Copper	12		12/16/2024	0340
7439-89-6	Iron	10000		12/16/2024	0340
7439-92-1	Lead	9.6		12/16/2024	0340
7439-95-4	Magnesium	7500	*	12/16/2024	0340
7439-96-5	Manganese	380	*	12/16/2024	0340
7440-02-0	Nickel	13		12/16/2024	0340
7440-09-7	Potassium	490		12/16/2024	0340
7782-49-2	Selenium	3.2	U*	12/16/2024	0340
7440-22-4	Silver	0.91	U*	12/16/2024	0340
7440-23-5	Sodium	460	U	12/16/2024	0340
7440-28-0	Thallium	2.3		12/16/2024	0340
7440-62-2	Vanadium	11		12/16/2024	0340
7440-66-6	Zinc	22	*	12/16/2024	0340

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

Comments:

EPA SAMPLE NO.

MBHKG2

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-21

% Solids: 89.8 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	4500		12/16/2024	0343
7440-36-0	Antimony	0.98	J*	12/16/2024	0343
7440-38-2	Arsenic	2.2		12/16/2024	0343
7440-39-3	Barium	40		12/16/2024	0343
7440-41-7	Beryllium	0.36	J	12/16/2024	0343
7440-43-9	Cadmium	0.22	J	12/16/2024	0343
7440-70-2	Calcium	41000		12/16/2024	0343
7440-47-3	Chromium	7.4	*	12/16/2024	0343
7440-48-4	Cobalt	9.7	*	12/16/2024	0343
7440-50-8	Copper	8.0		12/16/2024	0343
7439-89-6	Iron	12000		12/16/2024	0343
7439-92-1	Lead	8.9		12/16/2024	0343
7439-95-4	Magnesium	7700	*	12/16/2024	0343
7439-96-5	Manganese	560	*	12/16/2024	0343
7440-02-0	Nickel	13		12/16/2024	0343
7440-09-7	Potassium	630		12/16/2024	0343
7782-49-2	Selenium	3.1	U*	12/16/2024	0343
7440-22-4	Silver	0.90	U*	12/16/2024	0343
7440-23-5	Sodium	450	U	12/16/2024	0343
7440-28-0	Thallium	2.5		12/16/2024	0343
7440-62-2	Vanadium	12		12/16/2024	0343
7440-66-6	Zinc	18	*	12/16/2024	0343

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

Comments:

EPA SAMPLE NO.

MBHKG3

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.: MBHK34

Matrix: SOIL Lab Sample ID: P5028-22

% Solids: 89.9 Date Received: 11/27/2024

Analytical Method: ICP_AES

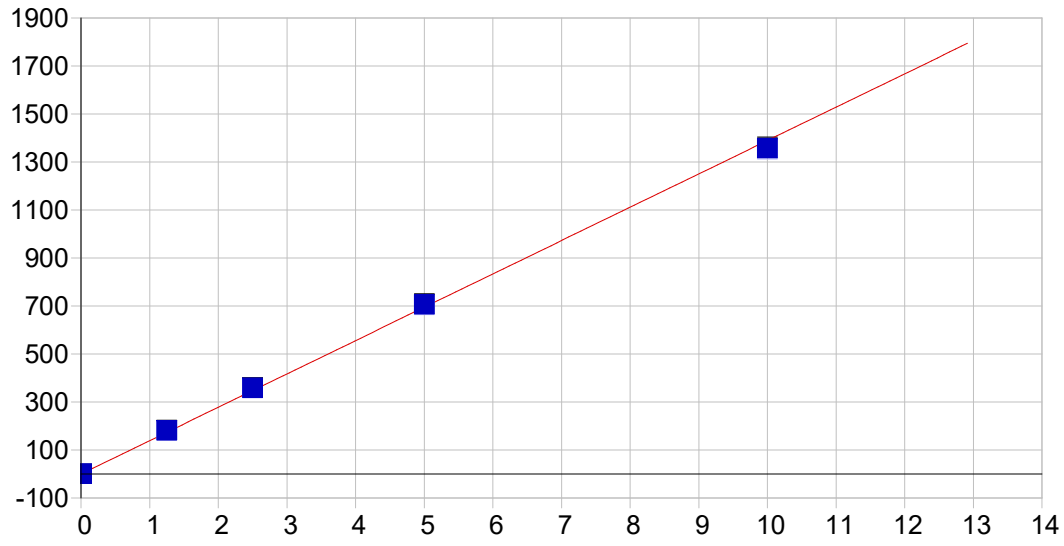
Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	5100		12/16/2024	0347
7440-36-0	Antimony	1.2	J*	12/16/2024	0347
7440-38-2	Arsenic	2.9		12/16/2024	0347
7440-39-3	Barium	45		12/16/2024	0347
7440-41-7	Beryllium	0.44	J	12/16/2024	0347
7440-43-9	Cadmium	0.20	J	12/16/2024	0347
7440-70-2	Calcium	21000		12/16/2024	0347
7440-47-3	Chromium	8.3	*	12/16/2024	0347
7440-48-4	Cobalt	9.6	*	12/16/2024	0347
7440-50-8	Copper	12		12/16/2024	0347
7439-89-6	Iron	13000		12/16/2024	0347
7439-92-1	Lead	12		12/16/2024	0347
7439-95-4	Magnesium	6500	*	12/16/2024	0347
7439-96-5	Manganese	320	*	12/16/2024	0347
7440-02-0	Nickel	14		12/16/2024	0347
7440-09-7	Potassium	370	J	12/16/2024	0347
7782-49-2	Selenium	3.3	U*	12/16/2024	0347
7440-22-4	Silver	0.94	U*	12/16/2024	0347
7440-23-5	Sodium	470	U	12/16/2024	0347
7440-28-0	Thallium	1.6	J	12/16/2024	0347
7440-62-2	Vanadium	13		12/16/2024	0347
7440-66-6	Zinc	23	*	12/16/2024	0347

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

Comments:

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



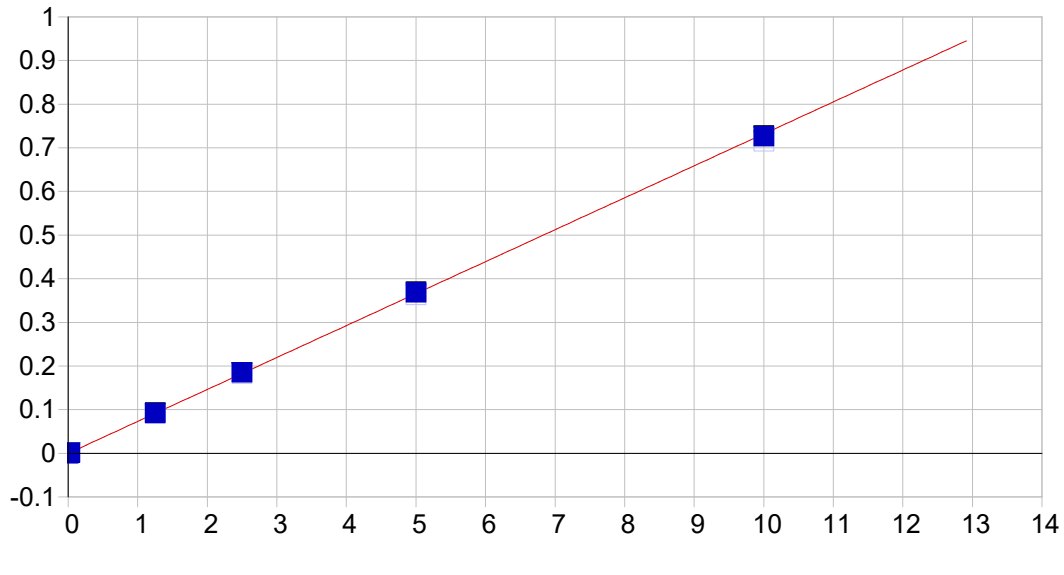
As 189.042 {478}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.050262	Re-Slope:	1.000000
A1 (Gain):	138.943569	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999669	Status:	OK.
Std Error of Est:	0.059665		
Predicted MDL:	0.005088		
Predicted MQL:	0.016960		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.05065	.144	1
S1	.01000	.01204	.002	20.4	1.6204	.626	1
S2	1.2500	1.3064	.056	4.51	180.74	1.14	1
S3	2.5000	2.5843	.084	3.37	357.56	.641	1
S4	5.0000	5.0834	.083	1.67	703.34	2.69	1
S5	10.000	9.7739	-.226	-2.26	1352.1	5.06	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



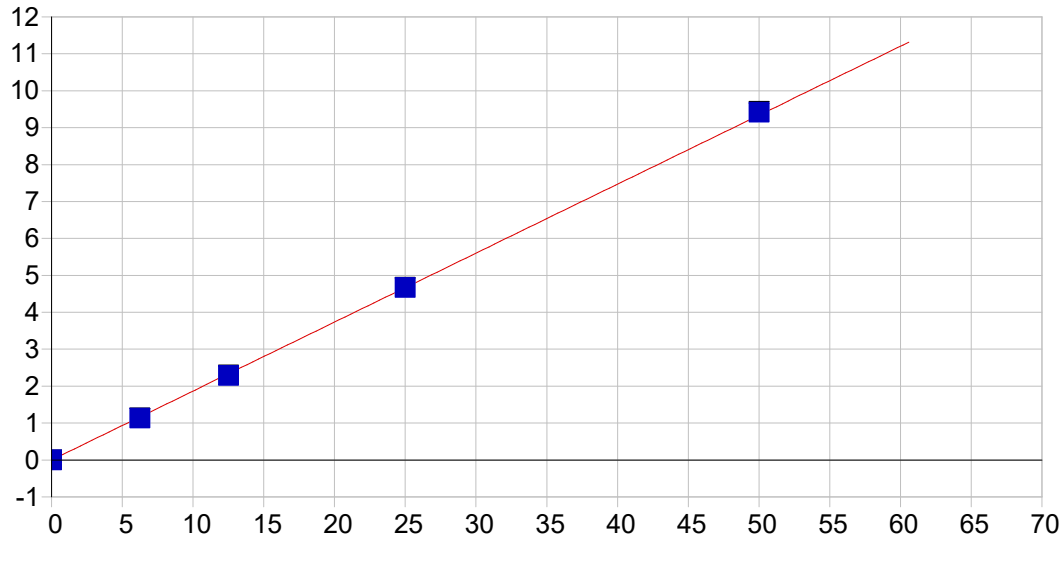
Tl 190.856 {477}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000166	Re-Slope:	1.000000
A1 (Gain):	0.073211	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000017		
Predicted MDL:	0.002722		
Predicted MQL:	0.009073		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00017	.000	1
S1	.02500	.02358	-.001	-5.66	.00149	.000	1
S2	1.2500	1.2590	.009	.720	.09059	.001	1
S3	2.5000	2.5322	.032	1.29	.18239	.000	1
S4	5.0000	5.0370	.037	.741	.36293	.001	1
S5	10.000	9.9231	-.077	-.769	.71498	.002	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



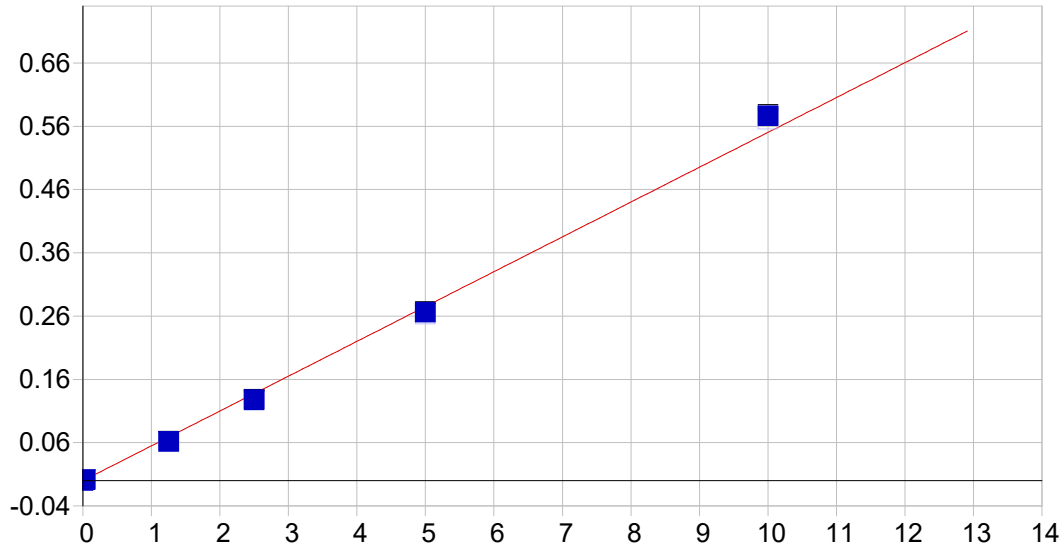
Pb 220.353 {453}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000125	Re-Slope:	1.000000
A1 (Gain):	0.186745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000088		
Predicted MDL:	0.002456		
Predicted MQL:	0.008186		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00013	.001	1
S1	.01000	.01030	.000	2.99	.00204	.000	1
S2	6.2500	6.0554	-.195	-3.11	1.1298	.001	1
S3	12.500	12.254	-.246	-1.97	2.2864	.009	1
S4	25.000	25.000	-.000	-.001	4.6643	.011	1
S5	50.000	50.440	.440	.880	9.4109	.025	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



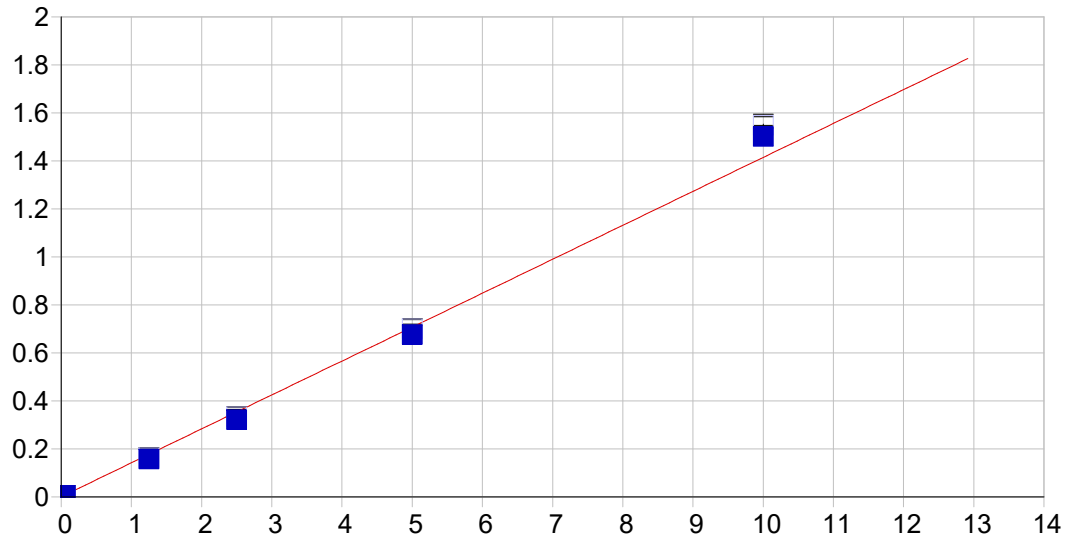
Se 196.090 {472}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000118	Re-Slope:	1.000000
A1 (Gain):	0.055046	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998485	Status:	OK.
Std Error of Est:	0.000094		
Predicted MDL:	0.005122		
Predicted MQL:	0.017075		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00012	.000	1
S1	.03500	.02614	-.009	-25.3	.00132	.000	1
S2	1.2500	1.1261	-.124	-9.91	.06115	.000	1
S3	2.5000	2.3224	-.178	-7.11	.12627	.001	1
S4	5.0000	4.8310	-.169	-3.38	.26292	.001	1
S5	10.000	10.479	.479	4.79	.57096	.002	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



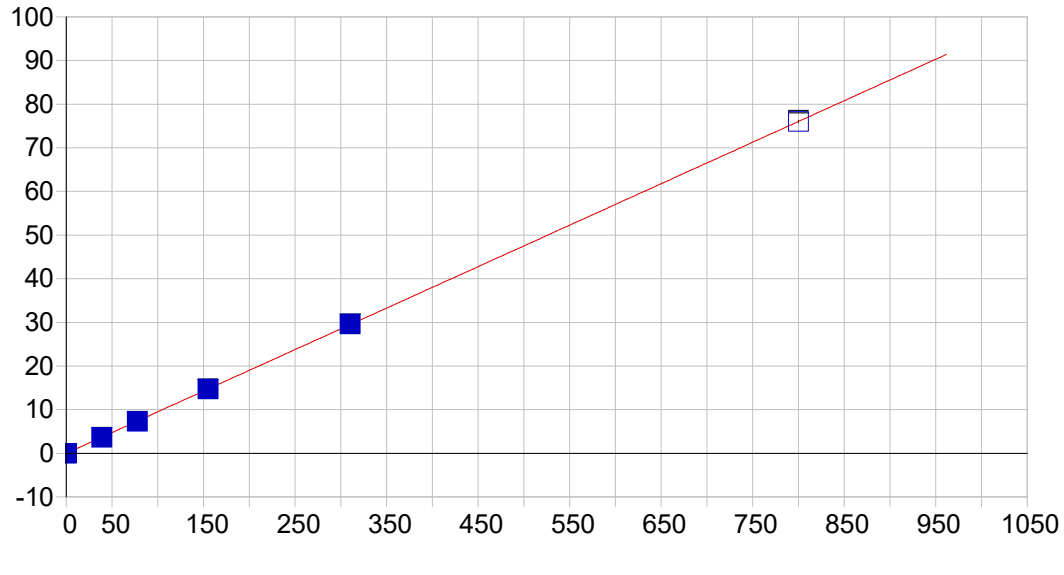
Sb 206.833 {463}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000587	Re-Slope:	1.000000
A1 (Gain):	0.141381	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997816	Status:	OK.
Std Error of Est:	0.000398		
Predicted MDL:	0.002776		
Predicted MQL:	0.009253		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00059	.000	1
S1	.06000	.04767	-.012	-20.5	.00733	.000	1
S2	1.2500	1.1070	-.143	-11.4	.16300	.001	1
S3	2.5000	2.2666	-.233	-9.33	.33286	.002	1
S4	5.0000	4.7771	-.223	-4.46	.69961	.002	1
S5	10.000	10.611	.611	6.11	1.5481	.006	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



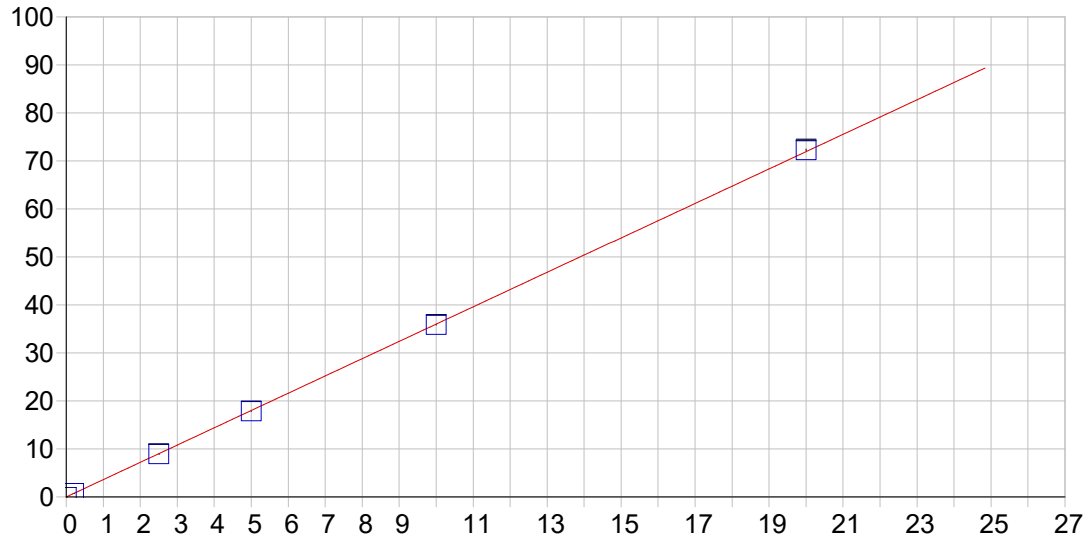
Al 396.152 { 85}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000557	Re-Slope:	1.000000
A1 (Gain):	0.095047	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999994	Status:	OK.
Std Error of Est:	0.000202		
Predicted MDL:	0.023391		
Predicted MQL:	0.077970		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00056	.002	1
S1	.20000	.18401	-.016	-7.99	.01696	.001	1
S2	38.750	38.536	-.214	-.553	3.6661	.006	1
S3	77.500	76.871	-.629	-.811	7.3138	.009	1
S4	155.00	154.58	-.423	-.273	14.707	.035	1
S5	310.00	311.52	1.52	.490	29.640	.036	1
S6	800.00	799.76	-.235	-.029	76.014	.305	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



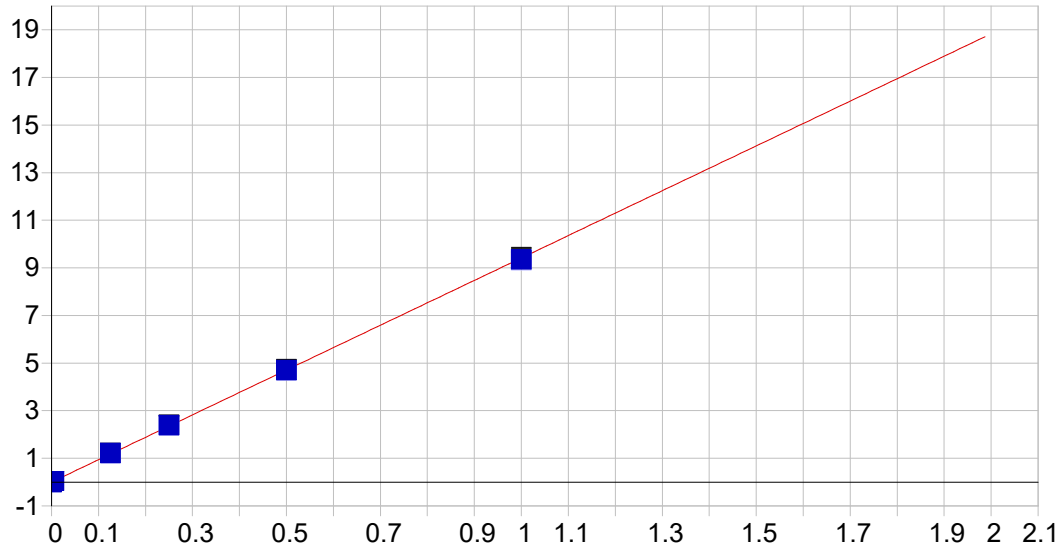
Ba 493.409 { 68}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.016437	Re-Slope:	1.000000
A1 (Gain):	3.596620	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.002024		
Predicted MDL:	0.001151		
Predicted MQL:	0.003838		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.01646	.005	1
S1	.20000	.19711	-.003	-1.44	.72538	.006	1
S2	2.5000	2.4827	-.017	-.692	8.9457	.013	1
S3	5.0000	4.9586	-.041	-.828	17.851	.029	1
S4	10.000	9.9672	-.033	-.328	35.865	.066	1
S5	20.000	20.094	.094	.472	72.288	.177	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



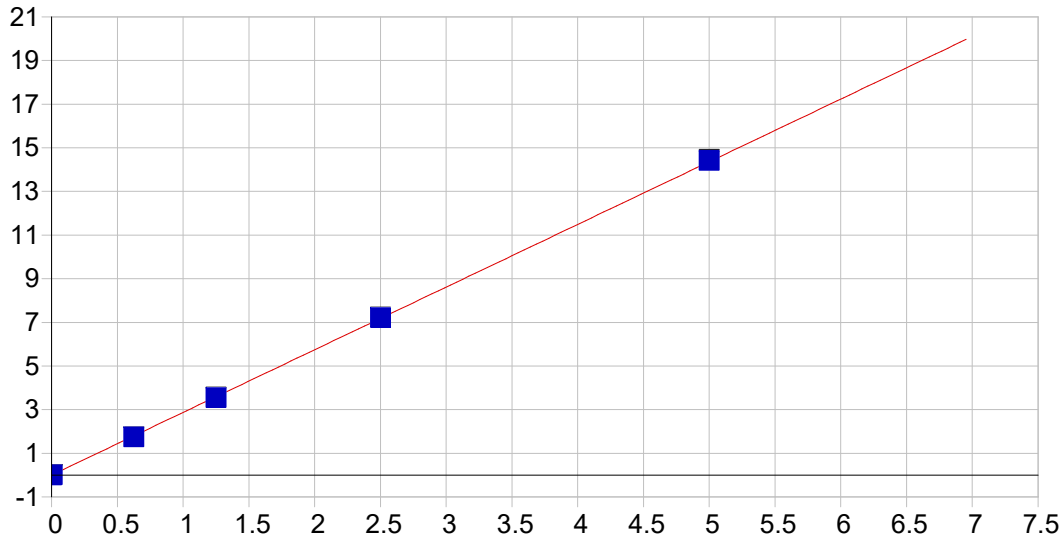
Be 234.861 {144}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000152	Re-Slope:	1.000000
A1 (Gain):	9.416802	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000364		
Predicted MDL:	0.000125		
Predicted MQL:	0.000418		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00015	.001	1
S1	.00500	.00502	.000	.398	.04708	.001	1
S2	.12500	.12878	.004	3.02	1.2071	.002	1
S3	.25000	.25317	.003	1.27	2.3731	.020	1
S4	.50000	.49970	-.000	-.059	4.6839	.034	1
S5	1.0000	.99333	-.007	-.667	9.3106	.090	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



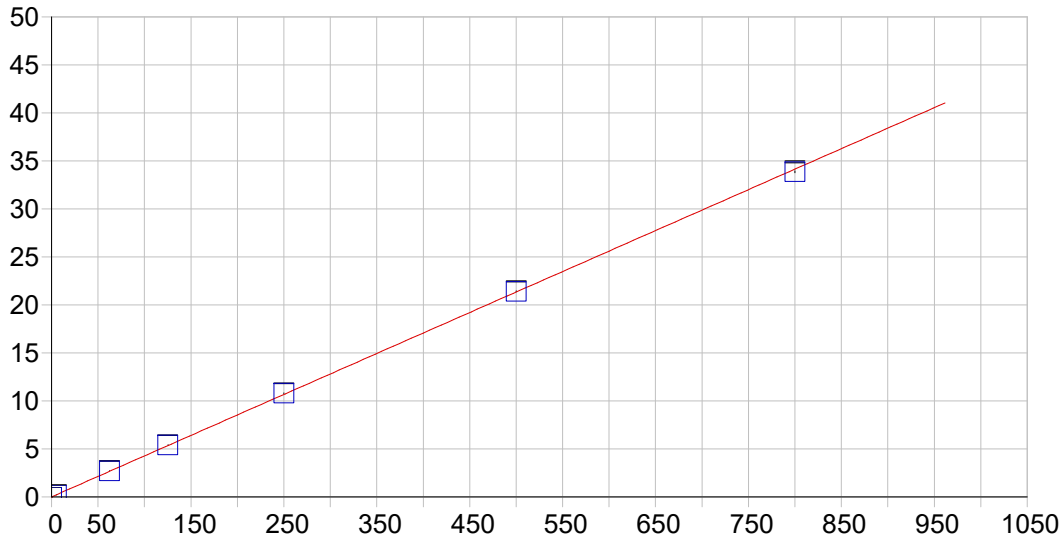
Cd 214.438 {457}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000045	Re-Slope:	1.000000
A1 (Gain):	2.872245	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.000215		
Predicted MDL:	0.000107		
Predicted MQL:	0.000357		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00004	.000	1
S1	.00500	.00454	-.000	-9.26	.01304	.000	1
S2	.62500	.60853	-.016	-2.64	1.7505	.005	1
S3	1.2500	1.2366	-.013	-1.07	3.5573	.013	1
S4	2.5000	2.5123	.012	.491	7.2269	.018	1
S5	5.0000	5.0180	.018	.361	14.435	.037	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



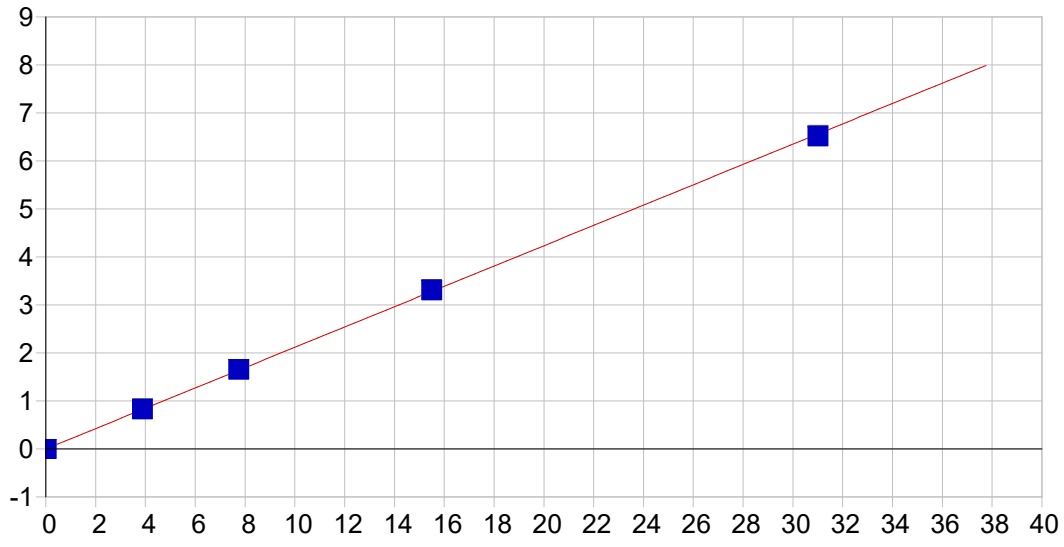
Ca 373.690 { 90}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004690	Re-Slope:	1.000000
A1 (Gain):	0.042674	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.001249		
Predicted MDL:	0.040888		
Predicted MQL:	0.136293		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00012	-.000	.000	.00468	.001	1
S1	5.0000	4.9632	-.037	-.736	.21649	.003	1
S2	62.500	63.404	.904	1.45	2.7104	.009	1
S3	125.00	126.55	1.55	1.24	5.4049	.008	1
S4	250.00	252.64	2.64	1.06	10.786	.034	1
S5	500.00	501.67	1.67	.335	21.413	.053	1
S6	800.00	793.27	-6.73	-.841	33.857	.098	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



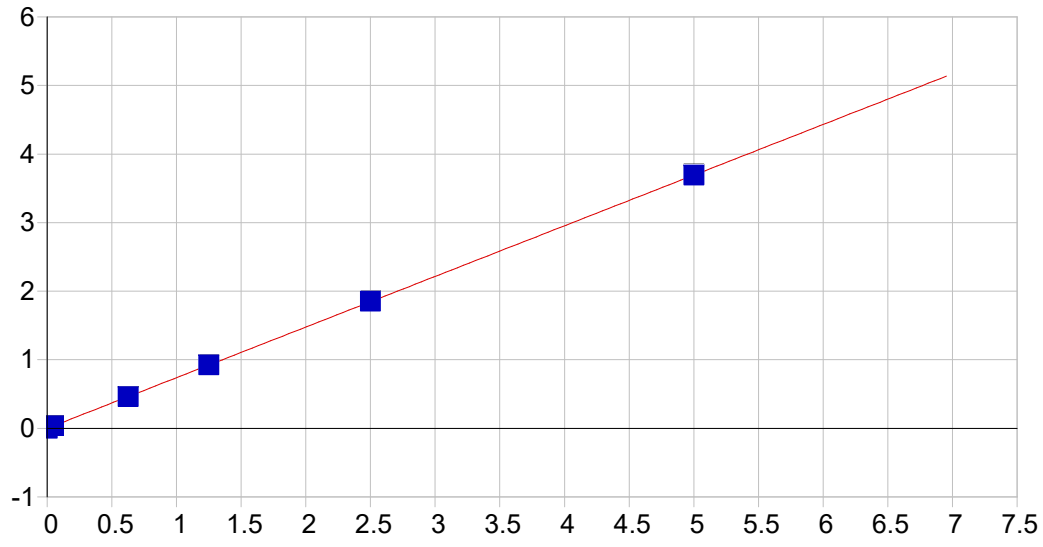
Cr 267.716 {126}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000038	Re-Slope:	1.000000
A1 (Gain):	0.211651	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999967	Status:	OK.
Std Error of Est:	0.000051		
Predicted MDL:	0.000910		
Predicted MQL:	0.003034		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00004	.000	1
S1	.01000	.00989	-.000	-1.12	.00213	.000	1
S2	3.8750	3.9210	.046	1.19	.83057	.002	1
S3	7.7500	7.8127	.063	.810	1.6549	.001	1
S4	15.500	15.625	.125	.807	3.3096	.000	1
S5	31.000	30.766	-.234	-.754	6.5168	.016	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



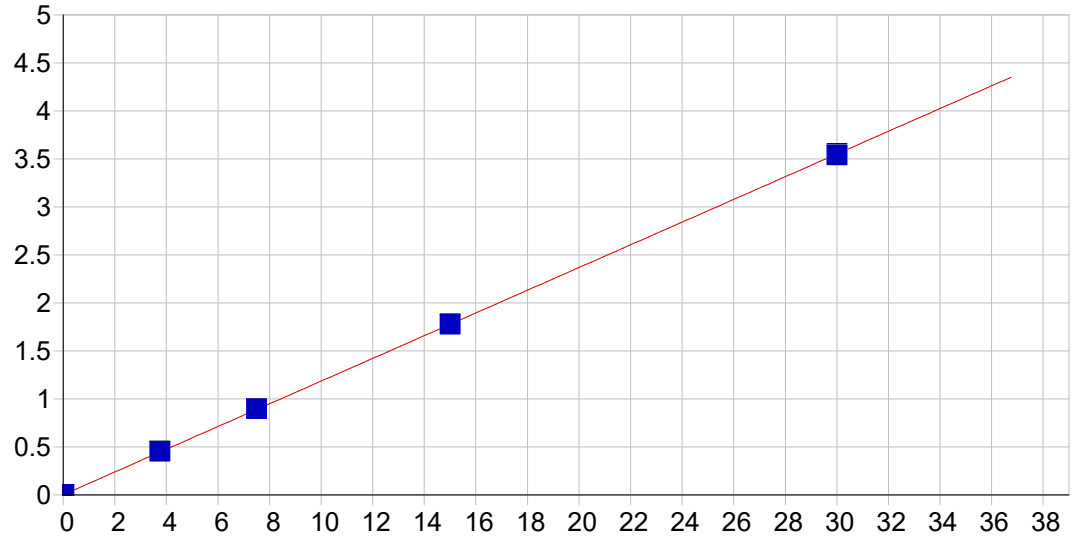
Co 228.616 {448}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000014	Re-Slope:	1.000000
A1 (Gain):	0.738523	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000078		
Predicted MDL:	0.000456		
Predicted MQL:	0.001519		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00002	.000	1
S1	.05000	.04773	-.002	-4.53	.03539	.001	1
S2	.62500	.62238	-.003	-.419	.46114	.002	1
S3	1.2500	1.2485	-.002	-.123	.92501	.003	1
S4	2.5000	2.5088	.009	.351	1.8588	.003	1
S5	5.0000	4.9976	-.002	-.047	3.7028	.008	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

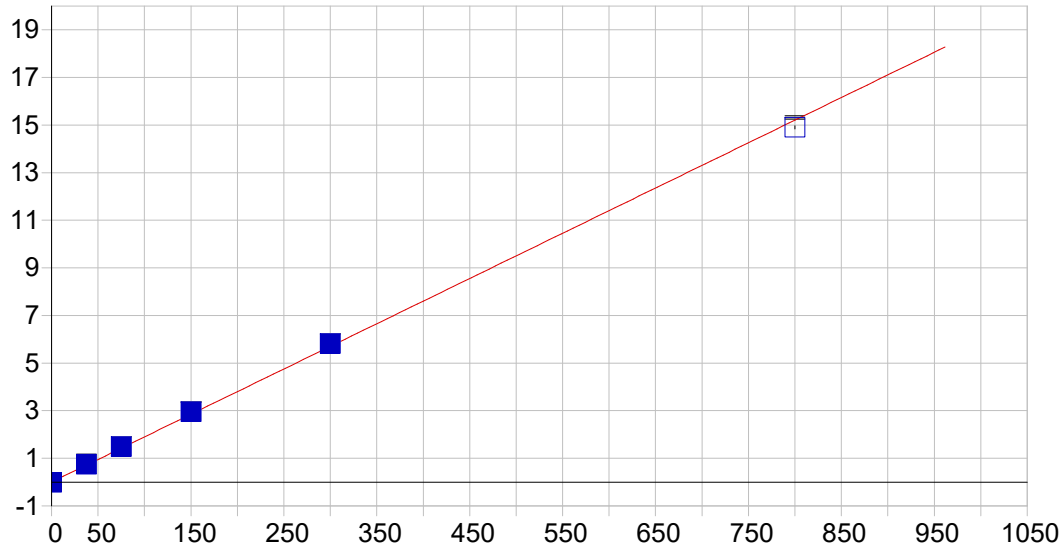


Cu 324.754 {104}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002327	Re-Slope:	1.000000
A1 (Gain):	0.118307	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999984	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.008816		
Predicted MQL:	0.029386		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00233	.000	1
S1	.02500	.02368	-.001	-5.27	.00513	.000	1
S2	3.7500	3.8130	.063	1.68	.45338	.002	1
S3	7.5000	7.5477	.048	.636	.89517	.003	1
S4	15.000	14.995	-.005	-.034	1.7761	.003	1
S5	30.000	29.896	-.104	-.348	3.5388	.014	1



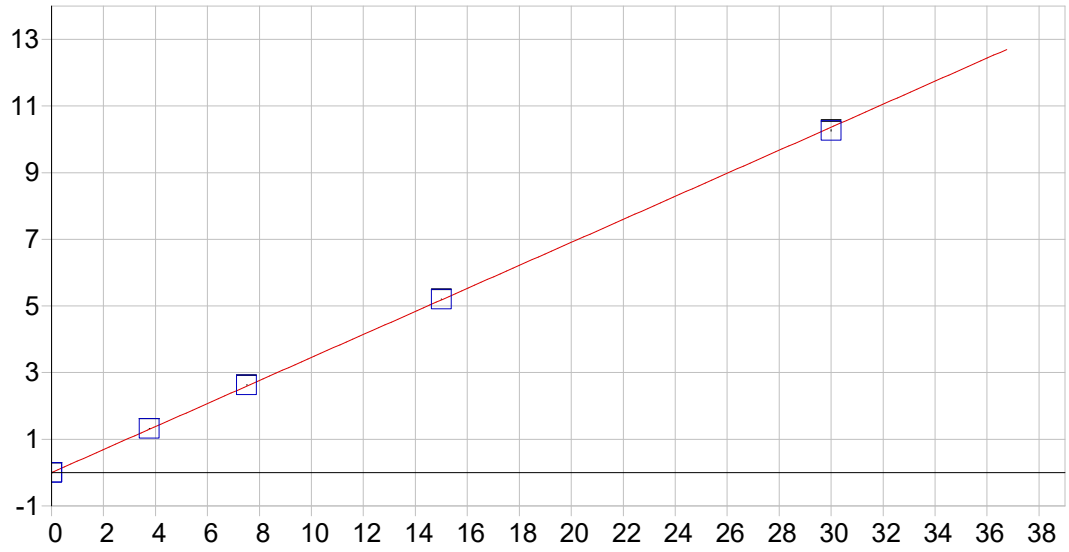
Fe 259.837 {130}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000016	Re-Slope:	1.000000
A1 (Gain):	0.019008	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999701	Status:	OK.
Std Error of Est:	0.000203		
Predicted MDL:	0.035805		
Predicted MQL:	0.119348		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00002	.000	1
S1	.10000	.07842	-.022	-21.6	.00151	.000	1
S2	37.500	39.261	1.76	4.70	.74645	.003	1
S3	75.000	78.077	3.08	4.10	1.4845	.004	1
S4	150.00	155.17	5.17	3.45	2.9502	.006	1
S5	300.00	305.78	5.78	1.93	5.8137	.006	1
S6	800.00	784.22	-15.8	-1.97	14.907	.068	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



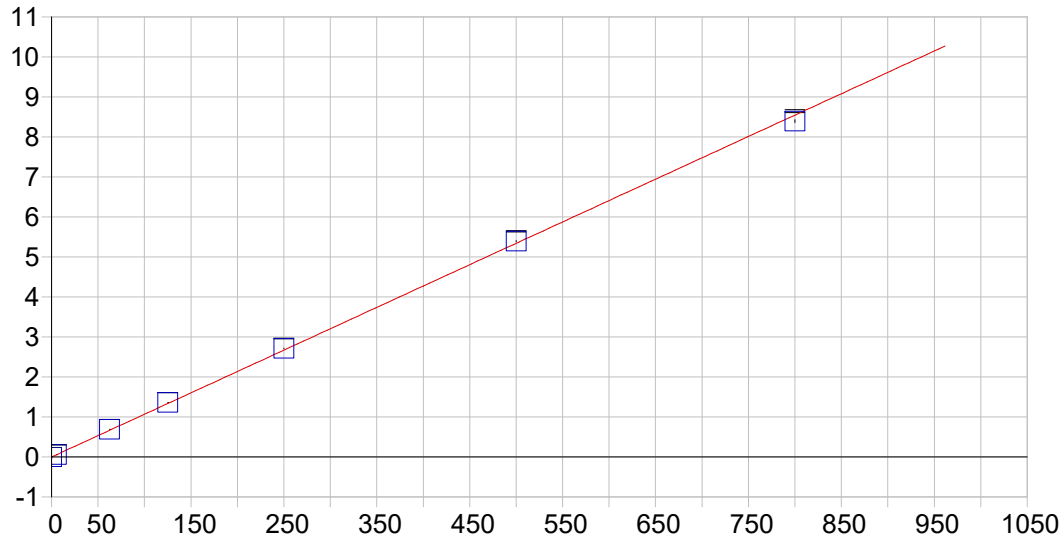
Mn 257.610 {131}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000355	Re-Slope:	1.000000
A1 (Gain):	0.345463	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999939	Status:	OK.
Std Error of Est:	0.000136		
Predicted MDL:	0.001622		
Predicted MQL:	0.005406		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00036	.000	1
S1	.01500	.01660	.002	10.7	.00538	.000	1
S2	3.7500	3.8408	.091	2.42	1.3265	.001	1
S3	7.5000	7.6132	.113	1.51	2.6297	.004	1
S4	15.000	15.069	.069	.457	5.2053	.012	1
S5	30.000	29.726	-.274	-.914	10.269	.023	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



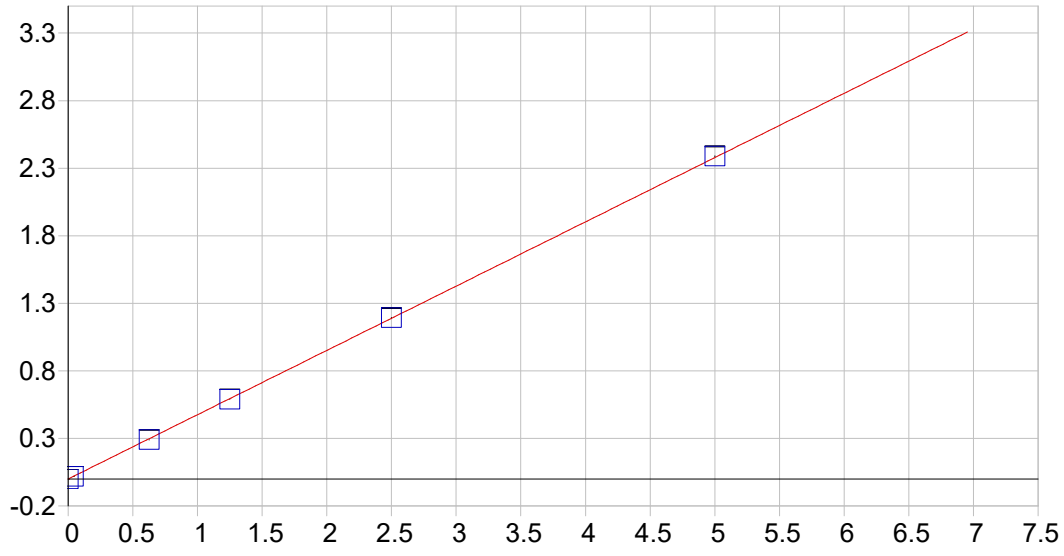
Mg 279.079 {121}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001688	Re-Slope:	1.000000
A1 (Gain):	0.010684	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000633		
Predicted MDL:	0.071982		
Predicted MQL:	0.239939		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00057	-.001	.000	-.00169	.001	1
S1	5.0000	5.2479	.248	4.96	.05438	.000	1
S2	62.500	64.575	2.07	3.32	.68821	.000	1
S3	125.00	127.67	2.67	2.14	1.3623	.001	1
S4	250.00	254.19	4.19	1.68	2.7140	.007	1
S5	500.00	504.85	4.85	.971	5.3921	.013	1
S6	800.00	785.96	-14.0	-1.75	8.3953	.034	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



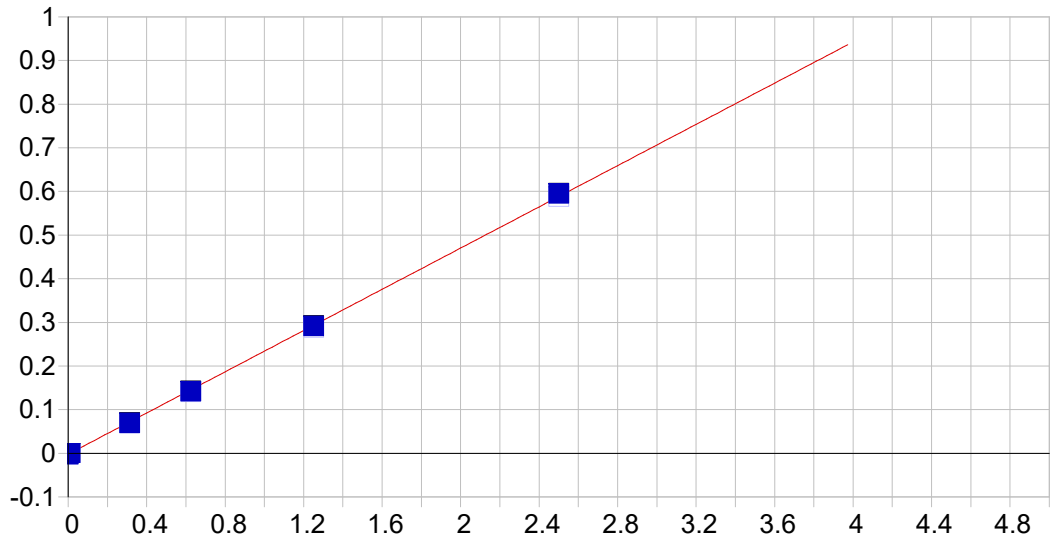
Ni 231.604 {446}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000462	Re-Slope:	1.000000
A1 (Gain):	0.475765	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999962	Status:	OK.
Std Error of Est:	0.000098		
Predicted MDL:	0.000735		
Predicted MQL:	0.002449		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00046	.000	1
S1	.04000	.03760	-.002	-6.01	.01743	.000	1
S2	.62500	.60962	-.015	-2.46	.28957	.001	1
S3	1.2500	1.2397	-.010	-.827	.58933	.001	1
S4	2.5000	2.5080	.008	.322	1.1928	.004	1
S5	5.0000	5.0201	.020	.402	2.3879	.004	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



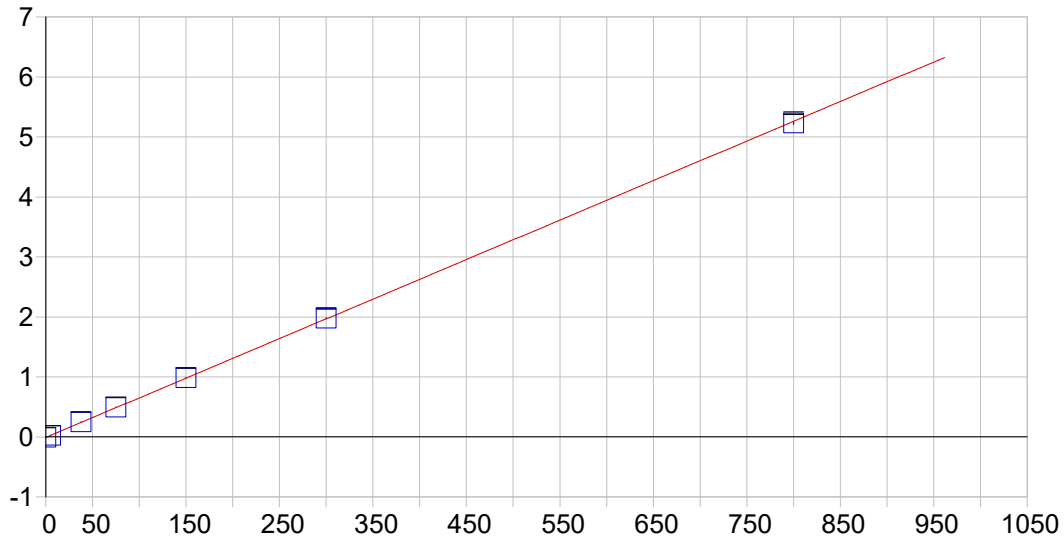
Ag 328.068 {103}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002188	Re-Slope:	1.000000
A1 (Gain):	0.236213	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999906	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.001216		
Predicted MQL:	0.004052		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00219	.000	1
S1	.01000	.00979	-.000	-2.10	.00012	.000	1
S2	.31250	.30430	-.008	-2.62	.06881	.001	1
S3	.62500	.61139	-.014	-2.18	.14046	.000	1
S4	1.2500	1.2438	-.006	-.493	.28808	.000	1
S5	2.5000	2.5282	.028	1.13	.58791	.001	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



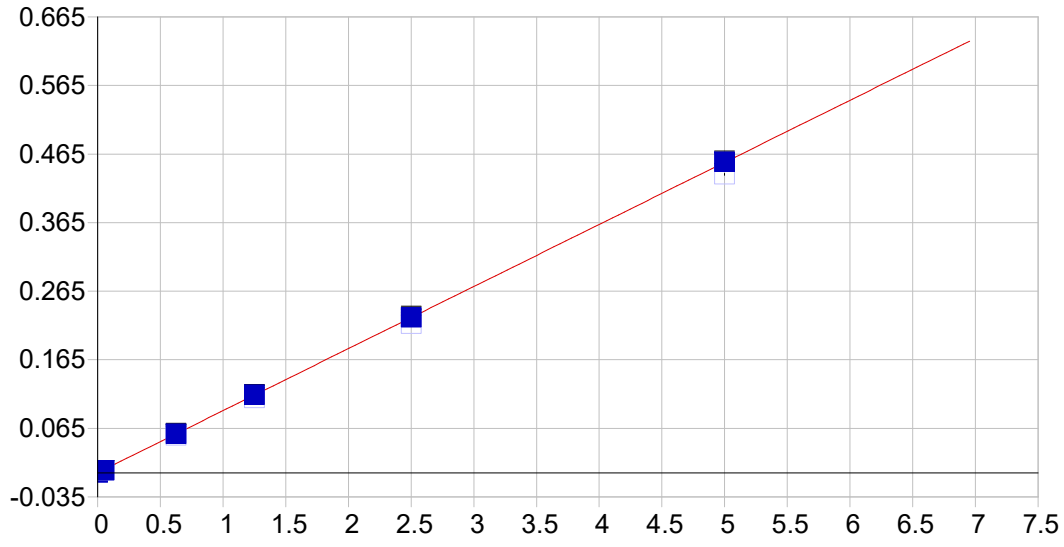
Na 818.326 { 41}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.008367	Re-Slope:	1.000000
A1 (Gain):	0.006586	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999954	Status:	OK.
Std Error of Est:	0.000196		
Predicted MDL:	0.733123		
Predicted MQL:	2.443744		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00022	-.000	.000	-.00837	.006	1
S1	5.0000	4.9094	-.091	-1.81	.02397	.004	1
S2	37.500	39.178	1.68	4.47	.24966	.002	1
S3	75.000	75.945	.945	1.26	.49180	.006	1
S4	150.00	150.79	.788	.525	.98471	.004	1
S5	300.00	301.39	1.39	.465	1.9766	.010	1
S6	800.00	795.29	-4.71	-.589	5.2293	.022	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



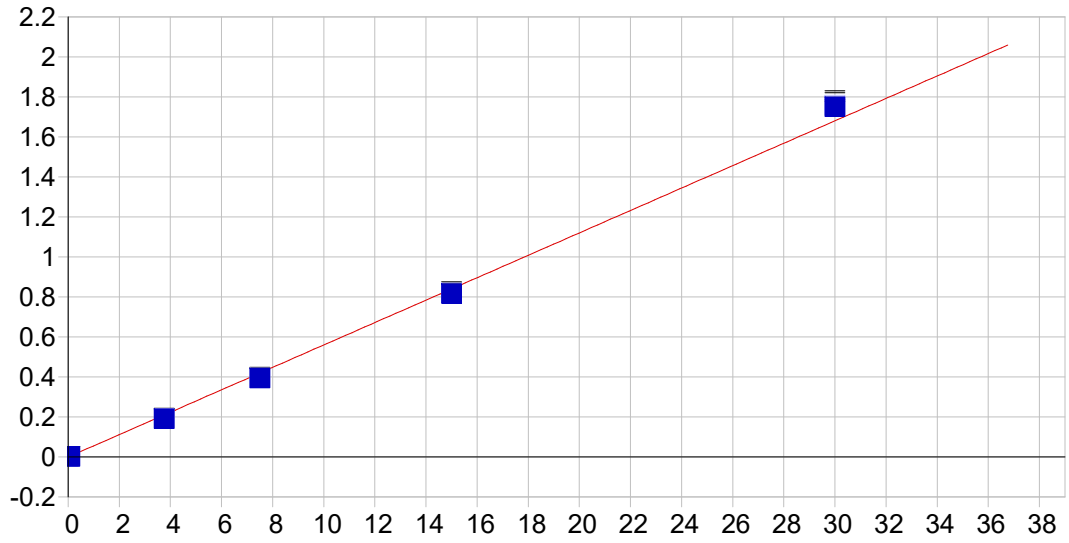
V 292.402 {115}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000246	Re-Slope:	1.000000
A1 (Gain):	0.090525	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999793	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.011563		
Predicted MQL:	0.038545		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00025	.001	1
S1	.05000	.03663	-.013	-26.7	.00355	.000	1
S2	.62500	.62738	.002	.381	.05477	.001	1
S3	1.2500	1.2531	.003	.245	.10914	.001	1
S4	2.5000	2.5016	.002	.066	.21764	.002	1
S5	5.0000	5.0068	.007	.136	.43534	.001	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



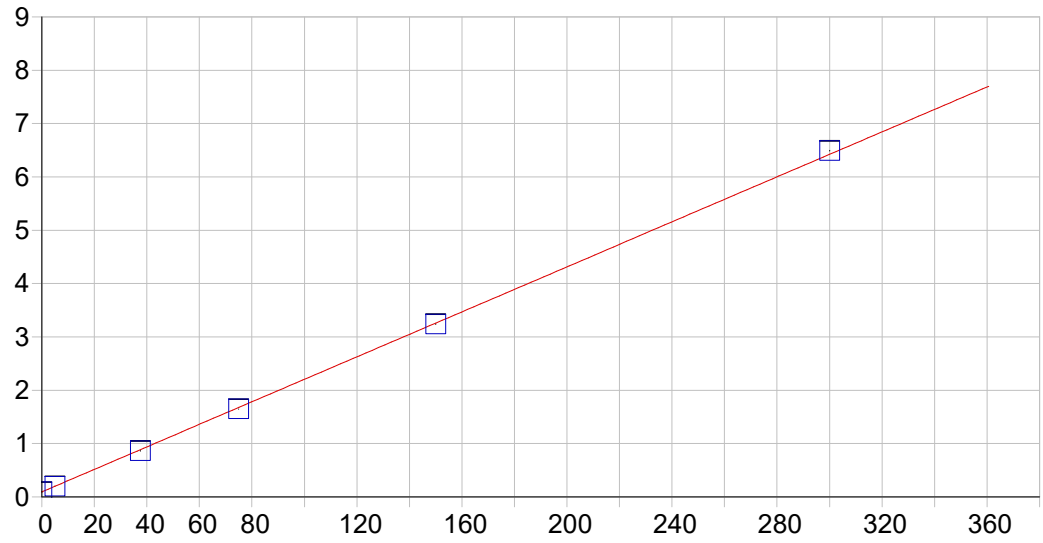
Zn 213.856 {158}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000647	Re-Slope:	1.000000
A1 (Gain):	0.056038	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998911	Status:	OK.
Std Error of Est:	0.000187		
Predicted MDL:	0.008963		
Predicted MQL:	0.029878		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00065	.001	1
S1	.06000	.05008	-.010	-16.5	.00217	.000	1
S2	3.7500	3.4210	-.329	-8.77	.19209	.001	1
S3	7.5000	7.0243	-.476	-6.34	.39504	.003	1
S4	15.000	14.574	-.426	-2.84	.82018	.005	1
S5	30.000	31.240	1.24	4.13	1.7582	.022	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



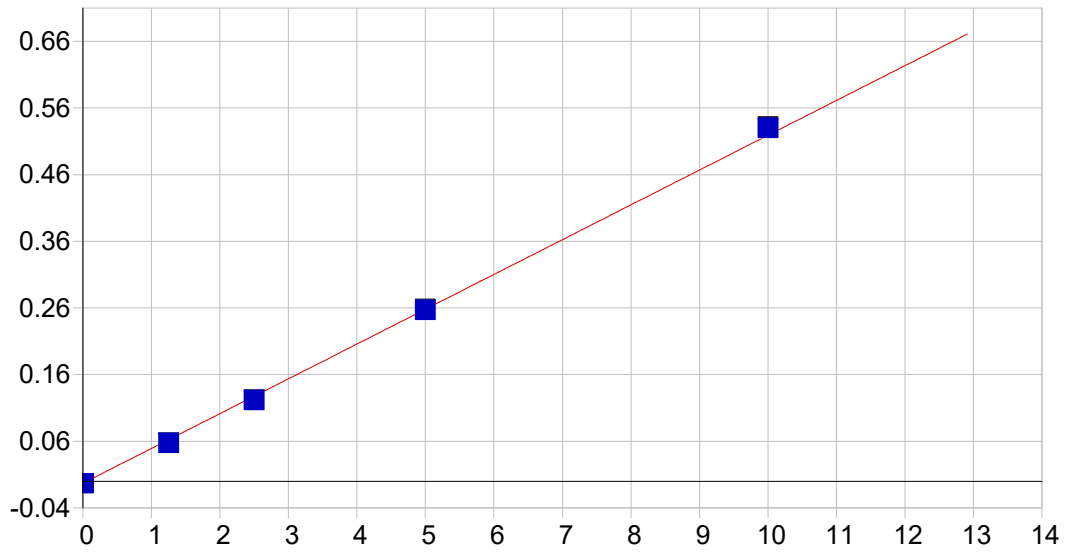
K 769.896 { 44}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.095027	Re-Slope:	1.000000
A1 (Gain):	0.021092	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999919	Status:	OK.
Std Error of Est:	0.000552		
Predicted MDL:	0.173577		
Predicted MQL:	0.578592		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00020	.000	.000	.09503	.003	1
S1	5.0000	4.9921	-.008	-.158	.20032	.001	1
S2	37.500	36.522	-.978	-2.61	.86536	.005	1
S3	75.000	73.667	-1.33	-1.78	1.6488	.003	1
S4	150.00	149.03	-.970	-.647	3.2384	.005	1
S5	300.00	303.29	3.29	1.10	6.4921	.008	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



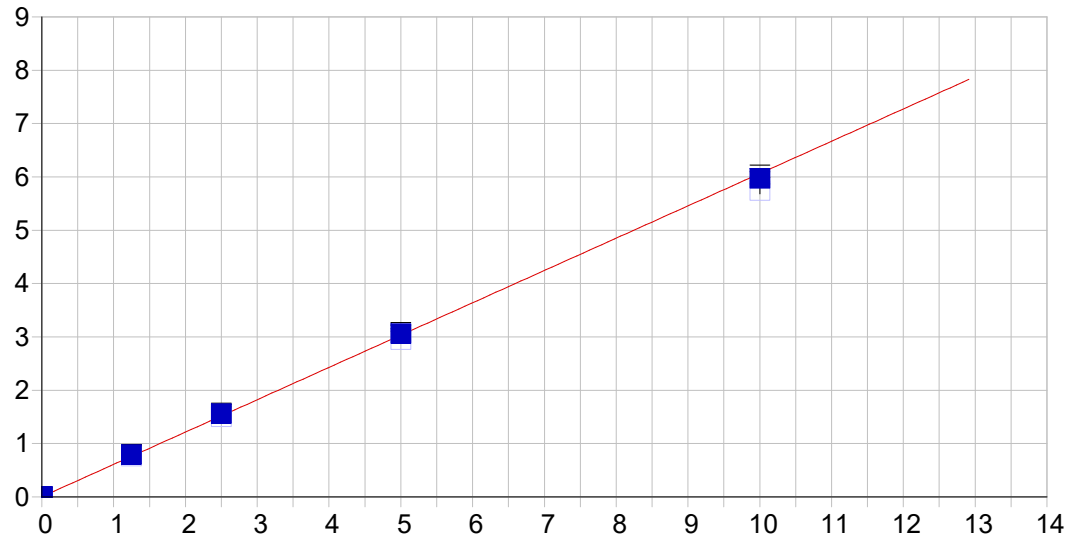
P 177.495 {490}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002987	Re-Slope:	1.000000
A1 (Gain):	0.052213	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999572	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.002764		
Predicted MQL:	0.009213		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00299	.000	1
S1	.01000	.00854	-.001	-14.6	-.00254	.000	1
S2	1.2500	1.1598	-.090	-7.22	.05747	.000	1
S3	2.5000	2.3919	-.108	-4.33	.12171	.000	1
S4	5.0000	4.9859	-.014	-.282	.25696	.001	1
S5	10.000	10.214	.214	2.14	.52955	.002	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



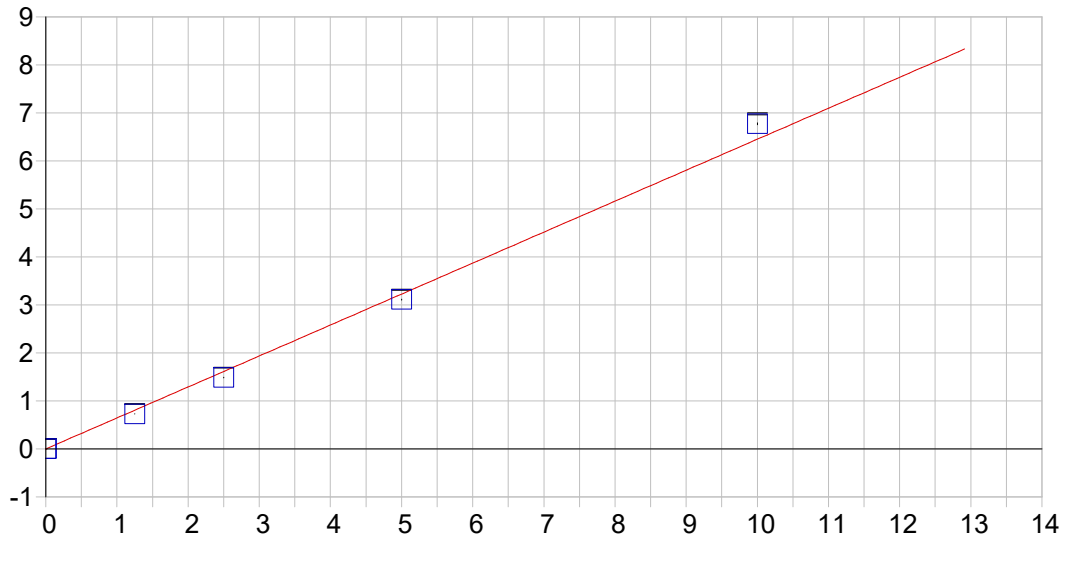
B 249.678 {135}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004096	Re-Slope:	1.000000
A1 (Gain):	0.605905	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999482	Status:	OK.
Std Error of Est:	0.000315		
Predicted MDL:	0.002356		
Predicted MQL:	0.007854		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00410	.001	1
S1	.01000	-.00073	-.011	-107.	.00362	.002	1
S2	1.2500	1.3013	.051	4.10	.76376	.003	1
S3	2.5000	2.5677	.068	2.71	1.5023	.014	1
S4	5.0000	5.0409	.041	.818	2.9432	.023	1
S5	10.000	9.8512	-.149	-1.49	5.7426	.061	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

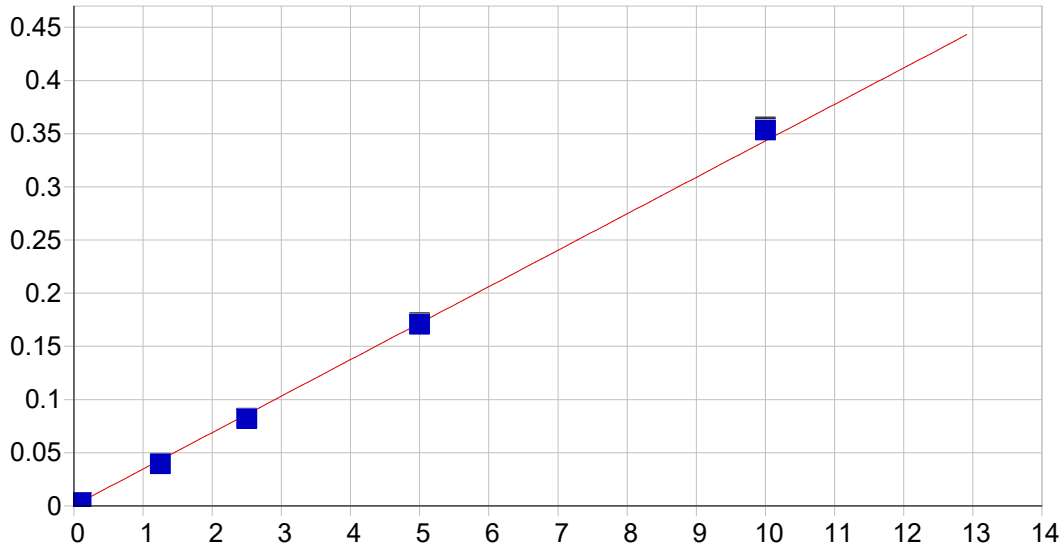


Mo 202.030 {467}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000115	Re-Slope:	1.000000
A1 (Gain):	0.645140	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998461	Status:	OK.
Std Error of Est:	0.000601		
Predicted MDL:	0.000492		
Predicted MQL:	0.001640		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00012	.000	1
S1	.01000	.00883	-.001	-11.7	.00581	.000	1
S2	1.2500	1.1302	-.120	-9.59	.72923	.002	1
S3	2.5000	2.3039	-.196	-7.85	1.4864	.007	1
S4	5.0000	4.8219	-.178	-3.56	3.1109	.008	1
S5	10.000	10.495	.495	4.95	6.7710	.020	1



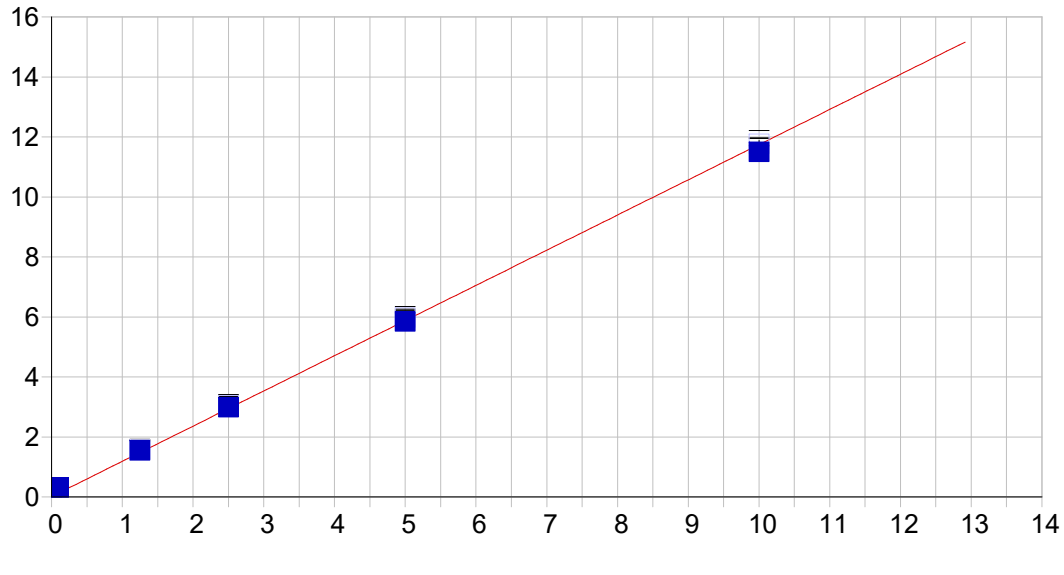
S 182.034 {485}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000397	Re-Slope:	1.000000
A1 (Gain):	0.034283	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999235	Status:	OK.
Std Error of Est:	0.000072		
Predicted MDL:	0.004855		
Predicted MQL:	0.016183		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00040	.000	1
S1	.10000	.07924	-.021	-20.8	.00311	.000	1
S2	1.2500	1.1390	-.111	-8.88	.03958	.001	1
S3	2.5000	2.3738	-.126	-5.05	.08205	.000	1
S4	5.0000	4.9691	-.031	-.617	.17131	.001	1
S5	10.000	10.289	.289	2.89	.35423	.002	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



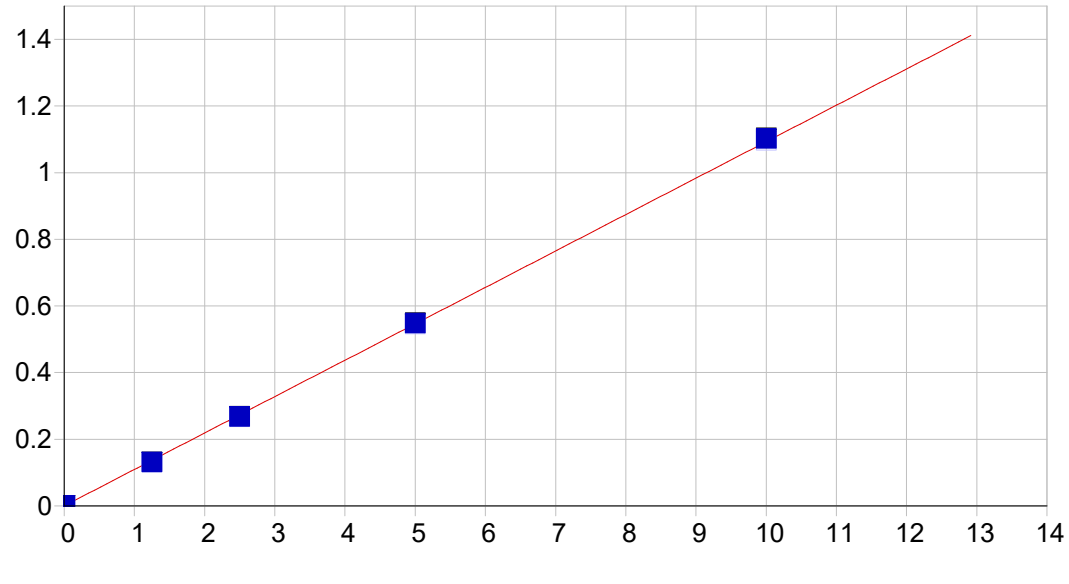
Si 251.611 {134}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013392	Re-Slope:	1.000000
A1 (Gain):	1.172886	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.993922	Status:	OK.
Std Error of Est:	0.007060		
Predicted MDL:	0.001154		
Predicted MQL:	0.003845		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00016	-.000	.000	.01321	.001	1
S1	.10000	.25296	.153	153.	.31174	.002	1
S2	1.2500	1.3075	.057	4.60	1.5802	.009	1
S3	2.5000	2.5311	.031	1.24	3.0486	.034	1
S4	5.0000	4.9699	-.030	-.601	5.9757	.041	1
S5	10.000	9.7898	-.210	-2.10	11.762	.122	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

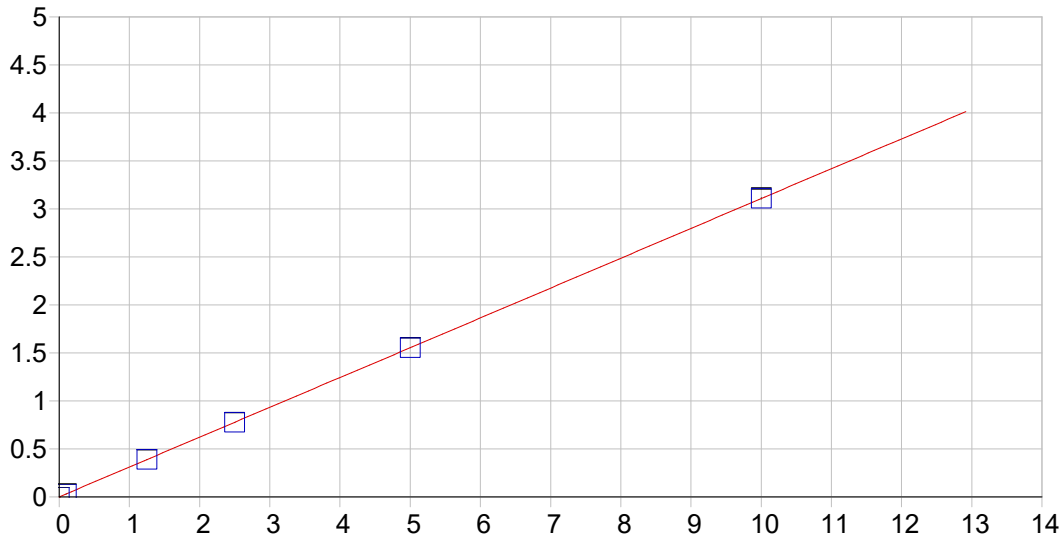


Sn 189.989 {478}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000126	Re-Slope:	1.000000
A1 (Gain):	0.109271	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999893	Status:	OK.
Std Error of Est:	0.000022		
Predicted MDL:	0.001385		
Predicted MQL:	0.004616		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00013	.000	1
S1	.00700	.00538	-.002	-23.2	.00068	.000	1
S2	1.2500	1.2002	-.050	-3.98	.13059	.000	1
S3	2.5000	2.4531	-.047	-1.87	.26682	.001	1
S4	5.0000	5.0139	.014	.277	.54526	.001	1
S5	10.000	10.084	.084	.843	1.0966	.002	1



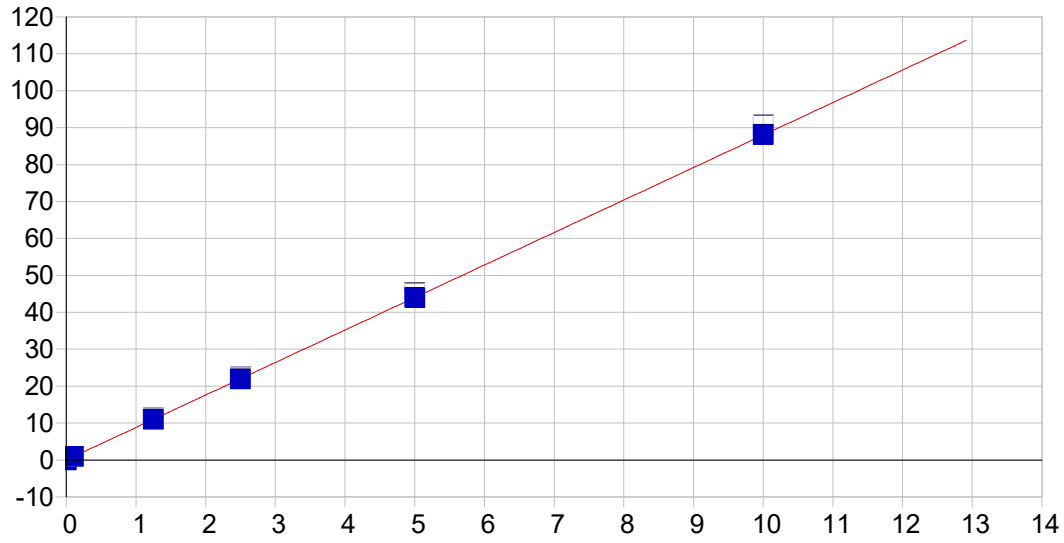
Ti 336.121 {100}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000742	Re-Slope:	1.000000
A1 (Gain):	0.310667	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999996	Status:	OK.
Std Error of Est:	0.000048		
Predicted MDL:	0.003991		
Predicted MQL:	0.013303		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00074	.000	1
S1	.10000	.09644	-.004	-3.56	.03070	.001	1
S2	1.2500	1.2492	-.001	-.060	.38884	.003	1
S3	2.5000	2.4927	-.007	-.291	.77515	.001	1
S4	5.0000	5.0011	.001	.022	1.5544	.001	1
S5	10.000	10.010	.010	.105	3.1107	.006	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



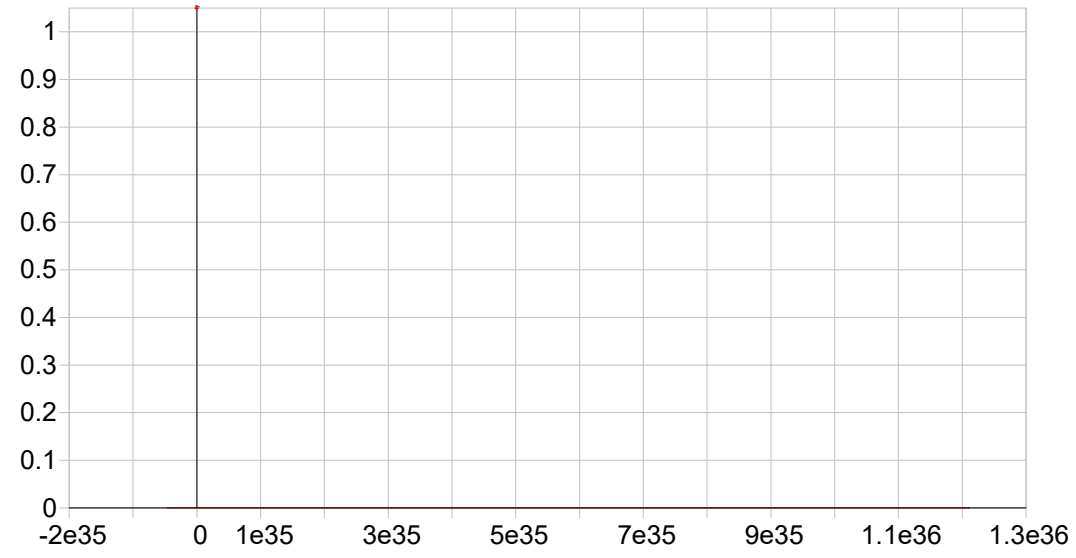
Sr 407.771 { 83}

Date of Fit:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.006562	Re-Slope:	1.000000
A1 (Gain):	8.801467	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.001261		
Predicted MDL:	0.000238		
Predicted MQL:	0.000794		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00658	.002	1
S1	.10000	.10270	.003	2.70	.89826	.001	1
S2	1.2500	1.2506	.001	.046	11.330	.024	1
S3	2.5000	2.4916	-.008	-.335	22.584	.005	1
S4	5.0000	4.9911	-.009	-.177	45.243	.030	1
S5	10.000	10.014	.014	.140	90.772	.058	1

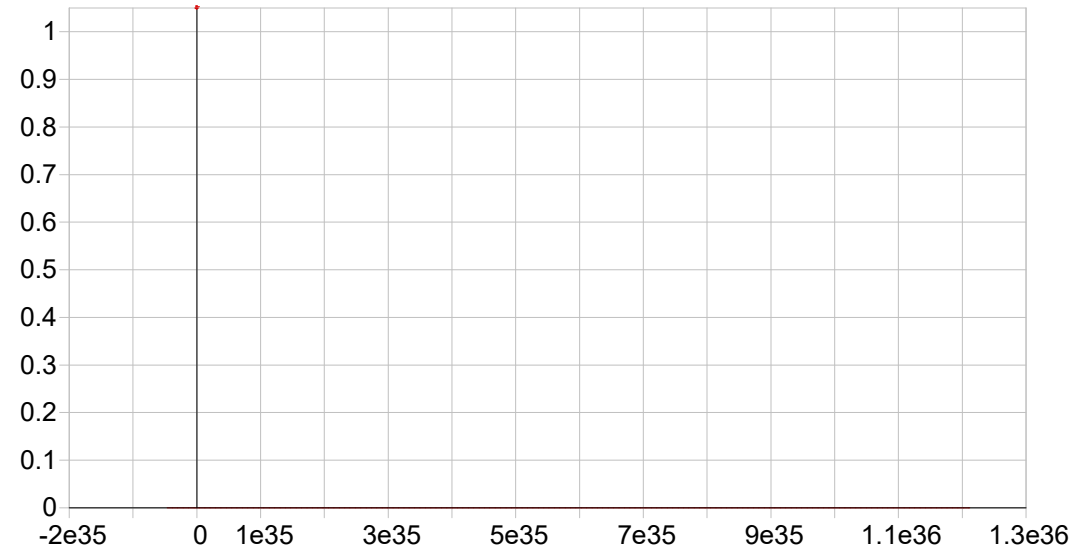
Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



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



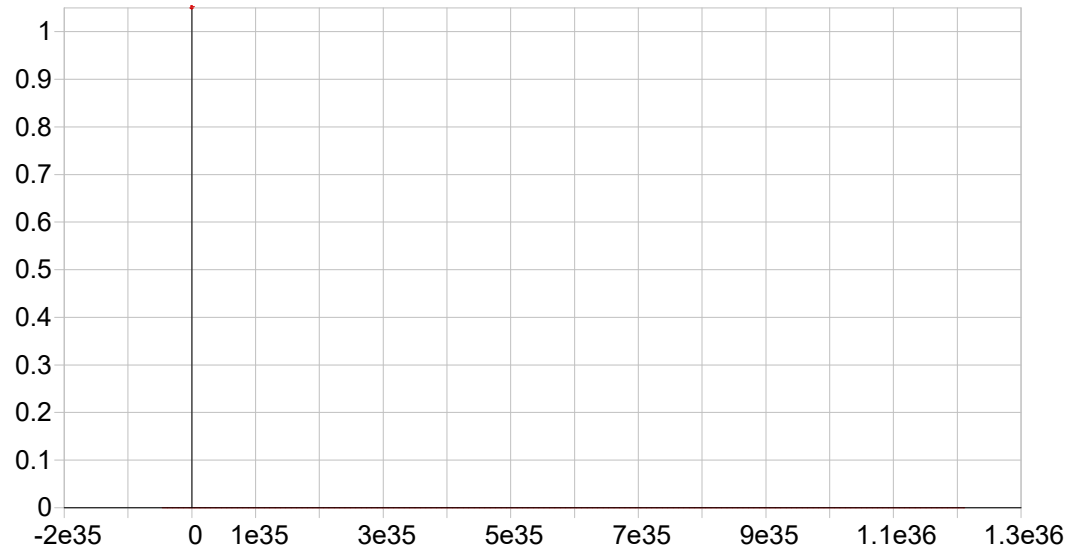
Y 360.073 { 94}*

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:12/18/2024 3:02:43 AM
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



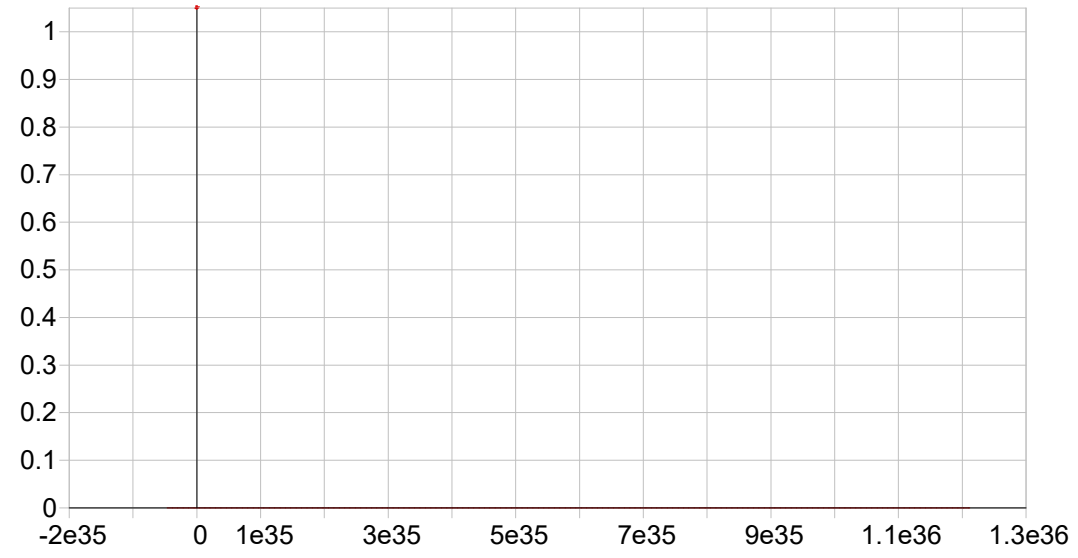
Y 371.030 { 91}*

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

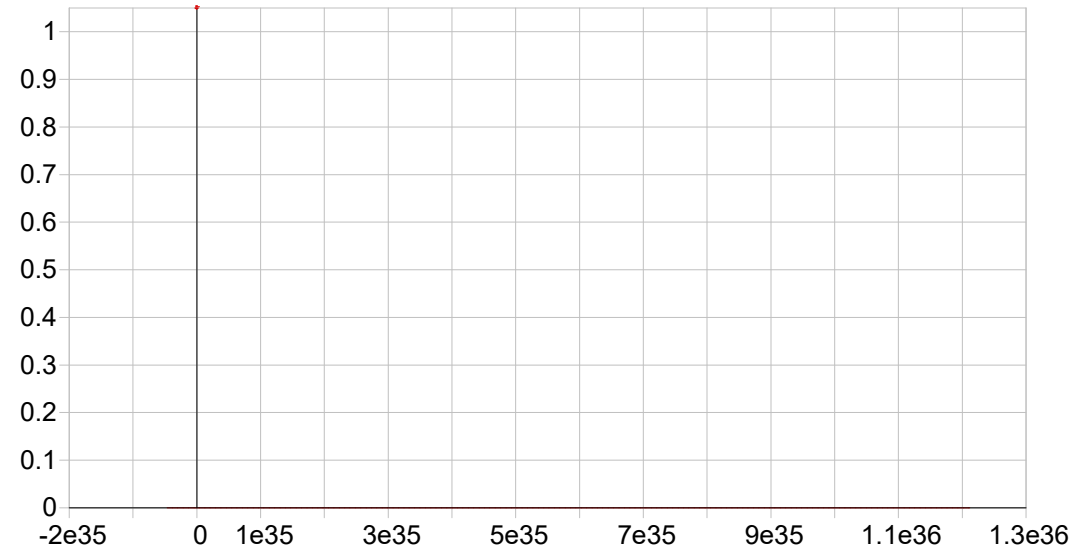
Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5



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



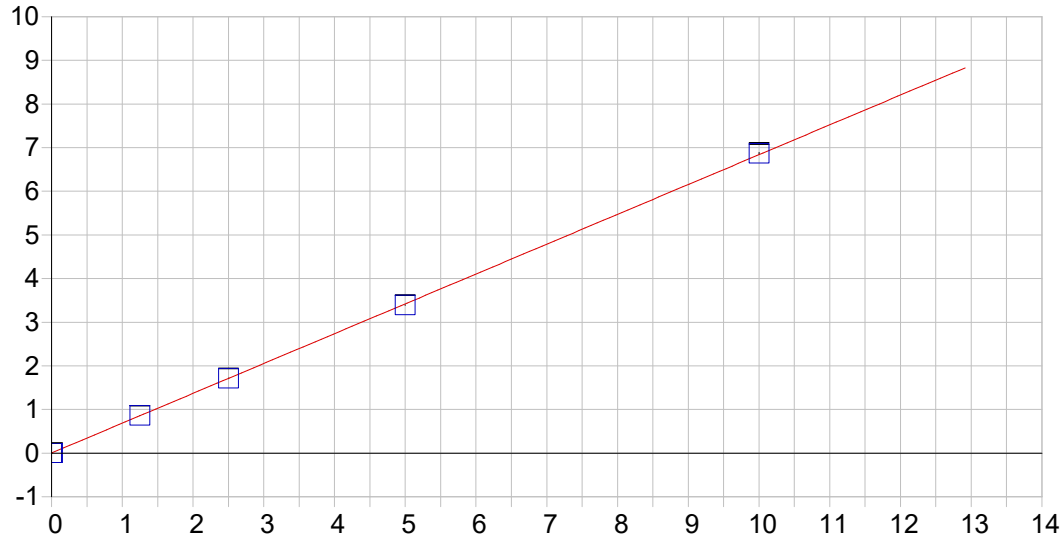
In 230.606 {446}*

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:12/18/2024 3:02:43 AM
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:	12/15/2024 5:38:47	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002806	Re-Slope:	1.000000
A1 (Gain):	0.683586	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999881	Status:	OK.
Std Error of Est:	0.000216		
Predicted MDL:	0.006322		
Predicted MQL:	0.021073		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00281	.005	1
S5	10.000	10.042	.042	.419	6.8673	.021	1
S4	5.0000	4.9606	-.039	-.789	3.3938	.006	1
S3	2.5000	2.5024	.002	.095	1.7134	.004	1
S2	1.2500	1.2529	.003	.232	.85927	.007	1
S1	.01500	.00730	-.008	-51.3	.00779	.005	1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/15/2024 17:13:21 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**-.05065**	**-.00017**	**.00013**	**-.00012**	**.00059**	**-.00056**	**.01646**	**-.00015**
Stddev	.14371	.00006	.00053	.00024	.00006	.00177	.00497	.00097
%RSD	283.76	37.463	419.64	208.53	10.029	318.11	30.218	631.37
#1	.11231	-.00011	-.00041	-.00003	.00062	-.00150	.01565	.00067
#2	-.15927	-.00016	.00064	.00008	.00052	-.00165	.01194	-.00123
#3	-.10498	-.00023	.00014	-.00039	.00063	.00148	.02178	.00009

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	**-.00004**	**.00468**	**.00004**	**.00002**	**.00233**	**.00002**	**-.00036**	**-.00169**
Stddev	.00009	.00063	.00020	.00018	.00045	.00032	.00028	.00072
%RSD	218.53	13.350	534.71	1165.0	19.474	2000.2	77.427	42.762
#1	.00006	.00404	-.00016	.00011	.00199	-.00033	-.00032	-.00144
#2	-.00007	.00529	.00024	.00013	.00284	.00028	-.00010	-.00113
#3	-.00012	.00472	.00003	-.00020	.00215	.00010	-.00065	-.00251

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	**-.00046**	**-.00219**	**-.00837**	**.00025**	**-.00065**	**.09503**	**-.00299**	**.00410**
Stddev	.00018	.00027	.00630	.00147	.00055	.00295	.00008	.00067
%RSD	39.902	12.198	75.317	595.40	85.237	3.1019	2.6448	16.296
#1	-.00026	-.00249	-.01561	.00180	-.00128	.09163	-.00306	.00444
#2	-.00062	-.00207	-.00413	-.00113	-.00029	.09666	-.00290	.00333
#3	-.00050	-.00200	-.00537	.00007	-.00037	.09681	-.00300	.00454

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	**.00012**	**.00040**	**.01321**	**.00013**	**.00074**	**-.00658**	**.00281**
Stddev	.00015	.00013	.00100	.00007	.00049	.00178	.00536
%RSD	125.18	31.477	7.5482	51.595	66.143	26.969	190.61
#1	.00019	.00027	.01268	.00017	.00019	-.00481	-.00024
#2	-.00005	.00052	.01259	.00005	.00115	-.00836	.00900
#3	.00021	.00040	.01436	.00016	.00089	-.00659	-.00032

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/15/2024 17:13:21 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	2343.9	28323.	2550.2	1975.0	3242.9
Stddev	10.4	15.	16.2	2.8	13.6
%RSD	.44523	.05425	.63481	.14169	.42012
#1	2341.4	28340.	2564.3	1972.1	3239.2
#2	2335.0	28317.	2532.5	1975.2	3231.6
#3	2355.4	28311.	2553.7	1977.7	3258.1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/15/2024 17:17:26 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**1.6204**	**.00149**	**.00204**	**.00132**	**.00733**	**.01696**	**.72538**	**.04708**
Stddev	.6261	.00013	.00035	.00014	.00005	.00083	.00634	.00080
%RSD	38.639	8.3687	17.181	10.354	.67563	4.9096	.87340	1.7087
#1	2.2536	.00158	.00242	.00117	.00734	.01792	.73029	.04784
#2	1.6061	.00155	.00197	.00143	.00728	.01659	.72763	.04624
#3	1.0016	.00135	.00172	.00136	.00738	.01639	.71823	.04714

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	**.01304**	**.21649**	**.00213**	**.03539**	**.00513**	**.00151**	**.00538**	**.05438**
Stddev	.00022	.00320	.00013	.00071	.00043	.00046	.00031	.00041
%RSD	1.7218	1.4771	6.2278	1.9966	8.4142	30.367	5.8104	.75137
#1	.01311	.21551	.00222	.03605	.00509	.00169	.00516	.05392
#2	.01322	.22006	.00198	.03547	.00471	.00099	.00574	.05451
#3	.01279	.21389	.00220	.03464	.00557	.00185	.00524	.05470

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	**.01743**	**.00012**	**.02397**	**.00355**	**.00217**	**.20032**	**-.00254**	**.00362**
Stddev	.00024	.00010	.00420	.00021	.00010	.00125	.00017	.00159
%RSD	1.3974	85.833	17.535	5.9150	4.3935	.62150	6.7014	43.805
#1	.01767	.00017	.02098	.00335	.00206	.19959	-.00250	.00197
#2	.01742	.00000	.02877	.00353	.00220	.20176	-.00272	.00514
#3	.01718	.00019	.02214	.00377	.00225	.19962	-.00239	.00375

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	**.00581**	**.00311**	**.31174**	**.00068**	**.03070**	**.89826**	**.00779**
Stddev	.00017	.00002	.00200	.00010	.00144	.00076	.00450
%RSD	2.9268	.79413	.64284	14.579	4.6788	.08419	57.784
#1	.00600	.00314	.31338	.00076	.03132	.89774	.00344
#2	.00567	.00312	.31234	.00057	.02906	.89792	.01244
#3	.00577	.00309	.30951	.00072	.03173	.89913	.00750

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/15/2024 17:17:26 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	2344.7	28184.	2560.2	1963.0	3251.5
Stddev	5.4	128.	18.7	9.9	13.2
%RSD	.23222	.45250	.73052	.50460	.40731
#1	2343.2	28330.	2556.4	1974.4	3241.6
#2	2340.1	28120.	2543.7	1958.3	3246.4
#3	2350.7	28100.	2580.5	1956.3	3266.6

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/15/2024 17:21:31 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**180.74**	**.09059**	**1.1298**	**.06115**	**.16300**	**3.6661**	**8.9457**	**1.2071**
Stddev	1.14	.00052	.0015	.00041	.00064	.0056	.0132	.0022
%RSD	.63332	.57317	.13121	.67418	.39298	.15173	.14747	.17843
#1	179.80	.09087	1.1287	.06075	.16304	3.6705	8.9541	1.2058
#2	180.40	.08999	1.1293	.06111	.16234	3.6599	8.9305	1.2096
#3	182.01	.09091	1.1315	.06157	.16362	3.6680	8.9526	1.2059

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	**1.7505**	**2.7104**	**.83057**	**.46114**	**.45338**	**.74645**	**1.3265**	**.68821**
Stddev	.0046	.0093	.00178	.00177	.00158	.00339	.0008	.00015
%RSD	.26442	.34243	.21471	.38288	.34779	.45365	.05732	.02151
#1	1.7461	2.7115	.82904	.45915	.45346	.74655	1.3274	.68835
#2	1.7503	2.7006	.83013	.46179	.45177	.74302	1.3261	.68824
#3	1.7553	2.7191	.83253	.46249	.45492	.74979	1.3260	.68805

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	**.28957**	**.06881**	**.24966**	**.05477**	**.19209**	**.86536**	**.05747**	**.76376**
Stddev	.00061	.00060	.00218	.00097	.00111	.00542	.00027	.00252
%RSD	.21099	.86631	.87202	1.7745	.58019	.62627	.46824	.33031
#1	.28998	.06940	.24864	.05369	.19330	.86478	.05745	.76526
#2	.28887	.06820	.25216	.05557	.19111	.86026	.05722	.76517
#3	.28988	.06882	.24818	.05506	.19185	.87105	.05775	.76084

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	**.72923**	**.03958**	**1.5802**	**.13059**	**.38884**	**11.330**	**.85927**
Stddev	.00165	.00051	.0088	.00025	.00274	.024	.00695
%RSD	.22564	1.2956	.55416	.19143	.70552	.21331	.80896
#1	.72747	.03901	1.5795	.13030	.38746	11.340	.85491
#2	.72949	.03973	1.5893	.13075	.38707	11.303	.85562
#3	.73073	.04001	1.5718	.13072	.39200	11.348	.86729

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/15/2024 17:21:31 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	2230.8	27483.	2554.6	1876.4	2938.3
Stddev	2.8	41.	12.2	2.9	2.2
%RSD	.12687	.15052	.47727	.15703	.07355
#1	2232.3	27522.	2568.2	1879.8	2938.5
#2	2232.6	27486.	2544.6	1874.7	2940.4
#3	2227.5	27440.	2551.1	1874.8	2936.1

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/15/2024 17:25:20 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**357.56**	**.18239**	**2.2864**	**.12627**	**.33286**	**7.3138**	**17.851**	**2.3731**
Stddev	.64	.00033	.0092	.00076	.00210	.0086	.029	.0202
%RSD	.17930	.18034	.40267	.60231	.63151	.11722	.16236	.85072
#1	356.97	.18207	2.2785	.12541	.33088	7.3164	17.882	2.3734
#2	357.46	.18236	2.2841	.12658	.33265	7.3208	17.844	2.3931
#3	358.24	.18273	2.2965	.12683	.33507	7.3042	17.826	2.3527

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	**3.5573**	**5.4049**	**1.6549**	**.92501**	**.89517**	**1.4845**	**2.6297**	**1.3623**
Stddev	.0130	.0078	.0010	.00314	.00270	.0035	.0042	.0013
%RSD	.36422	.14486	.06355	.33996	.30143	.23632	.15844	.09636
#1	3.5458	5.4073	1.6542	.92187	.89285	1.4823	2.6325	1.3623
#2	3.5547	5.4112	1.6544	.92500	.89813	1.4885	2.6317	1.3610
#3	3.5714	5.3962	1.6561	.92815	.89454	1.4826	2.6249	1.3637

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	**.58933**	**.14046**	**.49180**	**.10914**	**.39504**	**1.6488**	**.12171**	**1.5023**
Stddev	.00115	.00043	.00608	.00070	.00312	.0034	.00047	.0143
%RSD	.19590	.30754	1.2364	.63805	.78963	.20319	.38436	.94858
#1	.58819	.14008	.48722	.10901	.39324	1.6452	.12123	1.5097
#2	.58929	.14037	.48949	.10990	.39323	1.6494	.12172	1.5112
#3	.59050	.14093	.49870	.10853	.39864	1.6518	.12217	1.4858

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	**1.4864**	**.08205**	**3.0486**	**.26682**	**.77515**	**22.584**	**1.7134**
Stddev	.0075	.00043	.0338	.00073	.00107	.005	.0043
%RSD	.50130	.51865	1.1097	.27536	.13868	.02205	.25010
#1	1.4803	.08163	3.0660	.26623	.77620	22.584	1.7099
#2	1.4842	.08204	3.0703	.26657	.77519	22.578	1.7182
#3	1.4947	.08248	3.0097	.26764	.77406	22.588	1.7121

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/15/2024 17:25:20 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**2145.2**	**27069.**	**2565.9**	**1830.4**	**2809.9**
Stddev	5.6	126.	13.7	7.5	5.4
%RSD	.25951	.46530	.53201	.41097	.19117
#1	2144.7	27146.	2569.0	1836.9	2806.7
#2	2151.0	27138.	2551.0	1832.1	2816.1
#3	2139.9	26924.	2577.8	1822.2	2806.9

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/15/2024 17:29:06 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**703.34**	**.36293**	**4.6643**	**.26292**	**.69961**	**14.707**	**35.865**	**4.6839**
Stddev	2.69	.00144	.0108	.00113	.00237	.035	.066	.0343
%RSD	.38183	.39604	.23228	.42795	.33879	.23986	.18383	.73225
#1	706.40	.36136	4.6592	.26178	.69769	14.739	35.937	4.7216
#2	701.40	.36326	4.6570	.26294	.69887	14.670	35.850	4.6753
#3	702.21	.36418	4.6768	.26403	.70226	14.713	35.807	4.6547

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	**7.2269**	**10.786**	**3.3096**	**1.8588**	**1.7761**	**2.9502**	**5.2053**	**2.7140**
Stddev	.0178	.034	.0004	.0030	.0027	.0065	.0122	.0070
%RSD	.24643	.31482	.01239	.16141	.15233	.21986	.23413	.25820
#1	7.2191	10.798	3.3092	1.8581	1.7733	2.9577	5.2193	2.7219
#2	7.2143	10.747	3.3098	1.8561	1.7787	2.9463	5.1978	2.7086
#3	7.2473	10.812	3.3100	1.8620	1.7764	2.9467	5.1987	2.7116

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	**1.1928**	**.28808**	**.98471**	**.21764**	**.82018**	**3.2384**	**.25696**	**2.9432**
Stddev	.0036	.00037	.00412	.00205	.00534	.0054	.00107	.0230
%RSD	.30020	.12687	.41883	.94061	.65144	.16601	.41504	.78016
#1	1.1908	.28766	.98885	.21761	.81507	3.2347	.25694	2.9691
#2	1.1906	.28834	.98060	.21970	.81974	3.2359	.25591	2.9352
#3	1.1969	.28824	.98469	.21560	.82573	3.2446	.25804	2.9253

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	**3.1109**	**.17131**	**5.9757**	**.54526**	**1.5544**	**45.243**	**3.3938**
Stddev	.0082	.00087	.0409	.00120	.0009	.030	.0063
%RSD	.26400	.50796	.68404	.21991	.05969	.06723	.18569
#1	3.1045	.17112	6.0213	.54461	1.5555	45.277	3.4004
#2	3.1081	.17055	5.9632	.54452	1.5538	45.235	3.3931
#3	3.1202	.17226	5.9425	.54664	1.5540	45.217	3.3878

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/15/2024 17:29:06 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	1989.9	26211.	2540.6	1725.1	2648.7
Stddev	10.2	67.	10.4	8.6	12.3
%RSD	.51222	.25395	.41013	.50033	.46510
#1	2000.9	26281.	2528.7	1733.1	2661.8
#2	1988.0	26203.	2547.7	1726.4	2647.0
#3	1980.8	26149.	2545.5	1715.9	2637.3

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/15/2024 17:32:46 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	**1352.1**	**.71498**	**9.4109**	**.57096**	**1.5481**	**29.640**	**72.288**	**9.3106**
Stddev	5.1	.00179	.0254	.00156	.0056	.036	.177	.0903
%RSD	.37444	.25088	.27032	.27368	.36088	.12167	.24421	.96947
#1	1352.9	.71293	9.3915	.57015	1.5455	29.666	72.347	9.3973
#2	1346.7	.71577	9.4014	.56996	1.5442	29.655	72.428	9.3175
#3	1356.7	.71625	9.4397	.57276	1.5545	29.599	72.090	9.2171

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	**14.435**	**21.413**	**6.5168**	**3.7028**	**3.5388**	**5.8137**	**10.269**	**5.3921**
Stddev	.037	.053	.0163	.0080	.0145	.0064	.023	.0127
%RSD	.25732	.24535	.24976	.21623	.40931	.11022	.22547	.23520
#1	14.406	21.455	6.5273	3.6986	3.5295	5.8093	10.280	5.3969
#2	14.422	21.430	6.4981	3.6977	3.5555	5.8211	10.284	5.4016
#3	14.477	21.354	6.5250	3.7120	3.5314	5.8108	10.242	5.3777

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	**2.3879**	**.58791**	**1.9766**	**.43534**	**1.7582**	**6.4921**	**.52955**	**5.7426**
Stddev	.0043	.00087	.0101	.00131	.0218	.0076	.00159	.0607
%RSD	.18008	.14719	.50954	.30119	1.2413	.11629	.30056	1.0570
#1	2.3858	.58855	1.9766	.43412	1.7439	6.4984	.52808	5.7902
#2	2.3850	.58693	1.9867	.43673	1.7474	6.4942	.52933	5.7633
#3	2.3929	.58826	1.9665	.43519	1.7834	6.4837	.53124	5.6742

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	**6.7710**	**.35423**	**11.762**	**1.0966**	**3.1107**	**90.772**	**6.8673**
Stddev	.0195	.00189	.122	.0024	.0063	.058	.0212
%RSD	.28860	.53482	1.0368	.22063	.20113	.06434	.30822
#1	6.7612	.35344	11.858	1.0944	3.1155	90.789	6.8495
#2	6.7583	.35286	11.803	1.0961	3.1129	90.821	6.8907
#3	6.7935	.35639	11.625	1.0992	3.1036	90.707	6.8617

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/15/2024 17:32:46 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	1737.5	25288.	2493.4	1553.0	2474.2
Stddev	4.3	136.	9.0	16.3	6.8
%RSD	.24740	.53954	.36139	1.0477	.27421
#1	1742.1	25415.	2491.3	1567.1	2480.1
#2	1733.6	25307.	2485.6	1556.6	2466.8
#3	1736.7	25144.	2503.2	1535.2	2475.7

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: S6 Acquired: 12/15/2024 17:36:24 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) 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	76.014	33.857	14.907	8.3953	5.2293
Stddev	.305	.098	.068	.0340	.0221
%RSD	.40121	.29043	.45659	.40435	.42196
#1	75.866	33.813	14.874	8.3791	5.2158
#2	76.365	33.969	14.985	8.4343	5.2548
#3	75.812	33.788	14.861	8.3726	5.2175

Int. Std.	Y_3710
Units	Cts/S
Avg	2478.8
Stddev	13.6
%RSD	.54895
#1	2471.5
#2	2470.3
#3	2494.5

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICV004 Acquired: 12/15/2024 17:40:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.038947**	**.9930447**	**.9441570**	**.9206292**	**.9511772**	**2.370367**
Stddev	.001662	.0062430	.0062369	.0057424	.0075145	.003706
%RSD	.1599640	.6286692	.6605770	.6237483	.7900166	.1563550
#1	1.040708	.9860440	.9420876	.9142968	.9425085	2.366172
#2	1.038727	.9950560	.9392179	.9220921	.9558378	2.371732
#3	1.037406	.9980341	.9511656	.9254986	.9551854	2.373197

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5105981**	**.5074084**	**.4770064**	**10.12286**	**.5317201**	**.4835181**
Stddev	.0013849	.0019591	.0025671	.07309	.0021263	.0023416
%RSD	.2712321	.3861069	.5381635	.7220005	.3998871	.4842937
#1	.5121679	.5051609	.4743886	10.13415	.5328117	.4808450
#2	.5100776	.5083094	.4771109	10.04479	.5330789	.4845019
#3	.5095489	.5087550	.4795196	10.18965	.5292697	.4852073

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4926610**	**10.40534**	**.5214154**	**6.192417**	**.4909916**	**.2438986**
Stddev	.0050868	.06961	.0004530	.142043	.0031651	.0012405
%RSD	1.032514	.6690070	.0868860	2.293818	.6446451	.5086092
#1	.4983385	10.46997	.5219059	6.356399	.4876057	.2434994
#2	.4911260	10.33164	.5213278	6.107500	.4914930	.2452895
#3	.4885185	10.41442	.5210126	6.113352	.4938762	.2429068

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.05315**	**.5038855**	**.9292499**	**9.291803**	F **-.000307**	F **.0100625**
Stddev	.29825	.0078271	.0059638	.056879	.001130	.0022492
%RSD	2.966756	1.553355	.6417808	.6121424	367.5991	22.35208
#1	10.06054	.4949547	.9353652	9.279258	.000983	.0103289
#2	10.34763	.5095525	.9289340	9.242243	-.000787	.0121666
#3	9.75126	.5071494	.9234503	9.353907	-.001118	.0076920

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICV004 Acquired: 12/15/2024 17:40:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV004 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0006094	F -.001856	F .0040990	F .0015549	F .0009017	F -.008969
Stddev	.0000825	.005279	.0009841	.0004710	.0019155	.000206
%RSD	13.54227	284.3896	24.00804	30.29437	212.4254	2.300851
#1	.0006892	.002759	.0047694	.0017614	-.001065	-.008958
#2	.0006145	-.007613	.0029692	.0018874	.001008	-.008768
#3	.0005244	-.000716	.0045585	.0010159	.002762	-.009180

Elem	Li6707
Units	ppm
Avg	F -.003787
Stddev	.005212
%RSD	137.6130
#1	-.005827
#2	.002136
#3	-.007671

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2335.453	28272.37	2608.262	1965.105	3197.178
Stddev	14.654	107.97	3.292	8.438	19.099
%RSD	.6274602	.3818891	.1262316	.4294138	.5973844
#1	2351.709	28198.57	2611.364	1957.552	3219.033
#2	2323.258	28222.24	2604.807	1963.551	3183.689
#3	2331.391	28396.29	2608.613	1974.213	3188.812

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICB004 Acquired: 12/15/2024 17:44:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003684**	**.0014289**	**.0022742**	**-.000601**	**.0000029**	**.0082884**	**.0002556**
Stddev	.0019860	.0007064	.0006859	.001694	.0007972	.0085457	.0004529
%RSD	539.0624	49.43355	30.16147	281.9492	27322.93	103.1047	177.2219
#1	-.001709	.0011067	.0020850	-.002548	.0004592	.0175765	.0006768
#2	.000567	.0009411	.0030349	.000218	-.000918	.0065302	-.000224
#3	.002248	.0022389	.0017028	.000528	.000467	.0007585	.000314

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000046**	**.0000319**	**.0252482**	**.0000927**	**-.000218**	**-.004677**	**.0110761**
Stddev	.000125	.0000671	.0243485	.0002301	.000273	.003690	.0397035
%RSD	269.8392	210.6593	96.43641	248.2408	125.2536	78.90284	358.4608
#1	.000085	.0000895	.0455800	-.000097	-.000523	-.007574	-.022456
#2	-.000060	-.000042	.0318994	.000349	.000006	-.000523	.000767
#3	-.000163	.000048	-.001735	.000027	-.000138	-.005933	.054917

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000342**	**.0152618**	**.0001299**	**.0001480**	**-.436100**	**-.005734**	**-.002831**
Stddev	.000794	.0649878	.0006264	.0004370	.475474	.010012	.006666
%RSD	232.1481	425.8210	482.2983	295.3003	109.0287	174.6260	235.4770
#1	-.001081	-.015717	-.000369	.0001761	-.909566	-.003736	.004797
#2	-.000441	.089943	.000833	.0005702	.041357	-.016594	-.005752
#3	.000497	-.028440	-.000074	-.000302	-.440090	.003129	-.007538

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1735206**	**-.002021**	**.0084682**	**.0002788**	**-.003443**	**.0014398**	**.0007721**
Stddev	.1727968	.001641	.0031520	.0002037	.005842	.0005516	.0005589
%RSD	99.58287	81.22386	37.22151	73.06636	169.6786	38.31285	72.39436
#1	.3730416	-.003831	.0079164	.0002028	.003266	.0012116	.0006465
#2	.0722570	-.000631	.0056285	.0001240	-.007409	.0010389	.0013831
#3	.0752632	-.001600	.0118596	.0005096	-.006186	.0020689	.0002866

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICB004 Acquired: 12/15/2024 17:44:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB004 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002714	.0002427	-.009929
Stddev	.002433	.0002313	.002955
%RSD	89.66175	95.31826	29.75974
#1	-.001327	.0000263	-.010998
#2	-.001291	.0002153	-.012200
#3	-.005524	.0004865	-.006588

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2337.120	28245.34	2576.996	1968.706	3237.734
Stddev	7.048	63.07	15.514	9.983	10.923
%RSD	.3015792	.2233048	.6020008	.5070626	.3373634
#1	2340.297	28298.42	2575.010	1979.753	3237.731
#2	2342.021	28175.61	2562.571	1960.333	3248.658
#3	2329.043	28261.98	2593.407	1966.032	3226.812

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICSA004 Acquired: 12/15/2024 17:48:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000840**	**.0203396**	**.0039096**	**-.030305**	**.0078546**	**238.9222**
Stddev	.003195	.0029692	.0033035	.004553	.0005842	1.0467
%RSD	380.5111	14.59824	84.49749	15.02377	7.437519	.4380929
#1	.001707	.0219178	.0071699	-.025360	.0085288	239.4015
#2	-.004424	.0221864	.0039943	-.031233	.0074981	239.6434
#3	.000199	.0169145	.0005646	-.034323	.0075369	237.7217

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052860**	**.0013489**	**.0010346**	**244.6726**	**.0497077**	**.0360242**
Stddev	.0011259	.0001970	.0000445	.7914	.0009657	.0002770
%RSD	21.29936	14.60286	4.302533	.3234608	1.942767	.7689558
#1	.0048878	.0011381	.0010021	245.1308	.0498810	.0357115
#2	.0044132	.0015283	.0010163	245.1282	.0505750	.0362389
#3	.0065568	.0013802	.0010853	243.7587	.0486671	.0361222

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.014912**	**102.3676**	**.0102816**	**257.7221**	**.0060916**	**-.008820**
Stddev	.006612	.4687	.0007586	.8777	.0010375	.000389
%RSD	44.33585	.4578983	7.378411	.3405555	17.03129	4.413214
#1	-.020956	102.8510	.0096558	258.6154	.0070196	-.008422
#2	-.007851	102.3366	.0111253	257.6901	.0062837	-.008838
#3	-.015930	101.9151	.0100636	256.8608	.0049715	-.009199

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021769**	**.0010595**	**-.043038**	**-.516808**	**.0033750**	F **-.026524**
Stddev	1.328731	.0051313	.001182	.215820	.0041100	.002500
%RSD	61038.15	484.3017	2.747272	41.76028	121.7778	9.425288
#1	-1.19429	.0035717	-.044037	-.733638	.0079985	-.029390
#2	-.23138	.0044506	-.043345	-.514774	.0001356	-.025388
#3	1.43220	-.004844	-.041733	-.302012	.0019910	-.024793

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICSA004 Acquired: 12/15/2024 17:48:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA004 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003007	.0073976	-.004304	F .0125049	-.004535	.0022724
Stddev	.0003052	.0020493	.000681	.0017405	.002199	.0004011
%RSD	101.5110	27.70261	15.81576	13.91833	48.48776	17.65234
#1	.0001922	.0085228	-.004951	.0105139	-.005231	.0023659
#2	.0006453	.0050322	-.003594	.0137374	-.002073	.0026185
#3	.0000645	.0086380	-.004369	.0132634	-.006303	.0018327

Elem	Li6707
Units	ppm
Avg	.0124230
Stddev	.0018064
%RSD	14.54097
#1	.0142010
#2	.0124786
#3	.0105894

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2198.418	26245.49	2546.895	1843.216	2785.585
Stddev	3.497	70.56	14.834	4.326	6.065
%RSD	.1590802	.2688328	.5824529	.2347167	.2177265
#1	2199.270	26246.00	2542.420	1845.002	2784.720
#2	2194.573	26315.79	2534.813	1846.363	2779.999
#3	2201.410	26174.68	2563.452	1838.282	2792.036

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICSAB004 Acquired: 12/15/2024 17:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0996684	.1213299	.0500216	.0185984	.5262279	236.9978
Stddev	.0042138	.0023818	.0044102	.0086762	.0048475	.4166
%RSD	4.227843	1.963043	8.816546	46.65044	.9211860	.1757654
#1	.0948270	.1221144	.0551133	.0284889	.5284580	236.9184
#2	.1025096	.1186548	.0474034	.0150357	.5206666	237.4484
#3	.1016687	.1232204	.0475480	.0122706	.5295590	236.6267

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5245710	.5098990	.9799221	242.8101	.5737440	.5106450
Stddev	.0011042	.0027781	.0049376	.1066	.0024994	.0029135
%RSD	.2104929	.5448335	.5038799	.0439062	.4356354	.5705458
#1	.5247030	.5070817	.9772636	242.7191	.5766300	.5088267
#2	.5256033	.5126362	.9768834	242.9274	.5723130	.5091029
#3	.5234068	.5099791	.9856194	242.7839	.5722889	.5140054

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4640818	101.8175	.5219761	255.3015	.9784937	.1784824
Stddev	.0030989	.0875	.0020559	.3795	.0037730	.0008773
%RSD	.6677580	.0859767	.3938659	.1486339	.3855890	.4915309
#1	.4641236	101.8293	.5222695	255.0719	.9754853	.1791890
#2	.4671596	101.8985	.5197893	255.7395	.9772690	.1787577
#3	.4609622	101.7246	.5238695	255.0932	.9827269	.1775005

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.144349	.5209979	.8845220	-1.01536	.0017003	F -.032378
Stddev	.160124	.0191549	.0036843	.18984	.0056661	.000998
%RSD	110.9286	3.676581	.4165260	18.69657	333.2414	3.083686
#1	.028632	.5381664	.8861609	-1.13579	-.001560	-.033490
#2	-.174288	.5244903	.8803026	-1.11376	.008243	-.031558
#3	-.287390	.5003372	.8871024	-.79652	-.001582	-.032085

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: ICSAB004 Acquired: 12/15/2024 17:52:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB004 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006472	.0090201	-.003558	F .0097004	-.004847	.0024975
Stddev	.0005212	.0018872	.001254	.0025725	.004493	.0003232
%RSD	80.53504	20.92179	35.24724	26.51994	92.71213	12.94077
#1	.0012148	.0070317	-.003402	.0097901	-.001604	.0021265
#2	.0005364	.0092423	-.004883	.0070842	-.002960	.0026477
#3	.0001902	.0107864	-.002389	.0122270	-.009976	.0027183

Elem	Li6707
Units	ppm
Avg	.0057799
Stddev	.0079792
%RSD	138.0503
#1	.0149468
#2	.0003945
#3	.0019984

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2204.018	26341.35	2541.423	1847.546	2812.009
Stddev	3.057	95.06	9.992	3.759	10.511
%RSD	.1386823	.3608785	.3931691	.2034598	.3737987
#1	2207.520	26231.64	2551.121	1843.207	2822.590
#2	2202.647	26393.20	2531.160	1849.815	2811.866
#3	2201.887	26399.21	2541.987	1849.616	2801.569

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV029 Acquired: 12/15/2024 17:56:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV029 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.708424**	**4.761779**	**23.63709**	**4.537755**	**4.589025**	**388.7774**	**9.716457**
Stddev	.028584	.012765	.08760	.023589	.001721	.3176	.017206
%RSD	.6070908	.2680813	.3706135	.5198476	.0375050	.0816860	.1770853
#1	4.741421	4.754885	23.64530	4.518086	4.587598	388.7787	9.719589
#2	4.692611	4.753942	23.54567	4.531270	4.588541	388.4592	9.697900
#3	4.691240	4.776509	23.72030	4.563908	4.590936	389.0943	9.731882

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4782449**	**2.370645**	**395.3735**	**14.73088**	**2.360447**	**14.66721**	**399.7576**
Stddev	.0019061	.006975	.1566	.01585	.009731	.02423	.5631
%RSD	.3985602	.2942123	.0395965	.1075690	.4122510	.1651678	.1408582
#1	.4777538	2.371098	395.2133	14.72022	2.360087	14.66668	399.6475
#2	.4803484	2.363455	395.3812	14.74909	2.350901	14.64326	399.2577
#3	.4766323	2.377383	395.5261	14.72334	2.370353	14.69170	400.3676

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.48009**	**389.5076**	**2.386359**	**1.200211**	**395.1780**	**2.410747**	**14.75238**
Stddev	.02389	.6170	.004229	.004049	1.3444	.015268	.08689
%RSD	.1649641	.1584074	.1772090	.3373543	.3402053	.6333186	.5889919
#1	14.49192	389.1125	2.385973	1.196335	396.7046	2.428342	14.78974
#2	14.45260	389.1917	2.382337	1.204413	394.1708	2.402909	14.65306
#3	14.49576	390.2186	2.390768	1.199884	394.6585	2.400991	14.81434

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**144.7496**	**4.741525**	**4.659796**	**4.563860**	**4.739867**	**4.813405**	**4.789253**
Stddev	.4431	.019615	.015633	.010194	.017706	.011026	.019221
%RSD	.3061479	.4136757	.3354879	.2233602	.3735582	.2290725	.4013368
#1	144.2381	4.742769	4.654165	4.559500	4.737844	4.809179	4.787975
#2	144.9934	4.721318	4.677465	4.556573	4.723260	4.825919	4.770703
#3	145.0173	4.760488	4.647758	4.575509	4.758498	4.805116	4.809081

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV029 Acquired: 12/15/2024 17:56:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV029 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.859396	4.593898	5.004194
Stddev	.011018	.009525	.012782
%RSD	.2267264	.2073447	.2554193
#1	4.869344	4.593182	5.010568
#2	4.847554	4.584751	4.989479
#3	4.861290	4.603761	5.012535

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1921.536	25135.77	2491.077	1667.551	2537.417
Stddev	8.226	104.44	5.582	13.005	11.566
%RSD	.4280863	.4155099	.2240901	.7799046	.4558231
#1	1930.228	25048.39	2485.968	1666.351	2546.232
#2	1920.508	25251.45	2497.035	1681.115	2541.699
#3	1913.873	25107.49	2490.229	1655.188	2524.321

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB029 Acquired: 12/15/2024 17:59:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB029 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002623**	**.0036344**	**.0023924**	**-.000261**	**-.003073**	**.0474962**	**.0003648**
Stddev	.001582	.0000993	.0022460	.006992	.003041	.0152675	.0006476
%RSD	60.32016	2.732180	93.88028	2677.028	98.94907	32.14469	177.5397
#1	-.001287	.0036775	.0006865	.005789	-.003135	.0353060	-.000369
#2	-.004370	.0037049	.0049370	-.007916	-.006082	.0425618	.000609
#3	-.002212	.0035208	.0015535	.001343	-.000002	.0646206	.000855

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001832**	**.0001002**	**.0217255**	**.0013602**	**.0000890**	**.0075177**	**.0122751**
Stddev	.0001736	.0000306	.0283031	.0008051	.0002449	.0008765	.0272519
%RSD	94.77882	30.55087	130.2763	59.19049	275.0195	11.65936	222.0086
#1	.0003007	.0001228	.0043380	.0016482	-.000157	.0084656	-.018901
#2	-.000016	.0000654	.0064542	.0004507	.000092	.0067364	.031565
#3	.000265	.0001123	.0543843	.0019817	.000332	.0073512	.024161

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011160**	**.0986318**	**.0003736**	**.0012622**	**-.603451**	**-.010452**	**-.008942**
Stddev	.0013960	.0507845	.0005533	.0015002	.499182	.004306	.007164
%RSD	125.0857	51.48892	148.0985	118.8523	82.72111	41.20264	80.11560
#1	.0011118	.0849570	.0010104	.0011915	-.953988	-.007247	-.005758
#2	-.000278	.1548536	.0000116	-.000201	-.824447	-.008761	-.017145
#3	.002514	.0560849	.0000987	.002797	-.031919	-.015347	-.003922

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0483428**	**-.000887**	**.0108553**	**.0007221**	**-.006134**	**.0005404**	**.0009997**
Stddev	.1068376	.003634	.0016569	.0004230	.002781	.0017705	.0010403
%RSD	221.0002	409.6756	15.26392	58.57953	45.33704	327.6139	104.0626
#1	-.036629	.001633	.0117072	.0011986	-.007164	.0003740	.0021728
#2	.168283	-.005053	.0089457	.0003909	-.002985	.0023883	.0001894
#3	.013375	.000758	.0119129	.0005767	-.008252	-.001141	.0006368

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB029 Acquired: 12/15/2024 17:59:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB029 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001753	.0003151	.0003296
Stddev	.001591	.0000576	.0014330
%RSD	90.72617	18.28951	434.7601
#1	-.000126	.0003701	.0015165
#2	-.003305	.0002551	.0007347
#3	-.001828	.0003199	-.001262

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2309.651	28088.28	2563.289	1946.707	3225.850
Stddev	7.906	166.72	14.361	14.850	15.290
%RSD	.3422877	.5935571	.5602536	.7628124	.4739723
#1	2300.825	27902.05	2559.577	1933.078	3212.955
#2	2316.083	28139.14	2551.148	1944.511	3242.741
#3	2312.044	28223.64	2579.141	1962.532	3221.855

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165442BL Acquired: 12/15/2024 18:03:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS442 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018658**	**.0011079**	**.0000895**	**-.003353**	**-.002527**	**-.010391**	**-.000088**
Stddev	.0039910	.0018605	.0001734	.001830	.001251	.007070	.000995
%RSD	213.9096	167.9331	193.7101	54.56704	49.48105	68.04318	1133.684
#1	-.002734	.0032185	-.000073	-.001965	-.002054	-.017060	-.000148
#2	.003916	.0003990	.000069	-.002668	-.001583	-.002978	.000936
#3	.004415	-.000294	.000272	-.005426	-.003946	-.011134	-.001051

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000742**	**.0000584**	**-.013136**	**-.000194**	**-.000533**	**-.010222**	**.0013460**
Stddev	.0001558	.0000333	.041845	.000971	.000568	.009218	.0477117
%RSD	209.9656	57.10150	318.5483	501.4355	106.4660	90.18160	3544.573
#1	.0002461	.0000490	-.011126	-.000152	-.001181	-.005633	.0477169
#2	-.000058	.0000308	.027667	-.001185	-.000295	-.020834	.0039233
#3	.000034	.0000954	-.055950	.000756	-.000123	-.004199	-.047602

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009456**	**.0289093**	**-.000539**	**.0009293**	**-.227679**	**-.010268**	**-.003977**
Stddev	.0021881	.0118900	.000777	.0008470	.915665	.007070	.001436
%RSD	231.3939	41.12870	144.1029	91.14712	402.1740	68.85024	36.10901
#1	-.001459	.0155844	-.001388	.0018995	.823399	-.002548	-.005542
#2	.002820	.0384366	.000137	.0003373	-.653872	-.016426	-.002720
#3	.001475	.0327070	-.000366	.0005510	-.852564	-.011831	-.003670

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1992637**	**-.001908**	**.0041045**	**.0000766**	**-.007926**	**.0000220**	**.0003866**
Stddev	.2569769	.001160	.0011973	.0002587	.002615	.0009568	.0001173
%RSD	128.9632	60.81122	29.16992	337.5767	32.99931	4345.873	30.35120
#1	.1401559	-.002424	.0051446	-.000024	-.010943	.0009313	.0004948
#2	-.023009	-.000579	.0043732	-.000117	-.006301	-.000976	.0004030
#3	.480645	-.002721	.0027957	.000371	-.006533	.000111	.0002619

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165442BL Acquired: 12/15/2024 18:03:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS442 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002520	.0002978	-.007299
Stddev	.003110	.0003457	.006691
%RSD	123.4098	116.0800	91.67910
#1	-.003395	.0001911	-.001438
#2	.000934	.0006843	-.014589
#3	-.005099	.0000181	-.005868

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2345.109	28221.59	2562.807	1963.892	3266.430
Stddev	14.866	72.45	20.945	5.708	20.079
%RSD	.6339176	.2567154	.8172503	.2906529	.6147051
#1	2334.590	28173.07	2562.061	1959.762	3255.946
#2	2338.622	28304.87	2542.245	1970.406	3253.762
#3	2362.117	28186.83	2584.114	1961.510	3289.580

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165442BS Acquired: 12/15/2024 18:07:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS442 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0208700**	**.0476446**	**.0197785**	**.0586902**	**.0930647**	**.3608528**
Stddev	.0013164	.0012059	.0008509	.0005230	.0015165	.0104140
%RSD	6.307793	2.530949	4.302347	.8910535	1.629464	2.885945
#1	.0205008	.0466730	.0199010	.0592274	.0914938	.3613754
#2	.0223317	.0489942	.0188730	.0581828	.0945201	.3709956
#3	.0197776	.0472667	.0205616	.0586604	.0931800	.3501873

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3873279**	**.0098358**	**.0089314**	**9.533278**	**.0190234**	**.0922798**
Stddev	.0011175	.0000665	.0000242	.078180	.0003903	.0001711
%RSD	.2885256	.6763693	.2706726	.8200721	2.051819	.1853595
#1	.3872343	.0097733	.0089575	9.554394	.0191579	.0921401
#2	.3884893	.0099057	.0089097	9.598730	.0193286	.0924705
#3	.3862602	.0098283	.0089271	9.446708	.0185836	.0922286

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0440081**	**.1780129**	**.0314120**	**9.978176**	**.0719253**	**.0198035**
Stddev	.0023440	.0097699	.0023536	.046081	.0005441	.0005227
%RSD	5.326369	5.488340	7.492822	.4618166	.7565131	2.639663
#1	.0462431	.1892727	.0306881	10.03132	.0725357	.0198976
#2	.0415685	.1729861	.0295053	9.94929	.0714914	.0202729
#3	.0442127	.1717798	.0340425	9.95392	.0717487	.0192401

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.47084**	**.0866187**	**.1020769**	**9.495302**	**.0163335**	F **.0011956**
Stddev	1.60018	.0075232	.0052758	.269285	.0017697	.0023515
%RSD	15.28222	8.685370	5.168476	2.835986	10.83499	196.6811
#1	11.84981	.0866982	.0980456	9.712577	.0177095	.0036387
#2	8.71628	.0790562	.1080480	9.579300	.0143371	-.001052
#3	10.84644	.0941019	.1001371	9.194029	.0169540	.001000

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165442BS Acquired: 12/15/2024 18:07:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS442 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173253	.1604191	F .4891690	.0124953	.1867875	.1976498
Stddev	.0003751	.0010840	.0059707	.0020514	.0066377	.0006579
%RSD	2.165038	.6757522	1.220589	16.41741	3.553614	.3328456
#1	.0177546	.1611570	.4850741	.0127269	.1944445	.1977478
#2	.0171606	.1591745	.4960199	.0144211	.1832523	.1982532
#3	.0170608	.1609257	.4864129	.0103380	.1826656	.1969484

Elem	Li6707
Units	ppm
Avg	F .0184420
Stddev	.0032963
%RSD	17.87404
#1	.0198872
#2	.0207689
#3	.0146699

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2309.832	28066.92	2569.319	1949.306	3195.183
Stddev	2.793	192.96	25.776	10.804	5.713
%RSD	.1208979	.6875099	1.003213	.5542383	.1788132
#1	2307.844	27853.84	2569.094	1941.937	3189.727
#2	2313.025	28117.03	2543.656	1944.273	3201.123
#3	2308.628	28229.88	2595.206	1961.708	3194.699

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165377BL Acquired: 12/15/2024 18:11:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS377 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034636**	**.0015145**	**-.001444**	**.0018750**	**-.001788**	**-.017419**	**-.000339**
Stddev	.0023977	.0008324	.002176	.0055831	.002141	.010795	.001300
%RSD	69.22747	54.95942	150.6656	297.7709	119.7440	61.97299	382.8672
#1	.0011841	.0015998	-.000379	.0047090	.000553	-.008504	-.000284
#2	.0032424	.0006428	-.000006	.0054727	-.002270	-.029422	.000932
#3	.0059642	.0023010	-.003948	-.004557	-.003646	-.014332	-.001666

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000857**	**.0000702**	**.0469373**	**-.000295**	**.0000145**	**.0054145**	**.0102583**
Stddev	.0000310	.0000227	.0574717	.000606	.0003806	.0084626	.0499299
%RSD	36.17571	32.40502	122.4436	205.6760	2625.710	156.2953	486.7281
#1	.0001107	.0000682	.0478276	-.000864	.0004486	-.002135	.0065865
#2	.0000953	.0000485	-.010974	.000343	-.000143	.014562	.0619227
#3	.0000510	.0000939	.103959	-.000364	-.000262	.003817	-.037734

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000370**	**.0621765**	**.0003642**	**-.000801**	**-.033523**	**-.007167**	**-.006780**
Stddev	.001013	.0260998	.0008050	.000314	.284537	.012047	.005093
%RSD	274.0312	41.97704	221.0361	39.19566	848.7930	168.0761	75.11570
#1	.000748	.0429362	.0010481	-.001157	-.068017	.001612	-.003303
#2	-.001226	.0918854	.0005674	-.000684	-.299240	-.020902	-.004411
#3	-.000631	.0517078	-.000523	-.000563	.266689	-.002213	-.012626

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1607653**	**.0000688**	**.0007185**	**-.000032**	**-.005527**	**.0019105**	**-.001179**
Stddev	.2148813	.0023314	.0016372	.000439	.006261	.0005923	.000742
%RSD	133.6615	3388.923	227.8469	1359.399	113.2723	31.00115	62.96777
#1	.2779061	-.000779	-.001122	-.000018	-.005404	.0018345	-.002015
#2	-.087232	-.001720	.002013	.000399	.000671	.0013599	-.000921
#3	.291622	.002706	.001264	-.000479	-.011849	.0025371	-.000600

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165377BL Acquired: 12/15/2024 18:11:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS377 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.003006	.0002627	-.006775
Stddev	.001414	.0001539	.008097
%RSD	47.01759	58.57811	119.5206
#1	-.002916	.0004086	-.009184
#2	-.004463	.0002776	-.013393
#3	-.001640	.0001019	.002254

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2330.914	28354.41	2591.498	1972.479	3251.590
Stddev	7.027	154.74	14.425	11.616	5.953
%RSD	.3014644	.5457346	.5566422	.5888906	.1830717
#1	2338.944	28506.95	2598.274	1983.673	3258.428
#2	2327.905	28197.56	2601.288	1960.483	3248.778
#3	2325.892	28358.71	2574.932	1973.280	3247.564

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165377BS Acquired: 12/15/2024 18:15:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS377 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0204337**	**.0475361**	**.0199598**	**.0555622**	**.0921767**	**.4053435**
Stddev	.0026287	.0008449	.0022485	.0001729	.0008554	.0205318
%RSD	12.86473	1.777324	11.26508	.3111879	.9280018	5.065295
#1	.0201047	.0465666	.0196664	.0553835	.0927239	.4203022
#2	.0179850	.0481156	.0178724	.0557286	.0911909	.4137932
#3	.0232115	.0479259	.0223406	.0555746	.0926152	.3819351

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3894544**	**.0097215**	**.0090624**	**9.628219**	**.0195167**	**.0920543**
Stddev	.0011923	.0001792	.0000629	.050406	.0015834	.0004735
%RSD	.3061441	1.843320	.6936836	.5235284	8.112877	.5144233
#1	.3881508	.0095341	.0089923	9.590275	.0179816	.0917028
#2	.3904896	.0098912	.0090810	9.685414	.0194242	.0925928
#3	.3897227	.0097392	.0091138	9.608969	.0211443	.0918674

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0499098**	**.1919005**	**.0306944**	**9.891359**	**.0725755**	**.0204088**
Stddev	.0063170	.0473455	.0015826	.017041	.0004546	.0004107
%RSD	12.65674	24.67188	5.155821	.1722810	.6263653	2.012204
#1	.0571996	.1372391	.0290519	9.908278	.0721842	.0204078
#2	.0464818	.2184024	.0322092	9.891599	.0724682	.0208200
#3	.0460479	.2200601	.0308222	9.874199	.0730742	.0199987

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.508250**	**.0984704**	**.0989951**	**9.441698**	**.0148338**	F **-.000746**
Stddev	.603675	.0091833	.0048024	.062426	.0009700	.000985
%RSD	6.348959	9.326002	4.851149	.6611781	6.539268	132.0403
#1	9.220879	.0970464	.0937614	9.461206	.0139870	-.001827
#2	10.20192	.1082826	.1031993	9.371847	.0158921	-.000510
#3	9.10195	.0900823	.1000247	9.492041	.0146223	.000100

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165377BS Acquired: 12/15/2024 18:15:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS377 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174640	.1581055	F .4896587	.0121791	.1905577	.1997542
Stddev	.0003152	.0013977	.0025218	.0010268	.0008802	.0005381
%RSD	1.805139	.8840570	.5150209	8.431069	.4619022	.2693707
#1	.0178168	.1581124	.4874029	.0111789	.1904960	.1992991
#2	.0173654	.1567043	.4923813	.0121278	.1897100	.2003481
#3	.0172099	.1594997	.4891920	.0132307	.1914672	.1996155

Elem	Li6707
Units	ppm
Avg	.0216420
Stddev	.0063711
%RSD	29.43878
#1	.0163307
#2	.0287061
#3	.0198893

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2321.418	28057.04	2586.628	1959.687	3219.038
Stddev	2.510	100.36	7.191	7.944	3.041
%RSD	.1081042	.3577021	.2780032	.4053529	.0944697
#1	2320.702	27946.30	2589.978	1956.809	3216.622
#2	2319.344	28141.98	2578.373	1968.669	3218.039
#3	2324.208	28082.85	2591.532	1953.584	3222.453

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165359BL Acquired: 12/15/2024 18:19:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS359 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006666	.0021387	.0018846	-.000205	-.001360	-.026579	-.000669
Stddev	.0021543	.0008685	.0021161	.002929	.001194	.020094	.000598
%RSD	323.1624	40.60982	112.2885	1429.966	87.80824	75.59912	89.33385
#1	-.001734	.0011801	.0008445	-.002514	-.002717	-.009928	-.000124
#2	.001302	.0023627	.0004897	.003090	-.000895	-.048898	-.000575
#3	.002432	.0028733	.0043195	-.001190	-.000468	-.020911	-.001309

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001584	-.000023	-.015758	.0003707	.0001144	-.008530	-.012324
Stddev	.0000430	.000035	.051931	.0007063	.0005314	.005028	.017037
%RSD	27.14880	147.5090	329.5520	190.5265	464.4977	58.95070	138.2370
#1	.0001103	-.000049	-.033556	-.000278	.0006909	-.013301	-.027330
#2	.0001719	.000016	-.056450	.001123	.0000081	-.003279	-.015838
#3	.0001930	-.000037	.042732	.000268	-.000356	-.009009	.006195

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001529	.0550809	.0002106	.0002773	.2493689	.0034437	-.011553
Stddev	.001214	.0109849	.0002315	.0013343	.1770875	.0130187	.001371
%RSD	79.41983	19.94319	109.9239	481.0888	71.01427	378.0423	11.86378
#1	-.002486	.0445848	.0001009	.0008477	.1374529	-.010739	-.010283
#2	-.001938	.0541611	.0004765	.0012317	.4535365	.014851	-.011368
#3	-.000163	.0664967	.0000544	-.001247	.1571172	.006219	-.013006

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2701455	.0004708	-.002016	.0002214	-.008433	.0019650	-.001597
Stddev	.0240641	.0019473	.001376	.0004018	.002997	.0007483	.000579
%RSD	8.907817	413.6155	68.27482	181.4867	35.53615	38.08114	36.26402
#1	.2435916	.0013096	-.001598	.0000714	-.005276	.0016512	-.000970
#2	.2763338	.0018582	-.000896	.0006766	-.011239	.0028192	-.002112
#3	.2905110	-.001755	-.003552	-.000084	-.008782	.0014248	-.001709

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165359BL Acquired: 12/15/2024 18:19:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS359 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002769	.0000928	-.008880
Stddev	.005137	.0000874	.003092
%RSD	185.5306	94.18209	34.82274
#1	.003111	.0001841	-.007849
#2	-.005027	.0000845	-.006435
#3	-.006390	.0000099	-.012355

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2319.918	28177.73	2604.479	1963.123	3242.567
Stddev	3.155	83.10	61.965	2.565	3.078
%RSD	.1359783	.2949297	2.379158	.1306686	.0949321
#1	2317.817	28142.23	2574.835	1960.855	3241.468
#2	2318.391	28272.69	2562.905	1965.907	3240.189
#3	2323.545	28118.29	2675.697	1962.607	3246.044

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165359BS Acquired: 12/15/2024 18:23:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS359 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0217073**	**.0491947**	**.0196270**	**.0533178**	**.0925889**	**.3802635**
Stddev	.0048209	.0011412	.0013645	.0031865	.0019940	.0150138
%RSD	22.20879	2.319829	6.951942	5.976520	2.153590	3.948261
#1	.0163457	.0505116	.0211025	.0508612	.0903047	.3971262
#2	.0230917	.0484932	.0193679	.0569185	.0939820	.3683464
#3	.0256846	.0485794	.0184107	.0521738	.0934798	.3753178

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3902492**	**.0096547**	**.0089895**	**9.624309**	**.0202235**	**.0912949**
Stddev	.0029794	.0002033	.0001603	.048701	.0004913	.0003820
%RSD	.7634665	2.105899	1.782850	.5060235	2.429570	.4184292
#1	.3926474	.0097831	.0089251	9.675559	.0207908	.0917343
#2	.3911864	.0094203	.0088715	9.618732	.0199351	.0910418
#3	.3869139	.0097607	.0091720	9.578636	.0199446	.0911085

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0510558**	**.1713515**	**.0311262**	**9.950077**	**.0719206**	**.0204622**
Stddev	.0030673	.0412147	.0007053	.097923	.0004553	.0000634
%RSD	6.007689	24.05272	2.266105	.9841429	.6331264	.3099031
#1	.0534409	.1884234	.0306630	10.05508	.0724187	.0205345
#2	.0475957	.1243439	.0307776	9.86125	.0718173	.0204362
#3	.0521308	.2012871	.0319379	9.93390	.0715258	.0204159

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.635655**	**.0932455**	**.0994555**	**9.557946**	**.0154924**	F **-.000833**
Stddev	.821308	.0007594	.0148663	.113885	.0017995	.001967
%RSD	8.523640	.8144369	14.94767	1.191525	11.61536	236.2356
#1	10.32363	.0934477	.1012692	9.613005	.0134628	-.002781
#2	8.72637	.0938834	.0837656	9.426994	.0168928	-.000870
#3	9.85697	.0924055	.1133317	9.633839	.0161217	.001153

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165359BS Acquired: 12/15/2024 18:23:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS359 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0176460	.1550186	F .4920665	.0115679	.1906413	.1993334
Stddev	.0004032	.0022241	.0041881	.0011031	.0027769	.0008736
%RSD	2.284722	1.434729	.8511327	9.535731	1.456636	.4382569
#1	.0173219	.1564179	.4964855	.0120681	.1932960	.2002316
#2	.0180975	.1561839	.4881557	.0123323	.1908717	.1992819
#3	.0175186	.1524540	.4915582	.0103033	.1877564	.1984867

Elem	Li6707
Units	ppm
Avg	F .0204459
Stddev	.0047854
%RSD	23.40495
#1	.0158373
#2	.0201101
#3	.0253903

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2322.121	28135.02	2588.280	1960.542	3232.854
Stddev	11.960	84.87	28.122	10.165	8.297
%RSD	.5150483	.3016364	1.086522	.5184849	.2566588
#1	2321.749	28127.85	2556.621	1961.610	3230.585
#2	2334.263	28053.97	2597.853	1949.885	3242.049
#3	2310.352	28223.25	2610.366	1970.131	3225.926

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165408BL Acquired: 12/15/2024 18:27:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS408 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039213**	**.0013801**	**.0009244**	**-.001717**	**.0000859**	**-.019750**	**.0000096**
Stddev	.0029220	.0019519	.0013168	.002730	.0026696	.003175	.0012089
%RSD	74.51536	141.4317	142.4449	158.9837	3106.452	16.07516	12598.11
#1	.0034861	-.000859	.0006072	.001320	.0005324	-.016153	.0012872
#2	.0012413	.002276	-.000205	-.002506	.0025042	-.022164	-.000142
#3	.0070365	.002723	.002371	-.003966	-.002779	-.020932	-.001116

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000902**	**.0000600**	**-.008436**	**.0001501**	**-.000120**	**.0007108**	**.0195408**
Stddev	.0000709	.0000240	.017880	.0010617	.000174	.0044211	.0162812
%RSD	78.60899	40.02072	211.9354	707.2761	145.4726	621.9377	83.31921
#1	.0001472	.0000325	-.025522	-.000552	-.000009	.0057173	.0280253
#2	.0001126	.0000771	.010144	.001372	-.000030	-.002657	.0298274
#3	.0000108	.0000703	-.009931	-.000370	-.000321	-.000928	.0007696

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001506**	**.0532775**	**-.000248**	**.0005791**	**-.038560**	**.0020889**	**-.011870**
Stddev	.000868	.0489686	.000617	.0000738	1.032253	.0121285	.011838
%RSD	57.66936	91.91226	248.8393	12.73934	2676.986	580.6162	99.72491
#1	-.002397	.0105712	-.000527	.0006092	-.346752	-.011498	-.000237
#2	-.000662	.0425363	-.000676	.0004951	-.881616	.011823	-.023902
#3	-.001459	.1067251	.000459	.0006331	1.112686	.005942	-.011471

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3204808**	**-.001652**	**-.002958**	**.0004387**	**-.008152**	**.0012512**	**-.001795**
Stddev	.1466463	.000407	.001396	.0003614	.002379	.0012025	.001476
%RSD	45.75821	24.65398	47.18463	82.39251	29.18375	96.11409	82.20073
#1	.2220180	-.001258	-.004250	.0008526	-.005444	.0001453	-.003495
#2	.2504061	-.002072	-.003146	.0001856	-.009903	.0010769	-.000841
#3	.4890182	-.001627	-.001478	.0002778	-.009110	.0025313	-.001049

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165408BL Acquired: 12/15/2024 18:27:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS408 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002233	.0001975	-.009396
Stddev	.000615	.0000408	.006943
%RSD	27.54630	20.67157	73.88844
#1	-.002889	.0001514	-.012391
#2	-.001670	.0002291	-.001459
#3	-.002139	.0002121	-.014339

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2319.796	28250.21	2570.421	1963.975	3255.174
Stddev	6.758	96.15	8.542	6.305	12.400
%RSD	.2913247	.3403434	.3323247	.3210396	.3809331
#1	2320.959	28349.64	2578.637	1970.351	3255.863
#2	2325.897	28243.26	2571.038	1963.832	3267.215
#3	2312.532	28157.72	2561.587	1957.743	3242.444

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165408BS Acquired: 12/15/2024 18:31:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS408 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0208627**	**.0486157**	**.0168878**	**.0550551**	**.0969031**	**.4077708**
Stddev	.0014573	.0018509	.0018954	.0071726	.0014842	.0040527
%RSD	6.985145	3.807095	11.22345	13.02807	1.531636	.9938617
#1	.0194967	.0496424	.0184215	.0619193	.0951969	.4110413
#2	.0223967	.0464791	.0174732	.0556363	.0978959	.4032369
#3	.0206947	.0497257	.0147688	.0476095	.0976165	.4090341

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3917727**	**.0099342**	**.0090561**	**9.657341**	**.0199329**	**.0919765**
Stddev	.0006944	.0001317	.0000469	.110262	.0006314	.0004116
%RSD	.1772361	1.325222	.5174382	1.141743	3.167779	.4474469
#1	.3916614	.0100860	.0090178	9.692484	.0193224	.0919577
#2	.3925160	.0098656	.0090421	9.745748	.0198930	.0915746
#3	.3911407	.0098510	.0091084	9.533791	.0205834	.0923971

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0456237**	**.2023339**	**.0304110**	**10.15312**	**.0716974**	**.0198299**
Stddev	.0099454	.0387305	.0025264	.10813	.0003494	.0011130
%RSD	21.79880	19.14189	8.307627	1.064989	.4872947	5.612768
#1	.0566926	.1660080	.0302940	10.26104	.0717120	.0200300
#2	.0427386	.1979051	.0279451	10.15356	.0713409	.0186304
#3	.0374397	.2430884	.0329939	10.04478	.0720392	.0208293

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.899030**	**.1005988**	**.1000637**	**9.729479**	**.0167161**	F **-.003060**
Stddev	.742033	.0034942	.0079551	.130971	.0012792	.001148
%RSD	7.496016	3.473370	7.950040	1.346126	7.652249	37.53334
#1	9.722537	.0979627	.0908927	9.720830	.0170822	-.002504
#2	10.71340	.1045621	.1051001	9.603047	.0152938	-.002295
#3	9.26116	.0992716	.1041984	9.864560	.0177723	-.004380

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165408BS Acquired: 12/15/2024 18:31:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS408 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0175603	.1570852	F .4949146	.0114232	.1936510	.2010279
Stddev	.0006215	.0033449	.0009964	.0010850	.0024950	.0011566
%RSD	3.539333	2.129327	.2013180	9.498233	1.288400	.5753486
#1	.0182438	.1544313	.4939071	.0124289	.1929432	.2021061
#2	.0170290	.1559820	.4958995	.0102733	.1915864	.2011713
#3	.0174081	.1608424	.4949372	.0115672	.1964234	.1998062

Elem	Li6707
Units	ppm
Avg	.0216338
Stddev	.0049815
%RSD	23.02650
#1	.0271894
#2	.0175648
#3	.0201472

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2302.876	28007.00	2544.900	1939.778	3203.795
Stddev	2.620	79.26	14.251	2.832	5.372
%RSD	.1137630	.2829871	.5600002	.1460017	.1676608
#1	2299.856	28054.01	2546.819	1943.011	3200.589
#2	2304.232	27915.50	2529.786	1938.585	3209.996
#3	2304.540	28051.50	2558.094	1937.738	3200.799

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165373BL Acquired: 12/15/2024 18:35:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS373 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019611	.0011746	-.000633	-.000191	-.001513	-.022701	.0007224
Stddev	.0022229	.0011591	.002304	.004486	.002080	.009603	.0005279
%RSD	113.3495	98.67579	363.9370	2342.926	137.5117	42.30066	73.07639
#1	.0039537	.0022539	-.000717	.003697	-.002557	-.017131	.0011705
#2	-.000436	-.000050	-.002894	.000827	.000883	-.017184	.0001405
#3	.002366	.001320	.001712	-.005099	-.002864	-.033790	.0008563

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000001	.0000425	-.017746	.0007197	.0001036	.0001048	-.002287
Stddev	.000124	.0000096	.048479	.0005014	.0002652	.0070917	.012821
%RSD	9000.051	22.60822	273.1764	69.67500	255.9573	6764.990	560.5353
#1	-.000074	.0000325	-.055476	.0012986	-.000202	-.003677	-.011586
#2	.000141	.0000517	-.034694	.0004213	.000271	.008286	.012338
#3	-.000072	.0000432	.036931	.0004391	.000243	-.004295	-.007614

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020168	.0069904	.0001252	.0012111	.2537445	.0025819	-.014930
Stddev	.0019374	.0457642	.0000094	.0003736	.4652006	.0172496	.009068
%RSD	96.06397	654.6764	7.541398	30.85161	183.3342	668.1048	60.73530
#1	.0025342	.0051425	.0001318	.0007853	-.139397	.0223440	-.014427
#2	-.000127	-.037822	.0001144	.0014843	.133312	-.005145	-.006124
#3	.003643	.053650	.0001294	.0013636	.767319	-.009453	-.024239

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1275713	-.001284	-.002187	.0001593	-.004614	.0027901	-.002714
Stddev	.0944882	.002521	.001893	.0002660	.003551	.0004589	.001431
%RSD	74.06696	196.4423	86.58362	166.9640	76.96280	16.44796	52.73572
#1	.0771029	.000173	-.000601	.0004018	-.007838	.0030356	-.001119
#2	.2365773	.000172	-.001676	-.000125	-.000808	.0030740	-.003886
#3	.0690336	-.004195	-.004283	.000201	-.005195	.0022606	-.003136

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165373BL Acquired: 12/15/2024 18:35:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS373 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0001950	.0002076	-.008285
Stddev	.0018962	.0002617	.006410
%RSD	972.4814	126.0922	77.37074
#1	.0000767	-.000010	-.002471
#2	.0021476	.000135	-.015159
#3	-.001639	.000498	-.007225

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2325.361	28102.79	2563.013	1949.089	3245.680
Stddev	1.136	356.98	15.854	26.167	4.640
%RSD	.0488519	1.270268	.6185622	1.342501	.1429571
#1	2325.706	28165.37	2544.721	1957.744	3250.996
#2	2326.284	28424.33	2571.528	1969.831	3242.445
#3	2324.092	27718.65	2572.789	1919.691	3243.598

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165373BS Acquired: 12/15/2024 18:39:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS373 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0210009	.0499943	.0195116	.0523439	.0925672	.3707225
Stddev	.0030597	.0003615	.0028860	.0042883	.0040225	.0080544
%RSD	14.56950	.7230569	14.79111	8.192641	4.345542	2.172623
#1	.0211548	.0501165	.0226365	.0505191	.0918405	.3727299
#2	.0178670	.0502788	.0169467	.0492697	.0889576	.3775834
#3	.0239807	.0495875	.0189515	.0572428	.0969036	.3618543

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3857945	.0097901	.0089067	9.541447	.0193646	.0914474
Stddev	.0025657	.0000296	.0001900	.018061	.0006195	.0009559
%RSD	.6650384	.3021581	2.132754	.1892889	3.198938	1.045319
#1	.3837575	.0098243	.0088781	9.523894	.0194631	.0922166
#2	.3849500	.0097736	.0087326	9.540471	.0199289	.0903772
#3	.3886760	.0097725	.0091093	9.559976	.0187018	.0917484

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0383048	.1979875	.0321982	9.996391	.0712556	.0201276
Stddev	.0119272	.0271166	.0015520	.058592	.0003962	.0005384
%RSD	31.13771	13.69610	4.820169	.5861308	.5560305	2.675108
#1	.0246326	.1803582	.0327032	10.01027	.0711126	.0198015
#2	.0437049	.1843921	.0304566	9.93211	.0709508	.0207491
#3	.0465769	.2292123	.0334349	10.04680	.0717035	.0198323

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.755707	.0935324	.1016046	9.459422	.0176009	F -.003974
Stddev	.950151	.0156153	.0056454	.078940	.0017804	.001019
%RSD	9.739441	16.69510	5.556231	.8345139	10.11540	25.65270
#1	9.671265	.0895986	.0960726	9.548326	.0195833	-.003919
#2	8.850595	.1107385	.1013843	9.432394	.0161382	-.005020
#3	10.74526	.0802602	.1073569	9.397545	.0170812	-.002983

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: PB165373BS Acquired: 12/15/2024 18:39:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS373 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0172625	.1568443	F .4860638	.0106430	.1871377	.1976237
Stddev	.0006630	.0034204	.0008442	.0004901	.0055480	.0011078
%RSD	3.840663	2.180780	.1736796	4.605358	2.964654	.5605708
#1	.0178247	.1547957	.4867431	.0111596	.1881444	.1976895
#2	.0165314	.1549443	.4863295	.0101844	.1811553	.1964845
#3	.0174315	.1607930	.4851187	.0105850	.1921134	.1986972

Elem	Li6707
Units	ppm
Avg	F .0177363
Stddev	.0009596
%RSD	5.410488
#1	.0181784
#2	.0166353
#3	.0183951

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2332.507	28123.35	2578.619	1949.644	3226.159
Stddev	13.353	96.33	3.684	5.967	21.105
%RSD	.5724731	.3425190	.1428645	.3060528	.6541925
#1	2322.635	28234.44	2579.287	1955.747	3208.977
#2	2347.700	28072.69	2581.924	1949.360	3249.717
#3	2327.186	28062.93	2574.648	1943.824	3219.782

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-17 Acquired: 12/15/2024 18:43:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJP9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0862568**	**.0138682**	**10.21266**	**.0046705**	**.0273367**	**76.07806**
Stddev	.0045925	.0013276	.01127	.0012788	.0019825	.11939
%RSD	5.324209	9.572600	.1103121	27.38035	7.252301	.1569354
#1	.0820181	.0145783	10.20014	.0036732	.0250835	76.02466
#2	.0911359	.0123366	10.22198	.0061122	.0288136	76.21483
#3	.0856165	.0146897	10.21585	.0042261	.0281129	75.99468

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.257295**	**.0066425**	**.0091014**	**62.66482**	**.1512696**	**.1027919**
Stddev	.003286	.0001278	.0000634	.32309	.0010484	.0006776
%RSD	.2613190	1.923994	.6966595	.5155844	.6930775	.6592225
#1	1.256397	.0065250	.0091246	62.32742	.1500660	.1022013
#2	1.260937	.0067786	.0090297	62.97139	.1517590	.1026428
#3	1.254553	.0066241	.0091500	62.69564	.1519838	.1035317

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2638653**	**154.5090**	**6.478957**	**32.65559**	**.2420119**	**-.009214**
Stddev	.0059883	.4085	.016016	.05965	.0002947	.000754
%RSD	2.269459	.2643841	.2471973	.1826539	.1217898	8.185172
#1	.2705145	154.5255	6.494666	32.62686	.2417362	-.010070
#2	.2621843	154.9089	6.479555	32.72417	.2423226	-.008645
#3	.2588971	154.0924	6.462651	32.61575	.2419770	-.008928

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.088426**	**.1609862**	**2.343898**	**10.77819**	F **13.47691**	**.0126846**
Stddev	.251196	.0050988	.027781	.11671	.00630	.0026848
%RSD	23.07888	3.167235	1.185255	1.082795	.0467400	21.16566
#1	.817463	.1583400	2.374420	10.65242	13.48245	.0134588
#2	1.313541	.1668641	2.320087	10.88298	13.47006	.0096977
#3	1.134273	.1577544	2.337187	10.79916	13.47821	.0148971

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-17 Acquired: 12/15/2024 18:43:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJP9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038849	3.397539	8.108319	.1688521	1.189837	.0238242
Stddev	.0000713	.008637	.063280	.0001733	.001447	.0004097
%RSD	1.834704	.2541998	.7804342	.1026248	.1215862	1.719504
#1	.0038340	3.388100	8.036095	.1690347	1.189021	.0239110
#2	.0038542	3.405046	8.154029	.1688316	1.188982	.0241835
#3	.0039663	3.399471	8.134834	.1686899	1.191507	.0233781

Elem	Li6707
Units	ppm
Avg	.1147477
Stddev	.0032597
%RSD	2.840781
#1	.1110967
#2	.1157804
#3	.1173659

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2823.612	34218.86	3252.497	2373.308	3056.464
Stddev	7.695	154.61	25.540	14.181	5.112
%RSD	.2725288	.4518326	.7852370	.5975294	.1672469
#1	2832.477	34285.67	3280.838	2383.788	3062.364
#2	2819.711	34328.83	3245.388	2378.965	3053.659
#3	2818.649	34042.08	3231.265	2357.171	3053.368

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-18 Acquired: 12/15/2024 18:47:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJT9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0979243**	**.0080400**	**2.838877**	**.0024707**	**.0353417**	**69.16943**
Stddev	.0035692	.0023244	.000848	.0046004	.0020770	.18269
%RSD	3.644887	28.91088	.0298791	186.1974	5.876957	.2641139
#1	.0959258	.0053760	2.838145	.0060339	.0344729	69.30125
#2	.0958020	.0096555	2.839806	-.002723	.0377121	68.96090
#3	.1020451	.0090884	2.838678	.004101	.0338403	69.24614

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.591388**	**.0071086**	**.0095568**	**77.40014**	**.1968122**	**.1003500**
Stddev	.005063	.0001463	.0000894	.40390	.0002493	.0010396
%RSD	.3181669	2.057472	.9349073	.5218388	.1266429	1.035954
#1	1.595476	.0071293	.0096325	77.55572	.1965562	.1014520
#2	1.585724	.0069531	.0095797	76.94159	.1968263	.1002111
#3	1.592963	.0072435	.0094582	77.70312	.1970541	.0993868

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3669935**	**188.1985**	**4.647405**	**33.75371**	**.2412761**	**-.011897**
Stddev	.0007579	.5206	.011008	.09386	.0012240	.001184
%RSD	.2065085	.2766392	.2368581	.2780847	.5073095	9.952855
#1	.3668791	188.1576	4.639007	33.81077	.2426774	-.010530
#2	.3662992	187.6995	4.643341	33.80499	.2407354	-.012612
#3	.3678020	188.7384	4.659867	33.64538	.2404156	-.012549

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7795940**	**.1867577**	**2.085324**	**7.180475**	F **12.45014**	**-.002959**
Stddev	.4974927	.0049083	.024167	.105305	.01158	.001823
%RSD	63.81433	2.628190	1.158931	1.466547	.0929766	61.61640
#1	1.069391	.1921035	2.058741	7.070888	12.45064	-.003131
#2	.205147	.1857153	2.091261	7.189636	12.43832	-.004690
#3	1.064244	.1824542	2.105970	7.280900	12.46146	-.001056

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-18 Acquired: 12/15/2024 18:47:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJT9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0099044**	**5.687358**	**8.874004**	**.2389737**	**1.291500**	**.0461387**
Stddev	.0006017	.004333	.035567	.0011548	.004024	.0003698
%RSD	6.075252	.0761884	.4007953	.4832338	.3115908	.8015623
#1	.0095725	5.682434	8.912531	.2399225	1.286939	.0457141
#2	.0105990	5.690589	8.842423	.2376879	1.293008	.0463904
#3	.0095417	5.689050	8.867057	.2393106	1.294552	.0463116

Elem	Li6707
Units	ppm
Avg	**.1101406**
Stddev	.0036482
%RSD	3.312277
#1	.1089276
#2	.1072535
#3	.1142408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2621.043**	**31963.62**	**2980.926**	**2209.514**	**3064.709**
Stddev	4.302	54.02	13.103	11.180	6.142
%RSD	.1641222	.1690150	.4395498	.5059843	.2004150
#1	2617.462	32017.49	2971.671	2220.006	3057.710
#2	2625.815	31963.92	2995.919	2210.782	3069.203
#3	2619.853	31909.45	2975.189	2197.755	3067.214

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-19 Acquired: 12/15/2024 18:51:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0897685	.0065332	2.169439	.0042829	.0300490	58.86769	1.301166
Stddev	.0033907	.0011927	.012305	.0056187	.0023196	.11910	.006268
%RSD	3.777116	18.25617	.5672023	131.1894	7.719411	.2023115	.4817306
#1	.0936390	.0052886	2.156645	-.001959	.0274369	58.73655	1.297094
#2	.0883442	.0066447	2.170484	.005871	.0318682	58.89739	1.298020
#3	.0873223	.0076661	2.181189	.008936	.0308417	58.96912	1.308384

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060075	.0073883	63.96481	.1602444	.0847774	.2809324	168.9002
Stddev	.0001729	.0001414	.17440	.0006744	.0005193	.0071496	.6007
%RSD	2.878370	1.913691	.2726512	.4208759	.6125959	2.544944	.3556577
#1	.0059045	.0072983	63.85176	.1600738	.0842412	.2728732	168.4327
#2	.0062071	.0073153	63.87701	.1596717	.0852781	.2865122	168.6902
#3	.0059109	.0075513	64.16566	.1609878	.0848128	.2834118	169.5777

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.213753	30.26586	.1935840	-.009904	.4580694	.1540575	1.651126
Stddev	.018196	.08020	.0007308	.001274	.4867761	.0124232	.004739
%RSD	.4318261	.2649825	.3775227	12.86463	106.2669	8.064027	.2870098
#1	4.197205	30.25904	.1929441	-.010528	.6718087	.1405897	1.648754
#2	4.210815	30.18928	.1943804	-.008438	-.099009	.1565134	1.648041
#3	4.233240	30.34925	.1934275	-.010747	.801408	.1650693	1.656583

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.113958	9.894857	-.010201	.0076044	4.086802	9.490909	.0932338
Stddev	.107481	.072164	.000993	.0004788	.017015	.010722	.0011680
%RSD	2.101717	.7293092	9.731086	6.296807	.4163301	.1129741	1.252744
#1	5.079291	9.815121	-.009232	.0075119	4.067156	9.491017	.0919426
#2	5.028089	9.913768	-.011216	.0071786	4.096835	9.501577	.0942168
#3	5.234494	9.955683	-.010154	.0081227	4.096413	9.480133	.0935420

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-19 Acquired: 12/15/2024 18:51:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.162799	.0089013	.0935563
Stddev	.007198	.0003992	.0081772
%RSD	.6190623	4.484618	8.740372
#1	1.161928	.0087975	.0915739
#2	1.156076	.0085642	.1025424
#3	1.170394	.0093421	.0865526

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.487	31090.71	2880.494	2155.825	3075.792
Stddev	6.154	88.81	4.128	14.597	11.015
%RSD	.2421399	.2856549	.1433182	.6770886	.3581116
#1	2544.213	31037.95	2885.012	2143.100	3085.286
#2	2545.807	31193.24	2876.918	2171.760	3078.373
#3	2534.441	31040.93	2879.554	2152.617	3063.715

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-20 Acquired: 12/15/2024 18:55:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1103386	.0162644	2.842377	-.001475	.0282688	66.49128
Stddev	.0033841	.0048526	.003219	.004780	.0041110	.36127
%RSD	3.066974	29.83560	.1132340	324.1216	14.54266	.5433386
#1	.1099070	.0193498	2.841023	-.005279	.0308695	66.23115
#2	.1139178	.0187722	2.840057	.003891	.0235293	66.90377
#3	.1071911	.0106710	2.846052	-.003037	.0304077	66.33891

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.680520	.0070333	.0088517	130.5810	.1594406	.1063218
Stddev	.010527	.0000055	.0001037	.5265	.0011947	.0005044
%RSD	.6264230	.0786353	1.171851	.4031905	.7492904	.4743718
#1	1.675623	.0070395	.0089249	130.1903	.1582328	.1068887
#2	1.692604	.0070313	.0087330	131.1797	.1606217	.1061540
#3	1.673334	.0070290	.0088971	130.3730	.1594674	.1059228

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3559207	185.5842	5.360271	50.87773	.2218921	-.010425
Stddev	.0069320	.8869	.032646	.37900	.0007511	.000400
%RSD	1.947618	.4778706	.6090273	.7449223	.3385070	3.832430
#1	.3527223	185.4022	5.349115	50.57788	.2227586	-.009969
#2	.3638745	186.5479	5.397032	51.30371	.2214269	-.010593
#3	.3511654	184.8025	5.334666	50.75159	.2214907	-.010713

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5937152	.1899309	1.900200	5.241804	F 10.98552	.0152333
Stddev	.2970891	.0064978	.015226	.108631	.01538	.0032309
%RSD	50.03900	3.421145	.8012712	2.072388	.1399994	21.20942
#1	.8695125	.1891746	1.885305	5.357061	10.96871	.0189542
#2	.2791422	.1967738	1.899559	5.141311	10.98896	.0136077
#3	.6324910	.1838444	1.915737	5.227040	10.99889	.0131381

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-20 Acquired: 12/15/2024 18:55:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0114650	4.776345	9.216245	.1413043	1.235093	.1212163
Stddev	.0004993	.011783	.020577	.0021496	.006632	.0013226
%RSD	4.354956	.2466847	.2232669	1.521284	.5369610	1.091122
#1	.0118146	4.765223	9.217796	.1432692	1.233567	.1203107
#2	.0108931	4.788693	9.236002	.1390084	1.242355	.1227341
#3	.0116871	4.775119	9.194936	.1416353	1.229357	.1206041

Elem	Li6707
Units	ppm
Avg	.1060882
Stddev	.0045357
%RSD	4.275409
#1	.1021506
#2	.1050663
#3	.1110477

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.817	31288.38	2931.992	2168.430	2998.922
Stddev	3.525	36.40	5.165	8.180	5.326
%RSD	.1368370	.1163505	.1761678	.3772107	.1776080
#1	2573.922	31286.19	2937.434	2174.108	2998.251
#2	2579.883	31325.83	2927.158	2172.128	3004.552
#3	2573.644	31253.12	2931.384	2159.055	2993.963

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-21 Acquired: 12/15/2024 18:58:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0906189	.0163906	2.361956	-.009483	.0273626	61.83587	1.888526
Stddev	.0013246	.0024121	.001090	.005973	.0029629	.18437	.003220
%RSD	1.461706	14.71647	.0461623	62.98740	10.82814	.2981589	.1705205
#1	.0893559	.0191150	2.362641	-.012023	.0245380	61.62306	1.885317
#2	.0905032	.0145269	2.362527	-.013767	.0271031	61.94744	1.888504
#3	.0919975	.0155297	2.360698	-.002660	.0304467	61.93711	1.891757

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070960	.0085189	223.8502	.1417994	.1158534	.3105641	188.7253
Stddev	.0000776	.0000883	.4667	.0005900	.0004463	.0012389	.7907
%RSD	1.093162	1.036155	.2084740	.4160910	.3852185	.3989018	.4189580
#1	.0070086	.0086196	223.3117	.1420333	.1163299	.3115962	187.8247
#2	.0071227	.0084550	224.1013	.1422367	.1157849	.3109059	189.3054
#3	.0071567	.0084822	224.1375	.1411284	.1154453	.3091903	189.0458

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.517290	50.68648	.3316666	-.010329	1.290734	.1654650	1.819921
Stddev	.011329	.15311	.0015548	.001085	.634411	.0146711	.010105
%RSD	.2053275	.3020663	.4687831	10.50318	49.15119	8.866605	.5552539
#1	5.504355	50.82369	.3327798	-.009077	1.160264	.1606455	1.823860
#2	5.522066	50.52132	.3323298	-.010947	.731701	.1819396	1.827463
#3	5.525448	50.71442	.3298902	-.010964	1.980237	.1538099	1.808440

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.886158	8.156210	.0158331	.0150903	3.350474	10.14499	.0776941
Stddev	.180742	.016922	.0019091	.0003793	.012048	.02740	.0019894
%RSD	3.699052	.2074786	12.05744	2.513855	.3596050	.2701007	2.560498
#1	4.764993	8.159314	.0142785	.0147686	3.353893	10.11653	.0792244
#2	5.093903	8.171366	.0152569	.0149938	3.360443	10.14725	.0754453
#3	4.799579	8.137951	.0179639	.0155086	3.337085	10.17119	.0784124

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-21 Acquired: 12/15/2024 18:58:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.575099	.3150772	.1042521
Stddev	.013842	.0006026	.0041498
%RSD	.8787787	.1912676	3.980568
#1	1.571118	.3150367	.1028172
#2	1.563683	.3156990	.1089289
#3	1.590494	.3144958	.1010101

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2464.064	30150.99	2845.967	2086.449	2897.192
Stddev	4.954	28.15	10.783	3.377	8.051
%RSD	.2010382	.0933479	.3788828	.1618615	.2778990
#1	2458.497	30155.67	2857.702	2087.827	2890.846
#2	2467.988	30176.50	2843.702	2082.600	2894.481
#3	2465.706	30120.80	2836.496	2088.919	2906.249

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-22 Acquired: 12/15/2024 19:02:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0864969	.0121776	1.871540	-.005746	.0305104	55.61931	1.379338
Stddev	.0018603	.0029878	.004332	.002240	.0035623	.56976	.012720
%RSD	2.150722	24.53518	.2314687	38.97604	11.67573	1.024401	.9221936
#1	.0846237	.0128705	1.872224	-.005768	.0299583	55.68405	1.379931
#2	.0883440	.0147580	1.866906	-.007974	.0272564	55.01993	1.366332
#3	.0865229	.0089042	1.875488	-.003495	.0343166	56.15393	1.391751

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070853	.0067965	126.4401	.1334942	.0969175	.3074825	186.1554
Stddev	.0000563	.0000640	1.3834	.0047066	.0003143	.0031590	1.9311
%RSD	.7941563	.9414935	1.094153	3.525673	.3243073	1.027382	1.037336
#1	.0070841	.0067620	126.7403	.1305650	.0967727	.3047749	186.5632
#2	.0070297	.0068704	124.9312	.1389233	.0967018	.3067195	184.0530
#3	.0071422	.0067572	127.6488	.1309945	.0972782	.3109532	187.8499

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.950270	48.89854	.2389908	-.012100	2.045462	.1730504	1.395138
Stddev	.038988	.30818	.0013973	.001600	.567858	.0085661	.047104
%RSD	.9869731	.6302402	.5846457	13.22163	27.76187	4.950061	3.376326
#1	3.950109	48.96398	.2390637	-.010993	1.883557	.1785703	1.369211
#2	3.911363	48.56290	.2375585	-.013934	1.576139	.1773985	1.449510
#3	3.989339	49.16875	.2403501	-.011372	2.676690	.1631823	1.366694

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.524763	7.692525	.0054291	.0105717	3.153478	9.019652	.0824056
Stddev	.070622	.036441	.0035964	.0003155	.018564	.085493	.0003752
%RSD	1.560792	.4737238	66.24335	2.984442	.5886886	.9478518	.4553123
#1	4.511279	7.666981	.0081688	.0109160	3.133387	8.922685	.0822149
#2	4.461856	7.676338	.0013565	.0105026	3.157051	9.052104	.0828379
#3	4.601156	7.734256	.0067620	.0102965	3.169996	9.084168	.0821641

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5012-22 Acquired: 12/15/2024 19:02:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJW3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.480367	.1347533	.0854487
Stddev	.009258	.0011857	.0073018
%RSD	.6253952	.8799230	8.545185
#1	1.488680	.1346565	.0898094
#2	1.470390	.1336189	.0895177
#3	1.482032	.1359845	.0770190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2483.969	30390.46	2843.119	2090.002	2985.433
Stddev	5.678	904.46	17.479	69.857	10.375
%RSD	.2285744	2.976122	.6147884	3.342444	.3475158
#1	2477.618	31091.20	2854.273	2139.351	2980.217
#2	2488.554	29369.44	2852.109	2010.069	2997.380
#3	2485.736	30710.74	2822.974	2120.586	2978.701

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4907-01A Acquired: 12/15/2024 19:06:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHE1A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1229294**	**.0278922**	**1.422318**	**.0339170**	**.0235576**	**94.93577**
Stddev	.0040943	.0032479	.007727	.0071753	.0031906	.11697
%RSD	3.330633	11.64455	.5432643	21.15536	13.54364	.1232131
#1	.1247020	.0243782	1.418402	.0422013	.0235160	94.91463
#2	.1258388	.0307840	1.417332	.0298842	.0267688	95.06187
#3	.1182475	.0285143	1.431219	.0296654	.0203881	94.83080

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.931320**	**.0144296**	**.0101184**	**277.9015**	**.1533782**	**.1287007**
Stddev	.004396	.0000429	.0001634	.7432	.0038416	.0008076
%RSD	.2276392	.2971871	1.614472	.2674265	2.504685	.6275262
#1	1.933159	.0144046	.0101174	277.8620	.1552493	.1278046
#2	1.934498	.0144051	.0099555	277.1788	.1559258	.1293723
#3	1.926302	.0144792	.0102822	278.6636	.1489595	.1289253

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.577661**	**174.0677**	**10.17936**	**82.18575**	**.2182752**	**-.009143**
Stddev	.021815	.3620	.03190	.33353	.0017001	.000739
%RSD	1.382713	.2079412	.3133577	.4058197	.7788743	8.084474
#1	1.602769	174.3368	10.20906	82.55574	.2174005	-.008964
#2	1.566852	174.2101	10.18337	82.09336	.2171905	-.009955
#3	1.563361	173.6562	10.14564	81.90817	.2202345	-.008510

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7201231**	**.2012830**	**4.347097**	**12.19097**	F **16.53562**	**.0139819**
Stddev	.1134782	.0032064	.111379	.07443	.05126	.0005627
%RSD	15.75816	1.592967	2.562155	.6105320	.3099820	4.024712
#1	.8396762	.2007813	4.426448	12.25403	16.48295	.0135277
#2	.7067964	.1983571	4.395073	12.21002	16.53855	.0146114
#3	.6138967	.2047107	4.219769	12.10887	16.58534	.0138066

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4907-01A Acquired: 12/15/2024 19:06:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHE1A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044168	3.970727	9.365105	.1035796	.9897947	.2514076
Stddev	.0003085	.022567	.024510	.0012311	.0049457	.0010243
%RSD	6.984759	.5683359	.2617204	1.188578	.4996671	.4074194
#1	.0045677	3.947375	9.357031	.1048205	.9934587	.2519435
#2	.0046209	3.972387	9.392634	.1023585	.9917563	.2520528
#3	.0040619	3.992418	9.345651	.1035599	.9841692	.2502265

Elem	Li6707
Units	ppm
Avg	.1658521
Stddev	.0021413
%RSD	1.291098
#1	.1682286
#2	.1652550
#3	.1640728

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2723.347	33274.35	3141.308	2305.247	2850.948
Stddev	6.023	677.48	5.112	48.079	12.984
%RSD	.2211713	2.036031	.1627311	2.085653	.4554271
#1	2725.023	32932.67	3138.980	2274.570	2859.295
#2	2728.354	32835.75	3147.169	2280.513	2857.560
#3	2716.663	34054.63	3137.773	2360.659	2835.989

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-01DLX2 Acquired: 12/15/2024 19:10:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0371012	.0907126	.2096007	.0702438	.1818476	72.32734
Stddev	.0034052	.0073368	.0026777	.0059257	.0033444	.23046
%RSD	9.178168	8.087944	1.277509	8.435837	1.839127	.3186290
#1	.0408621	.0857018	.2076483	.0768723	.1780076	72.30071
#2	.0342272	.0873021	.2126532	.0654597	.1841219	72.56995
#3	.0362143	.0991339	.2085005	.0683994	.1834135	72.11136

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4822183	.0055355	.0075676	F 1127.289	5.964658	.0881320
Stddev	.0019354	.0000839	.0001341	3.284	.004514	.0002262
%RSD	.4013473	1.515905	1.772064	.2913450	.0756819	.2566978
#1	.4818339	.0055291	.0076217	1128.137	5.965876	.0883755
#2	.4843170	.0056224	.0074149	1130.065	5.968438	.0880923
#3	.4805040	.0054550	.0076661	1123.663	5.959659	.0879283

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.039846	750.5274	F 121.8084	200.2915	.2051224	-.042445
Stddev	.004996	3.3515	.4640	.9858	.0009098	.001253
%RSD	12.53949	.4465522	.3809061	.4922060	.4435606	2.951879
#1	-.036791	748.1990	121.4389	199.6591	.2045939	-.043705
#2	-.045612	754.3686	122.3291	201.4275	.2046004	-.041199
#3	-.037135	749.0146	121.6571	199.7881	.2061730	-.042432

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.257505	2.480733	.2469434	1.216413	F 13.91096	.1199205
Stddev	.371280	.012078	.0144875	.133346	.04812	.0091358
%RSD	16.44648	.4868677	5.866715	10.96222	.3458876	7.618225
#1	2.509077	2.492956	.2312638	1.079136	13.89009	.1097871
#2	2.432357	2.468806	.2497336	1.224658	13.87681	.1224478
#3	1.831082	2.480436	.2598328	1.345445	13.96599	.1275267

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-01DLX2 Acquired: 12/15/2024 19:10:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156429	29.38566	5.818286	.0947211	11.37351	.5282161
Stddev	.0006151	.08371	.051779	.0011118	.05823	.0014280
%RSD	3.931980	.2848773	.8899312	1.173724	.5119675	.2703486
#1	.0156149	29.36397	5.818652	.0955100	11.30844	.5266634
#2	.0162715	29.31492	5.869880	.0952037	11.42071	.5294732
#3	.0150423	29.47808	5.766325	.0934496	11.39137	.5285116

Elem	Li6707
Units	ppm
Avg	.1284287
Stddev	.0018315
%RSD	1.426100
#1	.1271669
#2	.1305294
#3	.1275899

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2114.931	26490.67	2595.708	1804.954	2641.177
Stddev	5.149	23.78	9.411	3.067	7.053
%RSD	.2434805	.0897490	.3625595	.1699308	.2670472
#1	2118.157	26473.44	2593.289	1801.419	2641.036
#2	2117.643	26517.79	2587.742	1806.535	2648.300
#3	2108.992	26480.77	2606.092	1806.909	2634.196

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-02DLX2 Acquired: 12/15/2024 19:14:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0410587	.0840360	.2939146	.0516553	.1877096	72.82333
Stddev	.0013959	.0049765	.0036240	.0055306	.0018430	.43948
%RSD	3.399771	5.921825	1.232999	10.70681	.9818602	.6034922
#1	.0414392	.0862859	.2979865	.0532229	.1895447	73.33017
#2	.0422248	.0783319	.2910432	.0455100	.1858587	72.54785
#3	.0395119	.0874903	.2927142	.0562328	.1877254	72.59199

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6956292	.0107868	.0089529	F 1043.632	6.270912	.0901542
Stddev	.0040880	.0001734	.0002486	4.525	.016801	.0009170
%RSD	.5876651	1.607551	2.776341	.4335772	.2679205	1.017120
#1	.6999380	.0109747	.0088423	1048.793	6.252854	.0911046
#2	.6918053	.0106330	.0092376	1041.760	6.286082	.0892748
#3	.6951445	.0107526	.0087788	1040.344	6.273801	.0900830

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0129507	744.3764	F 93.31770	188.6808	.5564657	-.047367
Stddev	.0019104	5.2757	.65450	1.0366	.0003452	.000739
%RSD	14.75141	.7087356	.7013622	.5493844	.0620254	1.560792
#1	.0113595	750.2260	94.04703	189.8733	.5560688	-.047535
#2	.0150695	739.9788	92.78149	187.9955	.5566950	-.046558
#3	.0124231	742.9245	93.12460	188.1735	.5566334	-.048008

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.968108	.9591334	.2107943	2.773378	8.445073	.3480306
Stddev	.456042	.0141296	.0036932	.151986	.025440	.0028635
%RSD	15.36474	1.473162	1.752019	5.480165	.3012400	.8227646
#1	2.460178	.9663776	.2130009	2.815408	8.417087	.3509632
#2	3.101742	.9428509	.2065307	2.899926	8.451333	.3478870
#3	3.342403	.9681717	.2128513	2.604800	8.466798	.3452416

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-02DLX2 Acquired: 12/15/2024 19:14:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0305275	42.56692	5.124770	.0845466	7.773347	.0449362
Stddev	.0006328	.09610	.037011	.0002169	.069423	.0005844
%RSD	2.072826	.2257616	.7221998	.2565929	.8930921	1.300589
#1	.0311137	42.53842	5.154714	.0847571	7.853509	.0453348
#2	.0298567	42.48829	5.083391	.0845591	7.733626	.0442653
#3	.0306122	42.67405	5.136205	.0843237	7.732906	.0452085

Elem	Li6707
Units	ppm
Avg	.1382725
Stddev	.0020132
%RSD	1.455938
#1	.1375289
#2	.1367369
#3	.1405517

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2148.354	27070.07	2648.455	1845.385	2656.987
Stddev	1.447	162.46	25.423	15.695	1.398
%RSD	.0673651	.6001452	.9599281	.8505144	.0526175
#1	2148.396	26986.94	2621.593	1835.278	2655.933
#2	2146.887	26965.99	2672.142	1837.410	2656.455
#3	2149.780	27257.27	2651.629	1863.467	2658.573

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-03DLX2 Acquired: 12/15/2024 19:17:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0243544**	**.0444499**	**.1309664**	**-.006483**	**.0414518**	**43.03429**	**.4613443**
Stddev	.0043578	.0045160	.0016823	.005551	.0012793	.28562	.0027433
%RSD	17.89352	10.15987	1.284562	85.63153	3.086253	.6636931	.5946361
#1	.0293320	.0414319	.1299430	-.000185	.0404204	42.77059	.4584996
#2	.0225042	.0496418	.1329080	-.010666	.0428834	42.99462	.4615599
#3	.0212268	.0422761	.1300480	-.008597	.0410516	43.33767	.4639735

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046417**	**.0029277**	**519.9265**	**1.160363**	**.0693649**	**.0454895**	**233.0073**
Stddev	.0001006	.0001595	3.2952	.003262	.0005576	.0038089	1.2943
%RSD	2.168020	5.447948	.6337728	.2811374	.8039183	8.373221	.5554941
#1	.0045348	.0027998	516.4146	1.158102	.0698189	.0494322	231.6970
#2	.0046557	.0031064	520.4144	1.164103	.0687425	.0418302	233.0399
#3	.0047346	.0028768	522.9504	1.158884	.0695334	.0452060	234.2851

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.60236**	**102.2063**	**.1234077**	**-.012824**	**1.331236**	**.3775655**	**.1801232**
Stddev	.17236	.7596	.0009163	.000724	.593060	.0129954	.0070538
%RSD	.6244512	.7432485	.7425026	5.643656	44.54961	3.441896	3.916073
#1	27.43833	101.4220	.1232748	-.013634	1.987173	.3737137	.1867877
#2	27.58675	102.2583	.1225651	-.012240	.832884	.3920514	.1727359
#3	27.78200	102.9386	.1243832	-.012599	1.173650	.3669314	.1808459

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.533116**	**3.144882**	**.1467260**	**.0126694**	**14.01009**	**7.997074**	**.0284796**
Stddev	.135280	.025616	.0027876	.0009698	.08779	.018542	.0011567
%RSD	5.340456	.8145362	1.899879	7.654290	.6265966	.2318636	4.061488
#1	2.530134	3.123080	.1462084	.0115685	13.97265	8.013332	.0275190
#2	2.399351	3.138471	.1442335	.0130425	13.94722	8.001011	.0297636
#3	2.669862	3.173094	.1497361	.0133971	14.11039	7.976879	.0281564

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-03DLX2 Acquired: 12/15/2024 19:17:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.503801	.4696285	.0898979
Stddev	.013285	.0037585	.0036055
%RSD	.5306130	.8003234	4.010718
#1	2.489530	.4661491	.0881728
#2	2.506064	.4691217	.0940420
#3	2.515810	.4736148	.0874791

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2267.212	27767.04	2641.550	1923.935	2821.945
Stddev	15.861	49.84	10.157	8.256	22.956
%RSD	.6995816	.1794874	.3845204	.4291160	.8134896
#1	2277.183	27810.07	2635.484	1932.954	2838.166
#2	2275.531	27712.43	2653.277	1916.750	2831.990
#3	2248.922	27778.62	2635.891	1922.103	2795.678

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV030 Acquired: 12/15/2024 19:21:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV030 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.816856**	**4.854990**	**23.80364**	**4.595654**	**4.632597**	**390.6082**	**9.816482**
Stddev	.009982	.011785	.05037	.009603	.005861	1.4290	.019846
%RSD	.2072397	.2427298	.2116195	.2089505	.1265186	.3658376	.2021748
#1	4.815840	4.841718	23.75317	4.595120	4.628340	390.1492	9.810479
#2	4.827308	4.864228	23.85391	4.605513	4.639282	392.2103	9.838636
#3	4.807421	4.859024	23.80383	4.586330	4.630169	389.4651	9.800329

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4775143**	**2.381883**	**398.9024**	**14.75127**	**2.351727**	**14.76399**	**401.8717**
Stddev	.0009793	.003056	1.5672	.02564	.004120	.00380	1.2460
%RSD	.2050783	.1283027	.3928744	.1738060	.1752110	.0257089	.3100598
#1	.4768134	2.380570	398.5496	14.77823	2.349904	14.76800	402.4024
#2	.4770963	2.385376	400.6159	14.72719	2.356445	14.76350	402.7646
#3	.4786332	2.379703	397.5416	14.74839	2.348833	14.76046	400.4482

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.56949**	**388.7432**	**2.394430**	**1.210153**	**395.9310**	**2.432054**	**14.70531**
Stddev	.03613	.9578	.003672	.001052	.9755	.044005	.06457
%RSD	.2480041	.2463768	.1533377	.0869308	.2463733	1.809386	.4391183
#1	14.54312	388.6405	2.392891	1.210397	396.7256	2.395929	14.73503
#2	14.61068	389.7482	2.398621	1.211061	396.2252	2.481063	14.74968
#3	14.55469	387.8409	2.391779	1.209000	394.8423	2.419170	14.63123

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**145.1337**	**4.773080**	**4.649665**	**4.623996**	**4.788151**	**4.869521**	**4.825180**
Stddev	.5390	.007233	.007696	.006296	.009707	.009777	.011610
%RSD	.3713649	.1515316	.1655228	.1361495	.2027371	.2007802	.2406059
#1	145.6299	4.769261	4.643526	4.620797	4.794814	4.859495	4.812368
#2	145.2111	4.781422	4.647170	4.631249	4.792626	4.870038	4.835004
#3	144.5603	4.768558	4.658300	4.619943	4.777014	4.879029	4.828167

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV030 Acquired: 12/15/2024 19:21:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV030 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.898991	4.624726	5.086026
Stddev	.002274	.012361	.014458
%RSD	.0464244	.2672874	.2842773
#1	4.901200	4.624552	5.102608
#2	4.899116	4.637172	5.079413
#3	4.896657	4.612452	5.076056

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1931.275	25228.52	2503.901	1680.263	2565.632
Stddev	2.325	111.89	1.745	4.616	3.872
%RSD	.1204005	.4435021	.0696873	.2746918	.1509314
#1	1933.950	25136.71	2504.304	1676.143	2570.045
#2	1929.732	25195.70	2501.990	1679.394	2562.798
#3	1930.144	25353.14	2505.409	1685.251	2564.055

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB030 Acquired: 12/15/2024 19:25:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB030 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028257	.0023657	.0020192	.0009179	-.003020	-.018354	.0006783
Stddev	.0029190	.0005613	.0020827	.0049861	.001214	.019724	.0007978
%RSD	103.3003	23.72574	103.1425	543.2018	40.20021	107.4638	117.6198
#1	-.000544	.0021554	.0008319	.0047486	-.004230	-.005341	.0002466
#2	.004439	.0019399	.0044240	.0027248	-.003028	-.041049	.0015990
#3	.004582	.0030018	.0008017	-.004720	-.001802	-.008674	.0001894

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000510	.0000025	-.012278	-.000423	-.000053	-.006159	.0037707
Stddev	.0000662	.0000487	.049592	.000187	.000361	.003769	.0291453
%RSD	129.9295	1966.744	403.9019	44.20485	687.6396	61.19900	772.9424
#1	.0001128	-.000023	-.016605	-.000615	.000180	-.003320	.0347205
#2	-.000019	.000059	-.059565	-.000242	-.000469	-.010435	-.000257
#3	.000059	-.000028	.039335	-.000411	.000132	-.004722	-.023151

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002326	.0941412	.0006862	.0003470	-.796150	-.001377	-.007217
Stddev	.0007080	.0526708	.0002380	.0004677	.575484	.005801	.003420
%RSD	304.3588	55.94873	34.67813	134.7828	72.28342	421.2241	47.38887
#1	.0004556	.1526757	.0009587	.0006243	-1.05587	-.005790	-.005599
#2	-.000560	.0505736	.0005195	.0006096	-1.19600	-.003536	-.004906
#3	.000802	.0791744	.0005803	-.000193	-.13658	.005194	-.011146

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5455238	-.001515	.0085667	.0005124	-.002088	.0024138	-.000798
Stddev	.1530768	.001243	.0023839	.0002039	.001973	.0001323	.000484
%RSD	28.06051	82.06938	27.82805	39.78949	94.47836	5.480770	60.57093
#1	.4204925	-.001792	.0104100	.0007451	-.000793	.0023627	-.001185
#2	.7162424	-.000156	.0094155	.0004271	-.004359	.0023147	-.000954
#3	.4998365	-.002595	.0058745	.0003650	-.001112	.0025641	-.000256

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB030 Acquired: 12/15/2024 19:25:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB030 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.000934	.0001392	.0033009
Stddev	.002526	.0001510	.0023474
%RSD	270.3561	108.4551	71.11416
#1	-.001183	.0000097	.0035796
#2	.001707	.0003050	.0008266
#3	-.003327	.0001029	.0054965

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2314.724	28089.03	2554.109	1957.126	3246.956
Stddev	5.814	154.00	21.270	7.083	4.391
%RSD	.2511925	.5482398	.8327905	.3618916	.1352304
#1	2319.885	27934.98	2533.120	1953.565	3251.898
#2	2315.863	28089.12	2553.557	1952.529	3243.503
#3	2308.425	28242.97	2575.650	1965.282	3245.467

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-04DLX2 Acquired: 12/15/2024 19:29:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225009	.0330815	.0482060	-.044346	-.008546	20.27046	.5947114
Stddev	.0036071	.0012597	.0016882	.002062	.005738	.04677	.0019856
%RSD	16.03092	3.807895	3.501943	4.650459	67.14434	.2307365	.3338800
#1	.0261373	.0344884	.0497935	-.046706	-.002163	20.28366	.5947816
#2	.0189238	.0326979	.0483919	-.043442	-.013276	20.21851	.5926917
#3	.0224417	.0320582	.0464326	-.042890	-.010197	20.30921	.5966611

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018890	.0017340	683.8794	.0394396	.0668442	.0496537	55.39091
Stddev	.0000307	.0001017	2.0796	.0014241	.0003428	.0027498	.24108
%RSD	1.622840	5.862544	.3040934	3.610810	.5128141	5.537971	.4352428
#1	.0019244	.0016170	682.7597	.0404359	.0671549	.0469872	55.23607
#2	.0018710	.0017843	682.5995	.0400744	.0669014	.0494940	55.26798
#3	.0018716	.0018007	686.2790	.0378085	.0664765	.0524798	55.66868

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.280971	247.7486	.0846483	-.003456	.1515126	.0725664	.1315626
Stddev	.002447	1.1819	.0002621	.000190	.5601065	.0066794	.0068255
%RSD	.1910031	.4770550	.3095896	5.484109	369.6765	9.204585	5.188008
#1	1.282886	247.6585	.0843666	-.003371	-.065031	.0648540	.1277832
#2	1.281812	246.6143	.0848849	-.003324	.787564	.0763550	.1274628
#3	1.278214	248.9730	.0846932	-.003673	-.267995	.0764901	.1394418

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.581243	1.147160	.0143971	.0191656	18.14549	4.439462	.0090490
Stddev	.039798	.006789	.0026561	.0001677	.04284	.010949	.0010669
%RSD	1.541806	.5918442	18.44889	.8752158	.2360990	.2466258	11.79018
#1	2.560539	1.141417	.0161982	.0191204	18.18967	4.450694	.0102028
#2	2.556065	1.145409	.0113467	.0190251	18.10413	4.438872	.0088460
#3	2.627125	1.154653	.0156465	.0193513	18.14266	4.428820	.0080981

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-04DLX2 Acquired: 12/15/2024 19:29:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5859452	7.379751	.0907292
Stddev	.0054416	.011314	.0062535
%RSD	.9286860	.1533168	6.892450
#1	.5819959	7.375378	.0835180
#2	.5836874	7.371276	.0940119
#3	.5921523	7.392600	.0946578

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2183.908	26690.70	2553.874	1841.029	2704.340
Stddev	7.237	141.69	13.690	21.472	9.444
%RSD	.3313958	.5308561	.5360514	1.166327	.3492175
#1	2190.778	26751.58	2554.326	1858.471	2711.737
#2	2184.594	26791.79	2567.333	1847.568	2707.579
#3	2176.353	26528.75	2539.964	1817.047	2693.702

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-05DLX2 Acquired: 12/15/2024 19:33:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019281	.0384417	.0623671	-.057141	-.010986	4.336867
Stddev	.0041382	.0018047	.0038488	.003007	.004848	.009118
%RSD	214.6279	4.694722	6.171118	5.263041	44.12634	.2102523
#1	.0034507	.0404233	.0651800	-.056662	-.012239	4.345132
#2	.0050893	.0368924	.0579809	-.054402	-.005635	4.327085
#3	-.002756	.0380093	.0639403	-.060359	-.015085	4.338382

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7878888	.0007370	.0006249	F 892.2093	.0270615	.0536786
Stddev	.0025288	.0001494	.0000925	1.5300	.0009976	.0007273
%RSD	.3209565	20.27560	14.79686	.1714802	3.686357	1.354833
#1	.7859379	.0005981	.0006896	893.5473	.0266944	.0538947
#2	.7869828	.0007178	.0005190	890.5413	.0281907	.0528678
#3	.7907458	.0008951	.0006660	892.5393	.0262995	.0542733

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0203350	21.11593	.5364214	485.2023	.0415299	-.000016
Stddev	.0084707	.04186	.0019466	.6808	.0003940	.000893
%RSD	41.65580	.1982304	.3628787	.1403200	.9487786	5439.330
#1	.0163148	21.12528	.5373281	485.2621	.0419271	.000999
#2	.0146229	21.07019	.5341869	484.4936	.0415233	-.000677
#3	.0300673	21.15233	.5377492	485.8514	.0411391	-.000371

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1682391	.0299990	.0286844	.1104929	.4836608	.0470674
Stddev	.4335271	.0178867	.0020874	.0448762	.0045761	.0021679
%RSD	257.6852	59.62415	7.277171	40.61457	.9461374	4.605908
#1	.0859061	.0441151	.0283970	.1329573	.4884952	.0467182
#2	.6370289	.0098840	.0267555	.1397006	.4793964	.0493887
#3	-.218218	.0359979	.0309006	.0588208	.4830906	.0450953

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-05DLX2 Acquired: 12/15/2024 19:33:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030509	10.21868	1.930876	.0075045	.0547926	20.80809
Stddev	.0003046	.01532	.008475	.0025022	.0040742	.29034
%RSD	9.982905	.1499594	.4389006	33.34291	7.435749	1.395307
#1	.0028025	10.22937	1.931459	.0100959	.0529846	20.63502
#2	.0033907	10.20112	1.939045	.0073152	.0519352	21.14329
#3	.0029594	10.22555	1.922126	.0051023	.0594580	20.64598

Elem	Li6707
Units	ppm
Avg	.0850509
Stddev	.0068642
%RSD	8.070704
#1	.0842423
#2	.0786268
#3	.0922836

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2095.931	25643.62	2474.939	1746.195	2589.347
Stddev	7.764	41.16	10.839	5.788	8.048
%RSD	.3704240	.1605221	.4379438	.3314493	.3108161
#1	2098.296	25627.54	2481.020	1740.749	2589.831
#2	2102.237	25690.40	2462.425	1752.273	2597.141
#3	2087.260	25612.93	2481.372	1745.563	2581.067

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-08DLX2 Acquired: 12/15/2024 19:37:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0299452	.0293908	.0528877	-.039707	-.005042	23.96299	.6853305
Stddev	.0051979	.0047853	.0006342	.005639	.001771	.28527	.0088454
%RSD	17.35818	16.28161	1.199082	14.20184	35.12293	1.190465	1.290677
#1	.0306952	.0248438	.0528508	-.037631	-.003208	24.16850	.6899792
#2	.0347274	.0343832	.0535395	-.035401	-.006742	24.08319	.6908824
#3	.0244130	.0289453	.0522728	-.046090	-.005176	23.63729	.6751301

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023067	.0019527	658.1787	.0490229	.0723837	.0575884	67.98669
Stddev	.0001833	.0001346	7.1178	.0001440	.0002901	.0121003	.83936
%RSD	7.945380	6.894756	1.081441	.2936671	.4007301	21.01180	1.234600
#1	.0021040	.0018338	662.2447	.0489630	.0722209	.0623831	68.64503
#2	.0023554	.0019254	662.3315	.0491871	.0727186	.0665566	68.27354
#3	.0024607	.0020989	649.9599	.0489185	.0722117	.0438254	67.04151

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.515712	253.1386	.0984697	-.004133	.1478512	.0810084	.1590022
Stddev	.017083	2.8147	.0007378	.000801	.0267482	.0171960	.0021279
%RSD	1.127045	1.111920	.7493189	19.37321	18.09127	21.22744	1.338302
#1	1.525265	255.1374	.0976182	-.003436	.1545467	.1001586	.1591663
#2	1.525883	254.3587	.0988695	-.005008	.1706156	.0759780	.1610433
#3	1.495990	249.9197	.0989214	-.003955	.1183914	.0668886	.1567969

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.107571	1.396915	.0146946	.0184285	15.87106	4.578217	.0104328
Stddev	.183042	.004519	.0027227	.0004733	.06295	.033230	.0016009
%RSD	5.890198	.3235163	18.52856	2.568532	.3966109	.7258189	15.34460
#1	3.060406	1.394253	.0171921	.0179105	15.86795	4.603172	.0096750
#2	3.309580	1.394359	.0150995	.0185363	15.80973	4.590981	.0122718
#3	2.952727	1.402133	.0117921	.0188386	15.93550	4.540498	.0093515

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-08DLX2 Acquired: 12/15/2024 19:37:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6073412	1.066819	.1132072
Stddev	.0066017	.012535	.0114527
%RSD	1.086989	1.175020	10.11660
#1	.6115280	1.075547	.1150860
#2	.6107646	1.072456	.1236044
#3	.5997309	1.052455	.1009313

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2217.866	27041.29	2598.402	1866.150	2712.293
Stddev	9.335	150.71	28.951	9.186	8.399
%RSD	.4208930	.5573354	1.114193	.4922480	.3096558
#1	2227.015	26996.60	2573.265	1863.408	2720.294
#2	2218.229	26917.99	2591.886	1858.648	2713.037
#3	2208.356	27209.30	2630.056	1876.395	2703.546

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-12DLX2 Acquired: 12/15/2024 19:41:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28N1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0485704**	**.0248790**	**.0700912**	**-.044073**	**.0044623**	**31.19122**	**.1494366**
Stddev	.0035814	.0017713	.0031593	.012829	.0010716	.26588	.0015126
%RSD	7.373706	7.119643	4.507431	29.10776	24.01334	.8524222	1.012231
#1	.0511560	.0261933	.0708756	-.055899	.0037700	31.04393	.1481566
#2	.0444825	.0228647	.0727844	-.045885	.0039204	31.49815	.1511059
#3	.0500726	.0255791	.0666136	-.030435	.0056966	31.03159	.1490475

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033849**	**.0027812**	**593.0689**	**.0633372**	**.0855694**	**.0641416**	**106.7363**
Stddev	.0002468	.0000165	4.2914	.0004527	.0002925	.0059986	.9108
%RSD	7.291796	.5918056	.7235899	.7147561	.3418004	9.352048	.8533255
#1	.0035892	.0027987	591.2560	.0628845	.0853424	.0601567	106.2115
#2	.0034550	.0027788	597.9692	.0637899	.0858994	.0612277	107.7880
#3	.0031107	.0027660	589.9815	.0633373	.0854662	.0710405	106.2095

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.124847**	**90.14924**	**.1399980**	**-.007828**	**-.031967**	**.0990801**	**.2091751**
Stddev	.020921	.54765	.0012077	.000903	.552989	.0045420	.0136238
%RSD	.9845820	.6074964	.8626445	11.53988	1729.897	4.584185	6.513092
#1	2.114900	89.70890	.1393135	-.006821	-.670422	.1038473	.2128700
#2	2.148886	90.76247	.1413924	-.008568	.296053	.0985900	.2205703
#3	2.110756	89.97635	.1392880	-.008095	.278470	.0948030	.1940850

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.204630**	**2.365600**	**.0018970**	**.0307044**	**13.98408**	**5.199362**	**.0123661**
Stddev	.208089	.006082	.0004346	.0001135	.02946	.014897	.0014174
%RSD	4.949037	.2571052	22.91157	.3697602	.2106368	.2865072	11.46216
#1	4.101088	2.359196	.0021513	.0308067	13.95141	5.185123	.0138833
#2	4.444178	2.371299	.0013951	.0307241	13.99219	5.214839	.0110759
#3	4.068625	2.366305	.0021446	.0305823	14.00862	5.198125	.0121392

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-12DLX2 Acquired: 12/15/2024 19:41:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28N1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4810422	.8829590	.1111117
Stddev	.0062689	.0077789	.0042875
%RSD	1.303190	.8810004	3.858711
#1	.4867417	.8784205	.1063746
#2	.4743278	.8919411	.1122345
#3	.4820571	.8785155	.1147262

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2286.115	27777.66	2664.397	1919.492	2794.517
Stddev	12.029	105.01	12.794	8.048	10.762
%RSD	.5261648	.3780345	.4801790	.4192923	.3851003
#1	2291.904	27882.14	2675.551	1924.786	2796.564
#2	2272.286	27672.12	2650.431	1910.230	2782.878
#3	2294.153	27778.72	2667.209	1923.460	2804.108

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-18DLX2 Acquired: 12/15/2024 19:44:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28N7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0268333	.0276953	.0565578	-.038652	.0017721	24.18778	.5152988
Stddev	.0054320	.0021170	.0016470	.004442	.0008132	.09217	.0016545
%RSD	20.24356	7.643773	2.912066	11.49306	45.89222	.3810517	.3210703
#1	.0271398	.0256696	.0555495	-.040306	.0017146	24.28498	.5171655
#2	.0321055	.0298931	.0556655	-.042030	.0009891	24.17670	.5140136
#3	.0212545	.0275231	.0584584	-.033620	.0026125	24.10165	.5147173

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024158	.0020642	577.5329	.0567330	.0724322	.0721719	70.57066
Stddev	.0000884	.0000877	2.0487	.0004132	.0002843	.0060528	.13751
%RSD	3.659696	4.249036	.3547326	.7284198	.3925404	8.386588	.1948520
#1	.0024583	.0020256	579.7981	.0562840	.0723516	.0757675	70.69522
#2	.0024750	.0020025	575.8097	.0568174	.0721969	.0755644	70.59366
#3	.0023142	.0021646	576.9909	.0570975	.0727481	.0651837	70.42311

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.583984	181.3733	.1012109	-.004471	.4164051	.0809262	.1768633
Stddev	.006301	.5986	.0002658	.000526	.0428077	.0003369	.0031326
%RSD	.3978052	.3300539	.2626167	11.76480	10.28031	.4162886	1.771204
#1	1.585108	181.9769	.1009061	-.004703	.3745068	.0806629	.1740969
#2	1.589647	180.7798	.1013944	-.003869	.4600677	.0808098	.1762282
#3	1.577196	181.3632	.1013323	-.004840	.4146407	.0813058	.1802648

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.351439	1.621239	.0059581	.0188250	17.18621	4.913556	.0109905
Stddev	.095223	.003552	.0026029	.0005342	.03428	.034659	.0009078
%RSD	2.841269	.2190967	43.68720	2.837669	.1994344	.7053825	8.260327
#1	3.417152	1.619423	.0030982	.0187084	17.14812	4.952514	.0108800
#2	3.394930	1.618962	.0081888	.0183588	17.19592	4.902013	.0119485
#3	3.242236	1.625332	.0065872	.0194079	17.21457	4.886140	.0101430

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-18DLX2 Acquired: 12/15/2024 19:44:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28N7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6464127	1.562166	.0927826
Stddev	.0015735	.004153	.0050702
%RSD	.2434136	.2658197	5.464625
#1	.6446807	1.565849	.0968652
#2	.6468035	1.562984	.0871072
#3	.6477540	1.557665	.0943753

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2235.510	27224.31	2617.518	1886.722	2761.412
Stddev	12.403	38.05	20.737	2.292	11.460
%RSD	.5547951	.1397555	.7922249	.1214973	.4149989
#1	2230.567	27181.69	2593.579	1885.171	2756.425
#2	2249.622	27236.42	2629.050	1889.355	2774.521
#3	2226.341	27254.83	2629.926	1885.639	2753.291

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-02DLX2 Acquired: 12/15/2024 19:48:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHS8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0224789	.0357064	.5742739	-.049763	-.009535	13.63263	.2572250
Stddev	.0016271	.0017092	.0020541	.005721	.000797	.09084	.0014559
%RSD	7.238136	4.786679	.3576915	11.49648	8.362504	.6663068	.5659966
#1	.0230265	.0353557	.5764586	-.048620	-.008712	13.53817	.2555993
#2	.0237616	.0375637	.5739813	-.055969	-.009589	13.64039	.2576673
#3	.0206487	.0341998	.5723817	-.044699	-.010304	13.71934	.2584086

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016025	.0066296	793.9560	.0374402	.0656577	.0805836	65.45184
Stddev	.0001213	.0001134	2.9129	.0003266	.0004030	.0022143	.16417
%RSD	7.570798	1.710817	.3668878	.8722172	.6137516	2.747875	.2508221
#1	.0016695	.0065176	790.9769	.0378071	.0654418	.0790857	65.33551
#2	.0016756	.0066268	794.0932	.0371815	.0661226	.0795380	65.38038
#3	.0014625	.0067444	796.7979	.0373320	.0654087	.0831272	65.63962

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.736794	416.7508	.0556175	-.002090	-.252245	.0317654	1.237725
Stddev	.024069	2.1697	.0006284	.001624	.355456	.0044981	.018911
%RSD	.3572817	.5206137	1.129934	77.71014	140.9173	14.16028	1.527892
#1	6.709054	414.5855	.0563268	-.000820	-.660521	.0332891	1.220099
#2	6.749185	416.7420	.0551303	-.001530	-.084597	.0353037	1.257702
#3	6.752143	418.9248	.0553953	-.003920	-.011615	.0267034	1.235375

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.350557	2.814835	.0250186	.0011398	18.00668	4.975454	.0176322
Stddev	.187909	.011281	.0022551	.0007376	.03359	.009721	.0025867
%RSD	4.319196	.4007743	9.013598	64.71697	.1865304	.1953793	14.67010
#1	4.139535	2.809072	.0249534	.0008775	18.01466	4.966366	.0200317
#2	4.499795	2.807600	.0227968	.0005691	17.96983	4.974291	.0179730
#3	4.412341	2.827834	.0273055	.0019727	18.03557	4.985704	.0148921

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-02DLX2 Acquired: 12/15/2024 19:48:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHS8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1876706	.2183614	.0755767
Stddev	.0068910	.0023085	.0021316
%RSD	3.671863	1.057203	2.820493
#1	.1842492	.2158710	.0768139
#2	.1831599	.2187833	.0768009
#3	.1956028	.2204298	.0731153

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2194.217	26940.33	2620.990	1849.676	2611.020
Stddev	4.752	32.38	11.059	4.234	5.512
%RSD	.2165714	.1201802	.4219291	.2289249	.2110925
#1	2191.251	26943.41	2626.704	1851.769	2606.765
#2	2199.698	26906.52	2628.023	1844.803	2617.246
#3	2191.703	26971.05	2608.243	1852.457	2609.049

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-19DLX2 Acquired: 12/15/2024 19:52:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHX9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0183615	.0321050	.4786630	-.043290	-.007565	20.69058	.2354646
Stddev	.0007987	.0025502	.0030985	.004667	.005460	.07215	.0010583
%RSD	4.349649	7.943348	.6473340	10.78053	72.16967	.3487025	.4494685
#1	.0179839	.0291731	.4759955	-.042174	-.013704	20.75819	.2343043
#2	.0178218	.0333325	.4779317	-.039281	-.003254	20.61462	.2363769
#3	.0192790	.0338093	.4820618	-.048413	-.005736	20.69895	.2357127

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020602	.0028336	565.4569	.0377477	.0633825	.0924691	57.34177
Stddev	.0001251	.0000869	2.7609	.0003701	.0000645	.0081278	.12841
%RSD	6.074296	3.068531	.4882628	.9805500	.1017563	8.789784	.2239296
#1	.0022043	.0028379	568.6409	.0377661	.0634563	.0862596	57.48439
#2	.0019966	.0029182	563.7252	.0381084	.0633543	.0894792	57.30556
#3	.0019796	.0027445	564.0046	.0373688	.0633368	.1016684	57.23536

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.073460	285.0491	.0569733	-.002729	.1666120	.0422983	.5781615
Stddev	.003549	.8599	.0005458	.001771	.5356661	.0119486	.0083920
%RSD	.0871220	.3016839	.9580628	64.89418	321.5051	28.24847	1.451501
#1	4.077554	285.9403	.0571318	-.002610	-.448302	.0560879	.5708292
#2	4.071571	284.2243	.0574224	-.004557	.531939	.0350094	.5873144
#3	4.071255	284.9826	.0563658	-.001021	.416199	.0357976	.5763410

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.858869	2.172074	.0292819	-.000017	5.981291	5.486057	.0237293
Stddev	.084322	.006882	.0040930	.000219	.025796	.037943	.0015837
%RSD	2.185136	.3168377	13.97803	1293.013	.4312797	.6916207	6.674138
#1	3.827663	2.173716	.0246764	.000175	5.966643	5.528338	.0254227
#2	3.794599	2.164520	.0325040	.000029	5.966153	5.454973	.0234802
#3	3.954346	2.177987	.0306652	-.000255	6.011076	5.474860	.0222848

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-19DLX2 Acquired: 12/15/2024 19:52:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHX9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2946809	.2332942	.0750348
Stddev	.0053056	.0009026	.0011091
%RSD	1.800465	.3869036	1.478081
#1	.3007306	.2342690	.0762525
#2	.2908189	.2324874	.0740825
#3	.2924932	.2331263	.0747695

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2241.276	27300.57	2621.836	1887.088	2706.293
Stddev	.519	64.94	14.877	10.343	1.703
%RSD	.0231690	.2378638	.5674188	.5480689	.0629217
#1	2241.004	27374.60	2604.957	1889.289	2705.417
#2	2241.874	27253.24	2627.509	1875.822	2705.207
#3	2240.948	27273.86	2633.041	1896.153	2708.256

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-21DLX2 Acquired: 12/15/2024 19:56:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHY1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0217450	.0309324	.1727616	-.031678	.0000254	33.03633	.2957673
Stddev	.0051710	.0006320	.0032551	.002851	.0031091	.07612	.0007421
%RSD	23.78015	2.043033	1.884140	9.000955	12258.04	.2304147	.2509101
#1	.0267156	.0314930	.1692636	-.033876	.0035528	33.07192	.2966234
#2	.0163946	.0310568	.1733196	-.028456	-.001160	32.94894	.2953729
#3	.0221248	.0302475	.1757016	-.032702	-.002317	33.08815	.2953057

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025619	.0031250	454.3990	.0485710	.0768133	.1114568	81.11236
Stddev	.0000500	.0000849	1.0743	.0009571	.0009157	.0019801	.22315
%RSD	1.950726	2.716557	.2364123	1.970483	1.192110	1.776541	.2751177
#1	.0025161	.0030481	453.9257	.0485807	.0758909	.1131897	80.97416
#2	.0025543	.0032161	453.6426	.0495232	.0777222	.1118820	80.99312
#3	.0026152	.0031109	455.6286	.0476091	.0768266	.1092986	81.36980

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.511071	107.0465	.0841495	-.005225	.5665264	.0703776	.4662213
Stddev	.009339	.1207	.0013657	.000741	1.034860	.0092999	.0158683
%RSD	.1694509	.1127987	1.622929	14.18697	182.6675	13.21435	3.403607
#1	5.521115	107.1849	.0845765	-.004975	1.429947	.0685054	.4835673
#2	5.502651	106.9914	.0826213	-.006059	.850227	.0621561	.4524354
#3	5.509447	106.9631	.0852507	-.004641	-.580595	.0804712	.4626612

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.890393	3.604217	-.005649	-.000300	1.466694	4.917284	.0172150
Stddev	.157742	.015301	.003089	.000355	.008414	.072242	.0007400
%RSD	4.054661	.4245244	54.69147	118.3199	.5736985	1.469145	4.298622
#1	4.021513	3.611592	-.002217	-.000587	1.464746	4.894206	.0180658
#2	3.934325	3.586625	-.008209	-.000410	1.459425	4.859400	.0167211
#3	3.715342	3.614433	-.006519	.000097	1.475912	4.998245	.0168582

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4940-21DLX2 Acquired: 12/15/2024 19:56:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHHY1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5782960	.3326440	.0885081
Stddev	.0021741	.0012532	.0058107
%RSD	.3759443	.3767302	6.565113
#1	.5776942	.3339858	.0825425
#2	.5764861	.3324422	.0941503
#3	.5807075	.3315039	.0888315

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2376.807	28968.86	2770.799	2007.466	2805.059
Stddev	17.886	188.10	20.042	16.428	19.127
%RSD	.7525079	.6493187	.7233360	.8183316	.6818877
#1	2392.718	28815.02	2778.508	1994.341	2821.727
#2	2380.254	28912.99	2785.842	2002.168	2809.274
#3	2357.449	29178.57	2748.047	2025.889	2784.176

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4963-07DLX2 Acquired: 12/15/2024 20:00:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ00 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0513252	.0319575	.2336006	-.026738	.0110236	37.54250	.3980675
Stddev	.0021281	.0016810	.0023495	.000540	.0018282	.36826	.0024917
%RSD	4.146387	5.259969	1.005795	2.020628	16.58414	.9809239	.6259475
#1	.0519980	.0320672	.2318525	-.026114	.0127425	37.87814	.4005509
#2	.0530356	.0335809	.2362715	-.027061	.0112255	37.14857	.3955675
#3	.0489420	.0302244	.2326779	-.027039	.0091029	37.60079	.3980840

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032799	.0034061	560.0529	.0528774	.0821424	.3121882	138.9715
Stddev	.0000250	.0000477	5.0608	.0006080	.0008832	.0063591	.9407
%RSD	.7636647	1.401716	.9036326	1.149920	1.075171	2.036935	.6768917
#1	.0032984	.0034472	564.7516	.0532153	.0825362	.3051142	139.8405
#2	.0032900	.0033537	554.6946	.0521755	.0811308	.3174302	137.9726
#3	.0032514	.0034174	560.7125	.0532415	.0827601	.3140201	139.1014

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.526436	55.96790	.0989465	-.008092	-.337298	.0901591	.4285133
Stddev	.066144	.24594	.0007065	.000469	.313057	.0032625	.0048738
%RSD	.7757522	.4394350	.7140186	5.799401	92.81329	3.618553	1.137380
#1	8.583072	56.21917	.0997361	-.008632	-.598379	.0939233	.4325569
#2	8.453741	55.72765	.0987293	-.007861	-.423281	.0884066	.4298813
#3	8.542496	55.95689	.0983741	-.007783	.009766	.0881475	.4231017

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.108933	4.724418	-.030299	.0014457	.6918823	5.098780	.0177679
Stddev	.207118	.018599	.000391	.0001529	.0020509	.050309	.0015626
%RSD	5.040664	.3936732	1.289933	10.57354	.2964255	.9866818	8.794422
#1	4.059266	4.745873	-.030748	.0016150	.6922752	5.156818	.0159863
#2	3.931165	4.714504	-.030032	.0014044	.6937083	5.067584	.0184120
#3	4.336369	4.712876	-.030117	.0013177	.6896634	5.071940	.0189056

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4963-07DLX2 Acquired: 12/15/2024 20:00:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ00 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6501018	.3940108	.0963523
Stddev	.0024078	.0017256	.0104199
%RSD	.3703659	.4379515	10.81433
#1	.6524084	.3953888	.1079828
#2	.6502925	.3920754	.0878683
#3	.6476043	.3945681	.0932058

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2383.128	29097.63	2756.902	2009.145	2812.439
Stddev	5.203	159.60	31.519	13.660	5.610
%RSD	.2183409	.5484900	1.143270	.6799062	.1994679
#1	2382.058	29095.55	2724.262	2001.549	2808.857
#2	2378.543	29258.26	2787.166	2024.915	2809.556
#3	2388.784	28939.09	2759.278	2000.972	2818.904

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-04DLX2 Acquired: 12/15/2024 20:04:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0153767	.0399084	.5025751	-.045788	-.009279	12.93205	.2070223
Stddev	.0057509	.0027290	.0047310	.004860	.003483	.06911	.0009451
%RSD	37.40013	6.838095	.9413485	10.61328	37.53319	.5344055	.4565280
#1	.0218241	.0402165	.4972719	-.042665	-.005390	12.99181	.2073309
#2	.0107762	.0370385	.5063620	-.051387	-.010334	12.94798	.2077747
#3	.0135297	.0424703	.5040915	-.043312	-.012111	12.85637	.2059615

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014662	.0046565	768.5710	.0379569	.0599403	.1074529	55.94768
Stddev	.0001112	.0001605	3.7227	.0006818	.0011153	.0073552	.35255
%RSD	7.587035	3.447083	.4843600	1.796287	1.860757	6.845099	.6301509
#1	.0013389	.0045077	770.9711	.0371924	.0597182	.1146615	56.24695
#2	.0015446	.0046351	770.4593	.0381765	.0589528	.1077379	56.03704
#3	.0015150	.0048266	764.2827	.0385019	.0611501	.0999592	55.55904

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.246359	396.3340	.0643570	-.001039	-.021086	.0344326	.9339372
Stddev	.027439	2.0466	.0000748	.000969	.558943	.0025867	.0089279
%RSD	.5230123	.5163819	.1162924	93.25573	2650.830	7.512377	.9559468
#1	5.261074	396.5945	.0644173	-.001951	.293118	.0338521	.9263762
#2	5.263301	398.2379	.0643805	-.000022	-.666423	.0372602	.9437866
#3	5.214701	394.1696	.0642733	-.001145	.310048	.0321854	.9316489

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.965219	2.441782	.0392318	.0010395	7.752916	4.794348	.0361161
Stddev	.169465	.018094	.0009996	.0005795	.036400	.035139	.0010893
%RSD	5.715086	.7410255	2.547911	55.74892	.4694960	.7329188	3.016011
#1	2.831940	2.451240	.0401507	.0016638	7.729545	4.820701	.0361648
#2	2.907778	2.420919	.0393773	.0009360	7.734347	4.807890	.0371802
#3	3.155938	2.453187	.0381674	.0005188	7.794855	4.754453	.0350033

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-04DLX2 Acquired: 12/15/2024 20:04:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2484698	.2617744	.0706404
Stddev	.0027274	.0010744	.0051769
%RSD	1.097662	.4104336	7.328602
#1	.2491091	.2621181	.0646628
#2	.2508208	.2626349	.0736749
#3	.2454796	.2605702	.0735835

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2165.014	26679.25	2565.866	1822.837	2616.900
Stddev	7.256	136.27	19.917	10.378	12.815
%RSD	.3351698	.5107872	.7762282	.5693316	.4897134
#1	2170.958	26830.84	2546.129	1834.488	2626.486
#2	2167.156	26566.92	2565.511	1814.585	2621.869
#3	2156.927	26639.98	2585.958	1819.439	2602.344

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-05DLX2 Acquired: 12/15/2024 20:07:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0201356**	**.0427347**	**.4088491**	**-.045009**	**-.012754**	**10.20088**
Stddev	.0023045	.0020541	.0013096	.005160	.002739	.06762
%RSD	11.44486	4.806545	.3203200	11.46472	21.47725	.6629127
#1	.0207919	.0433794	.4089963	-.050610	-.015907	10.26287
#2	.0175741	.0404356	.4074720	-.043968	-.011403	10.21101
#3	.0220407	.0443890	.4100789	-.040448	-.010953	10.12877

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1168002**	**.0013919**	**.0260024**	F **940.4342**	**.0286269**	**.0622751**
Stddev	.0005482	.0000638	.0000880	2.9563	.0014181	.0004833
%RSD	.4693111	4.587394	.3382764	.3143555	4.953659	.7760140
#1	.1171383	.0013186	.0260864	943.5013	.0271139	.0628206
#2	.1170945	.0014357	.0259109	940.1985	.0288411	.0621042
#3	.1161677	.0014213	.0260098	937.6028	.0299257	.0619006

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0619594**	**56.36200**	**5.866075**	**494.4810**	**.0570388**	**-.002101**
Stddev	.0109863	.29242	.018190	2.0171	.0011384	.000174
%RSD	17.73149	.5188236	.3100926	.4079244	1.995829	8.290800
#1	.0613311	56.15441	5.857022	495.8476	.0578008	-.001985
#2	.0732463	56.69642	5.887015	495.4310	.0575853	-.002301
#3	.0513007	56.23516	5.854188	492.1643	.0557302	-.002017

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7973661**	**.0299612**	**4.667694**	**3.306847**	**1.531754**	**.0366315**
Stddev	.5285865	.0006449	.084457	.150718	.004484	.0003522
%RSD	66.29157	2.152386	1.809397	4.557764	.2927435	.9614275
#1	1.391799	.0297764	4.572004	3.163785	1.526870	.0368772
#2	.620112	.0306784	4.731835	3.464203	1.532708	.0362280
#3	.380187	.0294290	4.699244	3.292554	1.535685	.0367893

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-05DLX2 Acquired: 12/15/2024 20:07:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ03 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000226	12.70461	4.546496	.0216548	.1232983	.2797154
Stddev	.000157	.04716	.019860	.0007999	.0032277	.0014817
%RSD	69.52944	.3711896	.4368288	3.693990	2.617809	.5297048
#1	-.000363	12.74044	4.526996	.0207478	.1268698	.2801544
#2	-.000055	12.65118	4.566698	.0219570	.1224353	.2809280
#3	-.000260	12.72220	4.545794	.0222596	.1205898	.2780639

Elem	Li6707
Units	ppm
Avg	.0865648
Stddev	.0027751
%RSD	3.205766
#1	.0858050
#2	.0842488
#3	.0896406

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2135.601	26473.98	2545.260	1810.960	2553.962
Stddev	6.107	478.31	16.333	37.834	8.648
%RSD	.2859635	1.806700	.6416973	2.089157	.3385952
#1	2128.563	26981.05	2541.482	1853.118	2544.266
#2	2139.506	26030.88	2531.147	1779.958	2560.878
#3	2138.734	26410.02	2563.151	1799.806	2556.742

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-06DLX2 Acquired: 12/15/2024 20:11:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0205878**	**.0387710**	**.3347556**	**-.058550**	**-.010668**	**8.894500**
Stddev	.0047189	.0004725	.0035648	.002628	.001943	.042868
%RSD	22.92088	1.218594	1.064890	4.488867	18.21662	.4819641
#1	.0201370	.0393151	.3356638	-.056616	-.010087	8.925971
#2	.0161105	.0384650	.3308246	-.057491	-.009082	8.845676
#3	.0255159	.0385327	.3377784	-.061542	-.012836	8.911853

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1074904**	**.0012873**	**.0034731**	F **1085.835**	**.0284433**	**.0632100**
Stddev	.0007889	.0001253	.0001106	5.162	.0003172	.0008770
%RSD	.7339056	9.730967	3.184252	.4753758	1.115346	1.387456
#1	.1067064	.0011611	.0033499	1091.544	.0286022	.0641924
#2	.1082841	.0012892	.0035638	1081.497	.0280780	.0629319
#3	.1074805	.0014116	.0035057	1084.464	.0286496	.0625058

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0369218**	**57.14517**	**6.027634**	**589.0823**	**.0462274**	**-.002671**
Stddev	.0067579	.36438	.029843	3.7937	.0004690	.001199
%RSD	18.30337	.6376385	.4951087	.6440030	1.014559	44.86913
#1	.0318045	57.56564	6.061142	593.3228	.0464282	-.002859
#2	.0343785	56.92148	6.003915	586.0101	.0465626	-.001390
#3	.0445823	56.94841	6.017844	587.9141	.0456914	-.003765

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.110105**	**.0299801**	**.5754488**	**4.003403**	**1.062142**	**.0423650**
Stddev	.322805	.0122408	.0088201	.171481	.003459	.0022275
%RSD	293.1808	40.82979	1.532733	4.283391	.3256870	5.257923
#1	-.080653	.0425101	.5854656	3.807408	1.060632	.0398757
#2	-.446627	.0293798	.5720347	4.125799	1.059695	.0441703
#3	.196966	.0180505	.5688461	4.077004	1.066100	.0430489

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-06DLX2 Acquired: 12/15/2024 20:11:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ04 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000281	14.34477	4.498980	.0165135	.0775316	.3352562
Stddev	.000121	.00947	.057632	.0017892	.0011525	.0017964
%RSD	42.92005	.0659859	1.280998	10.83465	1.486476	.5358287
#1	-.000259	14.33497	4.539268	.0144958	.0771506	.3371308
#2	-.000411	14.35386	4.432965	.0179068	.0788264	.3335498
#3	-.000173	14.34548	4.524706	.0171380	.0766179	.3350879

Elem	Li6707
Units	ppm
Avg	.0890011
Stddev	.0032169
%RSD	3.614413
#1	.0923206
#2	.0887851
#3	.0858977

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2129.077	26064.97	2569.044	1775.406	2534.256
Stddev	5.723	143.51	20.695	8.183	7.378
%RSD	.2688007	.5505808	.8055342	.4609342	.2911116
#1	2123.464	26078.96	2546.923	1779.676	2526.403
#2	2128.864	25914.98	2587.931	1765.971	2535.321
#3	2134.904	26200.97	2572.279	1780.571	2541.043

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-07DLX2 Acquired: 12/15/2024 20:15:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173265	.0353147	.2859464	-.041514	-.012500	14.79286	.1540496
Stddev	.0021743	.0030730	.0007500	.003547	.001067	.03936	.0009491
%RSD	12.54874	8.701823	.2622881	8.543153	8.535161	.2660825	.6161038
#1	.0196004	.0377825	.2854064	-.037789	-.013394	14.74747	.1529611
#2	.0152680	.0318726	.2868027	-.041903	-.011319	14.81759	.1544833
#3	.0171110	.0362888	.2856300	-.044851	-.012787	14.81353	.1547044

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015253	.0034586	704.9436	.0270778	.0605807	.0511625	53.47552
Stddev	.0000405	.0002265	.6007	.0009052	.0012177	.0082588	.03234
%RSD	2.653509	6.549629	.0852059	3.342974	2.009964	16.14234	.0604732
#1	.0015208	.0033072	704.9659	.0280421	.0591857	.0442562	53.51012
#2	.0014873	.0037190	704.3322	.0262464	.0614306	.0489204	53.44607
#3	.0015679	.0033496	705.5328	.0269448	.0611258	.0603108	53.47036

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.951565	372.8150	.0472412	-.002620	.4194837	.0287027	.6811752
Stddev	.008880	.7483	.0008422	.000170	.0951202	.0024182	.0035589
%RSD	.1793436	.2007104	1.782822	6.498728	22.67555	8.425050	.5224663
#1	4.941405	372.0391	.0463273	-.002513	.3820003	.0262434	.6771677
#2	4.957849	373.5322	.0479862	-.002531	.3488157	.0287869	.6823907
#3	4.955440	372.8738	.0474099	-.002817	.5276352	.0310776	.6839670

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.065751	1.503983	.0207189	-.000522	8.069266	5.005588	.0146236
Stddev	.168981	.004775	.0032378	.000361	.019024	.045777	.0008193
%RSD	5.511880	.3175067	15.62742	69.23947	.2357641	.9145188	5.602607
#1	2.870842	1.507387	.0173028	-.000522	8.047757	5.012041	.0145365
#2	3.171099	1.506039	.0237428	-.000884	8.083887	4.956927	.0154830
#3	3.155312	1.498525	.0211110	-.000161	8.076154	5.047797	.0138513

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-07DLX2 Acquired: 12/15/2024 20:15:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ05 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2507548	.2172195	.0711650
Stddev	.0053131	.0006948	.0020276
%RSD	2.118827	.3198657	2.849153
#1	.2446895	.2164620	.0721186
#2	.2545858	.2178271	.0725401
#3	.2529891	.2173695	.0688365

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2213.083	27007.35	2620.922	1857.803	2660.177
Stddev	4.859	118.39	18.952	2.250	5.338
%RSD	.2195778	.4383496	.7230891	.1211206	.2006588
#1	2210.238	26924.37	2606.130	1856.352	2663.392
#2	2218.693	26954.75	2642.284	1860.395	2663.125
#3	2210.316	27142.92	2614.353	1856.662	2654.015

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-09DLX2 Acquired: 12/15/2024 20:19:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0652130	.0352257	.3741820	-.043309	-.001759	30.54758	.3148764
Stddev	.0057138	.0021172	.0028204	.004236	.001117	.54162	.0053549
%RSD	8.761721	6.010425	.7537397	9.781526	63.45954	1.773043	1.700626
#1	.0614474	.0343417	.3717651	-.045357	-.002622	30.62658	.3168116
#2	.0717875	.0336937	.3735000	-.046132	-.002158	31.04537	.3189946
#3	.0624041	.0376416	.3772808	-.038438	-.000498	29.97080	.3088229

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026857	.0066398	682.5472	.0556928	.0726062	.0738480	82.39757
Stddev	.0001283	.0000368	12.0187	.0010317	.0006978	.0057742	1.70547
%RSD	4.775220	.5545557	1.760866	1.852512	.9611091	7.818988	2.069802
#1	.0028226	.0066311	685.7775	.0545403	.0718091	.0678906	82.82242
#2	.0026661	.0066082	692.6207	.0565303	.0729029	.0742338	83.85045
#3	.0025683	.0066802	669.2434	.0560078	.0731067	.0794196	80.51984

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.770830	346.7079	.0952645	-.005054	-.351133	.0708748	1.168135
Stddev	.090826	6.6706	.0010262	.000737	.417358	.0084611	.013460
%RSD	1.903769	1.923969	1.077187	14.59088	118.8602	11.93812	1.152289
#1	4.797869	348.2323	.0942338	-.005163	.003483	.0806305	1.152756
#2	4.845065	352.4843	.0962861	-.004268	-.811060	.0655379	1.173881
#3	4.669555	339.4071	.0952737	-.005731	-.245824	.0664561	1.177769

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.377839	2.695910	.0115147	.0017552	7.906816	5.609015	.0190400
Stddev	.299506	.010577	.0018682	.0000811	.011006	.104597	.0010431
%RSD	5.569254	.3923470	16.22427	4.623284	.1391913	1.864799	5.478432
#1	5.298416	2.683933	.0129691	.0016904	7.899139	5.642204	.0202344
#2	5.709052	2.703969	.0121671	.0018462	7.919425	5.692990	.0185777
#3	5.126051	2.699828	.0094077	.0017289	7.901884	5.491850	.0183080

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-09DLX2 Acquired: 12/15/2024 20:19:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4274493	.2425797	.0952473
Stddev	.0116752	.0046094	.0074023
%RSD	2.731374	1.900154	7.771705
#1	.4320292	.2442548	.0914200
#2	.4361402	.2461173	.1037798
#3	.4141785	.2373670	.0905422

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2252.007	27701.82	2698.087	1908.511	2674.650
Stddev	6.889	138.80	54.940	8.222	8.650
%RSD	.3058856	.5010615	2.036266	.4308050	.3234078
#1	2259.900	27823.24	2682.387	1916.459	2684.385
#2	2247.205	27731.71	2652.707	1909.034	2667.848
#3	2248.916	27550.50	2759.169	1900.040	2671.717

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-10DLX2 Acquired: 12/15/2024 20:23:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0402329**	**.0293406**	**.2404410**	**-.037326**	**.0009096**	**41.47406**	**.5123836**
Stddev	.0031752	.0017312	.0044286	.002121	.0043218	.07362	.0003570
%RSD	7.892062	5.900498	1.841856	5.681184	475.1181	.1774991	.0696692
#1	.0424889	.0298891	.2409226	-.036093	-.001013	41.42504	.5127958
#2	.0416079	.0307311	.2357913	-.039775	.005859	41.55871	.5121785
#3	.0366020	.0274015	.2446090	-.036111	-.002117	41.43843	.5121765

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034850**	**.0054322**	**622.6668**	**.0621242**	**.0768725**	**.0926174**	**97.67120**
Stddev	.0000974	.0000306	.6488	.0005291	.0005813	.0025316	.16623
%RSD	2.795873	.5637563	.1042035	.8516952	.7561642	2.733435	.1701919
#1	.0034589	.0054413	622.5472	.0624792	.0771108	.0923862	97.49678
#2	.0034033	.0054573	623.3671	.0623772	.0772967	.0902093	97.82781
#3	.0035928	.0053981	622.0861	.0615161	.0762099	.0952568	97.68902

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.302581**	**272.3041**	**.1008334**	**-.006471**	**-.227842**	**.0796767**	**1.087856**
Stddev	.012178	1.0750	.0007822	.000434	1.212310	.0104126	.008729
%RSD	.2830363	.3947924	.7757451	6.711527	532.0837	13.06853	.8023764
#1	4.291081	271.3899	.1007830	-.006721	.793434	.0814012	1.089570
#2	4.315339	273.4885	.1016397	-.006723	.090640	.0891194	1.095600
#3	4.301324	272.0340	.1000777	-.005970	-1.56760	.0685096	1.078397

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.413765**	**2.219174**	**-.006323**	**.0015664**	**5.074706**	**5.097403**	**.0146130**
Stddev	.203424	.004159	.002861	.0003546	.011694	.038286	.0014700
%RSD	3.757537	.1874186	45.25039	22.63967	.2304314	.7510934	10.05927
#1	5.266171	2.220702	-.003201	.0016549	5.072212	5.053221	.0162110
#2	5.645814	2.214467	-.006946	.0011759	5.064461	5.120823	.0133185
#3	5.329312	2.222354	-.008821	.0018683	5.087446	5.118166	.0143094

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-10DLX2 Acquired: 12/15/2024 20:23:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4706261	.3407026	.1117865
Stddev	.0016936	.0017041	.0027682
%RSD	.3598507	.5001615	2.476295
#1	.4725796	.3396964	.1087887
#2	.4695705	.3426701	.1123249
#3	.4697284	.3397412	.1142459

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2260.485	27591.55	2660.617	1906.454	2698.665
Stddev	3.688	48.83	13.924	8.395	3.840
%RSD	.1631396	.1769597	.5233196	.4403205	.1422784
#1	2263.795	27535.70	2676.690	1896.988	2700.346
#2	2261.150	27626.11	2652.258	1909.377	2694.271
#3	2256.510	27612.85	2652.903	1912.996	2701.376

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-12DLX2 Acquired: 12/15/2024 20:27:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0360381**	**.0330728**	**.1895551**	**-.042117**	**.0011928**	**37.48580**	**.4889714**
Stddev	.0052278	.0058902	.0020915	.002817	.0036072	.11519	.0025331
%RSD	14.50635	17.80968	1.103386	6.687539	302.4237	.3072789	.5180480
#1	.0382512	.0394664	.1875413	-.044195	.0040740	37.54463	.4911296
#2	.0300678	.0318847	.1917165	-.043244	-.002853	37.55970	.4896019
#3	.0397955	.0278672	.1894073	-.038911	.002357	37.35308	.4861825

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033753**	**.0091254**	**758.9876**	**.0579125**	**.0792806**	**.0923056**	**99.19681**
Stddev	.0002387	.0001040	2.3704	.0003789	.0003737	.0030895	.32286
%RSD	7.072512	1.139745	.3123046	.6542854	.4713751	3.347068	.3254704
#1	.0031775	.0090556	760.1132	.0582743	.0793988	.0891619	99.53163
#2	.0036404	.0090758	760.5854	.0579447	.0788621	.0953380	99.17138
#3	.0033079	.0092450	756.2641	.0575185	.0795810	.0924170	98.88742

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.218603**	**334.2941**	**.0982018**	**-.006181**	**-.380732**	**.0770918**	**1.712850**
Stddev	.017827	.9425	.0008891	.001043	.363565	.0085281	.015481
%RSD	.4225876	.2819430	.9053994	16.87435	95.49111	11.06231	.9038068
#1	4.232896	335.0812	.0991070	-.005893	-.293694	.0704657	1.721071
#2	4.224285	334.5515	.0981686	-.007338	-.068585	.0740960	1.722486
#3	4.198627	333.2496	.0973297	-.005313	-.779917	.0867136	1.694993

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.353650**	**1.676382**	**-.000431**	**.0012546**	**11.27071**	**5.648792**	**.0160056**
Stddev	.166675	.010088	.002222	.0000277	.01800	.032898	.0023695
%RSD	3.828404	.6017739	515.1154	2.205593	.1597363	.5823931	14.80434
#1	4.544906	1.684051	.001648	.0012656	11.29136	5.611039	.0157615
#2	4.276642	1.664954	-.002772	.0012231	11.26244	5.671320	.0137676
#3	4.239403	1.680140	-.000170	.0012751	11.25832	5.664017	.0184877

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-12DLX2 Acquired: 12/15/2024 20:27:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3777257	.4373447	.1102490
Stddev	.0016438	.0010764	.0045524
%RSD	.4351734	.2461160	4.129215
#1	.3758841	.4384995	.1144169
#2	.3782487	.4371653	.1053909
#3	.3790443	.4363693	.1109392

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2227.992	27286.48	2659.120	1884.919	2651.005
Stddev	1.838	88.79	6.781	10.751	4.649
%RSD	.0825017	.3254074	.2550207	.5703548	.1753829
#1	2227.048	27211.36	2660.246	1881.133	2648.871
#2	2230.110	27263.61	2651.846	1876.573	2656.338
#3	2226.818	27384.47	2665.267	1897.050	2647.805

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-16DLX2 Acquired: 12/15/2024 20:30:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJC7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0500587	.0299737	.4897726	-.037774	-.000181	36.06926	.4325231
Stddev	.0025820	.0022035	.0017677	.003198	.003361	1.58305	.0196101
%RSD	5.158010	7.351631	.3609189	8.466471	1854.039	4.388923	4.533878
#1	.0505564	.0306951	.4883539	-.040676	-.002020	35.34319	.4246749
#2	.0472641	.0317261	.4892110	-.034345	-.002222	37.88511	.4548417
#3	.0523558	.0274998	.4917528	-.038301	.003698	34.97948	.4180527

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0034703	.0023003	557.9262	.0532856	.0860646	.1838533	97.31129
Stddev	.0001795	.0001162	24.0923	.0006990	.0008447	.0100556	4.37631
%RSD	5.172568	5.051664	4.318188	1.311766	.9814335	5.469347	4.497223
#1	.0032715	.0024301	546.8866	.0538553	.0870387	.1760339	95.48975
#2	.0035187	.0022650	585.5602	.0525056	.0855349	.1951966	102.3042
#3	.0036206	.0022059	541.3320	.0534959	.0856202	.1803296	94.1400

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.542770	22.30567	.0867847	-.004374	-.274941	.0844405	.3130122
Stddev	.301159	1.00311	.0006385	.000249	.565031	.0203697	.0059544
%RSD	4.602933	4.497128	.7357826	5.701757	205.5104	24.12309	1.902299
#1	6.419340	21.81364	.0861125	-.004328	.370510	.0827880	.3066659
#2	6.886036	23.45980	.0868584	-.004150	-.515167	.1055861	.3138944
#3	6.322935	21.64358	.0873832	-.004642	-.680164	.0649475	.3184763

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.401698	2.960634	-.002203	.0010871	.7139799	4.804461	.0244111
Stddev	.466553	.013200	.001753	.0001295	.0065680	.193440	.0011220
%RSD	8.637160	.4458389	79.58381	11.90846	.9199204	4.026254	4.596386
#1	5.059651	2.975113	-.001415	.0009459	.7146096	4.703623	.0256475
#2	5.933172	2.957518	-.000982	.0012002	.7071197	5.027485	.0234575
#3	5.212270	2.949272	-.004211	.0011153	.7202104	4.682274	.0241283

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-16DLX2 Acquired: 12/15/2024 20:30:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJC7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4275359	.2668754	.0917443
Stddev	.0192747	.0121729	.0021559
%RSD	4.508330	4.561273	2.349914
#1	.4177347	.2618321	.0914013
#2	.4497416	.2807595	.0940512
#3	.4151314	.2580347	.0897805

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2378.235	28964.81	2699.822	1997.578	2862.869
Stddev	8.197	87.54	103.364	4.035	2.875
%RSD	.3446843	.3022133	3.828532	.2019787	.1004352
#1	2380.349	28865.75	2739.394	1997.357	2863.057
#2	2385.169	28996.93	2582.519	1993.659	2865.645
#3	2369.188	29031.75	2777.553	2001.719	2859.903

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-17DLX2 Acquired: 12/15/2024 20:34:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJC8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482714	.0373102	.5305616	-.036826	.0012531	23.52776	.3520360
Stddev	.0031071	.0021654	.0025793	.004429	.0026580	.04894	.0019498
%RSD	6.436647	5.803653	.4861423	12.02729	212.1228	.2080023	.5538658
#1	.0458086	.0390052	.5276407	-.032160	.0041517	23.53955	.3540527
#2	.0517622	.0380545	.5315180	-.037347	-.001070	23.56972	.3518945
#3	.0472434	.0348709	.5325261	-.040972	.000678	23.47400	.3501608

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022993	.0021072	687.4299	.0426531	.0762980	.2277787	85.09538
Stddev	.0001393	.0000677	2.3012	.0007817	.0009162	.0086973	.56989
%RSD	6.058991	3.214777	.3347550	1.832726	1.200833	3.818299	.6697113
#1	.0022351	.0021711	689.6419	.0429244	.0771525	.2362056	85.43764
#2	.0022038	.0020362	687.5990	.0432630	.0764111	.2188342	85.41100
#3	.0024592	.0021143	685.0488	.0417718	.0753305	.2282962	84.43751

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.472475	14.09182	.0655631	-.005056	.1741932	.0641134	.3000135
Stddev	.029216	.10619	.0008857	.001005	.6638314	.0078544	.0028114
%RSD	.3084332	.7535603	1.350919	19.87759	381.0892	12.25074	.9370976
#1	9.490375	14.00735	.0665536	-.004824	-.475153	.0651835	.2984039
#2	9.488289	14.21103	.0648473	-.004186	.146113	.0557788	.2983768
#3	9.438760	14.05708	.0652884	-.006156	.851619	.0713778	.3032598

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.748194	2.956434	-.010042	.0018587	.5559010	4.844928	.0169948
Stddev	.023978	.017931	.001463	.0004707	.0033172	.035765	.0004623
%RSD	.8724828	.6064989	14.56457	25.32236	.5967293	.7381885	2.719980
#1	2.772586	2.957334	-.008644	.0013165	.5549171	4.867713	.0165501
#2	2.747342	2.938070	-.011562	.0021618	.5531871	4.863365	.0174728
#3	2.724654	2.973897	-.009920	.0020978	.5595989	4.803707	.0169616

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-17DLX2 Acquired: 12/15/2024 20:34:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJC8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3939249	.3525819	.0721427
Stddev	.0038513	.0006107	.0040180
%RSD	.9776744	.1732111	5.569579
#1	.3971412	.3526741	.0755650
#2	.3896570	.3531413	.0677185
#3	.3949765	.3519303	.0731445

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2349.326	28649.13	2710.423	1976.455	2812.804
Stddev	12.633	35.20	15.813	8.815	15.238
%RSD	.5377147	.1228640	.5834175	.4459930	.5417363
#1	2337.437	28637.11	2695.588	1970.607	2803.998
#2	2362.590	28621.52	2708.621	1986.594	2830.399
#3	2347.952	28688.77	2727.060	1972.164	2804.014

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-21DLX2 Acquired: 12/15/2024 20:38:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJD0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0431154**	**.0339176**	**.5292801**	**-.039204**	**-.004658**	**30.56218**	**.3365873**
Stddev	.0035779	.0031621	.0023616	.005103	.002983	.16627	.0010498
%RSD	8.298450	9.323014	.4461972	13.01551	64.05214	.5440493	.3119068
#1	.0466375	.0375473	.5269739	-.033318	-.005660	30.70762	.3377643
#2	.0394842	.0324469	.5291727	-.041930	-.007011	30.59800	.3362502
#3	.0432246	.0317587	.5316935	-.042365	-.001302	30.38091	.3357474

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025413**	**.0022334**	**577.8883**	**.0479572**	**.0796739**	**.2212752**	**82.09128**
Stddev	.0000216	.0001170	2.6915	.0011637	.0006594	.0039553	.39308
%RSD	.8504023	5.239375	.4657502	2.426472	.8275998	1.787497	.4788367
#1	.0025302	.0022405	580.9662	.0478724	.0793476	.2167110	82.48935
#2	.0025662	.0023467	576.7222	.0468383	.0792413	.2236991	82.08111
#3	.0025275	.0021130	575.9764	.0491610	.0804328	.2234155	81.70338

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.230869**	**17.46062**	**.0781915**	**-.005213**	**.0597202**	**.0787750**	**.4114846**
Stddev	.026602	.11208	.0002750	.001064	.0829389	.0111292	.0098640
%RSD	.4269408	.6419205	.3516729	20.40816	138.8791	14.12778	2.397180
#1	6.261172	17.44687	.0779148	-.004029	.1522484	.0900690	.4226589
#2	6.220070	17.57894	.0784647	-.005520	-.007939	.0784377	.4039868
#3	6.211364	17.35604	.0781951	-.006089	.034851	.0678183	.4078082

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.188640**	**3.679207**	**-.010271**	**.0006016**	**.6521161**	**4.979529**	**.0174169**
Stddev	.131239	.012684	.001703	.0007054	.0019124	.034229	.0007829
%RSD	4.115829	.3447402	16.58240	117.2518	.2932632	.6873849	4.495077
#1	3.045680	3.666514	-.012146	.0007261	.6521727	4.940033	.0166110
#2	3.303657	3.679226	-.009845	-.000158	.6501760	5.000553	.0181746
#3	3.216584	3.691882	-.008821	.001236	.6539995	4.998001	.0174651

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4981-21DLX2 Acquired: 12/15/2024 20:38:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJD0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5001493	.2577250	.0766935
Stddev	.0029152	.0010363	.0041478
%RSD	.5828674	.4020821	5.408299
#1	.4971410	.2588087	.0813463
#2	.5029615	.2576226	.0733832
#3	.5003454	.2567438	.0753510

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2349.332	28578.67	2719.999	1974.588	2846.073
Stddev	7.439	129.69	6.117	10.226	8.127
%RSD	.3166458	.4538160	.2248823	.5178641	.2855459
#1	2343.289	28540.00	2727.055	1968.837	2842.357
#2	2347.067	28723.31	2716.182	1986.394	2840.468
#3	2357.641	28472.72	2716.762	1968.532	2855.393

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-01DLX2 Acquired: 12/15/2024 20:42:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ97 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0206098	.0353442	.1350834	-.044417	-.008502	17.24112	.1575209
Stddev	.0002704	.0027011	.0018525	.002041	.001162	.08499	.0002949
%RSD	1.312119	7.642145	1.371414	4.595683	13.66191	.4929674	.1871972
#1	.0202984	.0361715	.1367870	-.046338	-.009840	17.29887	.1578429
#2	.0207858	.0375349	.1331113	-.042274	-.007760	17.14353	.1572640
#3	.0207453	.0323263	.1353520	-.044638	-.007906	17.28096	.1574559

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015236	.0018262	540.8279	.0299884	.0670316	.0851532	54.10683
Stddev	.0001755	.0001702	1.7628	.0006198	.0003128	.0119511	.12691
%RSD	11.51659	9.321015	.3259389	2.066923	.4666125	14.03487	.2345502
#1	.0017127	.0016434	541.9321	.0292822	.0671732	.0846503	54.06943
#2	.0014919	.0018551	538.7949	.0304425	.0672485	.0734615	54.00282
#3	.0013661	.0019802	541.7566	.0302405	.0666730	.0973479	54.24823

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.656284	155.5086	.0488716	-.003043	1.110411	.0364478	.2022888
Stddev	.029517	.7669	.0009641	.001395	.534403	.0069116	.0093136
%RSD	.4434402	.4931650	1.972682	45.84833	48.12663	18.96316	4.604120
#1	6.640545	155.3957	.0486462	-.004445	.666617	.0388989	.1915711
#2	6.637974	154.8045	.0480402	-.001655	.960997	.0417997	.2068782
#3	6.690335	156.3258	.0499284	-.003028	1.703620	.0286446	.2084170

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.546456	2.567624	.0070074	-.000508	3.348028	5.090214	.0103993
Stddev	.111769	.008094	.0009552	.000118	.024422	.015836	.0011154
%RSD	4.389190	.3152344	13.63128	23.27540	.7294479	.3111094	10.72607
#1	2.435548	2.558644	.0061398	-.000496	3.330989	5.104643	.0095363
#2	2.659066	2.569868	.0068514	-.000632	3.337088	5.073271	.0100028
#3	2.544752	2.574359	.0080310	-.000396	3.376008	5.092728	.0116589

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-01DLX2 Acquired: 12/15/2024 20:42:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ97 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2338738	.3076446	.0599515
Stddev	.0042738	.0015231	.0002267
%RSD	1.827398	.4950893	.3781299
#1	.2377505	.3076425	.0598227
#2	.2292909	.3061225	.0602133
#3	.2345801	.3091687	.0598186

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2313.695	28184.98	2712.317	1946.572	2754.925
Stddev	13.570	130.99	7.617	12.180	14.271
%RSD	.5865263	.4647533	.2808455	.6257231	.5180356
#1	2318.488	28320.90	2704.706	1960.457	2765.137
#2	2324.219	28059.55	2719.941	1941.574	2761.020
#3	2298.379	28174.49	2712.303	1937.687	2738.618

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV031 Acquired: 12/15/2024 20:46:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV031 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.796555**	**4.774283**	**23.65928**	**4.578429**	**4.618039**	**387.1480**	**9.698918**
Stddev	.029917	.007653	.01437	.018145	.010180	2.8607	.086273
%RSD	.6237156	.1602891	.0607517	.3963175	.2204391	.7389076	.8895164
#1	4.770308	4.766443	23.64268	4.557523	4.606292	383.9890	9.603629
#2	4.790229	4.774672	23.66743	4.590082	4.623546	389.5636	9.771725
#3	4.829129	4.781734	23.66772	4.587682	4.624280	387.8914	9.721400

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4764193**	**2.373121**	**394.7297**	**14.63634**	**2.359461**	**14.46023**	**395.4205**
Stddev	.0055689	.002378	2.7959	.12033	.002603	.14472	3.3321
%RSD	1.168901	.1001988	.7082975	.8221266	.1103280	1.000810	.8426695
#1	.4725703	2.370396	391.6633	14.74416	2.360624	14.30111	391.7682
#2	.4828049	2.374195	397.1375	14.65832	2.361279	14.58400	398.2947
#3	.4738828	2.374774	395.3882	14.50653	2.356479	14.49557	396.1986

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.28476**	**385.2191**	**2.383000**	**1.192693**	**390.8594**	**2.381523**	**14.40428**
Stddev	.11088	3.2978	.006700	.007985	5.0015	.035427	.07062
%RSD	.7762411	.8560876	.2811501	.6695052	1.279607	1.487584	.4902645
#1	14.16542	381.5794	2.379139	1.198433	385.1272	2.340616	14.47322
#2	14.38461	388.0085	2.390736	1.196073	394.3345	2.402200	14.33210
#3	14.30424	386.0694	2.379124	1.183574	393.1166	2.401754	14.40751

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**144.8891**	**4.755438**	**4.612382**	**4.587372**	**4.779230**	**4.786604**	**4.795712**
Stddev	1.0374	.015104	.035836	.010087	.007610	.047502	.006947
%RSD	.7160099	.3176166	.7769585	.2198827	.1592295	.9923936	.1448499
#1	143.7695	4.751386	4.583432	4.577738	4.773688	4.746832	4.793993
#2	145.8179	4.772154	4.652463	4.597857	4.787906	4.839202	4.803356
#3	145.0799	4.742772	4.601252	4.586522	4.776095	4.773777	4.789785

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV031 Acquired: 12/15/2024 20:46:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV031 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.820996	4.553172	4.973007
Stddev	.037825	.038016	.043323
%RSD	.7845912	.8349383	.8711693
#1	4.778907	4.511608	4.925844
#2	4.852146	4.586184	5.011033
#3	4.831934	4.561723	4.982144

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1945.445	25569.53	2529.170	1702.264	2572.430
Stddev	5.584	132.57	22.143	8.459	6.636
%RSD	.2870173	.5184694	.8755017	.4969037	.2579854
#1	1944.931	25424.30	2547.983	1693.454	2568.635
#2	1940.136	25600.24	2504.768	1703.019	2568.562
#3	1951.268	25684.05	2534.759	1710.320	2580.093

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB031 Acquired: 12/15/2024 20:50:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB031 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000565**	**.0023944**	**-.000829**	**-.002702**	**-.001441**	**-.006655**	**.0015460**
Stddev	.002728	.0019282	.001312	.001491	.003150	.033072	.0009934
%RSD	483.1579	80.53030	158.2804	55.17516	218.6174	496.9391	64.25451
#1	.001600	.0044800	.000264	-.002453	.000873	.021884	.0024513
#2	.000335	.0020266	-.000467	-.004302	-.005028	-.042900	.0017033
#3	-.003628	.0006766	-.002285	-.001352	-.000168	.001051	.0004834

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000224**	**.0000038**	**-.026612**	**-.000390**	**-.000017**	**-.005273**	**-.001321**
Stddev	.0001412	.0001139	.031489	.000194	.000118	.007463	.017148
%RSD	630.4026	3037.889	118.3248	49.59293	678.3342	141.5306	1298.041
#1	.0000271	.0000416	-.037044	-.000539	-.000154	.002687	-.016269
#2	-.000121	-.000124	.008769	-.000460	.000052	-.006393	.017398
#3	.000161	.000094	-.051562	-.000172	.000050	-.012114	-.005092

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020680**	**-.014560**	**-.000244**	**-.000053**	**-.416739**	**-.001350**	**-.008723**
Stddev	.0004700	.098300	.000385	.000705	.811550	.004818	.003740
%RSD	22.72888	675.1223	157.5020	1327.799	194.7381	356.8639	42.87763
#1	.0024221	-.110770	-.000072	.000429	-.138023	.000809	-.004814
#2	.0015347	.085705	.000024	-.000862	.218727	.002010	-.009087
#3	.0022471	-.018616	-.000686	.000274	-1.33092	-.006870	-.012268

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5316412**	**-.000037**	**.0081707**	**-.000027**	**-.006308**	**.0026128**	**-.000554**
Stddev	.2790192	.000691	.0014571	.000120	.001734	.0001624	.000743
%RSD	52.48262	1848.961	17.83396	448.1461	27.48945	6.214524	134.0989
#1	.5830234	-.000614	.0071921	.000111	-.008024	.0027865	-.000813
#2	.7813980	-.000226	.0074746	-.000083	-.004556	.0025872	-.001132
#3	.2305020	.000728	.0098453	-.000108	-.006344	.0024648	.000284

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB031 Acquired: 12/15/2024 20:50:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB031 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001296	.0002333	-.000453
Stddev	.002491	.0002108	.005227
%RSD	192.2241	90.34176	1153.330
#1	-.003693	.0002643	.000097
#2	.001280	.0000088	.004477
#3	-.001475	.0004269	-.005934

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2331.339	28229.18	2569.856	1965.755	3260.002
Stddev	11.092	37.29	21.910	3.025	13.014
%RSD	.4757777	.1321048	.8525723	.1538971	.3992075
#1	2334.538	28216.40	2593.593	1962.403	3262.956
#2	2318.998	28271.19	2565.565	1968.281	3245.765
#3	2340.479	28199.97	2550.408	1966.582	3271.285

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-04DLX2 Acquired: 12/15/2024 20:54:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0312581	.0418118	.1798553	-.037916	-.003238	17.79329
Stddev	.0017318	.0043657	.0008235	.004450	.001288	.06924
%RSD	5.540209	10.44124	.4578659	11.73746	39.78627	.3891182
#1	.0327144	.0428128	.1801562	-.032778	-.003570	17.87312
#2	.0317166	.0370326	.1789237	-.040396	-.001816	17.74958
#3	.0293432	.0455901	.1804861	-.040573	-.004328	17.75717

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3400505	.0015629	.0024069	F 840.4763	.0270531	.0676666
Stddev	.0015431	.0001873	.0000746	.4629	.0008623	.0008949
%RSD	.4537944	11.98206	3.099873	.0550736	3.187555	1.322557
#1	.3385716	.0015131	.0024886	840.9737	.0261516	.0681604
#2	.3416507	.0017700	.0023423	840.3970	.0271377	.0682058
#3	.3399290	.0014055	.0023900	840.0582	.0278701	.0666335

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1444604	77.95980	11.43519	65.74364	.0523550	-.003486
Stddev	.0089338	.25262	.02578	.45434	.0001363	.000979
%RSD	6.184227	.3240409	.2254664	.6910717	.2603491	28.07877
#1	.1404549	78.06969	11.43855	66.26391	.0521997	-.002638
#2	.1382303	78.13886	11.45912	65.42511	.0524102	-.004557
#3	.1546959	77.67084	11.40789	65.54190	.0524550	-.003263

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.279917	.0441240	.1994517	2.438141	3.526831	-.002576
Stddev	.630586	.0010208	.0019255	.122191	.017014	.000466
%RSD	225.2763	2.313488	.9653862	5.011633	.4824217	18.09375
#1	.051220	.0437801	.2015433	2.417736	3.522789	-.002099
#2	-1.00709	.0452724	.1977529	2.327437	3.512201	-.003030
#3	.11612	.0433197	.1990588	2.569249	3.545502	-.002601

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-04DLX2 Acquired: 12/15/2024 20:54:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048735	1.594908	6.486310	.0165203	.2977510	.3758968
Stddev	.0007552	.004958	.025900	.0019602	.0139727	.0004693
%RSD	15.49709	.3108682	.3993013	11.86561	4.692756	.1248495
#1	.0045984	1.589193	6.507688	.0183940	.2939339	.3761757
#2	.0057277	1.597468	6.457509	.0166832	.2860835	.3761598
#3	.0042943	1.598062	6.493732	.0144837	.3132356	.3753550

Elem	Li6707
Units	ppm
Avg	.0776711
Stddev	.0035806
%RSD	4.609923
#1	.0810402
#2	.0739111
#3	.0780620

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2324.027	28096.76	2735.498	1952.828	2740.978
Stddev	6.494	125.56	4.619	9.387	8.382
%RSD	.2794395	.4469009	.1688617	.4806985	.3058058
#1	2325.348	28207.29	2732.182	1960.461	2745.242
#2	2329.759	27960.23	2740.774	1942.346	2746.371
#3	2316.974	28122.78	2733.539	1955.676	2731.322

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-05DLX2 Acquired: 12/15/2024 20:57:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJB6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1460528	.0447168	.2246662	-.023257	.0082991	33.22216	.5106236
Stddev	.0034333	.0027028	.0022438	.001001	.0030887	.07500	.0016452
%RSD	2.350740	6.044302	.9987266	4.302530	37.21700	.2257576	.3222026
#1	.1495451	.0461679	.2231220	-.023883	.0048304	33.14693	.5088264
#2	.1459317	.0463841	.2272400	-.023785	.0107516	33.22263	.5120555
#3	.1426817	.0415983	.2236364	-.022103	.0093154	33.29693	.5109889

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039528	.0029806	510.0677	.0528397	.1263164	.5748891	130.4930
Stddev	.0000463	.0001154	1.0792	.0009125	.0005516	.0051568	.1125
%RSD	1.171723	3.872166	.2115767	1.726860	.4366414	.8970151	.0862187
#1	.0039377	.0028839	508.9837	.0530230	.1267399	.5785997	130.4487
#2	.0040048	.0029496	510.0774	.0518495	.1256927	.5690006	130.6209
#3	.0039160	.0031084	511.1421	.0536466	.1265165	.5770668	130.4094

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.95168	54.96190	.1204869	-.006549	-.041979	.0919281	.2885366
Stddev	.03123	.06831	.0005187	.001228	.609320	.0073684	.0029497
%RSD	.1957481	.1242770	.4304860	18.74869	1451.504	8.015381	1.022296
#1	15.91651	54.92335	.1199727	-.007137	-.516499	.0840562	.2912334
#2	15.96238	54.92157	.1210099	-.005137	.645164	.0986602	.2853865
#3	15.97615	55.04076	.1204781	-.007372	-.254600	.0930678	.2889898

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.268033	8.588836	-.005742	.0003410	2.031171	5.764875	.0205499
Stddev	.119381	.010255	.000873	.0004723	.005311	.036635	.0005224
%RSD	1.904608	.1193979	15.20623	138.4945	.2614576	.6354794	2.542029
#1	6.131868	8.587582	-.004782	.0008553	2.035350	5.723381	.0211152
#2	6.317511	8.579266	-.006490	.0002408	2.032967	5.778500	.0204496
#3	6.354721	8.599661	-.005955	-.000073	2.025195	5.792745	.0200850

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-05DLX2 Acquired: 12/15/2024 20:57:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJB6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2993138	.3440252	.0760489
Stddev	.0031768	.0008838	.0061189
%RSD	1.061356	.2568962	8.046028
#1	.2999996	.3430128	.0810514
#2	.3020917	.3444204	.0778689
#3	.2958502	.3446424	.0692265

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2432.806	29882.14	2845.025	2066.408	2828.074
Stddev	1.155	399.59	14.899	27.270	4.045
%RSD	.0474801	1.337222	.5236713	1.319692	.1430435
#1	2431.662	29701.15	2861.684	2048.261	2823.409
#2	2432.785	30340.20	2832.978	2097.768	2830.614
#3	2433.972	29605.06	2840.413	2053.194	2830.199

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-07DLX2 Acquired: 12/15/2024 21:01:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJF9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0286904**	**.0357888**	**.2283958**	**-.042807**	**-.003359**	**31.84540**	**.4283256**
Stddev	.0014991	.0034690	.0025725	.004843	.002230	.03242	.0012157
%RSD	5.225177	9.692909	1.126326	11.31323	66.38881	.1017896	.2838161
#1	.0287159	.0368982	.2261463	-.039387	-.005640	31.88210	.4297025
#2	.0301766	.0385674	.2278404	-.040686	-.001184	31.82068	.4278736
#3	.0271786	.0319009	.2312006	-.048349	-.003253	31.83341	.4274007

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028795**	**.0032226**	**741.6617**	**.0545773**	**.0721517**	**.0734568**	**84.33893**
Stddev	.0001431	.0001311	2.0847	.0005919	.0007492	.0021906	.37402
%RSD	4.969021	4.068327	.2810801	1.084546	1.038317	2.982208	.4434675
#1	.0029958	.0031792	743.2454	.0548956	.0729816	.0750525	84.55375
#2	.0027197	.0033699	739.2999	.0549421	.0715253	.0709592	83.90706
#3	.0029230	.0031187	742.4399	.0538944	.0719483	.0743588	84.55598

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.525192**	**335.5861**	**.0884927**	**-.004619**	**-.408238**	**.0586644**	**.5797037**
Stddev	.017012	.5314	.0012635	.001257	.433508	.0111131	.0102074
%RSD	.3759460	.1583448	1.427759	27.21704	106.1900	18.94346	1.760790
#1	4.533730	335.9617	.0896943	-.003239	-.891380	.0636470	.5912055
#2	4.505602	334.9781	.0871753	-.004918	-.053267	.0664142	.5761825
#3	4.536244	335.8184	.0886085	-.005700	-.280068	.0459319	.5717231

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.704699**	**2.441388**	**.0019019**	**.0017844**	**8.015205**	**6.116597**	**.0150588**
Stddev	.299341	.006379	.0014521	.0003820	.018499	.050105	.0019116
%RSD	6.362589	.2612911	76.34801	21.40804	.2308008	.8191660	12.69445
#1	4.906069	2.437851	.0016816	.0020740	7.999765	6.173348	.0137587
#2	4.360719	2.448752	.0005726	.0013515	8.010140	6.097967	.0141639
#3	4.847309	2.437560	.0034515	.0019278	8.035709	6.078475	.0172537

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-07DLX2 Acquired: 12/15/2024 21:01:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJF9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3510031	.4384679	.1094353
Stddev	.0048343	.0016890	.0037556
%RSD	1.377292	.3852095	3.431795
#1	.3519568	.4401800	.1093210
#2	.3457630	.4368029	.1132467
#3	.3552895	.4384207	.1057382

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2208.037	26951.45	2631.631	1857.545	2644.645
Stddev	8.824	90.61	1.032	4.525	7.563
%RSD	.3996446	.3361843	.0391998	.2435815	.2859919
#1	2212.195	27025.51	2632.518	1854.317	2650.866
#2	2214.014	26850.42	2631.876	1862.717	2646.843
#3	2197.902	26978.43	2630.499	1855.602	2636.226

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-13DLX2 Acquired: 12/15/2024 21:05:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0158353	.0287695	.1695410	-.035690	.0060345	53.26398	.7558174
Stddev	.0053820	.0023871	.0015156	.006954	.0017770	.20222	.0052858
%RSD	33.98754	8.297479	.8939278	19.48409	29.44802	.3796546	.6993496
#1	.0106290	.0311458	.1678741	-.028947	.0042579	53.43617	.7596592
#2	.0154995	.0263716	.1708360	-.042837	.0078119	53.31448	.7580038
#3	.0213773	.0287911	.1699129	-.035286	.0060336	53.04130	.7497892

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045057	.0043041	633.1551	.0774970	.0897673	.1078775	111.7264
Stddev	.0001065	.0000801	2.2969	.0008984	.0005433	.0047538	.6256
%RSD	2.364137	1.861477	.3627652	1.159310	.6051763	4.406638	.5599021
#1	.0044579	.0043849	635.3595	.0764885	.0891900	.1071893	112.1560
#2	.0044315	.0042246	633.3300	.0782120	.0898432	.1035053	112.0144
#3	.0046278	.0043029	630.7758	.0777904	.0902686	.1129379	111.0087

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.757352	237.2700	.1271727	-.006473	.3373296	.0902082	.7241321
Stddev	.020868	1.0886	.0004372	.000848	.0859160	.0094410	.0156648
%RSD	.5553940	.4587973	.3437521	13.09629	25.46944	10.46580	2.163258
#1	3.773980	237.8682	.1276668	-.006556	.2979145	.0793093	.7341774
#2	3.764141	237.9283	.1268361	-.007276	.4358813	.0958657	.7321365
#3	3.733935	236.0135	.1270151	-.005587	.2781931	.0954495	.7060823

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.034430	1.922843	-.012418	.0028147	4.385270	5.962303	.0155390
Stddev	.117521	.002578	.001490	.0005223	.023872	.004005	.0018514
%RSD	3.872912	.1340492	11.99580	18.55795	.5443568	.0671690	11.91428
#1	3.071070	1.924921	-.012831	.0022619	4.379297	5.963159	.0175925
#2	3.129266	1.919959	-.010765	.0033000	4.364952	5.957940	.0139976
#3	2.902954	1.923650	-.013657	.0028820	4.411561	5.965811	.0150270

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-13DLX2 Acquired: 12/15/2024 21:05:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4487497	.7992943	.1409115
Stddev	.0040461	.0057455	.0070027
%RSD	.9016347	.7188191	4.969534
#1	.4441098	.8027520	.1480337
#2	.4515435	.8024688	.1406660
#3	.4505957	.7926620	.1340349

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2234.386	27162.08	2606.595	1862.251	2686.989
Stddev	1.475	40.57	5.970	2.999	4.192
%RSD	.0660321	.1493547	.2290398	.1610213	.1560106
#1	2235.896	27117.35	2599.701	1859.793	2691.761
#2	2232.947	27172.39	2610.022	1861.369	2683.901
#3	2234.314	27196.49	2610.061	1865.592	2685.305

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-14DLX2 Acquired: 12/15/2024 21:09:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0165026	.0333681	.2309090	-.042496	-.014137	11.11895	.0893738
Stddev	.0035862	.0023589	.0049900	.006559	.001999	.03889	.0003353
%RSD	21.73099	7.069411	2.161030	15.43317	14.13817	.3497765	.3751553
#1	.0136503	.0359628	.2261630	-.049934	-.013055	11.09938	.0897337
#2	.0153290	.0313531	.2304523	-.040012	-.012912	11.16374	.0893175
#3	.0205286	.0327883	.2361116	-.037543	-.016444	11.09373	.0890702

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015051	.0028063	694.7554	.0283370	.0592908	.0908601	46.27258
Stddev	.0001127	.0000668	.4066	.0008484	.0004601	.0029617	.08479
%RSD	7.485698	2.382226	.0585297	2.993944	.7760570	3.259595	.1832407
#1	.0015400	.0027363	695.2161	.0292925	.0595260	.0885282	46.35912
#2	.0015961	.0028695	694.6038	.0280465	.0595857	.0898597	46.26896
#3	.0013790	.0028130	694.4464	.0276720	.0587606	.0941924	46.18966

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.873302	373.2119	.0390425	-.001271	-.754711	.0274598	.5010485
Stddev	.003766	1.1853	.0004147	.000760	.297173	.0064908	.0110891
%RSD	.0972389	.3175883	1.062111	59.81583	39.37574	23.63759	2.213170
#1	3.870600	374.5312	.0391299	-.000395	-.452226	.0323438	.5124876
#2	3.877605	372.8679	.0394066	-.001764	-1.04627	.0299413	.5003116
#3	3.871703	372.2367	.0385911	-.001652	-.76564	.0200943	.4903462

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.518657	1.176546	.0488135	-.000839	11.81432	5.825940	.0264219
Stddev	.132883	.003580	.0022135	.000139	.01496	.032458	.0003291
%RSD	2.038497	.3042402	4.534533	16.58093	.1266139	.5571313	1.245396
#1	6.671917	1.174091	.0512479	-.000739	11.82176	5.789646	.0260626
#2	6.448454	1.174894	.0469219	-.000781	11.82409	5.852185	.0267087
#3	6.435600	1.180653	.0482706	-.000998	11.79710	5.835989	.0264943

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-14DLX2 Acquired: 12/15/2024 21:09:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1460466	.2720034	.0775653
Stddev	.0058411	.0003850	.0102302
%RSD	3.999505	.1415574	13.18917
#1	.1470235	.2723893	.0657615
#2	.1513377	.2716193	.0838669
#3	.1397786	.2720015	.0830675

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2178.902	26540.58	2559.420	1810.715	2631.371
Stddev	3.293	149.40	14.532	14.008	10.610
%RSD	.1511171	.5629179	.5677778	.7736287	.4032240
#1	2179.311	26403.77	2553.319	1801.306	2632.244
#2	2175.424	26517.97	2548.933	1804.024	2620.352
#3	2181.971	26700.00	2576.008	1826.814	2641.519

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-15DLX2 Acquired: 12/15/2024 21:13:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226746	.0361656	.5159116	-.043440	-.004896	17.88414	.1480180
Stddev	.0019572	.0036163	.0061610	.005713	.002309	.08654	.0008382
%RSD	8.631794	9.999346	1.194202	13.15077	47.16247	.4839055	.5662815
#1	.0246213	.0400869	.5124849	-.036879	-.002230	17.81624	.1471104
#2	.0207070	.0354481	.5122257	-.047307	-.006210	17.85458	.1481805
#3	.0226954	.0329618	.5230242	-.046135	-.006249	17.98158	.1487630

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018702	.0056166	728.8890	.0406521	.0673359	.3606467	68.38745
Stddev	.0000857	.0001142	1.7510	.0012641	.0009815	.0030899	.25683
%RSD	4.584842	2.032796	.2402342	3.109555	1.457621	.8567787	.3755537
#1	.0019104	.0055360	728.3715	.0418517	.0662232	.3640252	68.22683
#2	.0017718	.0057473	727.4550	.0407725	.0680787	.3599508	68.25185
#3	.0019285	.0055667	730.8404	.0393321	.0677059	.3579640	68.68366

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.023015	388.5293	.0582751	-.003665	.1395211	.0353744	1.527219
Stddev	.007480	1.5458	.0005704	.000106	.6837082	.0089708	.024102
%RSD	.1489202	.3978555	.9787405	2.900865	490.0393	25.35948	1.578161
#1	5.016122	386.8271	.0587093	-.003598	-.622375	.0279257	1.509213
#2	5.021955	388.9152	.0576291	-.003610	.699614	.0453327	1.517844
#3	5.030969	389.8456	.0584868	-.003788	.341324	.0328647	1.554600

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.374364	1.841262	.0282792	-.000131	10.32301	5.847732	.0805251
Stddev	.161509	.011880	.0015930	.000215	.02621	.031045	.0017921
%RSD	3.005172	.6452000	5.633244	163.1625	.2538845	.5308884	2.225554
#1	5.256367	1.827722	.0274017	-.000152	10.29661	5.863127	.0790512
#2	5.308293	1.849934	.0273178	-.000335	10.32340	5.868071	.0800040
#3	5.558433	1.846132	.0301180	.000093	10.34902	5.811998	.0825200

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-15DLX2 Acquired: 12/15/2024 21:13:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2223362	.2565955	.0923611
Stddev	.0033187	.0009869	.0068516
%RSD	1.492649	.3845962	7.418281
#1	.2223749	.2556481	.0945905
#2	.2189982	.2565209	.0978204
#3	.2256353	.2576176	.0846725

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2208.415	27021.21	2611.432	1852.327	2631.550
Stddev	8.357	62.10	9.328	7.904	7.872
%RSD	.3784084	.2298041	.3571895	.4266829	.2991258
#1	2212.053	27071.75	2605.073	1856.377	2638.827
#2	2214.335	27039.99	2607.082	1857.385	2632.628
#3	2198.855	26951.89	2622.140	1843.220	2623.195

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-16DLX2 Acquired: 12/15/2024 21:17:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0297595	.0299896	.3410176	-.034228	-.001403	30.50275	.2301552
Stddev	.0022363	.0030669	.0033694	.003678	.001488	.06576	.0009762
%RSD	7.514601	10.22656	.9880301	10.74451	106.0593	.2155843	.4241438
#1	.0313337	.0318019	.3405754	-.030173	.000134	30.43418	.2298200
#2	.0271997	.0317182	.3445862	-.035163	-.002836	30.56528	.2312548
#3	.0307452	.0264485	.3378912	-.037348	-.001506	30.50879	.2293908

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026587	.0035780	473.5181	.0485182	.0765003	.2127033	80.64724
Stddev	.0000358	.0001513	.9873	.0011876	.0009623	.0036917	.41510
%RSD	1.346236	4.227336	.2085097	2.447639	1.257892	1.735620	.5147147
#1	.0026195	.0037233	472.6556	.0498350	.0769571	.2124473	80.41165
#2	.0026897	.0035894	474.5950	.0481909	.0771491	.2091462	81.12654
#3	.0026670	.0034214	473.3036	.0475286	.0753947	.2165163	80.40353

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.224005	240.2004	.0843688	-.005399	.2172202	.0687989	1.000923
Stddev	.017958	.6305	.0010232	.001379	.3567049	.0105293	.021065
%RSD	.3437567	.2624706	1.212773	25.54262	164.2135	15.30451	2.104529
#1	5.219440	239.9528	.0848258	-.005721	.6289788	.0594091	.981008
#2	5.243805	240.9170	.0850839	-.003887	.0024233	.0801826	1.022975
#3	5.208771	239.7313	.0831967	-.006588	.0202585	.0668051	.998786

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.305317	3.666599	.0034735	.0003910	5.896945	5.268965	.0510579
Stddev	.127112	.025357	.0026349	.0011128	.027572	.018794	.0004731
%RSD	2.952433	.6915737	75.85559	284.6291	.4675622	.3566964	.9265461
#1	4.259339	3.664378	.0054530	.0006807	5.893401	5.290308	.0513559
#2	4.207592	3.692994	.0004828	.0013303	5.926118	5.254890	.0505124
#3	4.449020	3.642425	.0044848	-.000838	5.871316	5.261698	.0513054

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-16DLX2 Acquired: 12/15/2024 21:17:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4652477	.1834826	.0950161
Stddev	.0048937	.0007236	.0095458
%RSD	1.051860	.3943467	10.04656
#1	.4611585	.1826530	.0840077
#2	.4639148	.1839830	.1000355
#3	.4706698	.1838118	.1010050

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2334.925	28372.99	2722.490	1960.053	2740.746
Stddev	18.738	101.76	14.993	5.298	25.985
%RSD	.8025132	.3586340	.5507060	.2702760	.9481089
#1	2323.388	28285.54	2706.679	1956.485	2727.008
#2	2324.841	28348.76	2724.289	1957.535	2724.514
#3	2356.545	28484.68	2736.503	1966.140	2770.717

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-17DLX2 Acquired: 12/15/2024 21:20:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0338592	.0371370	.3492438	-.038439	-.006058	24.48916	.2879846
Stddev	.0030114	.0027544	.0026113	.005115	.000202	.01877	.0007941
%RSD	8.893833	7.416992	.7477025	13.30620	3.331419	.0766394	.2757560
#1	.0318033	.0342256	.3521772	-.032865	-.006236	24.50826	.2871448
#2	.0324585	.0397017	.3471725	-.039535	-.006099	24.47074	.2887233
#3	.0373158	.0374836	.3483818	-.042917	-.005838	24.48847	.2880857

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023460	.0039042	519.9678	.0397905	.0714086	.2077445	73.20489
Stddev	.0000969	.0000914	1.0433	.0002351	.0010668	.0076286	.12310
%RSD	4.131271	2.341834	.2006406	.5908094	1.493980	3.672119	.1681630
#1	.0024099	.0038546	520.9416	.0397373	.0720668	.2043992	73.14882
#2	.0022345	.0040097	520.0952	.0395866	.0701777	.2164742	73.11980
#3	.0023935	.0038484	518.8667	.0400477	.0719812	.2023600	73.34605

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.347053	212.2195	.0681719	-.003727	.3066823	.0445897	.8020178
Stddev	.005065	.5509	.0016942	.000275	.2672321	.0102943	.0098196
%RSD	.0689324	.2595919	2.485148	7.369601	87.13647	23.08662	1.224361
#1	7.348670	211.8243	.0689245	-.004028	.5625018	.0483424	.7906968
#2	7.341377	212.8488	.0662318	-.003489	.3282057	.0524812	.8082266
#3	7.351111	211.9853	.0693593	-.003666	.0293393	.0329456	.8071299

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.727034	3.018301	.0057559	.0027620	5.155362	5.571264	.0361370
Stddev	.051348	.010304	.0011436	.0009676	.030186	.022151	.0013443
%RSD	1.377728	.3413905	19.86826	35.03331	.5855189	.3975961	3.719925
#1	3.759551	3.025494	.0045111	.0038213	5.184649	5.596680	.0372389
#2	3.753714	3.006496	.0059966	.0025400	5.124351	5.561040	.0346392
#3	3.667838	3.022913	.0067600	.0019247	5.157087	5.556070	.0365328

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-17DLX2 Acquired: 12/15/2024 21:20:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3891914	.2417569	.0764354
Stddev	.0021508	.0001200	.0039493
%RSD	.5526236	.0496537	5.166793
#1	.3870069	.2417101	.0788622
#2	.3913068	.2416674	.0785655
#3	.3892606	.2418934	.0718784

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2320.488	28414.94	2730.469	1963.656	2725.288
Stddev	11.087	117.97	1.826	7.358	13.398
%RSD	.4777846	.4151703	.0668924	.3746944	.4916332
#1	2307.763	28539.52	2732.563	1970.074	2710.006
#2	2328.067	28304.93	2729.637	1965.268	2735.017
#3	2325.633	28400.35	2729.206	1955.626	2730.841

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-18DLX2 Acquired: 12/15/2024 21:24:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221393	.0355520	.2640538	-.038056	-.010303	19.76469	.2110878
Stddev	.0014978	.0039507	.0023342	.001422	.003217	.48789	.0059419
%RSD	6.765478	11.11234	.8839674	3.737607	31.22950	2.468501	2.814900
#1	.0227865	.0382471	.2667324	-.036652	-.006588	19.51074	.2091576
#2	.0232047	.0373920	.2624552	-.038020	-.012110	19.45615	.2063510
#3	.0204267	.0310170	.2629740	-.039496	-.012211	20.32717	.2177549

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018489	.0035555	696.3931	.0322994	.0725705	.1611303	61.01246
Stddev	.0001645	.0001335	16.8312	.0013351	.0005839	.0040626	1.59301
%RSD	8.898665	3.754933	2.416912	4.133603	.8046361	2.521294	2.610952
#1	.0020284	.0036938	688.5748	.0307578	.0719396	.1577783	60.42308
#2	.0017052	.0035454	684.8929	.0330688	.0726801	.1599643	59.79814
#3	.0018132	.0034274	715.7115	.0330717	.0730919	.1656484	62.81617

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.581515	195.5201	.0557085	-.002541	.6159183	.0469973	.6411588
Stddev	.174674	5.2661	.0009089	.001462	.3715561	.0040896	.0101656
%RSD	2.654013	2.693356	1.631526	57.54089	60.32556	8.701835	1.585511
#1	6.498242	193.1771	.0555709	-.002476	.7513809	.0434829	.6521187
#2	6.464060	191.8322	.0566783	-.004036	.1956372	.0514861	.6393189
#3	6.782244	201.5510	.0548762	-.001113	.9007368	.0460228	.6320387

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.270705	2.673599	.0080858	.0000275	4.562983	5.596705	.0302364
Stddev	.304582	.015881	.0007859	.0001204	.036732	.072352	.0007329
%RSD	9.312415	.5939924	9.719390	437.4912	.8050050	1.292768	2.423943
#1	3.441659	2.662564	.0072599	-.000085	4.545689	5.563691	.0301892
#2	2.919050	2.666431	.0088243	.000014	4.538090	5.546748	.0295282
#3	3.451408	2.691800	.0081732	.000154	4.605170	5.679676	.0309918

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-18DLX2 Acquired: 12/15/2024 21:24:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2984526	.4113893	.0776642
Stddev	.0076124	.0108994	.0071954
%RSD	2.550626	2.649410	9.264768
#1	.2937722	.4066872	.0834452
#2	.2943492	.4036303	.0696056
#3	.3072363	.4238505	.0799418

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2283.853	27802.41	2671.994	1919.379	2701.220
Stddev	1.922	44.77	30.709	5.669	5.098
%RSD	.0841394	.1610388	1.149279	.2953804	.1887191
#1	2282.900	27852.61	2691.098	1915.443	2703.369
#2	2286.064	27766.61	2688.313	1916.817	2704.890
#3	2282.593	27788.01	2636.571	1925.877	2695.399

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-19DLX2 Acquired: 12/15/2024 21:28:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0132869**	**.0398955**	**.1774766**	**-.052877**	**-.014917**	**11.78889**
Stddev	.0016784	.0030488	.0004674	.003383	.001735	.03511
%RSD	12.63201	7.641948	.2633791	6.398086	11.62893	.2978648
#1	.0147311	.0417535	.1771118	-.048971	-.016870	11.75039
#2	.0136839	.0363769	.1780035	-.054850	-.013554	11.81915
#3	.0114456	.0415562	.1773145	-.054812	-.014329	11.79712

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1583060**	**.0012353**	**.0024406**	F **1096.355**	**.0238330**	**.0652124**
Stddev	.0005766	.0000328	.0001752	.947	.0013873	.0010976
%RSD	.3642155	2.654045	7.178315	.0863701	5.820992	1.683043
#1	.1587233	.0012251	.0026422	1095.284	.0222321	.0661547
#2	.1585465	.0012720	.0023250	1096.702	.0245831	.0640073
#3	.1576481	.0012089	.0023547	1097.081	.0246838	.0654752

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0923648**	**46.00250**	**6.191442**	**162.9406**	**.0415248**	**-.002130**
Stddev	.0148282	.09155	.005512	.2523	.0013925	.000719
%RSD	16.05399	.1990208	.0890332	.1548415	3.353365	33.74527
#1	.1060739	46.09368	6.192153	162.6890	.0430729	-.002864
#2	.0766264	45.91057	6.185609	163.1936	.0411270	-.001427
#3	.0943939	46.00326	6.196565	162.9391	.0403746	-.002099

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.503262**	**.0305215**	**.3508125**	**2.686316**	**1.692524**	**.0149101**
Stddev	.462104	.0195509	.0115603	.052689	.005529	.0020584
%RSD	91.82190	64.05609	3.295287	1.961380	.3266596	13.80559
#1	-.134421	.0385233	.3636490	2.627161	1.691274	.0165460
#2	-1.02161	.0082390	.3475659	2.703580	1.687726	.0155854
#3	-.35375	.0448021	.3412226	2.728207	1.698570	.0125988

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-19DLX2 Acquired: 12/15/2024 21:28:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001239	4.082717	5.039142	.0172779	.1599805	.7181503
Stddev	.000772	.006332	.033197	.0021034	.0029047	.0014786
%RSD	62.35951	.1551001	.6587928	12.17383	1.815668	.2058942
#1	-.001934	4.083232	5.001908	.0195123	.1578539	.7174789
#2	-.000407	4.088776	5.049866	.0153362	.1632901	.7198455
#3	-.001375	4.076143	5.065652	.0169851	.1587976	.7171265

Elem	Li6707
Units	ppm
Avg	.0970685
Stddev	.0032188
%RSD	3.316029
#1	.0982917
#2	.0934174
#3	.0994964

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2214.590	26955.50	2643.375	1863.496	2634.603
Stddev	10.549	141.73	24.502	5.706	7.434
%RSD	.4763429	.5257951	.9269102	.3061820	.2821727
#1	2206.386	26832.87	2661.980	1857.039	2631.103
#2	2226.489	26922.96	2652.532	1865.588	2643.141
#3	2210.894	27110.67	2615.614	1867.860	2629.564

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-20DLX2 Acquired: 12/15/2024 21:32:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0086523**	**.0465344**	**.0882974**	**-.059966**	**-.017646**	**9.909132**
Stddev	.0041593	.0036020	.0025939	.004825	.000921	.294606
%RSD	48.07139	7.740506	2.937686	8.046025	5.218727	2.973077
#1	.0044235	.0460611	.0912143	-.064537	-.017282	9.624748
#2	.0087950	.0431924	.0874280	-.054922	-.018693	9.889654
#3	.0127383	.0503496	.0862499	-.060440	-.016962	10.21299

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1308099**	**.0009467**	**.0015616**	F **1576.695**	**.0184884**	**.0661676**
Stddev	.0036686	.0000921	.0001988	35.801	.0010733	.0015613
%RSD	2.804560	9.732117	12.72842	2.270643	5.805211	2.359564
#1	.1286145	.0008664	.0016973	1538.246	.0197276	.0655828
#2	.1287701	.0009264	.0013334	1582.767	.0178787	.0649832
#3	.1350451	.0010473	.0016540	1609.072	.0178587	.0679368

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0663198**	**36.91381**	**7.016790**	**100.9165**	**.0334158**	**-.001396**
Stddev	.0031045	1.01282	.185671	2.3469	.0006762	.000778
%RSD	4.681051	2.743753	2.646100	2.325570	2.023658	55.70023
#1	.0683908	36.04839	6.854538	98.8430	.0341758	-.000681
#2	.0627503	36.66527	6.976552	100.4423	.0331910	-.002224
#3	.0678182	38.02777	7.219282	103.4643	.0328807	-.001283

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.054643**	**.0246809**	**.2001928**	**2.395266**	**1.668662**	**.0168628**
Stddev	.810493	.0061438	.0147733	.221870	.029789	.0011355
%RSD	1483.260	24.89306	7.379561	9.262841	1.785186	6.733757
#1	-.059404	.0213105	.2087750	2.139524	1.702800	.0156146
#2	.758220	.0317723	.2086694	2.536307	1.647946	.0178346
#3	-.862744	.0209600	.1831341	2.509966	1.655238	.0171392

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-20DLX2 Acquired: 12/15/2024 21:32:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001872**	**1.935950**	**5.178247**	**.0124666**	**.1339045**	**1.186172**
Stddev	.000542	.017197	.088565	.0009585	.0151016	.030897
%RSD	28.96738	.8882748	1.710335	7.688160	11.27790	2.604750
#1	-.001641	1.955171	5.101646	.0130235	.1284204	1.159664
#2	-.002491	1.922023	5.157871	.0113598	.1223113	1.178747
#3	-.001483	1.930657	5.275225	.0130164	.1509819	1.220105

Elem	Li6707
Units	ppm
Avg	**.1257734**
Stddev	.0041287
%RSD	3.282618
#1	.1288580
#2	.1210831
#3	.1273792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2186.134**	**26727.40**	**2590.140**	**1845.541**	**2587.228**
Stddev	23.247	612.40	71.599	40.100	29.351
%RSD	1.063381	2.291292	2.764291	2.172819	1.134468
#1	2161.016	26471.75	2662.926	1830.824	2556.116
#2	2206.892	26284.23	2587.703	1814.879	2614.426
#3	2190.494	27426.20	2519.790	1890.921	2591.143

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-01DL2X4 Acquired: 12/15/2024 21:36:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0154637	.0615803	.1113626	.0230829	.0832724	36.16352
Stddev	.0051109	.0026832	.0007777	.0038487	.0016805	.01870
%RSD	33.05112	4.357151	.6983804	16.67356	2.018054	.0516985
#1	.0197933	.0590150	.1107708	.0232286	.0843778	36.14266
#2	.0098258	.0643675	.1122435	.0191633	.0813386	36.16912
#3	.0167720	.0613585	.1110735	.0268567	.0841010	36.17877

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435292	.0027320	.0032455	574.3059	3.030765	.0591463
Stddev	.0001489	.0001547	.0001743	.9559	.007558	.0001444
%RSD	.0611633	5.664362	5.371881	.1664447	.2493814	.2440636
#1	.2436150	.0029070	.0031289	575.2287	3.038366	.0592589
#2	.2433572	.0026131	.0031616	574.3691	3.030678	.0589835
#3	.2436154	.0026760	.0034459	573.3200	3.023250	.0591964

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.023514	384.2489	F 62.47123	101.5394	.1013039	-.019371
Stddev	.007166	.3197	.08954	.1588	.0012171	.002145
%RSD	30.47442	.0831960	.1433269	.1564054	1.201458	11.07346
#1	-.031789	384.5495	62.54733	101.4806	.1025954	-.018080
#2	-.019401	384.2842	62.49380	101.7192	.1001781	-.018185
#3	-.019353	383.9131	62.37257	101.4183	.1011381	-.021847

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.975697	1.257742	.1105162	1.024465	6.762169	.0536745
Stddev	.653590	.003314	.0109481	.163306	.017250	.0023769
%RSD	66.98702	.2634705	9.906287	15.94062	.2550994	4.428434
#1	-.529261	1.255175	.1118061	1.197432	6.767156	.0525358
#2	-1.72589	1.256567	.1207621	1.003024	6.742975	.0564066
#3	-.67194	1.261483	.0989803	.872938	6.776377	.0520812

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-01DL2X4 Acquired: 12/15/2024 21:36:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076049	13.99688	3.008135	.0473794	5.705299	.2562710
Stddev	.0003178	.04680	.016364	.0020530	.006725	.0002742
%RSD	4.178371	.3343706	.5440050	4.333165	.1178665	.1069821
#1	.0073087	14.00955	3.026059	.0496757	5.709207	.2561159
#2	.0079405	13.94505	3.004351	.0467414	5.697534	.2561095
#3	.0075656	14.03604	2.993993	.0457211	5.709156	.2565875

Elem	Li6707
Units	ppm
Avg	.0751895
Stddev	.0064230
%RSD	8.542454
#1	.0810795
#2	.0683411
#3	.0761478

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2178.866	27019.22	2576.090	1854.170	2801.730
Stddev	7.322	81.81	5.773	9.029	10.644
%RSD	.3360559	.3028001	.2241154	.4869777	.3799077
#1	2172.405	27113.57	2571.772	1863.084	2791.985
#2	2177.373	26967.89	2573.850	1854.396	2800.117
#3	2186.819	26976.20	2582.648	1845.030	2813.088

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-02DL2X4 Acquired: 12/15/2024 21:40:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0202559**	**.0557880**	**.1546441**	**.0101401**	**.0888910**	**37.33077**
Stddev	.0038665	.0024804	.0025922	.0030418	.0021744	.12339
%RSD	19.08799	4.446041	1.676254	29.99788	2.446168	.3305381
#1	.0247171	.0574790	.1574040	.0135848	.0905304	37.26883
#2	.0181760	.0569443	.1522607	.0078234	.0897181	37.25061
#3	.0178747	.0529406	.1542677	.0090121	.0864243	37.47286

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3590520**	**.0056093**	**.0037887**	**537.5501**	**3.239288**	**.0607322**
Stddev	.0007514	.0001631	.0001532	.5640	.010398	.0005409
%RSD	.2092754	2.906865	4.044784	.1049139	.3209994	.8906946
#1	.3590380	.0056936	.0037832	537.9071	3.248688	.0602098
#2	.3583076	.0057131	.0036383	536.8999	3.228119	.0606969
#3	.3598103	.0054214	.0039446	537.8433	3.241056	.0612900

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090197**	**388.9201**	F **48.78513**	**98.31202**	**.2806338**	**-.022904**
Stddev	.0032126	1.0989	.17394	.49826	.0014618	.000350
%RSD	35.61779	.2825534	.3565387	.5068109	.5209012	1.528837
#1	.0118412	389.3506	48.78618	98.57321	.2799975	-.023174
#2	.0096946	387.6711	48.61068	97.73748	.2795979	-.022508
#3	.0055232	389.7386	48.95855	98.62538	.2823060	-.023030

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.007103**	**.4947566**	**.0996678**	**1.835308**	**4.178123**	**.1997921**
Stddev	.380298	.0042649	.0074285	.223301	.013808	.0061263
%RSD	5354.338	.8620233	7.453293	12.16695	.3304943	3.066335
#1	.431842	.4978335	.0942295	1.587657	4.182870	.2037227
#2	-.215521	.4898881	.0966423	1.896963	4.162567	.1927332
#3	-.237629	.4965481	.1081317	2.021303	4.188932	.2029203

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5067-02DL2X4 Acquired: 12/15/2024 21:40:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28M1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0157869	20.86824	2.706659	.0442999	4.013454	.0192318
Stddev	.0002031	.08395	.014892	.0002086	.016724	.0009086
%RSD	1.286519	.4022856	.5502157	.4707901	.4166915	4.724545
#1	.0158773	20.80839	2.721680	.0440705	4.000838	.0182368
#2	.0159291	20.83211	2.706399	.0444780	4.007102	.0194411
#3	.0155543	20.96420	2.691899	.0443514	4.032423	.0200175

Elem	Li6707
Units	ppm
Avg	.0752911
Stddev	.0045787
%RSD	6.081361
#1	.0799196
#2	.0751898
#3	.0707638

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2205.532	27320.44	2600.842	1868.103	2810.075
Stddev	7.532	151.99	12.792	14.542	6.701
%RSD	.3414896	.5563380	.4918599	.7784410	.2384716
#1	2213.206	27379.72	2587.479	1873.826	2817.803
#2	2198.151	27433.87	2612.976	1878.913	2805.865
#3	2205.240	27147.74	2602.070	1851.570	2806.558

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-01 Acquired: 12/15/2024 21:43:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1190927**	**.0243508**	**1.843823**	**-.007526**	**.0212991**	**59.13876**	**1.377927**
Stddev	.0007915	.0016289	.001243	.001079	.0044523	.01890	.001421
%RSD	.6645960	6.689491	.0674278	14.33722	20.90353	.0319661	.1031500
#1	.1181822	.0225329	1.844021	-.008290	.0210178	59.13109	1.376552
#2	.1194795	.0256780	1.844956	-.006292	.0169942	59.16029	1.377838
#3	.1196165	.0248414	1.842493	-.007997	.0258854	59.12489	1.379391

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058331**	**.0075601**	**118.5651**	**.0975929**	**.1077438**	**.4462729**	**152.9786**
Stddev	.0000747	.0000613	.3452	.0008042	.0000531	.0080399	.0560
%RSD	1.281105	.8107310	.2911119	.8240027	.0492598	1.801563	.0365924
#1	.0057610	.0076227	118.1788	.0967323	.1078014	.4413009	152.9427
#2	.0059102	.0075576	118.6733	.0977212	.1077331	.4555486	153.0431
#3	.0058282	.0075002	118.8432	.0983252	.1076968	.4419693	152.9500

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.75614**	**30.00425**	**.1487411**	**-.006836**	**-.432051**	**.1348857**	**1.343453**
Stddev	.01812	.04839	.0011642	.000152	.301326	.0072658	.015867
%RSD	.1541210	.1612780	.7827025	2.225803	69.74317	5.386664	1.181051
#1	11.73534	30.04139	.1492995	-.007002	-.710398	.1431981	1.361649
#2	11.76847	29.94953	.1474029	-.006704	-.473681	.1317141	1.332499
#3	11.76461	30.02184	.1495209	-.006800	-.112075	.1297447	1.336212

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.966787**	**6.715980**	**-.011438**	**.0064469**	**1.992732**	**9.199033**	**.0954404**
Stddev	.105556	.003634	.001005	.0005346	.008990	.044892	.0010254
%RSD	1.515136	.0541165	8.782856	8.292005	.4511257	.4880064	1.074434
#1	7.041149	6.716557	-.011664	.0069599	1.992471	9.147803	.0943602
#2	7.013240	6.712091	-.012311	.0058931	2.001849	9.217800	.0955607
#3	6.845970	6.719291	-.010340	.0064877	1.983875	9.231496	.0964005

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-01 Acquired: 12/15/2024 21:43:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7027585	.8730734	.0927989
Stddev	.0048485	.0013027	.0104031
%RSD	.6899254	.1492084	11.21041
#1	.7076966	.8716670	.0834282
#2	.6980049	.8742386	.1039933
#3	.7025741	.8733146	.0909752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2644.597	32023.61	2994.793	2224.559	3083.150
Stddev	10.010	72.54	4.229	11.143	12.355
%RSD	.3785000	.2265186	.1412223	.5009137	.4007191
#1	2649.708	31941.43	2993.926	2212.153	3089.612
#2	2651.020	32078.75	2991.065	2233.717	3090.935
#3	2633.064	32050.63	2999.389	2227.808	3068.905

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-02 Acquired: 12/15/2024 21:47:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1170612**	**.0261529**	**1.766841**	**-.005412**	**.0203541**	**56.25931**	**1.310562**
Stddev	.0041464	.0019868	.004810	.001539	.0016525	1.73157	.036801
%RSD	3.542061	7.596883	.2722534	28.44439	8.118906	3.077841	2.807997
#1	.1205719	.0249295	1.766471	-.006996	.0187596	56.77822	1.323661
#2	.1124865	.0284453	1.762226	-.003922	.0202437	54.32761	1.269004
#3	.1181253	.0250839	1.771825	-.005316	.0220591	57.67209	1.339020

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057635**	**.0072474**	**113.2954**	**.0941150**	**.1040463**	**.4195882**	**145.1803**
Stddev	.0002147	.0000765	3.5562	.0007679	.0001142	.0048560	4.3604
%RSD	3.724213	1.055234	3.138858	.8158854	.1097309	1.157335	3.003457
#1	.0059833	.0072253	114.6192	.0949597	.1040817	.4202353	146.4006
#2	.0055544	.0073325	109.2672	.0934592	.1041386	.4144411	140.3397
#3	.0057528	.0071844	115.9999	.0939261	.1039186	.4240883	148.8006

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.17268**	**28.50734**	**.1417408**	**-.006551**	**-.149045**	**.1360629**	**1.258138**
Stddev	.33675	.90763	.0007876	.001529	.584036	.0063897	.005541
%RSD	3.014013	3.183838	.5556657	23.33204	391.8522	4.696157	.4404357
#1	11.29806	28.86779	.1426455	-.005500	.017388	.1415462	1.253706
#2	10.79123	27.47485	.1412083	-.008305	-.798233	.1290459	1.264350
#3	11.42874	29.17937	.1413685	-.005849	.333710	.1375966	1.256356

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.157401**	**6.431316**	**-.014115**	**.0063646**	**1.911635**	**8.850413**	**.0898628**
Stddev	.311583	.010884	.001039	.0004559	.011056	.217372	.0011642
%RSD	5.060301	.1692404	7.361869	7.163183	.5783746	2.456063	1.295536
#1	6.204814	6.435062	-.013084	.0058437	1.908410	8.859573	.0895583
#2	5.824829	6.419053	-.015162	.0065593	1.902550	8.628607	.0888812
#3	6.442560	6.439833	-.014099	.0066908	1.923946	9.063060	.0911490

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-02 Acquired: 12/15/2024 21:47:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6648185	.8276850	.0830485
Stddev	.0155251	.0236325	.0047897
%RSD	2.335236	2.855253	5.767343
#1	.6671408	.8344633	.0825860
#2	.6482632	.8014041	.0785069
#3	.6790517	.8471877	.0880527

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2737.491	33415.77	3144.182	2320.029	3210.643
Stddev	6.867	114.34	80.627	7.861	5.095
%RSD	.2508410	.3421638	2.564332	.3388187	.1587013
#1	2738.186	33547.68	3147.564	2326.518	3209.052
#2	2743.984	33344.96	3223.064	2322.282	3216.344
#3	2730.303	33354.68	3061.916	2311.288	3206.533

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-01LX5 Acquired: 12/15/2024 21:51:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0252251	.0077220	.3644057	-.008765	.0005787	12.81544	.3016891
Stddev	.0020791	.0026137	.0017880	.004438	.0018799	.08969	.0023782
%RSD	8.242345	33.84693	.4906478	50.63054	324.8845	.6998549	.7882980
#1	.0247177	.0051950	.3632602	-.012092	-.001183	12.73330	.2992952
#2	.0234467	.0075566	.3634908	-.010477	.002558	12.91114	.3040513
#3	.0275111	.0104145	.3664659	-.003726	.000361	12.80187	.3017209

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013905	.0014716	26.23298	.0214592	.0286443	.1071812	33.51475
Stddev	.0001141	.0000942	.23516	.0005368	.0002036	.0039869	.25375
%RSD	8.207136	6.403738	.8964358	2.501701	.7107220	3.719740	.7571246
#1	.0012599	.0015174	26.09986	.0210030	.0286700	.1105597	33.23917
#2	.0014713	.0013632	26.50451	.0213239	.0284291	.1027837	33.73874
#3	.0014402	.0015342	26.09458	.0220508	.0288338	.1082001	33.56633

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.586531	6.636249	.0275573	-.001805	-.587829	.0212835	.2742892
Stddev	.020727	.031234	.0011280	.000978	.875204	.0106302	.0091336
%RSD	.8013424	.4706559	4.093202	54.19241	148.8876	49.94557	3.329914
#1	2.568250	6.672222	.0285834	-.000822	.277790	.0334181	.2676917
#2	2.609049	6.620504	.0263495	-.001814	-.568963	.0136145	.2704622
#3	2.582295	6.616022	.0277391	-.002778	-1.47231	.0168181	.2847138

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.610747	1.300994	-.007179	.0008699	.3874219	2.069234	.0169380
Stddev	.040501	.003159	.001646	.0002412	.0064726	.030895	.0011497
%RSD	2.514406	.2428368	22.93193	27.72448	1.670675	1.493077	6.787494
#1	1.575342	1.297346	-.007974	.0006911	.3802726	2.078307	.0165063
#2	1.601987	1.302812	-.005286	.0007745	.3928834	2.094577	.0160667
#3	1.654910	1.302823	-.008278	.0011442	.3891095	2.034818	.0182410

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-01LX5 Acquired: 12/15/2024 21:51:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1535234	.1907241	.0203277
Stddev	.0040388	.0016721	.0026262
%RSD	2.630738	.8766925	12.91944
#1	.1553340	.1895418	.0190363
#2	.1563401	.1926372	.0233495
#3	.1488961	.1899935	.0185971

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2468.095	30002.79	2762.203	2086.497	3288.981
Stddev	8.278	126.82	31.859	2.687	4.696
%RSD	.3354012	.4226986	1.153408	.1287958	.1427867
#1	2460.129	29925.01	2752.063	2086.006	3283.795
#2	2476.653	30149.14	2736.648	2089.396	3292.948
#3	2467.501	29934.23	2797.898	2084.089	3290.199

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-03 Acquired: 12/15/2024 21:55:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2056720	.1178382	1.854045	.1448745	.1678452	61.21074	4.893396
Stddev	.0042102	.0024949	.001641	.0052575	.0033333	.04955	.010023
%RSD	2.047062	2.117262	.0885067	3.628985	1.985952	.0809518	.2048191
#1	.2052639	.1206992	1.852293	.1418348	.1668929	61.15573	4.885932
#2	.2100714	.1161144	1.855546	.1418434	.1650917	61.25187	4.904788
#3	.2016807	.1167012	1.854296	.1509453	.1715511	61.22462	4.889470

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0904704	.1001890	117.3798	.4571447	1.034341	.8632369	151.8746
Stddev	.0004803	.0004441	.1611	.0028842	.004296	.0090093	.3701
%RSD	.5309504	.4432190	.1372145	.6309131	.4153099	1.043668	.2436711
#1	.0907251	.1000968	117.4109	.4587260	1.033355	.8640513	151.4593
#2	.0907698	.0997982	117.5231	.4588923	1.030624	.8538480	152.1694
#3	.0899163	.1006719	117.2055	.4538157	1.039044	.8718113	151.9950

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.44834	29.37209	1.102597	.0623695	-.071919	1.035644	2.051518
Stddev	.01630	.12111	.003344	.0002777	.568302	.002699	.024412
%RSD	.1309485	.4123192	.3033092	.4452256	790.1966	.2606324	1.189933
#1	12.43565	29.25234	1.100172	.0625922	.551621	1.032527	2.028245
#2	12.46673	29.36941	1.101208	.0624579	-.560792	1.037236	2.049381
#3	12.44265	29.49451	1.106412	.0620584	-.206585	1.037168	2.076928

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.624484	6.633920	-.020206	.0066167	1.968578	9.050151	.0944339
Stddev	.073084	.013029	.003510	.0002764	.002969	.054864	.0006583
%RSD	1.103241	.1964072	17.37167	4.177622	.1508067	.6062165	.6971364
#1	6.629600	6.621852	-.023004	.0069356	1.968559	9.088931	.0942154
#2	6.694876	6.632172	-.016267	.0064460	1.965619	9.074144	.0951737
#3	6.548977	6.647735	-.021346	.0064684	1.971556	8.987378	.0939126

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5042-03 Acquired: 12/15/2024 21:55:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB0S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6842702	.8557732	.0891883
Stddev	.0033917	.0003316	.0044358
%RSD	.4956733	.0387472	4.973553
#1	.6808529	.8559551	.0846572
#2	.6876358	.8559740	.0935223
#3	.6843218	.8553905	.0893855

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2670.856	32514.58	3053.283	2262.346	3131.125
Stddev	20.672	6.06	11.632	5.931	22.546
%RSD	.7739794	.0186224	.3809618	.2621432	.7200631
#1	2659.756	32511.59	3046.068	2269.164	3118.953
#2	2694.706	32510.61	3047.080	2259.498	3157.141
#3	2658.104	32521.55	3066.702	2258.376	3117.280

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-04DL2X4 Acquired: 12/15/2024 21:59:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036892	.0304847	.2623331	-.042016	-.011792	6.605498	.1090108
Stddev	.0073958	.0032670	.0004848	.001956	.001942	.056683	.0010811
%RSD	200.4727	10.71691	.1848041	4.656556	16.47269	.8581189	.9917519
#1	.0110070	.0341935	.2623729	-.043310	-.009695	6.670944	.1100315
#2	.0038429	.0292279	.2618296	-.039765	-.012152	6.571984	.1078780
#3	-.003782	.0280327	.2627967	-.042971	-.013529	6.573568	.1091229

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007772	.0024354	403.6153	.0212796	.0446603	.0609452	29.50341
Stddev	.0000592	.0000389	1.0157	.0003378	.0005316	.0114708	.22971
%RSD	7.611741	1.598498	.2516538	1.587511	1.190242	18.82144	.7785778
#1	.0008148	.0024249	404.6066	.0216440	.0450653	.0650746	29.71941
#2	.0008079	.0024785	402.5768	.0212180	.0440584	.0479815	29.52872
#3	.0007090	.0024028	403.6626	.0209768	.0448573	.0697796	29.26209

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.766158	205.8166	.0321236	-.000739	-.655124	.0224055	.4639165
Stddev	.011090	.4472	.0005034	.000876	.120777	.0034044	.0047010
%RSD	.4009307	.2172995	1.567039	118.5164	18.43579	15.19459	1.013330
#1	2.774036	206.2692	.0326142	-.000719	-.787967	.0185363	.4620937
#2	2.770963	205.8059	.0316084	-.001625	-.625470	.0249419	.4603999
#3	2.753475	205.3749	.0321483	.000127	-.551936	.0237383	.4692560

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.895340	1.224160	.0169330	.0005770	3.892602	2.530785	.0150466
Stddev	.095294	.003571	.0007162	.0004915	.023039	.028025	.0010530
%RSD	5.027825	.2917461	4.229496	85.18982	.5918628	1.107357	6.998161
#1	1.959021	1.225346	.0169086	.0000545	3.917312	2.536697	.0139909
#2	1.785785	1.220146	.0176611	.0010302	3.871711	2.555382	.0160968
#3	1.941215	1.226987	.0162294	.0006462	3.888785	2.500276	.0150519

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-04DL2X4 Acquired: 12/15/2024 21:59:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1285524	.1360887	.0478818
Stddev	.0032542	.0004214	.0076228
%RSD	2.531391	.3096198	15.92013
#1	.1318074	.1363983	.0566683
#2	.1285508	.1362590	.0439433
#3	.1252991	.1356089	.0430340

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2214.411	27099.37	2594.748	1868.526	2793.441
Stddev	2.876	18.56	22.166	6.734	2.093
%RSD	.1298903	.0685070	.8542812	.3603696	.0749087
#1	2211.101	27083.06	2591.484	1871.677	2792.095
#2	2215.828	27119.58	2574.394	1873.107	2792.378
#3	2216.304	27095.49	2618.365	1860.795	2795.852

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-06DL2X4 Acquired: 12/15/2024 22:03:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103291**	**.0339233**	**.1756052**	**-.050252**	**-.015650**	**4.464836**	**.0555242**
Stddev	.0033107	.0032182	.0012095	.009174	.001351	.015176	.0013516
%RSD	32.05203	9.486617	.6887466	18.25645	8.630364	.3398979	2.434257
#1	.0124283	.0333783	.1758187	-.060834	-.017202	4.458723	.0542155
#2	.0065126	.0373791	.1743032	-.045386	-.014744	4.482115	.0569149
#3	.0120464	.0310124	.1766937	-.044536	-.015003	4.453671	.0554424

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007106**	**.0016899**	**557.0103**	**.0152043**	**.0475314**	**.0170951**	**29.34283**
Stddev	.0000733	.0000562	2.4023	.0006430	.0011785	.0088171	.05319
%RSD	10.31323	3.325493	.4312909	4.228857	2.479321	51.57673	.1812811
#1	.0006261	.0017534	555.6857	.0158346	.0467764	.0120020	29.31694
#2	.0007497	.0016697	559.7833	.0152289	.0469285	.0120072	29.40402
#3	.0007561	.0016466	555.5618	.0145494	.0488893	.0272762	29.30754

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.101299**	**300.3382**	**.0225673**	**-.000029**	**.1282846**	**.0121290**	**.2774852**
Stddev	.003999	.5096	.0001517	.000964	.8967710	.0070624	.0104222
%RSD	.1289456	.1696670	.6721603	3277.456	699.0480	58.22763	3.755951
#1	3.102542	300.5135	.0226653	.000434	-.807998	.0118975	.2669746
#2	3.096826	300.7369	.0223925	-.001138	.979479	.0193043	.2776645
#3	3.104529	299.7641	.0226440	.000616	.213373	.0051851	.2878167

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.445564**	**.5125791**	**.0194069**	**-.000553**	**6.820787**	**2.314011**	**.0076313**
Stddev	.116468	.0019369	.0008499	.000827	.018994	.018983	.0011336
%RSD	4.762427	.3778771	4.379509	149.5687	.2784655	.8203319	14.85393
#1	2.566093	.5103544	.0192733	-.000529	6.834887	2.334994	.0076403
#2	2.333634	.5134923	.0186317	.000262	6.799189	2.309010	.0064932
#3	2.436965	.5138906	.0203157	-.001391	6.828285	2.298031	.0087603

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4964-06DL2X4 Acquired: 12/15/2024 22:03:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ04 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0380161	.1684602	.0537177
Stddev	.0057698	.0005071	.0048637
%RSD	15.17718	.3010419	9.054195
#1	.0322803	.1682364	.0482017
#2	.0379488	.1690407	.0573902
#3	.0438192	.1681034	.0555611

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2167.426	26495.13	2557.395	1819.291	2706.871
Stddev	13.204	46.35	17.714	7.306	17.780
%RSD	.6091871	.1749440	.6926647	.4016098	.6568491
#1	2182.659	26517.76	2539.901	1810.855	2727.387
#2	2159.267	26441.81	2556.962	1823.547	2697.299
#3	2160.352	26525.81	2575.321	1823.472	2695.928

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-04DL2X4 Acquired: 12/15/2024 22:07:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0142108**	**.0326972**	**.0966299**	**-.041797**	**-.008824**	**8.859753**	**.1712202**
Stddev	.0066903	.0034915	.0014367	.003568	.001427	.323856	.0057294
%RSD	47.07911	10.67816	1.486762	8.537646	16.16718	3.655356	3.346235
#1	.0211493	.0346271	.0980890	-.045301	-.008015	9.088104	.1758468
#2	.0077998	.0347975	.0952168	-.038168	-.007985	9.002044	.1730023
#3	.0136834	.0286668	.0965838	-.041921	-.010471	8.489113	.1648115

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008659**	**.0012240**	**421.3304**	**.0140206**	**.0493386**	**.0701326**	**39.45851**
Stddev	.0001337	.0001431	14.2856	.0006271	.0006457	.0008415	1.34135
%RSD	15.43764	11.68702	3.390583	4.472570	1.308713	1.199885	3.399400
#1	.0009502	.0011525	430.9347	.0139287	.0491223	.0710891	40.31898
#2	.0009357	.0011309	428.1427	.0134445	.0500646	.0698023	40.14358
#3	.0007118	.0013888	404.9138	.0146886	.0488287	.0695063	37.91296

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.808581**	**33.96884**	**.0251976**	**-.002451**	**-.252042**	**.0247528**	**.1001813**
Stddev	.187802	1.02970	.0001968	.000668	.371420	.0034059	.0074206
%RSD	3.233175	3.031317	.7810682	27.24906	147.3642	13.75960	7.407183
#1	5.944499	34.67085	.0249767	-.002372	-.312195	.0271297	.1009723
#2	5.886959	34.44890	.0253542	-.001826	.145782	.0208509	.1071747
#3	5.594287	32.78677	.0252618	-.003155	-.589714	.0262777	.0923969

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.465778**	**1.692490**	**-.006005**	**.0027088**	**.7646665**	**3.337122**	**.0055483**
Stddev	.361547	.014742	.003954	.0002093	.0092146	.111784	.0016410
%RSD	24.66587	.8710073	65.83757	7.727712	1.205052	3.349706	29.57555
#1	1.602860	1.678959	-.003471	.0028519	.7540274	3.387396	.0073717
#2	1.738737	1.690312	-.003984	.0028059	.7698563	3.414942	.0041903
#3	1.055736	1.708200	-.010561	.0024685	.7701157	3.209029	.0050830

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-04DL2X4 Acquired: 12/15/2024 22:07:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1425168	.1892470	.0486504
Stddev	.0040716	.0058490	.0042095
%RSD	2.856906	3.090692	8.652487
#1	.1455219	.1932997	.0534450
#2	.1441455	.1918996	.0455615
#3	.1378830	.1825417	.0469448

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2304.386	28307.70	2688.499	1956.662	2887.909
Stddev	3.900	313.19	60.616	17.665	11.924
%RSD	.1692242	1.106374	2.254644	.9028154	.4128897
#1	2307.027	28569.66	2652.536	1962.830	2901.452
#2	2299.907	28392.64	2654.477	1970.416	2878.985
#3	2306.223	27960.80	2758.483	1936.740	2883.291

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV032 Acquired: 12/15/2024 22:11:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV032 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.859728**	**4.835540**	**24.12334**	**4.643017**	**4.721023**	**391.1107**	**10.04865**
Stddev	.006927	.019977	.05305	.007537	.006780	1.0250	.03000
%RSD	.1425375	.4131345	.2199217	.1623356	.1436110	.2620640	.2985840
#1	4.851748	4.813225	24.07330	4.634349	4.720055	391.4140	10.06254
#2	4.863247	4.841634	24.11776	4.646673	4.714779	391.9498	10.06919
#3	4.864189	4.851761	24.17896	4.648029	4.728235	389.9683	10.01422

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4940678**	**2.416207**	**398.5378**	**14.86869**	**2.417241**	**15.08145**	**398.0003**
Stddev	.0037655	.004942	.6586	.03424	.004296	.04100	.8782
%RSD	.7621468	.2045206	.1652532	.2302665	.1777316	.2718867	.2206572
#1	.4900922	2.412247	399.0481	14.88259	2.412813	15.12525	398.7649
#2	.4945308	2.414628	398.7709	14.89380	2.417517	15.07513	398.1948
#3	.4975804	2.421745	397.7943	14.82969	2.421393	15.04397	397.0411

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.70444**	**392.6225**	**2.431142**	**1.214462**	**399.0182**	**2.442887**	**14.10824**
Stddev	.01079	.5671	.001716	.004696	1.9829	.023021	.14058
%RSD	.0733466	.1444517	.0705686	.3867042	.4969555	.9423651	.9964487
#1	14.70857	392.8426	2.430837	1.216379	400.5734	2.469107	14.21087
#2	14.71256	393.0465	2.429600	1.217896	399.6960	2.433561	14.16585
#3	14.69220	391.9782	2.432990	1.209110	396.7852	2.425992	13.94801

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**150.3527**	**4.858354**	**4.831083**	**4.667589**	**4.871206**	**4.980456**	**4.898621**
Stddev	.2369	.005562	.043206	.005410	.019097	.037044	.012509
%RSD	.1575892	.1144878	.8943362	.1159018	.3920452	.7437818	.2553578
#1	150.0839	4.852125	4.788169	4.665236	4.855459	4.941680	4.892222
#2	150.5315	4.862823	4.830504	4.663753	4.865710	4.984205	4.890606
#3	150.4425	4.860114	4.874575	4.673776	4.892448	5.015482	4.913035

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV032 Acquired: 12/15/2024 22:11:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV032 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.969873	4.729002	5.246234
Stddev	.010363	.010620	.010242
%RSD	.2085070	.2245660	.1952211
#1	4.975121	4.734173	5.258046
#2	4.976562	4.736046	5.240820
#3	4.957936	4.716787	5.239835

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1938.555	25370.05	2470.207	1675.234	2551.686
Stddev	2.682	83.20	14.096	8.465	5.553
%RSD	.1383630	.3279648	.5706228	.5052982	.2176019
#1	1940.452	25291.41	2485.277	1672.948	2557.098
#2	1939.727	25361.56	2467.997	1668.146	2551.959
#3	1935.486	25457.17	2457.347	1684.607	2546.003

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB032 Acquired: 12/15/2024 22:14:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB032 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002283**	**.0001138**	**.0011940**	**.0002812**	**-.005179**	**.0126625**	**.0015013**
Stddev	.002830	.0023041	.0017032	.0056327	.001510	.0120336	.0002556
%RSD	123.9896	2025.290	142.6512	2002.975	29.14631	95.03349	17.02140
#1	-.004938	-.002518	.0004298	.0052798	-.003491	-.001165	.0014359
#2	.000695	.001766	.0000066	.0013859	-.005646	.020764	.0012849
#3	-.002604	.001093	.0031454	-.005822	-.006400	.018388	.0017832

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.000040**	**.0000900**	**-.023215**	**.0005625**	**-.000296**	**-.006296**	**-.006146**
Stddev	.000089	.0001053	.038705	.0003593	.000327	.006965	.016727
%RSD	222.5679	117.0442	166.7222	63.87556	110.2953	110.6313	272.1820
#1	-.000109	.0001383	-.053002	.0009084	.000017	-.011406	-.025406
#2	-.000073	-.000031	-.037178	.0001911	-.000635	.001638	.002231
#3	.000061	.000162	.020534	.0005881	-.000270	-.009119	.004738

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001545**	**.0640417**	**.0006286**	**.0000221**	**-.638631**	**-.012951**	**-.012492**
Stddev	.000709	.1032432	.0002159	.0004114	.200974	.003791	.005279
%RSD	45.88215	161.2125	34.34541	1863.436	31.46942	29.26919	42.25737
#1	-.001252	.1692524	.0008773	.0003572	-.560886	-.008851	-.006415
#2	-.002353	.0599871	.0004888	-.000437	-.488144	-.013672	-.015117
#3	-.001030	-.037115	.0005198	.000146	-.866863	-.016329	-.015943

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6721944**	**-.001119**	**.0062677**	**-.000081**	**-.006061**	**.0028624**	**-.000911**
Stddev	.1340443	.000730	.0020932	.000133	.000387	.0006764	.000615
%RSD	19.94130	65.22444	33.39603	164.6200	6.389481	23.63195	67.45438
#1	.5573372	-.000656	.0086270	-.000191	-.006502	.0020950	-.001572
#2	.6397691	-.001961	.0046333	-.000118	-.005776	.0033722	-.000357
#3	.8194770	-.000741	.0055429	.000067	-.005905	.0031201	-.000803

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB032 Acquired: 12/15/2024 22:14:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB032 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0016239	.0003430	.0148301
Stddev	.0036334	.0001465	.0033283
%RSD	223.7434	42.69267	22.44285
#1	.0057438	.0004545	.0163595
#2	.0002507	.0003975	.0110120
#3	-.001123	.0001772	.0171187

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2343.721	28521.07	2588.760	1974.885	3253.631
Stddev	4.510	91.64	15.708	11.087	4.961
%RSD	.1924338	.3212933	.6067755	.5613911	.1524716
#1	2340.668	28625.70	2572.337	1986.144	3251.409
#2	2341.594	28482.41	2590.306	1974.530	3250.170
#3	2348.902	28455.09	2603.638	1963.979	3259.315

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-19DL2X4 Acquired: 12/15/2024 22:18:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071979	.0353834	.0947996	-.043661	-.014245	6.063247	.0808417
Stddev	.0042337	.0019408	.0005253	.002457	.002380	.070553	.0008063
%RSD	58.81842	5.485017	.5541209	5.627329	16.71103	1.163610	.9973737
#1	.0103180	.0337125	.0941931	-.043166	-.016553	6.071693	.0800895
#2	.0023786	.0375122	.0951067	-.041489	-.014382	5.988852	.0816929
#3	.0088970	.0349254	.0950991	-.046328	-.011798	6.129196	.0807425

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006601	.0012662	568.8111	.0124785	.0486143	.0390448	23.73509
Stddev	.0001429	.0000794	1.8847	.0007197	.0009511	.0110100	.07903
%RSD	21.65204	6.273822	.3313405	5.767561	1.956511	28.19846	.3329507
#1	.0005455	.0012970	568.4096	.0117009	.0497125	.0362955	23.70410
#2	.0006147	.0013256	567.1595	.0126136	.0480753	.0511690	23.67626
#3	.0008203	.0011760	570.8642	.0131211	.0480550	.0296700	23.82492

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.188933	84.84648	.0204921	-.001849	-.758455	.0042717	.1684576
Stddev	.009254	.47329	.0006880	.001645	.640553	.0058895	.0054926
%RSD	.2902029	.5578183	3.357238	88.99750	84.45508	137.8710	3.260525
#1	3.194404	84.79082	.0197523	-.000460	-1.47979	.0015967	.1736105
#2	3.178248	84.40348	.0211126	-.003666	-.25613	.0001946	.1690836
#3	3.194148	85.34514	.0206115	-.001421	-.53944	.0110239	.1626789

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.492802	.8201866	.0128324	-.000080	1.988787	2.582627	.0098444
Stddev	.064962	.0072444	.0031887	.000362	.012895	.035019	.0013477
%RSD	4.351692	.8832671	24.84876	454.6440	.6483947	1.355941	13.69042
#1	1.496005	.8184069	.0160699	.000230	1.977169	2.611275	.0083232
#2	1.556104	.8139978	.0096948	.000008	1.986532	2.543589	.0108893
#3	1.426298	.8281550	.0127325	-.000477	2.002662	2.593016	.0103208

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-19DL2X4 Acquired: 12/15/2024 22:18:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJG9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0803896	.3674522	.0561294
Stddev	.0035464	.0015551	.0027969
%RSD	4.411511	.4232000	4.982921
#1	.0818482	.3675165	.0544641
#2	.0829742	.3658660	.0545657
#3	.0763465	.3689741	.0593584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2255.676	27416.17	2635.897	1892.246	2814.767
Stddev	3.422	161.82	18.484	16.443	3.267
%RSD	.1517268	.5902279	.7012360	.8689766	.1160773
#1	2256.731	27523.38	2618.060	1903.321	2813.710
#2	2258.448	27230.03	2654.966	1873.352	2818.432
#3	2251.851	27495.10	2634.667	1900.065	2812.160

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-20DL2X4 Acquired: 12/15/2024 22:22:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002380**	**.0334739**	**.0524696**	**-.046407**	**-.018417**	**4.925661**
Stddev	.002198	.0017775	.0025644	.003369	.000698	.034804
%RSD	92.33433	5.310096	4.887372	7.259797	3.790007	.7065798
#1	-.004884	.0316302	.0495121	-.045356	-.018692	4.942828
#2	-.000769	.0336147	.0540737	-.043689	-.017623	4.885609
#3	-.001488	.0351768	.0538231	-.050176	-.018936	4.948546

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0656048**	**.0004211**	**.0007835**	F **801.7278**	**.0095732**	**.0499595**
Stddev	.0005652	.0001530	.0000805	2.7127	.0008569	.0006963
%RSD	.8614718	36.33739	10.27940	.3383563	8.951124	1.393692
#1	.0655587	.0005399	.0007505	798.5983	.0105623	.0501643
#2	.0661916	.0002484	.0007248	803.4094	.0090524	.0505304
#3	.0650641	.0004749	.0008753	803.1756	.0091051	.0491837

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0298099**	**18.38535**	**3.510624**	**51.17913**	**.0162394**	**-.000215**
Stddev	.0098049	.03146	.018533	.07737	.0003684	.000293
%RSD	32.89152	.1710879	.5279207	.1511772	2.268800	136.0260
#1	.0203002	18.35988	3.493034	51.09406	.0165835	-.000433
#2	.0398855	18.42051	3.529975	51.19803	.0162842	-.000330
#3	.0292439	18.37566	3.508863	51.24530	.0158507	.000118

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.467538**	**.0047276**	**.1018537**	**1.254738**	**.8147637**	**.0126813**
Stddev	.946202	.0094583	.0022335	.072453	.0069600	.0018320
%RSD	202.3798	200.0656	2.192871	5.774352	.8542400	14.44676
#1	.451349	.0112870	.1006788	1.281207	.8112289	.0110003
#2	-1.43887	-.006115	.1044294	1.310235	.8102805	.0146340
#3	-.41509	.009010	.1004529	1.172772	.8227818	.0124095

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P4983-20DL2X4 Acquired: 12/15/2024 22:22:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000749	.9384875	2.599193	.0059824	.0648727	.5905101
Stddev	.000315	.0101376	.032754	.0015814	.0037344	.0034345
%RSD	42.04294	1.080205	1.260165	26.43427	5.756434	.5816111
#1	-.000688	.9420155	2.572516	.0076450	.0675406	.5877987
#2	-.000469	.9270572	2.635750	.0058050	.0664725	.5943722
#3	-.001089	.9463896	2.589315	.0044972	.0606050	.5893594

Elem	Li6707
Units	ppm
Avg	.0704452
Stddev	.0088410
%RSD	12.55014
#1	.0791209
#2	.0614478
#3	.0707669

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2276.924	27726.76	2684.798	1916.888	2829.761
Stddev	11.941	159.73	7.023	10.248	14.228
%RSD	.5244228	.5760955	.2615683	.5346110	.5027978
#1	2288.051	27584.36	2683.148	1909.672	2838.901
#2	2278.412	27696.44	2678.747	1912.373	2837.014
#3	2264.309	27899.48	2692.499	1928.618	2813.368

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-01 Acquired: 12/15/2024 22:27:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0944679	.0108384	1.060964	.0045145	.0266958	64.50862
Stddev	.0009836	.0031606	.002904	.0038654	.0029686	.07059
%RSD	1.041224	29.16099	.2737032	85.62220	11.11998	.1094234
#1	.0933775	.0130489	1.062821	.0064326	.0292114	64.56161
#2	.0952884	.0072183	1.057618	.0070458	.0274546	64.53575
#3	.0947379	.0122479	1.062453	.0000652	.0234215	64.42849

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.312243	.0064473	.0068407	55.98495	.1189129	.0905961
Stddev	.003190	.0001647	.0000588	.08339	.0004768	.0006922
%RSD	.2430688	2.554232	.8591668	.1489460	.4009276	.7640415
#1	1.313566	.0064890	.0069083	55.95623	.1193419	.0903921
#2	1.314559	.0065871	.0068020	56.07890	.1183996	.0900288
#3	1.308605	.0062657	.0068117	55.91971	.1189970	.0913674

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3336049	151.0867	6.768650	19.46657	.1649439	-.008165
Stddev	.0057798	.0509	.007726	.04100	.0000422	.000245
%RSD	1.732534	.0336724	.1141477	.2106304	.0255643	3.003251
#1	.3303649	151.0730	6.759981	19.51367	.1649360	-.008337
#2	.3402779	151.1430	6.774810	19.44722	.1649895	-.008274
#3	.3301718	151.0441	6.771160	19.43882	.1649063	-.007884

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.403050	.1627979	1.278187	8.570754	F 12.24235	-.017178
Stddev	.161115	.0040067	.012111	.107361	.04070	.004006
%RSD	39.97386	2.461158	.9474864	1.252646	.3324762	23.32304
#1	-.522353	.1673837	1.287691	8.451401	12.26486	-.017702
#2	-.219774	.1599741	1.264551	8.659456	12.19537	-.020897
#3	-.467025	.1610361	1.282320	8.601407	12.26683	-.012936

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-01 Acquired: 12/15/2024 22:27:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053169	4.275331	8.900402	.0810935	.7194359	.0150356
Stddev	.0003256	.017576	.073029	.0032462	.0053459	.0004397
%RSD	6.124037	.4110909	.8205182	4.002973	.7430737	2.924309
#1	.0050265	4.293720	8.855213	.0832728	.7148650	.0152271
#2	.0052553	4.258701	8.984655	.0826449	.7253143	.0153470
#3	.0056689	4.273572	8.861339	.0773627	.7181284	.0145326

Elem	Li6707
Units	ppm
Avg	.1011694
Stddev	.0062702
%RSD	6.197718
#1	.0939295
#2	.1047393
#3	.1048396

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2751.644	33348.75	3088.377	2317.810	3199.357
Stddev	11.472	132.63	9.941	7.074	9.996
%RSD	.4169183	.3977174	.3219000	.3052137	.3124296
#1	2760.899	33204.54	3094.255	2311.689	3202.318
#2	2755.224	33465.51	3076.899	2325.555	3207.538
#3	2738.808	33376.20	3093.977	2316.185	3188.216

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-02 Acquired: 12/15/2024 22:31:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0972839**	**.0088882**	**1.611177**	**.0015772**	**.0257436**	**68.68270**
Stddev	.0058046	.0025140	.006649	.0099800	.0018381	.35898
%RSD	5.966673	28.28482	.4126956	632.7825	7.139872	.5226696
#1	.0942127	.0065731	1.617213	-.007546	.0273541	68.29549
#2	.0936602	.0115625	1.604050	.012236	.0261355	68.74813
#3	.1039790	.0085290	1.612268	.000041	.0237412	69.00446

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.310251**	**.0066777**	**.0071832**	**61.74207**	**.1293831**	**.0903990**
Stddev	.007222	.0000837	.0001196	.39195	.0002792	.0004090
%RSD	.5511805	1.252841	1.664451	.6348217	.2157875	.4524551
#1	1.302304	.0065978	.0071697	61.32847	.1290962	.0904514
#2	1.312035	.0066705	.0073089	61.78973	.1296539	.0907793
#3	1.316414	.0067647	.0070709	62.10801	.1293992	.0899663

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4332231**	**148.1359**	**6.177343**	**20.26017**	**.1780154**	**-.007036**
Stddev	.0061003	.9945	.033307	.10759	.0011799	.000773
%RSD	1.408112	.6713524	.5391772	.5310312	.6628253	10.98480
#1	.4351603	147.0036	6.139322	20.20774	.1791314	-.006147
#2	.4381196	148.5360	6.191343	20.18884	.1781342	-.007545
#3	.4263895	148.8680	6.201366	20.38392	.1767805	-.007417

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.229991**	**.1762563**	**1.610312**	**8.561665**	F **13.72492**	**-.013204**
Stddev	.395847	.0052479	.009169	.222949	.03891	.003094
%RSD	172.1145	2.977419	.5693832	2.604038	.2834954	23.43365
#1	-.333121	.1818808	1.620831	8.786809	13.75995	-.016064
#2	.207215	.1714911	1.606095	8.340978	13.68304	-.009920
#3	-.564066	.1753970	1.604010	8.557208	13.73178	-.013627

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-02 Acquired: 12/15/2024 22:31:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047272	4.056691	7.497628	.1569703	.6980624	.0457350
Stddev	.0003269	.018761	.034194	.0007606	.0055268	.0003615
%RSD	6.915871	.4624744	.4560641	.4845751	.7917270	.7903626
#1	.0050680	4.057543	7.459193	.1561458	.6917002	.0460292
#2	.0046976	4.037519	7.509014	.1576446	.7008116	.0458444
#3	.0044161	4.075012	7.524675	.1571206	.7016754	.0453315

Elem	Li6707
Units	ppm
Avg	.1052990
Stddev	.0029338
%RSD	2.786198
#1	.1019155
#2	.1068458
#3	.1071358

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2746.604	33623.26	3101.276	2333.064	3168.938
Stddev	2.668	209.81	13.295	9.019	4.119
%RSD	.0971324	.6239902	.4286910	.3865563	.1299783
#1	2743.603	33859.32	3116.133	2343.419	3164.367
#2	2748.708	33458.04	3090.500	2328.845	3172.363
#3	2747.500	33552.42	3097.197	2326.929	3170.085

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-03 Acquired: 12/15/2024 22:35:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0984190	.0099199	.9453780	.0020789	.0253098	65.87389
Stddev	.0019631	.0009406	.0045913	.0039422	.0026433	.09264
%RSD	1.994650	9.481572	.4856624	189.6340	10.44357	.1406280
#1	.0983916	.0092142	.9460898	.0044703	.0223522	65.76788
#2	.0964697	.0095579	.9404723	.0042375	.0261357	65.91453
#3	.1003957	.0109877	.9495718	-.002471	.0274415	65.93926

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.249449	.0062872	.0065116	63.85632	.1180690	.0889114
Stddev	.003963	.0000355	.0001084	.13225	.0007922	.0007259
%RSD	.3171657	.5641676	1.665321	.2070978	.6709958	.8164823
#1	1.245037	.0062978	.0065990	63.86739	.1186738	.0893638
#2	1.250604	.0063162	.0065455	63.71889	.1183610	.0880741
#3	1.252706	.0062477	.0063902	63.98268	.1171722	.0892964

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3225095	146.8604	6.470020	22.06159	.1521890	-.008775
Stddev	.0068220	.3140	.023592	.15113	.0011425	.001172
%RSD	2.115289	.2138198	.3646349	.6850344	.7506964	13.35845
#1	.3234697	146.5694	6.443209	21.91153	.1517573	-.008208
#2	.3152583	147.1933	6.487604	22.05948	.1513252	-.007994
#3	.3288006	146.8184	6.479247	22.21376	.1534844	-.010123

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074124	.1740976	1.067275	7.148692	F 11.85630	-.013211
Stddev	.4373024	.0051111	.015100	.121093	.03508	.001683
%RSD	5899.576	2.935790	1.414818	1.693922	.2959073	12.74135
#1	.0579311	.1763906	1.054850	7.008871	11.85430	-.013921
#2	.4172615	.1682415	1.062893	7.217521	11.82226	-.014424
#3	-.452955	.1776607	1.084081	7.219684	11.89234	-.011289

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-03 Acquired: 12/15/2024 22:35:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039270	3.212864	8.224322	.0704238	.6477648	.0467659
Stddev	.0002715	.017458	.019312	.0014013	.0041183	.0003239
%RSD	6.913271	.5433754	.2348136	1.989766	.6357723	.6926491
#1	.0039039	3.215629	8.225137	.0705458	.6466984	.0466098
#2	.0042092	3.194188	8.243213	.0689656	.6442846	.0465496
#3	.0036678	3.228773	8.204616	.0717602	.6523114	.0471383

Elem	Li6707
Units	ppm
Avg	.1077015
Stddev	.0027158
%RSD	2.521573
#1	.1102940
#2	.1048773
#3	.1079332

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2770.739	33585.07	3106.720	2340.074	3232.704
Stddev	10.698	88.95	3.889	11.705	8.937
%RSD	.3861167	.2648365	.1251836	.5001940	.2764564
#1	2758.477	33613.98	3108.216	2343.283	3222.856
#2	2778.164	33655.96	3102.305	2349.840	3240.299
#3	2775.576	33485.26	3109.639	2327.099	3234.957

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-04 Acquired: 12/15/2024 22:39:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1171705**	**.0171033**	**.6323914**	**.0036379**	**.0265440**	**70.84916**
Stddev	.0040234	.0034487	.0005722	.0052214	.0015711	.08763
%RSD	3.433832	20.16392	.0904829	143.5301	5.918788	.1236820
#1	.1206787	.0140100	.6329471	.0093957	.0282946	70.93178
#2	.1127787	.0208219	.6318040	.0023076	.0260807	70.85844
#3	.1180543	.0164781	.6324230	-.000790	.0252567	70.75726

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.551076**	**.0063387**	**.0064160**	**64.35486**	**.1047523**	**.1125873**
Stddev	.002785	.0001918	.0000803	.07225	.0041616	.0008753
%RSD	.1795564	3.025438	1.250916	.1122647	3.972750	.7774342
#1	1.552978	.0063922	.0065001	64.28223	.0999622	.1115942
#2	1.552371	.0064981	.0063403	64.42672	.1074779	.1129214
#3	1.547880	.0061259	.0064076	64.35562	.1068169	.1132464

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2640845**	**165.1108**	**9.886914**	**22.80903**	**.1420345**	**-.010747**
Stddev	.0054744	.2895	.031335	.10191	.0007186	.001646
%RSD	2.072984	.1753415	.3169343	.4468083	.5059092	15.31737
#1	.2612590	165.3297	9.894823	22.71162	.1428089	-.009106
#2	.2606003	165.2201	9.913536	22.80055	.1413894	-.012398
#3	.2703944	164.7825	9.852382	22.91492	.1419052	-.010738

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.048821**	**.1725976**	**.8551815**	**6.593720**	F **15.03828**	**-.013581**
Stddev	.218088	.0105882	.0143912	.094794	.04790	.003820
%RSD	446.7088	6.134633	1.682828	1.437637	.3185016	28.12785
#1	-.231369	.1839021	.8386183	6.504388	15.00563	-.009921
#2	-.107780	.1709784	.8622994	6.693164	15.01595	-.017543
#3	.192685	.1629122	.8646267	6.583608	15.09327	-.013277

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-04 Acquired: 12/15/2024 22:39:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043819	2.924561	7.296006	.0500188	.5436697	.0257341
Stddev	.0008352	.020744	.072590	.0014505	.0041955	.0002473
%RSD	19.05944	.7093043	.9949329	2.899839	.7716995	.9610581
#1	.0044466	2.902557	7.243719	.0497434	.5410729	.0257051
#2	.0035163	2.927365	7.378885	.0515873	.5485100	.0259947
#3	.0051829	2.943760	7.265415	.0487258	.5414263	.0255026

Elem	Li6707
Units	ppm
Avg	.1134071
Stddev	.0026401
%RSD	2.327994
#1	.1132688
#2	.1108388
#3	.1161136

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2860.376	34883.69	3229.558	2428.615	3196.591
Stddev	8.031	610.39	8.047	39.893	6.718
%RSD	.2807657	1.749788	.2491761	1.642627	.2101621
#1	2852.028	35550.07	3225.047	2472.220	3192.435
#2	2868.048	34351.68	3224.777	2393.951	3204.341
#3	2861.051	34749.33	3238.849	2419.673	3192.996

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-05 Acquired: 12/15/2024 22:42:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0787260	.0090848	.3248573	-.001853	.0267069	65.74693	1.016142
Stddev	.0056273	.0041178	.0026180	.007555	.0034225	.31350	.006177
%RSD	7.148004	45.32648	.8058762	407.6807	12.81514	.4768329	.6078948
#1	.0775181	.0137422	.3218751	-.006865	.0296145	65.38495	1.009017
#2	.0848592	.0075856	.3267768	.006837	.0229351	65.93173	1.019994
#3	.0738007	.0059266	.3259200	-.005532	.0275712	65.92410	1.019414

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061168	.0046020	60.68805	.0994321	.0884853	.2350336	157.6049
Stddev	.0001804	.0000513	.15635	.0007383	.0005508	.0038081	.8179
%RSD	2.948754	1.115422	.2576286	.7425070	.6225373	1.620227	.5189420
#1	.0059195	.0046200	60.51253	.1002561	.0881639	.2375981	156.6605
#2	.0061577	.0046419	60.73917	.0992093	.0881707	.2368448	158.0729
#3	.0062732	.0045441	60.81243	.0988308	.0891214	.2306580	158.0812

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.587190	26.78369	.1303060	-.010589	.5378745	.1498696	.6848977
Stddev	.043101	.20329	.0011230	.000081	.4525847	.0029588	.0060961
%RSD	.7714228	.7589936	.8618321	.7636829	84.14318	1.974238	.8900780
#1	5.537830	26.57081	.1298810	-.010657	.9256554	.1481341	.6822074
#2	5.606362	26.97578	.1315795	-.010611	.0405827	.1481886	.6918762
#3	5.617379	26.80449	.1294575	-.010499	.6473854	.1532859	.6806096

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.852697	8.781109	-.016153	.0031535	1.914645	9.302591	.0274731
Stddev	.217938	.031425	.001793	.0001891	.010121	.057730	.0017833
%RSD	3.723722	.3578756	11.09745	5.998272	.5285954	.6205756	6.490943
#1	5.602806	8.746825	-.018163	.0031147	1.909906	9.237756	.0266751
#2	6.003389	8.787953	-.015577	.0029867	1.907764	9.348426	.0295161
#3	5.951896	8.808547	-.014720	.0033590	1.926266	9.321590	.0262283

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-05 Acquired: 12/15/2024 22:42:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7096703	-.021182	.1041977
Stddev	.0046807	.000317	.0042971
%RSD	.6595593	1.498025	4.124035
#1	.7106800	-.021003	.1083021
#2	.7045672	-.020995	.1045601
#3	.7137638	-.021549	.0997308

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2797.510	34057.45	3169.390	2365.235	3145.274
Stddev	10.990	200.19	14.530	12.881	14.983
%RSD	.3928524	.5877964	.4584596	.5446168	.4763636
#1	2807.110	33890.53	3185.729	2360.071	3160.868
#2	2799.899	34002.43	3164.526	2355.737	3143.969
#3	2785.522	34279.40	3157.916	2379.897	3130.987

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-06 Acquired: 12/15/2024 22:46:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0623205	.0255702	1.474217	-.021986	.0161549	63.52170	.9430249
Stddev	.0045620	.0019118	.005883	.005960	.0010289	.23045	.0063173
%RSD	7.320258	7.476692	.3990386	27.11062	6.368672	.3627901	.6698934
#1	.0575172	.0239122	1.476358	-.016196	.0168459	63.37944	.9396695
#2	.0628491	.0276614	1.467564	-.028104	.0149725	63.78758	.9503118
#3	.0665952	.0251370	1.478729	-.021657	.0166464	63.39807	.9390933

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056546	.0047549	258.2369	.0988016	.1028052	1.214537	163.4468
Stddev	.0001287	.0000533	.9955	.0005914	.0004239	.014558	.7544
%RSD	2.275212	1.121194	.3855129	.5986227	.4123073	1.198627	.4615657
#1	.0055270	.0048151	257.3557	.0994842	.1027592	1.205119	162.8401
#2	.0057843	.0047361	259.3168	.0984799	.1032502	1.231304	164.2915
#3	.0056524	.0047136	258.0382	.0984408	.1024062	1.207187	163.2087

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.113944	52.29120	.1556807	-.012482	.4495048	.1263685	6.906478
Stddev	.049021	.18705	.0004066	.000393	.0945682	.0106166	.064379
%RSD	.6041632	.3577119	.2611761	3.147434	21.03830	8.401279	.9321510
#1	8.109037	52.32537	.1552625	-.012688	.3571319	.1325048	6.838768
#2	8.165235	52.45882	.1560746	-.012728	.5461251	.1141095	6.966906
#3	8.067561	52.08942	.1557051	-.012029	.4452574	.1324912	6.913761

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.994783	8.083288	-.012528	.0020800	1.467217	7.943111	.5932700
Stddev	.084308	.017945	.002289	.0002519	.004886	.042105	.0017430
%RSD	1.687920	.2219962	18.26908	12.11133	.3329774	.5300813	.2937872
#1	4.951063	8.075969	-.011207	.0022758	1.463121	7.958936	.5912606
#2	5.091971	8.070159	-.015171	.0021684	1.465906	7.975010	.5941762
#3	4.941317	8.103735	-.011207	.0017958	1.472625	7.895386	.5943732

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-06 Acquired: 12/15/2024 22:46:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6712576	.1377961	.1250262
Stddev	.0043299	.0013221	.0007488
%RSD	.6450476	.9594513	.5988941
#1	.6718365	.1383083	.1258887
#2	.6752689	.1387854	.1246475
#3	.6666673	.1362945	.1245424

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2771.775	33610.74	3197.659	2331.702	3029.773
Stddev	6.525	107.06	13.744	9.088	4.020
%RSD	.2354266	.3185229	.4298227	.3897425	.1326730
#1	2778.257	33734.35	3188.518	2340.623	3033.405
#2	2771.861	33548.07	3190.994	2322.456	3030.460
#3	2765.207	33549.78	3213.465	2332.026	3025.455

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-07 Acquired: 12/15/2024 22:50:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0598717**	**.0336566**	**.1800379**	**-.036621**	**.0068665**	**39.88854**
Stddev	.0053408	.0026025	.0012400	.001926	.0027411	.14588
%RSD	8.920449	7.732422	.6887145	5.258888	39.91956	.3657308
#1	.0590137	.0309162	.1806052	-.037572	.0077634	40.05630
#2	.0550119	.0360948	.1808927	-.034405	.0037894	39.81795
#3	.0655896	.0339586	.1786158	-.037887	.0090469	39.79138

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6397719**	**.0038439**	**.0037349**	F **942.4037**	**.0650822**	**.1105351**
Stddev	.0023697	.0002076	.0000544	2.8130	.0004078	.0005916
%RSD	.3703939	5.399971	1.456264	.2984911	.6265952	.5351911
#1	.6418538	.0038675	.0036904	945.6478	.0648188	.1108249
#2	.6371932	.0040387	.0037187	940.9222	.0655519	.1109260
#3	.6402686	.0036255	.0037955	940.6412	.0648758	.1098546

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2674654**	**133.7155**	**7.790749**	**188.3496**	**.1216448**	**-.010979**
Stddev	.0040720	.4582	.029984	.7848	.0010786	.001457
%RSD	1.522434	.3426473	.3848603	.4166842	.8866694	13.26954
#1	.2631107	134.0231	7.825371	189.2549	.1225848	-.009298
#2	.2681071	133.9346	7.773451	187.9341	.1204672	-.011751
#3	.2711785	133.1890	7.773425	187.8600	.1218823	-.011886

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3780458**	**.1069299**	**.3686580**	**5.010631**	**7.934814**	**.0018785**
Stddev	.1479254	.0171404	.0022215	.041599	.020142	.0023978
%RSD	39.12896	16.02961	.6025960	.8302115	.2538441	127.6460
#1	.2094729	.0925940	.3660936	5.009113	7.938548	.0003083
#2	.4384722	.1022803	.3698847	4.969812	7.913067	.0046386
#3	.4861924	.1259155	.3699957	5.052968	7.952829	.0006886

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-07 Acquired: 12/15/2024 22:50:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012472	2.026320	6.301993	.0238925	1.171323	.7805190
Stddev	.0002919	.002510	.037369	.0022901	.004324	.0025782
%RSD	23.40658	.1238476	.5929760	9.585208	.3691480	.3303215
#1	.0011827	2.025765	6.338801	.0223385	1.176248	.7834823
#2	.0015659	2.024134	6.303092	.0265225	1.169571	.7787899
#3	.0009928	2.029060	6.264087	.0228165	1.168150	.7792847

Elem	Li6707
Units	ppm
Avg	.1455761
Stddev	.0034602
%RSD	2.376933
#1	.1478247
#2	.1473120
#3	.1415915

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2503.604	30359.49	2981.008	2102.927	2703.189
Stddev	7.378	87.91	23.738	4.365	3.682
%RSD	.2946796	.2895543	.7963050	.2075538	.1362198
#1	2512.072	30381.00	2957.561	2104.042	2707.040
#2	2500.180	30262.82	2980.435	2098.113	2702.822
#3	2498.561	30434.64	3005.027	2106.626	2699.704

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-08 Acquired: 12/15/2024 22:54:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0621507**	**.0346016**	**.1778323**	**-.034400**	**.0088739**	**39.84837**
Stddev	.0040906	.0020627	.0010383	.003143	.0026878	.14730
%RSD	6.581739	5.961318	.5838456	9.137805	30.28883	.3696570
#1	.0609064	.0337711	.1767091	-.036387	.0117890	39.90536
#2	.0588267	.0369501	.1787569	-.030776	.0064939	39.68109
#3	.0667190	.0330836	.1780309	-.036037	.0083389	39.95866

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6356219**	**.0039790**	**.0035182**	F **939.0403**	**.0640637**	**.1086138**
Stddev	.0018149	.0001313	.0000510	2.7697	.0005871	.0008062
%RSD	.2855361	3.298918	1.449364	.2949550	.9163629	.7422804
#1	.6361365	.0041161	.0034664	941.1117	.0640110	.1076933
#2	.6336052	.0038545	.0035683	935.8943	.0635047	.1089539
#3	.6371239	.0039663	.0035199	940.1149	.0646753	.1091943

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2718812**	**133.7299**	**7.803371**	**187.3770**	**.1195737**	**-.009844**
Stddev	.0100338	.5809	.021996	.9924	.0003935	.000631
%RSD	3.690514	.4343581	.2818814	.5296523	.3290571	6.409424
#1	.2771591	133.3778	7.785578	186.7592	.1191267	-.010188
#2	.2781744	133.4117	7.796571	186.8501	.1198677	-.010229
#3	.2603100	134.4004	7.827964	188.5218	.1197267	-.009116

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1879463**	**.1068214**	**.3559728**	**5.118860**	**7.876117**	**.0022329**
Stddev	.3547482	.0104452	.0073911	.121720	.066051	.0025620
%RSD	188.7498	9.778143	2.076302	2.377882	.8386303	114.7414
#1	.3173114	.1104278	.3640327	5.145713	7.803153	.0004709
#2	-.213329	.0950510	.3543730	4.985955	7.893362	.0051719
#3	.459857	.1149855	.3495125	5.224911	7.931835	.0010558

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-08 Acquired: 12/15/2024 22:54:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005765	2.005522	6.478513	.0223572	1.177383	.7788116
Stddev	.0006605	.012584	.037619	.0002922	.007399	.0038758
%RSD	114.5735	.6274811	.5806806	1.306728	.6284662	.4976581
#1	.0007627	1.991629	6.443033	.0221769	1.171878	.7773418
#2	-.000157	2.008780	6.517958	.0226942	1.174476	.7758857
#3	.001124	2.016157	6.474549	.0222004	1.185794	.7832073

Elem	Li6707
Units	ppm
Avg	.1513254
Stddev	.0003402
%RSD	.2247995
#1	.1511967
#2	.1517111
#3	.1510683

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2534.140	30639.92	3004.333	2128.531	2742.329
Stddev	16.323	142.53	13.262	12.635	23.004
%RSD	.6441151	.4651878	.4414137	.5935838	.8388325
#1	2552.119	30634.57	3017.049	2134.517	2765.251
#2	2530.051	30785.05	3005.364	2137.059	2742.492
#3	2520.250	30500.13	2990.586	2114.015	2719.244

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-07LX5 Acquired: 12/15/2024 22:58:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091444	.0211622	.0440733	-.033279	-.013562	8.606025	.1398553
Stddev	.0064423	.0038230	.0009297	.003363	.003351	.021736	.0009907
%RSD	70.45090	18.06523	2.109524	10.10415	24.70694	.2525619	.7083458
#1	.0158771	.0181273	.0436793	-.033693	-.009881	8.583059	.1393416
#2	.0030383	.0199034	.0434054	-.036416	-.016434	8.608740	.1392270
#3	.0085178	.0254559	.0451351	-.029729	-.014370	8.626275	.1409973

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008747	.0006208	208.5372	.0152166	.0428580	.0606966	30.36925
Stddev	.0001325	.0001623	.1394	.0016036	.0003935	.0036984	.15799
%RSD	15.15100	26.14343	.0668301	10.53874	.9181175	6.093217	.5202349
#1	.0007537	.0006154	208.3855	.0136811	.0430688	.0572475	30.35738
#2	.0010164	.0007857	208.5666	.0168806	.0431011	.0646019	30.53284
#3	.0008542	.0004612	208.6595	.0150881	.0424040	.0602403	30.21752

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.770247	42.37365	.0209592	-.001611	-.777145	.0119455	.0704927
Stddev	.005507	.08759	.0005057	.000546	.464411	.0060924	.0059180
%RSD	.3111044	.2067085	2.412742	33.89758	59.75868	51.00172	8.395159
#1	1.764562	42.32695	.0205696	-.001045	-1.08903	.0063664	.0772853
#2	1.775557	42.47469	.0215307	-.001653	-.24341	.0110238	.0677427
#3	1.770623	42.31930	.0207774	-.002134	-.99899	.0184462	.0664501

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.410732	1.435190	-.003791	.0004970	.3743197	1.440313	.0030962
Stddev	.112132	.003302	.000308	.0002498	.0073921	.019747	.0008274
%RSD	7.948478	.2300486	8.124824	50.25194	1.974812	1.371044	26.72204
#1	1.440067	1.437752	-.003533	.0006988	.3825549	1.436994	.0039760
#2	1.505279	1.431464	-.004132	.0002177	.3721463	1.461510	.0023339
#3	1.286848	1.436353	-.003708	.0005746	.3682579	1.422436	.0029785

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-07LX5 Acquired: 12/15/2024 22:58:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2579063	.1714134	.0382031
Stddev	.0007458	.0001082	.0026507
%RSD	.2891640	.0631071	6.938368
#1	.2571482	.1712899	.0351460
#2	.2579315	.1714586	.0396033
#3	.2586391	.1714916	.0398601

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2443.599	28642.00	2756.294	1989.468	3144.267
Stddev	4.987	1349.87	17.201	92.157	6.133
%RSD	.2040705	4.712899	.6240639	4.632243	.1950429
#1	2443.041	29388.31	2772.973	2041.218	3143.853
#2	2438.915	27083.77	2738.615	1883.067	3138.351
#3	2448.842	29453.93	2757.295	2044.118	3150.596

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-09 Acquired: 12/15/2024 23:02:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1410570**	**.1279503**	**.2145914**	**.1236868**	**.1629339**	**42.75259**
Stddev	.0064024	.0045129	.0041858	.0027428	.0039344	.06335
%RSD	4.538881	3.527038	1.950586	2.217495	2.414752	.1481849
#1	.1341328	.1228770	.2194147	.1268515	.1592865	42.69211
#2	.1422758	.1315175	.2119106	.1222098	.1671033	42.81847
#3	.1467624	.1294564	.2124488	.1219990	.1624120	42.74720

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.258617**	**.0927160**	**.1014725**	F **925.4248**	**.4295652**	**1.084316**
Stddev	.011428	.0006994	.0002661	1.1658	.0029071	.003151
%RSD	.2683505	.7543699	.2622911	.1259747	.6767543	.2905925
#1	4.258685	.0934058	.1017786	925.8971	.4329125	1.084009
#2	4.270011	.0927349	.1012958	926.2804	.4276731	1.081329
#3	4.247155	.0920074	.1013430	924.0970	.4281099	1.087609

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6802632**	**133.5361**	**8.548265**	**184.6690**	**1.111094**	**.0624179**
Stddev	.0016573	.2294	.012062	.5240	.001543	.0007750
%RSD	.2436294	.1718262	.1411093	.2837597	.1388743	1.241638
#1	.6790937	133.5808	8.551473	184.3571	1.111340	.0617689
#2	.6795360	133.7399	8.558398	185.2740	1.109442	.0632760
#3	.6821597	133.2876	8.534922	184.3760	1.112499	.0622088

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3674921**	**1.027838**	**1.148047**	**5.161910**	**7.655586**	**-.000146**
Stddev	.0993249	.008218	.018776	.174136	.019658	.001202
%RSD	27.02776	.7995222	1.635437	3.373483	.2567845	824.4479
#1	.4818353	1.018508	1.155919	5.353859	7.667384	.001116
#2	.3180435	1.034000	1.161605	5.117801	7.632892	-.000276
#3	.3025973	1.031007	1.126616	5.014069	7.666481	-.001278

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-09 Acquired: 12/15/2024 23:02:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008010	1.949472	6.331632	.0231915	1.154256	.7624730
Stddev	.0003442	.004870	.027144	.0008797	.008846	.0024190
%RSD	42.97448	.2498233	.4286999	3.793231	.7663393	.3172610
#1	.0004313	1.949140	6.360143	.0241958	1.157481	.7609999
#2	.0011123	1.944775	6.328652	.0228213	1.161037	.7652648
#3	.0008593	1.954499	6.306102	.0225573	1.144251	.7611542

Elem	Li6707
Units	ppm
Avg	.1518758
Stddev	.0036860
%RSD	2.426998
#1	.1504660
#2	.1560587
#3	.1491028

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2490.873	30409.68	2966.351	2103.244	2714.455
Stddev	3.681	153.71	12.439	13.727	4.224
%RSD	.1477777	.5054616	.4193288	.6526776	.1556039
#1	2493.207	30422.55	2959.394	2102.630	2717.659
#2	2492.782	30556.54	2980.712	2117.269	2716.038
#3	2486.629	30249.94	2958.948	2089.834	2709.668

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-10 Acquired: 12/15/2024 23:05:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0893559	.0118093	1.025060	.0066807	.0280389	71.24245
Stddev	.0040268	.0024841	.005448	.0063460	.0020452	.29531
%RSD	4.506457	21.03515	.5315221	94.99031	7.294026	.4145144
#1	.0893722	.0098045	1.020042	.0113516	.0297903	71.29219
#2	.0853210	.0110350	1.024284	.0092350	.0285352	70.92543
#3	.0933745	.0145883	1.030856	-.000544	.0257913	71.50973

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.177271	.0062808	.0071143	52.67680	.1173414	.0893827
Stddev	.003590	.0001495	.0001395	.32032	.0004002	.0003488
%RSD	.3049751	2.379668	1.960690	.6080900	.3410339	.3902491
#1	1.177723	.0061245	.0069592	52.68143	.1175432	.0892447
#2	1.173476	.0062954	.0072295	52.35419	.1168805	.0891241
#3	1.180614	.0064224	.0071541	52.99478	.1176005	.0897795

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2703118	153.9175	8.175360	24.20593	.1834157	-.009344
Stddev	.0025016	.4710	.037456	.12491	.0010801	.000363
%RSD	.9254530	.3060340	.4581576	.5160488	.5888844	3.884550
#1	.2729949	153.8390	8.170180	24.15148	.1821890	-.009715
#2	.2698970	153.4906	8.140763	24.11747	.1838337	-.009326
#3	.2680436	154.4229	8.215136	24.34882	.1842242	-.008990

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.366210	.1500673	1.369490	5.709960	F 11.83483	-.015970
Stddev	.450677	.0102617	.012800	.036072	.04296	.002172
%RSD	123.0652	6.838049	.9346357	.6317371	.3629680	13.60067
#1	.153831	.1516462	1.383516	5.701509	11.80276	-.016577
#2	-.609566	.1391077	1.366513	5.678864	11.81810	-.013559
#3	-.642896	.1594480	1.358442	5.749508	11.88364	-.017774

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-10 Acquired: 12/15/2024 23:05:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037016	4.383452	7.001212	.0557464	.6962654	-.012952
Stddev	.0002869	.025052	.089155	.0010060	.0058919	.000027
%RSD	7.749549	.5715193	1.273419	1.804664	.8462107	.2051418
#1	.0040223	4.360445	6.984470	.0568886	.6959971	-.012953
#2	.0034694	4.379770	6.921615	.0549921	.6905122	-.012925
#3	.0036130	4.410142	7.097551	.0553583	.7022868	-.012978

Elem	Li6707
Units	ppm
Avg	.1202130
Stddev	.0046971
%RSD	3.907315
#1	.1255404
#2	.1184309
#3	.1166678

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2737.926	33352.06	3061.762	2311.061	3176.746
Stddev	7.490	164.43	32.064	7.586	9.785
%RSD	.2735563	.4930066	1.047249	.3282468	.3080042
#1	2731.116	33163.25	3058.104	2302.945	3177.951
#2	2745.948	33429.19	3095.498	2312.263	3185.872
#3	2736.714	33463.74	3031.683	2317.973	3166.415

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-11 Acquired: 12/15/2024 23:09:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0886739	.0148989	.9365775	.0078473	.0230633	68.87640
Stddev	.0013367	.0026470	.0024759	.0016206	.0029347	.13753
%RSD	1.507388	17.76628	.2643587	20.65194	12.72459	.1996760
#1	.0901708	.0172512	.9339586	.0095263	.0201581	69.03481
#2	.0882510	.0120326	.9388800	.0062922	.0260266	68.80693
#3	.0875997	.0154128	.9368938	.0077234	.0230050	68.78747

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.212728	.0060453	.0062198	54.38606	.1062872	.0853696
Stddev	.004314	.0000992	.0000760	.25692	.0008306	.0011066
%RSD	.3556936	1.641190	1.222173	.4724026	.7814689	1.296262
#1	1.217610	.0060380	.0062960	54.49900	.1054176	.0860686
#2	1.211144	.0061480	.0061440	54.56716	.1070724	.0840937
#3	1.209431	.0059500	.0062194	54.09201	.1063717	.0859465

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2809748	148.4135	7.895692	22.96624	.1636372	-.009441
Stddev	.0162026	.7809	.031331	.12227	.0004772	.000322
%RSD	5.766567	.5261612	.3968130	.5323711	.2915958	3.407551
#1	.2789806	149.2807	7.930067	23.10353	.1638211	-.009189
#2	.2980821	148.1940	7.888271	22.92612	.1630955	-.009329
#3	.2658615	147.7659	7.868737	22.86908	.1639951	-.009803

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4753124	.1374317	1.323702	3.222189	F 12.60006	-.018582
Stddev	.4916955	.0079573	.011897	.157434	.02793	.001969
%RSD	103.4468	5.789974	.8987312	4.885938	.2216725	10.59701
#1	1.022195	.1465659	1.318983	3.111840	12.56898	-.017728
#2	.333987	.1320027	1.337234	3.402475	12.60815	-.017183
#3	.069756	.1337265	1.314889	3.152253	12.62305	-.020833

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-11 Acquired: 12/15/2024 23:09:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040888	3.947272	6.349739	.0865761	.5858764	.0095877
Stddev	.0002545	.010274	.057466	.0013210	.0079039	.0001252
%RSD	6.224564	.2602873	.9050103	1.525776	1.349073	1.305918
#1	.0038145	3.938839	6.414861	.0854026	.5948936	.0096458
#2	.0041348	3.944262	6.306148	.0880067	.5825877	.0094440
#3	.0043172	3.958715	6.328208	.0863190	.5801477	.0096733

Elem	Li6707
Units	ppm
Avg	.1145985
Stddev	.0031304
%RSD	2.731589
#1	.1157203
#2	.1110618
#3	.1170133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2762.934	33595.88	3101.532	2325.043	3219.015
Stddev	8.274	169.69	23.849	11.603	5.950
%RSD	.2994493	.5050973	.7689400	.4990658	.1848305
#1	2754.305	33754.01	3077.969	2329.289	3212.642
#2	2770.800	33416.61	3100.970	2311.914	3219.979
#3	2763.698	33617.02	3125.656	2333.925	3224.424

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-12 Acquired: 12/15/2024 23:13:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0672659	.0131676	.5131765	.0044306	.0229696	67.02803
Stddev	.0039235	.0021509	.0010334	.0055082	.0010590	.12463
%RSD	5.832781	16.33446	.2013722	124.3220	4.610402	.1859307
#1	.0689585	.0123071	.5140272	.0088970	.0240304	67.10158
#2	.0627802	.0115802	.5120265	-.001724	.0219125	67.09838
#3	.0700589	.0156154	.5134759	.006119	.0229658	66.88414

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.160746	.0057752	.0050472	55.94896	.0998708	.0887586
Stddev	.001076	.0001628	.0001261	.17185	.0004875	.0003687
%RSD	.0927074	2.818088	2.497404	.3071560	.4881314	.4154286
#1	1.161835	.0058766	.0050050	56.01252	.1000997	.0884342
#2	1.160721	.0055875	.0049476	56.07997	.1002017	.0891596
#3	1.159683	.0058615	.0051889	55.75438	.0993110	.0886820

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1916384	154.0903	8.183429	25.21533	.1457203	-.010709
Stddev	.0006597	.2533	.001647	.08407	.0007620	.000780
%RSD	.3442230	.1643577	.0201311	.3334203	.5229027	7.286311
#1	.1919362	154.2658	8.185316	25.26682	.1462307	-.009838
#2	.1920967	154.2051	8.182689	25.11831	.1448444	-.011345
#3	.1908824	153.8000	8.182281	25.26086	.1460857	-.010944

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.110943	.1409300	1.006488	2.953465	F 11.62711	-.022565
Stddev	.620037	.0029269	.002983	.204958	.02377	.002126
%RSD	558.8782	2.076833	.2963983	6.939588	.2044024	9.419846
#1	-.629506	.1381981	1.003350	3.046915	11.60621	-.020378
#2	-.279172	.1405729	1.006828	2.718436	11.62216	-.022694
#3	.575848	.1440191	1.009287	3.095043	11.65296	-.024623

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-12 Acquired: 12/15/2024 23:13:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKK7 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026966**	**2.472481**	**7.111776**	**.0296784**	**.6581910**	**-.017676**
Stddev	.0000654	.013068	.028727	.0016644	.0019721	.000083
%RSD	2.423744	.5285183	.4039359	5.608060	.2996237	.4722049
#1	.0026223	2.462317	7.081910	.0282550	.6565894	-.017687
#2	.0027222	2.467904	7.114208	.0315084	.6603937	-.017753
#3	.0027453	2.487221	7.139210	.0292718	.6575899	-.017587

Elem	Li6707
Units	ppm
Avg	**.1138752**
Stddev	.0038269
%RSD	3.360613
#1	.1140904
#2	.1099452
#3	.1175900

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2868.762**	**34818.34**	**3236.256**	**2424.480**	**3297.363**
Stddev	8.845	70.03	6.111	6.412	7.452
%RSD	.3083294	.2011233	.1888368	.2644884	.2259881
#1	2861.431	34844.71	3236.957	2431.121	3290.891
#2	2878.586	34738.96	3241.986	2418.324	3305.510
#3	2866.268	34871.36	3229.824	2423.996	3295.689

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-13 Acquired: 12/15/2024 23:17:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0929610	.0212932	.9341226	-.002554	.0253922	78.55219
Stddev	.0038152	.0015075	.0048540	.001516	.0022824	.07755
%RSD	4.104098	7.079871	.5196267	59.34890	8.988489	.0987192
#1	.0964964	.0229541	.9331563	-.001616	.0241362	78.51731
#2	.0934695	.0209141	.9298244	-.001743	.0280267	78.64105
#3	.0889170	.0200114	.9393870	-.004303	.0240137	78.49820

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.667132	.0068529	.0067423	109.6062	.1131038	.1085420
Stddev	.003739	.0000904	.0000399	.0319	.0004253	.0007325
%RSD	.2242884	1.318718	.5911365	.0290676	.3760473	.6748911
#1	1.663573	.0068380	.0067370	109.6376	.1126600	.1086035
#2	1.671028	.0069497	.0067054	109.6071	.1135079	.1077807
#3	1.666795	.0067708	.0067846	109.5739	.1131436	.1092419

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3391131	168.6951	8.690927	33.70013	.1658527	-.009635
Stddev	.0048472	.1380	.014611	.08347	.0001376	.001388
%RSD	1.429365	.0817838	.1681154	.2476948	.0829626	14.40426
#1	.3388372	168.6297	8.677288	33.62774	.1658321	-.009768
#2	.3440922	168.8536	8.706346	33.79144	.1657266	-.010952
#3	.3344097	168.6020	8.689148	33.68121	.1659994	-.008186

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3667574	.1621428	1.097809	6.840046	F 16.31428	.0090992
Stddev	.1701627	.0122140	.010850	.112664	.04245	.0011566
%RSD	46.39652	7.532846	.9883515	1.647123	.2601871	12.71081
#1	.5254237	.1487846	1.109621	6.950721	16.31728	.0094488
#2	.1870546	.1649039	1.095521	6.843926	16.27042	.0078081
#3	.3877939	.1727399	1.088285	6.725493	16.35515	.0100406

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-13 Acquired: 12/15/2024 23:17:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049446	4.585259	9.823009	.1225640	.6798491	.0730641
Stddev	.0003170	.021438	.073360	.0030811	.0036610	.0004924
%RSD	6.411319	.4675449	.7468205	2.513842	.5385039	.6739695
#1	.0052999	4.574084	9.772416	.1202135	.6763263	.0724959
#2	.0046905	4.571716	9.907144	.1214264	.6795868	.0733299
#3	.0048435	4.609975	9.789466	.1260522	.6836342	.0733664

Elem	Li6707
Units	ppm
Avg	.1351780
Stddev	.0061493
%RSD	4.549065
#1	.1301699
#2	.1420414
#3	.1333228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2763.611	33589.15	3148.638	2345.442	3126.042
Stddev	3.559	268.73	20.672	23.847	4.629
%RSD	.1287668	.8000389	.6565510	1.016747	.1480797
#1	2764.322	33484.72	3168.155	2334.257	3126.313
#2	2766.761	33388.31	3126.977	2329.244	3130.529
#3	2759.751	33894.41	3150.783	2372.826	3121.283

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-14 Acquired: 12/15/2024 23:21:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0436625	.0251278	.2755023	-.015784	.0163941	70.44852
Stddev	.0062771	.0007070	.0027687	.006876	.0014631	.68678
%RSD	14.37629	2.813746	1.004951	43.55979	8.924388	.9748723
#1	.0497113	.0253350	.2768632	-.008597	.0147444	70.65460
#2	.0371797	.0257080	.2723166	-.022299	.0169037	71.00867
#3	.0440964	.0243403	.2773271	-.016456	.0175342	69.68230

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.424159	.0053015	.0049996	161.2495	.0987105	.0979011
Stddev	.015808	.0001781	.0000628	1.3896	.0002679	.0000535
%RSD	1.109975	3.359821	1.256447	.8617514	.2714216	.0546823
#1	1.428447	.0053549	.0049971	161.7276	.0990155	.0979209
#2	1.437380	.0054468	.0049381	162.3368	.0985131	.0978405
#3	1.406649	.0051028	.0050636	159.6840	.0986028	.0979419

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2005830	143.7385	7.481866	38.94837	.1302555	-.008923
Stddev	.0021434	1.3647	.077924	.33195	.0001275	.000655
%RSD	1.068563	.9494293	1.041499	.8522712	.0979030	7.343099
#1	.2012705	144.2852	7.512560	39.08487	.1303217	-.009609
#2	.2022982	144.7450	7.539769	39.19030	.1301084	-.008304
#3	.1981802	142.1852	7.393270	38.56994	.1303362	-.008855

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.123286	.1218907	.7633730	4.790571	F 13.90354	.0030546
Stddev	.635360	.0128945	.0054170	.074753	.07405	.0007401
%RSD	515.3564	10.57874	.7096206	1.560422	.5325777	24.22900
#1	-.852837	.1297372	.7571199	4.801987	13.85732	.0035352
#2	.308562	.1289262	.7666363	4.858960	13.86435	.0034263
#3	.174418	.1070088	.7663628	4.710767	13.98894	.0022023

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-14 Acquired: 12/15/2024 23:21:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036390	3.515626	9.502164	.0314586	.5926381	.1008210
Stddev	.0000723	.014057	.092801	.0002876	.0074433	.0010565
%RSD	1.986458	.3998395	.9766354	.9141008	1.255967	1.047893
#1	.0035633	3.509215	9.566738	.0315280	.5905860	.1013397
#2	.0036465	3.505918	9.543937	.0317052	.6008922	.1015179
#3	.0037073	3.531746	9.395818	.0311427	.5864361	.0996054

Elem	Li6707
Units	ppm
Avg	.1162827
Stddev	.0066060
%RSD	5.680967
#1	.1161027
#2	.1097685
#3	.1229768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2725.437	32884.48	3148.097	2297.621	3106.442
Stddev	7.205	111.70	18.645	17.916	5.764
%RSD	.2643684	.3396888	.5922563	.7797703	.1855453
#1	2717.413	32984.47	3137.064	2311.441	3102.215
#2	2731.355	32905.06	3137.603	2304.043	3113.008
#3	2727.542	32763.92	3169.624	2277.379	3104.105

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-15 Acquired: 12/15/2024 23:25:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0425865	.0210263	.2556516	-.013018	.0160599	59.07041
Stddev	.0055674	.0022245	.0051052	.001086	.0009125	.18405
%RSD	13.07320	10.57976	1.996944	8.345444	5.681744	.3115692
#1	.0403522	.0216649	.2536978	-.014086	.0158208	59.27135
#2	.0489240	.0185523	.2518118	-.011914	.0170681	58.91002
#3	.0384833	.0228617	.2614452	-.013054	.0152908	59.02985

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.117857	.0050762	.0040396	196.9052	.0847932	.0935446
Stddev	.006062	.0001098	.0001166	.4635	.0006726	.0003120
%RSD	.5422711	2.163013	2.885642	.2353938	.7932628	.3335521
#1	1.124768	.0049640	.0039558	197.3316	.0846190	.0937078
#2	1.113440	.0050812	.0039903	196.9719	.0855358	.0931848
#3	1.115363	.0051835	.0041727	196.4119	.0842248	.0937411

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1935461	134.6247	6.263512	50.09168	.1220534	-.007708
Stddev	.0015411	.6450	.029847	.23815	.0006797	.000115
%RSD	.7962444	.4791225	.4765143	.4754315	.5568842	1.492664
#1	.1938805	135.3585	6.294931	50.22048	.1224603	-.007743
#2	.1948925	134.1471	6.235537	49.81686	.1212688	-.007802
#3	.1918652	134.3685	6.260068	50.23769	.1224313	-.007580

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2004460	.1233606	.6056533	4.845474	F 10.56719	.0002274
Stddev	.6202896	.0060831	.0087500	.139059	.02572	.0028987
%RSD	309.4547	4.931171	1.444715	2.869866	.2434216	1274.507
#1	.5029605	.1167031	.6062644	4.753808	10.58517	.0035687
#2	-.513059	.1286291	.6140816	5.005479	10.53772	-.001272
#3	.611437	.1247495	.5966137	4.777135	10.57868	-.001614

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-15 Acquired: 12/15/2024 23:25:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL7 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026415	2.917220	8.625371	.0432079	.7296582	.1128160
Stddev	.0001099	.009525	.059511	.0005364	.0066802	.0005160
%RSD	4.158780	.3265036	.6899542	1.241492	.9155262	.4573885
#1	.0027681	2.923401	8.569707	.0436103	.7373540	.1130257
#2	.0025705	2.906251	8.688099	.0425989	.7253560	.1122282
#3	.0025860	2.922007	8.618307	.0434145	.7262646	.1131942

Elem	Li6707
Units	ppm
Avg	.1179067
Stddev	.0021536
%RSD	1.826499
#1	.1154203
#2	.1191846
#3	.1191152

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.080	32287.36	3084.657	2255.273	3096.076
Stddev	11.644	395.72	27.097	27.762	12.614
%RSD	.4351073	1.225631	.8784559	1.230961	.4074220
#1	2687.194	32700.56	3113.011	2283.088	3107.465
#2	2677.076	31911.81	3081.940	2227.565	3098.244
#3	2663.970	32249.70	3059.021	2255.166	3082.518

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-16 Acquired: 12/15/2024 23:28:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0574276	.0335891	.2099754	-.034616	.0132170	42.79134
Stddev	.0001526	.0020177	.0033128	.007036	.0034620	.32263
%RSD	.2657648	6.006859	1.577707	20.32661	26.19369	.7539613
#1	.0574901	.0312906	.2071580	-.036908	.0152200	42.43257
#2	.0575391	.0344090	.2091433	-.040220	.0092194	42.88378
#3	.0572537	.0350679	.2136249	-.026719	.0152117	43.05765

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5794273	.0048687	.0035569	F 1026.897	.0732005	.1104176
Stddev	.0022763	.0001441	.0001080	5.185	.0011786	.0008668
%RSD	.3928537	2.959708	3.036289	.5048921	1.610142	.7849840
#1	.5781572	.0048448	.0036751	1021.588	.0744448	.1094350
#2	.5780695	.0047381	.0034634	1027.156	.0721009	.1110739
#3	.5820553	.0050233	.0035323	1031.948	.0730558	.1107438

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1735601	165.4932	6.976703	445.6537	.1226169	-.012286
Stddev	.0005579	.9859	.037332	2.0831	.0005792	.000252
%RSD	.3214285	.5957467	.5350927	.4674230	.4723568	2.051399
#1	.1741581	164.3552	6.937039	443.3752	.1220952	-.012265
#2	.1730537	166.0354	6.981914	446.1253	.1225153	-.012045
#3	.1734686	166.0890	7.011156	447.4605	.1232402	-.012548

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6601744	.1366278	.5240473	4.234251	7.457110	-.003221
Stddev	.5173464	.0108362	.0086165	.057036	.006261	.002919
%RSD	78.36511	7.931185	1.644230	1.347006	.0839663	90.62289
#1	.9426236	.1466268	.5339341	4.213646	7.463648	-.003975
#2	.0630834	.1381428	.5200698	4.298726	7.456514	.000001
#3	.9748162	.1251138	.5181379	4.190382	7.451167	-.005689

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-16 Acquired: 12/15/2024 23:28:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011061	1.840381	6.877056	.0222666	.5162835	.3646661
Stddev	.0003558	.007658	.051342	.0021593	.0017725	.0014579
%RSD	32.16656	.4161363	.7465660	9.697228	.3433186	.3997936
#1	.0007795	1.848825	6.833154	.0238539	.5160444	.3630901
#2	.0010535	1.838436	6.864505	.0231382	.5181634	.3659667
#3	.0014852	1.833883	6.933510	.0198078	.5146427	.3649414

Elem	Li6707
Units	ppm
Avg	.1616770
Stddev	.0026553
%RSD	1.642376
#1	.1621837
#2	.1640425
#3	.1588048

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2433.831	29984.53	2990.819	2066.197	2638.641
Stddev	10.386	352.15	22.889	19.380	12.176
%RSD	.4267320	1.174430	.7653086	.9379652	.4614567
#1	2444.736	29889.50	3014.095	2064.185	2652.182
#2	2432.702	29689.65	2990.024	2047.901	2635.147
#3	2424.057	30374.44	2968.337	2086.504	2628.594

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-17 Acquired: 12/15/2024 23:32:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0937953	.0122472	1.465380	.0042605	.0214147	57.35888
Stddev	.0064335	.0017439	.005329	.0010367	.0008006	.20232
%RSD	6.859049	14.23929	.3636671	24.33372	3.738406	.3527218
#1	.0982959	.0123090	1.462974	.0047826	.0220526	57.49418
#2	.0864266	.0139594	1.461678	.0049324	.0205163	57.12630
#3	.0966635	.0104732	1.471488	.0030665	.0216752	57.45616

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9792372	.0053038	.0052769	51.26878	.0959158	.0781282
Stddev	.0050655	.0000459	.0001421	.15963	.0008327	.0010710
%RSD	.5172871	.8653253	2.692281	.3113599	.8681996	1.370792
#1	.9830718	.0052664	.0053472	51.33856	.0961779	.0772845
#2	.9734949	.0053550	.0053702	51.08614	.0965860	.0777671
#3	.9811448	.0052901	.0051134	51.38164	.0949835	.0793331

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2275978	134.2321	5.661597	16.70151	.1462149	-.009261
Stddev	.0039071	.8408	.033425	.16449	.0007446	.000304
%RSD	1.716682	.6263899	.5903744	.9848572	.5092437	3.285657
#1	.2312480	134.8758	5.682354	16.85157	.1454994	-.008941
#2	.2234764	133.2808	5.623040	16.52565	.1469855	-.009293
#3	.2280690	134.5397	5.679399	16.72731	.1461599	-.009547

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.162977	.1404292	1.009520	2.551563	F 14.02052	-.018696
Stddev	.359465	.0048916	.006781	.128536	.05066	.004456
%RSD	220.5622	3.483345	.6717084	5.037553	.3613080	23.83431
#1	.193356	.1362352	1.006500	2.697488	13.98159	-.014012
#2	-.525493	.1392495	1.004774	2.455126	14.00216	-.022882
#3	-.156793	.1458027	1.017287	2.502076	14.07779	-.019194

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-17 Acquired: 12/15/2024 23:32:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053847	2.978482	7.823830	.0560393	.7316263	.0143144
Stddev	.0001124	.010202	.017637	.0016687	.0031035	.0000402
%RSD	2.088031	.3425392	.2254211	2.977645	.4241896	.2807496
#1	.0054838	2.976668	7.816536	.0566627	.7350080	.0143175
#2	.0052625	2.969308	7.811011	.0573065	.7309624	.0143530
#3	.0054078	2.989470	7.843944	.0541487	.7289084	.0142728

Elem	Li6707
Units	ppm
Avg	.1083668
Stddev	.0030236
%RSD	2.790182
#1	.1050541
#2	.1109782
#3	.1090680

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2752.480	33565.42	3129.517	2327.628	3201.217
Stddev	6.272	166.26	13.719	15.422	11.871
%RSD	.2278563	.4953402	.4383701	.6625537	.3708193
#1	2758.556	33728.98	3145.357	2344.593	3212.537
#2	2752.854	33396.58	3121.434	2314.457	3202.253
#3	2746.029	33570.70	3121.760	2323.833	3188.863

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV033 Acquired: 12/15/2024 23:36:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV033 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.897363**	**4.847410**	**24.28753**	**4.679079**	**4.798218**	**384.6534**	**10.07650**
Stddev	.007444	.010541	.03351	.024980	.003119	1.2571	.03002
%RSD	.1520066	.2174645	.1379867	.5338636	.0649980	.3268073	.2979380
#1	4.902110	4.858650	24.31670	4.704672	4.800005	384.5884	10.06989
#2	4.901195	4.845835	24.25092	4.677804	4.794617	385.9417	10.10927
#3	4.888783	4.837745	24.29496	4.654761	4.800032	383.4301	10.05033

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4954488**	**2.432232**	**395.6178**	**14.93170**	**2.445840**	**15.12667**	**390.6694**
Stddev	.0031916	.003190	1.4578	.10872	.003434	.07783	1.9920
%RSD	.6441765	.1311572	.3684816	.7281352	.1404095	.5145426	.5098850
#1	.4962138	2.435878	395.0575	15.01306	2.449578	15.12084	389.9611
#2	.4981884	2.429955	397.2727	14.97383	2.442824	15.20725	392.9187
#3	.4919443	2.430864	394.5234	14.80822	2.445117	15.05191	389.1284

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.75774**	**389.3723**	**2.455686**	**1.223452**	**391.2151**	**2.464551**	**13.68428**
Stddev	.09334	1.5337	.004648	.008782	1.0226	.015497	.08971
%RSD	.6324668	.3938897	.1892706	.7178153	.2613792	.6288152	.6555831
#1	14.72527	388.6375	2.460811	1.230981	391.8318	2.449120	13.67507
#2	14.86297	391.1352	2.451744	1.225570	391.7787	2.464418	13.77825
#3	14.68497	388.3443	2.454503	1.213805	390.0347	2.480114	13.59953

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**150.9163**	**4.900638**	**4.857105**	**4.734705**	**4.916885**	**4.991906**	**4.932097**
Stddev	.1119	.012070	.022839	.010431	.003522	.037078	.011435
%RSD	.0741688	.2462901	.4702159	.2203150	.0716308	.7427576	.2318388
#1	150.9148	4.909368	4.862912	4.746023	4.914760	4.989881	4.941687
#2	151.0289	4.886864	4.876481	4.725477	4.914944	5.029955	4.919442
#3	150.8050	4.905681	4.831924	4.732616	4.920950	4.955882	4.935161

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV033 Acquired: 12/15/2024 23:36:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV033 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	**4.976101**	**4.752450**	**5.267520**
Stddev	.020984	.020087	.044643
%RSD	.4217013	.4226575	.8475081
#1	4.969184	4.743035	5.243462
#2	4.999670	4.775515	5.319031
#3	4.959448	4.738800	5.240066

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1932.472**	**25500.79**	**2501.906**	**1677.727**	**2553.549**
Stddev	6.615	215.45	19.845	17.224	6.494
%RSD	.3422897	.8448890	.7932133	1.026613	.2543219
#1	1925.485	25385.75	2502.064	1675.390	2546.872
#2	1938.638	25367.26	2481.982	1661.791	2559.843
#3	1933.292	25749.34	2521.672	1696.000	2553.931

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB033 Acquired: 12/15/2024 23:40:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB033 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.002590**	**.0020203**	**.0002030**	**.0002320**	**-.000027**	**-.012978**
Stddev	.005044	.0008797	.0006604	.0052863	.001457	.027986
%RSD	194.7663	43.54296	325.3658	2278.462	5339.763	215.6418
#1	-.001373	.0028274	.0003631	.0055693	-.001096	-.020894
#2	.001734	.0010826	-.000523	.0001285	-.000618	.018113
#3	-.008130	.0021508	.000769	-.005002	.001632	-.036154

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016868**	**-.000032**	**.0000642**	**-.060042**	**-.000583**	**.0000360**
Stddev	.0008243	.000083	.0000478	.022378	.000664	.0005095
%RSD	48.87108	255.6725	74.36920	37.26966	113.9101	1416.385
#1	.0025032	.000027	.0001114	-.054945	-.000155	.0005775
#2	.0017024	.000003	.0000158	-.084529	-.001347	-.000036
#3	.0008547	-.000127	.0000655	-.040653	-.000246	-.000434

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004822**	**-.013858**	**.0008328**	**.0381419**	**.0003579**	**-.000253**
Stddev	.0034456	.042804	.0002898	.0145348	.0000780	.000358
%RSD	714.6059	308.8766	34.79970	38.10726	21.79226	141.3085
#1	.0044535	-.061135	.0011658	.0455911	.0004399	-.000119
#2	-.001713	.022262	.0006381	.0213926	.0002847	.000018
#3	-.001294	-.002700	.0006943	.0474419	.0003492	-.000659

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.836525**	**-.013057**	**-.017217**	**.8255356**	**.0008956**	**.0096406**
Stddev	.151144	.004335	.004283	.1522722	.0020696	.0009385
%RSD	18.06806	33.19786	24.87401	18.44526	231.0890	9.735174
#1	-.792880	-.015177	-.018251	.6593859	-.001164	.0089277
#2	-.712006	-.008070	-.020888	.8587856	.002975	.0092901
#3	-1.00469	-.015923	-.012512	.9584354	.000875	.0107039

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB033 Acquired: 12/15/2024 23:40:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB033 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000811	-.005642	.0010783	-.000646	.0024332	.0002821
Stddev	.0001046	.001467	.0005026	.000665	.0042079	.0002385
%RSD	128.9051	25.99898	46.61317	102.9272	172.9401	84.54184
#1	.0001971	-.006383	.0016578	-.000404	.0057594	.0004367
#2	-.000006	-.006590	.0008166	-.000136	-.002297	.0000074
#3	.000052	-.003952	.0007606	-.001397	.003837	.0004022

Elem	Li6707
Units	ppm
Avg	F .0155746
Stddev	.0068930
%RSD	44.25795
#1	.0216300
#2	.0170203
#3	.0080734

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2348.182	28473.86	2607.522	1969.238	3261.300
Stddev	9.719	65.39	2.558	4.777	7.103
%RSD	.4139107	.2296648	.0980885	.2425566	.2178055
#1	2343.008	28549.35	2606.905	1974.635	3255.296
#2	2359.394	28434.30	2605.329	1967.521	3269.142
#3	2342.143	28437.95	2610.332	1965.557	3259.463

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-18 Acquired: 12/15/2024 23:44:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1007970	.0086632	1.438009	.0046396	.0245647	60.85424	1.003159
Stddev	.0014721	.0030568	.006240	.0032796	.0010825	.14722	.002656
%RSD	1.460453	35.28524	.4339181	70.68777	4.406611	.2419247	.2647842
#1	.1015879	.0101795	1.435152	.0017515	.0234788	60.99764	1.005790
#2	.0990985	.0106655	1.433709	.0082050	.0245714	60.86159	1.003209
#3	.1017046	.0051447	1.445166	.0039622	.0256437	60.70348	1.000478

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056405	.0049887	40.47417	.0919895	.0756792	.2562555	144.8678
Stddev	.0001917	.0001523	.14093	.0014568	.0009496	.0046364	.6783
%RSD	3.397782	3.052182	.3482030	1.583690	1.254753	1.809301	.4682515
#1	.0058615	.0051262	40.63536	.0927451	.0755442	.2558956	145.6377
#2	.0055199	.0048251	40.37419	.0903101	.0748043	.2610614	144.6074
#3	.0055400	.0050148	40.41298	.0929132	.0766890	.2518096	144.3582

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.050457	18.79396	.1344662	-.010045	-.354308	.1496460	.9174877
Stddev	.028617	.11806	.0001406	.000558	.903847	.0129177	.0202999
%RSD	.4729769	.6281989	.1045555	5.558570	255.1024	8.632188	2.212549
#1	6.083488	18.90416	.1343073	-.010687	.017900	.1446811	.9150801
#2	6.033123	18.80836	.1345746	-.009769	-1.38483	.1643096	.8984990
#3	6.034760	18.66936	.1345167	-.009678	.30400	.1399473	.9388840

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.622884	7.141282	-.012223	.0036857	2.073512	7.768535	.0625694
Stddev	.081526	.016439	.001817	.0001487	.002413	.050511	.0008351
%RSD	3.108267	.2301966	14.86679	4.035581	.1163743	.6502039	1.334613
#1	2.530806	7.130488	-.014135	.0038567	2.071270	7.826857	.0635010
#2	2.651960	7.133156	-.010518	.0035858	2.073200	7.738847	.0623191
#3	2.685886	7.160201	-.012016	.0036148	2.076065	7.739901	.0618882

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-18 Acquired: 12/15/2024 23:44:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6937562	-.037024	.1070783
Stddev	.0050421	.000219	.0015417
%RSD	.7267792	.5906687	1.439791
#1	.6977401	-.037263	.1068711
#2	.6880874	-.036834	.1087131
#3	.6954411	-.036975	.1056506

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.631	32644.47	3018.620	2271.022	3237.721
Stddev	6.107	340.14	15.864	30.613	6.276
%RSD	.2279758	1.041962	.5255233	1.347964	.1938517
#1	2683.514	32540.68	3003.705	2262.882	3244.111
#2	2680.594	33024.42	3016.870	2304.882	3237.487
#3	2671.784	32368.31	3035.286	2245.303	3231.565

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-19 Acquired: 12/15/2024 23:48:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0748053	.0078947	.7876163	.0001085	.0227998	62.34995	.8716726
Stddev	.0011969	.0013655	.0075541	.0020884	.0010726	.04932	.0015956
%RSD	1.599947	17.29619	.9591140	1925.095	4.704281	.0791052	.1830518
#1	.0757809	.0080530	.7845320	-.002008	.0229114	62.31798	.8717001
#2	.0734698	.0064570	.7820922	.002168	.0216758	62.40675	.8732543
#3	.0751652	.0091741	.7962245	.000166	.0238122	62.32511	.8700634

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053731	.0037658	55.10500	.0823153	.0755440	.1878937	144.2875
Stddev	.0000163	.0001220	.20364	.0009896	.0001589	.0051948	.2606
%RSD	.3041375	3.239399	.3695431	1.202145	.2103475	2.764775	.1806214
#1	.0053590	.0036268	55.01578	.0815533	.0755437	.1854879	144.2457
#2	.0053694	.0038154	55.33802	.0819588	.0753852	.1938554	144.5664
#3	.0053910	.0038551	54.96121	.0834337	.0757030	.1843380	144.0502

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.585227	22.42640	.1059142	-.010089	-.230305	.1382741	.5538112
Stddev	.006693	.05286	.0007906	.000563	.636887	.0130916	.0055573
%RSD	.1198394	.2356878	.7464345	5.579917	276.5401	9.467863	1.003469
#1	5.592735	22.37309	.1050164	-.010384	.409961	.1474122	.5581447
#2	5.579886	22.42731	.1062195	-.009440	-.237120	.1441338	.5475458
#3	5.583059	22.47879	.1065065	-.010444	-.863758	.1232761	.5557432

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.658994	6.184895	-.021157	.0030478	1.451721	7.362189	.0540904
Stddev	.063146	.062718	.001670	.0003448	.011433	.055857	.0009690
%RSD	3.806305	1.014052	7.891625	11.31117	.7875270	.7587026	1.791447
#1	1.674271	6.134436	-.022487	.0027295	1.440934	7.328728	.0532313
#2	1.713099	6.165136	-.019284	.0030001	1.450523	7.331168	.0551408
#3	1.589610	6.255113	-.021702	.0034140	1.463705	7.426672	.0538990

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-19 Acquired: 12/15/2024 23:48:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6711656	-.027228	.1022917
Stddev	.0056101	.000187	.0031027
%RSD	.8358756	.6851278	3.033139
#1	.6706475	-.027436	.0987176
#2	.6770168	-.027174	.1038651
#3	.6658325	-.027075	.1042924

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2627.981	31876.68	2982.631	2224.125	3219.282
Stddev	8.125	194.21	20.510	6.967	13.253
%RSD	.3091739	.6092397	.6876637	.3132256	.4116819
#1	2629.482	31653.89	2979.243	2217.386	3224.877
#2	2635.251	32010.19	3004.624	2231.299	3228.821
#3	2619.210	31965.96	2964.025	2223.691	3204.149

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-20 Acquired: 12/15/2024 23:51:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1406541	.0222313	.2431763	.0012893	.0335590	62.19006
Stddev	.0028981	.0026534	.0016560	.0011225	.0016743	.15396
%RSD	2.060407	11.93522	.6809664	87.06413	4.989006	.2475574
#1	.1418534	.0200096	.2434588	.0019893	.0318198	62.16442
#2	.1427601	.0251692	.2413973	-.000005	.0351597	62.35523
#3	.1373490	.0215150	.2446728	.001884	.0336973	62.05054

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8572186	.0062692	.0053952	68.68969	.1000087	.1094665
Stddev	.0006879	.0000996	.0001876	.19253	.0005397	.0009424
%RSD	.0802474	1.588775	3.477821	.2802864	.5396785	.8609493
#1	.8572004	.0061957	.0054853	68.80109	.0993911	.1098574
#2	.8565400	.0063826	.0051795	68.80060	.1003901	.1083915
#3	.8579155	.0062294	.0055208	68.46738	.1002448	.1101506

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2463360	214.4611	14.40055	32.53853	.2096614	-.015611
Stddev	.0016041	.4160	.02322	.12882	.0007607	.000439
%RSD	.6511899	.1939857	.1612254	.3959030	.3628352	2.812962
#1	.2445277	214.3972	14.41311	32.47583	.2089168	-.015572
#2	.2468926	214.9054	14.41478	32.68670	.2096300	-.016068
#3	.2475876	214.0807	14.37376	32.45306	.2104373	-.015193

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2221453	.2039864	.4649738	3.586735	F 11.65785	-.040358
Stddev	.2679773	.0068047	.0094764	.067175	.01176	.001325
%RSD	120.6315	3.335861	2.038041	1.872872	.1009167	3.282992
#1	.0990628	.2059693	.4575527	3.605721	11.65645	-.041814
#2	.5295521	.1964105	.4756483	3.512110	11.64685	-.039224
#3	.0378211	.2095795	.4617204	3.642373	11.67025	-.040035

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-20 Acquired: 12/15/2024 23:51:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029410	.8663334	8.246889	.0213998	.7159543	-.063289
Stddev	.0002217	.0045330	.052112	.0007703	.0052716	.000306
%RSD	7.537161	.5232343	.6319010	3.599738	.7363009	.4835122
#1	.0030570	.8650445	8.248396	.0208410	.7169560	-.063291
#2	.0026854	.8713712	8.298232	.0210799	.7206532	-.063594
#3	.0030806	.8625844	8.194040	.0222786	.7102538	-.062982

Elem	Li6707
Units	ppm
Avg	.1265606
Stddev	.0034472
%RSD	2.723768
#1	.1227501
#2	.1274693
#3	.1294625

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2974.277	36128.10	3421.932	2514.703	3155.011
Stddev	3.838	114.87	30.529	7.291	4.589
%RSD	.1290530	.3179629	.8921547	.2899386	.1454666
#1	2970.918	36167.45	3428.094	2518.936	3151.702
#2	2978.461	35998.72	3388.792	2506.284	3160.251
#3	2973.452	36218.12	3448.910	2518.889	3153.082

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-21 Acquired: 12/15/2024 23:55:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1088633	.0078955	.2501499	.0121315	.0353586	73.81577	.8810170
Stddev	.0031809	.0029329	.0040144	.0044016	.0029719	1.39968	.0174567
%RSD	2.921881	37.14635	1.604782	36.28251	8.405021	1.896181	1.981425
#1	.1065081	.0056837	.2467409	.0070772	.0338377	72.22801	.8611281
#2	.1124818	.0067804	.2491343	.0151219	.0387832	74.87112	.8938005
#3	.1076001	.0112224	.2545746	.0141954	.0334551	74.34820	.8881223

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071539	.0051316	30.35915	.1063373	.0983336	.2091470	204.6741
Stddev	.0001820	.0001540	.68828	.0004639	.0004322	.0086016	3.9114
%RSD	2.544259	3.001840	2.267114	.4363003	.4395577	4.112724	1.911054
#1	.0071065	.0052933	29.58809	.1059981	.0986257	.2037960	200.2435
#2	.0073549	.0049866	30.91147	.1061478	.0978371	.2190691	207.6487
#3	.0070003	.0051147	30.57790	.1068660	.0985380	.2045759	206.1302

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.78605	21.43316	.1982722	-.014459	.2169258	.1864809	.3951865
Stddev	.19726	.40405	.0019225	.000452	.3540671	.0008351	.0076495
%RSD	1.828849	1.885155	.9696095	3.126515	163.2204	.4478221	1.935664
#1	10.56089	20.97286	.1965670	-.014963	.5659073	.1872330	.3892841
#2	10.92846	21.72925	.1978940	-.014089	.2268867	.1866273	.3924470
#3	10.86880	21.59738	.2003557	-.014325	-.142017	.1855822	.4038286

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.553380	4.140293	-.048894	.0050226	.5778609	8.606340	.0233035
Stddev	.151716	.024575	.002809	.0005251	.0020866	.016885	.0015213
%RSD	4.269614	.5935659	5.746048	10.45385	.3610965	.1961930	6.528119
#1	3.382124	4.115273	-.052069	.0055371	.5761122	8.590864	.0227323
#2	3.670966	4.141209	-.047885	.0050431	.5772998	8.624348	.0221506
#3	3.607050	4.164398	-.046729	.0044876	.5801707	8.603808	.0250277

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5039-21 Acquired: 12/15/2024 23:55:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9720330	-.121350	.1389831
Stddev	.0233959	.002553	.0044667
%RSD	2.406907	2.103946	3.213811
#1	.9465113	-.118444	.1353948
#2	.9924654	-.123232	.1439857
#3	.9771222	-.122373	.1375688

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2956.028	35746.99	3387.526	2490.809	3184.155
Stddev	13.114	26.20	14.222	1.634	16.097
%RSD	.4436373	.0733033	.4198207	.0656082	.5055492
#1	2969.031	35745.68	3402.954	2491.329	3199.824
#2	2956.245	35773.82	3374.940	2488.979	3184.982
#3	2942.806	35721.46	3384.684	2492.121	3167.660

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-01 Acquired: 12/15/2024 23:59:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1586510	.0236727	1.290022	.0016955	.0260722	73.06554	1.375854
Stddev	.0050145	.0017823	.002697	.0053075	.0020535	.20637	.006462
%RSD	3.160693	7.529028	.2090963	313.0395	7.876330	.2824480	.4696365
#1	.1605190	.0224007	1.291244	.0077146	.0275316	73.22359	1.377420
#2	.1624633	.0229076	1.286930	-.002312	.0269610	72.83206	1.368753
#3	.1529706	.0257098	1.291892	-.000316	.0237240	73.14096	1.381389

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072253	.0093444	83.14545	.1133599	.1197780	.3023067	179.7720
Stddev	.0001876	.0000398	.28882	.0003310	.0005094	.0020711	.8774
%RSD	2.596739	.4263702	.3473730	.2919763	.4252568	.6850950	.4880852
#1	.0074414	.0093439	83.33647	.1136127	.1196595	.3042341	180.1470
#2	.0071042	.0093049	82.81318	.1129853	.1193383	.3001170	178.7694
#3	.0071303	.0093845	83.28669	.1134816	.1203361	.3025691	180.3997

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.77110	33.41522	.1909983	-.010120	-.285830	.1593477	.9300372
Stddev	.06507	.14614	.0008824	.000877	.606918	.0031229	.0061626
%RSD	.4405546	.4373522	.4619876	8.661233	212.3355	1.959825	.6626145
#1	14.81174	33.56115	.1919520	-.010433	-.303248	.1609668	.9267703
#2	14.69604	33.26887	.1902109	-.010797	-.883852	.1557477	.9261959
#3	14.80551	33.41563	.1908321	-.009130	.329610	.1613287	.9371454

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.637250	7.472421	-.019228	.0064461	2.768953	8.331872	.0996679
Stddev	.249409	.016176	.000983	.0001142	.001462	.069705	.0015603
%RSD	3.757714	.2164756	5.110244	1.771342	.0528103	.8366096	1.565527
#1	6.409087	7.488710	-.018656	.0063429	2.768470	8.409972	.0994451
#2	6.599143	7.456360	-.020363	.0065688	2.767794	8.309677	.0982310
#3	6.903519	7.472192	-.018666	.0064267	2.770596	8.275967	.1013277

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-01 Acquired: 12/15/2024 23:59:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5074309	-.018037	.1202880
Stddev	.0081487	.000540	.0042925
%RSD	1.605870	2.991885	3.568545
#1	.5140578	-.018428	.1244361
#2	.4983326	-.017421	.1205635
#3	.5099024	-.018262	.1158643

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2797.276	33866.07	3179.481	2370.398	3192.667
Stddev	6.609	179.45	17.094	12.588	8.835
%RSD	.2362678	.5298803	.5376391	.5310541	.2767215
#1	2797.287	33963.11	3160.462	2378.862	3188.807
#2	2803.880	33976.10	3193.563	2376.400	3202.775
#3	2790.662	33658.99	3184.418	2355.932	3186.419

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-02 Acquired: 12/16/2024 0:03:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1305265	.0294753	.7182744	.0051212	.0305052	74.30214	1.329653
Stddev	.0016836	.0005243	.0013182	.0035863	.0010308	.09731	.001676
%RSD	1.289822	1.778868	.1835242	70.02903	3.379194	.1309631	.1260428
#1	.1287238	.0300727	.7178510	.0069060	.0310076	74.37477	1.331571
#2	.1320581	.0290917	.7172199	.0009927	.0293195	74.19158	1.328472
#3	.1307976	.0292615	.7197523	.0074649	.0311885	74.34007	1.328915

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070294	.0080353	100.9100	.1144042	.1274089	.2402889	196.9467
Stddev	.0000557	.0001614	.1878	.0005226	.0013069	.0024282	.6219
%RSD	.7918246	2.008272	.1860920	.4567795	1.025774	1.010539	.3157641
#1	.0070800	.0078974	100.7193	.1140854	.1259279	.2411840	197.6292
#2	.0069698	.0079956	100.9159	.1150073	.1284007	.2375402	196.7987
#3	.0070384	.0082127	101.0947	.1141200	.1278981	.2421425	196.4122

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.30168	32.28291	.1776850	-.011388	.1746829	.1467753	.6375549
Stddev	.04967	.21928	.0002952	.000300	.6245196	.0102451	.0119494
%RSD	.3046991	.6792565	.1661166	2.634878	357.5161	6.980146	1.874252
#1	16.35561	32.47737	.1773672	-.011121	.7829549	.1353581	.6254756
#2	16.25780	32.04524	.1779505	-.011713	-.464906	.1498010	.6493699
#3	16.29164	32.32612	.1777374	-.011331	.206000	.1551669	.6378193

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.875910	6.528455	-.024246	.0063146	2.249074	8.522788	.0862467
Stddev	.062984	.020488	.002350	.0003990	.010407	.084539	.0014888
%RSD	1.071903	.3138302	9.691110	6.318833	.4627055	.9919159	1.726187
#1	5.849838	6.526860	-.026659	.0059067	2.255259	8.599828	.0876844
#2	5.830149	6.508811	-.024116	.0063331	2.237059	8.536186	.0863441
#3	5.947744	6.549694	-.021965	.0067040	2.254904	8.432351	.0847116

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-02 Acquired: 12/16/2024 0:03:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4421759	-.037708	.1119815
Stddev	.0037139	.000736	.0050675
%RSD	.8399088	1.952953	4.525327
#1	.4430058	-.038228	.1062455
#2	.4381173	-.038030	.1138476
#3	.4454047	-.036865	.1158513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2800.434	33929.86	3182.157	2364.366	3162.439
Stddev	16.408	76.54	18.403	7.598	20.223
%RSD	.5858942	.2255712	.5783041	.3213436	.6394593
#1	2819.358	33985.64	3169.769	2371.113	3185.431
#2	2790.189	33842.60	3173.398	2356.136	3147.412
#3	2791.755	33961.34	3203.302	2365.849	3154.475

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-03 Acquired: 12/16/2024 0:07:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1685278**	**.0571950**	**.6032984**	**.0035944**	**.0296615**	**77.67177**
Stddev	.0063835	.0013683	.0015498	.0037770	.0031921	.09166
%RSD	3.787805	2.392409	.2568889	105.0789	10.76189	.1180089
#1	.1635632	.0578330	.6015712	.0049852	.0328864	77.67027
#2	.1662916	.0581278	.6045676	.0064789	.0265032	77.76417
#3	.1757285	.0556242	.6037564	-.000681	.0295948	77.58087

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.868927**	**.0061332**	**.0113314**	**221.3194**	**.1165173**	**.1582751**
Stddev	.006241	.0000863	.0001238	.5088	.0004599	.0006838
%RSD	.3339611	1.406453	1.092806	.2299133	.3946759	.4320512
#1	1.873494	.0062197	.0112120	221.1182	.1161405	.1574875
#2	1.871472	.0060471	.0113230	221.8981	.1163816	.1586210
#3	1.861815	.0061330	.0114593	220.9419	.1170297	.1587169

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2664048**	**215.8942**	F **31.98679**	**83.52485**	**.2132559**	**-.009607**
Stddev	.0017552	.2703	.06666	.11886	.0009169	.000397
%RSD	.6588276	.1251830	.2084014	.1423084	.4299562	4.136999
#1	.2679596	216.1753	32.06209	83.44305	.2121971	-.010045
#2	.2645016	215.8709	31.96292	83.66120	.2137773	-.009507
#3	.2667533	215.6363	31.93534	83.47030	.2137931	-.009269

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.439697**	**.1433634**	**.6466409**	**5.437951**	**6.560251**	**-.016224**
Stddev	.379613	.0133575	.0038375	.046742	.022698	.002816
%RSD	86.33510	9.317238	.5934565	.8595603	.3459855	17.35445
#1	-.137966	.1542157	.6494501	5.472445	6.543283	-.019101
#2	-.315200	.1284454	.6422685	5.456656	6.551437	-.016095
#3	-.865926	.1474290	.6482041	5.384753	6.586034	-.013475

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-03 Acquired: 12/16/2024 0:07:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055176	2.432877	8.559969	.0397551	.3929156	.0134207
Stddev	.0001781	.017962	.046111	.0005445	.0004320	.0004230
%RSD	3.227664	.7382887	.5386821	1.369736	.1099515	3.152112
#1	.0055924	2.414793	8.526151	.0394438	.3924868	.0138452
#2	.0056462	2.433123	8.612494	.0394376	.3933507	.0129991
#3	.0053144	2.450714	8.541263	.0403839	.3929093	.0134178

Elem	Li6707
Units	ppm
Avg	.1279585
Stddev	.0035913
%RSD	2.806594
#1	.1243089
#2	.1314885
#3	.1280782

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2888.150	34976.27	3341.197	2432.573	3006.368
Stddev	12.027	56.41	9.928	11.047	15.841
%RSD	.4164224	.1612752	.2971348	.4541114	.5269039
#1	2901.930	34971.99	3349.903	2432.669	3024.514
#2	2879.767	35034.70	3330.385	2443.572	2995.302
#3	2882.752	34922.13	3343.303	2421.479	2999.288

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-04 Acquired: 12/16/2024 0:11:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1843063**	**.0630663**	**.6446426**	**.0067668**	**.0310119**	**83.81101**
Stddev	.0030641	.0028655	.0046539	.0042820	.0024913	.16198
%RSD	1.662492	4.543632	.7219344	63.27953	8.033325	.1932645
#1	.1875495	.0662752	.6401898	.0030446	.0338051	83.84996
#2	.1839094	.0621606	.6494744	.0114465	.0302110	83.94996
#3	.1814600	.0607631	.6442634	.0058094	.0290196	83.63311

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.959632**	**.0067134**	**.0123468**	**210.1797**	**.1228825**	**.1693995**
Stddev	.005111	.0000606	.0002254	.3647	.0005372	.0010226
%RSD	.2608008	.9030369	1.825818	.1735174	.4371235	.6036450
#1	1.956190	.0067729	.0126027	210.5004	.1227461	.1682561
#2	1.965504	.0067156	.0122603	209.7830	.1224267	.1702264
#3	1.957201	.0066517	.0121774	210.2556	.1234747	.1697159

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2747811**	**228.5097**	F **33.42684**	**85.64134**	**.2334082**	**-.009904**
Stddev	.0077648	.1765	.05576	.23740	.0004638	.000215
%RSD	2.825820	.0772282	.1667973	.2772035	.1987170	2.174050
#1	.2792678	228.6698	33.36429	85.50009	.2337424	-.009705
#2	.2658150	228.5386	33.47131	85.91543	.2328787	-.009874
#3	.2792604	228.3205	33.44492	85.50851	.2336036	-.010132

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.282193**	**.1528662**	**.6828452**	**5.821663**	**7.039485**	**-.022159**
Stddev	.802086	.0053625	.0106477	.163956	.002721	.002619
%RSD	284.2328	3.508003	1.559307	2.816304	.0386530	11.82060
#1	-.077721	.1589231	.6711809	5.863213	7.036680	-.024431
#2	-1.16672	.1487229	.6920434	5.640930	7.042114	-.022751
#3	.39786	.1509527	.6853114	5.960847	7.039659	-.019294

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-04 Acquired: 12/16/2024 0:11:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060417	2.641408	8.806278	.0433689	.3755475	-.008521
Stddev	.0006318	.018355	.058900	.0015887	.0008446	.000396
%RSD	10.45776	.6949043	.6688445	3.663265	.2249031	4.650610
#1	.0066958	2.640207	8.873586	.0437596	.3764217	-.008550
#2	.0059945	2.660334	8.764170	.0447258	.3747360	-.008902
#3	.0054348	2.623683	8.781077	.0416213	.3754849	-.008111

Elem	Li6707
Units	ppm
Avg	.1274731
Stddev	.0089048
%RSD	6.985620
#1	.1262995
#2	.1369065
#3	.1192133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2961.958	35949.99	3418.391	2507.720	3023.639
Stddev	4.384	109.58	24.302	6.522	5.965
%RSD	.1480206	.3048080	.7109280	.2600754	.1972664
#1	2965.020	35905.31	3390.584	2505.506	3030.404
#2	2963.918	35869.80	3429.026	2502.593	3019.138
#3	2956.936	36074.85	3435.564	2515.061	3021.375

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-03LX5 Acquired: 12/16/2024 0:14:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0305955	.0185474	.1283164	-.008312	.0011076	18.58643	.4537403
Stddev	.0022239	.0013391	.0006929	.001715	.0005179	.08027	.0013364
%RSD	7.268835	7.220113	.5399699	20.63025	46.76120	.4318998	.2945178
#1	.0283223	.0188865	.1277217	-.008172	.0012676	18.62603	.4546301
#2	.0306975	.0170713	.1281502	-.010092	.0015267	18.49405	.4522036
#3	.0327666	.0196843	.1290772	-.006671	.0005286	18.63922	.4543871

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015193	.0021996	54.43442	.0284621	.0454959	.0610915	53.24533
Stddev	.0000965	.0000436	.23258	.0006889	.0002048	.0153466	.30433
%RSD	6.351523	1.983421	.4272722	2.420340	.4501217	25.12058	.5715659
#1	.0014990	.0022112	54.45570	.0292446	.0457128	.0777955	53.43938
#2	.0014345	.0021513	54.19193	.0281942	.0454691	.0578631	52.89458
#3	.0016243	.0022363	54.65564	.0279473	.0453058	.0476160	53.40203

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.907565	20.37856	.0417712	-.001846	-1.23716	.0273317	.1487513
Stddev	.048397	.09523	.0006610	.000284	1.23580	.0039408	.0090377
%RSD	.6120371	.4673062	1.582475	15.39262	99.88956	14.41838	6.075731
#1	7.924094	20.31932	.0411042	-.001935	-2.66335	.0307680	.1392441
#2	7.853068	20.32794	.0424261	-.001528	-.56506	.0281969	.1497780
#3	7.945532	20.48841	.0417833	-.002076	-.48307	.0230302	.1572319

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.685703	1.310113	-.008565	.0015078	.4873535	2.125098	.0079974
Stddev	.115769	.011218	.001297	.0004062	.0023637	.015479	.0011492
%RSD	6.867700	.8562559	15.14875	26.93877	.4850054	.7283781	14.36926
#1	1.795685	1.298008	-.008733	.0010419	.4856958	2.139036	.0093142
#2	1.564906	1.312172	-.007191	.0017875	.4863046	2.108439	.0074807
#3	1.696517	1.320159	-.009769	.0016940	.4900602	2.127819	.0071972

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-03LX5 Acquired: 12/16/2024 0:14:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0939500	.0022967	.0394081
Stddev	.0025929	.0001748	.0019231
%RSD	2.759912	7.611363	4.879984
#1	.0958252	.0024979	.0414221
#2	.0950339	.0022105	.0392110
#3	.0909910	.0021818	.0375911

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2473.197	29794.80	2815.207	2073.777	3172.779
Stddev	14.319	54.80	13.137	6.595	24.079
%RSD	.5789731	.1839191	.4666381	.3180065	.7589388
#1	2489.697	29794.88	2801.645	2078.281	3200.583
#2	2465.867	29739.95	2827.873	2066.207	3158.947
#3	2464.026	29849.55	2816.104	2076.842	3158.806

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-05 Acquired: 12/16/2024 0:18:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2610883**	**.1573301**	**.6542685**	**.1465237**	**.1672599**	**80.80306**
Stddev	.0017595	.0024129	.0018265	.0006237	.0028023	.13718
%RSD	.6739083	1.533673	.2791638	.4256692	1.675386	.1697758
#1	.2611030	.1546613	.6562912	.1461836	.1671359	80.81867
#2	.2628404	.1593576	.6527400	.1461440	.1645217	80.65874
#3	.2593215	.1579715	.6537741	.1472436	.1701221	80.93178

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.166264**	**.0857779**	**.1078235**	**220.6305**	**.4551258**	**1.118668**
Stddev	.014926	.0005928	.0005537	.7424	.0023682	.003237
%RSD	.2889156	.6911255	.5134781	.3365113	.5203446	.2894055
#1	5.174103	.0854308	.1075325	220.7215	.4555746	1.116199
#2	5.149051	.0864624	.1074761	219.8467	.4572375	1.117471
#3	5.175636	.0854405	.1084620	221.3232	.4525652	1.122333

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6511261**	**218.6935**	F **32.83261**	**82.76304**	**1.194342**	**.0559779**
Stddev	.0041370	.4063	.05163	.03745	.004083	.0002743
%RSD	.6353623	.1857707	.1572500	.0452508	.3418588	.4899677
#1	.6518203	218.6385	32.82636	82.77838	1.191268	.0557763
#2	.6548721	218.3176	32.78439	82.72035	1.192783	.0558673
#3	.6466859	219.1245	32.88708	82.79038	1.198974	.0562903

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.627625**	**.9765623**	**1.327373**	**5.377289**	**6.671353**	**-.030810**
Stddev	.568746	.0083659	.021153	.058366	.026320	.002075
%RSD	90.61870	.8566660	1.593626	1.085416	.3945177	6.736495
#1	-.671844	.9827321	1.339813	5.312361	6.660277	-.028415
#2	-.038061	.9799147	1.302948	5.425402	6.652382	-.031916
#3	-1.17297	.9670402	1.339356	5.394104	6.701401	-.032098

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-05 Acquired: 12/16/2024 0:18:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054557	2.497367	8.572598	.0390076	.3879967	.0086673
Stddev	.0008936	.012312	.041614	.0013639	.0020331	.0001731
%RSD	16.37895	.4929966	.4854262	3.496409	.5240001	1.996549
#1	.0058439	2.485240	8.526306	.0378928	.3885541	.0088592
#2	.0060896	2.497004	8.584589	.0386017	.3896930	.0085233
#3	.0044337	2.509856	8.606900	.0405283	.3857431	.0086192

Elem	Li6707
Units	ppm
Avg	.1213704
Stddev	.0065933
%RSD	5.432406
#1	.1288296
#2	.1163209
#3	.1189607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2909.777	35273.33	3381.416	2464.884	3023.134
Stddev	2.710	45.62	14.341	3.876	2.321
%RSD	.0931454	.1293190	.4241079	.1572379	.0767749
#1	2912.251	35272.95	3394.290	2461.849	3023.855
#2	2906.880	35227.91	3365.959	2463.552	3025.008
#3	2910.199	35319.14	3383.999	2469.250	3020.538

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-06 Acquired: 12/16/2024 0:22:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1083383	.0405440	.4200829	-.018096	.0181978	72.68405	1.120881
Stddev	.0006357	.0013076	.0035102	.002085	.0010137	.06884	.003588
%RSD	.5868045	3.225009	.8355878	11.52364	5.570475	.0947160	.3201003
#1	.1084770	.0420530	.4201084	-.020503	.0172105	72.76252	1.124343
#2	.1076446	.0398339	.4165601	-.016926	.0192360	72.65583	1.117179
#3	.1088931	.0397453	.4235803	-.016858	.0181468	72.63379	1.121120

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063073	.0061714	436.8648	.1077782	.1282027	.2658177	177.1606
Stddev	.0000521	.0001472	1.0282	.0002498	.0004649	.0051250	.3153
%RSD	.8255772	2.385564	.2353487	.2317654	.3626577	1.928016	.1779624
#1	.0062870	.0063210	438.0519	.1080234	.1286640	.2709993	177.1396
#2	.0062683	.0061665	436.2800	.1075241	.1277342	.2607512	176.8564
#3	.0063664	.0060267	436.2624	.1077871	.1282100	.2657027	177.4859

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.87126	124.9266	.1912216	-.010492	.2152852	.1319023	.5985558
Stddev	.02880	.3777	.0015616	.000661	.6891269	.0162018	.0065939
%RSD	.1814448	.3023076	.8166347	6.303208	320.0996	12.28317	1.101626
#1	15.88794	125.0414	.1922770	-.009733	.2115385	.1501424	.6035473
#2	15.83801	124.5049	.1894277	-.010946	-.471961	.1263835	.5910808
#3	15.88784	125.2336	.1919600	-.010797	.906278	.1191809	.6010392

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.338264	6.152497	.0106097	.0014471	1.588713	7.921059	.0251654
Stddev	.141585	.016807	.0034943	.0001103	.011634	.032349	.0008680
%RSD	1.698013	.2731762	32.93496	7.624441	.7322702	.4083885	3.449158
#1	8.501495	6.166569	.0080471	.0015732	1.590077	7.892409	.0249696
#2	8.264590	6.133887	.0091920	.0014001	1.576458	7.956140	.0244120
#3	8.248707	6.157035	.0145901	.0013681	1.599605	7.914627	.0261146

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-06 Acquired: 12/16/2024 0:22:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3161093	.2312478	.1693170
Stddev	.0011078	.0017517	.0077058
%RSD	.3504610	.7574864	4.551110
#1	.3158375	.2332396	.1781424
#2	.3151626	.2299472	.1639226
#3	.3173277	.2305565	.1658860

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2733.381	32818.76	3187.506	2290.229	2976.388
Stddev	10.461	141.09	11.536	6.851	16.074
%RSD	.3827222	.4299088	.3619225	.2991255	.5400600
#1	2723.312	32655.86	3181.399	2282.813	2960.024
#2	2744.195	32902.29	3180.307	2291.550	2992.156
#3	2732.638	32898.13	3200.812	2296.322	2976.985

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-07 Acquired: 12/16/2024 0:26:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1251758	.0238130	1.877898	-.006416	.0283399	60.45023
Stddev	.0005680	.0030737	.000746	.004422	.0031041	.22834
%RSD	.4537607	12.90780	.0397447	68.91353	10.95317	.3777326
#1	.1249342	.0214542	1.877882	-.001960	.0251427	60.52390
#2	.1247685	.0226957	1.877159	-.006486	.0285354	60.63265
#3	.1258246	.0272891	1.878652	-.010803	.0313416	60.19416

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.348260	.0062683	.0071784	165.1980	.1182611	.1010063
Stddev	.008695	.0000263	.0000553	.5992	.0016642	.0004128
%RSD	.6448978	.4195750	.7698952	.3627275	1.407190	.4086709
#1	1.351986	.0062976	.0072004	165.6632	.1195994	.1005319
#2	1.354471	.0062466	.0071155	165.4089	.1187861	.1012041
#3	1.338323	.0062609	.0072193	164.5218	.1163977	.1012830

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4831035	177.6788	9.547421	55.37503	.2082913	-.011225
Stddev	.0048077	1.2216	.056614	.21651	.0004854	.000155
%RSD	.9951587	.6875591	.5929813	.3909846	.2330504	1.378265
#1	.4872122	178.2256	9.558739	55.32800	.2083668	-.011089
#2	.4842823	178.5316	9.597521	55.61119	.2077726	-.011194
#3	.4778161	176.2793	9.486002	55.18591	.2087346	-.011394

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0505314	.1716967	1.218795	7.219610	F 14.17114	.0062588
Stddev	.3667150	.0015151	.013876	.240896	.01503	.0012571
%RSD	725.7171	.8824458	1.138504	3.336689	.1060584	20.08536
#1	-.165309	.1727248	1.214088	7.164651	14.17197	.0052509
#2	-.157048	.1699567	1.234412	7.483236	14.15571	.0076675
#3	.473951	.1724087	1.207885	7.010942	14.18574	.0058582

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-07 Acquired: 12/16/2024 0:26:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062795	4.835586	7.307746	.1164983	.8936313	.1152481
Stddev	.0001401	.011814	.041649	.0003695	.0121326	.0010062
%RSD	2.230613	.2443101	.5699250	.3172022	1.357678	.8730787
#1	.0063990	4.838995	7.354833	.1163265	.8977881	.1149642
#2	.0063141	4.822443	7.292671	.1169225	.9031393	.1163657
#3	.0061254	4.845320	7.275734	.1162460	.8799667	.1144143

Elem	Li6707
Units	ppm
Avg	.1368138
Stddev	.0034199
%RSD	2.499704
#1	.1381971
#2	.1329190
#3	.1393255

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2722.125	33069.47	3165.186	2312.326	3095.286
Stddev	7.350	110.05	5.988	10.122	7.779
%RSD	.2700194	.3327827	.1891727	.4377201	.2513082
#1	2728.092	33175.74	3163.555	2321.275	3100.363
#2	2724.369	33076.68	3171.819	2314.361	3099.164
#3	2713.915	32955.99	3160.182	2301.342	3086.331

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-08 Acquired: 12/16/2024 0:30:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1535249**	**.0230622**	**2.012743**	**-.005623**	**.0359271**	**63.62819**
Stddev	.0053447	.0019883	.006092	.004702	.0023174	.16623
%RSD	3.481309	8.621509	.3026848	83.61603	6.450185	.2612557
#1	.1499263	.0251144	2.019269	-.002763	.0340993	63.78541
#2	.1509823	.0229274	2.007204	-.003056	.0351485	63.45421
#3	.1596663	.0211447	2.011757	-.011050	.0385335	63.64496

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.565902**	**.0070697**	**.0088110**	**176.6981**	**.1228244**	**.1097851**
Stddev	.002588	.0001454	.0001642	.2433	.0013803	.0004756
%RSD	.1652463	2.057182	1.864052	.1376681	1.123808	.4332356
#1	1.567641	.0072373	.0086722	176.7222	.1231573	.1101609
#2	1.562928	.0069776	.0087686	176.4437	.1213081	.1092504
#3	1.567135	.0069940	.0089923	176.9285	.1240078	.1099440

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6514823**	**197.1285**	**11.59911**	**60.43994**	**.2225061**	**-.012395**
Stddev	.0075102	.4470	.02957	.04338	.0005045	.000396
%RSD	1.152785	.2267568	.2549568	.0717660	.2267601	3.193143
#1	.6432015	197.6441	11.61610	60.47016	.2227353	-.012040
#2	.6578530	196.8898	11.56496	60.39024	.2219276	-.012323
#3	.6533923	196.8514	11.61627	60.45943	.2228553	-.012821

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.476986**	**.1753082**	**1.297853**	**5.895127**	F **11.01158**	**-.004603**
Stddev	.086207	.0033636	.016298	.188443	.02225	.001311
%RSD	18.07318	1.918704	1.255729	3.196592	.2020865	28.48100
#1	-.396399	.1730403	1.279953	5.775814	11.03500	-.005981
#2	-.466675	.1791728	1.311834	5.797194	10.99072	-.003372
#3	-.567884	.1737115	1.301771	6.112372	11.00902	-.004456

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-08 Acquired: 12/16/2024 0:30:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053612	4.018445	6.944075	.1569092	.7761700	.0676864
Stddev	.0003985	.012991	.064340	.0018939	.0047624	.0005787
%RSD	7.432633	.3232808	.9265393	1.207003	.6135713	.8550381
#1	.0050662	4.019335	7.015255	.1572368	.7778614	.0680142
#2	.0052029	4.005031	6.890057	.1548728	.7798557	.0670182
#3	.0058145	4.030967	6.926911	.1586179	.7707928	.0680268

Elem	Li6707
Units	ppm
Avg	.1367606
Stddev	.0035672
%RSD	2.608351
#1	.1339413
#2	.1355695
#3	.1407710

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2788.080	33738.75	3196.526	2355.205	3129.026
Stddev	11.350	134.86	23.258	5.183	12.533
%RSD	.4070908	.3997300	.7275931	.2200866	.4005439
#1	2776.289	33868.48	3173.568	2361.147	3116.698
#2	2798.931	33599.28	3220.072	2352.858	3141.754
#3	2789.022	33748.48	3195.939	2351.611	3128.625

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-09 Acquired: 12/16/2024 0:34:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1113440**	**.0338531**	**1.340524**	**-.006525**	**.0301187**	**68.61753**
Stddev	.0029887	.0005600	.009270	.006592	.0011686	2.73303
%RSD	2.684176	1.654144	.6915352	101.0296	3.879800	3.982990
#1	.1084569	.0344125	1.336806	-.008687	.0295752	70.82897
#2	.1144248	.0338543	1.333690	-.011765	.0314601	65.56204
#3	.1111502	.0332925	1.351076	.000877	.0293210	69.46159

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.224763**	**.0062052**	**.0071074**	**210.6215**	**.1022788**	**.1185351**
Stddev	.087491	.0003075	.0000985	8.3574	.0018415	.0004104
%RSD	3.932609	4.955963	1.385281	3.967964	1.800434	.3462608
#1	2.296244	.0062737	.0070901	217.2290	.1003193	.1181988
#2	2.127196	.0058692	.0072133	201.2266	.1039735	.1189924
#3	2.250849	.0064727	.0070187	213.4088	.1025437	.1184140

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4312816**	**190.9803**	**14.28774**	**47.82735**	**.1898780**	**-.012926**
Stddev	.0151684	7.4080	.58187	1.92002	.0016064	.000981
%RSD	3.517048	3.878913	4.072533	4.014472	.8459952	7.591134
#1	.4441199	197.0430	14.76775	49.39045	.1898260	-.011947
#2	.4145444	182.7230	13.64059	45.68419	.1882983	-.013909
#3	.4351805	193.1749	14.45489	48.40742	.1915097	-.012921

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3368749**	**.1585735**	**1.118350**	**5.278723**	F **16.75511**	**.0140648**
Stddev	.4762922	.0081712	.005354	.420757	.07580	.0030008
%RSD	141.3855	5.152956	.4787467	7.970816	.4524218	21.33590
#1	.0950850	.1679961	1.124520	5.589584	16.70468	.0133504
#2	.0299762	.1534389	1.114925	4.799933	16.71837	.0114856
#3	.8855636	.1542854	1.115604	5.446650	16.84229	.0173584

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-09 Acquired: 12/16/2024 0:34:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044910	3.228582	7.607615	.1177707	.6135980	.2172019
Stddev	.0003238	.018997	.295236	.0017616	.0231166	.0091730
%RSD	7.210211	.5883901	3.880796	1.495794	3.767387	4.223271
#1	.0044746	3.219663	7.834813	.1195668	.6326544	.2243022
#2	.0048226	3.215687	7.273902	.1160457	.5878828	.2068449
#3	.0041756	3.250397	7.714130	.1176996	.6202568	.2204588

Elem	Li6707
Units	ppm
Avg	.1435636
Stddev	.0058208
%RSD	4.054545
#1	.1495221
#2	.1378910
#3	.1432778

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2820.668	34383.37	3221.725	2394.832	3073.052
Stddev	4.569	276.81	118.478	20.900	1.100
%RSD	.1619899	.8050756	3.677468	.8726970	.0357973
#1	2821.706	34701.19	3132.194	2416.957	3074.114
#2	2815.670	34253.95	3356.074	2392.115	3071.918
#3	2824.630	34194.98	3176.907	2375.424	3073.126

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-10 Acquired: 12/16/2024 0:37:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0801513	.0309292	.9442946	-.015094	.0167683	59.72762
Stddev	.0041923	.0033086	.0016140	.001887	.0023521	.07571
%RSD	5.230434	10.69736	.1709264	12.50173	14.02680	.1267567
#1	.0758322	.0326957	.9444388	-.016844	.0188345	59.64383
#2	.0842041	.0329797	.9426132	-.013095	.0142087	59.74793
#3	.0804175	.0271123	.9458317	-.015343	.0172618	59.79111

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.966565	.0054684	.0061199	221.2584	.0876108	.1007529
Stddev	.003774	.0001818	.0000226	.4070	.0007814	.0007713
%RSD	.1919283	3.324666	.3690594	.1839535	.8919204	.7655420
#1	1.968909	.0055119	.0061177	221.4280	.0868660	.1001576
#2	1.962211	.0056245	.0060985	221.5533	.0884243	.1004769
#3	1.968575	.0052688	.0061435	220.7941	.0875422	.1016242

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3616661	148.9707	11.32753	33.85066	.1375478	-.010064
Stddev	.0094714	.2820	.01019	.07487	.0007386	.000544
%RSD	2.618835	.1892985	.0899404	.2211830	.5370143	5.404485
#1	.3513430	149.2643	11.33771	33.89326	.1371700	-.010084
#2	.3699555	148.7020	11.31733	33.89451	.1383990	-.009510
#3	.3636998	148.9458	11.32755	33.76421	.1370745	-.010597

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1141845	.1384914	.8289762	4.609383	F 14.01272	.0286856
Stddev	.9154259	.0083608	.0075412	.039535	.03579	.0006421
%RSD	801.7076	6.037075	.9097000	.8577118	.2554049	2.238376
#1	-.185312	.1459323	.8366925	4.646604	14.01555	.0293538
#2	1.141846	.1294438	.8286128	4.567882	13.97560	.0280732
#3	-.613980	.1400981	.8216233	4.613664	14.04701	.0286298

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-10 Acquired: 12/16/2024 0:37:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH7 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025506	3.210644	7.292792	.1058750	.5926786	.3109702
Stddev	.0002151	.011608	.035378	.0021465	.0045161	.0001261
%RSD	8.432187	.3615469	.4851083	2.027422	.7619860	.0405434
#1	.0023775	3.216271	7.288618	.1082601	.5978858	.3108675
#2	.0027914	3.197295	7.330071	.1040984	.5898319	.3109323
#3	.0024830	3.218367	7.259686	.1052666	.5903182	.3111109

Elem	Li6707
Units	ppm
Avg	.1267797
Stddev	.0017125
%RSD	1.350734
#1	.1287530
#2	.1256839
#3	.1259020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2781.831	33657.56	3243.994	2351.238	3151.063
Stddev	9.991	211.10	13.804	7.646	9.324
%RSD	.3591651	.6271849	.4255341	.3251788	.2959122
#1	2787.287	33899.52	3249.400	2356.751	3155.794
#2	2787.907	33562.12	3228.305	2354.453	3157.074
#3	2770.300	33511.03	3254.278	2342.510	3140.322

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-11 Acquired: 12/16/2024 0:41:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1066738**	**.0194518**	**.2897651**	**-.012913**	**.0183995**	**49.21295**	**.8712977**
Stddev	.0022254	.0017293	.0035020	.004493	.0032640	.06187	.0019921
%RSD	2.086202	8.889906	1.208564	34.79440	17.73948	.1257209	.2286385
#1	.1042138	.0194399	.2917527	-.012883	.0211287	49.28414	.8719060
#2	.1072605	.0177285	.2857215	-.017421	.0192858	49.18252	.8729149
#3	.1085471	.0211869	.2918211	-.008435	.0147839	49.17218	.8690724

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055213**	**.0047333**	**134.6868**	**.0744980**	**.0963219**	**.3080883**	**144.6435**
Stddev	.0001046	.0001160	.3168	.0008301	.0008817	.0014656	.3388
%RSD	1.895154	2.451045	.2351873	1.114244	.9154042	.4756970	.2342303
#1	.0055473	.0047224	134.8008	.0736205	.0968964	.3082517	144.3617
#2	.0054061	.0046231	134.9308	.0752707	.0953067	.3094653	145.0194
#3	.0056105	.0048544	134.3288	.0746029	.0967627	.3065479	144.5492

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.305188**	**33.96899**	**.1395470**	**-.009550**	**-.116040**	**.1344742**	**.4050713**
Stddev	.025058	.03878	.0003750	.000565	.360167	.0032747	.0058871
%RSD	.3017122	.1141765	.2687443	5.919301	310.3806	2.435171	1.453348
#1	8.312916	33.95613	.1394431	-.010077	.255537	.1330333	.4094822
#2	8.325471	33.93827	.1399630	-.008953	-.140065	.1321671	.3983864
#3	8.277176	34.01257	.1392349	-.009621	-.463594	.1382222	.4073454

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.243913**	**7.922219**	**-.009872**	**.0029593**	**2.083737**	**5.997782**	**.0246092**
Stddev	.138978	.026420	.003065	.0001198	.013536	.020943	.0015530
%RSD	6.193578	.3334961	31.04996	4.047339	.6496180	.3491862	6.310604
#1	2.160718	7.912713	-.013223	.0030811	2.079817	6.021082	.0260561
#2	2.166666	7.901866	-.009181	.0029551	2.072594	5.991740	.0248031
#3	2.404355	7.952077	-.007211	.0028416	2.098801	5.980523	.0229683

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-11 Acquired: 12/16/2024 0:41:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4837551	.0444146	.0959206
Stddev	.0032107	.0002728	.0035115
%RSD	.6637110	.6143188	3.660803
#1	.4874345	.0447283	.0969183
#2	.4815209	.0442826	.0988252
#3	.4823100	.0442328	.0920182

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2852.357	34539.19	3255.424	2410.456	3173.811
Stddev	6.517	26.73	16.072	8.048	10.568
%RSD	.2284764	.0773961	.4937000	.3338715	.3329760
#1	2851.338	34528.03	3238.367	2408.382	3174.054
#2	2859.324	34569.70	3257.622	2419.338	3184.256
#3	2846.410	34519.85	3270.284	2403.648	3163.124

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-12 Acquired: 12/16/2024 0:45:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0703458	.0436325	.1949610	-.024727	.0117431	45.21833	.9866544
Stddev	.0028737	.0036916	.0001459	.002452	.0008678	.19675	.0060401
%RSD	4.085039	8.460544	.0748506	9.915454	7.389958	.4351215	.6121781
#1	.0699709	.0456828	.1949233	-.025601	.0110828	45.06690	.9827963
#2	.0733885	.0393709	.1951220	-.026622	.0114205	45.44072	.9936153
#3	.0676780	.0458439	.1948376	-.021958	.0127260	45.14736	.9835517

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035741	.0043131	662.2054	.0839753	.1133802	.2292406	145.7301
Stddev	.0001712	.0001966	2.6414	.0003480	.0010285	.0058955	.9939
%RSD	4.789706	4.558468	.3988811	.4143950	.9070875	2.571743	.6820306
#1	.0035111	.0042628	660.7472	.0839876	.1127060	.2311410	144.7553
#2	.0037678	.0041465	665.2545	.0843170	.1128706	.2339515	146.7421
#3	.0034433	.0045300	660.6146	.0836214	.1145639	.2226293	145.6928

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.27012	198.5156	.1558136	-.011125	.2670310	.1352270	.3125753
Stddev	.06504	.8101	.0007834	.000758	.3640472	.0055000	.0087864
%RSD	.4259343	.4080600	.5027914	6.809207	136.3314	4.067203	2.810984
#1	15.24845	198.0465	.1552522	-.010315	.3412745	.1288872	.3032299
#2	15.34323	199.4510	.1554798	-.011244	-.128415	.1387206	.3138274
#3	15.21869	198.0493	.1567086	-.011817	.588234	.1380731	.3206685

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.104880	6.727713	.0081633	.0012956	1.123748	4.168924	.0199469
Stddev	.067397	.032734	.0009647	.0002574	.003568	.040967	.0005485
%RSD	1.320253	.4865556	11.81763	19.86707	.3175401	.9826835	2.749814
#1	5.115734	6.709759	.0085427	.0010037	1.120030	4.144284	.0193279
#2	5.166192	6.707885	.0070666	.0013930	1.127145	4.216215	.0201404
#3	5.032715	6.765495	.0088807	.0014900	1.124067	4.146273	.0203724

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-12 Acquired: 12/16/2024 0:45:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKH9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7960274	.3835076	.1374429
Stddev	.0101882	.0006853	.0020153
%RSD	1.279876	.1786994	1.466310
#1	.7868556	.3831545	.1397649
#2	.8069935	.3842974	.1364156
#3	.7942330	.3830708	.1361482

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2629.501	31818.75	3159.870	2210.897	2906.864
Stddev	16.906	145.33	24.841	9.862	19.565
%RSD	.6429246	.4567390	.7861413	.4460792	.6730621
#1	2645.256	31651.29	3165.811	2200.164	2924.064
#2	2631.606	31911.81	3132.597	2212.967	2910.949
#3	2611.642	31893.15	3181.202	2219.561	2885.579

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-13 Acquired: 12/16/2024 0:49:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0456435**	**.0312457**	**.1356696**	**-.036753**	**.0126230**	**50.44821**
Stddev	.0084553	.0048787	.0006201	.006056	.0017268	.05356
%RSD	18.52459	15.61387	.4570395	16.47776	13.68012	.1061749
#1	.0466308	.0327760	.1349606	-.043745	.0124036	50.42298
#2	.0367380	.0351757	.1361105	-.033156	.0110163	50.50973
#3	.0535619	.0257853	.1359376	-.033357	.0144491	50.41192

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4030660**	**.0046427**	**.0036054**	F **910.4568**	**.0924632**	**.1011980**
Stddev	.0010745	.0000850	.0001347	2.5047	.0030428	.0011918
%RSD	.2665798	1.831090	3.736839	.2751033	3.290837	1.177745
#1	.4019361	.0047116	.0036526	910.3598	.0936549	.1004708
#2	.4040748	.0045477	.0034534	913.0086	.0890049	.1005497
#3	.4031872	.0046688	.0037102	908.0021	.0947298	.1025735

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1656614**	**152.4531**	**7.478700**	**180.6592**	**.1421029**	**-.012585**
Stddev	.0013052	.3519	.023964	.3956	.0005595	.001242
%RSD	.7878513	.2307997	.3204259	.2189522	.3937257	9.870727
#1	.1644288	152.4719	7.464234	180.3773	.1421299	-.013545
#2	.1655268	152.7951	7.506361	181.1114	.1415304	-.011182
#3	.1670287	152.0921	7.465503	180.4890	.1426484	-.013029

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3213621**	**.1383325**	**.2907649**	**6.666421**	**5.109589**	**.0124550**
Stddev	.4149577	.0097441	.0124212	.125624	.010768	.0023651
%RSD	129.1246	7.044001	4.271911	1.884434	.2107345	18.98958
#1	.7751715	.1327149	.2936330	6.522151	5.111428	.0108551
#2	-.038707	.1326986	.2771605	6.751638	5.098021	.0151718
#3	.227621	.1495841	.3015012	6.725473	5.119319	.0113382

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-13 Acquired: 12/16/2024 0:49:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000469	1.373112	5.594507	.0239916	1.217166	.6270802
Stddev	.0010214	.006082	.069008	.0028515	.004963	.0023330
%RSD	2177.094	.4429395	1.233503	11.88558	.4077358	.3720466
#1	-.000167	1.366521	5.672934	.0269656	1.212052	.6261138
#2	.001158	1.374308	5.567502	.0212808	1.221963	.6297412
#3	-.000851	1.378507	5.543085	.0237283	1.217482	.6253857

Elem	Li6707
Units	ppm
Avg	.1729720
Stddev	.0040397
%RSD	2.335460
#1	.1711176
#2	.1701925
#3	.1776060

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2523.688	30741.56	3015.169	2139.358	2785.933
Stddev	12.416	600.63	14.788	39.279	10.060
%RSD	.4919743	1.953809	.4904431	1.836034	.3611146
#1	2532.090	30617.33	3001.468	2129.260	2792.871
#2	2529.548	31394.59	3013.194	2182.700	2790.533
#3	2509.427	30212.76	3030.845	2106.113	2774.395

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-14 Acquired: 12/16/2024 0:53:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1236799	.0157386	2.155044	.0007478	.0353439	95.27042
Stddev	.0063238	.0015247	.005434	.0058548	.0008840	.26850
%RSD	5.113052	9.687862	.2521523	782.9452	2.501263	.2818269
#1	.1212644	.0140454	2.161299	.0057551	.0351676	95.30518
#2	.1308555	.0170029	2.152347	.0021778	.0363028	95.51984
#3	.1189199	.0161675	2.151486	-.005690	.0345613	94.98623

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.050333	.0088491	.0102192	97.37961	.1968133	.1219998
Stddev	.004726	.0001449	.0001004	.27249	.0001751	.0003685
%RSD	.2304818	1.637314	.9824540	.2798175	.0889891	.3020637
#1	2.052669	.0087192	.0102529	97.39773	.1966111	.1217076
#2	2.053437	.0088228	.0102983	97.64258	.1969116	.1218780
#3	2.044895	.0090053	.0101062	97.09852	.1969172	.1224138

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4707562	198.8299	9.053437	28.88747	.2720406	-.012094
Stddev	.0048332	.2537	.029287	.09747	.0008690	.000753
%RSD	1.026696	.1275901	.3234912	.3374293	.3194259	6.227057
#1	.4747366	199.0023	9.038881	28.86487	.2730046	-.012962
#2	.4721538	198.9489	9.087150	28.99426	.2717999	-.011703
#3	.4653781	198.5386	9.034279	28.80329	.2713175	-.011616

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7013281	.2517980	2.031312	9.417056	F 17.15773	-.004669
Stddev	.6735076	.0106964	.015029	.114506	.04043	.005697
%RSD	96.03318	4.247993	.7398673	1.215946	.2356385	122.0210
#1	.1015706	.2625293	2.040132	9.295763	17.19682	.001533
#2	.5724519	.2517277	2.013958	9.432123	17.11608	-.005871
#3	1.429962	.2411369	2.039844	9.523284	17.16029	-.009669

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-14 Acquired: 12/16/2024 0:53:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0108295	5.046890	9.465685	.1118580	1.176500	.2391621
Stddev	.0002755	.016954	.101449	.0009362	.000596	.0010925
%RSD	2.544198	.3359249	1.071758	.8369782	.0506269	.4567807
#1	.0105146	5.062498	9.363636	.1112293	1.176668	.2394384
#2	.0109481	5.049321	9.466895	.1129340	1.175839	.2400899
#3	.0110259	5.028853	9.566524	.1114108	1.176994	.2379581

Elem	Li6707
Units	ppm
Avg	.1957233
Stddev	.0053607
%RSD	2.738919
#1	.1925005
#2	.2019116
#3	.1927580

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2747.440	33512.39	3203.984	2342.745	3148.430
Stddev	5.342	134.84	24.920	10.019	9.870
%RSD	.1944272	.4023496	.7777724	.4276751	.3134857
#1	2741.645	33423.54	3232.016	2334.908	3137.341
#2	2748.507	33446.09	3184.341	2339.293	3151.695
#3	2752.168	33667.54	3195.596	2354.034	3156.253

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-15 Acquired: 12/16/2024 0:57:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1075730**	**.0085899**	**1.784345**	**.0004591**	**.0265209**	**76.97264**
Stddev	.0027547	.0023970	.009456	.0050170	.0009036	.18859
%RSD	2.560813	27.90479	.5299638	1092.869	3.407131	.2450089
#1	.1102074	.0097528	1.788546	.0062520	.0256842	76.87337
#2	.1047120	.0101837	1.773516	-.002476	.0274791	76.85442
#3	.1077996	.0058333	1.790974	-.002399	.0263996	77.19013

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.632952**	**.0074552**	**.0080758**	**68.84041**	**.1623417**	**.1016324**
Stddev	.006217	.0000883	.0000714	.14608	.0007895	.0004750
%RSD	.3807088	1.184475	.8837401	.2122042	.4863263	.4673628
#1	1.629437	.0075107	.0080018	68.94638	.1621275	.1021227
#2	1.629289	.0075015	.0081443	68.67377	.1632162	.1011744
#3	1.640130	.0073533	.0080812	68.90107	.1616814	.1016000

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4419063**	**160.5088**	**6.813291**	**23.88152**	**.2138562**	**-.009612**
Stddev	.0049252	.4391	.024497	.14119	.0014441	.000374
%RSD	1.114538	.2735751	.3595462	.5912222	.6752552	3.890488
#1	.4365811	160.0982	6.789629	23.88219	.2151091	-.010012
#2	.4462978	160.4566	6.811699	23.73999	.2122768	-.009554
#3	.4428399	160.9717	6.838545	24.02237	.2141825	-.009271

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4277382**	**.2003362**	**1.837305**	**6.054032**	F **12.86000**	**-.004463**
Stddev	.2221973	.0021078	.003480	.099837	.05632	.002213
%RSD	51.94703	1.052116	.1894271	1.649094	.4379249	49.58429
#1	.2012403	.2006330	1.836527	6.168623	12.89022	-.006704
#2	.4366050	.1980957	1.841108	5.985833	12.79502	-.002279
#3	.6453694	.2022798	1.834279	6.007638	12.89476	-.004407

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-15 Acquired: 12/16/2024 0:57:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0108784	3.580975	8.080595	.0920010	.8139628	.2100990
Stddev	.0000938	.019943	.025765	.0011469	.0041584	.0011442
%RSD	.8621551	.5569156	.3188483	1.246639	.5108864	.5445821
#1	.0108369	3.585867	8.058652	.0933069	.8108349	.2090612
#2	.0108126	3.559041	8.108965	.0911576	.8123716	.2099098
#3	.0109858	3.598017	8.074169	.0915384	.8186818	.2113259

Elem	Li6707
Units	ppm
Avg	.1671743
Stddev	.0068765
%RSD	4.113347
#1	.1595484
#2	.1690712
#3	.1729031

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.365	32691.05	3119.759	2276.004	3221.683
Stddev	9.723	139.91	18.303	5.709	7.728
%RSD	.3599433	.4279754	.5866928	.2508436	.2398599
#1	2712.393	32704.61	3131.612	2272.376	3226.445
#2	2697.677	32823.68	3128.987	2282.585	3225.836
#3	2694.025	32544.85	3098.679	2273.051	3212.767

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV034 Acquired: 12/16/2024 1:10:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV034 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.877388**	**4.692970**	**23.68058**	**4.567165**	**4.655977**	**377.4860**	**9.684380**
Stddev	.004327	.011348	.06324	.024648	.013198	2.7813	.078811
%RSD	.0887169	.2418122	.2670654	.5396770	.2834653	.7367967	.8137946
#1	4.882379	4.700726	23.69547	4.542264	4.641898	374.5191	9.597460
#2	4.874681	4.679945	23.61123	4.567681	4.657962	377.9047	9.704500
#3	4.875106	4.698238	23.73505	4.591551	4.668069	380.0342	9.751181

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4724303**	**2.381797**	**386.7878**	**14.63811**	**2.390258**	**14.35341**	**382.9220**
Stddev	.0015987	.005636	2.4696	.03533	.005517	.14870	2.7520
%RSD	.3383964	.2366167	.6384768	.2413327	.2308158	1.035962	.7186935
#1	.4728816	2.382872	384.1498	14.61950	2.391829	14.18649	379.8500
#2	.4706545	2.375701	387.1691	14.61599	2.384126	14.40205	383.7537
#3	.4737549	2.386817	389.0445	14.67886	2.394820	14.47170	385.1622

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.03506**	**377.2298**	**2.393853**	**1.191130**	**380.3358**	**2.342397**	**14.73281**
Stddev	.11819	3.0746	.007460	.004473	3.4630	.007966	.13756
%RSD	.8421185	.8150585	.3116338	.3755182	.9105181	.3400923	.9336939
#1	13.90553	373.7221	2.395558	1.185973	376.3835	2.336040	14.58638
#2	14.06258	378.5088	2.385688	1.193960	381.7854	2.339818	14.85932
#3	14.13706	379.4585	2.400314	1.193456	382.8384	2.351333	14.75273

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**144.7533**	**4.794614**	**4.614524**	**4.580286**	**4.850379**	**4.702266**	**4.801805**
Stddev	.9847	.011572	.007235	.009022	.022419	.012044	.016985
%RSD	.6802630	.2413556	.1567863	.1969664	.4622170	.2561297	.3537213
#1	143.6165	4.800282	4.608363	4.570959	4.840844	4.703684	4.799429
#2	145.3002	4.781300	4.612720	4.580931	4.834303	4.689575	4.786133
#3	145.3432	4.802259	4.622491	4.588968	4.875989	4.713538	4.819853

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV034 Acquired: 12/16/2024 1:10:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV034 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	**4.754263**	**4.548710**	**4.958323**
Stddev	.041527	.042181	.056924
%RSD	.8734639	.9273178	1.148041
#1	4.707000	4.501204	4.893979
#2	4.770887	4.563156	4.978869
#3	4.784903	4.581770	5.002121

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1985.500**	**25910.93**	**2618.098**	**1712.081**	**2605.536**
Stddev	2.401	63.70	13.527	2.589	7.896
%RSD	.1209072	.2458352	.5166880	.1512001	.3030517
#1	1986.884	25948.40	2621.303	1711.112	2600.953
#2	1986.889	25947.00	2629.735	1715.014	2614.654
#3	1982.728	25837.38	2603.256	1710.116	2601.002

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB034 Acquired: 12/16/2024 1:13:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB034 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003512**	**.0011630**	**.0010343**	**-.003453**	**-.003121**	**-.003373**
Stddev	.001152	.0009743	.0016755	.005615	.002218	.004732
%RSD	32.80294	83.77131	162.0018	162.6054	71.07202	140.2987
#1	-.004704	.0001669	.0019474	-.005007	-.004647	.000030
#2	-.003428	.0021140	.0020549	.002775	-.000577	-.001372
#3	-.002404	.0012082	-.000899	-.008128	-.004138	-.008777

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009457**	**.0000632**	**.0000197**	**-.007759**	**.0004376**	**-.000103**
Stddev	.0010385	.0001441	.0000486	.052513	.0001746	.000321
%RSD	109.8142	227.9948	247.3475	676.7813	39.89946	310.1712
#1	.0009754	-.000049	.0000672	.041565	.0005875	-.000343
#2	-.000107	.000013	.0000218	-.001878	.0004794	.000261
#3	.001969	.000226	-.000030	-.062965	.0002459	-.000228

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.003088**	**-.008792**	**.0009327**	**.0396013**	**.0004204**	**.0000972**
Stddev	.000288	.009677	.0016485	.0629004	.0009170	.0009862
%RSD	9.329751	110.0609	176.7491	158.8341	218.1229	1014.319
#1	-.002816	-.008162	.0026513	.0609510	-.000417	.0006982
#2	-.003057	.000554	-.000635	-.031195	.001400	-.001041
#3	-.003390	-.018769	.000782	.089048	.000278	.000634

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.782416**	**-.015147**	**-.007498**	**.9564078**	**.0007505**	**.0105304**
Stddev	.220966	.004341	.004838	.2041207	.0025677	.0012539
%RSD	28.24148	28.66127	64.51526	21.34243	342.1320	11.90751
#1	-.980189	-.016279	-.010567	.9839242	-.001867	.0119188
#2	-.823139	-.010352	-.010006	.7399248	.003265	.0094805
#3	-.543922	-.018810	-.001922	1.145375	.000854	.0101918

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB034 Acquired: 12/16/2024 1:13:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB034 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000104	-.004235	.0018573	-.000008	.0005059	.0002961
Stddev	.000460	.004943	.0015712	.001442	.0007908	.0000720
%RSD	441.7568	116.7199	84.59206	17893.86	156.2933	24.31300
#1	-.000134	-.001384	.0031287	.001569	.0014032	.0002408
#2	-.000548	-.009942	.0023425	-.001258	.0002039	.0002700
#3	.000370	-.001378	.0001008	-.000336	-.000089	.0003774

Elem	Li6707
Units	ppm
Avg	F .0266391
Stddev	.0076965
%RSD	28.89190
#1	.0231266
#2	.0354652
#3	.0213254

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2360.664	28543.76	2676.826	1983.522	3269.339
Stddev	5.259	69.75	20.677	6.017	4.560
%RSD	.2227638	.2443485	.7724612	.3033744	.1394880
#1	2364.394	28511.04	2673.094	1976.608	3272.350
#2	2362.948	28496.39	2699.115	1987.577	3271.575
#3	2354.649	28623.85	2658.268	1986.380	3264.093

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-16 Acquired: 12/16/2024 1:17:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1494901**	**.0147204**	**1.735663**	**.0095857**	**.0365284**	**97.30369**
Stddev	.0035862	.0003422	.004544	.0016820	.0022544	.19383
%RSD	2.398945	2.324551	.2617887	17.54733	6.171696	.1992015
#1	.1508839	.0143441	1.736080	.0115069	.0341018	97.44825
#2	.1521702	.0148041	1.730925	.0083780	.0385579	97.37940
#3	.1454163	.0150129	1.739984	.0088723	.0369254	97.08344

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.152436**	**.0091330**	**.0100842**	**80.69547**	**.1885397**	**.1268227**
Stddev	.002717	.0000514	.0000108	.27207	.0005338	.0003615
%RSD	.1262501	.5624280	.1070010	.3371581	.2831297	.2850809
#1	2.150900	.0091812	.0100906	80.61892	.1891488	.1266633
#2	2.155574	.0091388	.0100717	80.99761	.1881531	.1265683
#3	2.150835	.0090790	.0100902	80.46987	.1883172	.1272366

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4715342**	**208.1266**	**9.658136**	**29.16675**	**.2506658**	**-.013712**
Stddev	.0032514	.0519	.015062	.06680	.0006958	.001691
%RSD	.6895432	.0249151	.1559525	.2290325	.2775846	12.33026
#1	.4752194	208.1845	9.674553	29.22190	.2510300	-.015502
#2	.4690703	208.1106	9.654898	29.09247	.2511038	-.013495
#3	.4703128	208.0846	9.644955	29.18588	.2498634	-.012141

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2381420**	**.2582450**	**1.707110**	**6.697820**	F **15.21154**	**-.010229**
Stddev	.4485095	.0111027	.011772	.113931	.05432	.004411
%RSD	188.3370	4.299300	.6895929	1.701012	.3571238	43.12031
#1	-.275844	.2700750	1.715960	6.597546	15.17709	-.006399
#2	.440136	.2480511	1.693750	6.674206	15.18337	-.015051
#3	.550134	.2566090	1.711621	6.821707	15.27416	-.009236

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-16 Acquired: 12/16/2024 1:17:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0100600	3.714007	9.161503	.0796207	.8423528	.2142207
Stddev	.0001622	.017200	.038023	.0024201	.0062835	.0008097
%RSD	1.612207	.4631242	.4150262	3.039551	.7459419	.3779955
#1	.0101820	3.694179	9.178296	.0769140	.8490146	.2151309
#2	.0098759	3.724920	9.188238	.0803722	.8415114	.2139510
#3	.0101221	3.722922	9.117975	.0815760	.8365325	.2135802

Elem	Li6707
Units	ppm
Avg	.2030574
Stddev	.0030922
%RSD	1.522814
#1	.2013151
#2	.2066277
#3	.2012296

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2809.911	34038.58	3260.998	2385.556	3168.201
Stddev	3.520	71.96	9.553	3.284	5.101
%RSD	.1252779	.2114021	.2929575	.1376806	.1610170
#1	2806.022	34121.52	3263.840	2389.097	3162.547
#2	2810.832	34001.47	3250.346	2384.960	3169.596
#3	2812.880	33992.75	3268.807	2382.610	3172.460

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-17 Acquired: 12/16/2024 1:21:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1183133**	**.0194782**	**.7600752**	**.0039143**	**.0302042**	**100.4171**
Stddev	.0048937	.0014382	.0065319	.0010833	.0013638	.2613
%RSD	4.136260	7.383491	.8593721	27.67667	4.515269	.2601971
#1	.1167519	.0189018	.7654581	.0041532	.0294115	100.6912
#2	.1237972	.0211152	.7528084	.0027314	.0317790	100.1709
#3	.1143908	.0184177	.7619591	.0048582	.0294222	100.3891

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.762471**	**.0089216**	**.0086653**	**97.53369**	**.2113272**	**.1174361**
Stddev	.005810	.0002186	.0001588	.12655	.0008562	.0008027
%RSD	.3296664	2.450529	1.832031	.1297543	.4051455	.6835622
#1	1.768015	.0090226	.0087486	97.59477	.2113987	.1172047
#2	1.756427	.0086707	.0087651	97.38818	.2104375	.1167745
#3	1.762972	.0090715	.0084822	97.61811	.2121454	.1183291

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2524372**	**187.6454**	**9.069418**	**30.78370**	**.2157990**	**-.011550**
Stddev	.0027809	.2553	.017318	.17268	.0014448	.000691
%RSD	1.101642	.1360679	.1909464	.5609462	.6695057	5.978324
#1	.2497395	187.7432	9.061840	30.96053	.2157597	-.010806
#2	.2522774	187.3556	9.057181	30.61550	.2143742	-.011674
#3	.2552946	187.8373	9.089233	30.77508	.2172630	-.012171

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4366241**	**.2232596**	**.9548689**	**5.939837**	F **13.17765**	**-.013893**
Stddev	.9020197	.0123914	.0238999	.015238	.05845	.001527
%RSD	206.5895	5.550200	2.502951	.2565409	.4435629	10.99398
#1	1.473651	.2110027	.9722818	5.952881	13.17517	-.012553
#2	-.165976	.2357812	.9647041	5.943541	13.12048	-.013569
#3	.002197	.2229950	.9276206	5.923088	13.23730	-.015556

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-17 Acquired: 12/16/2024 1:21:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089522	4.096738	8.545420	.0467871	.7244627	.2146562
Stddev	.0006842	.021965	.100127	.0014807	.0034212	.0005950
%RSD	7.643367	.5361696	1.171703	3.164649	.4722329	.2772068
#1	.0083274	4.108866	8.514569	.0452700	.7234174	.2149528
#2	.0088458	4.071382	8.464350	.0468629	.7282845	.2139712
#3	.0096834	4.109966	8.657342	.0482284	.7216861	.2150447

Elem	Li6707
Units	ppm
Avg	.2056410
Stddev	.0117457
%RSD	5.711730
#1	.1934724
#2	.2065384
#3	.2169123

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2928.022	35353.09	3350.824	2489.368	3163.783
Stddev	8.015	81.37	29.483	16.546	8.762
%RSD	.2737278	.2301643	.8798759	.6646741	.2769420
#1	2937.102	35261.58	3351.891	2472.760	3172.583
#2	2925.033	35380.38	3379.760	2489.492	3163.706
#3	2921.932	35417.31	3320.823	2505.852	3155.060

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-18 Acquired: 12/16/2024 1:25:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0761791	.0227194	.3777044	-.012312	.0259915	83.06281	1.386218
Stddev	.0057027	.0034252	.0011868	.004472	.0027827	.54112	.008484
%RSD	7.485920	15.07621	.3142066	36.32160	10.70611	.6514617	.6120394
#1	.0770049	.0265129	.3769893	-.009183	.0262815	82.92377	1.383036
#2	.0701085	.0198534	.3790744	-.017434	.0230752	83.65989	1.395833
#3	.0814239	.0217920	.3770496	-.010318	.0286179	82.60478	1.379785

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072002	.0063078	168.2750	.1896712	.1101111	.1881450	172.8904
Stddev	.0000933	.0000971	1.3517	.0009065	.0006398	.0064001	.6739
%RSD	1.295298	1.538910	.8032835	.4779446	.5810253	3.401702	.3897572
#1	.0072639	.0062626	167.8059	.1904790	.1104084	.1807567	172.7544
#2	.0072435	.0064192	169.7988	.1898439	.1105481	.1916916	173.6218
#3	.0070931	.0062416	167.2203	.1886907	.1093768	.1919866	172.2949

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.872222	40.23176	.2037050	-.012533	.0747573	.1783441	.6201761
Stddev	.039857	.19477	.0006092	.000421	.3759150	.0045120	.0110113
%RSD	.5063034	.4841218	.2990634	3.361537	502.8471	2.529921	1.775506
#1	7.853211	40.04617	.2041218	-.012440	-.277305	.1769892	.6252194
#2	7.918026	40.43457	.2039873	-.012993	.470678	.1833782	.6277624
#3	7.845430	40.21453	.2030058	-.012167	.030899	.1746648	.6075464

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.146242	9.828551	-.012261	.0079847	2.571092	6.198647	.0316788
Stddev	.192181	.017450	.002931	.0002988	.009240	.047609	.0023646
%RSD	4.635056	.1775470	23.90958	3.742050	.3593807	.7680581	7.464393
#1	4.323229	9.824426	-.015325	.0082752	2.581007	6.244641	.0329974
#2	4.173679	9.847694	-.011974	.0076783	2.569548	6.201727	.0289489
#3	3.941817	9.813533	-.009483	.0080005	2.562721	6.149572	.0330901

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-18 Acquired: 12/16/2024 1:25:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7810234	.1468490	.1782510
Stddev	.0033136	.0010509	.0041188
%RSD	.4242630	.7156241	2.310658
#1	.7799526	.1465702	.1800537
#2	.7847400	.1480111	.1735383
#3	.7783776	.1459656	.1811612

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2845.295	34398.93	3298.380	2391.734	3101.740
Stddev	8.357	83.50	12.652	3.369	10.262
%RSD	.2937158	.2427263	.3835752	.1408603	.3308560
#1	2854.917	34486.28	3288.736	2388.922	3112.767
#2	2839.845	34390.61	3293.699	2390.812	3092.468
#3	2841.124	34319.91	3312.705	2395.468	3099.987

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-19 Acquired: 12/16/2024 1:29:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501824	.0307673	.1665518	-.022573	.0167866	67.12606	.9272823
Stddev	.0027298	.0021426	.0015494	.003032	.0013268	.39497	.0047363
%RSD	5.439742	6.963779	.9302560	13.43046	7.904085	.5884003	.5107730
#1	.0528946	.0332208	.1658690	-.020931	.0178406	66.68235	.9227580
#2	.0474354	.0298161	.1654612	-.026072	.0152967	67.25656	.9268835
#3	.0502171	.0292650	.1683253	-.020716	.0172225	67.43926	.9322054

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047400	.0034957	343.7112	.1117653	.1145772	.1320710	159.7905
Stddev	.0001930	.0000536	1.6021	.0006766	.0002973	.0087008	.9700
%RSD	4.071769	1.534443	.4661280	.6053337	.2594480	6.587966	.6070313
#1	.0045173	.0035323	341.8880	.1111884	.1142370	.1374255	158.9230
#2	.0048584	.0035207	344.3507	.1125100	.1147075	.1220316	159.6107
#3	.0048442	.0034341	344.8947	.1115976	.1147870	.1367559	160.8378

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.36662	79.67079	.2143671	-.012455	-.603852	.1398226	.3160640
Stddev	.06484	.49787	.0018336	.000666	.367413	.0059614	.0108701
%RSD	.6254229	.6249033	.8553416	5.345559	60.84494	4.263542	3.439206
#1	10.31034	79.17468	.2126619	-.011825	-.776571	.1426158	.3279248
#2	10.35200	79.66731	.2141330	-.013152	-.181905	.1329774	.3065769
#3	10.43751	80.17039	.2163065	-.012389	-.853079	.1438746	.3136904

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.014509	5.898902	-.016503	.0069489	.6510419	7.120730	.0215055
Stddev	.119446	.033270	.001865	.0005327	.0035038	.087742	.0010572
%RSD	2.975370	.5640021	11.30003	7.665587	.5381789	1.232207	4.915965
#1	4.063395	5.868383	-.014575	.0069600	.6482376	7.026349	.0208916
#2	3.878374	5.893956	-.018298	.0074759	.6499186	7.136018	.0208986
#3	4.101758	5.934368	-.016636	.0064107	.6549696	7.199824	.0227262

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-19 Acquired: 12/16/2024 1:29:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.045570	.3116460	.1776932
Stddev	.013827	.0013571	.0012846
%RSD	1.322390	.4354658	.7229021
#1	1.031097	.3101178	.1790675
#2	1.046968	.3121094	.1765228
#3	1.058644	.3127107	.1774891

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.929	31480.32	2998.894	2174.918	3000.271
Stddev	8.014	206.34	37.136	14.214	1.788
%RSD	.3111125	.6554484	1.238331	.6535300	.0596076
#1	2566.686	31390.87	3030.448	2170.023	2999.404
#2	2580.162	31716.29	3008.264	2190.933	3002.327
#3	2580.939	31333.80	2957.970	2163.799	2999.081

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-20 Acquired: 12/16/2024 1:33:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0532195	.0320776	.1358837	-.016876	.0213336	76.70597	1.310430
Stddev	.0026055	.0010373	.0012971	.004485	.0032635	.57383	.008258
%RSD	4.895675	3.233668	.9545964	26.57818	15.29725	.7480899	.6301643
#1	.0560452	.0320949	.1344735	-.021645	.0176983	76.29265	1.305092
#2	.0509121	.0310317	.1361517	-.012742	.0240107	76.46413	1.306256
#3	.0527014	.0331060	.1370259	-.016241	.0222920	77.36113	1.319942

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051095	.0039863	354.6246	.1204356	.1274986	.1704690	178.5128
Stddev	.0002318	.0000535	3.0264	.0003532	.0004894	.0074649	1.3602
%RSD	4.537337	1.341363	.8534088	.2933130	.3838657	4.379016	.7619614
#1	.0049748	.0039263	352.6425	.1201008	.1269551	.1688060	177.4270
#2	.0049766	.0040040	353.1231	.1204013	.1279045	.1786251	178.0728
#3	.0053772	.0040287	358.1081	.1208048	.1276363	.1639758	180.0385

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.14626	89.40286	.2460564	-.013905	-.456287	.1529898	.3403527
Stddev	.11908	.78378	.0017478	.000416	.607764	.0043018	.0083621
%RSD	.9058311	.8766877	.7103325	2.992723	133.1977	2.811821	2.456886
#1	13.05436	88.95060	.2450528	-.013559	-.222724	.1516814	.3355184
#2	13.10363	88.95008	.2450418	-.013789	.000049	.1577939	.3355313
#3	13.28079	90.30789	.2480746	-.014367	-1.14619	.1494941	.3500084

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.420199	6.170852	-.019811	.0030473	.5677543	7.701563	.0226017
Stddev	.183663	.036630	.002133	.0001539	.0022677	.085307	.0002634
%RSD	3.388492	.5935954	10.76685	5.049885	.3994153	1.107658	1.165242
#1	5.223398	6.134246	-.017571	.0030798	.5669329	7.645818	.0228526
#2	5.450160	6.170803	-.020045	.0031824	.5703183	7.659103	.0226252
#3	5.587040	6.207506	-.021818	.0028798	.5660118	7.799768	.0223274

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-20 Acquired: 12/16/2024 1:33:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.191994	.3411278	.2039475
Stddev	.008296	.0027935	.0033230
%RSD	.6959616	.8188884	1.629329
#1	1.184425	.3387594	.2070774
#2	1.190693	.3404155	.2004603
#3	1.200863	.3442084	.2043047

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.726	31386.03	3010.446	2175.397	2965.174
Stddev	8.229	167.78	24.510	14.303	15.291
%RSD	.3194772	.5345591	.8141645	.6574908	.5156887
#1	2581.025	31571.59	3027.737	2191.873	2974.097
#2	2579.906	31245.03	3021.204	2168.149	2973.907
#3	2566.246	31341.46	2982.397	2166.168	2947.518

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-21 Acquired: 12/16/2024 1:36:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0516798	.0347181	.1314163	-.021155	.0237921	74.94761	1.229086
Stddev	.0035311	.0014089	.0003056	.004386	.0038424	.14641	.003302
%RSD	6.832622	4.058163	.2325563	20.73215	16.14976	.1953504	.2686356
#1	.0484379	.0335497	.1310991	-.022196	.0260713	75.00886	1.226362
#2	.0511592	.0362827	.1314409	-.024926	.0259492	74.78053	1.228137
#3	.0554423	.0343220	.1317088	-.016342	.0193559	75.05346	1.232758

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050475	.0038796	351.2322	.1141224	.1295654	.1643966	180.2798
Stddev	.0001088	.0000197	1.0630	.0011319	.0010660	.0047097	.5029
%RSD	2.154503	.5070617	.3026544	.9917832	.8227530	2.864831	.2789605
#1	.0050965	.0038816	351.2894	.1140286	.1297078	.1654915	180.0033
#2	.0051231	.0038589	350.1418	.1152982	.1284354	.1592359	179.9758
#3	.0049228	.0038981	352.2655	.1130403	.1305531	.1684623	180.8603

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.79293	87.96985	.2419557	-.013483	-.476573	.1560838	.3209644
Stddev	.02661	.23863	.0008211	.000546	.343031	.0043533	.0168299
%RSD	.2079966	.2712665	.3393698	4.047525	71.97876	2.789093	5.243544
#1	12.76894	87.81253	.2426546	-.013010	-.821818	.1526116	.3015556
#2	12.78831	87.85260	.2410514	-.013359	-.472102	.1609678	.3315174
#3	12.82155	88.24443	.2421613	-.014081	-.135799	.1546721	.3298201

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.447189	6.044446	-.020924	.0034998	.4735447	6.374242	.0233599
Stddev	.073612	.017423	.005355	.0005133	.0099239	.063261	.0015478
%RSD	1.351373	.2882425	25.59348	14.66597	2.095661	.9924427	6.626004
#1	5.369546	6.051152	-.021971	.0031509	.4639958	6.417642	.0246634
#2	5.456054	6.024667	-.025678	.0040892	.4728331	6.403425	.0237671
#3	5.515967	6.057519	-.015122	.0032594	.4838053	6.301657	.0216492

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-21 Acquired: 12/16/2024 1:36:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.245277	.3291638	.1940918
Stddev	.005718	.0006233	.0016832
%RSD	.4591762	.1893470	.8671990
#1	1.239068	.3284671	.1923521
#2	1.246435	.3293556	.1942111
#3	1.250327	.3296685	.1957121

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2572.597	31322.41	3016.947	2183.762	2971.885
Stddev	5.805	249.57	7.792	14.943	10.833
%RSD	.2256456	.7967639	.2582737	.6842681	.3645195
#1	2572.453	31528.97	3007.956	2199.671	2969.335
#2	2578.472	31393.15	3021.732	2181.591	2983.765
#3	2566.865	31045.11	3021.152	2170.023	2962.554

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-22 Acquired: 12/16/2024 1:40:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499430	.0404331	.1571125	-.027468	.0178778	53.30450	1.130630
Stddev	.0064704	.0021320	.0028068	.003167	.0018683	.16884	.003795
%RSD	12.95556	5.272940	1.786491	11.52820	10.45057	.3167485	.3356594
#1	.0471206	.0411954	.1603294	-.029215	.0169504	53.22515	1.131901
#2	.0453632	.0420791	.1551621	-.023813	.0166546	53.49841	1.133627
#3	.0573451	.0380247	.1558461	-.029376	.0200284	53.18996	1.126363

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046256	.0057100	745.8807	.1015560	.1136182	.1642806	166.6062
Stddev	.0001374	.0000257	1.6138	.0009198	.0009205	.0043564	.5785
%RSD	2.970155	.4502682	.2163600	.9057287	.8101361	2.651788	.3472256
#1	.0044926	.0056936	745.1554	.1024915	.1139202	.1681217	166.1142
#2	.0047670	.0057397	747.7298	.1006527	.1125847	.1595472	167.2435
#3	.0046172	.0056969	744.7568	.1015237	.1143498	.1651729	166.4611

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.83156	132.4586	.1760063	-.013326	.1706203	.1393143	.3650914
Stddev	.06691	.4018	.0003791	.000652	.4266697	.0027267	.0106104
%RSD	.4837536	.3033266	.2153639	4.892376	250.0697	1.957213	2.906231
#1	13.78087	132.3898	.1755689	-.012682	.0718038	.1374373	.3689386
#2	13.90740	132.8903	.1762104	-.013985	-.197971	.1424420	.3732415
#3	13.80642	132.0956	.1762395	-.013312	.638028	.1380637	.3530941

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.757752	5.393385	.0183931	.0006325	1.235233	6.159779	.0269797
Stddev	.099713	.021110	.0023052	.0005065	.004846	.020726	.0013868
%RSD	1.285336	.3913989	12.53294	80.08506	.3922771	.3364774	5.140150
#1	7.782478	5.385237	.0210538	.0004254	1.235846	6.139644	.0283097
#2	7.842776	5.377564	.0169962	.0012098	1.230111	6.181050	.0255424
#3	7.648002	5.417355	.0171293	.0002623	1.239743	6.158645	.0270870

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5034-22 Acquired: 12/16/2024 1:40:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKP9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.190585	.5132295	.1702511
Stddev	.003189	.0019356	.0038704
%RSD	.2678762	.3771510	2.273331
#1	1.191229	.5125915	.1723702
#2	1.193403	.5154037	.1657840
#3	1.187123	.5116935	.1725993

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2528.940	30683.30	3028.357	2127.678	2792.833
Stddev	12.969	120.64	21.186	8.419	10.716
%RSD	.5128310	.3931673	.6996037	.3956709	.3836879
#1	2541.454	30821.64	3052.345	2136.586	2802.002
#2	2529.806	30628.22	3020.520	2126.596	2795.443
#3	2515.559	30600.03	3012.205	2119.853	2781.053

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-01 Acquired: 12/16/2024 1:44:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK34 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0458291**	**.0406356**	**.7941011**	**-.050835**	**-.002506**	**30.14463**
Stddev	.0036638	.0026017	.0100573	.004413	.003007	.24511
%RSD	7.994566	6.402529	1.266501	8.681316	120.0009	.8131228
#1	.0466783	.0397168	.8043795	-.047858	.000660	30.22305
#2	.0418153	.0386179	.7842806	-.048742	-.002853	29.86990
#3	.0489939	.0435720	.7936433	-.055906	-.005325	30.34093

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4673939**	**.0028033**	**.0048345**	F **1122.600**	**.0655322**	**.0888810**
Stddev	.0036528	.0001711	.0000345	11.132	.0010071	.0003564
%RSD	.7815162	6.103609	.7140002	.9916602	1.536861	.4010028
#1	.4698325	.0030008	.0048280	1129.010	.0645318	.0884695
#2	.4631942	.0027079	.0048036	1109.745	.0655189	.0890780
#3	.4691549	.0027011	.0048718	1129.044	.0665460	.0890953

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1130305**	**92.88419**	**7.334248**	**521.1377**	**.0893110**	**-.006041**
Stddev	.0083359	.83203	.062323	5.0711	.0009252	.000981
%RSD	7.374908	.8957727	.8497587	.9730866	1.035942	16.24376
#1	.1166447	93.30931	7.358174	523.3736	.0902536	-.004921
#2	.1034975	91.92548	7.263507	515.3329	.0884043	-.006750
#3	.1189494	93.41777	7.381064	524.7067	.0892750	-.006451

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.099573**	**.0701990**	**.7614594**	**7.604610**	**6.202393**	**.0671525**
Stddev	.585263	.0109037	.0269973	.171794	.023848	.0040300
%RSD	587.7708	15.53251	3.545469	2.259079	.3844922	6.001251
#1	-.005995	.0618154	.7926218	7.598365	6.226503	.0679882
#2	-.725987	.0825257	.7451481	7.436023	6.178816	.0627701
#3	.433263	.0662560	.7466084	7.779441	6.201861	.0706991

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-01 Acquired: 12/16/2024 1:44:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK34 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026129	23.77979	5.607631	.0283893	.3935341	.5771472
Stddev	.0005102	.11347	.035590	.0015392	.0031034	.0054678
%RSD	19.52721	.4771707	.6346729	5.421740	.7886057	.9473773
#1	.0023680	23.89863	5.566580	.0281028	.3936082	.5793160
#2	.0022712	23.67258	5.626498	.0270136	.3903943	.5709278
#3	.0031994	23.76817	5.629815	.0300517	.3965998	.5811980

Elem	Li6707
Units	ppm
Avg	.1406845
Stddev	.0049914
%RSD	3.547952
#1	.1447887
#2	.1421369
#3	.1351280

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2286.422	28123.61	2841.424	1937.408	2612.926
Stddev	7.933	120.51	18.074	3.439	13.820
%RSD	.3469787	.4284878	.6360810	.1774971	.5289179
#1	2278.072	28015.01	2850.737	1933.736	2596.979
#2	2287.334	28253.25	2852.942	1940.552	2621.427
#3	2293.861	28102.57	2820.593	1937.936	2620.372

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-02 Acquired: 12/16/2024 1:48:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK35 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0804987**	**.0414086**	**1.717934**	**-.041405**	**.0114609**	**55.20494**
Stddev	.0047727	.0068621	.004446	.008785	.0022679	.16966
%RSD	5.928944	16.57162	.2587886	21.21793	19.78817	.3073244
#1	.0857866	.0477867	1.713057	-.031627	.0088999	55.15263
#2	.0791991	.0341480	1.718988	-.048634	.0122677	55.39460
#3	.0765103	.0422911	1.721759	-.043954	.0132151	55.06760

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9877511**	**.0050983**	**.0086560**	F **1104.004**	**.1055472**	**.1170329**
Stddev	.0026829	.0001493	.0000661	2.797	.0003284	.0003591
%RSD	.2716151	2.928641	.7637676	.2533405	.3111686	.3068645
#1	.9852083	.0051696	.0086759	1104.854	.1056555	.1166698
#2	.9905550	.0051987	.0085822	1106.278	.1058077	.1173880
#3	.9874898	.0049267	.0087098	1100.881	.1051782	.1170408

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2609602**	**142.9848**	**11.25986**	**450.6316**	**.1526277**	**-.009307**
Stddev	.0087602	.3929	.01855	.9213	.0001441	.000867
%RSD	3.356905	.2747749	.1647728	.2044564	.0944055	9.316620
#1	.2700424	143.3081	11.26808	450.5308	.1524906	-.010086
#2	.2525621	143.0988	11.27288	451.5992	.1527779	-.008372
#3	.2602761	142.5476	11.23862	449.7648	.1526148	-.009463

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0620660**	**.1347989**	**1.403139**	**8.128705**	**6.892814**	**.0340960**
Stddev	.3563598	.0047164	.004350	.086211	.004457	.0029939
%RSD	574.1632	3.498850	.3100261	1.060574	.0646557	8.780887
#1	-.265896	.1306229	1.408098	8.029418	6.891427	.0315324
#2	.010818	.1399143	1.399967	8.184588	6.897799	.0373864
#3	.441275	.1338594	1.401352	8.172109	6.889215	.0333693

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-02 Acquired: 12/16/2024 1:48:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK35 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099107	15.75494	7.258974	.0531795	.6363392	.6185405
Stddev	.0005119	.00676	.074616	.0014366	.0035248	.0026682
%RSD	5.164742	.0429052	1.027915	2.701354	.5539111	.4313658
#1	.0095958	15.76120	7.270842	.0544511	.6396037	.6158184
#2	.0105013	15.75585	7.326945	.0516212	.6368120	.6211512
#3	.0096349	15.74777	7.179136	.0534662	.6326019	.6186518

Elem	Li6707
Units	ppm
Avg	.1752762
Stddev	.0060558
%RSD	3.454986
#1	.1797656
#2	.1776744
#3	.1683886

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2347.840	28538.64	2859.358	1964.587	2607.021
Stddev	8.890	100.66	33.442	4.837	7.366
%RSD	.3786671	.3527199	1.169575	.2462251	.2825278
#1	2356.483	28422.48	2835.637	1959.007	2615.141
#2	2338.721	28593.05	2844.830	1967.160	2600.769
#3	2348.318	28600.38	2897.608	1967.594	2605.153

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-03 Acquired: 12/16/2024 1:52:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK36 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2850236	.0269575	.6723494	.0028481	.0372303	90.37096	.9178000
Stddev	.0027755	.0024090	.0005517	.0053723	.0014320	.05764	.0039107
%RSD	.9737906	8.936487	.0820512	188.6314	3.846327	.0637840	.4260929
#1	.2823809	.0296416	.6729781	.0031834	.0382210	90.32994	.9168888
#2	.2847746	.0249830	.6719464	-.002684	.0378814	90.43686	.9220858
#3	.2879152	.0262478	.6721237	.008045	.0355884	90.34607	.9144254

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080367	.0091606	153.1714	.1077834	.1728252	.3934787	228.3116
Stddev	.0000993	.0000541	.1002	.0006199	.0008841	.0049790	.5634
%RSD	1.235743	.5907073	.0653962	.5751594	.5115747	1.265379	.2467870
#1	.0079261	.0091845	153.2443	.1084475	.1721185	.3880307	227.7217
#2	.0080660	.0090987	153.0572	.1076830	.1738166	.3946122	228.8443
#3	.0081181	.0091986	153.2126	.1072199	.1725406	.3977933	228.3688

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.52566	32.08713	.2243791	-.013069	-.140692	.1707881	.6625631
Stddev	.02797	.03024	.0005531	.000535	.374666	.0063496	.0141100
%RSD	.2232795	.0942473	.2465172	4.093364	266.3021	3.717841	2.129613
#1	12.53180	32.06148	.2249466	-.013354	.285610	.1649134	.6788255
#2	12.55005	32.07943	.2238416	-.012452	-.290009	.1775246	.6552946
#3	12.49513	32.12047	.2243491	-.013400	-.417678	.1699261	.6535693

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.231497	4.987420	-.043376	.0077664	1.484069	9.015927	.0353843
Stddev	.038813	.008904	.001659	.0002453	.003075	.052287	.0021878
%RSD	.4715137	.1785376	3.823859	3.158860	.2072319	.5799356	6.182844
#1	8.221812	4.987653	-.041538	.0078123	1.485770	8.969168	.0330401
#2	8.198443	4.978401	-.043830	.0079854	1.485919	9.006230	.0357411
#3	8.274235	4.996205	-.044760	.0075013	1.480519	9.072383	.0373718

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-03 Acquired: 12/16/2024 1:52:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK36 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5462869	.1652231	.1194402
Stddev	.0030372	.0004120	.0028953
%RSD	.5559785	.2493398	2.424073
#1	.5491365	.1652199	.1166300
#2	.5430917	.1656367	.1224137
#3	.5466326	.1648127	.1192768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3116.529	37729.36	3632.997	2631.788	3053.574
Stddev	7.872	130.44	19.357	6.555	7.734
%RSD	.2525941	.3457197	.5328089	.2490645	.2532884
#1	3112.313	37844.97	3652.353	2633.845	3049.973
#2	3125.612	37755.16	3633.000	2637.068	3062.453
#3	3111.663	37587.95	3613.639	2624.451	3048.297

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-04 Acquired: 12/16/2024 1:56:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK37 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1595060	.0231378	.4505489	.0165652	.0358999	85.67749	.8589146
Stddev	.0031044	.0026128	.0029870	.0015618	.0016588	.49928	.0042928
%RSD	1.946235	11.29251	.6629678	9.428295	4.620758	.5827475	.4997932
#1	.1604274	.0212069	.4525447	.0183657	.0343803	85.17846	.8545400
#2	.1620453	.0220956	.4471148	.0155767	.0376696	85.67700	.8590830
#3	.1560452	.0261109	.4519871	.0157532	.0356498	86.17702	.8631206

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073707	.0071593	49.05243	.1124242	.1464958	.3064531	212.0755
Stddev	.0000597	.0001081	.17989	.0012520	.0004424	.0011547	1.1222
%RSD	.8104207	1.510160	.3667349	1.113611	.3020241	.3767867	.5291618
#1	.0074351	.0070401	48.88514	.1130963	.1466798	.3077542	210.8395
#2	.0073598	.0071867	49.02944	.1109797	.1459911	.3055502	212.3565
#3	.0073172	.0072510	49.24272	.1131967	.1468166	.3060550	213.0305

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.35077	24.72587	.1955052	-.012815	.1895519	.1800212	.4596301
Stddev	.09942	.17756	.0006449	.000559	.1089809	.0038854	.0098278
%RSD	.5729768	.7181138	.3298501	4.358450	57.49398	2.158323	2.138188
#1	17.24647	24.57799	.1954642	-.013221	.2632566	.1755371	.4532595
#2	17.36140	24.67681	.1948818	-.013045	.0643675	.1821352	.4709484
#3	17.44445	24.92280	.1961696	-.012178	.2410316	.1823912	.4546823

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.106845	2.887046	-.045787	.0051592	.9643695	9.176491	.0244380
Stddev	.080961	.001904	.000773	.0005805	.0063016	.076901	.0014761
%RSD	1.325735	.0659490	1.689162	11.25081	.6534390	.8380192	6.039978
#1	6.116088	2.886342	-.045206	.0054726	.9694137	9.088606	.0254148
#2	6.182788	2.885594	-.046665	.0044894	.9573058	9.231427	.0251590
#3	6.021660	2.889201	-.045489	.0055156	.9663890	9.209440	.0227400

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-04 Acquired: 12/16/2024 1:56:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK37 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6821397	.0180645	.1022972
Stddev	.0035771	.0004441	.0016725
%RSD	.5243980	2.458687	1.634952
#1	.6781630	.0175997	.1036500
#2	.6850953	.0181093	.1028144
#3	.6831607	.0184846	.1004271

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3084.708	37382.66	3550.337	2597.892	3144.385
Stddev	21.596	265.75	30.782	18.332	21.065
%RSD	.7001058	.7108795	.8670051	.7056627	.6699385
#1	3095.258	37270.81	3567.021	2591.547	3157.625
#2	3099.000	37686.05	3569.175	2618.554	3155.435
#3	3059.864	37191.13	3514.815	2583.575	3120.093

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-05 Acquired: 12/16/2024 1:59:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK38 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0899110	.0202580	.7895901	-.005006	.0282627	82.17936	.8747759
Stddev	.0011542	.0019205	.0030074	.002622	.0006908	.24727	.0023631
%RSD	1.283737	9.480311	.3808833	52.37817	2.444206	.3008916	.2701330
#1	.0888389	.0214015	.7915645	-.007718	.0289459	81.96608	.8733225
#2	.0897614	.0180408	.7861289	-.004818	.0275645	82.12160	.8775025
#3	.0911327	.0213318	.7910770	-.002484	.0282775	82.45039	.8735027

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065424	.0058189	93.45594	.1015803	.1211466	.1627995	177.3632
Stddev	.0000445	.0001074	.32186	.0008013	.0007581	.0090256	.0341
%RSD	.6794980	1.845202	.3443933	.7888495	.6257438	5.544019	.0192112
#1	.0065431	.0059087	93.19473	.1024389	.1219761	.1558996	177.3980
#2	.0065866	.0058481	93.35759	.1008523	.1209741	.1594852	177.3299
#3	.0064977	.0057000	93.81549	.1014498	.1204897	.1730138	177.3618

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.27005	31.52380	.1256054	-.011529	-.380174	.1714236	.6415086
Stddev	.02674	.12667	.0004288	.000277	.125576	.0114964	.0121772
%RSD	.2179480	.4018194	.3413738	2.403386	33.03120	6.706431	1.898216
#1	12.26813	31.42428	.1260788	-.011446	-.269237	.1651623	.6365795
#2	12.29770	31.66639	.1254944	-.011303	-.516507	.1644171	.6325686
#3	12.24432	31.48073	.1252430	-.011838	-.354779	.1846916	.6553776

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.435001	2.704320	-.039918	.0048578	1.219213	10.20802	.0317653
Stddev	.129906	.002206	.001628	.0001539	.004979	.04246	.0009639
%RSD	3.781828	.0815842	4.079385	3.167795	.4083518	.4159145	3.034451
#1	3.314116	2.703408	-.038466	.0047458	1.215321	10.21448	.0309102
#2	3.572357	2.706837	-.039611	.0050333	1.224823	10.24687	.0315758
#3	3.418530	2.702717	-.041679	.0047943	1.217493	10.16270	.0328098

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-05 Acquired: 12/16/2024 1:59:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK38 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6576715	.0360950	.1009588
Stddev	.0069374	.0003059	.0033122
%RSD	1.054843	.8475540	3.280731
#1	.6578594	.0362028	.1014609
#2	.6645131	.0363323	.1039912
#3	.6506421	.0357497	.0974242

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2567.030	31172.11	2911.587	2163.163	3138.163
Stddev	3.477	300.95	3.127	20.693	5.633
%RSD	.1354400	.9654398	.1074133	.9565879	.1794893
#1	2564.142	31189.34	2913.444	2163.195	3131.913
#2	2570.889	31464.07	2907.976	2183.840	3139.731
#3	2566.058	30862.91	2913.340	2142.455	3142.846

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-06 Acquired: 12/16/2024 2:03:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK39 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0963391	.0103024	.5727948	.0132334	.0346360	99.13895	.7057493
Stddev	.0015668	.0024727	.0023396	.0026919	.0028079	.42452	.0048402
%RSD	1.626306	24.00115	.4084602	20.34174	8.106745	.4282027	.6858191
#1	.0949363	.0131298	.5704356	.0115568	.0365962	99.58762	.7110761
#2	.0960512	.0085446	.5728344	.0118050	.0314193	99.08559	.7045508
#3	.0980299	.0092327	.5751143	.0163384	.0358925	98.74363	.7016210

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073366	.0044024	29.34786	.1125940	.1135489	.1463192	191.9811
Stddev	.0001274	.0000908	.03697	.0006416	.0004996	.0067049	1.0870
%RSD	1.736738	2.062603	.1259682	.5698455	.4399907	4.582402	.5662164
#1	.0074824	.0044556	29.38581	.1118621	.1140905	.1540360	193.0639
#2	.0072805	.0042976	29.34582	.1128601	.1134500	.1430030	191.9894
#3	.0072469	.0044541	29.31196	.1130598	.1131061	.1419185	190.8899

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.61178	21.55525	.1336525	-.013702	.1387986	.1893388	.5916342
Stddev	.07967	.10030	.0002659	.000640	.3052341	.0024740	.0290409
%RSD	.6861285	.4653242	.1989374	4.669784	219.9116	1.306632	4.908583
#1	11.69925	21.64348	.1333954	-.014334	-.209937	.1909884	.6244130
#2	11.59274	21.57611	.1336357	-.013055	.268947	.1905338	.5813713
#3	11.54335	21.44616	.1339264	-.013716	.357386	.1864942	.5691183

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.758828	1.962551	-.040318	.0032355	.6466467	9.289201	.0251974
Stddev	.143901	.004420	.001844	.0000536	.0047824	.074960	.0021132
%RSD	5.216003	.2252210	4.573417	1.656760	.7395628	.8069600	8.386533
#1	2.922876	1.957692	-.038191	.0032051	.6517052	9.224387	.0238050
#2	2.653919	1.966334	-.041307	.0032039	.6460357	9.371291	.0276290
#3	2.699690	1.963627	-.041456	.0032974	.6421993	9.271925	.0241582

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-06 Acquired: 12/16/2024 2:03:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK39 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5599236	-.046441	.1064456
Stddev	.0068991	.000166	.0021185
%RSD	1.232145	.3568879	1.990186
#1	.5673173	-.046559	.1045297
#2	.5536583	-.046513	.1060864
#3	.5587951	-.046252	.1087207

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2697.375	32379.93	3043.757	2260.200	3262.249
Stddev	1.429	197.64	26.568	15.536	3.677
%RSD	.0529798	.6103779	.8728584	.6873926	.1127203
#1	2698.445	32157.94	3043.948	2244.269	3259.338
#2	2697.927	32445.07	3017.094	2261.021	3261.028
#3	2695.752	32536.78	3070.229	2275.310	3266.381

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-07 Acquired: 12/16/2024 2:07:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1509601	.0270139	1.118351	.0103920	.0411542	106.6250	.8450680
Stddev	.0016112	.0030030	.003503	.0018807	.0017577	.2678	.0014950
%RSD	1.067267	11.11664	.3132392	18.09716	4.271009	.2511243	.1769025
#1	.1523388	.0301406	1.114681	.0090707	.0399765	106.9107	.8466972
#2	.1513525	.0241521	1.118714	.0095602	.0403115	106.5846	.8437594
#3	.1491890	.0267490	1.121658	.0125452	.0431745	106.3797	.8447474

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087626	.0077663	90.66894	.1586365	.1596959	.2912329	244.0259
Stddev	.0001333	.0000533	.21746	.0005426	.0000322	.0021118	.7150
%RSD	1.521341	.6861427	.2398434	.3420294	.0201947	.7251306	.2929985
#1	.0086284	.0077144	90.83408	.1587838	.1596715	.2934422	244.5823
#2	.0088950	.0077637	90.75020	.1590902	.1597324	.2910220	243.2194
#3	.0087643	.0078208	90.42255	.1580354	.1596836	.2892344	244.2759

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.86638	33.99658	.2088502	-.017245	.0799598	.2201436	.9666239
Stddev	.05331	.03984	.0009736	.000617	.2845183	.0030613	.0115970
%RSD	.3160486	.1171780	.4661703	3.578932	355.8267	1.390610	1.199744
#1	16.90997	34.03242	.2092563	-.017750	-.224221	.2166464	.9751551
#2	16.80695	33.95369	.2095551	-.017429	.339549	.2223384	.9534194
#3	16.88222	34.00363	.2077393	-.016557	.124551	.2214461	.9712973

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.523235	3.581411	-.044990	.0048164	1.519196	9.068756	.0406193
Stddev	.113195	.000822	.002492	.0002161	.002380	.083113	.0012915
%RSD	2.502518	.0229524	5.539744	4.486076	.1566375	.9164785	3.179441
#1	4.559082	3.582309	-.043899	.0050016	1.520943	9.079215	.0416603
#2	4.614166	3.581231	-.047842	.0048688	1.520160	9.146144	.0391741
#3	4.396457	3.580695	-.043229	.0045790	1.516486	8.980908	.0410235

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-07 Acquired: 12/16/2024 2:07:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7288719	-.008677	.1323049
Stddev	.0030528	.000343	.0026730
%RSD	.4188440	3.956633	2.020306
#1	.7312159	-.008453	.1293344
#2	.7254198	-.009072	.1330644
#3	.7299801	-.008505	.1345159

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2937.967	35537.64	3381.393	2486.370	3171.227
Stddev	1.902	171.98	9.901	14.744	2.410
%RSD	.0647351	.4839428	.2928105	.5929809	.0759893
#1	2938.255	35358.22	3371.010	2470.340	3168.448
#2	2935.937	35553.64	3382.440	2489.417	3172.739
#3	2939.707	35701.07	3390.729	2499.351	3172.494

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-08 Acquired: 12/16/2024 2:11:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1527340	.0255485	1.145217	.0153781	.0414077	107.8526	.8546623
Stddev	.0056234	.0024032	.006581	.0020712	.0020513	.4242	.0035371
%RSD	3.681827	9.406477	.5746505	13.46826	4.953966	.3933073	.4138588
#1	.1464042	.0229133	1.151527	.0131089	.0437663	107.6508	.8506161
#2	.1571532	.0276193	1.145727	.0171669	.0404175	107.5669	.8562033
#3	.1546445	.0261128	1.138395	.0158584	.0400393	108.3400	.8571674

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088217	.0081079	91.74670	.1611531	.1629239	.2930087	247.1479
Stddev	.0000385	.0000809	.22056	.0004034	.0005497	.0049480	.6327
%RSD	.4368822	.9978803	.2403967	.2503058	.3374211	1.688703	.2560119
#1	.0088445	.0082012	91.49674	.1607535	.1633207	.2964030	246.4596
#2	.0087772	.0080655	91.82945	.1611456	.1631547	.2952918	247.2798
#3	.0088435	.0080571	91.91392	.1615602	.1622964	.2873313	247.7043

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.05108	34.35160	.2135344	-.016172	-.084582	.2130927	.9862639
Stddev	.08250	.17351	.0008936	.001946	.352882	.0031359	.0082904
%RSD	.4838680	.5050896	.4184655	12.03470	417.2065	1.471608	.8405857
#1	16.96810	34.21393	.2125468	-.018414	-.339024	.2136276	.9840667
#2	17.05205	34.29438	.2137693	-.015179	-.232987	.2097237	.9954315
#3	17.13310	34.54649	.2142870	-.014922	.318265	.2159267	.9792934

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.701426	3.661856	-.052881	.0050330	1.552605	9.221424	.0422153
Stddev	.088562	.007671	.003277	.0006007	.013934	.061383	.0022374
%RSD	1.883736	.2094707	6.197652	11.93596	.8974515	.6656574	5.300052
#1	4.800113	3.668737	-.054018	.0050538	1.567673	9.240322	.0426379
#2	4.628866	3.653586	-.049186	.0056231	1.540185	9.152814	.0397967
#3	4.675298	3.663245	-.055438	.0044221	1.549956	9.271135	.0442113

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-08 Acquired: 12/16/2024 2:11:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7427541	-.008493	.1341962
Stddev	.0004762	.000690	.0068159
%RSD	.0641127	8.123303	5.079056
#1	.7425876	-.008417	.1377859
#2	.7432912	-.009218	.1263357
#3	.7423834	-.007845	.1384670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2909.722	35286.69	3369.362	2468.564	3122.080
Stddev	9.688	122.81	12.399	14.101	13.354
%RSD	.3329554	.3480361	.3679811	.5712179	.4277203
#1	2900.262	35403.16	3372.267	2482.079	3106.979
#2	2909.281	35158.39	3380.050	2453.942	3126.933
#3	2919.623	35298.51	3355.768	2469.671	3132.329

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-07LX5 Acquired: 12/16/2024 2:28:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0284829	.0063023	.2315749	-.008216	.0079379	25.25716	.2012389
Stddev	.0069796	.0003210	.0016028	.003174	.0015583	.05053	.0011033
%RSD	24.50466	5.093022	.6921080	38.63813	19.63164	.2000779	.5482585
#1	.0243879	.0063430	.2330948	-.011545	.0097369	25.23152	.2012361
#2	.0245187	.0066010	.2299005	-.005223	.0070038	25.31537	.2001369
#3	.0365419	.0059629	.2317293	-.007879	.0070730	25.22458	.2023435

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022273	.0014445	21.77897	.0383150	.0433289	.0658785	58.51237
Stddev	.0000708	.0000271	.14432	.0007396	.0003546	.0078265	.19700
%RSD	3.179047	1.877392	.6626541	1.930329	.8183272	11.88014	.3366733
#1	.0023053	.0014739	21.73202	.0388134	.0429195	.0603955	58.30151
#2	.0022094	.0014206	21.66397	.0386664	.0435376	.0748415	58.54391
#3	.0021672	.0014390	21.94092	.0374652	.0435296	.0623987	58.69170

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.066297	8.258480	.0435701	-.002311	-.416743	.0448709	.2370298
Stddev	.010071	.047073	.0003931	.000244	.902039	.0065836	.0110349
%RSD	.2476792	.5699999	.9021900	10.54842	216.4500	14.67223	4.655473
#1	4.054670	8.307071	.0431319	-.002296	-.696842	.0524500	.2301780
#2	4.071910	8.213087	.0436869	-.002561	-1.14550	.0405703	.2311520
#3	4.072312	8.255284	.0438916	-.002075	.59212	.0415923	.2497593

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6055202	.7072569	-.027612	.0002683	.3029157	2.221915	.0094181
Stddev	.0601704	.0023289	.001252	.0001981	.0023793	.005222	.0010626
%RSD	9.936982	.3292882	4.534127	73.82200	.7854624	.2350032	11.28270
#1	.6734806	.7057012	-.026258	.0001055	.3055710	2.221733	.0086979
#2	.5840510	.7061350	-.028727	.0004888	.3009773	2.227224	.0106385
#3	.5590291	.7099344	-.027852	.0002107	.3021988	2.216786	.0089179

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-07LX5 Acquired: 12/16/2024 2:28:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1713810	-.002569	.0612098
Stddev	.0078669	.000127	.0050287
%RSD	4.590281	4.947673	8.215459
#1	.1622976	-.002697	.0557241
#2	.1758460	-.002443	.0623042
#3	.1759994	-.002569	.0656012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2411.778	30336.12	2762.944	2042.101	3177.747
Stddev	5.455	52.88	14.210	4.707	8.411
%RSD	.2261701	.1743215	.5142909	.2304918	.2646873
#1	2409.593	30284.75	2756.389	2038.029	3170.543
#2	2417.986	30333.22	2753.196	2047.254	3186.990
#3	2407.755	30390.40	2779.248	2041.021	3175.710

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-09 Acquired: 12/16/2024 2:32:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2337439	.1235711	1.152445	.1546256	.1823290	109.5518	4.301921
Stddev	.0061432	.0002128	.002832	.0050951	.0019811	.2125	.012098
%RSD	2.628180	.1721852	.2457453	3.295116	1.086574	.1939763	.2812320
#1	.2300425	.1234339	1.154983	.1604673	.1846162	109.7818	4.312399
#2	.2408352	.1234632	1.149390	.1511001	.1811441	109.5108	4.304684
#3	.2303539	.1238162	1.152961	.1523093	.1812269	109.3627	4.288680

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0908651	.1047728	90.91590	.5247565	1.310148	.7086304	246.3882
Stddev	.0003385	.0001908	.32776	.0011636	.001746	.0043005	1.2392
%RSD	.3724723	.1820921	.3605120	.2217443	.1333030	.6068794	.5029460
#1	.0906535	.1048403	91.28247	.5248727	1.311995	.7046618	247.5217
#2	.0906863	.1049207	90.65108	.5235391	1.308524	.7131997	246.5777
#3	.0912555	.1045574	90.81415	.5258576	1.309925	.7080299	245.0652

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.72482	34.03180	1.260890	.0510816	.0429208	1.084246	1.699017
Stddev	.06585	.08583	.001295	.0009632	.4297037	.003905	.007659
%RSD	.3715080	.2522056	.1026698	1.885636	1001.155	.3601564	.4507716
#1	17.78065	34.06786	1.261296	.0501099	.4404713	1.082288	1.707170
#2	17.74160	34.09372	1.261933	.0510987	-.412974	1.081707	1.697906
#3	17.65220	33.93382	1.259441	.0520361	.101265	1.088743	1.691974

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.011190	3.550231	-.095795	.0020624	1.558157	9.006946	.0420300
Stddev	.036806	.009727	.003001	.0003138	.006187	.061865	.0019214
%RSD	.6122989	.2739816	3.132732	15.21528	.3970599	.6868559	4.571437
#1	6.023443	3.551526	-.095254	.0017022	1.551041	8.983939	.0439909
#2	5.969820	3.559245	-.093101	.0022080	1.562258	8.959881	.0401507
#3	6.040307	3.539921	-.099029	.0022769	1.561173	9.077018	.0419485

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-09 Acquired: 12/16/2024 2:32:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7267799	-.011596	.1272005
Stddev	.0034022	.000259	.0061341
%RSD	.4681262	2.234378	4.822378
#1	.7297822	-.011778	.1340024
#2	.7230844	-.011299	.1255108
#3	.7274729	-.011710	.1220884

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2864.234	35428.80	3287.914	2402.505	3105.282
Stddev	11.498	168.19	5.819	13.799	11.646
%RSD	.4014284	.4747241	.1769831	.5743538	.3750501
#1	2852.284	35455.92	3294.631	2402.803	3093.315
#2	2865.198	35248.70	3284.390	2388.559	3105.951
#3	2875.220	35581.78	3284.722	2416.152	3116.579

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-10 Acquired: 12/16/2024 2:36:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0868242**	**.0173316**	**2.663329**	**-.019204**	**.0282531**	**79.37054**
Stddev	.0051663	.0038303	.012583	.005872	.0028571	.65418
%RSD	5.950334	22.09990	.4724491	30.57433	10.11256	.8242151
#1	.0904099	.0217286	2.652044	-.012859	.0257070	80.00727
#2	.0891604	.0155458	2.661045	-.020307	.0277092	79.40414
#3	.0809025	.0147203	2.676897	-.024446	.0313430	78.70019

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.794810**	**.0070564**	**.0101452**	**168.2592**	**.1721195**	**.1235970**
Stddev	.012651	.0001976	.0001687	1.0777	.0007537	.0005753
%RSD	.7048413	2.799621	1.662514	.6405233	.4378672	.4654967
#1	1.808463	.0072392	.0099796	169.2657	.1714313	.1239170
#2	1.792480	.0070833	.0101392	168.3897	.1720023	.1229328
#3	1.783486	.0068469	.0103168	167.1221	.1729249	.1239413

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4391335**	**171.4852**	**6.901807**	**38.77712**	**.2589222**	**-.010229**
Stddev	.0050080	1.3854	.052215	.30441	.0012427	.001025
%RSD	1.140426	.8078765	.7565372	.7850146	.4799619	10.02492
#1	.4442578	172.8996	6.956679	39.05321	.2574874	-.009529
#2	.4388921	171.4251	6.896008	38.82748	.2596180	-.011406
#3	.4342506	170.1308	6.852734	38.45067	.2596611	-.009752

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1134520**	**.2071350**	**2.120152**	**13.65538**	F **18.33250**	**-.011507**
Stddev	.6137170	.0090192	.023252	.18853	.07092	.003417
%RSD	540.9485	4.354257	1.096723	1.380612	.3868389	29.69578
#1	.8117831	.2049491	2.111528	13.87208	18.27419	-.010984
#2	-.131316	.2170463	2.102444	13.52904	18.31188	-.015155
#3	-.340111	.1994098	2.146484	13.56502	18.41145	-.008381

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-10 Acquired: 12/16/2024 2:36:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045613	5.314864	8.110384	.1320701	1.029116	.3089687
Stddev	.0001550	.033082	.134523	.0011784	.009806	.0027673
%RSD	3.398720	.6224439	1.658647	.8922533	.9528747	.8956715
#1	.0046523	5.280766	8.159629	.1328766	1.033312	.3119652
#2	.0043823	5.317000	8.213344	.1326160	1.036125	.3084318
#3	.0046493	5.346827	7.958178	.1307178	1.017910	.3065092

Elem	Li6707
Units	ppm
Avg	.1828331
Stddev	.0027558
%RSD	1.507289
#1	.1841076
#2	.1847210
#3	.1796707

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2633.092	32452.84	3052.934	2222.316	3103.854
Stddev	11.565	70.34	38.367	11.774	14.530
%RSD	.4391990	.2167554	1.256713	.5298114	.4681376
#1	2637.599	32469.40	3034.878	2221.826	3108.954
#2	2641.723	32513.43	3026.927	2234.328	3115.146
#3	2619.952	32375.70	3096.997	2210.796	3087.461

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-11 Acquired: 12/16/2024 2:40:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1035276	.0121233	2.301944	-.013820	.0525356	73.50524
Stddev	.0040485	.0018183	.009507	.001438	.0007042	.23178
%RSD	3.910577	14.99828	.4129860	10.40787	1.340419	.3153256
#1	.1025879	.0142226	2.302512	-.013831	.0517234	73.35183
#2	.1079634	.0111040	2.292167	-.012377	.0529066	73.39202
#3	.1000316	.0110433	2.311155	-.015254	.0529766	73.77187

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.808321	.0086359	.0104295	180.4507	.2734136	.1337806
Stddev	.006107	.0001735	.0000782	.5725	.0010069	.0003020
%RSD	.3377415	2.008839	.7493360	.3172680	.3682662	.2257569
#1	1.806259	.0084761	.0105195	180.3905	.2725490	.1335090
#2	1.803512	.0086111	.0103903	179.9106	.2745191	.1337269
#3	1.815193	.0088204	.0103787	181.0509	.2731726	.1341058

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5068856	276.5964	6.932853	32.74673	.2727707	-.020326
Stddev	.0137458	.8317	.032356	.22726	.0010515	.000858
%RSD	2.711822	.3006936	.4667091	.6940079	.3854864	4.221430
#1	.5227493	276.4770	6.931009	32.69359	.2736013	-.020096
#2	.4985004	275.8309	6.901458	32.55074	.2715884	-.021276
#3	.4994070	277.4814	6.966092	32.99585	.2731222	-.019606

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3254019	.2172207	1.956977	9.244694	F 17.29901	-.079693
Stddev	1.196728	.0021344	.014421	.262747	.05261	.006451
%RSD	367.7691	.9825853	.7368882	2.842134	.3041116	8.095412
#1	1.263848	.2181440	1.968088	9.496661	17.28481	-.079882
#2	.734612	.2147801	1.962163	8.972354	17.25496	-.073150
#3	-1.02225	.2187380	1.940681	9.265066	17.35726	-.086048

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-11 Acquired: 12/16/2024 2:40:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053901	3.846090	9.140535	.3651933	.9890564	.2922559
Stddev	.0001383	.009432	.048744	.0014814	.0106603	.0014394
%RSD	2.566591	.2452439	.5332750	.4056426	1.077823	.4925212
#1	.0055060	3.839102	9.099103	.3664846	.9809660	.2928772
#2	.0052369	3.842350	9.128259	.3655192	.9850672	.2906102
#3	.0054273	3.856819	9.194244	.3635761	1.001136	.2932803

Elem	Li6707
Units	ppm
Avg	.1739118
Stddev	.0054953
%RSD	3.159834
#1	.1764927
#2	.1676011
#3	.1776416

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.034	31944.09	2993.340	2177.522	3035.516
Stddev	9.034	95.30	17.749	7.980	5.539
%RSD	.3500052	.2983377	.5929534	.3664521	.1824800
#1	2571.836	31976.01	3011.019	2175.945	3029.133
#2	2581.371	31836.93	2993.480	2170.449	3038.354
#3	2589.894	32019.34	2975.522	2186.173	3039.061

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-12 Acquired: 12/16/2024 2:44:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0932648	.0197924	2.054577	-.016085	.0402537	73.55918
Stddev	.0024645	.0016431	.012346	.007247	.0028759	.21301
%RSD	2.642508	8.301457	.6008895	45.05766	7.144470	.2895795
#1	.0952290	.0202053	2.045853	-.016113	.0423031	73.77882
#2	.0940661	.0211895	2.049176	-.023318	.0369661	73.54523
#3	.0904993	.0179822	2.068703	-.008823	.0414920	73.35348

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.622223	.0066681	.0077515	124.4279	.1515663	.1184412
Stddev	.009029	.0001579	.0001090	.3775	.0013291	.0006134
%RSD	.5565899	2.368619	1.406821	.3034077	.8769301	.5178982
#1	1.631864	.0067047	.0076800	124.6783	.1501207	.1181704
#2	1.620842	.0064951	.0078770	124.6117	.1518427	.1180098
#3	1.613964	.0068046	.0076974	123.9936	.1527355	.1191434

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3857880	153.8943	6.676922	32.69037	.2152100	-.009953
Stddev	.0050848	.7557	.019896	.19449	.0007492	.000488
%RSD	1.318020	.4910489	.2979828	.5949591	.3481193	4.899734
#1	.3916114	154.6344	6.699077	32.85739	.2144657	-.009462
#2	.3822276	153.9244	6.671110	32.73689	.2152004	-.009961
#3	.3835249	153.1239	6.660579	32.47684	.2159640	-.010437

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2362290	.2009845	1.706798	9.239635	F 15.22234	-.015328
Stddev	.3117758	.0032985	.035316	.072375	.10703	.002086
%RSD	131.9803	1.641199	2.069160	.7833119	.7031295	13.61034
#1	.4210333	.2037181	1.710063	9.318140	15.12728	-.015974
#2	.4113894	.2019147	1.740368	9.175565	15.20146	-.012995
#3	-.123736	.1973207	1.669962	9.225199	15.33827	-.017014

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-12 Acquired: 12/16/2024 2:44:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037400	3.520947	8.995991	2.948385	1.028744	.3212126
Stddev	.0005947	.034956	.074843	.018162	.005424	.0011047
%RSD	15.90044	.9928061	.8319586	.6160025	.5271964	.3439245
#1	.0032107	3.484988	9.022330	2.932162	1.034526	.3223078
#2	.0036258	3.523046	8.911539	2.944987	1.023770	.3212317
#3	.0043835	3.554806	9.054103	2.968006	1.027935	.3200985

Elem	Li6707
Units	ppm
Avg	.1687286
Stddev	.0015736
%RSD	.9325955
#1	.1669769
#2	.1691867
#3	.1700223

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2630.530	32467.53	3057.783	2215.816	3111.373
Stddev	8.712	106.11	22.593	15.635	11.048
%RSD	.3312034	.3268074	.7388747	.7056114	.3550762
#1	2631.340	32454.26	3040.566	2210.823	3116.879
#2	2638.809	32368.68	3083.366	2203.288	3118.585
#3	2621.441	32579.64	3049.417	2233.338	3098.654

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV035 Acquired: 12/16/2024 3:04:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV035 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.633866**	**4.656270**	**23.37756**	**4.625787**	**4.583277**	**369.4012**	**9.641832**
Stddev	.015405	.006102	.05459	.013913	.019428	.4780	.028145
%RSD	.3324419	.1310479	.2335198	.3007674	.4238986	.1293851	.2919030
#1	4.621818	4.651284	23.35171	4.612497	4.584196	369.7398	9.629953
#2	4.651223	4.654451	23.34069	4.624616	4.563405	368.8545	9.621575
#3	4.628557	4.663074	23.44028	4.640249	4.602230	369.6094	9.673969

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4659313**	**2.345344**	**381.8063**	**14.96873**	**2.691768**	**14.64642**	**377.7879**
Stddev	.0013425	.006926	1.2129	.02770	.008599	.08217	.8220
%RSD	.2881236	.2953144	.3176842	.1850218	.3194683	.5610318	.2175693
#1	.4645607	2.340653	383.1754	14.99868	2.689534	14.61182	377.9467
#2	.4659893	2.342080	380.8662	14.94406	2.684506	14.58722	376.8981
#3	.4672438	2.353299	381.3773	14.96344	2.701264	14.74024	378.5188

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.88186**	**373.8461**	**2.465952**	**1.153015**	**381.0415**	**2.349653**	**14.83779**
Stddev	.04804	1.0512	.006875	.001606	1.3506	.011986	.07538
%RSD	.3460363	.2811808	.2787976	.1392640	.3544502	.5101099	.5080252
#1	13.85899	373.8174	2.464730	1.153393	380.6624	2.362620	14.86147
#2	13.84954	372.8096	2.459770	1.151254	379.9210	2.338980	14.75341
#3	13.93706	374.9113	2.473356	1.154398	382.5412	2.347357	14.89849

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**163.3080**	**4.717860**	**4.738762**	**4.528182**	**4.920209**	**4.679296**	**4.741588**
Stddev	.3703	.012028	.004290	.012273	.018048	.004695	.012533
%RSD	.2267460	.2549565	.0905267	.2710304	.3668131	.1003255	.2643187
#1	163.4450	4.710672	4.733870	4.522669	4.905561	4.675751	4.738744
#2	162.8887	4.711161	4.740538	4.519633	4.914695	4.684620	4.730722
#3	163.5902	4.731746	4.741879	4.542245	4.940371	4.677517	4.755299

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV035 Acquired: 12/16/2024 3:04:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV035 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	**4.707272**	**4.524728**	**5.086849**
Stddev	.011811	.011662	.015809
%RSD	.2509044	.2577413	.3107805
#1	4.707387	4.522819	5.074362
#2	4.695404	4.514138	5.081562
#3	4.719025	4.537227	5.104624

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1931.169**	**25721.88**	**2541.857**	**1622.186**	**2533.349**
Stddev	9.213	118.25	10.375	8.102	12.345
%RSD	.4770772	.4597353	.4081555	.4994690	.4872991
#1	1928.105	25595.43	2533.885	1614.149	2529.739
#2	1941.523	25829.73	2553.587	1630.352	2547.097
#3	1923.878	25740.47	2538.098	1622.057	2523.212

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB035 Acquired: 12/16/2024 3:08:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB035 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026824**	**.0019203**	**.0045157**	**-.001920**	**.0003055**	**-.012279**
Stddev	.0032471	.0019097	.0028089	.003394	.0006539	.015213
%RSD	121.0521	99.44735	62.20317	176.7404	214.0563	123.9005
#1	.0053536	.0012756	.0076727	.001243	-.000079	-.010565
#2	.0036253	.0004164	.0022931	-.005505	-.000065	.002005
#3	-.000932	.0040688	.0035812	-.001498	.001061	-.028276

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010729**	**.0000917**	**.0000332**	**-.001358**	**.0000839**	**-.000380**
Stddev	.0008613	.0000519	.0000272	.045853	.0009784	.000298
%RSD	80.28030	56.57616	81.82824	3377.045	1166.617	78.47941
#1	.0020042	.0001176	.0000119	-.049294	.0008113	-.000723
#2	.0009097	.0001254	.0000639	.003140	-.001028	-.000183
#3	.0003049	.0000319	.0000239	.042081	.000469	-.000234

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021443**	**-.007064**	**.0006035**	**.0506138**	**.0006199**	**.0003125**
Stddev	.0097081	.020985	.0017991	.0709930	.0008540	.0010487
%RSD	452.7479	297.0807	298.1268	140.2641	137.7634	335.5366
#1	.0044470	.014562	.0018585	.0615115	.0007886	.0011940
#2	-.008508	-.027343	-.001458	-.025198	.0013770	.0005909
#3	.010494	-.008409	.001410	.115528	-.000306	-.000847

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.696551**	**-.005525**	**-.008163**	**-1.00362**	**-.001684**	**.0191257**
Stddev	.598667	.008190	.007471	.18434	.001380	.0012976
%RSD	85.94723	148.2471	91.51463	18.36696	81.91864	6.784746
#1	-.733239	-.004044	-.006368	-1.10108	-.002931	.0206158
#2	-1.27603	-.014354	-.001754	-.79102	-.001920	.0185167
#3	-.08038	.001824	-.016368	-1.11877	-.000202	.0182446

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB035 Acquired: 12/16/2024 3:08:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB035 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006651	-.006174	.0001258	.0011933	.0037827	.0001689
Stddev	.0007359	.002527	.0008102	.0004626	.0029619	.0000449
%RSD	110.6590	40.92286	644.0840	38.76711	78.30167	26.59000
#1	.0012476	-.003257	.0002010	.0017192	.0011544	.0001218
#2	-.000162	-.007670	.0008957	.0008490	.0069920	.0002112
#3	.000910	-.007597	-.000719	.0010118	.0032016	.0001738

Elem	Li6707
Units	ppm
Avg	F .0349936
Stddev	.0037651
%RSD	10.75941
#1	.0306981
#2	.0365608
#3	.0377220

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2329.467	28954.25	2636.485	1976.407	3223.233
Stddev	3.270	439.05	22.086	31.812	4.730
%RSD	.1403820	1.516363	.8376934	1.609598	.1467457
#1	2333.195	28798.18	2611.018	1968.294	3228.328
#2	2328.119	29450.01	2650.377	2011.490	3222.389
#3	2327.086	28614.55	2648.060	1949.436	3218.981

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-13 Acquired: 12/16/2024 3:12:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0818273	.0252081	.1622136	-.038707	.0186291	51.94394	.5184834
Stddev	.0029810	.0043785	.0013549	.001264	.0021808	.49491	.0044005
%RSD	3.643084	17.36949	.8352436	3.265697	11.70613	.9527851	.8487300
#1	.0806485	.0274829	.1608555	-.037369	.0166355	51.76195	.5161005
#2	.0796159	.0201604	.1635653	-.038869	.0209581	51.56579	.5157883
#3	.0852175	.0279811	.1622202	-.039882	.0182938	52.50409	.5235615

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049486	.0034062	535.9600	.0836858	.1264214	.2798148	175.4197
Stddev	.0001170	.0000554	6.5304	.0009260	.0002774	.0099156	1.4909
%RSD	2.365128	1.627298	1.218455	1.106504	.2194642	3.543631	.8499210
#1	.0048365	.0034701	533.4697	.0846286	.1265301	.2751365	174.8617
#2	.0050700	.0033723	531.0412	.0836513	.1266280	.2731038	174.2882
#3	.0049391	.0033761	543.3692	.0827776	.1261061	.2912040	177.1091

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.840853	124.3370	.1663618	-.014431	.1733180	.1900550	.3547876
Stddev	.052606	.8352	.0004942	.000768	.5945502	.0140964	.0075495
%RSD	.9006578	.6717521	.2970851	5.320374	343.0401	7.416982	2.127883
#1	5.818948	123.7655	.1658327	-.014623	.2016158	.2061103	.3569843
#2	5.802740	123.9499	.1664413	-.015084	.7532140	.1843463	.3463834
#3	5.900872	125.2955	.1668115	-.013585	-.434876	.1797084	.3609951

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.375466	7.001167	-.042855	-.001852	.6781727	5.814818	.0170028
Stddev	.154758	.028536	.002678	.000264	.0019601	.037965	.0016887
%RSD	3.536946	.4075828	6.247913	14.28137	.2890263	.6528925	9.931782
#1	4.434197	6.972353	-.042767	-.001702	.6800507	5.784735	.0171570
#2	4.199939	7.001731	-.045575	-.001697	.6761397	5.802244	.0186091
#3	4.492261	7.029416	-.040222	-.002157	.6783276	5.857474	.0152423

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-13 Acquired: 12/16/2024 3:12:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.156176	.4613228	.1714103
Stddev	.005023	.0034176	.0019835
%RSD	.4344116	.7408204	1.157190
#1	1.153437	.4590355	.1701793
#2	1.153118	.4596815	.1736985
#3	1.161972	.4652514	.1703531

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2568.636	31620.16	3003.081	2159.373	2852.924
Stddev	1.448	196.51	27.656	8.255	2.925
%RSD	.0563566	.6214745	.9209119	.3823006	.1025364
#1	2566.994	31493.90	3007.437	2160.385	2849.747
#2	2569.729	31846.57	3028.301	2167.076	2853.518
#3	2569.186	31520.02	2973.506	2150.658	2855.506

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-14 Acquired: 12/16/2024 3:16:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0801224**	**.0108341**	**2.167778**	**-.007910**	**.0286265**	**76.57414**
Stddev	.0035399	.0044112	.009309	.002639	.0020568	.10828
%RSD	4.418101	40.71551	.4294482	33.36295	7.185121	.1414017
#1	.0781901	.0135019	2.159667	-.008861	.0306431	76.46874
#2	.0842080	.0057425	2.165724	-.009942	.0287047	76.56858
#3	.0779692	.0132579	2.177943	-.004927	.0265316	76.68509

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.174543**	**.0068097**	**.0059029**	**69.70908**	**.1395473**	**.1059829**
Stddev	.002473	.0002805	.0001549	.27696	.0007439	.0005649
%RSD	.2105297	4.118538	2.624365	.3973103	.5330790	.5329917
#1	1.172621	.0069524	.0057303	69.57546	.1396830	.1057320
#2	1.173674	.0064866	.0060298	70.02752	.1387450	.1055870
#3	1.177332	.0069901	.0059487	69.52426	.1402141	.1066298

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2595257**	**166.9517**	**7.257596**	**32.36061**	**.1986590**	**-.012120**
Stddev	.0104102	.3141	.016295	.09788	.0011687	.000436
%RSD	4.011238	.1881235	.2245181	.3024521	.5882864	3.598848
#1	.2574571	166.5936	7.243026	32.24790	.1979524	-.012624
#2	.2503051	167.1806	7.254569	32.40971	.1980168	-.011854
#3	.2708149	167.0808	7.275191	32.42421	.2000080	-.011883

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2058901**	**.1823851**	**1.038712**	**9.669205**	F **10.77834**	**-.030559**
Stddev	.4244467	.0030233	.021307	.053439	.02761	.004187
%RSD	206.1521	1.657640	2.051273	.5526761	.2561463	13.70121
#1	.6407386	.1794144	1.039247	9.609962	10.75762	-.026912
#2	-.207328	.1854583	1.059746	9.683878	10.76772	-.029634
#3	.184259	.1822826	1.017142	9.713775	10.80968	-.035132

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-14 Acquired: 12/16/2024 3:16:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042383	3.717835	8.772130	.0793635	.9559300	-.003387
Stddev	.0002954	.006806	.050203	.0020594	.0055869	.000452
%RSD	6.969709	.1830595	.5722962	2.594861	.5844477	13.33754
#1	.0039654	3.713704	8.745681	.0772774	.9499462	-.003413
#2	.0041975	3.714110	8.740682	.0794179	.9610099	-.003825
#3	.0045520	3.725690	8.830027	.0813951	.9568338	-.002923

Elem	Li6707
Units	ppm
Avg	.1728319
Stddev	.0069625
%RSD	4.028456
#1	.1773500
#2	.1648139
#3	.1763319

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2712.521	33573.91	3119.629	2298.649	3190.811
Stddev	15.372	104.04	19.524	10.918	17.559
%RSD	.5667180	.3098716	.6258313	.4749658	.5502847
#1	2724.390	33687.09	3132.797	2309.577	3205.247
#2	2718.017	33482.45	3128.892	2287.742	3195.923
#3	2695.156	33552.19	3097.198	2298.629	3171.265

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-15 Acquired: 12/16/2024 3:20:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1180393	.0134869	.7857217	-.001292	.0353013	82.66583	1.620456
Stddev	.0024011	.0030323	.0099837	.003335	.0019617	.69373	.016056
%RSD	2.034186	22.48345	1.270641	258.0613	5.556880	.8392039	.9908318
#1	.1162610	.0168102	.7850279	-.001455	.0341721	82.67639	1.626001
#2	.1170864	.0127802	.7761029	.002121	.0341653	81.96688	1.602362
#3	.1207707	.0108704	.7960342	-.004543	.0375664	83.35423	1.633004

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076786	.0072346	68.48598	.1433946	.1166414	.2239227	195.9138
Stddev	.0002723	.0000623	.66364	.0007786	.0013383	.0038568	1.7412
%RSD	3.545709	.8614620	.9690132	.5429901	1.147334	1.722395	.8887770
#1	.0075892	.0072655	68.50163	.1432501	.1168373	.2261862	195.9305
#2	.0074623	.0071629	67.81466	.1442353	.1152159	.2194695	194.1643
#3	.0079843	.0072754	69.14166	.1426983	.1178709	.2261126	197.6467

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.311105	32.23954	.2067575	-.015236	.3773864	.2127791	.8954564
Stddev	.081306	.17465	.0014264	.000467	.6436296	.0036906	.0048783
%RSD	.8732166	.5417179	.6898877	3.063579	170.5492	1.734481	.5447882
#1	9.317838	32.31849	.2073388	-.014812	-.120034	.2168420	.8974437
#2	9.226642	32.03935	.2051323	-.015159	1.104311	.2096339	.8898980
#3	9.388835	32.36076	.2078015	-.015736	.147882	.2118615	.8990273

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.774567	9.396508	-.047355	.0033822	2.511867	8.592472	.2882656
Stddev	.114832	.051901	.003196	.0005075	.018108	.106373	.0021091
%RSD	1.308690	.5523473	6.749718	15.00435	.7208858	1.237984	.7316449
#1	8.751993	9.395273	-.043894	.0028575	2.517345	8.495457	.2862973
#2	8.672698	9.345235	-.047974	.0034184	2.491652	8.575739	.2880076
#3	8.899009	9.449016	-.050196	.0038705	2.526602	8.706221	.2904917

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-15 Acquired: 12/16/2024 3:20:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9226519	-.029660	.1765718
Stddev	.0147496	.000318	.0080362
%RSD	1.598614	1.073528	4.551251
#1	.9247704	-.029412	.1823606
#2	.9069575	-.029549	.1799582
#3	.9362277	-.030019	.1673966

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2696.838	32980.04	3086.242	2256.699	3135.610
Stddev	7.410	186.72	21.910	17.119	13.947
%RSD	.2747815	.5661515	.7099349	.7585837	.4447999
#1	2692.702	32817.93	3103.999	2243.379	3126.392
#2	2705.393	32937.99	3092.970	2250.709	3151.656
#3	2692.417	33184.20	3061.756	2276.007	3128.782

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-16 Acquired: 12/16/2024 3:24:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0906435	.0228638	.4467666	-.009299	.0341973	92.22680	1.826887
Stddev	.0025735	.0030978	.0016546	.005003	.0023786	.13295	.002361
%RSD	2.839134	13.54913	.3703384	53.79941	6.955392	.1441501	.1292531
#1	.0919608	.0219471	.4484793	-.004183	.0343753	92.07572	1.824312
#2	.0922916	.0203277	.4466436	-.014180	.0364818	92.27874	1.827399
#3	.0876780	.0263165	.4451770	-.009535	.0317347	92.32593	1.828950

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078207	.0067025	118.5012	.1402398	.1359726	.1091376	215.6744
Stddev	.0000752	.0002179	.3307	.0000627	.0007983	.0103597	.5859
%RSD	.9617285	3.250236	.2790934	.0446836	.5871414	9.492346	.2716496
#1	.0078941	.0065981	118.2987	.1401676	.1356902	.0982909	215.1160
#2	.0078241	.0065564	118.3221	.1402792	.1353538	.1101922	215.6230
#3	.0077438	.0069529	118.8829	.1402727	.1368738	.1189296	216.2843

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.77703	36.39068	.1919606	-.016472	.0971825	.2287384	.5366405
Stddev	.01237	.26743	.0009246	.000660	.4765520	.0064974	.0049237
%RSD	.1050714	.7348962	.4816833	4.006902	490.3683	2.840553	.9175062
#1	11.76305	36.09334	.1914363	-.015922	.6473943	.2219534	.5323783
#2	11.78659	36.46714	.1914173	-.016289	-.185133	.2349038	.5355130
#3	11.78144	36.61156	.1930282	-.017204	-.170714	.2293581	.5420302

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.408426	8.229977	-.055634	.0012760	2.326155	8.433932	.0431183
Stddev	.072130	.039723	.003167	.0005712	.015083	.045823	.0011277
%RSD	.9736267	.4826563	5.691664	44.76265	.6484124	.5433197	2.615429
#1	7.367405	8.227105	-.052045	.0013239	2.325287	8.409313	.0420606
#2	7.491712	8.191769	-.056824	.0006824	2.311525	8.405680	.0443049
#3	7.366161	8.271058	-.058033	.0018218	2.341654	8.486802	.0429895

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-16 Acquired: 12/16/2024 3:24:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8815846	-.012713	.1942727
Stddev	.0043877	.000395	.0021232
%RSD	.4977037	3.103977	1.092900
#1	.8783817	-.013075	.1967121
#2	.8797864	-.012293	.1932653
#3	.8865858	-.012773	.1928408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2740.180	33506.39	3143.942	2296.314	3107.065
Stddev	8.073	128.70	5.021	16.789	9.331
%RSD	.2946264	.3841064	.1597065	.7311390	.3003284
#1	2748.862	33476.90	3143.626	2298.635	3111.394
#2	2738.781	33395.00	3139.086	2278.485	3113.445
#3	2732.898	33647.28	3149.114	2311.822	3096.355

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-17 Acquired: 12/16/2024 3:28:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0401698	.0277826	.1340391	-.043313	.0143853	58.01418	.6003615
Stddev	.0027969	.0029821	.0017430	.005250	.0029956	.53669	.0053946
%RSD	6.962690	10.73365	1.300354	12.12069	20.82403	.9250957	.8985642
#1	.0389764	.0277381	.1358025	-.041902	.0178216	58.59594	.6064419
#2	.0381676	.0248230	.1323173	-.038912	.0130095	57.53837	.5961492
#3	.0433654	.0307867	.1339977	-.049124	.0123248	57.90823	.5984934

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046967	.0030481	508.6792	.0899920	.1167591	.0787519	147.0885
Stddev	.0000976	.0001597	4.7489	.0006754	.0001054	.0019563	1.5134
%RSD	2.078232	5.238037	.9335764	.7504787	.0902682	2.484182	1.028902
#1	.0046958	.0028752	513.8399	.0894061	.1166665	.0778062	148.7334
#2	.0047947	.0030788	504.4933	.0898392	.1168738	.0774481	145.7551
#3	.0045995	.0031901	507.7046	.0907307	.1167370	.0810014	146.7769

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.901784	86.11130	.1598345	-.012668	-.659522	.1392864	.2309328
Stddev	.037452	.79425	.0008293	.001014	.826427	.0041034	.0026166
%RSD	.5426425	.9223518	.5188374	8.006612	125.3070	2.946029	1.133079
#1	6.944811	86.99081	.1589212	-.012279	.113907	.1374927	.2329389
#2	6.876512	85.44642	.1600419	-.013820	-.562153	.1363852	.2279731
#3	6.884028	85.89666	.1605403	-.011906	-1.53032	.1439812	.2318864

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.033958	6.902340	-.024154	-.002484	.9807142	6.356189	.0181663
Stddev	.251093	.017796	.000407	.000745	.0072915	.009202	.0004839
%RSD	3.569732	.2578209	1.684498	30.01056	.7434854	.1447739	2.663491
#1	7.322781	6.890496	-.024092	-.001631	.9794177	6.346915	.0181287
#2	6.911546	6.893720	-.024588	-.002806	.9741579	6.356334	.0177024
#3	6.867547	6.922805	-.023781	-.003014	.9885669	6.365318	.0186679

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-17 Acquired: 12/16/2024 3:28:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKE9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9756635	.4812043	.1626660
Stddev	.0007522	.0032409	.0035974
%RSD	.0770940	.6735062	2.211540
#1	.9762036	.4848973	.1666048
#2	.9748044	.4788334	.1618395
#3	.9759825	.4798821	.1595538

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2527.486	31271.74	2978.723	2136.771	2858.122
Stddev	4.726	94.74	17.479	12.759	3.547
%RSD	.1869984	.3029622	.5868009	.5971290	.1240992
#1	2524.681	31163.37	2958.545	2123.082	2854.859
#2	2532.943	31338.90	2989.217	2148.332	2861.898
#3	2524.834	31312.94	2988.407	2138.900	2857.611

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-18 Acquired: 12/16/2024 3:32:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0323830	.0271533	.1026907	-.042698	.0113217	52.40803	.4889518
Stddev	.0044178	.0012418	.0040975	.005425	.0027018	.39679	.0033459
%RSD	13.64239	4.573223	3.990131	12.70614	23.86419	.7571101	.6842930
#1	.0340575	.0263966	.1005633	-.048428	.0144394	52.86618	.4926985
#2	.0273727	.0285864	.1000944	-.037641	.0098604	52.17566	.4878946
#3	.0357188	.0264769	.1074143	-.042023	.0096652	52.18224	.4862621

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041662	.0023629	446.7786	.0829917	.1145987	.0810929	127.8873
Stddev	.0000070	.0000673	4.2421	.0010097	.0002286	.0047799	1.2051
%RSD	.1676626	2.847099	.9494819	1.216638	.1994565	5.894302	.9423141
#1	.0041636	.0022896	451.6338	.0841575	.1143660	.0859897	129.1724
#2	.0041742	.0023771	444.9127	.0823976	.1146071	.0764392	126.7825
#3	.0041610	.0024219	443.7893	.0824200	.1148229	.0808498	127.7069

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.285360	85.39471	.1478718	-.010438	-.688846	.1284619	.2006553
Stddev	.059629	1.16662	.0010420	.000263	.041033	.0055192	.0093544
%RSD	.9486942	1.366147	.7046327	2.516867	5.956771	4.296344	4.661928
#1	6.352005	86.64717	.1467614	-.010238	-.659242	.1348270	.1966246
#2	6.237058	84.33894	.1480257	-.010736	-.735686	.1255546	.2113493
#3	6.267016	85.19802	.1488282	-.010341	-.671611	.1250042	.1939919

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.268435	6.454422	-.011483	-.002672	.5648682	6.210696	.0160064
Stddev	.141157	.030592	.003495	.000257	.0065356	.047072	.0015571
%RSD	1.942058	.4739748	30.43951	9.635002	1.157016	.7579186	9.727987
#1	7.293633	6.420532	-.009851	-.002881	.5656305	6.260473	.0153528
#2	7.116376	6.462739	-.015496	-.002752	.5579849	6.166901	.0148826
#3	7.395296	6.479997	-.009103	-.002384	.5709893	6.204713	.0177838

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-18 Acquired: 12/16/2024 3:32:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9629209	.4965460	.1496687
Stddev	.0114592	.0047210	.0032858
%RSD	1.190043	.9507702	2.195389
#1	.9759163	.5019309	.1534444
#2	.9542663	.4931190	.1481039
#3	.9585801	.4945879	.1474578

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2520.201	30999.11	2973.597	2110.312	2885.262
Stddev	1.735	50.59	20.294	2.466	5.382
%RSD	.0688369	.1632038	.6824758	.1168684	.1865483
#1	2521.842	30976.72	2958.307	2109.617	2890.808
#2	2520.375	30963.57	2996.621	2113.051	2884.918
#3	2518.385	31057.03	2965.863	2108.267	2880.060

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-19 Acquired: 12/16/2024 3:36:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0333256	.0288740	.1068121	-.042593	.0167052	54.90930	.6629502
Stddev	.0034975	.0011401	.0028391	.003629	.0035809	.12372	.0000215
%RSD	10.49478	3.948694	2.658060	8.519624	21.43603	.2253178	.0032511
#1	.0346962	.0293808	.1082051	-.046542	.0175484	54.84116	.6629302
#2	.0359301	.0296729	.1035455	-.039406	.0197893	54.83463	.6629730
#3	.0293504	.0275683	.1086857	-.041830	.0127779	55.05211	.6629473

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040986	.0028135	452.3218	.0864326	.1164188	.1147641	140.2180
Stddev	.0000629	.0001047	.9506	.0005104	.0008000	.0080948	.1448
%RSD	1.535964	3.722507	.2101545	.5905261	.6871516	7.053438	.1032680
#1	.0040914	.0027078	451.5799	.0862612	.1172113	.1071776	140.3666
#2	.0041648	.0028153	451.9921	.0860300	.1164336	.1232859	140.0773
#3	.0040395	.0029173	453.3933	.0870067	.1156115	.1138288	140.2100

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.241922	71.66292	.1726710	-.012485	-.915675	.1287715	.2142793
Stddev	.023679	.17731	.0003491	.000748	.810275	.0043124	.0004720
%RSD	.2872960	.2474195	.2021504	5.994234	88.48940	3.348886	.2202856
#1	8.237031	71.62878	.1727203	-.011739	-.967065	.1273633	.2146526
#2	8.221070	71.50517	.1723000	-.012481	-1.69903	.1336119	.2144365
#3	8.267664	71.85482	.1729929	-.013236	-.08093	.1253391	.2137487

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.855516	5.931563	-.027281	-.002163	.6245195	6.205495	.0143751
Stddev	.052572	.016168	.000274	.000251	.0030245	.060333	.0014498
%RSD	.7668544	.2725796	1.005917	11.61703	.4842909	.9722487	10.08562
#1	6.905224	5.919330	-.027052	-.002379	.6270422	6.145994	.0159235
#2	6.800485	5.925466	-.027585	-.001887	.6211666	6.266626	.0141522
#3	6.860839	5.949894	-.027205	-.002221	.6253497	6.203866	.0130497

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-19 Acquired: 12/16/2024 3:36:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9713329	.4564660	.1548927
Stddev	.0031457	.0008432	.0061531
%RSD	.3238528	.1847144	3.972487
#1	.9711427	.4571192	.1542646
#2	.9682866	.4555142	.1613357
#3	.9745694	.4567645	.1490777

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2543.489	31226.85	2991.884	2135.076	2921.185
Stddev	3.527	75.23	23.446	8.159	4.433
%RSD	.1386710	.2409040	.7836622	.3821357	.1517619
#1	2546.196	31159.86	3010.839	2130.227	2925.188
#2	2544.770	31212.47	2965.665	2130.506	2916.420
#3	2539.500	31308.23	2999.148	2144.496	2921.946

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-20 Acquired: 12/16/2024 3:40:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0269332	.0257335	.1049494	-.046095	.0055116	46.59623	.4070136
Stddev	.0083812	.0014580	.0035421	.001412	.0047116	.04710	.0006549
%RSD	31.11860	5.665821	3.375013	3.064044	85.48414	.1010718	.1609011
#1	.0305508	.0248683	.1014690	-.045599	.0029105	46.54380	.4077683
#2	.0173507	.0249153	.1048290	-.044997	.0026740	46.60994	.4066774
#3	.0328980	.0274168	.1085501	-.047688	.0109503	46.63495	.4065951

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0037719	.0020283	431.8354	.0804505	.1026775	.1313202	111.5904
Stddev	.0000816	.0000770	.2330	.0009268	.0007654	.0064525	.3247
%RSD	2.164349	3.795235	.0539632	1.152067	.7454919	4.913593	.2910141
#1	.0036807	.0021086	431.9304	.0811194	.1029863	.1372512	111.3493
#2	.0038381	.0020211	431.5698	.0793926	.1018059	.1322601	111.9597
#3	.0037970	.0019551	432.0058	.0808397	.1032404	.1244492	111.4623

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.207109	82.75692	.1380045	-.010015	-1.12983	.1161791	.2378323
Stddev	.019284	.36050	.0008712	.000237	.84705	.0070894	.0078403
%RSD	.4583745	.4356133	.6312996	2.366893	74.97084	6.102164	3.296578
#1	4.187394	82.38415	.1379501	-.010273	-.64958	.1090490	.2363122
#2	4.225932	83.10375	.1371617	-.009807	-.63206	.1232272	.2308634
#3	4.208002	82.78285	.1389016	-.009965	-2.10786	.1162609	.2463214

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.373712	5.262961	-.016362	-.002565	.6748325	5.717701	.0138735
Stddev	.139631	.022399	.000841	.000306	.0091025	.023356	.0026547
%RSD	2.598402	.4255975	5.142026	11.91772	1.348852	.4084870	19.13532
#1	5.293926	5.267979	-.016149	-.002299	.6678276	5.691330	.0113123
#2	5.292269	5.238478	-.015647	-.002498	.6715487	5.735778	.0166128
#3	5.534940	5.282425	-.017289	-.002899	.6851213	5.725996	.0136954

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-20 Acquired: 12/16/2024 3:40:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8865804	.4598073	.1407423
Stddev	.0020701	.0012195	.0044601
%RSD	.2334959	.2652269	3.168979
#1	.8862370	.4588552	.1419794
#2	.8888008	.4611819	.1357943
#3	.8847034	.4593847	.1444533

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2487.411	30744.02	2937.674	2100.468	2910.023
Stddev	7.942	95.52	11.226	11.817	13.128
%RSD	.3192725	.3107084	.3821412	.5626056	.4511141
#1	2493.552	30692.84	2943.851	2099.631	2911.616
#2	2490.238	30685.00	2924.716	2089.092	2922.281
#3	2478.443	30854.23	2944.455	2112.682	2896.172

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-21 Acquired: 12/16/2024 3:43:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0248337	.0275624	.0988636	-.042704	.0109546	50.47525	.4467877
Stddev	.0005672	.0055606	.0012365	.005272	.0013971	.42752	.0044362
%RSD	2.283984	20.17463	1.250732	12.34509	12.75368	.8469800	.9929138
#1	.0253309	.0334882	.0984020	-.039226	.0125342	50.69139	.4493760
#2	.0249543	.0224584	.1002645	-.040115	.0104484	50.75153	.4493218
#3	.0242159	.0267405	.0979243	-.048769	.0098811	49.98282	.4416653

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040077	.0024726	459.1268	.0824420	.1077976	.0895759	128.2961
Stddev	.0001861	.0001637	3.3559	.0003198	.0005341	.0059282	1.2827
%RSD	4.643480	6.620293	.7309307	.3879624	.4955042	6.618042	.9997642
#1	.0038522	.0022863	461.0438	.0822996	.1074744	.0929938	128.9914
#2	.0039570	.0025384	461.0848	.0822180	.1075043	.0827307	129.0810
#3	.0042139	.0025933	455.2518	.0828083	.1084142	.0930034	126.8159

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.213022	85.94618	.1460671	-.011085	-.874002	.1317901	.1950241
Stddev	.059297	.89469	.0009139	.000331	.136181	.0052645	.0027607
%RSD	.9543970	1.040985	.6256593	2.987306	15.58126	3.994635	1.415567
#1	6.247194	86.46977	.1451071	-.010977	-1.02001	.1375623	.1981798
#2	6.247319	86.45566	.1461676	-.010821	-.75044	.1272527	.1930558
#3	6.144551	84.91312	.1469265	-.011456	-.85156	.1305554	.1938368

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.984936	6.365888	-.019024	-.002885	.6026914	6.479707	.0164379
Stddev	.167691	.017327	.003243	.000597	.0039126	.071103	.0025133
%RSD	2.400752	.2721785	17.04877	20.68113	.6491900	1.097323	15.28976
#1	7.032744	6.351973	-.021941	-.003445	.5985976	6.561637	.0191383
#2	7.123533	6.360395	-.019599	-.002258	.6063933	6.443348	.0141670
#3	6.798533	6.385295	-.015531	-.002952	.6030832	6.434135	.0160084

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-21 Acquired: 12/16/2024 3:43:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.081844	.4807434	.1469831
Stddev	.008362	.0048952	.0063438
%RSD	.7729236	1.018255	4.316044
#1	1.087525	.4848209	.1514126
#2	1.085765	.4820949	.1498209
#3	1.072242	.4753145	.1397157

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2501.650	30940.86	2980.939	2105.637	2854.034
Stddev	7.343	21.91	11.989	4.768	8.251
%RSD	.2935442	.0708124	.4022053	.2264298	.2890931
#1	2506.277	30956.05	2967.353	2107.848	2860.500
#2	2505.490	30950.79	2985.429	2100.165	2856.861
#3	2493.182	30915.74	2990.036	2108.897	2844.742

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-22 Acquired: 12/16/2024 3:47:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0309436	.0163940	.1246981	-.032417	.0129738	53.88900	.4775881
Stddev	.0069723	.0020978	.0035330	.003258	.0027466	.31785	.0027970
%RSD	22.53237	12.79591	2.833210	10.05121	21.17062	.5898284	.5856499
#1	.0289863	.0148351	.1271660	-.030010	.0149950	54.15410	.4799137
#2	.0251591	.0155679	.1262774	-.031116	.0098466	53.97627	.4783661
#3	.0386854	.0187791	.1206510	-.036124	.0140798	53.53663	.4744845

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046227	.0020902	221.0285	.0877163	.1020479	.1233088	135.3665
Stddev	.0001401	.0001022	1.2384	.0006930	.0009720	.0085858	.8955
%RSD	3.031199	4.890174	.5602882	.7901067	.9524681	6.962834	.6615719
#1	.0044743	.0020152	222.1526	.0883070	.1010637	.1332115	136.0628
#2	.0047527	.0022066	221.2320	.0878884	.1020727	.1179480	135.6805
#3	.0046413	.0020487	219.7010	.0869534	.1030072	.1187668	134.3563

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.368266	68.92070	.1492884	-.011912	-.152104	.1363397	.2445050
Stddev	.018066	.51631	.0010649	.000583	.109977	.0030293	.0058486
%RSD	.5363531	.7491392	.7132814	4.895331	72.30423	2.221893	2.392027
#1	3.377700	69.27933	.1484547	-.011421	-.030415	.1328854	.2437694
#2	3.379663	69.15383	.1489227	-.012557	-.244394	.1385438	.2390589
#3	3.347437	68.32893	.1504880	-.011758	-.181502	.1375900	.2506866

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.961850	5.877181	-.033798	-.001723	.7024415	6.249825	.0160553
Stddev	.132101	.025082	.003645	.000465	.0028471	.044002	.0009439
%RSD	3.334314	.4267661	10.78407	26.96332	.4053125	.7040479	5.878864
#1	3.830471	5.865780	-.030238	-.001656	.7013678	6.238605	.0164974
#2	3.960421	5.859824	-.037522	-.001295	.7056693	6.298351	.0149716
#3	4.094660	5.905938	-.033635	-.002217	.7002874	6.212520	.0166971

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5028-22 Acquired: 12/16/2024 3:47:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9559920	.1309453	.1415959
Stddev	.0066240	.0009473	.0024213
%RSD	.6928908	.7234129	1.710000
#1	.9552827	.1318906	.1436914
#2	.9629421	.1309495	.1421510
#3	.9497512	.1299960	.1389452

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2566.600	31530.98	2966.394	2151.617	3009.159
Stddev	1.828	201.91	13.324	12.347	2.311
%RSD	.0712387	.6403538	.4491570	.5738397	.0767827
#1	2568.441	31311.49	2971.281	2138.591	3007.404
#2	2564.784	31708.81	2951.316	2163.149	3011.777
#3	2566.576	31572.65	2976.583	2153.111	3008.297

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-01 Acquired: 12/16/2024 3:51:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK52 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1188367**	**.0229468**	**1.427445**	**.0082117**	**.0264666**	**63.80558**	**.8286816**
Stddev	.0017024	.0030915	.021611	.0048065	.0024863	.19156	.0011841
%RSD	1.432530	13.47230	1.513953	58.53211	9.393956	.3002234	.1428904
#1	.1171768	.0245995	1.452398	.0114560	.0292426	63.78588	.8290813
#2	.1205786	.0248607	1.415169	.0104893	.0257127	63.62463	.8273494
#3	.1187547	.0193803	1.414769	.0026898	.0244446	64.00623	.8296141

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0059259**	**.0064504**	**41.54421**	**.0931478**	**.1354095**	**.2459212**	**155.0815**
Stddev	.0000245	.0001716	.10482	.0007821	.0025998	.0046637	.4553
%RSD	.4127217	2.660304	.2523065	.8396250	1.919964	1.896427	.2936117
#1	.0059261	.0066465	41.56619	.0937381	.1384109	.2462125	154.9284
#2	.0059014	.0063278	41.43015	.0934445	.1338568	.2411187	154.7224
#3	.0059503	.0063770	41.63630	.0922608	.1339608	.2504325	155.5936

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.07266**	**20.86666**	**.1371660**	**-.008358**	**6.263444**	**.1454404**	**.5724261**
Stddev	.04759	.06091	.0028565	.000512	.665597	.0078412	.0125289
%RSD	.2787461	.2919194	2.082504	6.128142	10.62669	5.391380	2.188743
#1	17.02820	20.81488	.1404232	-.007832	5.908867	.1399996	.5860287
#2	17.06692	20.93378	.1350878	-.008855	7.031262	.1544285	.5698911
#3	17.12286	20.85133	.1359869	-.008387	5.850202	.1418933	.5613585

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.030897**	**4.277709**	**-.054026**	**.0068735**	**3.192043**	**6.594645**	**.0455610**
Stddev	.093944	.068383	.002547	.0004205	.055773	.031489	.0012205
%RSD	2.330607	1.598588	4.713949	6.116909	1.747248	.4774928	2.678771
#1	4.057051	4.356465	-.051848	.0073216	3.253252	6.581862	.0456563
#2	4.108992	4.233402	-.053403	.0064877	3.144099	6.571559	.0442956
#3	3.926646	4.243260	-.056826	.0068113	3.178777	6.630516	.0467309

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-01 Acquired: 12/16/2024 3:51:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK52 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.397435	.1366960	.0775338
Stddev	.005674	.0006138	.0061285
%RSD	.4060309	.4490360	7.904313
#1	1.398973	.1370996	.0824502
#2	1.391150	.1359896	.0794837
#3	1.402181	.1369988	.0706676

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2597.526	32291.63	2989.493	2198.666	3086.616
Stddev	32.270	152.58	9.248	11.719	53.155
%RSD	1.242321	.4725031	.3093389	.5330168	1.722105
#1	2560.472	32154.03	2978.841	2185.838	3025.568
#2	2612.655	32265.14	2994.182	2201.346	3111.634
#3	2619.452	32455.72	2995.458	2208.812	3122.645

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-02 Acquired: 12/16/2024 3:55:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK53 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1339546**	**.0125370**	**.8019176**	**.0154747**	**.0373310**	**75.82872**	**.6829139**
Stddev	.0052958	.0030962	.0058262	.0007621	.0028479	.22481	.0007883
%RSD	3.953427	24.69679	.7265295	4.924701	7.628778	.2964718	.1154329
#1	.1368652	.0093584	.7980652	.0146041	.0362330	75.59225	.6820057
#2	.1371568	.0155437	.8086201	.0157991	.0405645	75.85422	.6834212
#3	.1278419	.0127089	.7990674	.0160209	.0351955	76.03970	.6833147

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065620**	**.0053673**	**25.87885**	**.1029440**	**.1424757**	**.2327705**	**199.1999**
Stddev	.0001270	.0001041	.11585	.0007692	.0007821	.0060031	.6836
%RSD	1.934616	1.940132	.4476518	.7471604	.5489365	2.578996	.3431673
#1	.0066940	.0054449	25.74528	.1021047	.1416473	.2349854	198.4313
#2	.0065513	.0054080	25.93938	.1036153	.1432014	.2259746	199.4284
#3	.0064408	.0052489	25.95190	.1031119	.1425784	.2373515	199.7399

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.27215**	**18.97654**	**.1544237**	**-.012843**	**6.908788**	**.1629317**	**.5519174**
Stddev	.04561	.04634	.0026655	.000527	.693061	.0029908	.0086005
%RSD	.2802759	.2441981	1.726106	4.105259	10.03159	1.835610	1.558290
#1	16.21957	18.94733	.1536154	-.012991	7.619817	.1653569	.5450275
#2	16.30097	19.02997	.1573998	-.013280	6.235213	.1638484	.5491684
#3	16.29591	18.95231	.1522558	-.012257	6.871334	.1595899	.5615563

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.349517**	**2.960638**	**-.074234**	**.0050409**	**2.716830**	**7.507454**	**.0363798**
Stddev	.126456	.016414	.002841	.0002877	.018755	.024323	.0007072
%RSD	2.907355	.5544191	3.826582	5.706991	.6903373	.3239828	1.943969
#1	4.208199	2.952243	-.072036	.0048828	2.700959	7.507032	.0368382
#2	4.452005	2.979552	-.073224	.0048669	2.737526	7.531985	.0355654
#3	4.388345	2.950119	-.077442	.0053729	2.712004	7.483344	.0367360

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-02 Acquired: 12/16/2024 3:55:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK53 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.102371	-.066817	.0956922
Stddev	.002538	.000214	.0067492
%RSD	.2302087	.3198492	7.053080
#1	1.100579	-.066619	.0933394
#2	1.105275	-.066789	.0904342
#3	1.101258	-.067043	.1033029

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2668.967	33123.13	3048.314	2258.915	3091.974
Stddev	23.757	130.37	5.115	6.063	29.664
%RSD	.8901222	.3935812	.1678039	.2684118	.9593998
#1	2691.143	33273.57	3053.969	2265.771	3116.459
#2	2643.895	33043.21	3046.965	2254.259	3058.987
#3	2671.862	33052.62	3044.009	2256.716	3100.477

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-03 Acquired: 12/16/2024 3:59:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK54 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1887654**	**.0272317**	**1.203083**	**.0172627**	**.0433278**	**63.03595**	**.7266093**
Stddev	.0027803	.0003850	.010560	.0040409	.0006575	.04142	.0027772
%RSD	1.472873	1.413642	.8777586	23.40842	1.517491	.0657059	.3822157
#1	.1893918	.0275213	1.196508	.0160886	.0438748	62.99045	.7234138
#2	.1857254	.0273791	1.215264	.0139388	.0425984	63.07146	.7284406
#3	.1911790	.0267949	1.197477	.0217606	.0435103	63.04593	.7279735

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079849**	**.0104472**	**30.41243**	**.0974341**	**.1776679**	**.2946728**	**238.8338**
Stddev	.0001045	.0000932	.05573	.0003681	.0014968	.0013809	.4073
%RSD	1.308300	.8918549	.1832524	.3777697	.8424730	.4686045	.1705405
#1	.0078654	.0104916	30.35531	.0976657	.1763013	.2930785	238.7257
#2	.0080307	.0105099	30.46666	.0976270	.1792676	.2954858	239.2842
#3	.0080586	.0103401	30.41531	.0970097	.1774349	.2954542	238.4914

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.18543**	**18.55146**	**.2050865**	**-.017680**	**6.781146**	**.1425593**	**1.963379**
Stddev	.02646	.06715	.0031267	.000395	.199851	.0045431	.015125
%RSD	.1311076	.3619552	1.524577	2.231705	2.947161	3.186793	.7703701
#1	20.15487	18.62898	.2031639	-.018026	6.909458	.1373707	1.959823
#2	20.20079	18.51419	.2086943	-.017765	6.550880	.1458233	1.979965
#3	20.20062	18.51121	.2034014	-.017250	6.883099	.1444839	1.950348

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.409813**	**5.049037**	**-.084291**	**.0030410**	**3.426111**	**5.443353**	**.0346634**
Stddev	.114976	.038537	.001841	.0003980	.027813	.014031	.0002156
%RSD	2.607272	.7632568	2.184549	13.08621	.8118075	.2577702	.6219083
#1	4.408306	5.018381	-.082821	.0029368	3.403576	5.428443	.0346196
#2	4.295597	5.092298	-.083695	.0034807	3.457196	5.456298	.0348975
#3	4.525534	5.036433	-.086356	.0027056	3.417562	5.445319	.0344731

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-03 Acquired: 12/16/2024 3:59:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK54 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7017952	-.125918	.0862491
Stddev	.0064145	.000607	.0012778
%RSD	.9140121	.4817575	1.481524
#1	.7064416	-.126092	.0848468
#2	.7044675	-.126419	.0873476
#3	.6944767	-.125244	.0865530

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3198.305	39556.20	3651.157	2691.528	3051.673
Stddev	3.404	155.96	2.432	4.211	9.067
%RSD	.1064439	.3942721	.0666164	.1564542	.2971226
#1	3196.972	39383.69	3648.411	2686.983	3059.845
#2	3195.770	39687.21	3652.019	2695.297	3041.918
#3	3202.175	39597.69	3653.041	2692.305	3053.255

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-04 Acquired: 12/16/2024 4:03:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0645795	.0179147	2.027331	-.026374	.0191608	63.09917	1.132790
Stddev	.0019426	.0024815	.011847	.005871	.0024540	.05503	.000958
%RSD	3.008027	13.85159	.5843656	22.26160	12.80727	.0872190	.0846111
#1	.0623371	.0153884	2.027564	-.019625	.0192374	63.13438	1.133881
#2	.0657497	.0203487	2.015370	-.029187	.0215756	63.03576	1.132407
#3	.0656516	.0180070	2.039061	-.030308	.0166694	63.12739	1.132082

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055735	.0081115	161.6016	.1175420	.1051291	.1939544	139.9159
Stddev	.0001156	.0000190	.4060	.0005999	.0004875	.0061717	.1560
%RSD	2.074234	.2346366	.2512046	.5103383	.4637152	3.182028	.1115052
#1	.0055823	.0081032	161.4902	.1173603	.1055815	.1897079	139.7887
#2	.0056844	.0081333	161.2629	.1170540	.1046128	.2010340	140.0900
#3	.0054537	.0080980	162.0516	.1182117	.1051929	.1911214	139.8690

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.393989	68.55970	.1487804	-.011018	-.490326	.1467322	1.063442
Stddev	.004076	.04672	.0007489	.000790	.090684	.0017901	.002936
%RSD	.0755667	.0681380	.5033488	7.168646	18.49473	1.219981	.2760712
#1	5.391089	68.58732	.1492705	-.011363	-.595038	.1484930	1.060262
#2	5.398649	68.58602	.1479184	-.010114	-.438423	.1467896	1.064013
#3	5.392228	68.50576	.1491524	-.011577	-.437517	.1449141	1.066050

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.772644	6.053667	-.032559	-.000160	3.915788	7.528957	.0503915
Stddev	.103508	.022567	.001380	.000282	.016310	.025134	.0021670
%RSD	1.793069	.3727789	4.239987	176.7582	.4165099	.3338339	4.300377
#1	5.655181	6.059492	-.033439	.000071	3.909761	7.530861	.0522947
#2	5.812253	6.028759	-.030968	-.000474	3.903351	7.502926	.0508468
#3	5.850498	6.072751	-.033270	-.000076	3.934254	7.553086	.0480330

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-04 Acquired: 12/16/2024 4:03:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9481676	.1064417	.1127304
Stddev	.0043537	.0002196	.0022868
%RSD	.4591735	.2062623	2.028594
#1	.9519666	.1062036	.1104859
#2	.9491195	.1066361	.1126479
#3	.9434166	.1064855	.1150574

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2489.308	30804.27	2893.585	2093.188	2993.226
Stddev	2.117	133.49	23.736	13.923	6.151
%RSD	.0850302	.4333418	.8203009	.6651792	.2054832
#1	2489.946	30759.56	2899.378	2091.422	2995.227
#2	2491.032	30954.38	2913.889	2107.910	2998.127
#3	2486.946	30698.88	2867.489	2080.232	2986.324

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-05 Acquired: 12/16/2024 4:07:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0886287	.0164317	3.771074	-.017906	.0223550	65.28868	1.799767
Stddev	.0021776	.0021349	.015940	.006213	.0017677	.22297	.005823
%RSD	2.456992	12.99261	.4227027	34.69980	7.907308	.3415108	.3235242
#1	.0910557	.0159899	3.770934	-.017365	.0243961	65.51438	1.798750
#2	.0879846	.0187530	3.755203	-.011981	.0213351	65.06855	1.794521
#3	.0868458	.0145523	3.787083	-.024372	.0213337	65.28311	1.806032

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061357	.0166091	133.1576	.1339390	.1242532	.2843370	151.8027
Stddev	.0001513	.0000685	.3802	.0003611	.0003043	.0005037	.5042
%RSD	2.466006	.4126657	.2855525	.2696138	.2448866	.1771454	.3321188
#1	.0061961	.0166549	133.3860	.1343117	.1241877	.2839910	152.0514
#2	.0059636	.0166421	132.7186	.1339148	.1239871	.2849149	151.2225
#3	.0062475	.0165303	133.3681	.1335907	.1245850	.2841052	152.1341

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.435430	56.08203	.1781124	-.011465	-.173371	.1553625	1.930031
Stddev	.017427	.05640	.0001839	.000417	.194457	.0089330	.033666
%RSD	.2708044	.1005613	.1032617	3.633832	112.1623	5.749792	1.744343
#1	6.436510	56.12514	.1782329	-.011193	-.385597	.1541071	1.892633
#2	6.417488	56.01820	.1782035	-.011944	-.130770	.1648568	1.939540
#3	6.452293	56.10274	.1779006	-.011257	-.003746	.1471236	1.957921

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.557715	8.320255	-.029713	.0000186	3.110971	8.909736	.0692409
Stddev	.044947	.017914	.000427	.0007316	.007365	.140028	.0004958
%RSD	.8087235	.2153061	1.437526	3927.940	.2367377	1.571633	.7160807
#1	5.512992	8.314775	-.029485	.0008628	3.113954	9.066492	.0697114
#2	5.602882	8.305722	-.029449	-.000375	3.102583	8.797029	.0692880
#3	5.557271	8.340269	-.030206	-.000432	3.116376	8.865685	.0687232

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-05 Acquired: 12/16/2024 4:07:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.051161	.0855376	.1232073
Stddev	.005844	.0005912	.0046738
%RSD	.5559517	.6911348	3.793473
#1	1.047065	.0862150	.1267710
#2	1.048565	.0851257	.1179155
#3	1.057853	.0852721	.1249354

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2567.300	31534.94	2954.060	2145.988	3022.255
Stddev	8.020	96.97	36.598	2.975	5.337
%RSD	.3123897	.3074860	1.238889	.1386329	.1765738
#1	2560.085	31595.74	2912.732	2149.421	3017.072
#2	2565.880	31423.12	2982.365	2144.168	3021.961
#3	2575.935	31585.97	2967.082	2144.373	3027.733

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-06 Acquired: 12/16/2024 4:11:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1232286**	**.0318928**	**4.383984**	**-.036669**	**.0152972**	**53.04460**	**2.204463**
Stddev	.0014655	.0030835	.009100	.002118	.0002456	.26605	.011006
%RSD	1.189275	9.668182	.2075694	5.777317	1.605619	.5015645	.4992694
#1	.1216375	.0352873	4.391145	-.037482	.0155780	52.77700	2.193108
#2	.1245232	.0311258	4.373744	-.034264	.0151914	53.30908	2.215083
#3	.1235252	.0292652	4.387062	-.038260	.0151223	53.04772	2.205198

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049486**	**.0139653**	**397.6494**	**.1118662**	**.1258052**	**.3079774**	**129.6974**
Stddev	.0000734	.0000710	.7693	.0003462	.0008287	.0044246	.9140
%RSD	1.482674	.5080208	.1934497	.3095017	.6586834	1.436646	.7046855
#1	.0048764	.0140356	397.0436	.1120690	.1265082	.3120270	128.7604
#2	.0049463	.0138937	398.5149	.1114664	.1248916	.3086501	130.5864
#3	.0050231	.0139665	397.3898	.1120632	.1260160	.3032550	129.7455

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.38782**	**38.59752**	**.1438348**	**-.007263**	**.4870405**	**.1330359**	**1.654045**
Stddev	.04101	.32020	.0004058	.001262	.3730353	.0063137	.030160
%RSD	.3947557	.8295982	.2820951	17.37452	76.59225	4.745868	1.823397
#1	10.36288	38.41092	.1437295	-.008407	.6604122	.1403192	1.657159
#2	10.43514	38.96725	.1434921	-.005910	.7418397	.1291141	1.622450
#3	10.36543	38.41439	.1442828	-.007471	.0588697	.1296745	1.682528

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.617158**	**9.833343**	**-.015722**	**-.000209**	**2.644295**	**8.022366**	**.1768123**
Stddev	.052073	.023668	.003795	.000291	.008420	.125075	.0015822
%RSD	1.127815	.2406925	24.13702	138.9978	.3184231	1.559078	.8948326
#1	4.560375	9.859572	-.018569	-.000537	2.651087	8.056772	.1776020
#2	4.628422	9.813580	-.017183	.000017	2.634874	8.126638	.1749908
#3	4.662677	9.826876	-.011414	-.000107	2.646923	7.883689	.1778443

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-06 Acquired: 12/16/2024 4:11:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9265907	.4900169	.1308993
Stddev	.0039153	.0017808	.0047190
%RSD	.4225525	.3634062	3.605101
#1	.9285304	.4888210	.1324538
#2	.9291576	.4920634	.1346450
#3	.9220842	.4891662	.1255991

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2512.413	31058.44	2983.151	2117.566	2860.921
Stddev	7.723	151.23	34.187	11.410	10.158
%RSD	.3073805	.4869147	1.145991	.5388312	.3550583
#1	2514.724	31166.66	2979.446	2121.806	2864.506
#2	2518.716	31123.03	2950.967	2126.249	2868.802
#3	2503.798	30885.65	3019.039	2104.643	2849.457

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-07 Acquired: 12/16/2024 4:15:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1234626	.0327204	4.377499	-.036014	.0173850	53.00626	2.203081
Stddev	.0050581	.0012056	.009408	.006734	.0025129	.28419	.014852
%RSD	4.096852	3.684538	.2149093	18.69952	14.45439	.5361459	.6741442
#1	.1222899	.0319517	4.366771	-.042967	.0148249	52.68954	2.187884
#2	.1290040	.0320995	4.384340	-.029522	.0198479	53.09025	2.203795
#3	.1190939	.0341098	4.381385	-.035552	.0174820	53.23898	2.217562

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049058	.0140529	396.6571	.1119692	.1254635	.3069818	128.9831
Stddev	.0001013	.0001124	1.2619	.0009934	.0007604	.0009596	.7877
%RSD	2.065169	.7999356	.3181281	.8871837	.6060410	.3126060	.6107335
#1	.0050226	.0140644	395.2010	.1118571	.1249799	.3063790	128.1285
#2	.0048544	.0139351	397.4327	.1110367	.1250707	.3064780	129.1405
#3	.0048405	.0141590	397.3375	.1130139	.1263399	.3080885	129.6802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.37202	38.41353	.1433600	-.008241	-.080142	.1332892	1.658626
Stddev	.05810	.26917	.0012599	.000968	.431561	.0053649	.017753
%RSD	.5601633	.7007187	.8788645	11.74356	538.4980	4.024986	1.070335
#1	10.31367	38.11684	.1443142	-.007168	.414970	.1327499	1.640259
#2	10.37252	38.48167	.1438340	-.009048	-.278773	.1282144	1.675693
#3	10.42986	38.64208	.1419318	-.008506	-.376622	.1389034	1.659926

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.510755	9.823918	-.017521	-.000655	2.610936	7.981219	.1747470
Stddev	.049787	.024163	.002547	.000408	.016443	.039917	.0021795
%RSD	1.103745	.2459583	14.53881	62.31090	.6297822	.5001404	1.247233
#1	4.537959	9.845005	-.017379	-.000267	2.611694	7.992650	.1744275
#2	4.541013	9.797552	-.015047	-.001080	2.594127	7.936833	.1770686
#3	4.453293	9.829196	-.020136	-.000616	2.626987	8.014173	.1727449

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-07 Acquired: 12/16/2024 4:15:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9238546	.4877649	.1280871
Stddev	.0067963	.0024013	.0028650
%RSD	.7356520	.4923042	2.236773
#1	.9166397	.4855133	.1309902
#2	.9247884	.4874892	.1280092
#3	.9301358	.4902921	.1252618

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2516.929	30953.44	2989.512	2107.944	2866.753
Stddev	14.337	278.67	25.656	18.455	12.912
%RSD	.5696119	.9002813	.8582063	.8755201	.4504189
#1	2533.257	31252.20	3019.059	2127.267	2881.592
#2	2511.125	30700.55	2976.606	2090.500	2860.592
#3	2506.403	30907.56	2972.871	2106.064	2858.075

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-06LX5 Acquired: 12/16/2024 4:19:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0208749	.0188755	.9005169	-.030849	-.006567	11.74885	.4912544
Stddev	.0043699	.0024868	.0052915	.002384	.000808	.14157	.0065361
%RSD	20.93386	13.17456	.5876031	7.728620	12.29790	1.204977	1.330494
#1	.0210104	.0183076	.8946712	-.029292	-.005899	11.85042	.4947905
#2	.0164388	.0167218	.9049795	-.029662	-.007464	11.58714	.4837121
#3	.0251755	.0215971	.9018998	-.033594	-.006338	11.80901	.4952608

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011810	.0027721	89.03449	.0262030	.0444380	.0563548	29.28750
Stddev	.0001823	.0000860	1.07046	.0007624	.0007850	.0045189	.47839
%RSD	15.43504	3.103745	1.202296	2.909619	1.766604	8.018643	1.633439
#1	.0009877	.0028705	89.72249	.0255945	.0435319	.0592222	29.40962
#2	.0013498	.0027107	87.80118	.0270582	.0449142	.0511457	28.75989
#3	.0012057	.0027352	89.57980	.0259563	.0448679	.0586964	29.69300

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.357922	8.765055	.0282758	-.002073	-.193172	.0209662	.3688500
Stddev	.033343	.107623	.0007259	.001255	.682025	.0057573	.0060496
%RSD	1.414081	1.227862	2.567028	60.50574	353.0652	27.45973	1.640135
#1	2.377574	8.868007	.0277458	-.003331	.580797	.0217255	.3746851
#2	2.319423	8.653302	.0291031	-.002068	-.454117	.0148670	.3692582
#3	2.376768	8.773858	.0279785	-.000822	-.706198	.0263062	.3626065

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.249860	1.936291	-.009197	-.002114	.5145835	1.863385	.0349873
Stddev	.131625	.004107	.002497	.000371	.0060879	.031487	.0018307
%RSD	52.67943	.2120939	27.15213	17.55588	1.183065	1.689798	5.232525
#1	-.223345	1.932810	-.011825	-.002538	.5087197	1.899680	.0334805
#2	-.392723	1.935244	-.006855	-.001959	.5208731	1.843379	.0370247
#3	-.133511	1.940820	-.008909	-.001847	.5141576	1.847095	.0344566

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-06LX5 Acquired: 12/16/2024 4:19:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2057756	.1086415	.0521015
Stddev	.0047195	.0013172	.0010044
%RSD	2.293511	1.212404	1.927705
#1	.2050603	.1091402	.0522645
#2	.2014546	.1071478	.0510256
#3	.2108119	.1096365	.0530144

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2369.869	29262.29	2730.356	2005.104	3093.697
Stddev	3.795	123.23	34.812	7.861	7.895
%RSD	.1601407	.4211075	1.275014	.3920437	.2551843
#1	2371.751	29368.73	2694.510	2012.125	3101.863
#2	2372.354	29290.84	2764.033	2006.576	3093.122
#3	2365.500	29127.29	2732.524	1996.612	3086.105

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-08 Acquired: 12/16/2024 4:23:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2045277**	**.1274580**	**4.324031**	**.1261547**	**.1734294**	**55.32379**	**5.824049**
Stddev	.0061525	.0007516	.018923	.0044735	.0012647	.07853	.004429
%RSD	3.008152	.5897108	.4376256	3.546008	.7292228	.1419501	.0760386
#1	.2026122	.1266436	4.303186	.1278920	.1738844	55.23328	5.819187
#2	.1995607	.1281250	4.328780	.1210732	.1720002	55.36427	5.827852
#3	.2114101	.1276054	4.340128	.1294990	.1744037	55.37383	5.825107

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0946073**	**.1109443**	**386.9360**	**.5014429**	**1.248822**	**.7413259**	**128.3170**
Stddev	.0007899	.0003061	.2512	.0022534	.003477	.0039842	.3335
%RSD	.8349778	.2759035	.0649181	.4493897	.2784071	.5374455	.2598725
#1	.0944598	.1105957	387.2097	.4989012	1.245314	.7432184	128.0323
#2	.0939015	.1110682	386.7160	.5031963	1.248886	.7440111	128.6839
#3	.0954606	.1111691	386.8822	.5022312	1.252266	.7367482	128.2349

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.04278**	**37.57664**	**1.181680**	**.0651612**	**-.079727**	**1.057484**	**2.379096**
Stddev	.01734	.09794	.001518	.0007952	.552105	.005820	.024513
%RSD	.1570393	.2606355	.1284916	1.220386	692.4941	.5503975	1.030335
#1	11.03231	37.62939	1.179967	.0645833	-.569664	1.050802	2.398899
#2	11.03322	37.46364	1.182861	.0660681	-.188017	1.061453	2.386709
#3	11.06279	37.63690	1.182212	.0648323	.518499	1.060196	2.351680

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.443109**	**9.595582**	**-.022580**	**-.000461**	**2.560354**	**7.970423**	**.1696925**
Stddev	.089021	.019476	.003113	.000355	.009146	.025433	.0019462
%RSD	2.003585	.2029643	13.78507	77.12335	.3572120	.3190890	1.146869
#1	4.495691	9.574487	-.025194	-.000834	2.563525	7.999785	.1697010
#2	4.340325	9.599382	-.023409	-.000127	2.567493	7.956258	.1677420
#3	4.493310	9.612878	-.019137	-.000421	2.550045	7.955228	.1716343

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-08 Acquired: 12/16/2024 4:23:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC0S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9068133	.4781271	.1234748
Stddev	.0016736	.0010213	.0046091
%RSD	.1845589	.2136048	3.732783
#1	.9075865	.4791540	.1183564
#2	.9079605	.4771115	.1272969
#3	.9048929	.4781156	.1247711

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2538.822	31388.35	2994.685	2142.065	2907.573
Stddev	6.350	168.17	3.417	12.295	5.875
%RSD	.2501216	.5357705	.1141084	.5739604	.2020519
#1	2531.599	31446.96	2993.026	2134.690	2900.829
#2	2541.340	31198.72	2992.414	2135.246	2910.310
#3	2543.527	31519.37	2998.615	2156.258	2911.580

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-09 Acquired: 12/16/2024 4:27:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1256188	.0266523	1.742838	-.010909	.0244549	61.57740	1.370435
Stddev	.0025535	.0052250	.002699	.000698	.0030855	.35251	.008114
%RSD	2.032719	19.60439	.1548762	6.400365	12.61694	.5724650	.5920431
#1	.1229387	.0288801	1.740713	-.010618	.0227729	61.30943	1.364195
#2	.1280232	.0206826	1.741926	-.011705	.0225759	61.97673	1.379607
#3	.1258946	.0303941	1.745875	-.010403	.0280158	61.44605	1.367503

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055851	.0054751	86.89872	.0906312	.1438656	.2382225	154.8190
Stddev	.0001535	.0000769	.56834	.0012760	.0004563	.0098169	1.3899
%RSD	2.748124	1.404739	.6540293	1.407899	.3171990	4.120893	.8977434
#1	.0056757	.0054248	86.66177	.0921038	.1438378	.2270454	154.0284
#2	.0054078	.0054370	87.54720	.0898533	.1434238	.2454467	156.4238
#3	.0056717	.0055637	86.48719	.0899366	.1443352	.2421753	154.0048

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.89147	21.47055	.1269486	-.008122	-.192436	.1379335	.7104758
Stddev	.11113	.20897	.0006740	.000304	.447278	.0050742	.0078537
%RSD	.6992877	.9732779	.5309455	3.742612	232.4295	3.678717	1.105414
#1	15.81833	21.31264	.1268464	-.008457	.065885	.1437510	.7014234
#2	16.01935	21.70751	.1263315	-.007864	.065715	.1356288	.7145313
#3	15.83674	21.39150	.1276679	-.008045	-.708908	.1344206	.7154726

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.222502	7.163857	-.050511	.0014130	1.111789	7.755003	.1324901
Stddev	.178174	.008812	.003984	.0000654	.004342	.012748	.0009596
%RSD	4.219623	.1230059	7.886439	4.624959	.3905618	.1643897	.7242690
#1	4.022805	7.158095	-.053652	.0013598	1.111310	7.768351	.1316367
#2	4.279491	7.159475	-.046031	.0014860	1.107706	7.753705	.1323047
#3	4.365209	7.174001	-.051851	.0013934	1.116351	7.742953	.1335288

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: P5037-09 Acquired: 12/16/2024 4:27:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8218774	.0869193	.0934464
Stddev	.0044060	.0006046	.0032430
%RSD	.5360950	.6956473	3.470423
#1	.8184317	.0870402	.0929450
#2	.8268420	.0874543	.0904834
#3	.8203587	.0862633	.0969109

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.161	31789.33	2967.701	2169.391	3073.515
Stddev	8.239	65.54	6.342	5.227	10.889
%RSD	.3191953	.2061728	.2136862	.2409217	.3542879
#1	2580.520	31800.53	2964.304	2175.144	3066.056
#2	2589.702	31718.91	2963.782	2164.936	3086.010
#3	2573.262	31848.54	2975.017	2168.093	3068.479

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV036 Acquired: 12/16/2024 4:31:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV036 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.681104**	**4.601971**	**23.14568**	**4.622364**	**4.525384**	**364.6959**
Stddev	.025564	.071218	.33532	.074023	.080670	.7047
%RSD	.5461154	1.547558	1.448757	1.601408	1.782609	.1932336
#1	4.672576	4.657322	23.44727	4.668977	4.584765	364.0984
#2	4.709842	4.626967	23.20518	4.661105	4.557848	365.4730
#3	4.660894	4.521625	22.78459	4.537011	4.433540	364.5162

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.665233**	**.4680634**	**2.327075**	**380.3446**	**15.15398**	**2.662973**
Stddev	.020608	.0039230	.034295	.7757	.03908	.040310
%RSD	.2132174	.8381313	1.473742	.2039360	.2579095	1.513705
#1	9.654739	.4639065	2.358240	380.3807	15.17536	2.699093
#2	9.688976	.4717008	2.332651	381.1015	15.17771	2.670337
#3	9.651985	.4685829	2.290334	379.5515	15.10887	2.619489

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.61346**	**368.4347**	**13.82852**	**370.2188**	**2.439711**	**1.167224**
Stddev	.03041	1.1476	.04678	1.2822	.039279	.001963
%RSD	.2080676	.3114779	.3382936	.3463492	1.609984	.1682029
#1	14.60331	367.6529	13.80495	370.2785	2.475359	1.169491
#2	14.64765	369.7522	13.88240	371.4702	2.446171	1.166085
#3	14.58943	367.8989	13.79822	368.9078	2.397602	1.166096

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**374.1311**	**2.344161**	**14.14194**	**164.9154**	**4.647621**	**4.682057**
Stddev	.9320	.010599	.10977	.6701	.073496	.037791
%RSD	.2491097	.4521301	.7762360	.4063001	1.581364	.8071469
#1	373.1592	2.347499	14.26226	164.1496	4.716852	4.639242
#2	375.0173	2.352689	14.11632	165.3937	4.655514	4.696164
#3	374.2168	2.332296	14.04724	165.2030	4.570498	4.710765

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCV036 Acquired: 12/16/2024 4:31:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV036 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 4.493963	4.868644	4.664812	4.680498	4.725496	4.560157
Stddev	.074008	.070548	.048777	.067223	.014301	.012330
%RSD	1.646829	1.449035	1.045630	1.436235	.3026284	.2703840
#1	4.553423	4.921565	4.609423	4.737795	4.730983	4.559871
#2	4.517389	4.895817	4.701348	4.697200	4.736241	4.572628
#3	4.411077	4.788549	4.683665	4.606498	4.709264	4.547973

Elem	Li6707
Units	ppm
Avg	5.050673
Stddev	.024024
%RSD	.4756659
#1	5.029596
#2	5.076832
#3	5.045592

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1971.421	25830.08	2564.770	1633.611	2590.369
Stddev	29.294	50.56	24.467	2.648	36.182
%RSD	1.485955	.1957480	.9539711	.1620807	1.396774
#1	1943.930	25825.65	2592.152	1636.576	2553.602
#2	1968.097	25781.87	2545.053	1631.484	2591.569
#3	2002.236	25882.71	2557.106	1632.771	2625.935

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

Sample Name: CCB036 Acquired: 12/16/2024 4:59:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB036 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.001370**	**.0018520**	**.0048113**	**-.002265**	**-.001360**	**-.008633**
Stddev	.001608	.0021216	.0027417	.004737	.001320	.005404
%RSD	117.3665	114.5547	56.98501	209.1157	97.03555	62.59250
#1	.000413	.0011541	.0049640	.002481	-.001948	-.012926
#2	-.002711	.0042347	.0019964	-.002283	.000152	-.002565
#3	-.001812	.0001674	.0074734	-.006994	-.002283	-.010408

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006658**	**.0001025**	**.0000380**	**.0221275**	**.0001870**	**-.000096**
Stddev	.0012857	.0000864	.0000608	.0245166	.0007124	.000278
%RSD	193.1173	84.26138	160.1700	110.7969	380.8658	288.7570
#1	.0021426	.0000092	-.000029	.0091106	-.000621	-.000394
#2	-.000204	.0001796	.000052	.0504070	.000457	-.000052
#3	.000059	.0001187	.000091	.0068648	.000725	.000157

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.004740**	**-.013871**	**.0007068**	**.0764791**	**.0003494**	**.0004379**
Stddev	.009807	.037971	.0004250	.0698992	.0005031	.0004412
%RSD	206.9017	273.7364	60.12476	91.39644	144.0248	100.7571
#1	-.016063	-.001230	.0006975	.0493580	.0005202	.0009360
#2	.001069	-.056550	.0002866	.1558746	-.000217	.0000963
#3	.000774	.016167	.0011364	.0242048	.000745	.0002813

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.349525**	**-.010736**	**-.001621**	**-1.16115**	**.0007668**	**.0158982**
Stddev	.870565	.011420	.000430	.12727	.0034848	.0007455
%RSD	249.0706	106.3745	26.51601	10.96101	454.4490	4.689104
#1	-1.14668	-.021756	-.001127	-1.01931	.0035432	.0151352
#2	.57942	-.011499	-.001829	-1.19877	-.003144	.0166249
#3	-.48132	.001047	-.001907	-1.26538	.001901	.0159346

Reviewed By:Mohan
On:12/18/2024 3:02:43 AM
Inst Id :P5

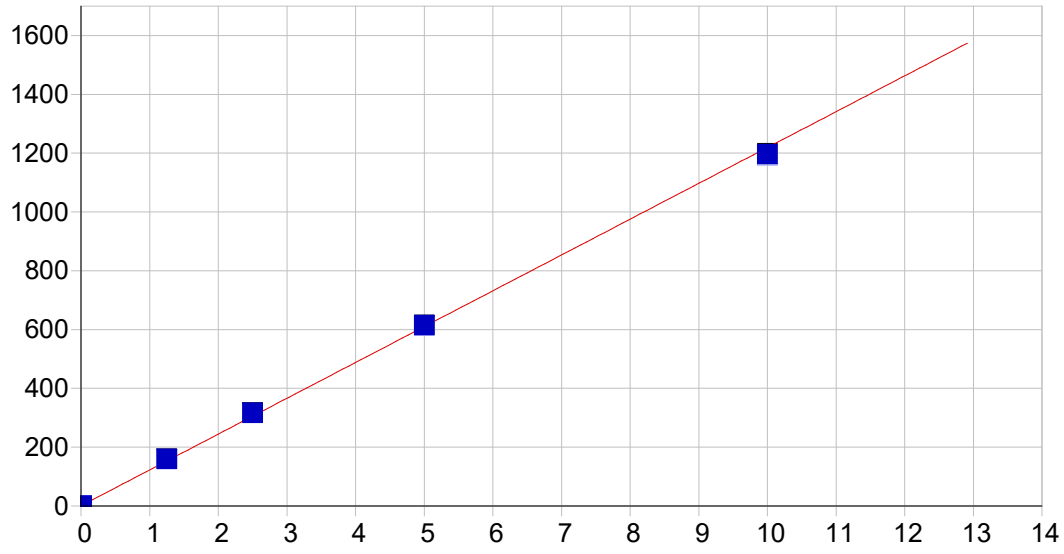
Sample Name: CCB036 Acquired: 12/16/2024 4:59:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v19) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB036 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008982	-.010199	.0007169	.0016393	-.002316	.0000217
Stddev	.0001648	.002358	.0003960	.0016342	.002082	.0002898
%RSD	18.34991	23.11850	55.23485	99.68851	89.87995	1338.007
#1	.0008216	-.008971	.0003026	-.000152	-.000130	.0002687
#2	.0010874	-.008709	.0010915	.003049	-.002542	.0000936
#3	.0007857	-.012918	.0007565	.002020	-.004275	-.000297

Elem	Li6707
Units	ppm
Avg	F .0442817
Stddev	.0031753
%RSD	7.170622
#1	.0479425
#2	.0426267
#3	.0422757

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2342.352	28588.53	2640.199	1952.793	3219.699
Stddev	3.889	56.18	5.385	14.608	4.860
%RSD	.1660462	.1965177	.2039793	.7480701	.1509409
#1	2339.555	28528.36	2635.548	1936.324	3214.474
#2	2346.793	28597.61	2638.951	1964.187	3224.084
#3	2340.706	28639.62	2646.099	1957.868	3220.540

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



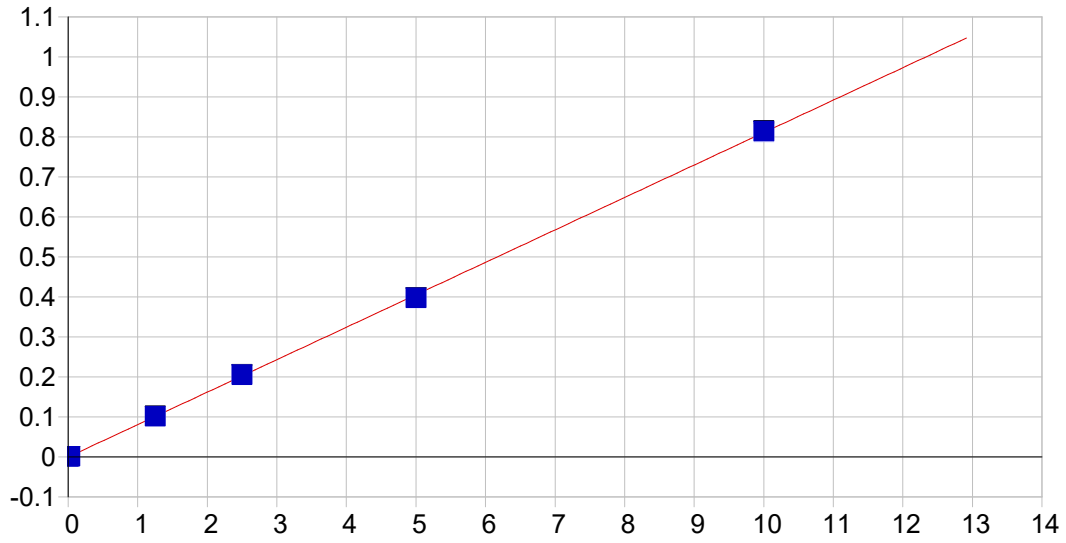
As 189.042 {478}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.707428	Re-Slope:	1.000000
A1 (Gain):	121.845964	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999711	Status:	OK.
Std Error of Est:	0.048899		
Predicted MDL:	0.006339		
Predicted MQL:	0.021131		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.70768	.190	1
S1	.01000	.00719	-.003	-28.1	1.5820	.224	1
S2	1.2500	1.3043	.054	4.34	158.99	.366	1
S3	2.5000	2.5966	.097	3.86	315.81	.865	1
S4	5.0000	5.0403	.040	.807	612.29	.382	1
S5	10.000	9.8116	-.188	-1.88	1191.1	2.71	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



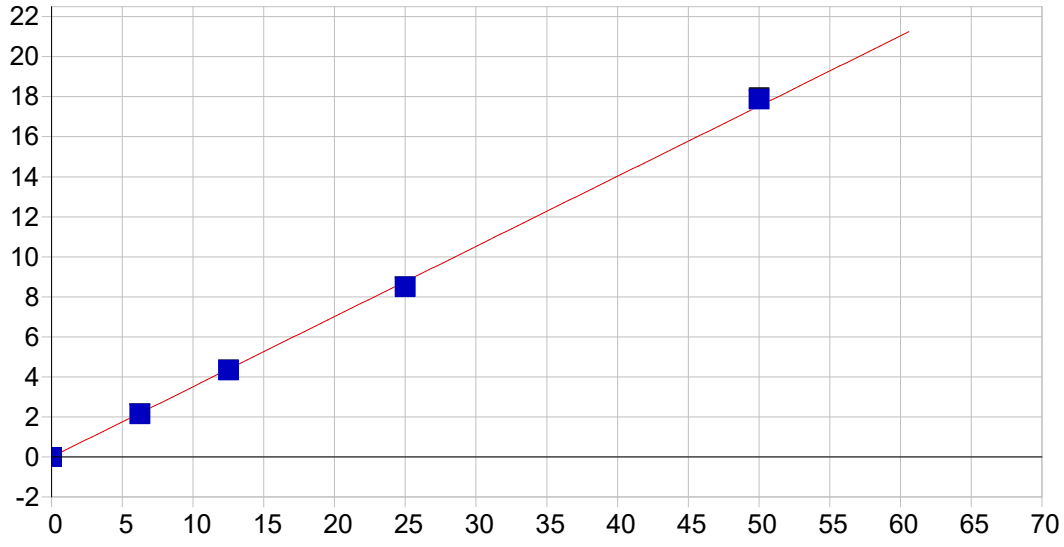
Tl 190.856 {477}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000342	Re-Slope:	1.000000
A1 (Gain):	0.081117	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999927	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.003623		
Predicted MQL:	0.012076		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00034	.000	1
S1	.02500	.02736	.002	9.46	.00181	.000	1
S2	1.2500	1.2605	.011	.841	.10164	.000	1
S3	2.5000	2.5389	.039	1.56	.20508	.001	1
S4	5.0000	4.9090	-.091	-1.82	.39682	.001	1
S5	10.000	10.039	.039	.393	.81192	.002	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



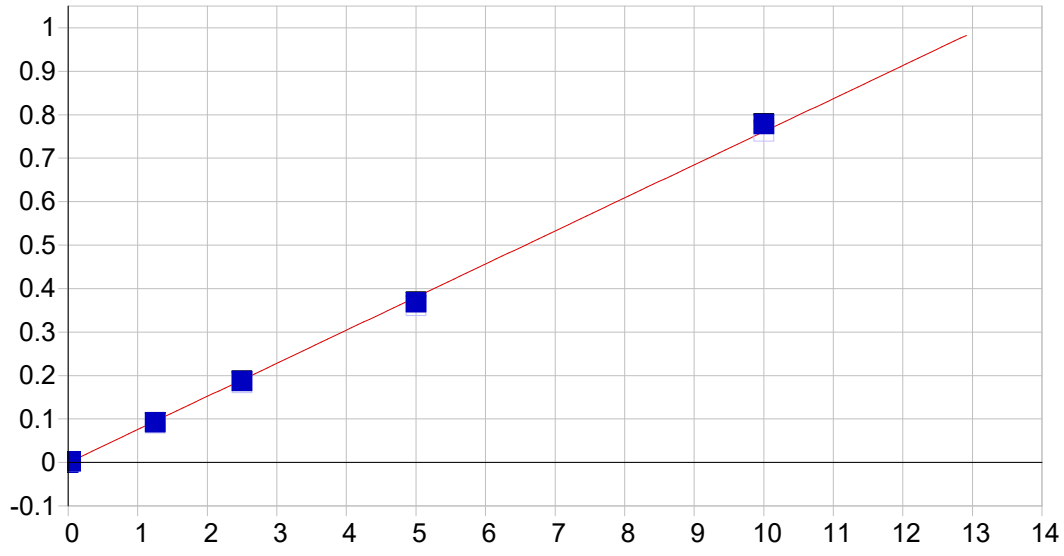
Pb 220.353 {453}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000135	Re-Slope:	1.000000
A1 (Gain):	0.350619	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999747	Status:	OK.
Std Error of Est:	0.000295		
Predicted MDL:	0.002288		
Predicted MQL:	0.007628		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00014	.001	1
S1	.01000	.00842	-.002	-15.8	.00307	.001	1
S2	6.2500	6.1312	-.119	-1.90	2.1475	.003	1
S3	12.500	12.375	-.125	-.997	4.3345	.001	1
S4	25.000	24.238	-.762	-3.05	8.4889	.010	1
S5	50.000	51.007	1.01	2.01	17.865	.055	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



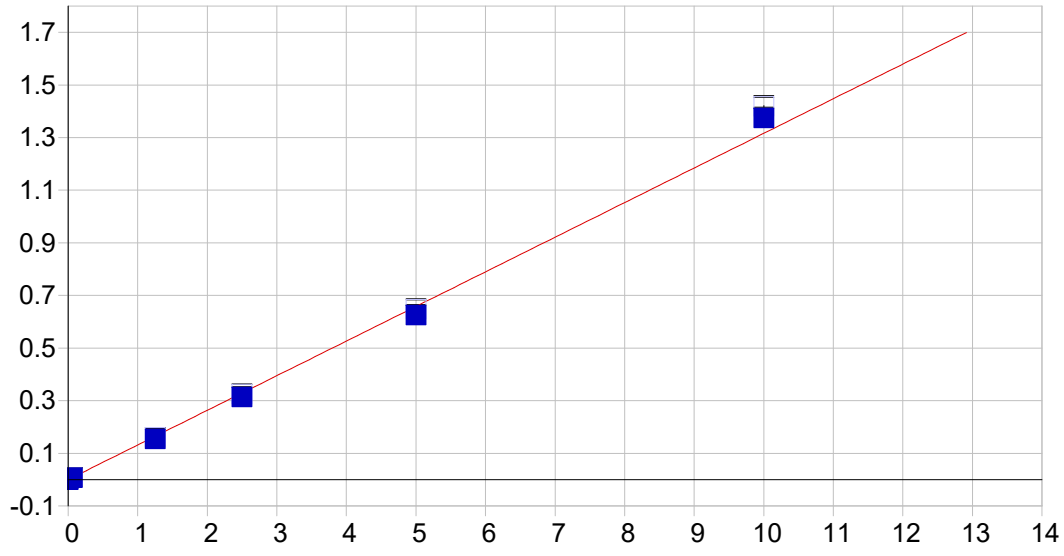
Se 196.090 {472}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000252	Re-Slope:	1.000000
A1 (Gain):	0.076112	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999668	Status:	OK.
Std Error of Est:	0.000060		
Predicted MDL:	0.004410		
Predicted MQL:	0.014700		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00025	.000	1
S1	.03500	.03245	-.003	-7.28	.00221	.000	1
S2	1.2500	1.2142	-.036	-2.86	.09002	.000	1
S3	2.5000	2.4639	-.036	-1.44	.18300	.001	1
S4	5.0000	4.8440	-.156	-3.12	.35987	.001	1
S5	10.000	10.230	.230	2.30	.76128	.002	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



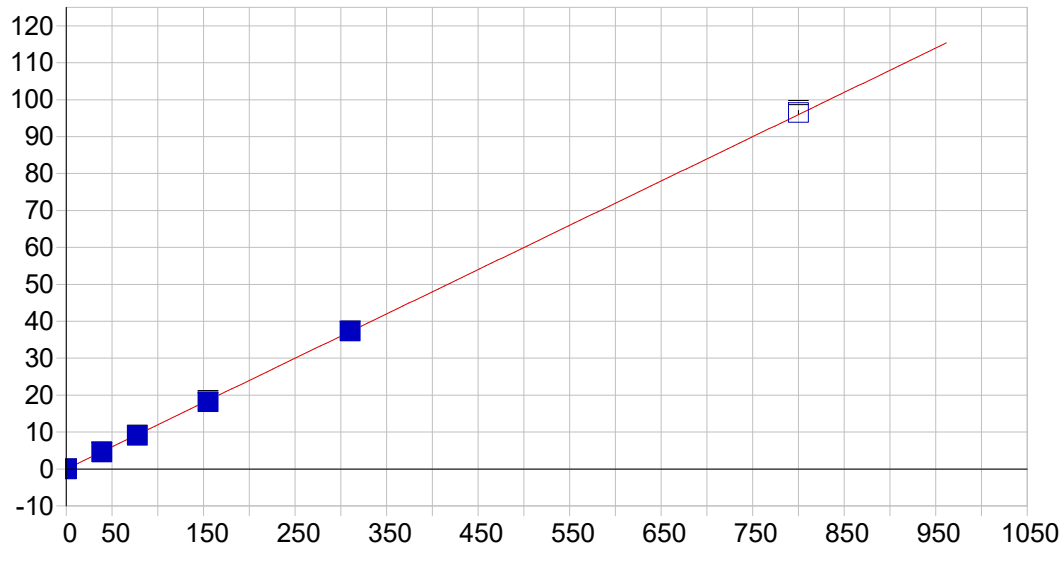
Sb 206.833 {463}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000155	Re-Slope:	1.000000
A1 (Gain):	0.131601	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998944	Status:	OK.
Std Error of Est:	0.000257		
Predicted MDL:	0.003267		
Predicted MQL:	0.010890		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00016	.000	1
S1	.06000	.05665	-.003	-5.58	.00761	.000	1
S2	1.2500	1.1714	-.079	-6.29	.15981	.001	1
S3	2.5000	2.3857	-.114	-4.57	.32512	.001	1
S4	5.0000	4.7515	-.248	-4.97	.64746	.002	1
S5	10.000	10.445	.445	4.45	1.4187	.003	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



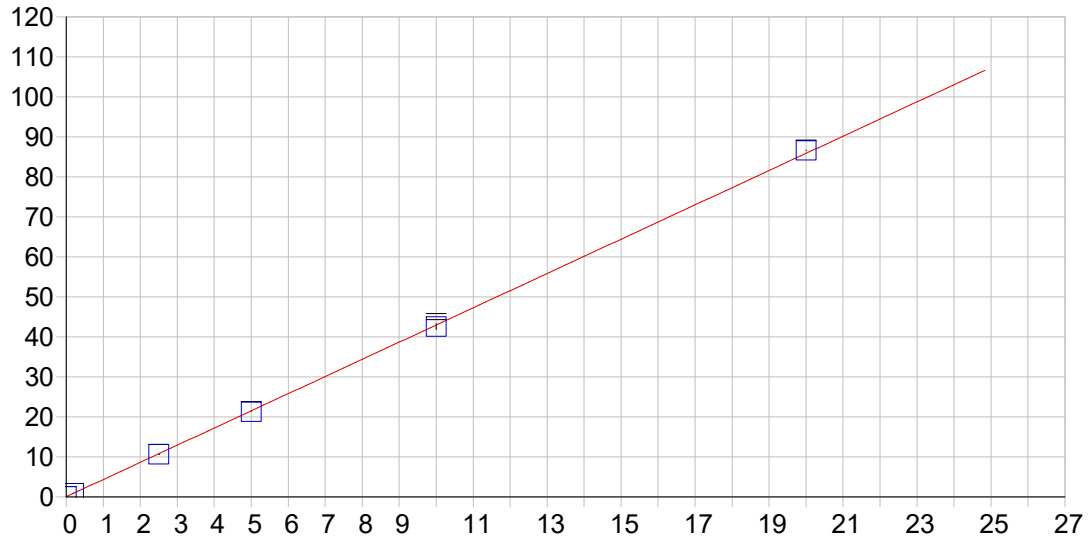
Al 396.152 { 85}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.005186	Re-Slope:	1.000000
A1 (Gain):	0.119963	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000795		
Predicted MDL:	0.025668		
Predicted MQL:	0.085559		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00519	.002	1
S1	.20000	.22162	.022	10.8	.02144	.003	1
S2	38.750	37.875	-.875	-2.26	4.5435	.006	1
S3	77.500	75.880	-1.62	-2.09	9.1077	.034	1
S4	155.00	151.71	-3.29	-2.13	18.214	.292	1
S5	310.00	311.10	1.10	.356	37.356	.034	1
S6	800.00	804.67	4.67	.583	96.525	.559	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



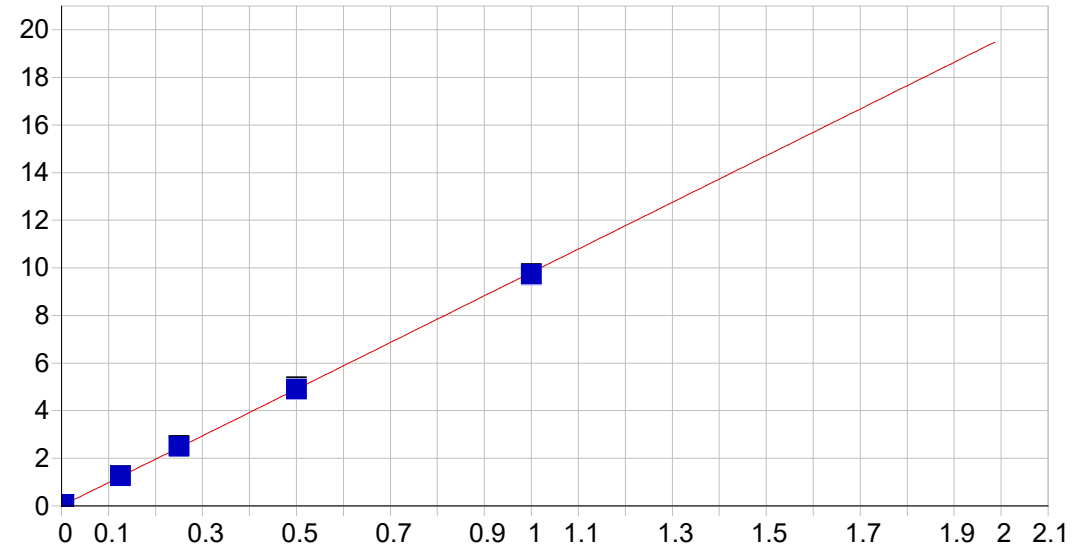
Ba 493.409 { 68}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.059957	Re-Slope:	1.000000
A1 (Gain):	4.291399	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.004244		
Predicted MDL:	0.001517		
Predicted MQL:	0.005057		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.05997	.014	1
S1	.20000	.20102	.001	.512	.92263	.004	1
S2	2.5000	2.4644	-.036	-1.42	10.636	.006	1
S3	5.0000	4.9503	-.050	-.993	21.304	.056	1
S4	10.000	9.9119	-.088	-.881	42.596	.742	1
S5	20.000	20.172	.172	.861	86.627	.094	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



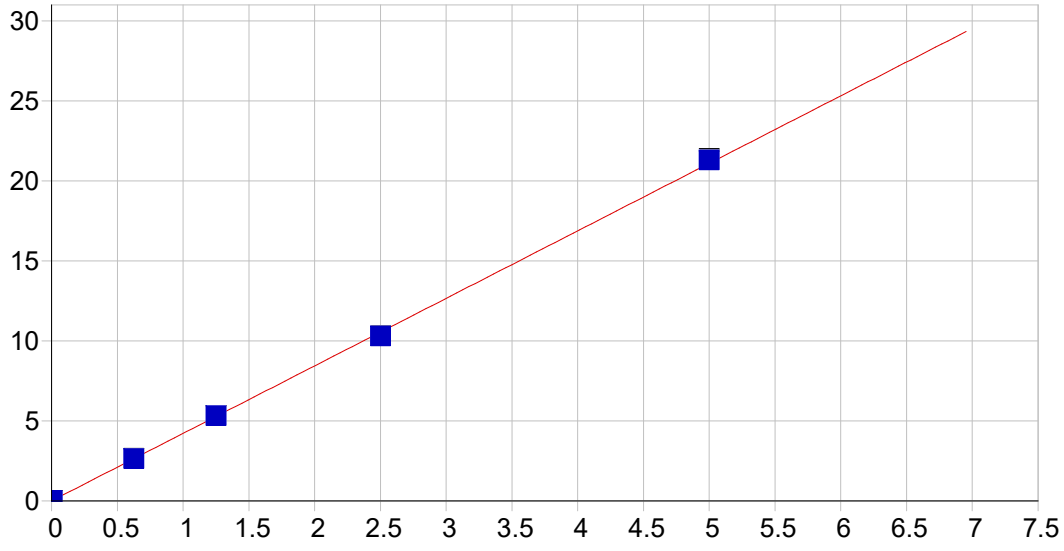
Be 234.861 {144}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001631	Re-Slope:	1.000000
A1 (Gain):	9.807787	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000450		
Predicted MDL:	0.000131		
Predicted MQL:	0.000437		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00163	.001	1
S1	.00500	.00525	.000	5.07	.05311	.000	1
S2	.12500	.12852	.004	2.82	1.2565	.009	1
S3	.25000	.25497	.005	1.99	2.4911	.031	1
S4	.50000	.49956	-.000	-.088	4.8787	.099	1
S5	1.0000	.99169	-.008	-.831	9.6829	.038	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



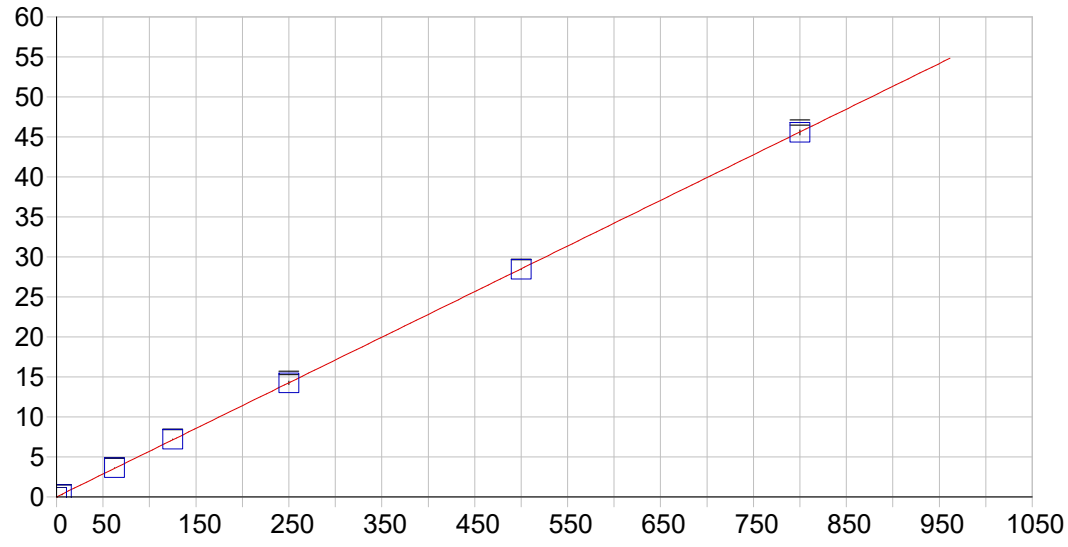
Cd 214.438 {457}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000638	Re-Slope:	1.000000
A1 (Gain):	4.219567	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999897	Status:	OK.
Std Error of Est:	0.000509		
Predicted MDL:	0.000118		
Predicted MQL:	0.000394		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00064	.000	1
S1	.00500	.00496	-.000	-.769	.02165	.001	1
S2	.62500	.62670	.002	.272	2.6491	.006	1
S3	1.2500	1.2615	.011	.919	5.3317	.010	1
S4	2.5000	2.4407	-.059	-2.37	10.316	.011	1
S5	5.0000	5.0461	.046	.923	21.326	.065	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



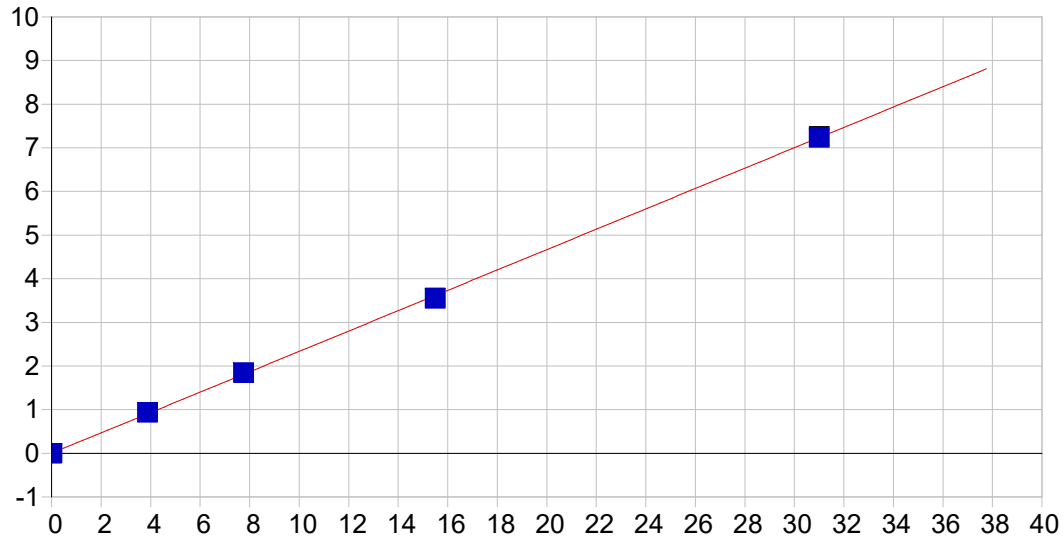
Ca 373.690 { 90}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008027	Re-Slope:	1.000000
A1 (Gain):	0.057013	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999993	Status:	OK.
Std Error of Est:	0.000759		
Predicted MDL:	0.036050		
Predicted MQL:	0.120167		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00014	-.000	.000	.00802	.001	1
S1	5.0000	5.0495	.050	.991	.29592	.001	1
S2	62.500	63.377	.877	1.40	3.6213	.010	1
S3	125.00	126.08	1.08	.866	7.1963	.035	1
S4	250.00	249.84	-.159	-.063	14.252	.216	1
S5	500.00	498.92	-1.08	-.216	28.453	.037	1
S6	800.00	799.23	-.769	-.096	45.574	.315	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



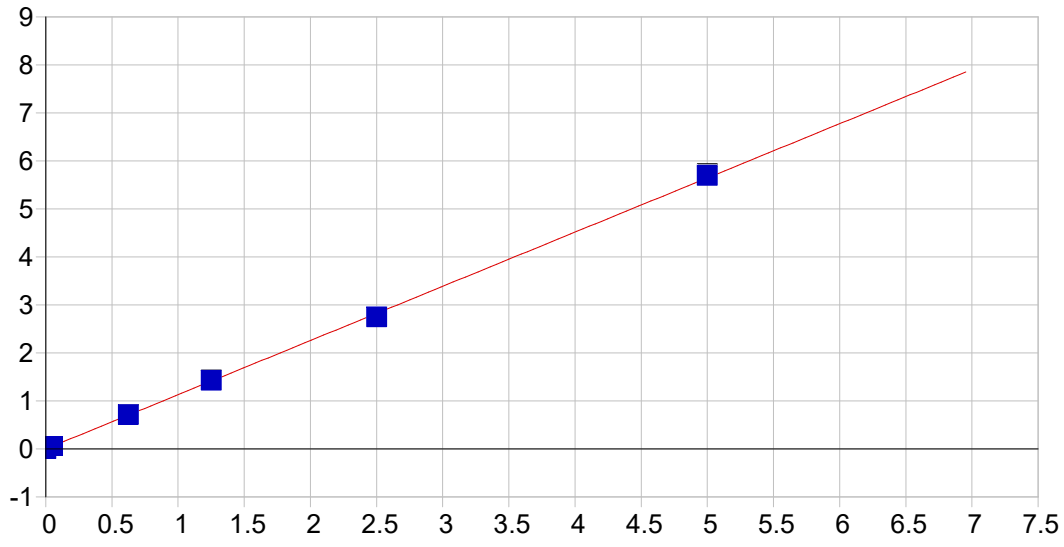
Cr 267.716 {126}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000231	Re-Slope:	1.000000
A1 (Gain):	0.233353	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999881	Status:	OK.
Std Error of Est:	0.000106		
Predicted MDL:	0.000934		
Predicted MQL:	0.003115		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00023	.000	1
S1	.01000	.00956	-.000	-4.40	.00246	.000	1
S2	3.8750	4.0070	.132	3.41	.93598	.002	1
S3	7.7500	7.9207	.171	2.20	1.8499	.002	1
S4	15.500	15.205	-.295	-1.90	3.5511	.005	1
S5	31.000	30.993	-.007	-.023	7.2381	.018	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



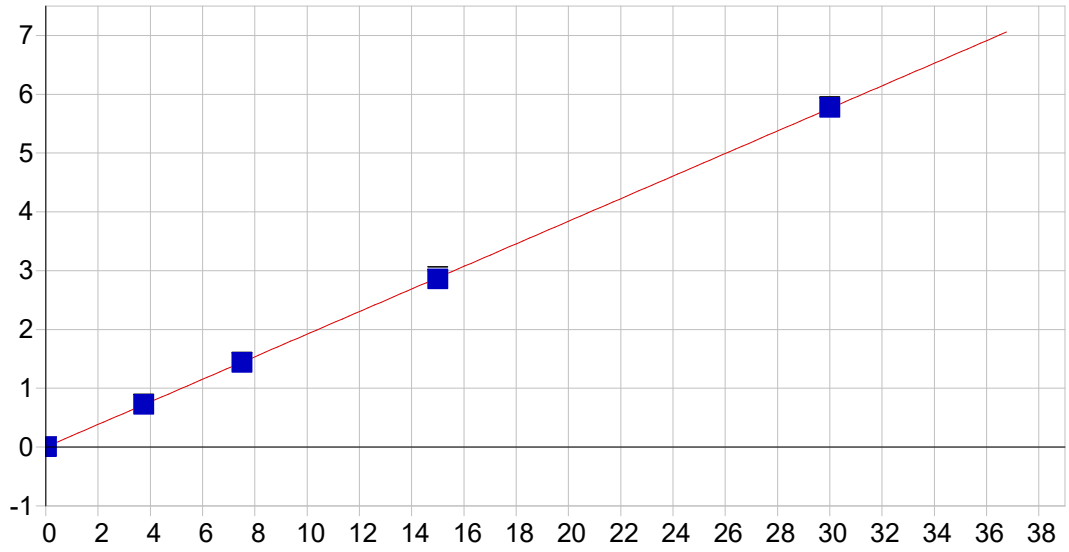
Co 228.616 {448}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000360	Re-Slope:	1.000000
A1 (Gain):	1.129159	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999875	Status:	OK.
Std Error of Est:	0.000476		
Predicted MDL:	0.000483		
Predicted MQL:	0.001611		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00036	.000	1
S1	.05000	.05108	.001	2.15	.05750	.001	1
S2	.62500	.63130	.006	1.01	.71475	.001	1
S3	1.2500	1.2642	.014	1.13	1.4316	.001	1
S4	2.5000	2.4342	-.066	-2.63	2.7573	.005	1
S5	5.0000	5.0443	.044	.886	5.7137	.022	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



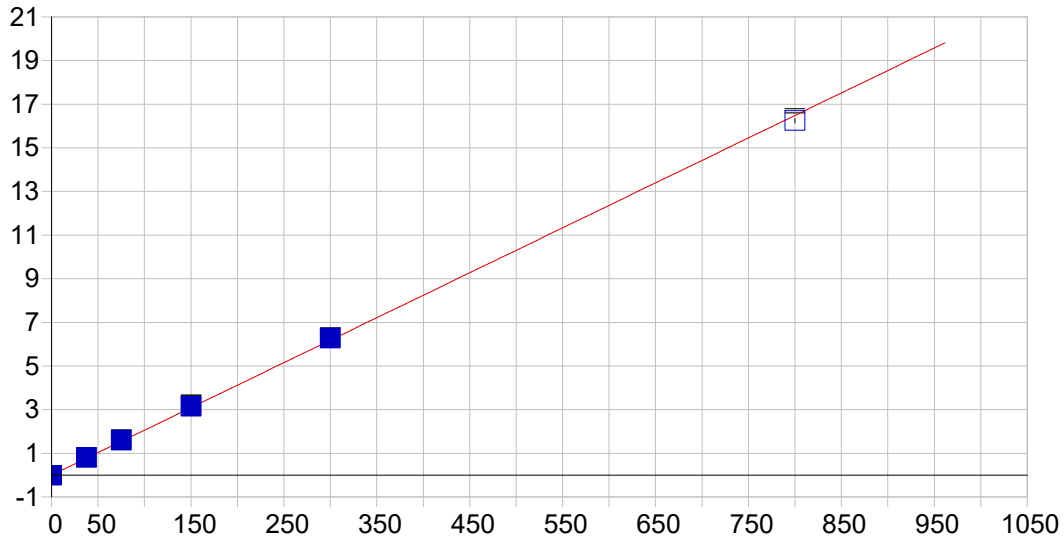
Cu 324.754 {104}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001468	Re-Slope:	1.000000
A1 (Gain):	0.191957	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999982	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.008087		
Predicted MQL:	0.026956		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00147	.002	1
S1	.02500	.02886	.004	15.4	.00700	.001	1
S2	3.7500	3.7833	.033	.888	.72761	.004	1
S3	7.5000	7.4874	-.013	-.168	1.4386	.004	1
S4	15.000	14.889	-.111	-.737	2.8593	.036	1
S5	30.000	30.086	.086	.287	5.7760	.012	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



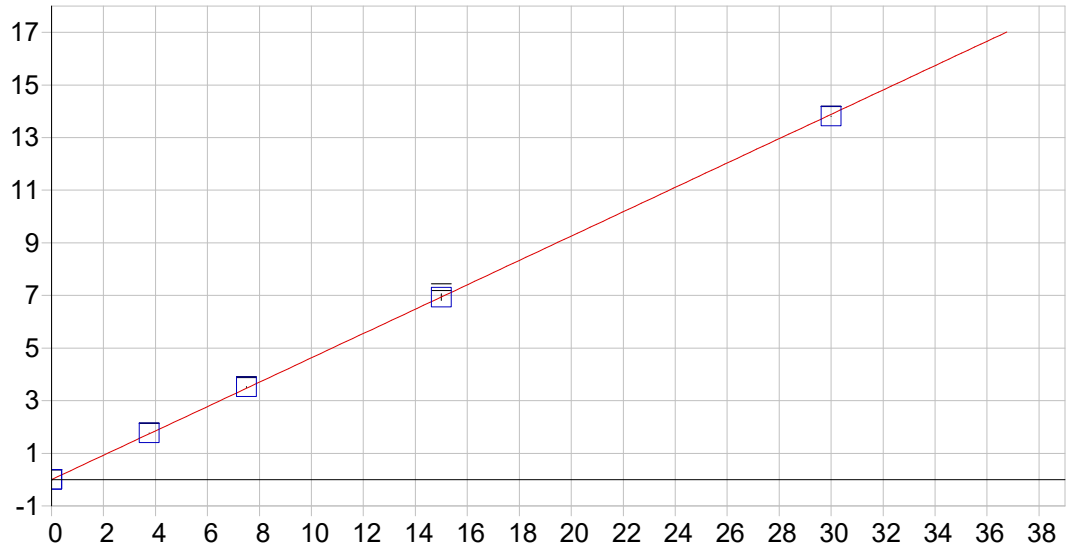
Fe 259.837 {130}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000159	Re-Slope:	1.000000
A1 (Gain):	0.020604	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999837	Status:	OK.
Std Error of Est:	0.000163		
Predicted MDL:	0.036143		
Predicted MQL:	0.120477		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00003	-.000	.000	-.00016	.001	1
S1	.10000	.12137	.021	21.4	.00234	.000	1
S2	37.500	38.887	1.39	3.70	.80125	.003	1
S3	75.000	77.537	2.54	3.38	1.5977	.006	1
S4	150.00	153.06	3.06	2.04	3.1543	.054	1
S5	300.00	304.63	4.63	1.54	6.2779	.012	1
S6	800.00	788.35	-11.6	-1.46	16.243	.095	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



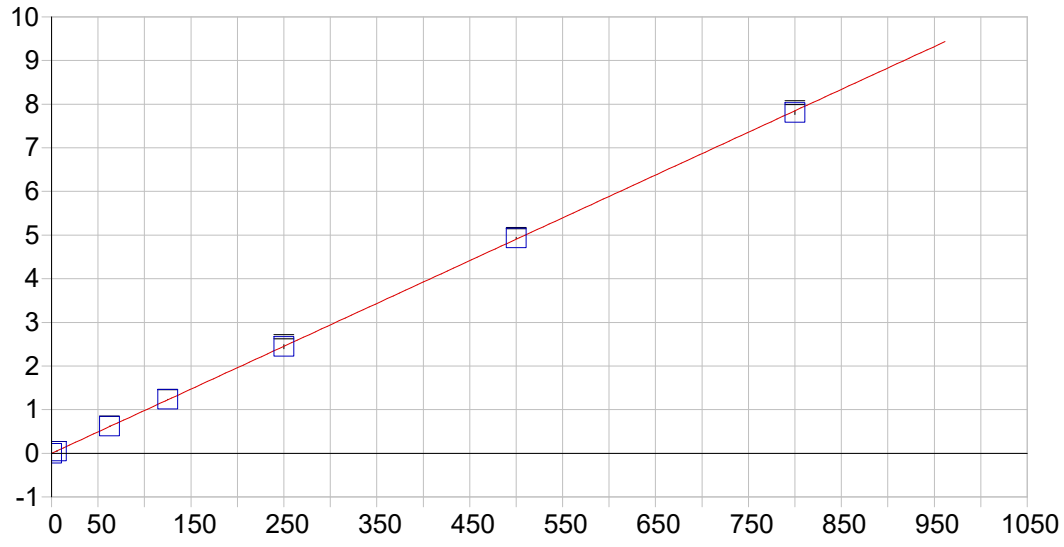
Mn 257.610 {131}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000226	Re-Slope:	1.000000
A1 (Gain):	0.462809	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000135		
Predicted MDL:	0.001420		
Predicted MQL:	0.004733		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00023	.000	1
S1	.01500	.01673	.002	11.5	.00797	.000	1
S2	3.7500	3.8189	.069	1.84	1.7676	.007	1
S3	7.5000	7.6060	.106	1.41	3.5204	.017	1
S4	15.000	14.980	-.020	-.134	6.9331	.130	1
S5	30.000	29.843	-.157	-.522	13.812	.007	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



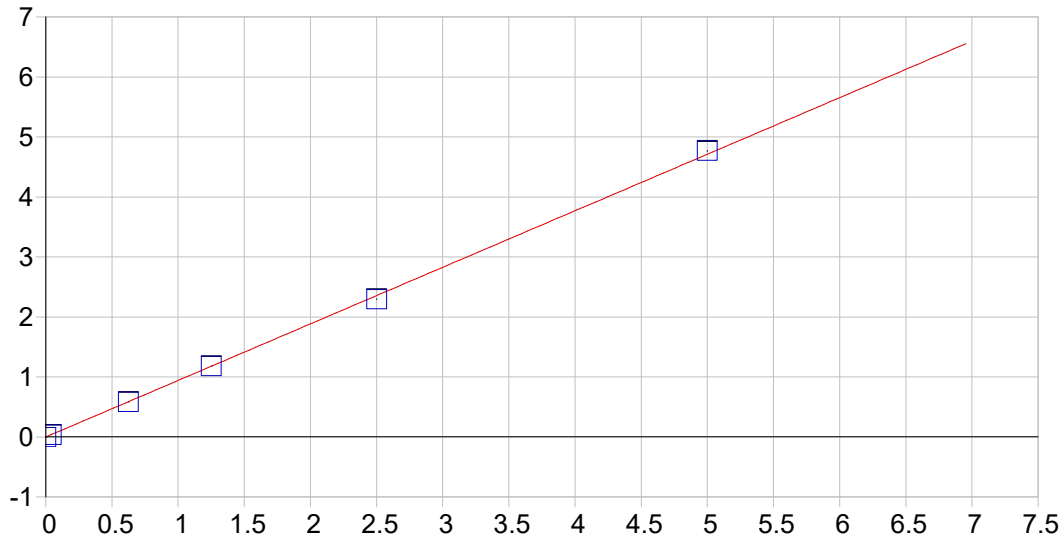
Mg 279.079 {121}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001515	Re-Slope:	1.000000
A1 (Gain):	0.009812	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000210		
Predicted MDL:	0.096315		
Predicted MQL:	0.321051		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00031	-.000	.000	-.00152	.000	1
S1	5.0000	5.2308	.231	4.62	.04981	.001	1
S2	62.500	63.176	.676	1.08	.61839	.001	1
S3	125.00	125.91	.906	.725	1.2339	.006	1
S4	250.00	249.38	-.620	-.248	2.4455	.048	1
S5	500.00	502.99	2.99	.598	4.9340	.014	1
S6	800.00	795.82	-4.18	-.523	7.8074	.041	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



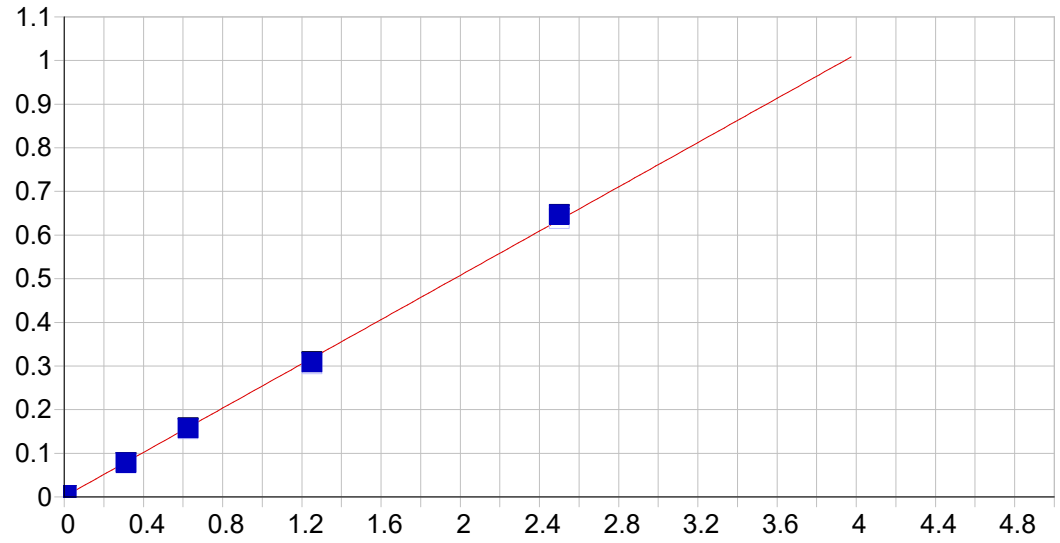
Ni 231.604 {446}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001258	Re-Slope:	1.000000
A1 (Gain):	0.942511	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999874	Status:	OK.
Std Error of Est:	0.000356		
Predicted MDL:	0.000650		
Predicted MQL:	0.002168		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00126	.001	1
S1	.04000	.04094	.001	2.35	.03733	.000	1
S2	.62500	.62074	-.004	-.682	.58379	.000	1
S3	1.2500	1.2550	.005	.404	1.1816	.001	1
S4	2.5000	2.4374	-.063	-2.50	2.2960	.003	1
S5	5.0000	5.0609	.061	1.22	4.7687	.009	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



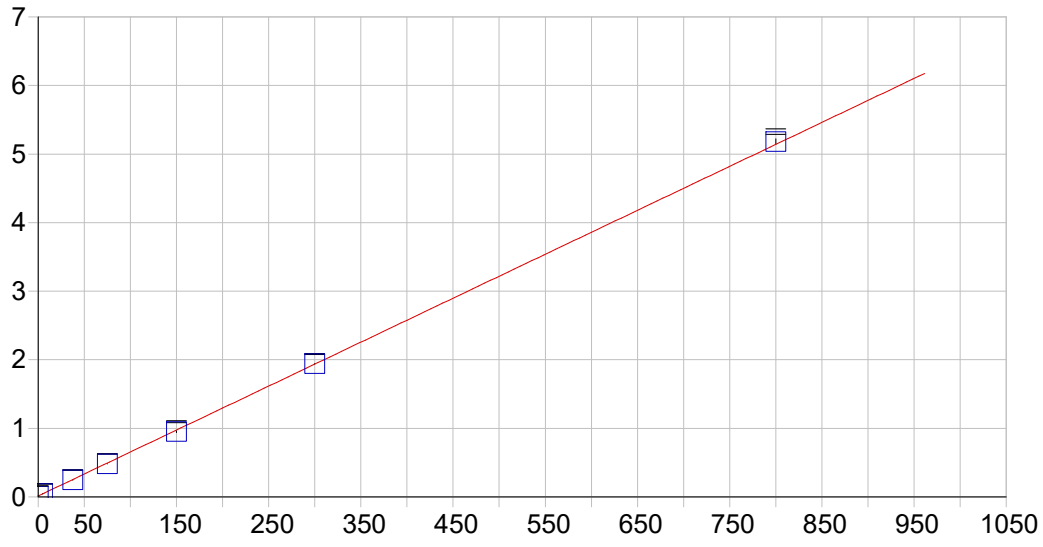
Ag 328.068 {103}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000720	Re-Slope:	1.000000
A1 (Gain):	0.253538	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999779	Status:	OK.
Std Error of Est:	0.000044		
Predicted MDL:	0.001501		
Predicted MQL:	0.005003		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00072	.000	1
S1	.01000	.00980	-.000	-2.03	.00320	.000	1
S2	.31250	.30606	-.006	-2.06	.07718	.000	1
S3	.62500	.61847	-.007	-1.05	.15524	.001	1
S4	1.2500	1.2160	-.034	-2.72	.30445	.001	1
S5	2.5000	2.5472	.047	1.89	.63740	.001	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

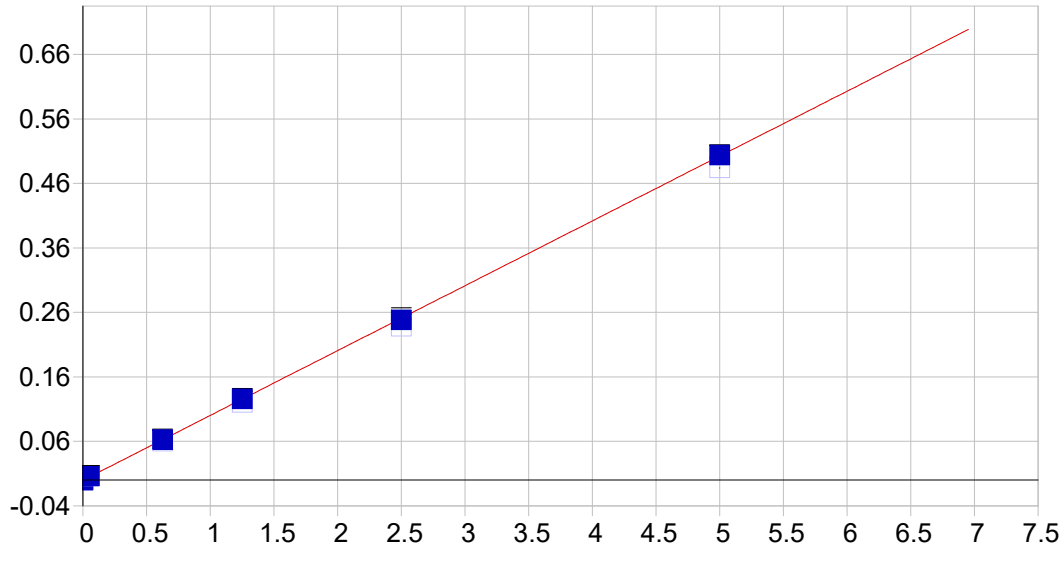


Na 818.326 { 41}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.014106	Re-Slope:	1.000000
A1 (Gain):	0.006408	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999918	Status:	OK.
Std Error of Est:	0.000254		
Predicted MDL:	0.802267		
Predicted MQL:	2.674224		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00037	.000	.000	.01411	.005	1
S1	5.0000	4.9699	-.030	-.602	.04596	.006	1
S2	37.500	36.499	-1.00	-2.67	.24801	.005	1
S3	75.000	73.037	-1.96	-2.62	.48216	.004	1
S4	150.00	146.22	-3.78	-2.52	.95112	.013	1
S5	300.00	300.43	.430	.143	1.9394	.005	1
S6	800.00	806.35	6.35	.793	5.1815	.040	1



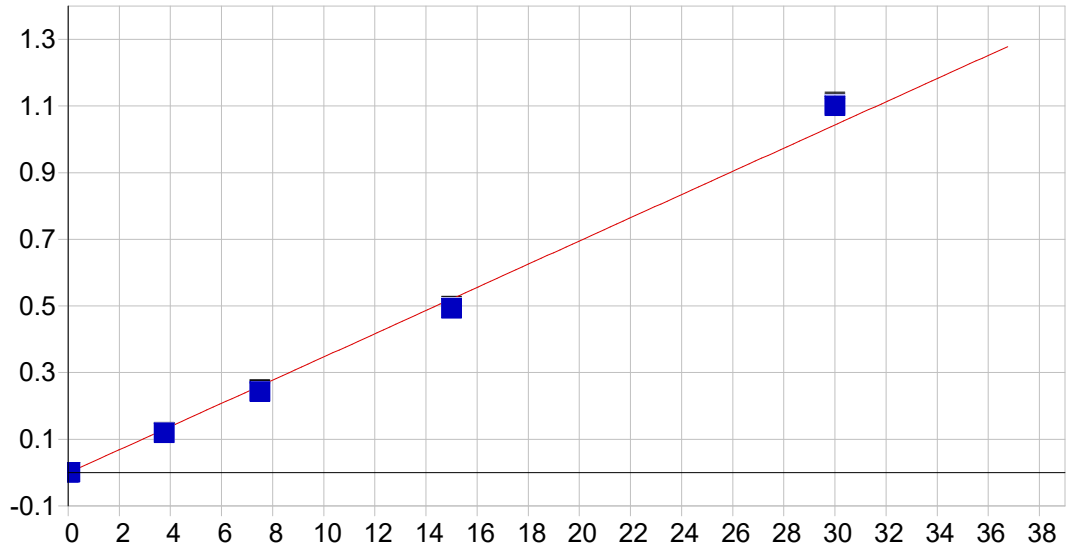
V 292.402 {115}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000210	Re-Slope:	1.000000
A1 (Gain):	0.100527	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999791	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.009268		
Predicted MQL:	0.030895		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00021	.000	1
S1	.05000	.06274	.013	25.5	.00608	.001	1
S2	.62500	.62384	-.001	-.185	.05999	.001	1
S3	1.2500	1.2505	.000	.036	.12046	.001	1
S4	2.5000	2.4716	-.028	-1.14	.23818	.004	1
S5	5.0000	5.0159	.016	.318	.48388	.000	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



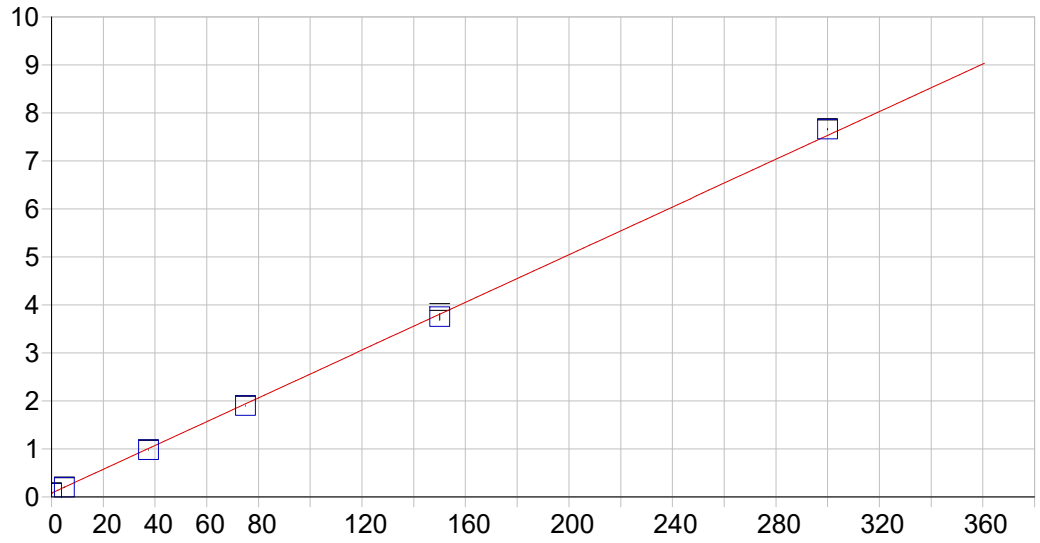
Zn 213.856 {158}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001112	Re-Slope:	1.000000
A1 (Gain):	0.034810	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998287	Status:	OK.
Std Error of Est:	0.000146		
Predicted MDL:	0.012124		
Predicted MQL:	0.040414		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	-.00111	.000	1
S1	.06000	.04210	-.018	-29.8	.00036	.001	1
S2	3.7500	3.4468	-.303	-8.08	.11951	.001	1
S3	7.5000	7.0070	-.493	-6.57	.24408	.004	1
S4	15.000	14.184	-.816	-5.44	.49517	.004	1
S5	30.000	31.630	1.63	5.43	1.1050	.007	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



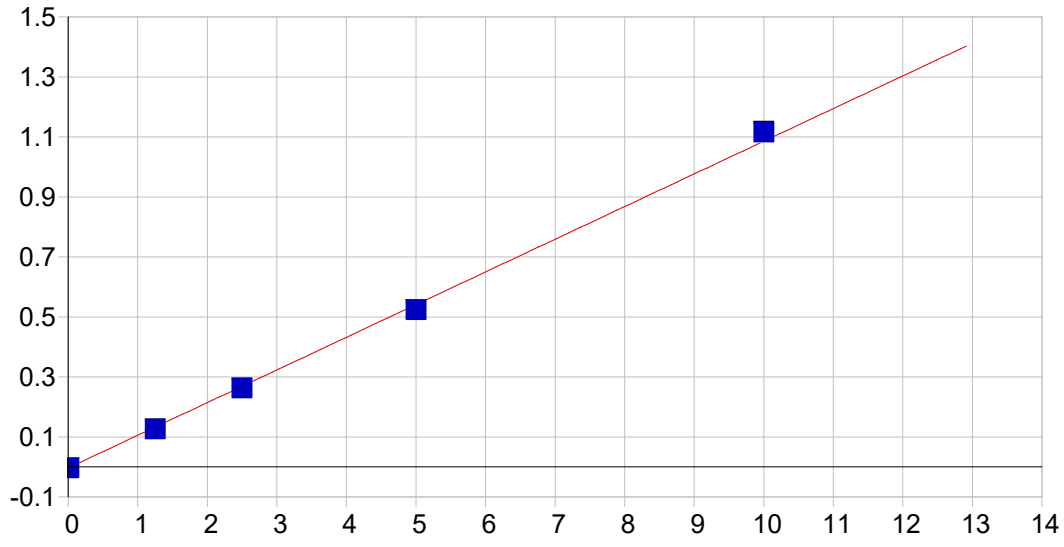
K 769.896 { 44}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.077346	Re-Slope:	1.000000
A1 (Gain):	0.024844	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999813	Status:	OK.
Std Error of Est:	0.000991		
Predicted MDL:	0.162277		
Predicted MQL:	0.540923		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00038	.000	.000	.07736	.006	1
S1	5.0000	4.8971	-.103	-2.06	.19901	.006	1
S2	37.500	36.211	-1.29	-3.44	.97697	.003	1
S3	75.000	73.238	-1.76	-2.35	1.8969	.006	1
S4	150.00	147.85	-2.15	-1.43	3.7506	.069	1
S5	300.00	305.30	5.30	1.77	7.6624	.013	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

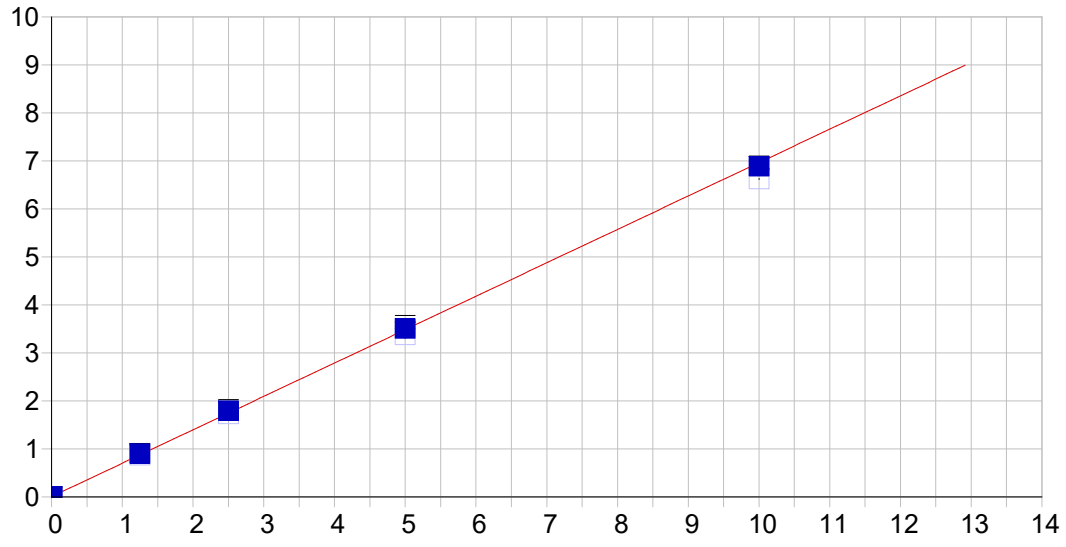


P 177.495 {490}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003606	Re-Slope:	1.000000
A1 (Gain):	0.108914	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999540	Status:	OK.
Std Error of Est:	0.000055		
Predicted MDL:	0.002310		
Predicted MQL:	0.007699		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00361	.000	1
S1	.01000	.00967	-.000	-3.33	-.00255	.000	1
S2	1.2500	1.1873	-.063	-5.01	.12551	.000	1
S3	2.5000	2.4420	-.058	-2.32	.26197	.001	1
S4	5.0000	4.8424	-.158	-3.15	.52301	.001	1
S5	10.000	10.279	.279	2.79	1.1143	.004	1



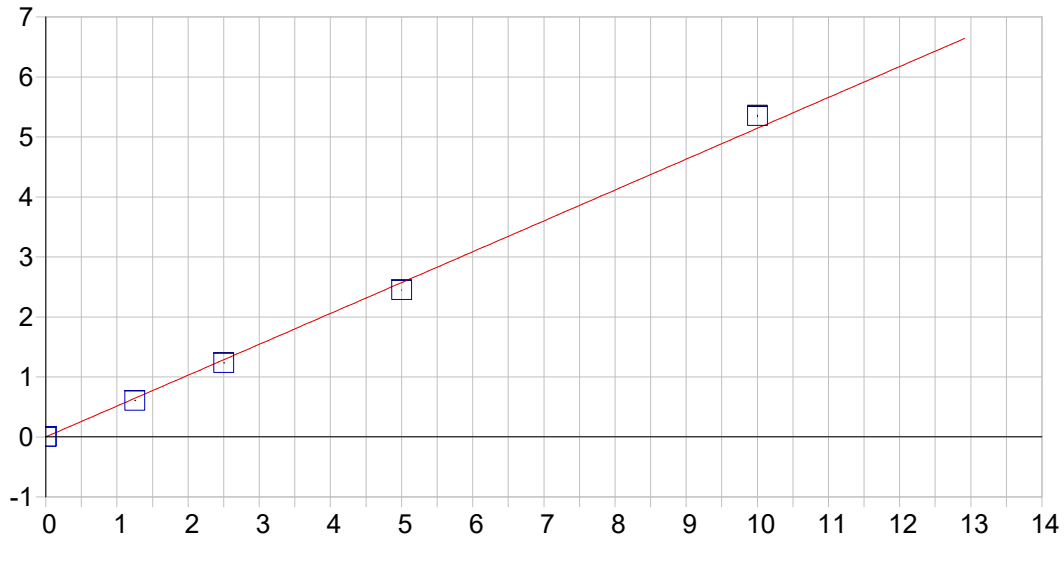
B 249.678 {135}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006362	Re-Slope:	1.000000
A1 (Gain):	0.695827	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999482	Status:	OK.
Std Error of Est:	0.000361		
Predicted MDL:	0.002653		
Predicted MQL:	0.008845		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00637	.002	1
S1	.01000	-.00184	-.012	-118.	.00504	.002	1
S2	1.2500	1.2828	.033	2.63	.86591	.007	1
S3	2.5000	2.5651	.065	2.60	1.7251	.026	1
S4	5.0000	5.0263	.026	.527	3.3715	.068	1
S5	10.000	9.8880	-.112	-1.12	6.6221	.008	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



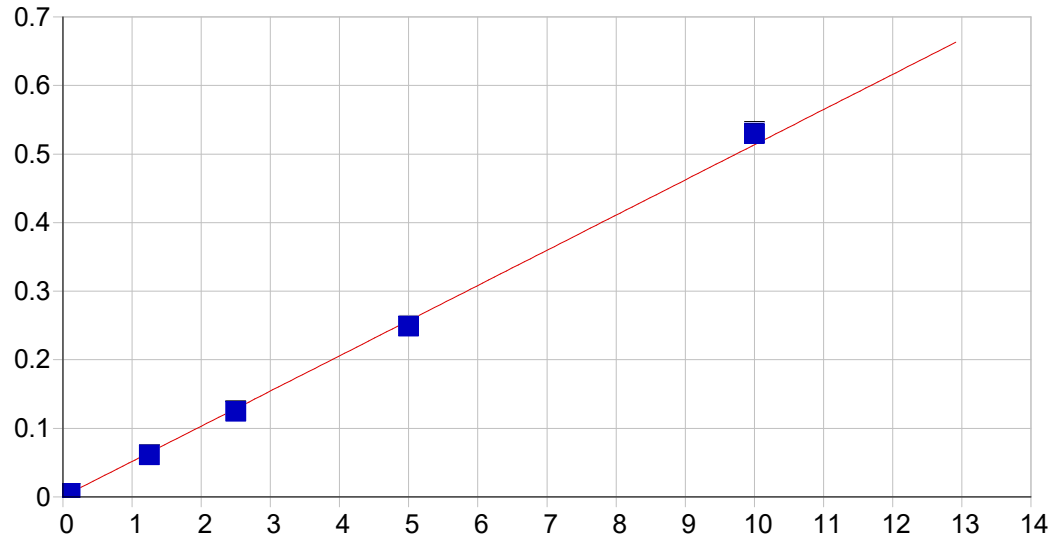
Mo 202.030 {467}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000060	Re-Slope:	1.000000
A1 (Gain):	0.514327	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999031	Status:	OK.
Std Error of Est:	0.000380		
Predicted MDL:	0.000669		
Predicted MQL:	0.002230		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00006	.000	1
S1	.01000	.01089	.001	8.95	.00566	.000	1
S2	1.2500	1.1787	-.071	-5.71	.60628	.000	1
S3	2.5000	2.4008	-.099	-3.97	1.2349	.002	1
S4	5.0000	4.7599	-.240	-4.80	2.4482	.002	1
S5	10.000	10.410	.410	4.10	5.3540	.011	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



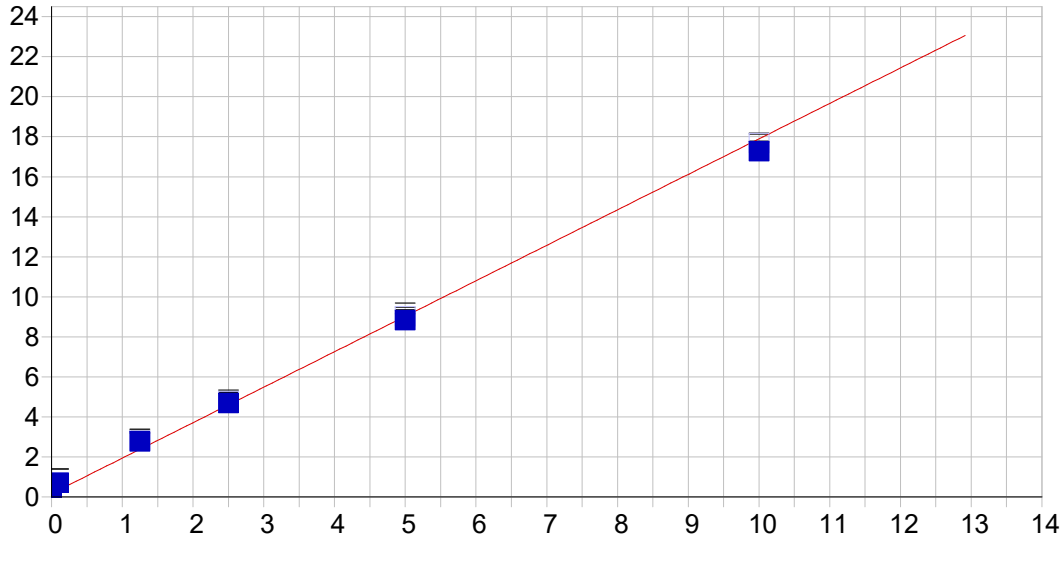
S 182.034 {485}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000493	Re-Slope:	1.000000
A1 (Gain):	0.051305	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999414	Status:	OK.
Std Error of Est:	0.000094		
Predicted MDL:	0.005236		
Predicted MQL:	0.017452		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00049	.000	1
S1	.10000	.09031	-.010	-9.69	.00513	.000	1
S2	1.2500	1.1800	-.070	-5.60	.06124	.000	1
S3	2.5000	2.4215	-.078	-3.14	.12514	.000	1
S4	5.0000	4.8424	-.158	-3.15	.24976	.000	1
S5	10.000	10.316	.316	3.16	.53139	.001	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



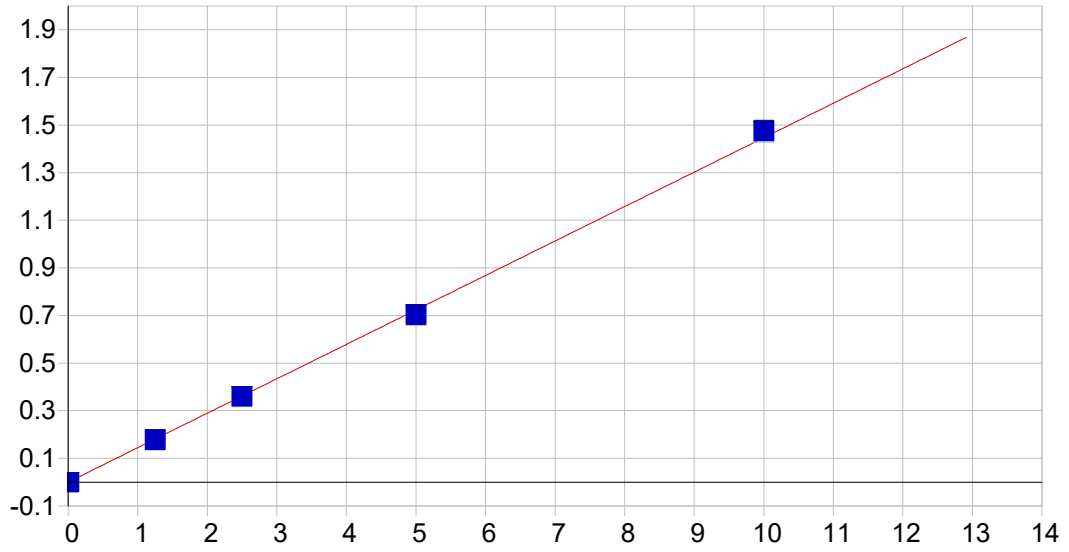
Si 251.611 {134}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.164857	Re-Slope:	1.000000
A1 (Gain):	1.772742	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.988066	Status:	OK.
Std Error of Est:	0.015018		
Predicted MDL:	0.000946		
Predicted MQL:	0.003154		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00022	-.000	.000	.16447	.003	1
S1	.10000	.30592	.206	206.	.70968	.194	1
S2	1.2500	1.4690	.219	17.5	2.8193	.079	1
S3	2.5000	2.5471	.047	1.88	4.7808	.064	1
S4	5.0000	4.8835	-.117	-2.33	9.0232	.167	1
S5	10.000	9.6462	-.354	-3.54	17.668	.027	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



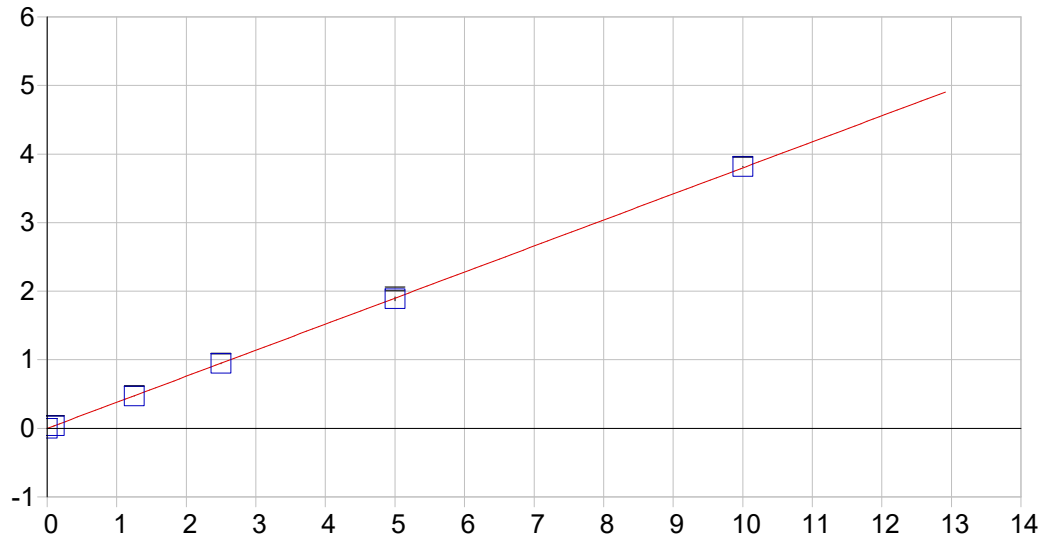
Sn 189.989 {478}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000003	Re-Slope:	1.000000
A1 (Gain):	0.144693	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999769	Status:	OK.
Std Error of Est:	0.000043		
Predicted MDL:	0.001676		
Predicted MQL:	0.005585		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00000	.000	1
S1	.00700	.00724	.000	3.47	.00101	.000	1
S2	1.2500	1.2245	-.025	-2.04	.17628	.001	1
S3	2.5000	2.4849	-.015	-.603	.35774	.000	1
S4	5.0000	4.8517	-.148	-2.97	.69839	.002	1
S5	10.000	10.189	.189	1.89	1.4670	.004	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



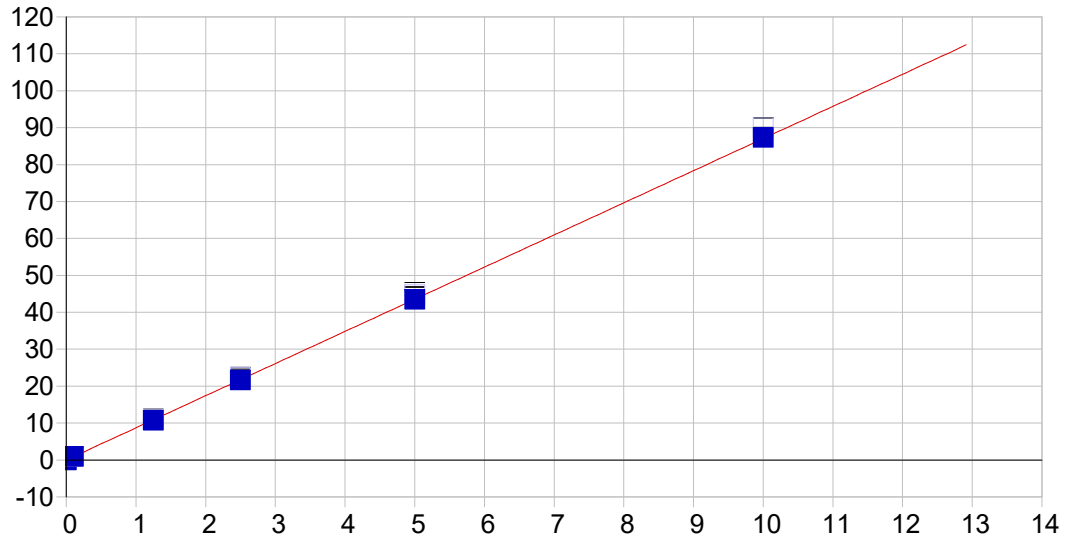
Ti 336.121 {100}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000042	Re-Slope:	1.000000
A1 (Gain):	0.379794	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999989	Status:	OK.
Std Error of Est:	0.000094		
Predicted MDL:	0.003669		
Predicted MQL:	0.012231		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00004	.002	1
S1	.10000	.09999	-.000	-.014	.03793	.001	1
S2	1.2500	1.2434	-.007	-.525	.47221	.002	1
S3	2.5000	2.4877	-.012	-.491	.94479	.005	1
S4	5.0000	4.9754	-.025	-.493	1.8896	.027	1
S5	10.000	10.043	.043	.435	3.8144	.005	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



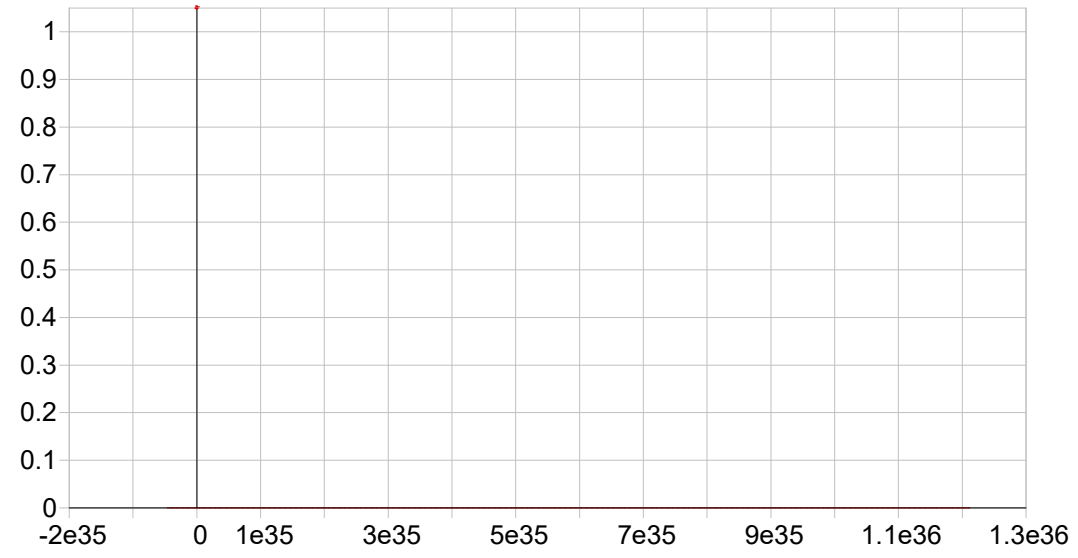
Sr 407.771 { 83}

Date of Fit:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003722	Re-Slope:	1.000000
A1 (Gain):	8.705836	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.002466		
Predicted MDL:	0.000269		
Predicted MQL:	0.000897		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00374	.001	1
S1	.10000	.10403	.004	4.03	.90284	.007	1
S2	1.2500	1.2331	-.017	-1.35	11.058	.041	1
S3	2.5000	2.4871	-.013	-.515	22.302	.084	1
S4	5.0000	4.9982	-.002	-.036	44.815	.548	1
S5	10.000	10.028	.028	.277	89.908	.078	1

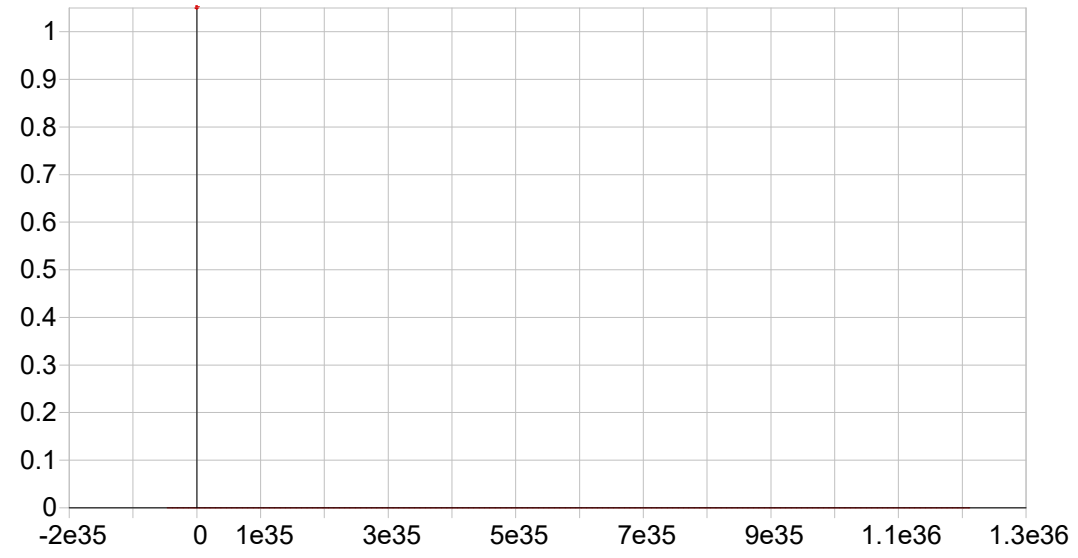
Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



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



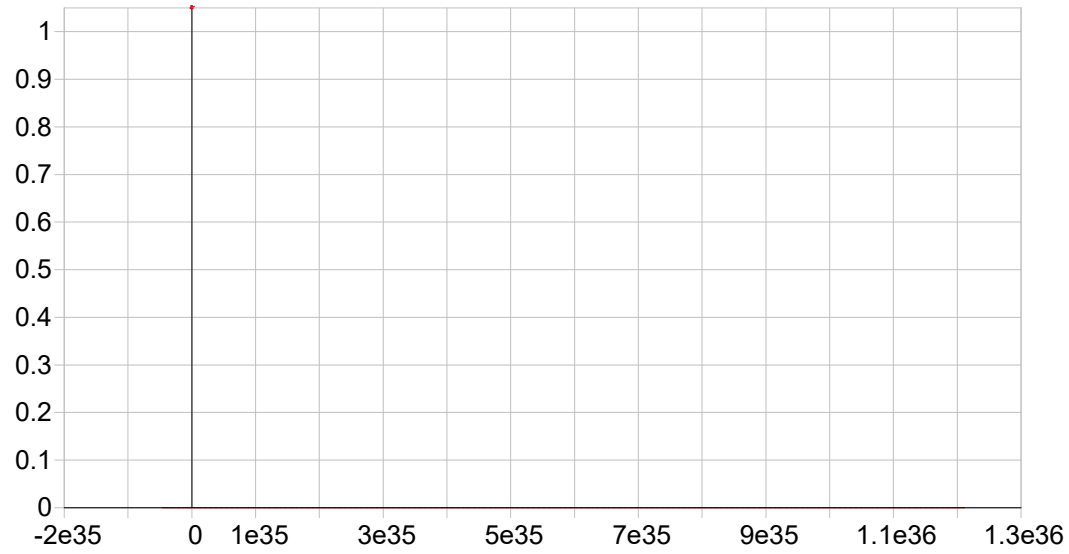
Y 360.073 { 94}*

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:12/27/2024 4:23:37 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

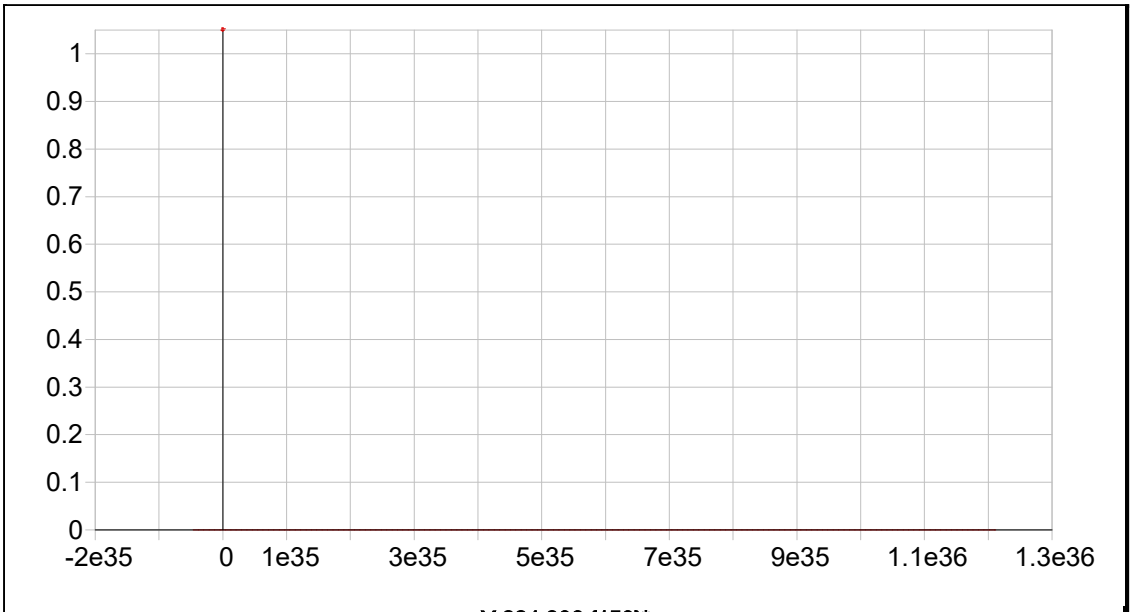


Y 371.030 { 91}*

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

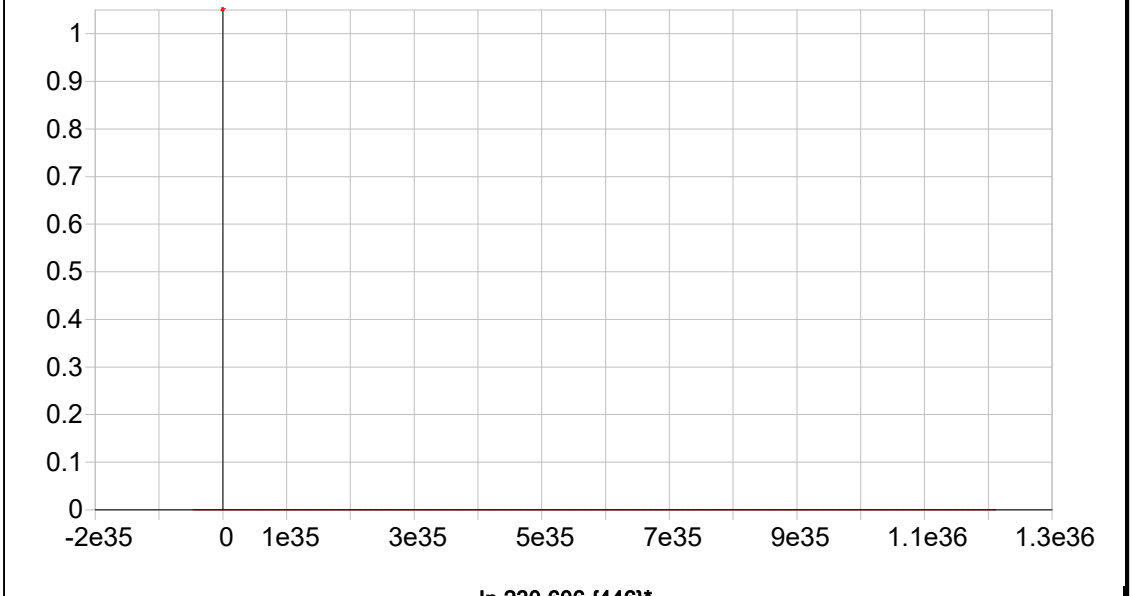
Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5



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



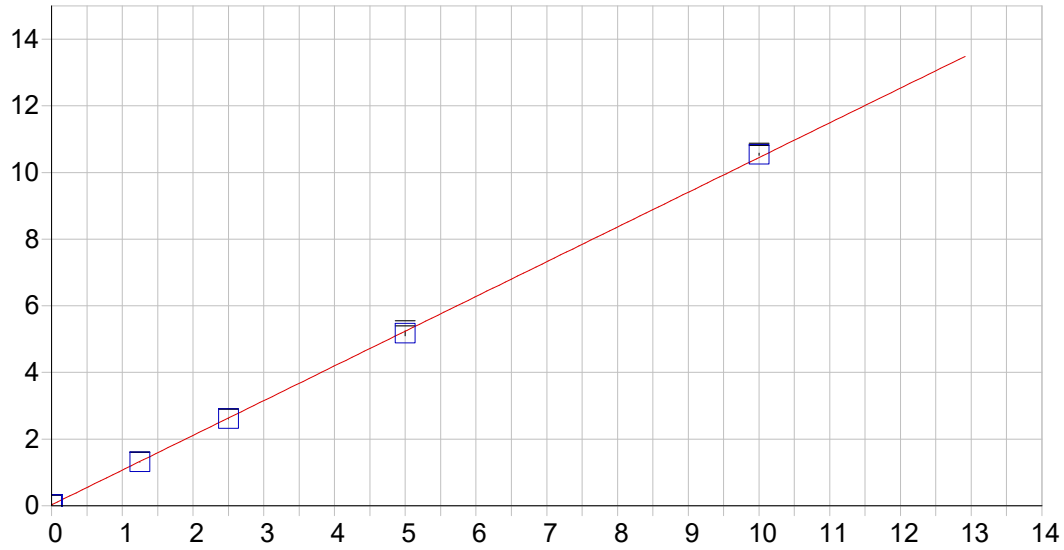
In 230.606 {446}*

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:kareem
On:12/27/2024 4:23:37 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:	12/23/2024 13:53:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.027254	Re-Slope:	1.000000
A1 (Gain):	1.042196	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000229		
Predicted MDL:	0.004384		
Predicted MQL:	0.014613		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.02725	.004	1
S5	10.000	10.094	.094	.942	10.547	.033	1
S4	5.0000	4.9437	-.056	-1.13	5.1796	.078	1
S3	2.5000	2.4767	-.023	-.933	2.6084	.006	1
S2	1.2500	1.2337	-.016	-1.31	1.3130	.004	1
S1	.01500	.01673	.002	11.5	.04469	.003	1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/23/2024 13:14:46 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	.70768	-.00034	.00014	-.00025	.00016	-.00519	.05997	.00163
Stddev	.19001	.00029	.00063	.00019	.00032	.00177	.01352	.00112
%RSD	26.850	85.141	461.10	75.935	206.33	34.166	22.540	68.875
#1	.51993	-.00006	.00022	-.00026	-.00005	-.00562	.07097	.00166
#2	.89988	-.00032	.00071	-.00044	-.00001	-.00670	.06407	.00273
#3	.70324	-.00064	-.00053	-.00006	.00053	-.00324	.04488	.00049

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	.00064	.00802	.00023	-.00036	.00147	-.00016	.00023	-.00152
Stddev	.00024	.00084	.00028	.00028	.00189	.00079	.00028	.00026
%RSD	38.236	10.441	123.12	76.052	128.86	493.88	123.53	17.300
#1	.00090	.00830	.00023	-.00005	.00210	-.00031	.00051	-.00131
#2	.00041	.00868	.00052	-.00058	.00296	.00070	-.00004	-.00181
#3	.00060	.00708	-.00005	-.00046	-.00066	-.00086	.00020	-.00143

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	-.00126	.00072	.01411	-.00021	-.00111	.07736	-.00361	.00637
Stddev	.00050	.00020	.00454	.00007	.00006	.00617	.00015	.00178
%RSD	39.834	27.169	32.194	35.390	5.0425	7.9755	4.0572	27.994
#1	-.00154	.00077	.00963	-.00030	-.00106	.07547	-.00344	.00445
#2	-.00155	.00050	.01871	-.00016	-.00117	.08425	-.00372	.00798
#3	-.00068	.00088	.01398	-.00018	-.00110	.07235	-.00366	.00667

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	.00006	.00049	.16447	.00000	-.00004	-.00374	.02725
Stddev	.00037	.00023	.00263	.00007	.00161	.00108	.00374
%RSD	615.56	46.421	1.6015	2062.3	3848.8	28.978	13.718
#1	.00018	.00036	.16470	.00003	.00039	-.00392	.02999
#2	-.00035	.00036	.16698	.00005	-.00183	-.00473	.02877
#3	.00035	.00076	.16172	-.00007	.00132	-.00258	.02299

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S0 Acquired: 12/23/2024 13:14:46 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1973.1	25641.	2057.2	1695.9	1769.4
Stddev	1.7	420.	40.0	24.4	3.3
%RSD	.08470	1.6362	1.9451	1.4406	.18520
#1	1975.0	26075.	2073.7	1722.2	1765.6
#2	1971.9	25238.	2011.6	1673.9	1770.9
#3	1972.4	25610.	2086.4	1691.6	1771.5

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/23/2024 13:18:52 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1.5820	.00181	.00307	.00221	.00761	.02144	.92263	.05311
Stddev	.2244	.00010	.00075	.00040	.00007	.00265	.00446	.00047
%RSD	14.186	5.7191	24.336	17.979	.89782	12.346	.48377	.88778
#1	1.7598	.00187	.00292	.00242	.00767	.01903	.92440	.05341
#2	1.3298	.00186	.00241	.00175	.00754	.02102	.92593	.05257
#3	1.6564	.00169	.00388	.00247	.00763	.02427	.91755	.05336

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	.02165	.29592	.00246	.05750	.00700	.00234	.00797	.04981
Stddev	.00054	.00136	.00020	.00103	.00109	.00031	.00021	.00107
%RSD	2.5035	.46022	8.0777	1.7839	15.619	13.229	2.6040	2.1558
#1	.02150	.29526	.00248	.05837	.00814	.00206	.00796	.04947
#2	.02226	.29500	.00226	.05637	.00689	.00267	.00776	.04895
#3	.02120	.29748	.00265	.05775	.00596	.00229	.00818	.05102

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	.03733	.00320	.04596	.00608	.00036	.19901	-.00255	.00504
Stddev	.00019	.00026	.00557	.00102	.00052	.00569	.00008	.00183
%RSD	.51293	8.1318	12.125	16.756	144.49	2.8571	3.3172	36.217
#1	.03746	.00319	.05238	.00720	.00096	.20551	-.00261	.00655
#2	.03711	.00295	.04250	.00584	.00004	.19658	-.00245	.00301
#3	.03742	.00347	.04298	.00521	.00008	.19494	-.00258	.00557

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	.00566	.00513	.70968	.00101	.03793	.90284	.04469
Stddev	.00021	.00028	.19423	.00024	.00099	.00737	.00271
%RSD	3.7365	5.3727	27.368	24.063	2.6216	.81599	6.0705
#1	.00560	.00504	.60388	.00128	.03685	.91134	.04759
#2	.00549	.00490	.59133	.00094	.03815	.89870	.04221
#3	.00590	.00543	.93384	.00081	.03880	.89847	.04427

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S1 Acquired: 12/23/2024 13:18:52 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1994.3	25796.	2073.0	1701.0	1804.2
Stddev	2.3	141.	21.0	7.1	2.0
%RSD	.11614	.54656	1.0121	.41528	.11158
#1	1995.1	25948.	2048.8	1708.7	1804.7
#2	1991.7	25670.	2084.1	1699.3	1802.0
#3	1996.2	25769.	2086.1	1694.9	1805.9

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/23/2024 13:23:00 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	158.99	.10164	2.1475	.09002	.15981	4.5435	10.636	1.2565
Stddev	.37	.00032	.0028	.00028	.00055	.0064	.006	.0086
%RSD	.23046	.31539	.13124	.31178	.34300	.14045	.05518	.68764
#1	159.39	.10128	2.1460	.09034	.15920	4.5442	10.630	1.2579
#2	158.69	.10180	2.1456	.08981	.15996	4.5495	10.641	1.2644
#3	158.87	.10186	2.1507	.08992	.16027	4.5368	10.637	1.2473

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	2.6491	3.6213	.93598	.71475	.72761	.80125	1.7676	.61839
Stddev	.0060	.0103	.00165	.00127	.00378	.00255	.0074	.00058
%RSD	.22472	.28298	.17587	.17787	.51977	.31801	.42008	.09348
#1	2.6492	3.6234	.93787	.71414	.72559	.80337	1.7630	.61772
#2	2.6431	3.6304	.93488	.71389	.73198	.80196	1.7762	.61871
#3	2.6550	3.6102	.93518	.71621	.72528	.79842	1.7638	.61874

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	.58379	.07718	.24801	.05999	.11951	.97697	.12551	.86591
Stddev	.00038	.00010	.00538	.00099	.00132	.00265	.00040	.00654
%RSD	.06489	.13203	2.1677	1.6422	1.1022	.27128	.32171	.75540
#1	.58423	.07715	.24468	.05951	.11938	.97990	.12510	.86834
#2	.58359	.07709	.24514	.06112	.11826	.97628	.12552	.87090
#3	.58356	.07729	.25421	.05933	.12089	.97473	.12591	.85851

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	.60628	.06124	2.8193	.17628	.47221	11.058	1.3130
Stddev	.00011	.00028	.0787	.00067	.00222	.041	.0042
%RSD	.01876	.45521	2.7902	.38221	.47057	.36902	.32260
#1	.60640	.06154	2.8989	.17665	.47041	11.026	1.3090
#2	.60625	.06100	2.8175	.17550	.47469	11.104	1.3175
#3	.60618	.06118	2.7416	.17669	.47153	11.043	1.3125

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/23/2024 13:23:00 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1942.5	25366.	2090.0	1658.5	1702.8
Stddev	.6	94.	8.9	15.3	3.3
%RSD	.03338	.37229	.42678	.92523	.19305
#1	1943.2	25320.	2083.9	1654.1	1704.0
#2	1941.9	25474.	2085.8	1675.5	1705.4
#3	1942.3	25302.	2100.2	1645.8	1699.1

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/23/2024 13:26:51 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	315.81	.20508	4.3345	.18300	.32512	9.1077	21.304	2.4911
Stddev	.86	.00088	.0013	.00053	.00089	.0345	.056	.0315
%RSD	.27376	.42785	.03034	.29159	.27326	.37839	.26325	1.2643
#1	315.23	.20471	4.3330	.18273	.32492	9.1275	21.345	2.5272
#2	315.40	.20445	4.3348	.18265	.32434	9.0679	21.240	2.4693
#3	316.81	.20609	4.3356	.18361	.32609	9.1278	21.326	2.4768

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	5.3317	7.1963	1.8499	1.4316	1.4386	1.5977	3.5204	1.2339
Stddev	.0104	.0349	.0019	.0014	.0044	.0062	.0166	.0055
%RSD	.19541	.48478	.10272	.09480	.30774	.38553	.47243	.44765
#1	5.3229	7.2193	1.8509	1.4321	1.4435	1.5997	3.5281	1.2368
#2	5.3289	7.1562	1.8512	1.4301	1.4351	1.5909	3.5013	1.2276
#3	5.3432	7.2136	1.8478	1.4327	1.4371	1.6027	3.5317	1.2374

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	1.1816	.15524	.48216	.12046	.24408	1.8969	.26197	1.7251
Stddev	.0013	.00061	.00355	.00127	.00407	.0060	.00065	.0261
%RSD	.11356	.39321	.73629	1.0509	1.6686	.31505	.24916	1.5135
#1	1.1801	.15491	.48506	.12178	.23946	1.8999	.26121	1.7552
#2	1.1820	.15595	.48322	.12033	.24715	1.8900	.26231	1.7099
#3	1.1827	.15487	.47820	.11926	.24562	1.9008	.26238	1.7101

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	1.2349	.12514	4.7808	.35774	.94479	22.302	2.6084
Stddev	.0022	.00018	.0638	.00041	.00514	.084	.0062
%RSD	.17641	.14180	1.3340	.11411	.54430	.37712	.23831
#1	1.2332	.12522	4.8544	.35786	.95057	22.390	2.6122
#2	1.2340	.12494	4.7431	.35729	.94305	22.222	2.6013
#3	1.2373	.12526	4.7449	.35808	.94074	22.293	2.6118

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/23/2024 13:26:51 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1892.2	25131.	2092.8	1617.5	1650.8
Stddev	1.4	133.	15.7	10.9	1.0
%RSD	.07322	.53051	.74986	.67645	.05805
#1	1893.8	25257.	2074.7	1630.0	1650.1
#2	1891.1	24991.	2101.3	1610.1	1650.5
#3	1891.9	25146.	2102.4	1612.2	1651.9

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/23/2024 13:30:38 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	612.29	.39682	8.4889	.35987	.64746	18.214	42.596	4.8787
Stddev	.38	.00066	.0103	.00104	.00151	.292	.742	.0992
%RSD	.06242	.16642	.12111	.28870	.23301	1.6027	1.7413	2.0330
#1	612.51	.39738	8.4947	.36104	.64597	18.417	43.137	4.9660
#2	611.85	.39698	8.4771	.35904	.64741	18.345	42.901	4.8993
#3	612.52	.39609	8.4950	.35955	.64899	17.880	41.751	4.7709

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	10.316	14.252	3.5511	2.7573	2.8593	3.1543	6.9331	2.4455
Stddev	.011	.216	.0051	.0055	.0360	.0544	.1298	.0475
%RSD	.10672	1.5159	.14407	.19861	1.2607	1.7237	1.8714	1.9425
#1	10.327	14.403	3.5483	2.7636	2.8801	3.1929	7.0322	2.4782
#2	10.305	14.349	3.5480	2.7534	2.8801	3.1779	6.9808	2.4673
#3	10.316	14.005	3.5570	2.7549	2.8176	3.0921	6.7862	2.3910

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	2.2960	.30445	.95112	.23818	.49517	3.7506	.52301	3.3715
Stddev	.0027	.00130	.01336	.00372	.00399	.0695	.00056	.0684
%RSD	.11915	.42771	1.4044	1.5621	.80573	1.8522	.10730	2.0284
#1	2.2990	.30546	.95979	.24022	.49402	3.8009	.52365	3.4209
#2	2.2936	.30298	.95783	.24043	.49188	3.7796	.52273	3.4002
#3	2.2956	.30492	.93574	.23389	.49961	3.6713	.52264	3.2935

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	2.4482	.24976	9.0232	.69839	1.8896	44.815	5.1796
Stddev	.0016	.00029	.1674	.00177	.0274	.548	.0777
%RSD	.06614	.11809	1.8549	.25346	1.4480	1.2234	1.5000
#1	2.4478	.25007	9.1503	.69980	1.9079	45.173	5.2234
#2	2.4468	.24948	9.0856	.69640	1.9026	45.089	5.2255
#3	2.4500	.24971	8.8336	.69897	1.8581	44.184	5.0899

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/23/2024 13:30:38 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1840.7	25059.	2069.3	1564.5	1617.1
Stddev	1.1	19.	41.5	1.4	.4
%RSD	.06219	.07559	2.0037	.09139	.02169
#1	1842.0	25080.	2037.6	1566.1	1616.9
#2	1839.8	25044.	2054.2	1563.6	1617.5
#3	1840.2	25052.	2116.2	1563.8	1617.0

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/23/2024 13:34:24 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1191.1	.81192	17.865	.76128	1.4187	37.356	86.627	9.6829
Stddev	2.7	.00198	.055	.00176	.0027	.034	.094	.0384
%RSD	.22715	.24340	.30602	.23065	.19361	.09097	.10811	.39675
#1	1189.7	.81146	17.832	.76107	1.4183	37.352	86.709	9.6835
#2	1194.2	.81021	17.835	.75964	1.4161	37.325	86.525	9.7210
#3	1189.4	.81408	17.928	.76313	1.4216	37.392	86.648	9.6441

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	21.326	28.453	7.2381	5.7137	5.7760	6.2779	13.812	4.9340
Stddev	.065	.037	.0179	.0220	.0116	.0117	.007	.0143
%RSD	.30403	.13090	.24678	.38437	.20035	.18647	.04965	.28965
#1	21.298	28.447	7.2357	5.7008	5.7646	6.2666	13.809	4.9261
#2	21.279	28.418	7.2216	5.7012	5.7757	6.2771	13.807	4.9255
#3	21.400	28.492	7.2571	5.7390	5.7877	6.2900	13.820	4.9505

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	4.7687	.63740	1.9394	.48388	1.1050	7.6624	1.1143	6.6221
Stddev	.0094	.00084	.0052	.00044	.0068	.0128	.0037	.0084
%RSD	.19647	.13236	.26806	.09192	.61653	.16680	.33344	.12630
#1	4.7638	.63758	1.9428	.48343	1.1024	7.6560	1.1142	6.6151
#2	4.7627	.63648	1.9334	.48432	1.0999	7.6540	1.1106	6.6197
#3	4.7795	.63814	1.9420	.48388	1.1128	7.6771	1.1180	6.6313

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	5.3540	.53139	17.668	1.4670	3.8144	89.908	10.547
Stddev	.0106	.00141	.027	.0043	.0054	.078	.033
%RSD	.19809	.26491	.15534	.29500	.14160	.08658	.31474
#1	5.3570	.53101	17.681	1.4665	3.8133	89.880	10.561
#2	5.3423	.53022	17.685	1.4629	3.8097	89.847	10.510
#3	5.3629	.53295	17.636	1.4715	3.8203	89.996	10.571

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/23/2024 13:34:24 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	1634.7	23577.	2036.8	1373.0	1480.6
Stddev	7.0	32.	6.9	5.4	6.2
%RSD	.42581	.13406	.33647	.39292	.42003
#1	1631.9	23549.	2035.5	1369.6	1480.6
#2	1642.6	23611.	2030.6	1379.2	1486.8
#3	1629.5	23570.	2044.2	1370.2	1474.3

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: S6 Acquired: 12/23/2024 13:38:17 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) 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	96.525	45.574	16.243	7.8074	5.1815
Stddev	.559	.315	.095	.0410	.0403
%RSD	.57887	.69185	.58431	.52533	.77686
#1	96.948	45.768	16.294	7.8359	5.2229
#2	95.892	45.210	16.134	7.7604	5.1425
#3	96.736	45.744	16.302	7.8259	5.1791

Int. Std.	Y_3710
Units	Cts/S
Avg	1999.3
Stddev	14.5
%RSD	.72647
#1	1983.3
#2	2011.7
#3	2003.0

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICV001 Acquired: 12/23/2024 13:56:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.097705	1.009504	.9904277	.9805424	.9066308	2.443882
Stddev	.002451	.004636	.0032467	.0029034	.0033667	.025575
%RSD	.2233201	.4592311	.3278049	.2960991	.3713419	1.046477
#1	1.099905	1.014729	.9927212	.9798775	.9029474	2.435952
#2	1.098146	1.007902	.9918492	.9780292	.9095491	2.423212
#3	1.095063	1.005881	.9867127	.9837206	.9073958	2.472483

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5206880	.5265912	.5121546	10.21306	.5547057	.5097208
Stddev	.0039120	.0046471	.0002879	.05874	.0013900	.0009832
%RSD	.7513106	.8824801	.0562055	.5751161	.2505833	.1928990
#1	.5192724	.5261751	.5119337	10.17669	.5554431	.5095012
#2	.5176810	.5221661	.5124802	10.18168	.5555716	.5107953
#3	.5251108	.5314323	.5120500	10.28082	.5531023	.5088660

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5028334	10.58304	.5318669	6.327666	.5215067	.2467561
Stddev	.0142278	.03737	.0072838	.218736	.0004380	.0014089
%RSD	2.829521	.3531366	1.369473	3.456821	.0839888	.5709741
#1	.5011987	10.54076	.5237633	6.147006	.5215685	.2454262
#2	.4894936	10.59672	.5339685	6.265134	.5219106	.2482326
#3	.5178079	10.61165	.5378688	6.570858	.5210411	.2466094

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.650437	.5109738	.9069055	8.866641	F .0027338	F .0016169
Stddev	.401675	.0016811	.0077157	.091244	.0008418	.0015939
%RSD	4.162245	.3290068	.8507769	1.029065	30.79337	98.58114
#1	10.08316	.5113681	.9151831	8.782866	.0034030	.0024636
#2	9.57866	.5124228	.9056205	8.963861	.0017886	.0026087
#3	9.28949	.5091306	.8999129	8.853196	.0030097	-.000222

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICV001 Acquired: 12/23/2024 13:56:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV001 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0009926	F .0055932	F -.012064	F .0014148	F .0003059	F -.009186
Stddev	.0006746	.0021417	.000981	.0020685	.0012174	.000113
%RSD	67.95988	38.29081	8.130862	146.2025	397.9983	1.227982
#1	.0015541	.0031306	-.011971	.0022120	.0016757	-.009073
#2	.0011794	.0070209	-.013088	.0029662	-.000105	-.009298
#3	.0002443	.0066280	-.011133	-.000934	-.000653	-.009186

Elem	Li6707
Units	ppm
Avg	F .0037256
Stddev	.0059965
%RSD	160.9541
#1	.0058862
#2	.0083423
#3	-.003052

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2029.388	26343.11	2140.188	1740.604	1822.592
Stddev	1.217	67.48	23.552	10.265	1.560
%RSD	.0599480	.2561403	1.100465	.5897588	.0856190
#1	2029.951	26418.49	2140.669	1740.891	1820.855
#2	2030.222	26288.36	2163.496	1750.722	1823.047
#3	2027.992	26322.48	2116.399	1730.198	1823.875

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICB001 Acquired: 12/23/2024 14:00:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003310	-.001601	-.001366	.0048692	.0006039	.0370921	-.001654
Stddev	.005994	.000820	.001181	.0013263	.0021066	.0263886	.001975
%RSD	181.0692	51.24100	86.50156	27.23961	348.8074	71.14333	119.4467
#1	-.009343	-.002537	-.000033	.0047871	-.001803	.0488166	.000296
#2	.002643	-.001258	-.002285	.0035858	.001501	.0555868	-.001604
#3	-.003231	-.001008	-.001779	.0062346	.002113	.0068730	-.003654

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000002	-.000029	-.016150	-.000513	-.000190	-.003490	-.003411
Stddev	.000016	.000123	.037108	.000715	.000167	.010339	.058460
%RSD	686.6488	432.6773	229.7738	139.5119	87.68182	296.2715	1713.859
#1	-.000017	-.000077	-.019499	-.000879	-.000318	-.014298	-.068760
#2	.000015	.000112	-.051469	-.000971	-.000250	.006304	.014609
#3	-.000005	-.000120	.022519	.000312	-.000002	-.002475	.043917

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011009	-.001647	.0008901	-.000408	-.231366	-.004941	-.004143
Stddev	.0007370	.103436	.0003304	.002012	.184844	.003898	.006325
%RSD	66.94802	6279.909	37.11793	493.5170	79.89251	78.89524	152.6425
#1	.0004190	-.102843	.0005669	-.002376	-.426916	-.005804	.003110
#2	.0010008	.103892	.0008761	.001646	-.207669	-.000683	-.008504
#3	.0018828	-.005990	.0012272	-.000493	-.059513	-.008335	-.007036

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.490042	-.002035	-.000443	.0006349	-.006083	-.017388	.0000172
Stddev	.039956	.001447	.002643	.0003115	.006338	.000991	.0010353
%RSD	8.153624	71.07581	596.7517	49.06358	104.2011	5.699089	6022.351
#1	-.448229	-.001815	-.003235	.0009291	-.008127	-.018300	-.000420
#2	-.494059	-.003579	-.000115	.0003086	-.011147	-.016333	.001199
#3	-.527838	-.000711	.002021	.0006671	.001025	-.017530	-.000727

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICB001 Acquired: 12/23/2024 14:00:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB001 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0007898	.0002543	.0057534
Stddev	.0028597	.0000156	.0010639
%RSD	362.0821	6.129717	18.49102
#1	.0039038	.0002373	.0069385
#2	-.001719	.0002679	.0054412
#3	.000184	.0002576	.0048806

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2021.490	26277.58	2113.547	1737.924	1820.832
Stddev	1.896	91.96	4.502	5.628	2.351
%RSD	.0937862	.3499554	.2130264	.3238464	.1291343
#1	2019.376	26171.50	2109.568	1731.425	1819.942
#2	2022.054	26334.72	2118.434	1741.212	1823.499
#3	2023.040	26326.53	2112.640	1741.134	1819.056

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICSA001 Acquired: 12/23/2024 14:04:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009508	-.010812	.0055747	.0244191	.0238240	236.4366
Stddev	.003015	.004417	.0014368	.0078781	.0011857	.9851
%RSD	31.70506	40.85655	25.77368	32.26220	4.976829	.4166594
#1	-.006624	-.015680	.0051257	.0165621	.0249401	235.4856
#2	-.009262	-.007058	.0044160	.0323182	.0239527	237.4526
#3	-.012638	-.009697	.0071824	.0243770	.0225793	236.3715

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028451	.0020196	.0010455	242.1648	.0521193	.0364007
Stddev	.0026461	.0001208	.0000499	1.2307	.0006230	.0003283
%RSD	93.00402	5.982478	4.769726	.5081931	1.195302	.9018821
#1	.0027269	.0018898	.0010579	241.2717	.0517763	.0362282
#2	.0002602	.0021288	.0010879	243.5686	.0528384	.0361947
#3	.0055484	.0020402	.0009905	241.6541	.0517432	.0367793

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001171	100.7543	.0123397	257.1051	.0038986	.0026556
Stddev	.006184	.1511	.0014035	.8350	.0002715	.0007506
%RSD	528.2150	.1499542	11.37420	.3247538	6.964331	28.26443
#1	-.003578	100.5890	.0139189	256.1442	.0039558	.0028919
#2	.005855	100.8852	.0118654	257.6543	.0036031	.0032595
#3	-.005790	100.7888	.0112348	257.5167	.0041370	.0018153

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-1.84089	.0089735	-.015816	-.855043	-.001025	F -.011812
Stddev	.65846	.0158117	.004204	.131253	.001462	.003901
%RSD	35.76858	176.2040	26.58355	15.35046	142.7257	33.02341
#1	-2.17277	.0171335	-.019343	-.995124	-.002578	-.010715
#2	-1.08253	.0190383	-.011163	-.835106	-.000821	-.008578
#3	-2.26737	-.009251	-.016941	-.734899	.000325	-.016144

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICSA001 Acquired: 12/23/2024 14:04:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA001 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035359	.0200226	-.026184	F .0129833	-.004881	.0015312
Stddev	.0008416	.0010926	.000930	.0009306	.002391	.0006983
%RSD	23.80170	5.456612	3.552547	7.167600	48.97955	45.60576
#1	.0038233	.0188216	-.025751	.0130218	-.002560	.0018082
#2	.0025883	.0209575	-.025550	.0120341	-.004747	.0020484
#3	.0041962	.0202887	-.027252	.0138941	-.007336	.0007369

Elem	Li6707
Units	ppm
Avg	.0084396
Stddev	.0016651
%RSD	19.72960
#1	.0103596
#2	.0073926
#3	.0075665

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1929.079	24812.76	2093.846	1646.319	1647.136
Stddev	1.737	100.46	2.577	7.764	.803
%RSD	.0900649	.4048901	.1230788	.4716181	.0487221
#1	1931.046	24858.16	2093.584	1644.090	1648.062
#2	1927.754	24882.51	2096.545	1654.954	1646.650
#3	1928.437	24697.61	2091.411	1639.913	1646.694

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICSAB001 Acquired: 12/23/2024 14:08:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0982024	.0831045	.0572344	.0693546	.5832036	236.9457
Stddev	.0048223	.0101188	.0023294	.0035492	.0044597	2.2810
%RSD	4.910592	12.17602	4.069987	5.117508	.7646963	.9626512
#1	.0930094	.0823399	.0560167	.0671594	.5791173	238.7269
#2	.0990587	.0733897	.0599203	.0734493	.5879608	237.7354
#3	.1025393	.0935840	.0557662	.0674551	.5825328	234.3749

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5258380	.5251327	1.019382	242.5419	.5961679	.5307926
Stddev	.0049631	.0048217	.003271	2.5055	.0018312	.0020734
%RSD	.9438458	.9181903	.3208646	1.033031	.3071629	.3906261
#1	.5285457	.5283708	1.016827	244.2667	.5969659	.5292143
#2	.5288584	.5274360	1.018252	243.6910	.5974646	.5300226
#3	.5201100	.5195913	1.023068	239.6679	.5940731	.5331408

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4788955	101.3140	.5265784	258.1679	1.016280	.1847340
Stddev	.0042526	1.1393	.0073320	2.6874	.004354	.0008688
%RSD	.8879930	1.124525	1.392392	1.040942	.4284452	.4703018
#1	.4806117	102.0543	.5324628	259.7154	1.014028	.1856135
#2	.4820218	101.8857	.5289078	259.7234	1.013512	.1847120
#3	.4740530	100.0021	.5183647	255.0648	1.021298	.1838763

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.944968	.5172710	.9267439	-1.24301	-.002438	F -.011429
Stddev	.925273	.0113762	.0172517	.22769	.002183	.004662
%RSD	97.91576	2.199266	1.861535	18.31793	89.54633	40.79375
#1	-.387888	.5221363	.9327057	-1.17258	-.004937	-.013747
#2	-.433966	.5042713	.9402239	-1.05886	-.000904	-.006062
#3	-2.01305	.5254055	.9073020	-1.49760	-.001473	-.014479

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: ICSAB001 Acquired: 12/23/2024 14:08:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB001 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042221	.0162405	-.029529	F .0130058	-.006371	.0013206
Stddev	.0015429	.0018697	.000671	.0033935	.001406	.0003761
%RSD	36.54334	11.51262	2.273004	26.09247	22.07108	28.48045
#1	.0024482	.0146393	-.028756	.0166358	-.005125	.0008904
#2	.0052518	.0157868	-.029865	.0124688	-.006092	.0015871
#3	.0049665	.0182952	-.029966	.0099128	-.007895	.0014843

Elem	Li6707
Units	ppm
Avg	.0071303
Stddev	.0013110
%RSD	18.38596
#1	.0080136
#2	.0056240
#3	.0077532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1923.948	24876.11	2110.058	1648.195	1649.141
Stddev	6.458	91.79	12.560	7.017	6.484
%RSD	.3356581	.3690069	.5952391	.4257640	.3931609
#1	1929.337	24923.63	2104.831	1651.352	1655.745
#2	1925.718	24934.41	2100.957	1653.079	1648.893
#3	1916.790	24770.30	2124.388	1640.154	1642.784

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV001 Acquired: 12/23/2024 14:12:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.005187	4.860599	24.94315	5.001554	4.953275	403.6886	10.16410
Stddev	.022926	.006987	.07643	.029779	.003855	4.5583	.10684
%RSD	.4580396	.1437556	.3064262	.5953896	.0778284	1.129150	1.051169
#1	5.031459	4.858332	24.87374	5.000786	4.957560	404.7458	10.20522
#2	4.989231	4.855026	24.93064	4.972166	4.950089	398.6946	10.04280
#3	4.994872	4.868438	25.02506	5.031709	4.952175	407.6253	10.24426

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5155738	2.503588	410.4360	15.79103	2.526658	15.21268	413.3318
Stddev	.0069292	.006451	4.2911	.04763	.007530	.18976	4.6911
%RSD	1.343973	.2576859	1.045510	.3016516	.2980340	1.247365	1.134956
#1	.5137668	2.499709	411.0921	15.84344	2.520650	15.24028	414.4449
#2	.5097272	2.500018	405.8546	15.75037	2.524218	15.01064	408.1843
#3	.5232275	2.511035	414.3614	15.77927	2.535106	15.38713	417.3663

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.06966	408.3939	2.533485	1.305511	404.7655	2.533295	15.08649
Stddev	.15941	4.5774	.004572	.003742	4.2368	.009711	.11288
%RSD	1.057812	1.120819	.1804656	.2866187	1.046718	.3833256	.7481963
#1	15.09623	410.1387	2.532527	1.309499	406.7292	2.542490	15.19944
#2	14.89863	403.2008	2.529468	1.302078	399.9032	2.523140	15.08635
#3	15.21411	411.8423	2.538460	1.304955	407.6641	2.534256	14.97369

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	153.1964	5.043375	4.994342	4.916126	5.035171	4.936523	5.066555
Stddev	1.5133	.010945	.076278	.012741	.010884	.068101	.017358
%RSD	.9877856	.2170197	1.527284	.2591630	.2161681	1.379534	.3425956
#1	153.4537	5.038795	4.982612	4.920150	5.022996	4.919038	5.054688
#2	151.5711	5.035464	4.924609	4.901859	5.038558	4.878869	5.058500
#3	154.5646	5.055866	5.075806	4.926369	5.043960	5.011662	5.086477

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV001 Acquired: 12/23/2024 14:12:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV001 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.055174	4.832406	5.113268
Stddev	.050991	.056893	.057730
%RSD	1.008689	1.177331	1.129021
#1	5.046159	4.825273	5.131326
#2	5.009291	4.779416	5.048668
#3	5.110071	4.892530	5.159810

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1757.337	23869.46	2053.477	1497.352	1533.736
Stddev	6.884	122.32	23.871	8.652	8.212
%RSD	.3917553	.5124659	1.162486	.5778446	.5354069
#1	1763.377	23730.69	2052.914	1489.283	1542.133
#2	1758.793	23916.07	2077.625	1496.284	1533.350
#3	1749.841	23961.63	2029.893	1506.488	1525.724

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB001 Acquired: 12/23/2024 14:16:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB001 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028919	.0012033	.0036605	.0022437	-.000066	.0378423	-.000999
Stddev	.0053961	.0027323	.0023915	.0047833	.002072	.0462896	.001053
%RSD	186.5908	227.0678	65.33412	213.1937	3161.328	122.3222	105.3644
#1	.0029740	-.001499	.0047063	.0057142	-.001379	.0020892	-.001494
#2	.0082466	.003965	.0053509	.0042296	.002323	.0901283	.000210
#3	-.002545	.001144	.0009241	-.003213	-.001141	.0213095	-.001713

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000053	-.000054	.0018350	.0003506	-.000032	.0083635	.0330278
Stddev	.000092	.000051	.0068233	.0002243	.000240	.0097983	.0279130
%RSD	174.7336	93.98517	371.8346	63.97844	746.8645	117.1554	84.51380
#1	-.000076	.000001	.0017088	.0005087	.000216	.0098373	.0335555
#2	-.000131	-.000064	.0087205	.0000939	-.000264	-.002088	.0048546
#3	.000049	-.000099	-.004924	.0004494	-.000048	.017341	.0606732

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015270	.1197950	.0009785	.0008518	-.110412	.0081163	-.004226
Stddev	.0012417	.0279895	.0002351	.0010047	.490852	.0045776	.009262
%RSD	81.31457	23.36450	24.02574	117.9483	444.5638	56.39959	219.1728
#1	.0009140	.1062140	.0012217	.0015575	-.040363	.0109801	-.012809
#2	.0007110	.1519839	.0009612	.0012965	-.632526	.0105320	.005591
#3	.0029560	.1011870	.0007525	-.000298	.341652	.0028369	-.005459

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.497514	-.001293	.0126564	.0006421	-.001531	-.034101	.0016355
Stddev	.106479	.001161	.0002901	.0004300	.004945	.001152	.0013538
%RSD	21.40219	89.79830	2.292122	66.97069	323.0139	3.377829	82.77380
#1	-.401480	-.000179	.0129475	.0001496	.000647	-.033500	.0022749
#2	-.479040	-.001203	.0126544	.0008337	.001951	-.033374	.0025512
#3	-.612020	-.002495	.0123673	.0009430	-.007190	-.035429	.0000805

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB001 Acquired: 12/23/2024 14:16:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB001 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002682	.0003368	.0137388
Stddev	.002457	.0003157	.0049226
%RSD	91.62129	93.72576	35.83009
#1	-.000289	.0003768	.0141281
#2	-.002558	.0006306	.0184552
#3	-.005199	.0000031	.0086330

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2039.177	26411.95	2124.655	1747.132	1835.178
Stddev	6.115	166.23	26.214	6.429	4.564
%RSD	.2998608	.6293683	1.233788	.3680006	.2486739
#1	2036.919	26220.01	2114.761	1739.810	1836.437
#2	2046.100	26508.37	2104.828	1751.857	1838.981
#3	2034.513	26507.48	2154.376	1749.729	1830.117

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-04DLX2 Acquired: 12/23/2024 14:28:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK96 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225509	.0015843	.0967704	.0108569	.0157128	27.98752	.4098541
Stddev	.0020264	.0048151	.0039473	.0046679	.0022530	.09991	.0010734
%RSD	8.985976	303.9283	4.079081	42.99461	14.33855	.3569716	.2619049
#1	.0202405	.0031102	.1002274	.0122511	.0145192	28.06200	.4107968
#2	.0233851	-.003809	.0976146	.0146689	.0183115	27.87399	.4086858
#3	.0240271	.005452	.0924693	.0056508	.0143077	28.02658	.4100797

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028621	.0015438	518.5643	.0452803	.0863384	.1030168	75.14285
Stddev	.0000973	.0000555	2.9479	.0008518	.0002785	.0143462	.33207
%RSD	3.399787	3.592972	.5684711	1.881137	.3225240	13.92607	.4419160
#1	.0029082	.0015262	520.8992	.0462589	.0862617	.0916435	75.42370
#2	.0027503	.0014993	515.2518	.0448764	.0861063	.0982728	74.77635
#3	.0029279	.0016060	519.5418	.0447056	.0866472	.1191341	75.22850

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.375428	85.12960	.0893618	.0022448	-1.45629	.0619682	.2544435
Stddev	.016630	.46639	.0008427	.0011614	.11314	.0031410	.0115419
%RSD	.4926813	.5478544	.9429967	51.73555	7.769249	5.068746	4.536140
#1	3.389644	84.94112	.0886647	.0009045	-1.58662	.0615064	.2653029
#2	3.357140	84.78695	.0891224	.0029542	-1.39894	.0590836	.2557049
#3	3.379499	85.66073	.0902983	.0028756	-1.38331	.0653145	.2423227

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.072825	2.918575	.0139432	.0045159	.8867764	4.970236	.0157657
Stddev	.173509	.006818	.0029766	.0004357	.0124083	.077247	.0008414
%RSD	5.646575	.2336007	21.34826	9.647462	1.399256	1.554197	5.336884
#1	3.074881	2.920230	.0135529	.0047274	.8898991	5.047162	.0150254
#2	2.898297	2.911081	.0170956	.0048054	.8731051	4.892672	.0166808
#3	3.245297	2.924412	.0111809	.0040148	.8973251	4.970874	.0155911

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-04DLX2 Acquired: 12/23/2024 14:28:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK96 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3927391	.3931578	.0727012
Stddev	.0069193	.0011924	.0019639
%RSD	1.761796	.3032739	2.701282
#1	.3963474	.3935260	.0706844
#2	.3847615	.3918248	.0728117
#3	.3971084	.3941227	.0746075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2067.811	26933.92	2260.024	1771.166	1633.616
Stddev	5.926	207.25	26.236	16.888	4.490
%RSD	.2866022	.7694621	1.160865	.9534794	.2748446
#1	2061.296	26946.58	2232.075	1772.105	1628.439
#2	2072.883	26720.64	2284.121	1753.829	1635.967
#3	2069.254	27134.55	2263.877	1787.565	1636.443

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-12DLX2 Acquired: 12/23/2024 14:32:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0685572	-.007129	.3279795	.0247713	.0228690	40.27653	.5503356
Stddev	.0024173	.003066	.0027664	.0012352	.0015264	.18870	.0026067
%RSD	3.525982	43.00628	.8434687	4.986572	6.674709	.4685138	.4736558
#1	.0695690	-.008162	.3281848	.0246228	.0242659	40.13950	.5476945
#2	.0703042	-.009544	.3306375	.0260740	.0231014	40.49176	.5529065
#3	.0657984	-.003680	.3251161	.0236169	.0212397	40.19834	.5504058

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043265	.0034828	485.2011	.0718956	.0922161	4.972718	104.4086
Stddev	.0001382	.0000279	1.8880	.0007118	.0006207	.022594	.5301
%RSD	3.195107	.7998045	.3891209	.9900394	.6731489	.4543660	.5076793
#1	.0041753	.0034519	483.3545	.0710738	.0916216	4.946804	103.9214
#2	.0044464	.0034906	487.1280	.0723170	.0928602	4.988292	104.9730
#3	.0043578	.0035060	485.1209	.0722960	.0921665	4.983058	104.3315

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.632948	80.50361	.1082767	.0044035	-.833074	.0877204	1.614655
Stddev	.030613	.46196	.0013918	.0009811	.449729	.0045909	.026128
%RSD	.4615281	.5738351	1.285386	22.27928	53.98428	5.233588	1.618171
#1	6.613998	80.37664	.1071184	.0050511	-.313827	.0876500	1.643314
#2	6.668266	81.01578	.1078910	.0032747	-1.09928	.0923461	1.608490
#3	6.616582	80.11842	.1098206	.0048845	-1.08611	.0831651	1.592161

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.948969	3.591317	.0289138	.0034962	1.238999	5.290007	.0401240
Stddev	.059543	.014479	.0020456	.0003115	.004655	.019833	.0015784
%RSD	.8568560	.4031616	7.074859	8.909209	.3757200	.3749179	3.933899
#1	6.924454	3.575829	.0265733	.0037229	1.240827	5.278913	.0383538
#2	6.905597	3.604513	.0303599	.0031410	1.242463	5.278204	.0406335
#3	7.016856	3.593609	.0298083	.0036248	1.233708	5.312905	.0413848

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-12DLX2 Acquired: 12/23/2024 14:32:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4297152	.3487660	.0839816
Stddev	.0022779	.0007799	.0042315
%RSD	.5300873	.2236265	5.038620
#1	.4283641	.3481212	.0792208
#2	.4284364	.3485438	.0854097
#3	.4323451	.3496329	.0873143

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2175.155	28345.97	2378.325	1855.985	1655.674
Stddev	7.730	165.57	2.001	13.960	4.677
%RSD	.3553836	.5841216	.0841480	.7521438	.2824668
#1	2177.674	28210.65	2376.805	1844.238	1658.041
#2	2181.312	28296.65	2377.578	1852.300	1658.694
#3	2166.480	28530.59	2380.593	1871.418	1650.287

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-13DLX2 Acquired: 12/23/2024 14:36:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0170614	.0086901	.1110210	-.004688	.0114631	27.20762	.3449406
Stddev	.0026694	.0019361	.0032133	.001580	.0038816	.15917	.0030894
%RSD	15.64581	22.27964	2.894268	33.69923	33.86215	.5850138	.8956408
#1	.0154059	.0079394	.1106485	-.003979	.0117245	27.38523	.3484385
#2	.0156374	.0108891	.1080103	-.006498	.0074573	27.07789	.3437983
#3	.0201408	.0072417	.1144043	-.003587	.0152074	27.15972	.3425849

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030642	.0014239	593.5666	.0480336	.0741249	.1473819	64.21548
Stddev	.0002328	.0000959	2.3498	.0017720	.0006748	.0021805	.42670
%RSD	7.598406	6.737580	.3958820	3.689107	.9103957	1.479477	.6644747
#1	.0031586	.0013134	596.2646	.0462669	.0744958	.1457198	64.65024
#2	.0027990	.0014722	592.4673	.0498109	.0745328	.1465751	63.79733
#3	.0032350	.0014861	591.9679	.0480230	.0733459	.1498508	64.19889

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.188343	57.18041	.0708181	.0029453	-.609537	.0542027	.2813171
Stddev	.020175	.42621	.0008111	.0003769	.540099	.0064759	.0184335
%RSD	.6327814	.7453856	1.145347	12.79823	88.60807	11.94757	6.552569
#1	3.210695	57.67053	.0715681	.0027844	-1.17807	.0600855	.2873333
#2	3.182853	56.89670	.0709290	.0026755	-.54727	.0552590	.2959908
#3	3.171482	56.97400	.0699573	.0033760	-.10327	.0472636	.2606271

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.737038	1.798972	.0444419	.0030749	1.209467	4.737006	.0152007
Stddev	.111546	.012552	.0004256	.0002749	.006838	.034029	.0003777
%RSD	1.655719	.6977531	.9576425	8.940638	.5654096	.7183560	2.484581
#1	6.614106	1.798860	.0447570	.0032188	1.205273	4.750888	.0149306
#2	6.831798	1.811580	.0439578	.0032481	1.217359	4.698231	.0150392
#3	6.765209	1.786476	.0446110	.0027579	1.205770	4.761900	.0156323

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5033-13DLX2 Acquired: 12/23/2024 14:36:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1428217	.4526459	.0639584
Stddev	.0026572	.0010219	.0046635
%RSD	1.860523	.2257704	7.291411
#1	.1426804	.4537068	.0586079
#2	.1455468	.4525628	.0671598
#3	.1402379	.4516680	.0661076

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2059.757	26897.91	2240.570	1764.765	1624.485
Stddev	7.384	85.02	9.672	11.027	7.548
%RSD	.3584653	.3160739	.4316841	.6248388	.4646519
#1	2053.291	26888.06	2231.324	1759.168	1617.385
#2	2058.177	26818.24	2250.619	1757.659	1623.656
#3	2067.802	26987.42	2239.767	1777.468	1632.413

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-03DLX2 Acquired: 12/23/2024 14:40:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0913763	-.015451	.3342841	.0587225	.0241963	43.46176	1.023358
Stddev	.0044129	.003258	.0014848	.0014166	.0010895	.05516	.002245
%RSD	4.829389	21.08776	.4441741	2.412298	4.502941	.1269146	.2193443
#1	.0951338	-.015517	.3334173	.0573751	.0247594	43.52374	1.024415
#2	.0865168	-.018675	.3334365	.0601993	.0248892	43.41804	1.020780
#3	.0924781	-.012160	.3359986	.0585930	.0229405	43.44351	1.024879

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040685	.0059184	122.8441	.0679909	.0968196	.1552627	122.1707
Stddev	.0001572	.0000784	.0105	.0010387	.0014970	.0045443	.3028
%RSD	3.863679	1.325380	.0085198	1.527731	1.546144	2.926830	.2478104
#1	.0042388	.0059194	122.8333	.0680584	.0951032	.1506666	122.2351
#2	.0040380	.0058395	122.8449	.0689942	.0978549	.1553682	121.8409
#3	.0039289	.0059963	122.8542	.0669201	.0975006	.1597533	122.4361

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.17656	47.68016	.1092877	.0077402	-.815263	.0989152	.4203638
Stddev	.02675	.33326	.0007741	.0010907	.503830	.0058982	.0112897
%RSD	.1471471	.6989541	.7083317	14.09088	61.79970	5.962930	2.685695
#1	18.17552	47.37241	.1097622	.0080656	-.283585	.0923786	.4207347
#2	18.15035	47.63397	.1083944	.0086311	-1.28563	.1005271	.4314635
#3	18.20381	48.03411	.1097064	.0065239	-.87657	.1038400	.4088933

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.321977	3.506004	.0068564	.0058242	1.327975	6.685938	.0247767
Stddev	.091078	.020252	.0030702	.0006007	.012903	.039520	.0030377
%RSD	2.741690	.5776478	44.77896	10.31429	.9716606	.5910847	12.26046
#1	3.401966	3.485904	.0088213	.0062131	1.313717	6.715834	.0271278
#2	3.222851	3.505703	.0084294	.0061272	1.331362	6.641133	.0258556
#3	3.341113	3.526406	.0033184	.0051323	1.338848	6.700848	.0213468

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-03DLX2 Acquired: 12/23/2024 14:40:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2260622	.0028587	.0490084
Stddev	.0036854	.0002350	.0031843
%RSD	1.630257	8.220947	6.497533
#1	.2231597	.0028719	.0526043
#2	.2248183	.0026174	.0478753
#3	.2302086	.0030868	.0465455

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2364.691	30717.03	2526.814	2027.673	1759.972
Stddev	10.631	148.15	18.743	13.781	10.524
%RSD	.4495663	.4823135	.7417806	.6796378	.5979589
#1	2375.413	30636.43	2507.484	2020.151	1770.188
#2	2364.505	30626.65	2544.910	2019.290	1760.564
#3	2354.154	30888.01	2528.047	2043.578	1749.165

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-04DLX2 Acquired: 12/23/2024 14:44:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0949371	-.015931	.3331671	.0575795	.0228122	44.14331	1.035129
Stddev	.0089612	.001231	.0001360	.0012995	.0037237	.16217	.001652
%RSD	9.439047	7.728332	.0408068	2.256861	16.32325	.3673652	.1596219
#1	.0979759	-.017185	.3330277	.0590540	.0205683	44.11291	1.033412
#2	.1019837	-.015882	.3332994	.0566013	.0271105	44.31853	1.036709
#3	.0848517	-.014725	.3331741	.0570832	.0207576	43.99849	1.035265

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040808	.0058577	123.6537	.0681909	.0970610	.1516273	123.5096
Stddev	.0000473	.0001092	.5156	.0008108	.0003779	.0024672	.5012
%RSD	1.157931	1.863801	.4169534	1.188999	.3893069	1.627123	.4058359
#1	.0040619	.0059216	123.5345	.0685584	.0974434	.1539265	123.3657
#2	.0041345	.0057316	124.2185	.0672614	.0966879	.1519346	124.0671
#3	.0040459	.0059199	123.2083	.0687528	.0970518	.1490210	123.0961

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.36340	48.11956	.1095808	.0068832	-1.09421	.0980086	.3964953
Stddev	.07764	.19554	.0010852	.0020425	.21900	.0076312	.0056487
%RSD	.4227876	.4063525	.9903154	29.67443	20.01432	7.786296	1.424666
#1	18.33302	48.13184	.1108326	.0061075	-.91241	.1027065	.3901238
#2	18.45163	48.30866	.1089058	.0091999	-1.03288	.0892034	.3984724
#3	18.30554	47.91817	.1090040	.0053421	-1.33733	.1021159	.4008897

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.283067	3.517788	.0123863	.0061984	1.324999	7.042350	.0223670
Stddev	.162526	.006957	.0014244	.0004509	.002103	.036295	.0029960
%RSD	4.950437	.1977727	11.49949	7.274362	.1587127	.5153772	13.39475
#1	3.095449	3.522064	.0140252	.0064955	1.326588	7.058704	.0192264
#2	3.373063	3.509760	.0114476	.0056796	1.322614	7.067589	.0226808
#3	3.380688	3.521540	.0116861	.0064202	1.325794	7.000755	.0251938

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-04DLX2 Acquired: 12/23/2024 14:44:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2417732	.0026123	.0475375
Stddev	.0057566	.0002234	.0059253
%RSD	2.380992	8.553533	12.46451
#1	.2364273	.0024964	.0541340
#2	.2478673	.0024706	.0458126
#3	.2410249	.0028699	.0426661

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2333.127	30203.68	2475.487	2002.694	1738.367
Stddev	1.789	123.54	14.257	14.727	2.591
%RSD	.0766853	.4090364	.5759199	.7353577	.1490663
#1	2332.568	30260.58	2476.851	2000.128	1738.334
#2	2335.129	30061.94	2460.597	1989.419	1740.976
#3	2331.684	30288.52	2489.013	2018.536	1735.793

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-03LDLX10 Acquired: 12/23/2024 14:48:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149961	-.000043	.0676067	.0065681	.0048629	9.893973	.2300490
Stddev	.0032764	.005534	.0025452	.0004418	.0042014	.038846	.0020520
%RSD	21.84816	12738.54	3.764779	6.726772	86.39835	.3926185	.8919670
#1	.0182010	-.004666	.0694798	.0069865	.0042441	9.853286	.2289762
#2	.0116527	-.001552	.0686315	.0061061	.0010051	9.930669	.2287557
#3	.0151346	.006088	.0647088	.0066118	.0093394	9.897963	.2324149

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009116	.0010301	27.97978	.0144381	.0274655	.0372169	27.92818
Stddev	.0001665	.0000545	.15100	.0008136	.0001099	.0017663	.07924
%RSD	18.26792	5.293761	.5396816	5.635136	.4002674	4.746035	.2837120
#1	.0008676	.0009920	27.86609	.0148430	.0273580	.0377095	27.91811
#2	.0010957	.0010057	28.15112	.0135015	.0274608	.0386847	28.01197
#3	.0007715	.0010926	27.92214	.0149697	.0275778	.0352566	27.85446

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.172565	11.04984	.0212191	.0013163	-1.78878	.0261593	.0802138
Stddev	.014864	.05356	.0005015	.0010658	.94026	.0049255	.0245343
%RSD	.3562406	.4847085	2.363232	80.96868	52.56435	18.82870	30.58611
#1	4.158574	11.01241	.0210230	.0002057	-2.35016	.0209083	.1083949
#2	4.188171	11.02591	.0217889	.0023308	-2.31290	.0306769	.0686328
#3	4.170951	11.11119	.0208453	.0014125	-.70327	.0268927	.0636136

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1613107	.6891325	.0021971	.0026400	.2565638	1.558592	.0047072
Stddev	.0490577	.0032152	.0032372	.0008581	.0008291	.021355	.0020565
%RSD	30.41196	.4665583	147.3394	32.50401	.3231480	1.370124	43.68955
#1	.1321083	.6855681	.0013025	.0030743	.2562729	1.538846	.0062496
#2	.1338753	.6918140	.0057876	.0031941	.2559194	1.581255	.0023723
#3	.2179486	.6900155	-.000499	.0016516	.2574991	1.555674	.0054996

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-03LDLX10 Acquired: 12/23/2024 14:48:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0523613	.0004488	.0119954
Stddev	.0048933	.0002448	.0043832
%RSD	9.345246	54.54919	36.54057
#1	.0477547	.0003661	.0167945
#2	.0574981	.0002560	.0082033
#3	.0518312	.0007243	.0109885

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2105.632	27527.67	2230.203	1819.669	1818.403
Stddev	4.053	150.28	20.751	9.697	.702
%RSD	.1925017	.5459381	.9304671	.5329261	.0386087
#1	2108.944	27356.52	2244.869	1809.965	1819.214
#2	2101.112	27638.06	2206.460	1829.360	1817.999
#3	2106.841	27588.44	2239.281	1819.681	1817.997

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-05DLX2 Acquired: 12/23/2024 14:52:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1372985	.0300452	.3363727	.1308802	.0998256	43.30071	2.654654
Stddev	.0032025	.0032815	.0013230	.0013456	.0022400	.25665	.022931
%RSD	2.332517	10.92189	.3933003	1.028111	2.243900	.5927174	.8637860
#1	.1368991	.0280014	.3357195	.1293432	.0974113	43.03339	2.629715
#2	.1406820	.0338303	.3355034	.1318457	.1002293	43.54516	2.674828
#3	.1343145	.0283039	.3378952	.1314518	.1018363	43.32357	2.659418

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0464084	.0535060	117.4575	.2433279	.5617803	.3506155	118.0658
Stddev	.0004114	.0001079	.8207	.0003713	.0002330	.0142779	1.0316
%RSD	.8865114	.2015956	.6986936	.1525860	.0414668	4.072232	.8737130
#1	.0461189	.0534090	116.6026	.2433427	.5617639	.3355293	116.9921
#2	.0468793	.0534869	118.2390	.2436915	.5615560	.3524001	119.0492
#3	.0462270	.0536222	117.5309	.2429494	.5620210	.3639172	118.1562

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.85743	45.75406	.5891337	.0363584	-1.12716	.5190420	.7708917
Stddev	.16308	.41242	.0010258	.0017955	.60620	.0016054	.0168099
%RSD	.9132266	.9013944	.1741265	4.938249	53.78104	.3092986	2.180584
#1	17.68119	45.37819	.5882358	.0343482	-.54645	.5183683	.7749381
#2	18.00300	46.19524	.5902517	.0378028	-1.07905	.5178833	.7524279
#3	17.88808	45.68875	.5889136	.0369242	-1.75598	.5208745	.7853091

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.982016	3.349533	.0073533	.0051312	1.264832	6.439987	.0207771
Stddev	.139254	.012175	.0027534	.0006550	.003278	.059354	.0009292
%RSD	4.669789	.3634822	37.44523	12.76439	.2591323	.9216418	4.472337
#1	2.992003	3.344813	.0064339	.0047394	1.261679	6.393156	.0197048
#2	2.838038	3.340425	.0051771	.0047668	1.264596	6.506739	.0213458
#3	3.116008	3.363361	.0104488	.0058873	1.268221	6.420067	.0212807

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-05DLX2 Acquired: 12/23/2024 14:52:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKB6S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2204833	.0016975	.0477828
Stddev	.0014149	.0002463	.0042014
%RSD	.6417048	14.51058	8.792742
#1	.2190034	.0016601	.0509711
#2	.2218226	.0014721	.0430219
#3	.2206238	.0019604	.0493552

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2407.635	31295.87	2575.721	2070.106	1804.561
Stddev	5.629	84.39	23.854	4.136	1.954
%RSD	.2337832	.2696383	.9261060	.1997906	.1082876
#1	2414.114	31369.15	2599.520	2066.089	1806.816
#2	2404.848	31314.84	2551.812	2074.352	1803.505
#3	2403.944	31203.61	2575.831	2069.877	1803.362

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-13DLX5 Acquired: 12/23/2024 14:56:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010123	.0132804	.0363928	-.011459	.0060540	11.65384	.0884583
Stddev	.0031095	.0032516	.0005693	.001886	.0014995	.00853	.0013012
%RSD	307.1576	24.48444	1.564309	16.46206	24.76947	.0731920	1.470986
#1	.0044659	.0164240	.0366766	-.010913	.0073166	11.66163	.0889005
#2	.0001361	.0099305	.0367644	-.013559	.0064488	11.65516	.0894808
#3	-.001565	.0134867	.0357374	-.009907	.0043965	11.64473	.0869936

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014162	.0006404	206.5279	.0217319	.0460503	.0439594	35.80746
Stddev	.0001915	.0000756	.1720	.0009236	.0004696	.0033948	.10175
%RSD	13.52399	11.80793	.0832849	4.250079	1.019774	7.722677	.2841627
#1	.0015395	.0006656	206.6803	.0209357	.0462750	.0478104	35.91354
#2	.0011955	.0007001	206.3414	.0227445	.0455105	.0413995	35.71067
#3	.0015135	.0005554	206.5620	.0215154	.0463653	.0426683	35.79816

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.775902	42.89046	.0282005	.0011821	-1.03903	.0349418	.0868453
Stddev	.006662	.25181	.0002734	.0009719	.36711	.0089214	.0095669
%RSD	.3751336	.5871063	.9695299	82.22388	35.33248	25.53206	11.01608
#1	1.781462	43.16593	.0278921	.0018574	-.89959	.0411261	.0954074
#2	1.777728	42.83331	.0284133	.0016206	-1.45543	.0247148	.0886094
#3	1.768518	42.67213	.0282960	.0000681	-.76206	.0389846	.0765190

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.253466	1.042007	.0086369	.0042177	.3128784	1.931247	.0090324
Stddev	.032361	.004644	.0027850	.0003042	.0037205	.018620	.0031861
%RSD	2.581717	.4456312	32.24540	7.212130	1.189112	.9641593	35.27373
#1	1.274355	1.045666	.0069424	.0041903	.3129229	1.927248	.0093279
#2	1.216189	1.036783	.0071171	.0045346	.3091359	1.951542	.0057089
#3	1.269854	1.043571	.0118512	.0039281	.3165764	1.914952	.0120605

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5034-13DLX5 Acquired: 12/23/2024 14:56:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2888712	.1364957	.0213223
Stddev	.0012916	.0007288	.0029431
%RSD	.4471186	.5338963	13.80275
#1	.2873825	.1359803	.0179666
#2	.2896938	.1361774	.0234648
#3	.2895372	.1373294	.0225355

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2028.446	26731.64	2185.702	1764.496	1703.514
Stddev	5.075	111.36	8.893	4.085	5.682
%RSD	.2502150	.4165784	.4068705	.2314863	.3335386
#1	2022.866	26784.33	2187.923	1765.853	1696.974
#2	2032.788	26603.72	2175.910	1759.906	1707.236
#3	2029.684	26806.89	2193.275	1767.729	1706.331

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-03DLX2 Acquired: 12/23/2024 15:00:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0351538	-.014196	.0974547	.0227531	.0229033	47.06037	.6103552
Stddev	.0021589	.002497	.0022433	.0051715	.0035355	.07746	.0011042
%RSD	6.141236	17.59002	2.301923	22.72878	15.43660	.1646032	.1809163
#1	.0374440	-.015193	.0965043	.0200758	.0191184	46.98072	.6096537
#2	.0331560	-.016040	.0958430	.0287144	.0261208	47.06497	.6097838
#3	.0348613	-.011354	.1000168	.0194692	.0234706	47.13544	.6116280

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048829	.0023868	415.8688	.0925597	.0866079	.0756606	106.6873
Stddev	.0000716	.0000741	.7694	.0006481	.0005397	.0024746	.1847
%RSD	1.466898	3.102671	.1850142	.7002206	.6232003	3.270655	.1731590
#1	.0049346	.0023496	415.2704	.0921711	.0860804	.0777190	106.5229
#2	.0049129	.0024721	415.5992	.0933079	.0871591	.0763477	106.6518
#3	.0048011	.0023389	416.7367	.0922001	.0865843	.0729150	106.8872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.222240	121.6019	.1439966	.0021310	-.853073	.1229990	.3191396
Stddev	.001993	.4314	.0010357	.0018619	.508568	.0014253	.0116131
%RSD	.0896828	.3547626	.7192675	87.37322	59.61601	1.158790	3.638866
#1	2.220658	121.3623	.1430083	.0034829	-.520183	.1232425	.3238618
#2	2.221583	121.3434	.1439075	.0000073	-.600556	.1214677	.3276477
#3	2.224478	122.0999	.1450740	.0029027	-1.43848	.1242869	.3059093

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.240331	2.063535	.0159257	.0138281	2.930084	5.902586	.0175140
Stddev	.144309	.006600	.0025175	.0007041	.024963	.035304	.0005562
%RSD	2.753818	.3198626	15.80782	5.091602	.8519465	.5981177	3.175882
#1	5.400873	2.064475	.0150227	.0131126	2.931244	5.932486	.0169131
#2	5.121398	2.056515	.0187701	.0138516	2.904562	5.863638	.0180109
#3	5.198721	2.069616	.0139841	.0145201	2.954447	5.911633	.0176181

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-03DLX2 Acquired: 12/23/2024 15:00:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6923031	.7079578	.0893270
Stddev	.0020918	.0016220	.0032964
%RSD	.3021545	.2291157	3.690312
#1	.6901359	.7090778	.0931240
#2	.6924629	.7060977	.0871967
#3	.6943104	.7086978	.0876604

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2088.431	27109.98	2282.484	1781.842	1680.724
Stddev	2.487	176.03	4.246	7.560	3.030
%RSD	.1190735	.6492999	.1860137	.4242556	.1802908
#1	2088.981	27282.24	2282.769	1787.347	1677.414
#2	2085.715	26930.42	2286.579	1773.222	1683.361
#3	2090.597	27117.27	2278.102	1784.956	1681.398

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-04DLX2 Acquired: 12/23/2024 15:04:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056047	.0195158	.1100900	-.010341	.0089329	43.94582	.4122944
Stddev	.0043340	.0066155	.0010979	.003297	.0023513	.24160	.0017016
%RSD	77.32799	33.89802	.9972562	31.88735	26.32202	.5497646	.4127075
#1	.0065148	.0126569	.1103657	-.006966	.0062305	43.81222	.4114635
#2	.0094115	.0200331	.1088805	-.010502	.0100568	43.80052	.4111680
#3	.0008879	.0258575	.1110237	-.013555	.0105114	44.22471	.4142518

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067967	.0011224	655.4018	.0687353	.0588710	.0515692	45.05707
Stddev	.0001734	.0002160	3.3447	.0004517	.0004727	.0040847	.24932
%RSD	2.550703	19.24230	.5103283	.6572020	.8029381	7.920863	.5533431
#1	.0069344	.0013587	652.7483	.0692100	.0594141	.0476717	44.91770
#2	.0066021	.0010734	654.2983	.0686851	.0586474	.0512173	44.90860
#3	.0068538	.0009351	659.1588	.0683107	.0585517	.0558184	45.34491

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.505404	196.6350	.0439795	.0006567	-.365704	.0665073	.2304782
Stddev	.020615	1.6000	.0004704	.0011427	.879041	.0053382	.0074408
%RSD	.5880973	.8136674	1.069475	173.9916	240.3696	8.026429	3.228442
#1	3.484544	195.3089	.0445017	-.000418	-.987938	.0618658	.2234243
#2	3.505902	196.1840	.0438477	.001857	-.749088	.0653155	.2297568
#3	3.525765	198.4120	.0435891	.000530	.639914	.0723406	.2382534

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.373692	1.016693	.1248064	.0076763	11.76877	5.798905	.0195787
Stddev	.099289	.015236	.0021019	.0004406	.10342	.038671	.0021517
%RSD	4.182888	1.498590	1.684134	5.740054	.8787759	.6668732	10.99009
#1	2.380764	1.031808	.1261477	.0081607	11.83138	5.843020	.0194654
#2	2.271056	1.016932	.1223840	.0075689	11.82552	5.770860	.0174858
#3	2.469256	1.001338	.1258875	.0072993	11.64940	5.782834	.0217847

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-04DLX2 Acquired: 12/23/2024 15:04:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.214214	1.246210	.0581521
Stddev	.001358	.007135	.0037340
%RSD	.1118386	.5725425	6.421159
#1	1.213143	1.242834	.0555629
#2	1.215741	1.241391	.0624325
#3	1.213757	1.254407	.0564610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2043.187	26655.92	2265.617	1745.639	1623.209
Stddev	10.082	132.94	9.300	1.352	10.561
%RSD	.4934668	.4987421	.4104796	.0774701	.6506520
#1	2033.188	26785.27	2267.795	1746.926	1612.571
#2	2043.021	26662.84	2273.635	1745.761	1623.364
#3	2053.351	26519.65	2255.422	1744.229	1633.692

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-06DLX2 Acquired: 12/23/2024 15:08:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0401652	-.009007	.2632828	.0186186	.0209520	41.45703	.3964863
Stddev	.0021924	.001530	.0058293	.0039111	.0041236	.24720	.0011839
%RSD	5.458450	16.98786	2.214097	21.00621	19.68098	.5962750	.2985882
#1	.0393786	-.008404	.2687902	.0229487	.0213686	41.74132	.3977813
#2	.0426424	-.010747	.2571776	.0175646	.0166360	41.29270	.3954597
#3	.0384747	-.007870	.2638805	.0153426	.0248515	41.33707	.3962178

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046504	.0022092	547.2288	.0971208	.0827129	.1386178	97.83961
Stddev	.0001275	.0000601	2.3987	.0003451	.0002201	.0090332	.50364
%RSD	2.741855	2.722002	.4383432	.3553404	.2660506	6.516587	.5147629
#1	.0045032	.0022611	549.9700	.0970724	.0829320	.1288387	98.40458
#2	.0047241	.0022231	546.2022	.0974876	.0827147	.1403650	97.43768
#3	.0047240	.0021433	545.5143	.0968024	.0824919	.1466498	97.67659

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.709253	165.6885	.1389636	.0014557	.0785736	.1320381	.3385397
Stddev	.012451	.8302	.0008425	.0006391	.3945080	.0029904	.0163770
%RSD	.4595830	.5010335	.6062715	43.90425	502.0875	2.264790	4.837528
#1	2.720426	166.6453	.1398494	.0010685	.5336311	.1354810	.3212085
#2	2.695830	165.2602	.1381723	.0021934	-.130829	.1300886	.3406534
#3	2.711504	165.1599	.1388691	.0011053	-.167082	.1305446	.3537571

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.817348	2.122965	.0297802	.0208368	9.323190	6.898028	.0334333
Stddev	.068126	.003149	.0025937	.0003083	.006563	.043728	.0014513
%RSD	1.414181	.1483254	8.709617	1.479466	.0703977	.6339171	4.340877
#1	4.741978	2.119457	.0316752	.0208507	9.316495	6.930905	.0349841
#2	4.874543	2.123894	.0268242	.0211380	9.323463	6.914778	.0332077
#3	4.835523	2.125546	.0308413	.0205219	9.329613	6.848401	.0321080

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-06DLX2 Acquired: 12/23/2024 15:08:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28R9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8446866	1.594024	.0661601
Stddev	.0081405	.006781	.0020569
%RSD	.9637362	.4253856	3.109027
#1	.8537753	1.601254	.0639605
#2	.8380650	1.593010	.0680359
#3	.8422195	1.587807	.0664839

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2058.421	26867.61	2251.442	1763.581	1651.196
Stddev	5.138	91.86	16.578	10.856	3.375
%RSD	.2496226	.3418996	.7363222	.6155586	.2043974
#1	2053.588	26765.27	2235.849	1751.273	1648.040
#2	2063.818	26942.95	2249.624	1767.681	1654.754
#3	2057.857	26894.60	2268.854	1771.790	1650.795

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-17DLX5 Acquired: 12/23/2024 15:11:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0567554	-.175448	1.420011	.2329077	.0952291	9.578620	.1548260
Stddev	.0069248	.004915	.002689	.0041844	.0014851	.037760	.0009056
%RSD	12.20118	2.801418	.1893781	1.796584	1.559455	.3942124	.5848874
#1	.0589673	-.169928	1.417301	.2377306	.0939924	9.621468	.1556637
#2	.0623040	-.177067	1.422678	.2302442	.0948187	9.564187	.1538652
#3	.0489948	-.179350	1.420055	.2307483	.0968762	9.550205	.1549491

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080878	.0125558	139.6329	1.252607	.0518852	.0816227	444.3348
Stddev	.0000200	.0001977	1.1053	.002557	.0004777	.0027486	2.9354
%RSD	.2469386	1.574780	.7915996	.2041744	.9207532	3.367459	.6606318
#1	.0080854	.0123993	140.9009	1.255521	.0519855	.0830949	447.6945
#2	.0081089	.0127781	139.1244	1.251564	.0523049	.0784515	443.0435
#3	.0080691	.0124901	138.8733	1.250735	.0513653	.0833215	442.2664

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.76173	21.94341	.4654375	.0208030	-.145524	.2126545	4.019313
Stddev	.12542	.12392	.0012792	.0007550	.739531	.0074712	.036713
%RSD	.6346637	.5647324	.2748353	3.629131	508.1856	3.513331	.9134181
#1	19.90414	22.08163	.4650990	.0206001	-.307385	.2189590	4.053290
#2	19.71338	21.84223	.4668519	.0216388	.661532	.2044023	4.024280
#3	19.66769	21.90637	.4643617	.0201703	-.790717	.2146021	3.980369

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.038886	1.897070	-.009492	.0249231	1.213727	2.174855	.0526410
Stddev	.048650	.008894	.002002	.0006229	.004056	.005371	.0008626
%RSD	125.1118	.4688135	21.09308	2.499176	.3342054	.2469571	1.638724
#1	-.093796	1.887949	-.011718	.0242493	1.213801	2.179964	.0535327
#2	-.021701	1.905718	-.008923	.0250424	1.217746	2.175346	.0518107
#3	-.001159	1.897541	-.007837	.0254777	1.209634	2.169256	.0525797

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-17DLX5 Acquired: 12/23/2024 15:11:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9520485	-.297050	.0648387
Stddev	.0091588	.002222	.0072589
%RSD	.9620123	.7480221	11.19525
#1	.9613736	-.299615	.0729723
#2	.9430656	-.295712	.0625254
#3	.9517065	-.295823	.0590185

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2027.270	26399.04	2152.628	1739.994	1813.680
Stddev	6.486	176.47	15.407	14.737	6.646
%RSD	.3199178	.6684631	.7157472	.8469544	.3664451
#1	2034.564	26219.97	2136.513	1728.747	1819.608
#2	2022.153	26404.37	2154.157	1734.558	1806.495
#3	2025.092	26572.79	2167.214	1756.677	1814.936

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-19DLX2 Acquired: 12/23/2024 15:15:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0911012	-.212715	1.748930	.2790690	.1236056	38.66287	.5244850
Stddev	.0034162	.005470	.001466	.0077616	.0045475	.05899	.0003947
%RSD	3.749930	2.571625	.0838262	2.781239	3.679061	.1525635	.0752507
#1	.0942118	-.215482	1.747897	.2781405	.1203523	38.72653	.5248208
#2	.0874450	-.216249	1.748286	.2872530	.1216627	38.65201	.5245839
#3	.0916468	-.206414	1.750608	.2718134	.1288019	38.61007	.5240502

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0126768	.0197000	340.7263	1.623918	.0818104	.1928078	545.0382
Stddev	.0001039	.0000441	.6920	.006177	.0009151	.0053633	.4695
%RSD	.8194668	.2240231	.2030895	.3804072	1.118531	2.781679	.0861345
#1	.0126663	.0196643	340.5044	1.620557	.0808207	.1917668	545.4922
#2	.0127856	.0196864	341.5020	1.631047	.0819849	.1986152	544.5547
#3	.0125786	.0197493	340.1724	1.620149	.0826257	.1880413	545.0678

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.00630	55.39403	.6902394	.0242803	1.070197	.2875560	6.771159
Stddev	.04463	.14280	.0025340	.0020175	.373615	.0049934	.024847
%RSD	.2230696	.2577805	.3671207	8.309299	34.91083	1.736505	.3669584
#1	20.04883	55.45340	.6931223	.0252196	.726698	.2848057	6.798974
#2	20.01025	55.23113	.6883642	.0219644	1.467988	.2845424	6.763347
#3	19.95983	55.49756	.6892319	.0256570	1.015906	.2933199	6.751157

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.127317	3.346313	.0407908	.0370933	5.400600	5.898293	.0848035
Stddev	.096973	.012036	.0052567	.0005395	.009088	.008505	.0034370
%RSD	1.891302	.3596725	12.88695	1.454589	.1682830	.1441869	4.052929
#1	5.069425	3.339463	.0419911	.0366313	5.403878	5.889640	.0868396
#2	5.239270	3.339266	.0453435	.0369622	5.390327	5.898599	.0808353
#3	5.073256	3.360211	.0350377	.0376863	5.407594	5.906641	.0867358

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5233-19DLX2 Acquired: 12/23/2024 15:15:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.431042	.2168574	.0590920
Stddev	.005094	.0030334	.0067101
%RSD	.3559392	1.398780	11.35529
#1	1.429142	.2139412	.0569528
#2	1.436812	.2199957	.0537124
#3	1.427171	.2166351	.0666109

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2045.733	26662.05	2244.333	1744.728	1750.976
Stddev	2.716	75.27	6.475	9.032	2.907
%RSD	.1327635	.2823253	.2885037	.5176551	.1660228
#1	2043.073	26632.81	2237.360	1734.328	1747.625
#2	2045.626	26605.78	2250.156	1750.609	1752.815
#3	2048.502	26747.56	2245.481	1749.245	1752.488

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5037-12DLX2 Acquired: 12/23/2024 15:29:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK75 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0188634	-.004027	.0621240	.0110028	.0140137	32.96734	.3569716
Stddev	.0045072	.004283	.0029956	.0006734	.0024245	.14936	.0011917
%RSD	23.89380	106.3450	4.822045	6.119964	17.30069	.4530666	.3338253
#1	.0219915	.000731	.0655584	.0116305	.0147708	32.81831	.3559918
#2	.0136972	-.005238	.0600500	.0110863	.0113010	33.11704	.3582981
#3	.0209016	-.007574	.0607635	.0102916	.0159692	32.96667	.3566248

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029983	.0016549	445.7581	.0533893	.0729311	.0574128	79.49569
Stddev	.0000763	.0000442	1.6411	.0008547	.0007677	.0026989	.36547
%RSD	2.544143	2.672831	.3681628	1.600870	1.052569	4.700849	.4597363
#1	.0029269	.0016875	445.3806	.0533571	.0734490	.0551589	79.24077
#2	.0029892	.0016726	447.5550	.0525511	.0720492	.0566759	79.91441
#3	.0030787	.0016045	444.3386	.0542596	.0732952	.0604036	79.33190

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.810866	62.58761	.0856332	.0011348	-1.25217	.0703549	.1990824
Stddev	.015849	.41985	.0002530	.0011219	.65355	.0088637	.0190997
%RSD	.8752423	.6708215	.2954394	98.85935	52.19353	12.59849	9.593880
#1	1.795790	62.44009	.0856709	.0023793	-1.31027	.0715657	.1878157
#2	1.827390	63.06131	.0858651	.0002009	-.57151	.0785509	.2211352
#3	1.809420	62.26142	.0853634	.0008244	-1.87473	.0609481	.1882964

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.996817	3.327001	-.001460	.0033984	.8066062	5.270851	.0163056
Stddev	.153326	.003574	.001273	.0005005	.0050569	.012923	.0003137
%RSD	7.678526	.1074213	87.15459	14.72604	.6269329	.2451791	1.923573
#1	1.941195	3.331031	-.002831	.0028619	.8026696	5.285772	.0166669
#2	1.879065	3.324215	-.000316	.0038526	.8048395	5.263555	.0161464
#3	2.170191	3.325757	-.001234	.0034807	.8123094	5.263225	.0161035

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5037-12DLX2 Acquired: 12/23/2024 15:29:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK75 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5153909	.2768400	.0761942
Stddev	.0064741	.0009085	.0033084
%RSD	1.256154	.3281815	4.342022
#1	.5111499	.2774161	.0746604
#2	.5228429	.2773113	.0739311
#3	.5121800	.2757927	.0799911

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2073.052	26909.98	2260.721	1764.538	1680.224
Stddev	2.252	108.60	5.139	5.933	2.589
%RSD	.1086115	.4035602	.2273342	.3362214	.1540618
#1	2070.456	27032.96	2265.251	1770.445	1677.240
#2	2074.470	26869.69	2255.136	1758.580	1681.861
#3	2074.230	26827.28	2261.776	1764.588	1681.572

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5037-20DLX2 Acquired: 12/23/2024 15:33:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0267489	.0094735	.1812382	.0017300	.0135034	24.79956	.1427899
Stddev	.0031958	.0009258	.0031869	.0032960	.0017096	.09950	.0005253
%RSD	11.94732	9.772530	1.758408	190.5232	12.66056	.4012008	.3678954
#1	.0304374	.0105322	.1782683	.0037626	.0149520	24.68803	.1422188
#2	.0248093	.0090721	.1808414	.0035002	.0116176	24.87921	.1432524
#3	.0249999	.0088161	.1846049	-.002073	.0139404	24.83143	.1428987

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022970	.0022401	629.2614	.0407779	.0801947	.2152272	68.91455
Stddev	.0000824	.0001476	2.4539	.0010261	.0004647	.0070688	.33670
%RSD	3.587439	6.587456	.3899581	2.516396	.5794489	3.284343	.4885813
#1	.0022589	.0022298	626.8470	.0417944	.0802358	.2233606	68.58337
#2	.0023915	.0023926	631.7529	.0397424	.0806374	.2117553	68.90375
#3	.0022405	.0020980	629.1843	.0407968	.0797108	.2105657	69.25652

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.521039	83.19612	.0776823	.0011469	-.853488	.0581245	.2661666
Stddev	.029205	.67269	.0006112	.0010381	.557059	.0071449	.0179917
%RSD	.5289706	.8085555	.7868213	90.51079	65.26850	12.29250	6.759543
#1	5.492620	82.66683	.0769896	.0001421	-1.32790	.0533965	.2839543
#2	5.550970	83.95310	.0781457	.0022153	-.99246	.0663438	.2665678
#3	5.519526	82.96842	.0779116	.0010834	-.24010	.0546331	.2479778

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.939867	5.052917	.0085980	.0040785	.6813906	4.834214	.0160406
Stddev	.197113	.004868	.0012847	.0008735	.0045213	.027897	.0012388
%RSD	5.003048	.0963440	14.94141	21.41649	.6635326	.5770769	7.723049
#1	3.761318	5.049653	.0078467	.0047103	.6846222	4.829907	.0169864
#2	3.906895	5.058513	.0078660	.0044434	.6762238	4.864014	.0146383
#3	4.151387	5.050587	.0100814	.0030817	.6833256	4.808721	.0164972

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5037-20DLX2 Acquired: 12/23/2024 15:33:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4875103	.4468275	.0552302
Stddev	.0043246	.0027574	.0044499
%RSD	.8870759	.6170986	8.056949
#1	.4898188	.4444417	.0563611
#2	.4825213	.4498463	.0503240
#3	.4901908	.4461944	.0590055

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2136.853	27872.23	2348.170	1828.121	1653.077
Stddev	6.381	35.59	14.523	3.807	1.995
%RSD	.2986205	.1276843	.6184620	.2082474	.1206765
#1	2130.102	27893.22	2358.502	1832.273	1651.388
#2	2142.786	27831.13	2331.566	1827.298	1655.278
#3	2137.670	27892.32	2354.443	1824.793	1652.565

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-01DLX2 Acquired: 12/23/2024 15:37:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK34 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0163755	.0226201	.4181767	-.006794	.0060534	16.36175	.2403742
Stddev	.0030667	.0038375	.0015784	.002093	.0043102	.02843	.0021464
%RSD	18.72738	16.96490	.3774384	30.80842	71.20254	.1737635	.8929566
#1	.0190132	.0268771	.4179704	-.007395	.0093765	16.37380	.2381453
#2	.0130105	.0215569	.4198481	-.008521	.0011832	16.32927	.2405498
#3	.0171027	.0194263	.4167117	-.004466	.0076005	16.38216	.2424274

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018859	.0022983	595.1550	.0353136	.0620658	.0708749	50.60425
Stddev	.0001097	.0000814	.6956	.0015574	.0004708	.0066744	.05483
%RSD	5.817574	3.540576	.1168833	4.410080	.7585565	9.417151	.1083409
#1	.0017652	.0023370	595.5423	.0360766	.0616329	.0672553	50.57857
#2	.0019797	.0023531	594.3519	.0363423	.0625670	.0785772	50.56697
#3	.0019128	.0022048	595.5708	.0335218	.0619976	.0667922	50.66720

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.021823	285.0778	.0436538	.0024640	-.936904	.0501545	.4580016
Stddev	.010651	.3151	.0001932	.0002753	.028913	.0047297	.0038952
%RSD	.2648198	.1105363	.4425496	11.17167	3.086019	9.430159	.8504668
#1	4.015845	285.3390	.0436047	.0027800	-.968545	.0552391	.4538488
#2	4.034120	284.7278	.0438668	.0023355	-.911858	.0458861	.4585820
#3	4.015504	285.1665	.0434898	.0022764	-.930308	.0493383	.4615740

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.058842	3.106323	.0436722	.0039673	11.85081	3.745284	.0188528
Stddev	.047472	.010924	.0011926	.0002920	.01824	.027397	.0017354
%RSD	1.169599	.3516758	2.730847	7.359130	.1539159	.7315040	9.205272
#1	4.031274	3.116022	.0424835	.0042243	11.84078	3.776916	.0182137
#2	4.031595	3.108459	.0448687	.0036499	11.87187	3.729049	.0175276
#3	4.113658	3.094489	.0436642	.0040278	11.83979	3.729887	.0208172

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-01DLX2 Acquired: 12/23/2024 15:37:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK34 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2234811	.2971427	.0277512
Stddev	.0024395	.0017897	.0009298
%RSD	1.091594	.6022985	3.350512
#1	.2241748	.2989757	.0276582
#2	.2207698	.2970526	.0268714
#3	.2254985	.2953997	.0287241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1996.187	26142.28	2201.655	1700.952	1612.197
Stddev	5.326	254.44	19.497	14.569	6.505
%RSD	.2668310	.9733037	.8855615	.8565311	.4034971
#1	2001.350	25986.82	2180.076	1689.490	1618.961
#2	1990.711	26004.10	2206.883	1696.018	1605.985
#3	1996.499	26435.92	2218.004	1717.347	1611.646

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-02DLX2 Acquired: 12/23/2024 15:41:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK35 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0468603	.0009497	.8856487	-.000983	.0150330	29.26238	.5068133
Stddev	.0008729	.0036231	.0025963	.002847	.0030816	.28448	.0052301
%RSD	1.862684	381.5199	.2931467	289.6401	20.49906	.9721581	1.031953
#1	.0478564	-.002907	.8870849	-.002358	.0122802	28.95443	.5014601
#2	.0464955	.001473	.8872096	.002290	.0144566	29.51536	.5119109
#3	.0462290	.004283	.8826517	-.002881	.0183621	29.31735	.5070690

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031350	.0042886	576.3378	.0556746	.0758277	.1380335	77.07323
Stddev	.0001570	.0000899	4.7398	.0002874	.0003059	.0149074	.87395
%RSD	5.007600	2.096609	.8223995	.5161239	.4034302	10.79988	1.133927
#1	.0029582	.0043710	570.9930	.0560056	.0755475	.1232225	76.19925
#2	.0032581	.0043022	580.0302	.0554893	.0757816	.1530356	77.94716
#3	.0031887	.0041927	577.9902	.0555290	.0761541	.1378423	77.07328

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.110212	244.1238	.0746664	.0039481	-.305440	.0758214	.8351000
Stddev	.065317	2.3215	.0004474	.0006443	.650099	.0074776	.0212498
%RSD	1.068987	.9509685	.5991563	16.31944	212.8406	9.862073	2.544585
#1	6.045155	241.6793	.0743841	.0040254	-.943778	.0813815	.8345621
#2	6.175787	246.2988	.0744329	.0045503	-.328355	.0673205	.8566136
#3	6.109694	244.3932	.0751822	.0032687	.355815	.0787622	.8141242

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.363118	3.430597	.0299642	.0088773	7.825870	4.741508	.0334921
Stddev	.141086	.006014	.0034771	.0001646	.012887	.007060	.0043907
%RSD	3.233604	.1753025	11.60415	1.853813	.1646759	.1489076	13.10964
#1	4.234551	3.435233	.0259553	.0090638	7.828313	4.736328	.0334683
#2	4.340753	3.432757	.0321608	.0087525	7.837361	4.749550	.0291134
#3	4.514051	3.423802	.0317765	.0088157	7.811936	4.738646	.0378947

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-02DLX2 Acquired: 12/23/2024 15:41:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK35 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3528922	.3129170	.0477139
Stddev	.0058608	.0020658	.0017898
%RSD	1.660789	.6601824	3.751057
#1	.3461768	.3105422	.0494755
#2	.3569759	.3139096	.0458972
#3	.3555238	.3142992	.0477692

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2049.530	26903.08	2252.208	1761.060	1619.822
Stddev	4.764	76.72	9.873	.659	3.715
%RSD	.2324620	.2851669	.4383497	.0374128	.2293766
#1	2054.385	26989.81	2262.507	1761.742	1623.909
#2	2049.344	26875.36	2242.826	1760.428	1616.647
#3	2044.862	26844.07	2251.290	1761.009	1618.912

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5009-21DLX2 Acquired: 12/23/2024 15:45:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJZ3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0310893	.0126268	.1105465	-.001562	.0086559	21.36778	.3013883
Stddev	.0023501	.0024541	.0023861	.000658	.0032944	.18578	.0031276
%RSD	7.559181	19.43602	2.158446	42.13528	38.06002	.8694422	1.037745
#1	.0327213	.0104881	.1130234	-.002203	.0121556	21.37010	.3018086
#2	.0283957	.0120859	.1082630	-.000887	.0081972	21.18085	.2980717
#3	.0321509	.0153062	.1103532	-.001597	.0056148	21.55239	.3042845

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023535	.0012433	705.2887	.0366832	.0751149	.1029151	62.69448
Stddev	.0000265	.0001656	6.7271	.0007661	.0005477	.0082124	.57114
%RSD	1.126138	13.31689	.9538131	2.088346	.7291705	7.979751	.9109966
#1	.0023838	.0013846	705.4105	.0369968	.0757319	.0946580	62.96031
#2	.0023424	.0010611	698.5014	.0372427	.0749267	.1030053	62.03887
#3	.0023344	.0012842	711.9541	.0358101	.0746861	.1110820	63.08426

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.183012	92.43127	.0532260	.0042685	-1.03467	.0574682	.2689804
Stddev	.067017	1.05816	.0003406	.0005343	.39304	.0052067	.0135159
%RSD	1.083887	1.144808	.6399547	12.51823	37.98642	9.060220	5.024860
#1	6.187272	92.67607	.0536191	.0048106	-.99210	.0604376	.2539500
#2	6.113967	91.27217	.0530198	.0042528	-.66466	.0514561	.2728561
#3	6.247798	93.34558	.0530390	.0037422	-1.44726	.0605108	.2801350

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.395309	3.541662	.0253063	.0039375	2.426365	5.491851	.0163962
Stddev	.026654	.006051	.0010752	.0002398	.012521	.057148	.0018291
%RSD	.6064168	.1708521	4.248641	6.090600	.5160221	1.040600	11.15559
#1	4.366551	3.538583	.0240851	.0036610	2.430326	5.534987	.0180429
#2	4.419183	3.548633	.0257232	.0040893	2.412343	5.427035	.0167182
#3	4.400193	3.537770	.0261106	.0040621	2.436426	5.513530	.0144275

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5009-21DLX2 Acquired: 12/23/2024 15:45:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJZ3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3423601	.5687549	.0446350
Stddev	.0031724	.0043384	.0028208
%RSD	.9266406	.7627919	6.319644
#1	.3428046	.5677076	.0475171
#2	.3389888	.5650360	.0418798
#3	.3452868	.5735211	.0445080

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2102.691	27479.27	2293.514	1790.876	1644.412
Stddev	1.176	167.77	22.062	10.262	2.893
%RSD	.0559499	.6105182	.9619311	.5730008	.1759165
#1	2103.208	27286.61	2276.678	1780.986	1646.584
#2	2103.520	27593.08	2318.489	1801.473	1641.128
#3	2101.344	27558.13	2285.374	1790.167	1645.523

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4984-08DLX5 Acquired: 12/23/2024 15:49:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJT5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004934	.0231649	.0946688	-.025313	.0026818	3.392508	.0334925
Stddev	.004728	.0040558	.0007924	.001597	.0016974	.036293	.0004745
%RSD	95.83581	17.50856	.8369832	6.310103	63.29431	1.069789	1.416592
#1	-.007796	.0266570	.0943428	-.023471	.0009908	3.379910	.0329918
#2	.000524	.0241213	.0955722	-.026322	.0043856	3.433422	.0335500
#3	-.007530	.0187163	.0940914	-.026145	.0026688	3.364194	.0339355

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005715	.0017217	351.3308	.0110466	.0415777	.0158378	19.94774
Stddev	.0000794	.0000971	1.0137	.0001583	.0008655	.0029046	.04502
%RSD	13.88542	5.637897	.2885245	1.433396	2.081647	18.33981	.2256688
#1	.0005368	.0017737	350.4365	.0111633	.0410641	.0191918	19.99912
#2	.0006623	.0016097	352.4319	.0111102	.0410920	.0141434	19.92882
#3	.0005154	.0017817	351.1239	.0108663	.0425769	.0141784	19.91527

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.139994	201.9476	.0144007	-.000318	-1.07556	.0170438	.3597119
Stddev	.006967	.8276	.0004961	.001266	.74918	.0070971	.0187595
%RSD	.3255789	.4098286	3.444652	398.4051	69.65513	41.64012	5.215141
#1	2.136269	202.2441	.0141631	-.000461	-.98607	.0208170	.3382365
#2	2.148032	202.5861	.0149709	.001014	-1.86546	.0088572	.3679951
#3	2.135681	201.0125	.0140681	-.001505	-.37514	.0214573	.3729040

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.110425	.5803411	.0170862	.0032693	3.737683	1.639552	.0067370
Stddev	.145241	.0062533	.0006441	.0003656	.032497	.009381	.0017241
%RSD	13.07973	1.077522	3.769684	11.18366	.8694382	.5721584	25.59164
#1	.957261	.5732729	.0169329	.0036190	3.705625	1.630879	.0047546
#2	1.127844	.5851536	.0177931	.0028896	3.736822	1.649509	.0078865
#3	1.246172	.5825967	.0165325	.0032994	3.770602	1.638269	.0075700

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4984-08DLX5 Acquired: 12/23/2024 15:49:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJT5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0393104	.0940777	.0112296
Stddev	.0019203	.0004765	.0017569
%RSD	4.884967	.5064540	15.64483
#1	.0373880	.0935322	.0114577
#2	.0412286	.0944124	.0093699
#3	.0393147	.0942885	.0128614

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1962.657	25740.75	2136.820	1682.692	1663.240
Stddev	15.363	87.30	19.484	9.842	12.681
%RSD	.7827578	.3391393	.9118135	.5849181	.7624233
#1	1979.414	25664.88	2149.641	1674.893	1677.624
#2	1949.238	25721.21	2114.399	1679.432	1653.676
#3	1959.317	25836.16	2146.420	1693.751	1658.421

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4983-20DLX5 Acquired: 12/23/2024 15:53:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005135	.0312685	.0422828	-.030817	.0014044	4.067683	.0481763
Stddev	.001956	.0046109	.0007382	.002536	.0042751	.013986	.0023402
%RSD	38.08330	14.74631	1.745814	8.228557	304.4156	.3438391	4.857589
#1	-.004524	.0259926	.0422413	-.030477	.0063251	4.083668	.0490037
#2	-.007323	.0332862	.0430409	-.033506	-.001397	4.061684	.0455347
#3	-.003558	.0345266	.0415663	-.028469	-.000715	4.057698	.0499903

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004490	.0006282	654.1922	.0078547	.0485784	.0321812	15.58177
Stddev	.0001616	.0000550	.9367	.0003466	.0001804	.0025583	.05397
%RSD	35.99084	8.749609	.1431807	4.412664	.3714398	7.949646	.3463869
#1	.0003949	.0006462	655.2725	.0074716	.0487620	.0297716	15.63890
#2	.0006307	.0005665	653.6069	.0079459	.0484013	.0348659	15.53164
#3	.0003214	.0006720	653.6971	.0081465	.0485718	.0319061	15.57475

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.952326	43.51719	.0131892	-.000461	-.965114	.0119867	.1031453
Stddev	.007419	.08663	.0002793	.000777	.577729	.0062541	.0013329
%RSD	.2512962	.1990813	2.117350	168.4451	59.86125	52.17527	1.292225
#1	2.949557	43.54618	.0128709	-.001065	-.970746	.0056472	.1036453
#2	2.946690	43.41977	.0133931	-.000733	-1.54001	.0121611	.1041558
#3	2.960731	43.58561	.0133035	.000415	-.38459	.0181518	.1016347

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3624774	.6679291	.0076609	.0025518	.8024161	1.898233	.0084816
Stddev	.0244771	.0036219	.0017353	.0003469	.0008384	.012595	.0005433
%RSD	6.752715	.5422535	22.65145	13.59217	.1044900	.6635205	6.405015
#1	.3883974	.6702652	.0067384	.0029081	.8018462	1.912684	.0087176
#2	.3397583	.6697652	.0096626	.0025322	.8033788	1.892429	.0078603
#3	.3592763	.6637569	.0065817	.0022152	.8020232	1.889587	.0088670

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4983-20DLX5 Acquired: 12/23/2024 15:53:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJH0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0495131	.4773864	.0099081
Stddev	.0053356	.0013887	.0042008
%RSD	10.77609	.2908990	42.39708
#1	.0483483	.4786581	.0141706
#2	.0448562	.4759046	.0097820
#3	.0553349	.4775966	.0057719

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1968.607	25749.77	2140.505	1675.822	1658.423
Stddev	3.393	74.80	14.102	9.853	.776
%RSD	.1723413	.2904823	.6588053	.5879222	.0467787
#1	1964.733	25727.50	2124.432	1686.148	1657.541
#2	1970.040	25688.63	2146.287	1666.524	1659.001
#3	1971.048	25833.17	2150.798	1674.794	1658.727

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV002 Acquired: 12/23/2024 15:57:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV002 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.061502	4.899265	24.97157	4.987082	4.940864	405.5304	10.23573
Stddev	.025083	.024881	.17605	.038422	.029250	3.4500	.06766
%RSD	.4955560	.5078509	.7049918	.7704388	.5919927	.8507463	.6610630
#1	5.039703	4.870760	24.76846	4.943029	4.907875	401.5573	10.15768
#2	5.055888	4.910412	25.06577	5.004554	4.951086	407.7693	10.27792
#3	5.088916	4.916624	25.08047	5.013664	4.963630	407.2646	10.27158

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5105178	2.502524	410.2599	15.60108	2.510902	15.25956	416.1910
Stddev	.0041844	.015879	2.5778	.00562	.017865	.10823	3.0072
%RSD	.8196326	.6345308	.6283296	.0360546	.7114905	.7092520	.7225453
#1	.5070475	2.484230	407.2911	15.60163	2.490338	15.13483	412.7187
#2	.5151644	2.510604	411.5580	15.60642	2.522595	15.31529	417.9389
#3	.5093416	2.512738	411.9306	15.59521	2.519773	15.32857	417.9155

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.19655	411.6973	2.537109	1.305591	412.0913	2.559870	15.31654
Stddev	.12310	3.3915	.014989	.003268	.6536	.033993	.13515
%RSD	.8100589	.8237775	.5907773	.2503405	.1586165	1.327930	.8823784
#1	15.05810	407.9145	2.519810	1.303786	411.3460	2.521181	15.20609
#2	15.29366	414.4661	2.545285	1.309364	412.3602	2.573476	15.27627
#3	15.23789	412.7113	2.546232	1.303623	412.5675	2.584952	15.46724

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	153.7266	5.046465	4.888562	4.927000	5.010294	4.813658	5.051284
Stddev	1.4771	.041757	.051462	.032940	.041263	.046623	.030427
%RSD	.9608886	.8274552	1.052708	.6685578	.8235653	.9685543	.6023690
#1	152.0270	4.998291	4.836405	4.889950	4.962658	4.775421	5.016192
#2	154.7008	5.068784	4.939300	4.938076	5.033237	4.865597	5.067323
#3	154.4520	5.072320	4.889981	4.952975	5.034987	4.799957	5.070336

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV002 Acquired: 12/23/2024 15:57:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV002 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.019106	4.788957	5.134688
Stddev	.032055	.031375	.034863
%RSD	.6386611	.6551428	.6789654
#1	4.982170	4.752747	5.094432
#2	5.039661	4.808063	5.154604
#3	5.035487	4.806061	5.155026

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1764.042	24166.14	2093.303	1511.083	1541.178
Stddev	8.956	100.61	9.815	5.816	8.250
%RSD	.5076974	.4163227	.4688556	.3848831	.5353081
#1	1774.342	24128.66	2103.215	1515.747	1550.538
#2	1759.696	24280.11	2083.589	1512.934	1534.962
#3	1758.088	24089.65	2093.103	1504.566	1538.035

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB002 Acquired: 12/23/2024 16:10:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB002 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005214	-.002804	-.001236	.0060497	-.000822	.0317602
Stddev	.000649	.001197	.001660	.0022278	.002024	.0167543
%RSD	12.44632	42.67198	134.3278	36.82538	246.0323	52.75258
#1	-.005498	-.002068	.000368	.0036139	-.003046	.0399975
#2	-.005672	-.004185	-.002947	.0065510	.000911	.0124818
#3	-.004471	-.002160	-.001128	.0079841	-.000332	.0428013

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001339	.0001989	.0001321	.0178254	-.001020	.0001203
Stddev	.000135	.0001218	.0000411	.0113203	.001149	.0000819
%RSD	10.08905	61.22026	31.11125	63.50642	112.6440	68.06381
#1	-.001352	.0001129	.0000973	.0198928	-.000381	.0002012
#2	-.001467	.0003382	.0001775	.0279695	-.000333	.0000375
#3	-.001198	.0001456	.0001217	.0056139	-.002346	.0001222

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002941	.0262826	.0022393	.0647686	.0006934	.0007293
Stddev	.008780	.0646474	.0011820	.0359613	.0005680	.0005379
%RSD	298.4879	245.9700	52.78194	55.52276	81.92185	73.75392
#1	-.009071	-.008160	.0016978	.1055329	.0012498	.0006121
#2	-.006870	-.013851	.0035950	.0375365	.0001144	.0002597
#3	.007117	.100859	.0014252	.0512364	.0007158	.0013162

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.861025	.0024722	.0035927	-.095416	-.000577	-.003280
Stddev	.870854	.0098272	.0103203	.132710	.002718	.003127
%RSD	101.1416	397.5135	287.2564	139.0853	471.1086	95.35714
#1	-1.18358	-.004513	.0123356	-.016407	-.001425	-.006045
#2	-1.52458	.013709	-.007792	-.248632	.002464	.000114
#3	.12509	-.001780	.006234	-.021210	-.002770	-.003908

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB002 Acquired: 12/23/2024 16:10:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB002 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006665	-.006644	-.075099	.0002908	-.002364	.0002221
Stddev	.0002604	.007360	.000301	.0002049	.000720	.0001038
%RSD	39.07541	110.7791	.4013442	70.45988	30.47799	46.70800
#1	.0009448	-.000775	-.074779	.0003066	-.003074	.0002659
#2	.0006260	-.004255	-.075377	.0004873	-.001633	.0002968
#3	.0004287	-.014902	-.075142	.0000784	-.002384	.0001037

Elem	Li6707
Units	ppm
Avg	F .0150740
Stddev	.0008735
%RSD	5.794380
#1	.0142623
#2	.0159982
#3	.0149616

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2028.530	26477.48	2132.566	1743.862	1837.385
Stddev	.217	130.99	7.592	9.920	2.984
%RSD	.0106911	.4947061	.3559882	.5688783	.1624095
#1	2028.639	26485.50	2137.420	1748.676	1839.874
#2	2028.670	26604.27	2136.461	1750.456	1834.077
#3	2028.280	26342.66	2123.818	1732.453	1838.203

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-07DLX2 Acquired: 12/23/2024 16:14:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0284620	.0042006	.0996210	.0027436	.0136285	21.85918	.3232399
Stddev	.0032811	.0045708	.0009909	.0028909	.0021512	.07911	.0018717
%RSD	11.52788	108.8145	.9946495	105.3656	15.78443	.3619152	.5790460
#1	.0267303	.0012868	.0984968	-.000324	.0125104	21.82864	.3253638
#2	.0322461	.0018463	.1003675	.005417	.0122667	21.94901	.3225247
#3	.0264095	.0094686	.0999987	.003138	.0161085	21.79990	.3218313

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024458	.0016976	483.1678	.0355096	.0699030	.1456843	71.01772
Stddev	.0001159	.0001744	.9245	.0013996	.0001786	.0063226	.26476
%RSD	4.739154	10.27115	.1913429	3.941324	.2554999	4.339944	.3728110
#1	.0025612	.0015150	483.1808	.0338990	.0701004	.1444618	70.71270
#2	.0024468	.0018624	484.0858	.0364301	.0698560	.1525290	71.15237
#3	.0023294	.0017154	482.2369	.0361995	.0697525	.1400623	71.18810

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.139241	99.98588	.0585420	.0027369	-.749720	.0623934	.2163983
Stddev	.018898	.67862	.0007635	.0009630	.457078	.0028459	.0048901
%RSD	.4565454	.6787192	1.304238	35.18416	60.96654	4.561162	2.259782
#1	4.120033	99.23654	.0588113	.0016635	-.227953	.0614649	.2111857
#2	4.157812	100.5590	.0576803	.0035248	-.941756	.0601277	.2208848
#3	4.139880	100.1621	.0591343	.0030225	-1.07945	.0655875	.2171242

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.359786	3.831682	.0147508	.0035776	1.002381	5.361440	.0151970
Stddev	.147253	.010958	.0019807	.0001464	.002208	.032980	.0007239
%RSD	4.382805	.2859720	13.42803	4.091326	.2202551	.6151312	4.763717
#1	3.289083	3.825213	.0146076	.0034399	1.004108	5.396509	.0143709
#2	3.261218	3.825500	.0167992	.0035615	1.003143	5.356764	.0157210
#3	3.529056	3.844334	.0128455	.0037313	.999894	5.331048	.0154990

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-07DLX2 Acquired: 12/23/2024 16:14:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6829972	.3930667	.0453415
Stddev	.0122013	.0012200	.0012268
%RSD	1.786432	.3103769	2.705622
#1	.6964332	.3939612	.0445812
#2	.6799500	.3935619	.0446866
#3	.6726082	.3916770	.0467568

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2192.107	28755.36	2398.793	1879.894	1708.314
Stddev	5.398	154.95	14.867	13.991	2.768
%RSD	.2462604	.5388610	.6197791	.7442360	.1620279
#1	2185.881	28907.79	2382.080	1885.638	1705.120
#2	2194.965	28598.01	2403.754	1863.946	1709.810
#3	2195.476	28760.27	2410.545	1890.100	1710.012

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-08DLX2 Acquired: 12/23/2024 16:18:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0322509	.0032954	.0987396	.0042298	.0113530	22.16409	.3282991
Stddev	.0039795	.0005150	.0019602	.0011560	.0056097	.07545	.0022535
%RSD	12.33915	15.62672	1.985242	27.32997	49.41141	.3404272	.6864026
#1	.0361771	.0029609	.1008625	.0052661	.0177827	22.24067	.3290748
#2	.0323554	.0030369	.0969981	.0044402	.0074580	22.08982	.3257603
#3	.0282202	.0038884	.0983581	.0029830	.0088182	22.16178	.3300623

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024883	.0016442	489.7892	.0357826	.0719836	.1391883	72.15277
Stddev	.0000878	.0000448	2.6685	.0001703	.0001441	.0012188	.32644
%RSD	3.528450	2.727889	.5448302	.4759151	.2002016	.8756616	.4524299
#1	.0025541	.0015940	492.4362	.0358272	.0718189	.1403478	72.41282
#2	.0025222	.0016585	489.8319	.0355944	.0720865	.1379178	72.25906
#3	.0023886	.0016802	487.0997	.0359261	.0720455	.1392994	71.78643

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.209847	101.8578	.0592873	.0023248	-1.00241	.0589461	.2349280
Stddev	.024214	.5308	.0010220	.0000955	.66207	.0047271	.0097593
%RSD	.5751832	.5211129	1.723880	4.107497	66.04764	8.019303	4.154175
#1	4.234407	102.1663	.0581301	.0022278	-.42257	.0595786	.2298732
#2	4.209140	102.1621	.0596652	.0023279	-1.72381	.0539345	.2461779
#3	4.185994	101.2449	.0600666	.0024187	-.86085	.0633250	.2287329

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.477463	3.913771	.0165987	.0030531	1.018662	5.405328	.0138068
Stddev	.076988	.009243	.0051727	.0001513	.001300	.077188	.0009397
%RSD	2.213916	.2361590	31.16307	4.955342	.1276240	1.427992	6.806020
#1	3.564185	3.904536	.0222112	.0031951	1.019942	5.475551	.0127929
#2	3.417172	3.913754	.0120230	.0030702	1.017343	5.417750	.0146485
#3	3.451033	3.923021	.0155618	.0028940	1.018700	5.322683	.0139791

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-08DLX2 Acquired: 12/23/2024 16:18:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6849268	.3979761	.0466362
Stddev	.0050469	.0031962	.0051408
%RSD	.7368470	.8031038	11.02320
#1	.6903775	.4011389	.0437016
#2	.6804159	.3980418	.0525722
#3	.6839868	.3947476	.0436349

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2153.610	28312.61	2366.731	1849.690	1673.916
Stddev	2.788	37.12	26.451	7.457	4.996
%RSD	.1294769	.1311100	1.117617	.4031278	.2984446
#1	2156.439	28305.24	2343.241	1845.258	1678.289
#2	2153.528	28352.87	2361.570	1845.512	1674.988
#3	2150.864	28279.74	2395.382	1858.298	1668.472

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-07LDLX10 Acquired: 12/23/2024 16:21:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004573	.0179097	.0252990	-.016129	.0039052	4.776188	.0681277
Stddev	.001619	.0025234	.0013827	.008844	.0040828	.026250	.0009337
%RSD	35.39457	14.08935	5.465549	54.83611	104.5483	.5495998	1.370456
#1	-.005110	.0168246	.0252149	-.026313	-.000377	4.793808	.0686612
#2	-.002754	.0207942	.0267219	-.010374	.007754	4.788736	.0686723
#3	-.005855	.0161105	.0239603	-.011700	.004339	4.746019	.0670497

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006242	.0002591	106.6016	.0068141	.0343526	.0281447	15.86352
Stddev	.0000364	.0000425	.1591	.0010690	.0007435	.0062553	.04184
%RSD	5.832975	16.40513	.1492680	15.68763	2.164409	22.22554	.2637357
#1	.0006228	.0002247	106.6146	.0076523	.0347173	.0267725	15.81607
#2	.0005885	.0003066	106.7538	.0071797	.0334971	.0226894	15.87939
#3	.0006613	.0002460	106.4364	.0056103	.0348434	.0349722	15.89509

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9265396	22.46782	.0108530	.0006561	-.688947	.0203117	.0530476
Stddev	.0032421	.10227	.0003861	.0000811	.638038	.0082817	.0103898
%RSD	.3499129	.4551669	3.557661	12.36155	92.61071	40.77319	19.58578
#1	.9300144	22.49289	.0111235	.0006987	-.155771	.0167402	.0413562
#2	.9235958	22.35535	.0104108	.0005626	-1.39586	.0297798	.0565627
#3	.9260085	22.55523	.0110248	.0007070	-.51521	.0144149	.0612238

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4238861	.7438014	.0012507	.0029254	.2082101	1.164588	.0038115
Stddev	.1304924	.0063761	.0025047	.0003506	.0062002	.008381	.0010104
%RSD	30.78478	.8572343	200.2649	11.98416	2.977875	.7196949	26.50891
#1	.5715776	.7495537	-.000349	.0028873	.2153603	1.168807	.0048478
#2	.3241814	.7369455	-.000036	.0032935	.2049499	1.154935	.0037575
#3	.3758992	.7449050	.004137	.0025954	.2043201	1.170022	.0028292

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-07LDLX10 Acquired: 12/23/2024 16:21:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1483325	.0853950	.0103239
Stddev	.0023435	.0003033	.0008943
%RSD	1.579894	.3551279	8.662536
#1	.1478736	.0852697	.0106461
#2	.1462523	.0857409	.0093132
#3	.1508714	.0851745	.0110125

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2073.812	27157.06	2215.861	1786.295	1802.150
Stddev	10.540	89.32	19.023	11.650	10.237
%RSD	.5082320	.3289183	.8584879	.6521821	.5680468
#1	2062.012	27054.34	2197.276	1773.059	1790.329
#2	2077.135	27216.48	2235.293	1794.991	1808.001
#3	2082.290	27200.36	2215.014	1790.836	1808.119

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-09DLX2 Acquired: 12/23/2024 16:26:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0727572	.0452282	.1141201	.0818997	.0931026	24.03185	2.093733
Stddev	.0040285	.0021335	.0011500	.0008133	.0000691	.20683	.014432
%RSD	5.536859	4.717241	1.007690	.9930847	.0742333	.8606459	.6892751
#1	.0771322	.0445936	.1131005	.0828387	.0931304	23.81025	2.078684
#2	.0719382	.0434840	.1138931	.0814456	.0930239	24.21978	2.107455
#3	.0692011	.0476070	.1153666	.0814148	.0931536	24.06552	2.095059

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0474865	.0496811	482.3594	.2221336	.5399411	.3560184	71.87935
Stddev	.0002444	.0001172	2.5379	.0006354	.0015479	.0022996	.41629
%RSD	.5146223	.2358532	.5261485	.2860471	.2866761	.6459317	.5791570
#1	.0474711	.0495994	479.4732	.2225004	.5415352	.3533637	71.40685
#2	.0477382	.0496285	484.2421	.2225004	.5384440	.3573980	72.19214
#3	.0472502	.0498153	483.3631	.2213999	.5398442	.3572936	72.03905

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.582487	100.3670	.5438631	.0345403	-.739294	.5134417	.6437337
Stddev	.036691	.9641	.0011036	.0002689	.513837	.0173974	.0060992
%RSD	.8006828	.9605324	.2029106	.7786395	69.50378	3.388383	.9474771
#1	4.540522	99.3078	.5444361	.0347565	-.382079	.5000446	.6493063
#2	4.608510	101.1933	.5425909	.0342391	-.507625	.5071766	.6372178
#3	4.598430	100.5998	.5445623	.0346253	-1.32818	.5331039	.6446770

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.483210	3.855071	.0151044	.0028704	1.000903	5.771222	.0138711
Stddev	.107777	.009648	.0024996	.0003366	.005204	.029261	.0014169
%RSD	3.094178	.2502562	16.54889	11.72561	.5199042	.5070157	10.21498
#1	3.551845	3.860322	.0139516	.0025000	1.004349	5.778979	.0130204
#2	3.538796	3.860954	.0133892	.0029539	1.003442	5.795822	.0130862
#3	3.358988	3.843937	.0179724	.0031574	.994917	5.738864	.0155068

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-09DLX2 Acquired: 12/23/2024 16:26:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKJ7S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7021624	.3907131	.0438329
Stddev	.0063198	.0014870	.0041187
%RSD	.9000449	.3805837	9.396418
#1	.6961035	.3890081	.0467368
#2	.7016695	.3917414	.0456427
#3	.7087142	.3913897	.0391191

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2182.621	28657.01	2394.483	1870.379	1694.721
Stddev	5.619	80.31	10.743	.744	2.730
%RSD	.2574534	.2802478	.4486514	.0397674	.1611057
#1	2179.063	28638.78	2392.364	1870.975	1691.726
#2	2189.099	28587.38	2384.958	1869.545	1697.071
#3	2179.702	28744.87	2406.128	1870.616	1695.367

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-16DLX2 Acquired: 12/23/2024 16:29:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0283264	-.000631	.1108515	.0126707	.0169476	23.56466	.2942591
Stddev	.0017278	.003689	.0017858	.0033106	.0056175	.03466	.0009652
%RSD	6.099720	584.2709	1.611011	26.12820	33.14619	.1470842	.3279984
#1	.0264761	.003302	.1121109	.0096060	.0210414	23.58602	.2949029
#2	.0298978	-.001180	.1088077	.0122241	.0192580	23.58330	.2947249
#3	.0286052	-.004016	.1116358	.0161819	.0105433	23.52467	.2931493

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030781	.0013843	526.5025	.0390683	.0709183	.0911562	87.63542
Stddev	.0000889	.0000505	1.6423	.0007268	.0008461	.0021142	.10983
%RSD	2.887070	3.644818	.3119313	1.860366	1.193010	2.319341	.1253278
#1	.0030684	.0014226	528.3204	.0382560	.0718156	.0900675	87.74169
#2	.0029945	.0014032	526.0610	.0396571	.0701351	.0935929	87.64223
#3	.0031715	.0013271	525.1260	.0392917	.0708043	.0898081	87.52235

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.697793	238.2402	.0577228	.0035725	-.589211	.0836824	.3433279
Stddev	.007218	.6465	.0009597	.0002206	.630902	.0093237	.0028883
%RSD	.1952072	.2713588	1.662526	6.175934	107.0757	11.14182	.8412714
#1	3.705893	238.9607	.0579875	.0038260	-1.12375	.0809385	.3400202
#2	3.692043	237.7111	.0585222	.0034240	-.75058	.0940702	.3446123
#3	3.695442	238.0487	.0566585	.0034675	.10670	.0760385	.3453513

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.929945	3.606482	.0189812	.0040694	.9178695	5.712012	.0165653
Stddev	.071865	.006626	.0024011	.0004620	.0041557	.012182	.0018779
%RSD	2.452791	.1837298	12.64992	11.35240	.4527573	.2132687	11.33627
#1	2.951065	3.613145	.0167987	.0042222	.9150356	5.725810	.0185404
#2	2.849886	3.599893	.0215532	.0035503	.9159328	5.702746	.0163526
#3	2.988884	3.606407	.0185916	.0044355	.9226400	5.707479	.0148028

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5039-16DLX2 Acquired: 12/23/2024 16:29:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKL8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3363689	.1813580	.0468555
Stddev	.0004485	.0006347	.0034431
%RSD	.1333386	.3499715	7.348430
#1	.3360970	.1820842	.0429857
#2	.3368866	.1810803	.0495803
#3	.3361231	.1809094	.0480004

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2158.235	28262.32	2368.034	1845.029	1678.282
Stddev	7.133	87.02	12.035	5.788	5.040
%RSD	.3304952	.3078925	.5082412	.3137182	.3003346
#1	2154.644	28239.64	2354.137	1839.762	1672.848
#2	2153.611	28188.89	2374.984	1844.098	1679.191
#3	2166.450	28358.43	2374.981	1851.226	1682.805

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-01DLX4 Acquired: 12/23/2024 16:33:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYW9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2612144	-.133731	.1278111	.1853724	.0626960	54.39113	.8458765
Stddev	.0039434	.003118	.0007845	.0024162	.0035519	.27432	.0060197
%RSD	1.509657	2.331243	.6138101	1.303444	5.665233	.5043386	.7116486
#1	.2583783	-.135208	.1279584	.1863195	.0585984	54.63645	.8520120
#2	.2657176	-.135835	.1269634	.1826261	.0648960	54.44201	.8456377
#3	.2595473	-.130149	.1285115	.1871716	.0645937	54.09494	.8399798

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059447	.0024989	22.52062	.1335551	.1196720	.1832151	319.8103
Stddev	.0000824	.0001314	.07477	.0008170	.0008795	.0033892	1.1317
%RSD	1.386105	5.259915	.3320069	.6117063	.7349168	1.849848	.3538712
#1	.0060358	.0024089	22.59433	.1328456	.1190639	.1793320	320.9031
#2	.0058753	.0024381	22.52270	.1344483	.1192716	.1847346	319.8846
#3	.0059228	.0026498	22.44483	.1333714	.1206804	.1855786	318.6433

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.60374	33.80252	.1202556	.0118167	-.878976	.3559816	.3436356
Stddev	.08162	.14295	.0008965	.0007034	.528021	.0083500	.0054810
%RSD	.4636311	.4228996	.7454727	5.952364	60.07226	2.345639	1.594999
#1	17.69316	33.91086	.1195824	.0124660	-1.20523	.3636090	.3384452
#2	17.58479	33.64050	.1212732	.0110695	-.26978	.3572757	.3430947
#3	17.53326	33.85619	.1199112	.0119146	-1.16192	.3470600	.3493670

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.074464	2.595960	-.052552	-.000069	.2021095	2.538028	.0257577
Stddev	.175401	.005530	.002621	.000161	.0060684	.020082	.0018118
%RSD	2.172299	.2130407	4.988322	232.2024	3.002509	.7912306	7.033988
#1	8.275386	2.590592	-.055256	-.000244	.1951457	2.550899	.0237858
#2	7.996109	2.595649	-.050022	.000073	.2049177	2.548297	.0261386
#3	7.951899	2.601639	-.052376	-.000037	.2062651	2.514888	.0273489

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-01DLX4 Acquired: 12/23/2024 16:33:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYW9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5620164	-.184522	.0534683
Stddev	.0052233	.000599	.0021718
%RSD	.9293853	.3244110	4.061940
#1	.5680474	-.185169	.0554426
#2	.5589442	-.184410	.0511419
#3	.5590577	-.183988	.0538202

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2161.655	28058.93	2285.119	1854.031	1868.857
Stddev	4.354	152.40	29.200	15.109	2.196
%RSD	.2014081	.5431406	1.277850	.8149426	.1175030
#1	2156.714	27994.12	2270.230	1838.228	1866.711
#2	2163.324	27949.65	2266.363	1855.529	1871.100
#3	2164.928	28233.02	2318.763	1868.335	1868.761

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-03DLX4 Acquired: 12/23/2024 16:37:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3684136	-.130532	.1173124	.1790445	.0618933	71.36608	1.188434
Stddev	.0047431	.000610	.0010879	.0040255	.0021061	.10988	.002089
%RSD	1.287430	.4672985	.9273529	2.248310	3.402762	.1539737	.1757514
#1	.3629446	-.131129	.1176056	.1750247	.0621363	71.34457	1.190389
#2	.3708943	-.130557	.1161079	.1790331	.0638674	71.26854	1.186233
#3	.3714018	-.129910	.1182236	.1830756	.0596763	71.48513	1.188680

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056599	.0027002	20.38726	.2432190	.1502870	.3436109	306.5915
Stddev	.0000575	.0001610	.04295	.0010421	.0007687	.0066431	.2719
%RSD	1.015450	5.964134	.2106804	.4284732	.5115116	1.933331	.0886734
#1	.0056466	.0026274	20.43009	.2436303	.1494598	.3508322	306.5296
#2	.0056102	.0028847	20.38752	.2439927	.1504215	.3377595	306.3559
#3	.0057228	.0025883	20.34418	.2420340	.1509795	.3422410	306.8890

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.62396	48.67022	.1753824	.0100385	-.228645	.5403198	.2929230
Stddev	.04464	.18162	.0003311	.0004807	.258600	.0043518	.0149439
%RSD	.2532750	.3731583	.1888043	4.788089	113.1014	.8054138	5.101646
#1	17.57589	48.60261	.1750090	.0101577	-.442800	.5385234	.2924962
#2	17.63188	48.53211	.1754981	.0104483	.058647	.5371537	.3080757
#3	17.66410	48.87595	.1756403	.0095094	-.301781	.5452822	.2781970

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.301398	2.006593	-.057653	-.000151	.1804981	2.885376	.0248911
Stddev	.039398	.002834	.003515	.000214	.0038117	.020035	.0022271
%RSD	.4235742	.1412127	6.097181	141.9101	2.111744	.6943497	8.947351
#1	9.293670	2.009797	-.054366	-.000224	.1845021	2.890052	.0231984
#2	9.344088	2.005564	-.057234	-.000318	.1800789	2.863418	.0274140
#3	9.266436	2.004418	-.061359	.000090	.1769134	2.902660	.0240607

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-03DLX4 Acquired: 12/23/2024 16:37:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7105369	-.170852	.0609448
Stddev	.0079630	.000413	.0031500
%RSD	1.120705	.2417045	5.168572
#1	.7137693	-.170550	.0576394
#2	.7014659	-.171322	.0612829
#3	.7163754	-.170683	.0639121

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2138.273	27681.83	2262.610	1831.689	1832.524
Stddev	1.997	94.78	14.754	6.068	2.374
%RSD	.0933754	.3423765	.6520787	.3312524	.1295531
#1	2137.686	27681.77	2255.862	1825.467	1835.265
#2	2136.635	27587.09	2279.532	1832.011	1831.169
#3	2140.497	27776.64	2252.437	1837.589	1831.137

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-04DLX5 Acquired: 12/23/2024 16:41:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1244900	-.119189	.1971117	.1736406	.0608865	27.48356	1.217853
Stddev	.0062969	.002388	.0011972	.0011248	.0030191	.10816	.005244
%RSD	5.058141	2.003443	.6073880	.6477977	4.958621	.3935620	.4305774
#1	.1175095	-.117820	.1959788	.1726645	.0587829	27.60839	1.223500
#2	.1297425	-.121946	.1969920	.1733866	.0643459	27.42495	1.216921
#3	.1262180	-.117801	.1983642	.1748707	.0595307	27.41736	1.213138

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045475	.0036008	15.46486	.0597382	.0993300	.2382965	293.4298
Stddev	.0002470	.0000547	.07642	.0007572	.0004393	.0018634	1.0742
%RSD	5.430440	1.519992	.4941673	1.267538	.4422837	.7819589	.3660870
#1	.0046783	.0035439	15.55310	.0605962	.0988396	.2362218	294.0715
#2	.0042627	.0036056	15.41979	.0594549	.0996877	.2388401	294.0282
#3	.0047015	.0036530	15.42169	.0591636	.0994626	.2398277	292.1897

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.63119	16.94451	.0714074	.0433326	-.376543	.1457444	.4347215
Stddev	.07841	.16125	.0006938	.0015208	.217153	.0018157	.0164692
%RSD	.3624679	.9516441	.9716151	3.509629	57.67003	1.245817	3.788445
#1	21.71495	16.93767	.0721897	.0420406	-.563031	.1478410	.4513907
#2	21.61906	16.78679	.0711659	.0450086	-.428462	.1446840	.4184599
#3	21.55955	17.10908	.0708667	.0429486	-.138137	.1447083	.4343140

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.152403	1.797810	-.061936	-.000750	.2043205	1.577892	.0226679
Stddev	.124578	.006225	.004769	.000354	.0050718	.010416	.0008753
%RSD	1.741765	.3462531	7.699764	47.26282	2.482289	.6600907	3.861510
#1	7.023888	1.803839	-.067435	-.000437	.1985607	1.583004	.0220339
#2	7.272631	1.791406	-.058943	-.000677	.2081178	1.565908	.0236666
#3	7.160689	1.798186	-.059429	-.001135	.2062831	1.584764	.0223033

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-04DLX5 Acquired: 12/23/2024 16:41:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3994755	-.172553	.0348150
Stddev	.0043761	.001446	.0025443
%RSD	1.095462	.8380483	7.308097
#1	.4006122	-.173050	.0324043
#2	.3946433	-.173685	.0374747
#3	.4031712	-.170924	.0345661

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2128.047	27536.73	2227.524	1818.539	1883.058
Stddev	4.897	54.36	12.292	5.029	4.614
%RSD	.2301209	.1974209	.5518167	.2765214	.2450008
#1	2133.647	27522.36	2217.222	1821.491	1888.075
#2	2125.922	27491.00	2241.130	1821.394	1882.099
#3	2124.571	27596.84	2224.219	1812.733	1878.999

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-05DLX8 Acquired: 12/23/2024 16:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1727602	-.064109	.0908377	.0934835	.0311365	27.56073	.5781977
Stddev	.0017545	.006830	.0008186	.0032748	.0017452	.28713	.0067827
%RSD	1.015553	10.65384	.9011547	3.503032	5.605054	1.041791	1.173080
#1	.1744279	-.070721	.0914036	.0902859	.0331516	27.60324	.5809773
#2	.1729225	-.064525	.0898991	.0968303	.0301202	27.82422	.5831490
#3	.1709302	-.057080	.0912104	.0933342	.0301375	27.25471	.5704667

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025967	.0019653	10.65234	.0816324	.0634173	.1726193	152.3868
Stddev	.0001414	.0000850	.12073	.0006477	.0003848	.0040469	1.7292
%RSD	5.446026	4.323841	1.133334	.7933877	.6067205	2.344389	1.134712
#1	.0027059	.0019480	10.76816	.0821592	.0634567	.1679985	152.9943
#2	.0024370	.0018903	10.66162	.0818288	.0637809	.1755323	153.7302
#3	.0026472	.0020576	10.52724	.0809093	.0630144	.1743272	150.4359

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.32144	18.61084	.0719617	.0054263	-.719999	.1943084	.1598083
Stddev	.09723	.23206	.0010056	.0005148	.758926	.0152989	.0165327
%RSD	.9420454	1.246884	1.397358	9.487354	105.4066	7.873506	10.34531
#1	10.35666	18.80943	.0714921	.0049504	-.832899	.2076506	.1788863
#2	10.39616	18.66733	.0712769	.0059728	-1.41615	.1976646	.1508623
#3	10.21151	18.35575	.0731162	.0053559	.08905	.1776101	.1496763

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.435059	.8831737	-.029875	.0012313	.1492220	1.511695	.0121970
Stddev	.050047	.0039190	.002348	.0000715	.0008950	.020893	.0009355
%RSD	2.055258	.4437427	7.858124	5.806133	.5997978	1.382077	7.670076
#1	2.414148	.8787241	-.028684	.0013048	.1490050	1.512574	.0120530
#2	2.398859	.8861123	-.032580	.0012270	.1484554	1.532134	.0113419
#3	2.492170	.8846846	-.028362	.0011620	.1502055	1.490376	.0131962

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-05DLX8 Acquired: 12/23/2024 16:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3397215	-.081704	.0263092
Stddev	.0024942	.001227	.0036552
%RSD	.7341967	1.501269	13.89312
#1	.3376484	-.081962	.0221169
#2	.3424895	-.082780	.0279826
#3	.3390264	-.080368	.0288280

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2115.768	27412.43	2248.225	1810.742	1868.404
Stddev	3.450	114.95	30.708	18.153	2.686
%RSD	.1630641	.4193501	1.365876	1.002508	.1437507
#1	2112.942	27317.33	2242.983	1790.054	1865.592
#2	2119.613	27379.77	2220.476	1818.163	1870.942
#3	2114.750	27540.17	2281.217	1824.008	1868.679

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-06DLX8 Acquired: 12/23/2024 16:49:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1338164	-.069488	.0795642	.0983636	.0340737	27.34383	.6591959
Stddev	.0070003	.001799	.0009183	.0029191	.0018525	.14453	.0037951
%RSD	5.231312	2.588435	1.154112	2.967667	5.436795	.5285622	.5757165
#1	.1305250	-.069944	.0785640	.0971598	.0323117	27.29023	.6578629
#2	.1290683	-.071014	.0797593	.1016921	.0339043	27.50750	.6634776
#3	.1418558	-.067505	.0803692	.0962389	.0360051	27.23375	.6562471

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029002	.0015044	8.359636	.0713879	.0603482	.1518770	168.2251
Stddev	.0002388	.0000150	.039949	.0005351	.0002782	.0051163	.6889
%RSD	8.234285	.9946625	.4778815	.7496136	.4609070	3.368707	.4095280
#1	.0029672	.0015088	8.397528	.0717970	.0600707	.1558434	167.8995
#2	.0026350	.0015166	8.317906	.0715845	.0606269	.1461021	169.0165
#3	.0030984	.0014877	8.363474	.0707823	.0603469	.1536856	167.7593

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.53022	18.95879	.0627185	.0053574	-.467783	.2044779	.1992833
Stddev	.03659	.16073	.0002392	.0008506	.812001	.0044193	.0081915
%RSD	.3173152	.8478084	.3813435	15.87745	173.5847	2.161251	4.110485
#1	11.52923	18.92655	.0625452	.0043911	.000885	.2040409	.1898333
#2	11.56730	19.13321	.0629914	.0056879	.001166	.2090994	.2036547
#3	11.49414	18.81663	.0626190	.0059932	-1.40540	.2002933	.2043618

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.362809	1.043820	-.032875	-.000401	.0522989	1.057526	.0117763
Stddev	.105281	.002612	.002223	.000453	.0019033	.002805	.0005899
%RSD	1.963172	.2502733	6.761804	112.8759	3.639180	.2652083	5.008993
#1	5.484213	1.041447	-.030310	-.000604	.0505792	1.057446	.0124574
#2	5.307585	1.046619	-.034240	.000118	.0543438	1.054762	.0114255
#3	5.296630	1.043394	-.034076	-.000717	.0519737	1.060369	.0114461

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-06DLX8 Acquired: 12/23/2024 16:49:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3293643	-.110852	.0278099
Stddev	.0057244	.000414	.0051803
%RSD	1.738017	.3736351	18.62733
#1	.3308278	-.110799	.0325249
#2	.3342148	-.111291	.0222647
#3	.3230502	-.110467	.0286401

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2098.390	27320.37	2208.407	1805.975	1853.427
Stddev	2.692	98.55	2.844	3.848	3.622
%RSD	.1283003	.3607021	.1287806	.2130844	.1954330
#1	2095.570	27425.79	2209.004	1810.109	1851.449
#2	2098.666	27230.57	2205.312	1802.497	1851.225
#3	2100.934	27304.76	2210.906	1805.319	1857.608

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-07DLX8 Acquired: 12/23/2024 16:53:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0808820	-.080155	.1149807	.1179792	.0381783	17.32849	.4943321
Stddev	.0016256	.004411	.0023504	.0056538	.0010023	.88167	.0260633
%RSD	2.009848	5.503242	2.044139	4.792223	2.625184	5.087980	5.272422
#1	.0827390	-.084822	.1144704	.1232028	.0393337	18.20871	.5213368
#2	.0801912	-.079588	.1129273	.1119761	.0375433	16.44537	.4693253
#3	.0797160	-.076055	.1175442	.1187588	.0376580	17.33140	.4923340

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0031631	.0017696	9.169349	.0303136	.0610327	.1433330	189.8767
Stddev	.0002695	.0001672	.428010	.0003541	.0003952	.0062347	9.0312
%RSD	8.521060	9.446994	4.667838	1.168042	.6475695	4.349816	4.756349
#1	.0034736	.0015927	9.611473	.0299259	.0609653	.1503724	199.2999
#2	.0029897	.0017911	8.757008	.0306198	.0614573	.1385067	181.2967
#3	.0030259	.0019249	9.139567	.0303952	.0606756	.1411199	189.0335

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.86184	9.727909	.0428747	.0078409	-1.81959	.0805264	.2043424
Stddev	.59104	.467250	.0009073	.0005817	.93038	.0146651	.0184524
%RSD	4.982741	4.803187	2.116188	7.419348	51.13120	18.21159	9.030135
#1	12.48547	10.15088	.0433781	.0081961	-.94048	.0924947	.1830357
#2	11.30993	9.22635	.0434187	.0071695	-2.79391	.0641675	.2150909
#3	11.79012	9.80650	.0418273	.0081570	-1.72436	.0849170	.2149006

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.653189	1.092703	-.033682	-.000362	.1301649	.9565983	.0147130
Stddev	.316516	.002103	.003919	.000600	.0039938	.0415864	.0022047
%RSD	11.92965	.1924812	11.63473	165.8674	3.068265	4.347325	14.98490
#1	2.970510	1.090360	-.029259	-.000921	.1259266	1.001483	.0168568
#2	2.337484	1.093320	-.036721	.000271	.1338582	.919376	.0148303
#3	2.651572	1.094429	-.035065	-.000435	.1307098	.948936	.0124520

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-07DLX8 Acquired: 12/23/2024 16:53:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1460185	-.133099	.0246778
Stddev	.0102487	.005850	.0064275
%RSD	7.018765	4.395180	26.04563
#1	.1571537	-.139070	.0303381
#2	.1369807	-.127378	.0176903
#3	.1439212	-.132850	.0260049

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2092.215	27242.88	2179.648	1806.287	1860.934
Stddev	5.625	82.31	81.259	6.322	6.763
%RSD	.2688561	.3021213	3.728059	.3500008	.3634265
#1	2087.512	27259.58	2090.574	1799.036	1855.491
#2	2098.446	27153.50	2249.726	1809.185	1868.505
#3	2090.687	27315.55	2198.643	1810.641	1858.805

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-08DLX8 Acquired: 12/23/2024 16:57:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1214305	-.062212	.0787288	.0948772	.0296667	27.96856	.5096963
Stddev	.0043938	.002473	.0009439	.0049579	.0029277	.09803	.0032500
%RSD	3.618352	3.974871	1.198893	5.225614	9.868720	.3505163	.6376356
#1	.1166113	-.059363	.0795205	.0892379	.0330464	27.85584	.5084820
#2	.1252138	-.063799	.0789818	.0985508	.0280498	28.01594	.5133786
#3	.1224663	-.063475	.0776843	.0968431	.0279041	28.03391	.5072283

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027222	.0012656	10.30301	.0666501	.0617868	.1279810	157.1514
Stddev	.0001342	.0000621	.02291	.0004009	.0004947	.0012020	.4547
%RSD	4.930522	4.909271	.2223756	.6014722	.8006788	.9391834	.2893405
#1	.0026325	.0011954	10.29411	.0662762	.0612202	.1289174	156.6863
#2	.0026576	.0013136	10.32904	.0666009	.0620073	.1284000	157.5949
#3	.0028765	.0012877	10.28589	.0670734	.0621330	.1266256	157.1729

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.48573	18.03338	.0616511	.0045555	-.787005	.1706052	.2043660
Stddev	.03450	.08704	.0002442	.0007762	.881106	.0066887	.0042138
%RSD	.3290578	.4826730	.3961214	17.03968	111.9568	3.920585	2.061881
#1	10.44900	17.97678	.0619280	.0042911	-1.40117	.1640261	.2066180
#2	10.51746	17.98975	.0614665	.0054294	.22254	.1703912	.1995047
#3	10.49074	18.13361	.0615587	.0039460	-1.18238	.1773984	.2069753

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.602760	1.127083	-.029900	-.000231	.1402103	1.293490	.0126086
Stddev	.079865	.003813	.006469	.000238	.0087205	.004246	.0020289
%RSD	1.735145	.3382994	21.63462	103.0010	6.219582	.3282759	16.09119
#1	4.622118	1.130143	-.028759	-.000309	.1431092	1.293277	.0129990
#2	4.671165	1.122812	-.024078	-.000420	.1304095	1.289353	.0144138
#3	4.514995	1.128294	-.036864	.000036	.1471120	1.297838	.0104128

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-08DLX8 Acquired: 12/23/2024 16:57:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3604452	-.089599	.0279636
Stddev	.0043570	.000821	.0013883
%RSD	1.208777	.9160866	4.964675
#1	.3644887	-.088679	.0269091
#2	.3610159	-.090257	.0295365
#3	.3558310	-.089862	.0274451

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2110.757	27301.83	2213.829	1806.323	1864.888
Stddev	8.569	81.62	14.059	5.649	6.767
%RSD	.4059773	.2989574	.6350646	.3127417	.3628598
#1	2100.863	27237.83	2211.190	1801.793	1857.099
#2	2115.624	27393.75	2229.020	1812.653	1869.323
#3	2115.785	27273.92	2201.276	1804.524	1868.243

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-09DLX8 Acquired: 12/23/2024 17:01:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0679677	-.079278	.0903220	.1128582	.0400173	19.09742	.5494827
Stddev	.0027153	.003745	.0008835	.0064350	.0004436	.06832	.0017801
%RSD	3.995002	4.723519	.9781842	5.701805	1.108493	.3577270	.3239530
#1	.0710732	-.077766	.0909215	.1188588	.0400978	19.02103	.5495020
#2	.0667889	-.083542	.0893073	.1060627	.0404151	19.11857	.5476930
#3	.0660409	-.076526	.0907370	.1136530	.0395390	19.15266	.5512530

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032363	.0013669	9.591860	.0319174	.0594046	.0939794	189.3162
Stddev	.0001213	.0001173	.039620	.0010779	.0004906	.0035032	.4859
%RSD	3.747326	8.579208	.4130598	3.377109	.8258274	3.727608	.2566729
#1	.0031023	.0014591	9.605252	.0306773	.0595497	.0899823	189.3012
#2	.0032683	.0014066	9.547280	.0326297	.0588579	.0965162	188.8380
#3	.0033385	.0012349	9.623049	.0324451	.0598063	.0954396	189.8095

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.84537	11.45370	.0454767	.0070553	-1.00402	.0797815	.2176015
Stddev	.02587	.09283	.0004033	.0015651	.65543	.0074571	.0036271
%RSD	.2384896	.8104400	.8867159	22.18296	65.28115	9.346921	1.666831
#1	10.81928	11.34680	.0451599	.0076969	-1.21359	.0854905	.2183836
#2	10.84583	11.51382	.0453396	.0081977	-.26943	.0825095	.2207737
#3	10.87100	11.50050	.0459306	.0052714	-1.52904	.0713445	.2136472

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.859870	1.066586	-.039715	-.000313	.0980994	1.042594	.0130365
Stddev	.211577	.002361	.007038	.000349	.0019207	.002586	.0003372
%RSD	4.353559	.2213300	17.72043	111.5754	1.957956	.2480301	2.586840
#1	4.621614	1.063984	-.034522	-.000582	.0991498	1.043513	.0134174
#2	5.025799	1.068591	-.047725	.000082	.0992660	1.044595	.0127761
#3	4.932198	1.067182	-.036897	-.000439	.0958826	1.039674	.0129159

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-09DLX8 Acquired: 12/23/2024 17:01:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3062632	-.129388	.0255977
Stddev	.0039898	.000645	.0025480
%RSD	1.302732	.4983927	9.953841
#1	.3017159	-.129322	.0235798
#2	.3078965	-.128779	.0284609
#3	.3091771	-.130064	.0247525

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2108.682	27373.60	2214.943	1806.069	1874.644
Stddev	6.975	77.83	7.013	15.695	6.219
%RSD	.3307760	.2843358	.3166430	.8690362	.3317429
#1	2103.261	27456.64	2222.949	1806.188	1870.188
#2	2106.234	27361.84	2211.996	1821.705	1871.996
#3	2116.551	27302.31	2209.883	1790.315	1881.749

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-10DLX10 Acquired: 12/23/2024 17:05:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0734615	-.061408	.1146291	.0897823	.0257612	14.40760	.7965419
Stddev	.0028255	.001039	.0005781	.0017497	.0011327	.02295	.0021756
%RSD	3.846261	1.691599	.5043512	1.948852	4.396783	.1592701	.2731301
#1	.0764455	-.060661	.1147779	.0896957	.0270018	14.39253	.7989032
#2	.0731120	-.060969	.1151183	.0915738	.0247823	14.43401	.7961036
#3	.0708270	-.062594	.1139911	.0880775	.0254995	14.39626	.7946188

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021555	.0017530	6.781638	.0331413	.0483335	.1625546	143.5123
Stddev	.0001401	.0000556	.025049	.0002834	.0000567	.0038139	.3684
%RSD	6.502177	3.173383	.3693600	.8552261	.1172099	2.346232	.2566889
#1	.0021125	.0017567	6.807290	.0328843	.0482880	.1667604	143.1179
#2	.0023121	.0016956	6.780384	.0334453	.0483155	.1615828	143.8474
#3	.0020419	.0018067	6.757240	.0330942	.0483970	.1593206	143.5718

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.65582	9.702485	.0403853	.0067543	-1.35788	.0858879	.1991685
Stddev	.02175	.034280	.0007222	.0002500	.34073	.0029893	.0103043
%RSD	.2040832	.3533126	1.788182	3.702029	25.09286	3.480488	5.173640
#1	10.63117	9.740960	.0404605	.0065019	-1.07571	.0824713	.1978969
#2	10.67231	9.675193	.0396285	.0070019	-1.26151	.0871705	.2100496
#3	10.66396	9.691301	.0410669	.0067592	-1.73641	.0880219	.1895591

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.768568	.7905719	-.031693	-.000285	.0471137	.6451860	.0090122
Stddev	.055199	.0040664	.003648	.000780	.0041983	.0054542	.0015725
%RSD	1.993766	.5143661	11.51144	273.5009	8.911003	.8453621	17.44841
#1	2.799820	.7862651	-.034672	.000566	.0453110	.6489522	.0079001
#2	2.801050	.7911055	-.027624	-.000966	.0519123	.6389314	.0083252
#3	2.704834	.7943453	-.032782	-.000456	.0441178	.6476743	.0108113

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5180-10DLX10 Acquired: 12/23/2024 17:05:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1816231	-.093450	.0182110
Stddev	.0019798	.000169	.0040877
%RSD	1.090063	.1803705	22.44619
#1	.1834869	-.093257	.0159201
#2	.1818376	-.093568	.0229304
#3	.1795447	-.093525	.0157826

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2087.463	27126.05	2200.538	1793.840	1861.005
Stddev	5.911	93.60	11.609	9.849	4.995
%RSD	.2831568	.3450427	.5275430	.5490480	.2683777
#1	2093.813	27038.56	2188.429	1783.687	1865.364
#2	2086.458	27114.85	2211.572	1794.478	1862.096
#3	2082.120	27224.75	2201.614	1803.354	1855.556

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5181-10DLX4 Acquired: 12/23/2024 17:09:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0750166	-.085997	.1097178	.1264466	.0422131	34.17853	.6450045
Stddev	.0018881	.001271	.0018304	.0036097	.0021424	.23090	.0025368
%RSD	2.516910	1.477975	1.668254	2.854693	5.075154	.6755780	.3933038
#1	.0759375	-.084568	.1081803	.1257551	.0439071	34.02920	.6429670
#2	.0762676	-.086423	.1092305	.1232328	.0398048	34.06192	.6442007
#3	.0728448	-.087000	.1117425	.1303520	.0429274	34.44449	.6478459

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035129	.0015836	15.13341	.0538030	.0889977	.1405305	210.6339
Stddev	.0000324	.0000218	.09456	.0006966	.0010246	.0062274	.7431
%RSD	.9226171	1.375021	.6248567	1.294660	1.151263	4.431329	.3528107
#1	.0034885	.0015859	15.04764	.0530616	.0878528	.1380005	209.9534
#2	.0035497	.0015607	15.11777	.0544439	.0893121	.1476247	210.5216
#3	.0035006	.0016041	15.23482	.0539034	.0898283	.1359664	211.4269

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.09411	20.83357	.0650005	.0099781	-1.45490	.1108992	.3648029
Stddev	.08255	.12914	.0003479	.0016164	.47527	.0020006	.0036436
%RSD	.4829249	.6198639	.5351489	16.19974	32.66654	1.803986	.9987887
#1	17.04269	20.90893	.0647790	.0090349	-1.58261	.1111746	.3643010
#2	17.05030	20.68445	.0648211	.0118446	-1.85327	.1087751	.3686714
#3	17.18933	20.90732	.0654015	.0090549	-.92883	.1127478	.3614362

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.506589	1.714550	-.045575	-.001230	.1323273	2.545351	.0140175
Stddev	.087037	.005214	.006843	.000378	.0076657	.008746	.0004918
%RSD	1.580590	.3041263	15.01497	30.73566	5.792999	.3435986	3.508305
#1	5.449548	1.708533	-.042015	-.000793	.1365534	2.535254	.0145817
#2	5.463449	1.717367	-.053464	-.001446	.1369497	2.550248	.0137907
#3	5.606769	1.717751	-.041245	-.001451	.1234786	2.550552	.0136800

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5181-10DLX4 Acquired: 12/23/2024 17:09:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4562823	-.093644	.0468352
Stddev	.0060293	.000313	.0029136
%RSD	1.321397	.3340141	6.220892
#1	.4513905	-.093996	.0501797
#2	.4544382	-.093398	.0448467
#3	.4630183	-.093538	.0454793

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2123.695	27496.56	2216.300	1812.718	1866.032
Stddev	1.506	130.62	6.296	3.073	.853
%RSD	.0709320	.4750524	.2840881	.1695475	.0457338
#1	2122.689	27390.32	2217.803	1809.224	1866.768
#2	2125.427	27642.40	2221.709	1815.003	1866.230
#3	2122.970	27456.95	2209.389	1813.928	1865.096

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-20DLX2 Acquired: 12/23/2024 17:13:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6954414	-.196860	.4792039	.2317101	.0941987	199.2449	.4042972
Stddev	.0014519	.002515	.0029620	.0016383	.0014296	.3953	.0019824
%RSD	.2087758	1.277443	.6181107	.7070474	1.517611	.1983838	.4903387
#1	.6969288	-.194270	.4817315	.2306718	.0958417	199.3974	.4059568
#2	.6953677	-.199292	.4799356	.2335987	.0935155	199.5412	.4048328
#3	.6940277	-.197017	.4759446	.2308597	.0932389	198.7961	.4021020

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091432	.0176197	37.39181	.8627625	.2867155	2.105859	421.4394
Stddev	.0001749	.0001354	.09150	.0022348	.0009482	.021018	.7425
%RSD	1.913355	.7684253	.2447186	.2590321	.3306988	.9980680	.1761846
#1	.0092684	.0175624	37.37052	.8627652	.2857758	2.119749	421.9232
#2	.0092180	.0175223	37.49208	.8649960	.2876719	2.116150	421.8105
#3	.0089433	.0177743	37.31282	.8605263	.2866988	2.081679	420.5845

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.712818	151.7260	.5239538	.0090086	-.902012	1.145599	1.114674
Stddev	.027132	.3918	.0007208	.0015423	.624398	.012690	.002978
%RSD	.3517747	.2582298	.1375769	17.12040	69.22276	1.107752	.2671212
#1	7.724165	151.2740	.5232796	.0072817	-.635402	1.130996	1.114537
#2	7.732434	151.9683	.5247136	.0094953	-1.61546	1.151854	1.117717
#3	7.681855	151.9357	.5238681	.0102489	-.45518	1.153949	1.111767

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.450128	2.042734	-.085894	-.000519	.3771516	8.257168	.0377393
Stddev	.094076	.002784	.006329	.000851	.0034110	.070375	.0002698
%RSD	3.839625	.1362984	7.368474	164.0211	.9044142	.8522872	.7149501
#1	2.349910	2.045219	-.078619	-.000805	.3755489	8.191958	.0379558
#2	2.463939	2.039725	-.090136	.000438	.3748371	8.331765	.0378250
#3	2.536534	2.043260	-.088926	-.001191	.3810688	8.247780	.0374370

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-20DLX2 Acquired: 12/23/2024 17:13:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.991602	-.315423	.0974277
Stddev	.009527	.000629	.0016568
%RSD	.3184476	.1994316	1.700510
#1	2.998492	-.315883	.0955162
#2	2.995584	-.315680	.0984512
#3	2.980730	-.314706	.0983156

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2165.605	28040.49	2330.818	1856.019	1793.109
Stddev	4.156	28.04	10.794	3.702	3.471
%RSD	.1918988	.0999895	.4630799	.1994357	.1935778
#1	2164.937	28027.66	2337.948	1851.860	1792.129
#2	2170.054	28021.17	2318.400	1857.246	1796.964
#3	2161.824	28072.65	2336.107	1858.952	1790.233

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-21DLX2 Acquired: 12/23/2024 17:17:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6943300	-.200631	.4792459	.2369211	.0936122	199.3883	.4051442
Stddev	.0060069	.003282	.0024059	.0041462	.0028427	.2608	.0003919
%RSD	.8651425	1.635862	.5020186	1.750049	3.036655	.1307870	.0967216
#1	.6940472	-.198092	.4789807	.2417085	.0968454	199.6775	.4054316
#2	.6884695	-.204337	.4769836	.2344836	.0915051	199.1712	.4046979
#3	.7004734	-.199463	.4817735	.2345713	.0924862	199.3161	.4053032

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0092522	.0178849	38.03537	.8570622	.2854444	2.108289	422.1619
Stddev	.0001464	.0000874	.07076	.0020759	.0003189	.001358	.5294
%RSD	1.582606	.4887710	.1860347	.2422050	.1117031	.0644138	.1253987
#1	.0093558	.0179664	38.05605	.8589161	.2850938	2.109828	422.5986
#2	.0093162	.0177926	38.09349	.8548194	.2855223	2.107257	422.3140
#3	.0090847	.0178959	37.95658	.8574512	.2857170	2.107783	421.5731

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.734838	152.1305	.5251936	.0092437	-.853355	1.153548	1.114304
Stddev	.005648	.3621	.0010215	.0011086	.631948	.016141	.008422
%RSD	.0730213	.2380218	.1944915	11.99304	74.05460	1.399239	.7558410
#1	7.737760	152.5280	.5240338	.0094705	-1.36354	1.161611	1.119206
#2	7.738425	152.0440	.5255876	.0080392	-.14644	1.134964	1.104579
#3	7.728327	151.8195	.5259594	.0102214	-1.05009	1.164069	1.119127

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.680641	2.045144	-.092862	-.000961	.3803747	8.228447	.0385543
Stddev	.225435	.010894	.007131	.000996	.0054394	.121312	.0010341
%RSD	8.409725	.5326938	7.679590	103.6375	1.430021	1.474299	2.682198
#1	2.881683	2.039876	-.100029	-.000933	.3780128	8.361457	.0389183
#2	2.436916	2.037884	-.092791	.000021	.3865959	8.199992	.0373874
#3	2.723325	2.057671	-.085766	-.001970	.3765155	8.123892	.0393572

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-21DLX2 Acquired: 12/23/2024 17:17:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.993035	-.316374	.1007593
Stddev	.005889	.000190	.0020427
%RSD	.1967674	.0601098	2.027309
#1	2.999129	-.316166	.0986642
#2	2.987375	-.316539	.1008685
#3	2.992601	-.316415	.1027452

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2161.381	27955.20	2324.495	1858.987	1789.166
Stddev	8.422	29.63	25.122	3.190	5.593
%RSD	.3896638	.1059859	1.080755	.1716173	.3126132
#1	2156.945	27961.49	2295.893	1859.629	1787.778
#2	2171.093	27981.18	2334.603	1855.524	1795.323
#3	2156.103	27922.93	2342.988	1861.807	1784.398

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-20LDLX10 Acquired: 12/23/2024 17:21:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1403471	-.042219	.0962286	.0534637	.0192447	41.26289	.0811405
Stddev	.0020237	.002747	.0008372	.0020790	.0028389	.18579	.0015263
%RSD	1.441937	6.506650	.8700493	3.888546	14.75131	.4502670	1.881058
#1	.1424273	-.039368	.0971676	.0558097	.0211424	41.14210	.0828609
#2	.1402290	-.042441	.0959583	.0527316	.0206107	41.16973	.0799490
#3	.1383850	-.044849	.0955599	.0518498	.0159811	41.47683	.0806117

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019141	.0033163	7.867051	.1787464	.0579384	.4480010	89.07893
Stddev	.0000399	.0000432	.036812	.0006607	.0003059	.0089732	.38434
%RSD	2.084889	1.303106	.4679210	.3696559	.5280546	2.002945	.4314580
#1	.0019181	.0033651	7.861573	.1792131	.0582508	.4583617	89.33451
#2	.0018724	.0033007	7.833285	.1779903	.0579251	.4427212	88.63693
#3	.0019519	.0032830	7.906294	.1790358	.0576394	.4429201	89.26534

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.630126	31.56182	.1055011	.0023790	-.477682	.2405072	.2322672
Stddev	.009829	.04676	.0008935	.0003545	.619741	.0039473	.0125923
%RSD	.6029671	.1481662	.8468699	14.90042	129.7392	1.641243	5.421458
#1	1.631632	31.55593	.1065323	.0020165	-.820656	.2397536	.2381533
#2	1.619630	31.61125	.1050123	.0023956	-.850121	.2369911	.2178098
#3	1.639115	31.51828	.1049586	.0027249	.237731	.2447770	.2408385

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1880743	.3960599	-.024155	-.000180	.0682980	1.710983	.0067111
Stddev	.0700760	.0019443	.002398	.000206	.0045913	.017387	.0036856
%RSD	37.25973	.4909015	9.928303	114.7251	6.722476	1.016224	54.91845
#1	.1538340	.3938419	-.026881	-.000086	.0711165	1.730830	.0106742
#2	.1417017	.3968677	-.023215	-.000037	.0630000	1.703680	.0033864
#3	.2686874	.3974700	-.022369	-.000416	.0707775	1.698438	.0060725

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-20LDLX10 Acquired: 12/23/2024 17:21:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6214004	-.066833	.0222586
Stddev	.0038022	.000646	.0011012
%RSD	.6118816	.9670119	4.947148
#1	.6176953	-.067476	.0230709
#2	.6252928	-.066184	.0210053
#3	.6212133	-.066839	.0226996

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2079.273	27276.30	2214.291	1807.198	1845.263
Stddev	1.078	72.24	24.132	4.696	1.665
%RSD	.0518344	.2648450	1.089828	.2598236	.0902235
#1	2080.168	27231.71	2186.808	1802.425	1846.042
#2	2079.574	27237.54	2224.048	1807.356	1846.396
#3	2078.077	27359.64	2232.017	1811.812	1843.351

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-22DLX2 Acquired: 12/23/2024 17:25:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7826231	-.105078	.5134099	.4101163	.2567519	202.0671	4.172040
Stddev	.0088778	.002601	.0049933	.0078938	.0017993	.4195	.008671
%RSD	1.134362	2.474977	.9725776	1.924770	.7007766	.2076215	.2078413
#1	.7725245	-.102228	.5079007	.4016441	.2579647	201.6094	4.162454
#2	.7861466	-.107322	.5176376	.4172643	.2576065	202.4335	4.179337
#3	.7891982	-.105683	.5146912	.4114404	.2546847	202.1583	4.174331

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1037165	.1124486	37.82483	1.229664	1.204470	2.556892	423.4686
Stddev	.0006697	.0004839	.19766	.001516	.002626	.009820	1.1756
%RSD	.6456589	.4303244	.5225789	.1233008	.2179959	.3840630	.2776021
#1	.1031837	.1119170	37.73537	1.231219	1.202122	2.560223	422.2802
#2	.1044682	.1125652	38.05141	1.228190	1.203984	2.564614	424.6309
#3	.1034975	.1128635	37.68771	1.229582	1.207305	2.545840	423.4947

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.641239	151.8190	1.474048	.0783212	-.545199	2.112856	1.979916
Stddev	.034575	.6333	.001896	.0020547	.314251	.017952	.026904
%RSD	.4001127	.4171419	.1286045	2.623437	57.63970	.8496531	1.358840
#1	8.613975	151.1067	1.471942	.0759675	-.217569	2.108737	1.997926
#2	8.680128	152.0318	1.474583	.0792397	-.573930	2.132509	1.948990
#3	8.629614	152.3185	1.475618	.0797565	-.844099	2.097322	1.992833

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.535564	2.003198	-.103746	-.001009	.3644163	8.455370	.0385475
Stddev	.051639	.002794	.003634	.000408	.0057699	.058200	.0011476
%RSD	2.036596	.1394633	3.503146	40.43049	1.583333	.6883163	2.977171
#1	2.514173	1.999985	-.104837	-.001481	.3634203	8.458971	.0397019
#2	2.498058	2.005048	-.106710	-.000764	.3592093	8.511685	.0374067
#3	2.594462	2.004562	-.099691	-.000784	.3706194	8.395453	.0385340

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5184-22DLX2 Acquired: 12/23/2024 17:25:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZF8S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.990251	-.318053	.0984763
Stddev	.003277	.001439	.0056976
%RSD	.1096003	.4524727	5.785774
#1	2.988931	-.316516	.0970863
#2	2.993982	-.319368	.0936024
#3	2.987839	-.318276	.1047404

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2170.296	28449.08	2328.519	1879.598	1805.649
Stddev	2.146	96.73	13.696	2.266	.683
%RSD	.0988579	.3399990	.5881895	.1205788	.0378529
#1	2172.710	28337.46	2325.386	1877.343	1806.429
#2	2169.574	28508.33	2316.660	1881.876	1805.153
#3	2168.605	28501.45	2343.510	1879.573	1805.365

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5154-09DLX5 Acquired: 12/23/2024 17:29:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28P7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008548	.0260760	.0131877	-.033446	.0001750	1.969984	.0377696
Stddev	.002694	.0055211	.0022567	.002070	.0022788	.028878	.0013360
%RSD	31.51931	21.17306	17.11199	6.188094	1302.558	1.465879	3.537166
#1	-.009346	.0220479	.0120332	-.033834	.0021854	1.939961	.0384687
#2	-.010752	.0323694	.0157880	-.035295	.0006399	1.972432	.0386110
#3	-.005545	.0238107	.0117418	-.031210	-.002300	1.997560	.0362292

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003049	.0000529	344.7415	.0084752	.0387342	.0081387	5.613802
Stddev	.0001055	.0001024	.1701	.0007561	.0008793	.0053020	.029738
%RSD	34.58609	193.6541	.0493528	8.921740	2.270001	65.14528	.5297250
#1	.0001846	-.000058	344.6201	.0088407	.0378772	.0133282	5.641818
#2	.0003813	.000074	344.6686	.0089792	.0386914	.0083569	5.616989
#3	.0003488	.000143	344.9360	.0076058	.0396341	.0027310	5.582599

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2012718	196.5844	.0131976	-.000130	-2.03743	.0149904	.0393325
Stddev	.0009585	.4590	.0005080	.000865	.54650	.0040533	.0071826
%RSD	.4762430	.2334973	3.849377	665.2576	26.82284	27.03943	18.26130
#1	.2008880	196.0579	.0126518	-.001126	-2.66393	.0119620	.0467935
#2	.2023628	196.7951	.0132845	.000297	-1.65877	.0134142	.0324651
#3	.2005647	196.9003	.0136566	.000439	-1.78959	.0195951	.0387389

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.564093	.1327785	.0038955	.0048353	2.027742	.7085349	.0073012
Stddev	.086098	.0034277	.0023325	.0003688	.017947	.0059231	.0015420
%RSD	15.26299	2.581527	59.87666	7.627120	.8850676	.8359678	21.11906
#1	-.516118	.1299349	.0041597	.0051574	2.007521	.7056437	.0060351
#2	-.663490	.1318161	.0014421	.0049154	2.033929	.7046126	.0090184
#3	-.512671	.1365846	.0060846	.0044330	2.041777	.7153484	.0068503

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5154-09DLX5 Acquired: 12/23/2024 17:29:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28P7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0673118	.2690500	.0046572
Stddev	.0046836	.0004047	.0053353
%RSD	6.958075	.1504164	114.5600
#1	.0633571	.2694928	.0016891
#2	.0660944	.2686993	.0108166
#3	.0724839	.2689580	.0014660

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1979.654	26218.78	2150.411	1710.980	1699.295
Stddev	13.363	137.76	5.454	13.203	14.613
%RSD	.6750140	.5254066	.2536352	.7716818	.8599620
#1	1988.115	26181.19	2156.649	1703.245	1707.265
#2	1986.599	26103.73	2146.540	1703.469	1708.190
#3	1964.249	26371.43	2148.044	1726.225	1682.429

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV003 Acquired: 12/23/2024 17:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.031209	4.876313	24.55670	4.919828	4.836937	402.8975	10.19142
Stddev	.019348	.011818	.03609	.003849	.009578	2.1291	.06572
%RSD	.3845601	.2423632	.1469495	.0782373	.1980152	.5284424	.6448955
#1	5.020219	4.862667	24.51742	4.916864	4.847975	400.6052	10.12058
#2	5.019858	4.883041	24.56431	4.918441	4.830829	404.8130	10.25041
#3	5.053549	4.883230	24.58838	4.924178	4.832006	403.2744	10.20327

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5106427	2.465840	412.6283	15.32674	2.444707	15.21692	418.1073
Stddev	.0003608	.001323	1.2762	.01737	.000731	.06519	2.4364
%RSD	.0706593	.0536581	.3092777	.1133330	.0299176	.4283954	.5827225
#1	.5109487	2.464818	411.3390	15.31628	2.444423	15.17352	415.6169
#2	.5102448	2.465368	413.8909	15.31715	2.445538	15.29188	420.4859
#3	.5107346	2.467335	412.6550	15.34679	2.444161	15.18536	418.2191

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.19965	412.9929	2.493083	1.298929	410.9113	2.579388	15.38914
Stddev	.08150	3.7268	.005915	.004336	3.4489	.007990	.00904
%RSD	.5362181	.9023784	.2372382	.3338218	.8393329	.3097805	.0587587
#1	15.11475	408.7403	2.486414	1.294691	406.9649	2.573967	15.37882
#2	15.27727	415.6896	2.497693	1.303357	412.4213	2.588565	15.39293
#3	15.20692	414.5488	2.495142	1.298740	413.3477	2.575633	15.39566

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	153.1191	4.958277	4.828743	4.886634	4.884942	4.779598	4.992196
Stddev	.8883	.006178	.006100	.008321	.005708	.006835	.003273
%RSD	.5801304	.1246053	.1263314	.1702756	.1168419	.1430059	.0655605
#1	152.3570	4.958688	4.823054	4.891025	4.880448	4.787332	4.988421
#2	154.0947	4.951904	4.827990	4.877037	4.891364	4.774370	4.994233
#3	152.9057	4.964240	4.835184	4.891839	4.883015	4.777092	4.993935

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV003 Acquired: 12/23/2024 17:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV003 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.031683	4.767840	5.139188
Stddev	.003203	.018420	.027029
%RSD	.0636563	.3863465	.5259363
#1	5.035206	4.748403	5.109508
#2	5.030896	4.785039	5.162388
#3	5.028946	4.770079	5.145669

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1775.359	24213.95	2078.386	1520.141	1551.678
Stddev	3.076	77.40	.927	.280	2.984
%RSD	.1732782	.3196437	.0446066	.0184348	.1923342
#1	1774.776	24299.75	2079.452	1520.446	1553.243
#2	1772.616	24192.71	2077.772	1520.081	1548.237
#3	1778.685	24149.40	2077.933	1519.896	1553.555

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB003 Acquired: 12/23/2024 17:37:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB003 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002657	-.000934	.0036794	-.000031	.0008841	.0282710	-.001586
Stddev	.003573	.001695	.0005344	.001457	.0031621	.0199779	.000793
%RSD	134.4859	181.4575	14.52348	4696.976	357.6730	70.66578	50.00289
#1	.000106	-.000190	.0040590	-.001175	.0011279	.0269005	-.000673
#2	-.001385	-.002874	.0039109	.001610	-.002393	.0090136	-.001986
#3	-.006691	.000262	.0030683	-.000529	.003917	.0488989	-.002100

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000024	-.000097	-.017206	-.001129	-.000075	.0010175	.0313354
Stddev	.000161	.000075	.014359	.000161	.000348	.0095611	.0132398
%RSD	681.4487	77.86731	83.45583	14.29846	467.1849	939.6308	42.25184
#1	.000162	-.000154	-.006980	-.001303	.000085	-.008561	.0212438
#2	-.000128	-.000011	-.011016	-.001100	.000165	.010561	.0463266
#3	-.000105	-.000126	-.033622	-.000985	-.000474	.001053	.0264357

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009898	.0833795	.0007016	-.000063	-.933045	.0042170	-.003391
Stddev	.0017550	.2035665	.0004961	.001890	.277235	.0091686	.015630
%RSD	177.3015	244.1447	70.70384	3016.991	29.71294	217.4192	460.8938
#1	.0030006	.3175460	.0001436	-.001326	-1.22586	.0101922	-.020859
#2	-.000233	-.015988	.0008687	.002110	-.67459	-.006339	.001413
#3	.000202	-.051419	.0010926	-.000972	-.89868	.008798	.009273

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.596801	-.000858	.0088214	.0002806	-.004628	-.079119	-.000431
Stddev	.172052	.000408	.0009502	.0005114	.004581	.000533	.000151
%RSD	28.82902	47.59734	10.77149	182.2624	98.98175	.6730664	34.97596
#1	-.795032	-.001329	.0098633	.0008274	-.008839	-.079614	-.000476
#2	-.486275	-.000619	.0080025	-.000186	-.005293	-.079188	-.000555
#3	-.509096	-.000625	.0085984	.000200	.000249	-.078556	-.000263

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB003 Acquired: 12/23/2024 17:37:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB003 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0010029	.0000461	.0098546
Stddev	.0038583	.0001172	.0051057
%RSD	384.6973	254.0990	51.81000
#1	.0051450	.0000530	.0039789
#2	.0003527	.0001597	.0123739
#3	-.002489	-.000074	.0132110

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2041.148	26763.73	2144.952	1765.502	1853.001
Stddev	7.810	82.66	8.996	8.447	8.758
%RSD	.3826111	.3088554	.4193992	.4784387	.4726512
#1	2044.618	26697.27	2155.166	1760.693	1860.544
#2	2032.205	26737.62	2138.205	1760.557	1843.395
#3	2046.621	26856.29	2141.487	1775.255	1855.062

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-05DLX5 Acquired: 12/23/2024 17:41:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ51 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003821	.0309689	.0861474	-.027126	.0008646	3.371960	.0239011
Stddev	.004219	.0062980	.0015451	.000922	.0008403	.041784	.0011488
%RSD	110.4113	20.33648	1.793513	3.398446	97.18788	1.239158	4.806402
#1	-.007923	.0265122	.0867270	-.026972	.0015525	3.384626	.0250177
#2	-.004047	.0381740	.0873189	-.028115	-.000072	3.325308	.0227226
#3	.000506	.0282204	.0843963	-.026291	.001113	3.405945	.0239629

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004722	.0029437	418.9507	.0106571	.0432386	.0096347	18.82457
Stddev	.0000733	.0000442	3.7380	.0006255	.0010247	.0067898	.14339
%RSD	15.53369	1.501655	.8922379	5.869198	2.369869	70.47304	.7617434
#1	.0004107	.0029791	419.3433	.0100942	.0437150	.0018769	18.73330
#2	.0005534	.0028941	415.0318	.0113305	.0439385	.0144957	18.75055
#3	.0004524	.0029578	422.4768	.0105467	.0420625	.0125314	18.98984

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.064912	237.4983	.0134111	.0020067	-1.57852	.0178885	.6033808
Stddev	.021015	2.1437	.0004384	.0010054	.04235	.0087793	.0047402
%RSD	1.017701	.9026064	3.268886	50.10185	2.682617	49.07793	.7855981
#1	2.065828	237.8786	.0138818	.0027603	-1.52963	.0280172	.6038733
#2	2.043454	235.1900	.0130145	.0023946	-1.60393	.0124587	.5984136
#3	2.085453	239.4264	.0133368	.0008651	-1.60198	.0131896	.6078555

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9096959	.2709356	.0238398	.0030010	4.140861	1.734917	.0070800
Stddev	.2049333	.0024197	.0004014	.0008144	.009135	.012821	.0022090
%RSD	22.52767	.8930856	1.683905	27.13889	.2206008	.7390107	31.20017
#1	.8333067	.2688151	.0242176	.0020700	4.130314	1.743880	.0045537
#2	1.141852	.2735714	.0238834	.0035818	4.146024	1.720231	.0080378
#3	.753929	.2704202	.0234183	.0033512	4.146246	1.740641	.0086484

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-05DLX5 Acquired: 12/23/2024 17:41:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ51 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0303081	.1147723	.0176824
Stddev	.0035732	.0016355	.0032300
%RSD	11.78939	1.425032	18.26662
#1	.0273642	.1149297	.0171015
#2	.0292767	.1130637	.0147822
#3	.0342836	.1163234	.0211634

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1924.206	25321.03	2128.440	1647.106	1629.145
Stddev	7.349	42.46	16.658	4.400	5.219
%RSD	.3819182	.1676693	.7826360	.2671127	.3203497
#1	1920.534	25355.09	2113.443	1642.482	1627.362
#2	1919.416	25273.47	2146.369	1651.240	1625.051
#3	1932.667	25334.54	2125.508	1647.596	1635.022

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-06DLX5 Acquired: 12/23/2024 17:45:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ52 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002504	.0260888	.0752226	-.024735	.0045171	2.562454	.0277576
Stddev	.005448	.0056078	.0034941	.001979	.0026487	.107310	.0014122
%RSD	217.5739	21.49497	4.645070	8.000291	58.63759	4.187787	5.087718
#1	.002747	.0197602	.0732401	-.027019	.0034345	2.512519	.0262179
#2	-.002129	.0280665	.0792571	-.023528	.0075357	2.685632	.0280624
#3	-.008130	.0304398	.0731707	-.023658	.0025812	2.489212	.0289925

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004375	.0018072	407.5088	.0079349	.0407561	.0125088	17.82947
Stddev	.0001438	.0001491	12.7206	.0008382	.0012695	.0064963	.54785
%RSD	32.85354	8.250723	3.121547	10.56295	3.114884	51.93405	3.072741
#1	.0004792	.0018849	402.6409	.0087189	.0410226	.0069120	17.58107
#2	.0005558	.0019015	421.9444	.0070515	.0418713	.0196327	18.45752
#3	.0002776	.0016353	397.9411	.0080343	.0393746	.0109818	17.44982

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.408923	229.7196	.0108464	-.000225	-1.48422	.0073251	.3699886
Stddev	.088443	7.1822	.0007922	.001452	.45494	.0026492	.0028772
%RSD	3.671464	3.126497	7.303607	644.8352	30.65192	36.16571	.7776310
#1	2.369333	226.0332	.0116987	-.001662	-1.45413	.0075341	.3685584
#2	2.510245	237.9964	.0107078	-.000256	-1.04507	.0098636	.3681068
#3	2.347191	225.1291	.0101327	.001242	-1.95346	.0045776	.3733006

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4521901	.2230720	.0194171	.0016706	3.661340	1.320003	.0076941
Stddev	.1000913	.0072073	.0012732	.0004792	.100662	.036213	.0021187
%RSD	22.13479	3.230912	6.557113	28.68509	2.749320	2.743411	27.53673
#1	.3368615	.2286733	.0200773	.0019164	3.726881	1.310142	.0089218
#2	.5033158	.2256018	.0179494	.0011184	3.711702	1.360126	.0089128
#3	.5163931	.2149409	.0202247	.0019772	3.545436	1.289742	.0052476

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-06DLX5 Acquired: 12/23/2024 17:45:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ52 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0135876	.1116848	.0106762
Stddev	.0054173	.0038759	.0024214
%RSD	39.86962	3.470425	22.68021
#1	.0077684	.1099450	.0096893
#2	.0184848	.1161258	.0134352
#3	.0145096	.1089836	.0089042

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2022.349	26299.19	2124.211	1709.006	1716.986
Stddev	51.079	81.42	57.270	4.091	46.954
%RSD	2.525733	.3095989	2.696057	.2393984	2.734654
#1	1990.493	26229.07	2137.219	1710.524	1686.270
#2	1995.289	26280.00	2061.556	1704.372	1693.653
#3	2081.265	26388.49	2173.859	1712.121	1771.036

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-07DLX5 Acquired: 12/23/2024 17:49:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ53 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005354	.0278520	.0771317	-.032949	.0017851	2.345101	.0140194
Stddev	.002269	.0030296	.0005159	.004254	.0021761	.041293	.0021234
%RSD	42.38406	10.87742	.6688316	12.91110	121.8989	1.760814	15.14578
#1	-.006009	.0249922	.0765546	-.029044	.0042973	2.360212	.0145593
#2	-.002829	.0275370	.0772924	-.032320	.0005725	2.298381	.0116782
#3	-.007224	.0310268	.0775480	-.037482	.0004856	2.376710	.0158207

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003714	.0009490	400.8446	.0073948	.0415993	.0110587	17.29286
Stddev	.0000746	.0001083	7.2844	.0003023	.0008809	.0037218	.28510
%RSD	20.09122	11.41450	1.817253	4.087734	2.117584	33.65493	1.648670
#1	.0003299	.0008516	404.8368	.0077415	.0416155	.0094582	17.40139
#2	.0003267	.0009297	392.4369	.0072567	.0407104	.0084049	16.96943
#3	.0004575	.0010657	405.2600	.0071862	.0424719	.0153131	17.50776

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.965943	227.9986	.0103937	.0014398	-1.08785	.0078807	.1940119
Stddev	.054911	4.0461	.0007578	.0017181	.66629	.0011159	.0171994
%RSD	1.851387	1.774619	7.291362	119.3282	61.24788	14.15937	8.865106
#1	2.993249	230.3145	.0107266	.0026405	-.33779	.0065938	.2027096
#2	2.902732	223.3266	.0109280	-.000528	-1.31457	.0084700	.2051253
#3	3.001849	230.3546	.0095263	.002207	-1.61119	.0085784	.1742008

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5639713	.2217980	.0145611	.0021088	3.460601	1.328545	.0073534
Stddev	.1594761	.0017509	.0019083	.0004043	.004444	.026634	.0003324
%RSD	28.27735	.7893895	13.10514	19.17138	.1284249	2.004739	4.520360
#1	.7202709	.2235068	.0138074	.0016874	3.461640	1.352742	.0071324
#2	.4014980	.2200079	.0131448	.0021455	3.455730	1.300008	.0071921
#3	.5701449	.2218792	.0167311	.0024935	3.464434	1.332886	.0077357

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4978-07DLX5 Acquired: 12/23/2024 17:49:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ53 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0082863	.1020759	.0073491
Stddev	.0015418	.0015925	.0011768
%RSD	18.60672	1.560071	16.01267
#1	.0065293	.1028159	.0072049
#2	.0094135	.1002481	.0062510
#3	.0089162	.1031638	.0085913

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1956.787	25915.93	2157.506	1685.425	1656.706
Stddev	2.180	54.13	43.054	5.381	2.199
%RSD	.1113876	.2088812	1.995550	.3192462	.1327625
#1	1954.327	25861.37	2122.994	1685.619	1654.413
#2	1958.478	25916.80	2205.752	1690.706	1658.798
#3	1957.557	25969.62	2143.773	1679.949	1656.908

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4979-14DLX2 Acquired: 12/23/2024 17:53:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0374797	.0082313	.2322187	.0157902	.0127943	25.46199	.3943019
Stddev	.0011633	.0029273	.0028288	.0009837	.0009640	.15635	.0010786
%RSD	3.103834	35.56268	1.218142	6.229868	7.534535	.6140537	.2735554
#1	.0361837	.0111501	.2307462	.0154860	.0121700	25.28337	.3942361
#2	.0378218	.0082480	.2354800	.0149945	.0139045	25.52863	.3954119
#3	.0384336	.0052957	.2304300	.0168901	.0123083	25.57399	.3932577

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025531	.0025353	527.5334	.0473093	.0737200	.2207117	77.94114
Stddev	.0000433	.0000712	1.6253	.0010182	.0003768	.0040502	.29512
%RSD	1.695915	2.808253	.3080977	2.152126	.5110752	1.835073	.3786411
#1	.0025767	.0024538	525.6711	.0463133	.0739762	.2166506	77.60192
#2	.0025032	.0025665	528.2629	.0483483	.0738965	.2247509	78.13890
#3	.0025795	.0025856	528.6662	.0472664	.0732874	.2207336	78.08259

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.51816	19.06584	.0713243	.0044529	-1.03695	.0628346	.3042279
Stddev	.03091	.15878	.0011933	.0017036	.73002	.0053993	.0122325
%RSD	.2683810	.8328102	1.673132	38.25929	70.40124	8.592959	4.020842
#1	11.48472	18.88268	.0711161	.0064096	-1.87991	.0639490	.3102653
#2	11.52405	19.16468	.0702488	.0036508	-.61407	.0675897	.3122679
#3	11.54570	19.15015	.0726081	.0032983	-.61687	.0569650	.2901504

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.877915	4.427597	-.002759	.0090856	.8590088	4.837912	.0200951
Stddev	.171639	.006209	.002782	.0005703	.0084221	.039310	.0021203
%RSD	9.139877	.1402329	100.8379	6.276571	.9804435	.8125385	10.55149
#1	2.021660	4.422621	-.003567	.0093964	.8521025	4.792850	.0178323
#2	1.924207	4.425616	-.005048	.0094329	.8683914	4.865166	.0220362
#3	1.687877	4.434555	.000338	.0084274	.8565325	4.855721	.0204167

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4979-14DLX2 Acquired: 12/23/2024 17:53:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3187857	.3129050	.0318472
Stddev	.0037745	.0009627	.0020612
%RSD	1.184025	.3076598	6.472275
#1	.3146715	.3119197	.0317594
#2	.3195970	.3138433	.0339510
#3	.3220885	.3129520	.0298313

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2206.078	28981.97	2420.074	1889.548	1705.760
Stddev	1.156	87.32	22.766	7.405	.929
%RSD	.0524121	.3012932	.9407145	.3918860	.0544843
#1	2204.766	29077.22	2446.251	1897.476	1705.577
#2	2206.518	28963.00	2404.895	1888.356	1704.935
#3	2206.949	28905.70	2409.076	1882.811	1706.766

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4979-16DLX5 Acquired: 12/23/2024 17:57:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009327	.0177450	.0528372	-.016856	.0026297	5.702700	.1320265
Stddev	.0006755	.0017242	.0037121	.002135	.0022007	.053151	.0020531
%RSD	72.42323	9.716261	7.025494	12.66747	83.68655	.9320351	1.555046
#1	.0002650	.0163215	.0546134	-.018455	.0018752	5.720586	.1318812
#2	.0016158	.0196621	.0553275	-.014431	.0009055	5.744601	.1341484
#3	.0009174	.0172512	.0485708	-.017681	.0051084	5.642913	.1300500

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006667	.0005538	391.1175	.0103351	.0471602	.0641508	30.42196
Stddev	.0000444	.0000103	3.8141	.0005763	.0006831	.0029734	.30555
%RSD	6.657854	1.854769	.9751825	5.576417	1.448441	4.635022	1.004363
#1	.0006511	.0005547	390.1156	.0097760	.0479443	.0664220	30.15482
#2	.0007168	.0005636	395.3326	.0109272	.0468426	.0607853	30.75512
#3	.0006323	.0005431	387.9043	.0103020	.0466938	.0652450	30.35595

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.093490	6.989529	.0188217	.0033202	-1.14070	.0116487	.0746953
Stddev	.053928	.194578	.0005313	.0010813	.74686	.0039331	.0132093
%RSD	1.058755	2.783843	2.822674	32.56754	65.47364	33.76480	17.68426
#1	5.082765	7.017865	.0193081	.0039629	-.31458	.0071390	.0797692
#2	5.151975	7.168385	.0189022	.0020718	-1.76810	.0143691	.0846155
#3	5.045732	6.782337	.0182547	.0039259	-1.33943	.0134379	.0597014

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.025897	1.263697	-.006095	.0044129	.2535802	2.083267	.0073320
Stddev	.132980	.003655	.002724	.0002320	.0045061	.019112	.0023356
%RSD	513.4862	.2892300	44.69568	5.258004	1.776987	.9174286	31.85536
#1	-.146146	1.264601	-.009173	.0041614	.2566861	2.091219	.0100161
#2	.116924	1.259675	-.003996	.0044585	.2484121	2.097119	.0062179
#3	-.048470	1.266815	-.005116	.0046187	.2556426	2.061462	.0057621

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4979-16DLX5 Acquired: 12/23/2024 17:57:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJA4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0644568	.1957536	.0028274
Stddev	.0014886	.0017271	.0061235
%RSD	2.309471	.8822750	216.5751
#1	.0642472	.1958648	.0030606
#2	.0660391	.1974224	.0088311
#3	.0630841	.1939736	-.003409

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2060.239	26882.11	2214.338	1761.711	1757.176
Stddev	9.033	88.49	16.213	10.535	4.860
%RSD	.4384374	.3291716	.7321845	.5980063	.2765797
#1	2053.796	26958.34	2217.106	1768.250	1752.804
#2	2070.564	26902.92	2196.918	1767.326	1762.409
#3	2056.357	26785.07	2228.988	1749.558	1756.314

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-03DLX5 Acquired: 12/23/2024 18:01:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ72 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057370	.0273425	.1641073	-.021582	.0024640	4.692069	.0442297
Stddev	.0010654	.0018230	.0015959	.006052	.0008477	.064492	.0017201
%RSD	18.57021	6.667179	.9724882	28.04120	34.40270	1.374492	3.889081
#1	.0046292	.0258511	.1650609	-.028487	.0017561	4.757707	.0441225
#2	.0058275	.0293747	.1622648	-.017203	.0034034	4.689713	.0460008
#3	.0067542	.0268017	.1649961	-.019055	.0022325	4.628788	.0425656

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007219	.0026029	387.1262	.0134872	.0426225	.0339332	23.04519
Stddev	.0001195	.0002101	4.8409	.0005856	.0006636	.0051505	.30104
%RSD	16.55369	8.071074	1.250472	4.341902	1.556939	15.17831	1.306307
#1	.0006412	.0028223	390.7082	.0139598	.0433455	.0335852	23.15006
#2	.0008592	.0024036	389.0516	.0128320	.0424811	.0289656	23.27976
#3	.0006653	.0025828	381.6189	.0136697	.0420411	.0392489	22.70573

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.782077	217.7175	.0218890	.0009018	-1.74912	.0150784	.5913069
Stddev	.035281	2.0756	.0005475	.0012701	.70239	.0073192	.0120487
%RSD	1.268154	.9533657	2.501132	140.8356	40.15678	48.54094	2.037639
#1	2.808799	218.7227	.0218923	.0020888	-2.30944	.0234124	.5776510
#2	2.795348	219.0992	.0224349	-.000438	-1.97678	.0096952	.5958311
#3	2.742085	215.3306	.0213400	.001054	-.96114	.0121276	.6004388

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8623212	.6205152	.0115607	.0028469	4.888891	1.852058	.0164072
Stddev	.0668927	.0025199	.0011744	.0005251	.007890	.019058	.0008413
%RSD	7.757283	.4060994	10.15820	18.44387	.1613857	1.029019	5.127464
#1	.7883014	.6176063	.0123812	.0023179	4.887477	1.857377	.0164928
#2	.9184475	.6220299	.0120856	.0028550	4.881803	1.867892	.0155264
#3	.8802148	.6219095	.0102155	.0033679	4.897392	1.830906	.0172024

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-03DLX5 Acquired: 12/23/2024 18:01:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ72 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0631361	.1084760	.0104651
Stddev	.0047579	.0020535	.0036918
%RSD	7.535903	1.893083	35.27692
#1	.0590341	.1104928	.0083025
#2	.0683522	.1085477	.0083650
#3	.0620221	.1063876	.0147279

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2003.054	26435.72	2153.862	1722.984	1693.400
Stddev	3.755	163.03	24.835	5.561	2.063
%RSD	.1874838	.6167024	1.153037	.3227272	.1218425
#1	2001.878	26268.91	2131.793	1718.716	1692.853
#2	2007.256	26594.68	2149.039	1729.272	1695.682
#3	2000.027	26443.57	2180.755	1720.965	1691.666

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-10DLX5 Acquired: 12/23/2024 18:05:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ86 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0605850	.0228003	.1700087	-.023223	.0049516	6.103151	.1350925
Stddev	.0035335	.0061664	.0055074	.004359	.0006976	.031139	.0003332
%RSD	5.832281	27.04520	3.239468	18.77012	14.08815	.5102078	.2466549
#1	.0630040	.0219210	.1669661	-.024793	.0055355	6.123395	.1347280
#2	.0622211	.0293592	.1666939	-.026580	.0051403	6.118763	.1353814
#3	.0565300	.0171208	.1763661	-.018297	.0041791	6.067294	.1351682

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008278	.0055968	339.4136	.0145827	.0440914	.0371306	26.49095
Stddev	.0002196	.0002049	.9030	.0006718	.0003974	.0037912	.07979
%RSD	26.52605	3.660715	.2660499	4.606708	.9013330	10.21056	.3011813
#1	.0008093	.0058111	338.5178	.0140318	.0436611	.0327854	26.41786
#2	.0010561	.0055764	340.3236	.0143851	.0441682	.0397645	26.57607
#3	.0006181	.0054028	339.3993	.0153311	.0444447	.0388418	26.47893

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.257891	181.8377	.0233745	.0010669	-.817469	.0232840	1.286003
Stddev	.007942	.6696	.0007933	.0005653	.479359	.0070472	.020421
%RSD	.3517393	.3682195	3.393798	52.98266	58.63938	30.26644	1.587918
#1	2.249948	181.2897	.0224617	.0016440	-.402360	.0214743	1.283503
#2	2.265832	182.5840	.0238976	.0010423	-1.34212	.0310597	1.266948
#3	2.257895	181.6394	.0237642	.0005143	-.70793	.0173181	1.307559

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7307005	.5939440	.0072030	.0039002	4.424863	2.260749	.0093082
Stddev	.0980866	.0034440	.0020497	.0005297	.025745	.015985	.0014886
%RSD	13.42364	.5798470	28.45667	13.58188	.5818235	.7070712	15.99215
#1	.6383791	.5901499	.0054680	.0045095	4.395136	2.279194	.0076302
#2	.7200409	.5968729	.0094646	.0036413	4.439535	2.252122	.0104700
#3	.8336816	.5948092	.0066763	.0035497	4.439918	2.250931	.0098244

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-10DLX5 Acquired: 12/23/2024 18:05:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ86 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0794060	.1092927	.0107353
Stddev	.0034369	.0002632	.0025799
%RSD	4.328298	.2407930	24.03204
#1	.0825856	.1090344	.0094238
#2	.0798728	.1092833	.0090746
#3	.0757595	.1095604	.0137075

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2003.986	26420.89	2179.962	1718.547	1696.632
Stddev	4.296	109.25	14.107	5.232	2.817
%RSD	.2143683	.4134977	.6471170	.3044147	.1660054
#1	2008.892	26521.69	2171.885	1723.220	1699.878
#2	2002.168	26304.80	2171.751	1712.896	1694.832
#3	2000.899	26436.18	2196.251	1719.526	1695.187

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-16DLX5 Acquired: 12/23/2024 18:09:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ90 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016155	.0211714	.1555485	-.019017	.0039210	9.235031	.1018236
Stddev	.0019151	.0013817	.0001157	.001919	.0032595	.070679	.0008791
%RSD	118.5441	6.526176	.0743937	10.09296	83.13156	.7653352	.8633669
#1	.0037472	.0195780	.1554206	-.016894	.0065176	9.183153	.1009831
#2	.0000401	.0218984	.1556459	-.020630	.0049822	9.315532	.1027368
#3	.0010592	.0220378	.1555790	-.019528	.0002630	9.206409	.1017508

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013633	.0059101	336.7644	.0162205	.0481439	.0444994	30.29759
Stddev	.0000766	.0001187	1.2856	.0003119	.0002583	.0041049	.03985
%RSD	5.617471	2.008162	.3817440	1.922648	.5365787	9.224553	.1315377
#1	.0012933	.0058616	335.3695	.0163963	.0483783	.0398221	30.25915
#2	.0014451	.0058234	337.9017	.0164047	.0478669	.0475029	30.33872
#3	.0013516	.0060454	337.0220	.0158604	.0481864	.0461732	30.29489

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.498647	154.5052	.0309664	.0018769	-1.58886	.0247675	.7513950
Stddev	.009064	1.0598	.0004783	.0007780	.61519	.0130789	.0064878
%RSD	.6048197	.6859180	1.544644	41.45096	38.71920	52.80643	.8634345
#1	1.488752	153.2946	.0311134	.0013923	-1.98556	.0342968	.7510515
#2	1.506549	155.2651	.0304318	.0014642	-.88018	.0301493	.7580477
#3	1.500640	154.9560	.0313539	.0027743	-1.90083	.0098564	.7450857

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.160694	.7325710	.0135246	.0033142	3.731418	2.387808	.0238188
Stddev	.125238	.0047748	.0018085	.0001006	.002914	.027596	.0023195
%RSD	10.78991	.6517885	13.37213	3.035644	.0780872	1.155700	9.738045
#1	1.061862	.7304731	.0115277	.0032457	3.728057	2.379831	.0264502
#2	1.118684	.7292044	.0139938	.0032673	3.733238	2.418513	.0220709
#3	1.301536	.7380356	.0150523	.0034297	3.732959	2.365078	.0229353

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-16DLX5 Acquired: 12/23/2024 18:09:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ90 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1201139	.1589147	.0168434
Stddev	.0063104	.0004581	.0041914
%RSD	5.253663	.2882676	24.88435
#1	.1155655	.1585003	.0187751
#2	.1273181	.1588373	.0197206
#3	.1174581	.1594066	.0120345

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2005.387	26515.53	2188.316	1729.365	1691.741
Stddev	4.340	81.99	17.618	7.062	1.818
%RSD	.2164014	.3092223	.8051069	.4083861	.1074621
#1	2009.543	26453.39	2188.277	1734.765	1693.680
#2	2000.884	26608.45	2170.718	1731.958	1690.074
#3	2005.732	26484.73	2205.954	1721.373	1691.470

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-17DLX5 Acquired: 12/23/2024 18:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJB0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001144	.0218834	.1001292	-.022716	.0022613	4.694074	.0365601
Stddev	.003528	.0023040	.0005341	.005653	.0052613	.037639	.0019672
%RSD	308.2995	10.52848	.5333613	24.88635	232.6688	.8018367	5.380812
#1	-.004009	.0198849	.0995302	-.016826	-.003540	4.710262	.0358332
#2	-.002220	.0213618	.1005555	-.028098	.006725	4.720910	.0387874
#3	.002796	.0244034	.1003020	-.023224	.003598	4.651049	.0350598

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006381	.0011312	453.5277	.0125897	.0456604	.0333369	25.31832
Stddev	.0001096	.0000461	4.8618	.0004144	.0003140	.0021044	.19989
%RSD	17.17987	4.079410	1.071993	3.291473	.6876604	6.312580	.7895250
#1	.0005707	.0011809	458.6917	.0130682	.0458158	.0355571	25.47026
#2	.0005791	.0010896	452.8526	.0123559	.0458665	.0330822	25.39283
#3	.0007646	.0011231	449.0387	.0123452	.0452991	.0313714	25.09187

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.553243	243.9532	.0208744	.0008310	-1.48101	.0059413	.2274061
Stddev	.021844	2.7829	.0003145	.0006356	.78607	.0046389	.0040053
%RSD	.8555356	1.140771	1.506611	76.48530	53.07642	78.07925	1.761307
#1	2.567509	246.5519	.0212014	.0009943	-.64340	.0028093	.2319359
#2	2.564123	244.2911	.0208474	.0001297	-2.20266	.0037440	.2243330
#3	2.528095	241.0168	.0205742	.0013690	-1.59698	.0112706	.2259494

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.408243	.4405781	.0181419	.0026596	5.664354	2.327144	.0103617
Stddev	.214565	.0023266	.0024663	.0009996	.014326	.024283	.0004377
%RSD	15.23639	.5280814	13.59417	37.58608	.2529139	1.043457	4.224607
#1	1.652706	.4392965	.0198757	.0031594	5.657618	2.344134	.0099948
#2	1.251126	.4391742	.0153185	.0015086	5.654638	2.337967	.0102440
#3	1.320898	.4432638	.0192316	.0033107	5.680806	2.299332	.0108462

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4980-17DLX5 Acquired: 12/23/2024 18:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJB0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0314786	.1514442	.0100129
Stddev	.0035091	.0019775	.0012568
%RSD	11.14772	1.305745	12.55177
#1	.0349694	.1536218	.0095305
#2	.0279514	.1509505	.0114394
#3	.0315152	.1497604	.0090687

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1976.700	26005.64	2169.342	1695.912	1651.054
Stddev	1.664	108.81	27.407	5.694	1.254
%RSD	.0842010	.4183925	1.263372	.3357429	.0759382
#1	1977.364	25888.18	2143.030	1689.547	1651.362
#2	1977.929	26102.99	2167.270	1697.668	1652.125
#3	1974.806	26025.75	2197.726	1700.521	1649.675

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-05DLX5 Acquired: 12/23/2024 18:17:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ37 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226031	.0209468	.3716582	-.018030	.0060458	5.897618	.1377004
Stddev	.0086974	.0019438	.0024688	.003669	.0014482	.026967	.0014637
%RSD	38.47890	9.279559	.6642547	20.34997	23.95419	.4572523	1.062948
#1	.0326283	.0188573	.3742495	-.020741	.0047539	5.869512	.1361416
#2	.0170741	.0212820	.3713915	-.019493	.0057722	5.923279	.1379140
#3	.0181069	.0227013	.3693336	-.013855	.0076113	5.900062	.1390455

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009900	.0019697	334.3900	.0132414	.0446768	.0478666	25.80582
Stddev	.0001259	.0001366	1.1263	.0012027	.0005665	.0052376	.09185
%RSD	12.71462	6.933928	.3368253	9.082489	1.268061	10.94200	.3559151
#1	.0008487	.0018749	333.1206	.0143392	.0441764	.0536627	25.74587
#2	.0010310	.0021263	335.2699	.0134290	.0445620	.0434733	25.76002
#3	.0010902	.0019080	334.7794	.0119560	.0452919	.0464638	25.91156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.316658	40.63615	.0235315	.0016276	-1.63794	.0188023	.8472718
Stddev	.003623	.03281	.0004348	.0009550	.32030	.0015145	.0160977
%RSD	.1563776	.0807452	1.847572	58.67430	19.55535	8.055100	1.899943
#1	2.317792	40.60807	.0238742	.0023691	-1.29554	.0185101	.8550156
#2	2.319578	40.67222	.0236777	.0019637	-1.93025	.0204416	.8287657
#3	2.312604	40.62817	.0230424	.0005500	-1.68802	.0174551	.8580342

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.015824	.6131991	-.002831	.0041346	.7665672	1.609571	.0098603
Stddev	.121805	.0003460	.000828	.0013735	.0066971	.011187	.0010655
%RSD	769.7650	.0564208	29.25961	33.21997	.8736491	.6950179	10.80621
#1	.097826	.6135969	-.002966	.0056981	.7592319	1.600022	.0105108
#2	-.144408	.6130317	-.001944	.0031224	.7723554	1.621879	.0086306
#3	-.000889	.6129685	-.003584	.0035833	.7681144	1.606812	.0104395

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-05DLX5 Acquired: 12/23/2024 18:17:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJ37 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1198300	.1746341	.0037550
Stddev	.0057349	.0012565	.0002215
%RSD	4.785838	.7195249	5.898616
#1	.1157418	.1731856	.0040102
#2	.1173626	.1752848	.0036421
#3	.1263856	.1754317	.0036128

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2065.326	27221.26	2221.234	1791.741	1766.403
Stddev	2.873	75.84	7.483	6.546	3.689
%RSD	.1390962	.2785986	.3368961	.3653631	.2088619
#1	2068.463	27159.25	2229.593	1784.359	1770.020
#2	2062.823	27305.81	2215.157	1794.026	1762.646
#3	2064.692	27198.72	2218.952	1796.839	1766.543

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-15DLX5 Acquired: 12/23/2024 18:21:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006336	.0255890	.0239070	-.022070	.0039486	7.279945	.1139026
Stddev	.004903	.0030226	.0012878	.003073	.0039360	.026499	.0013753
%RSD	77.38642	11.81200	5.386596	13.92610	99.68098	.3640032	1.207393
#1	-.006623	.0260230	.0249155	-.019658	.0083670	7.273431	.1142989
#2	-.011090	.0283711	.0243491	-.025530	.0008171	7.309093	.1123727
#3	-.001296	.0223729	.0224564	-.021021	.0026617	7.257310	.1150361

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005279	.0004352	348.0983	.0110267	.0447438	.0323766	24.10949
Stddev	.0000680	.0000965	.4110	.0007535	.0006305	.0040193	.09009
%RSD	12.87663	22.18240	.1180817	6.832937	1.409170	12.41405	.3736502
#1	.0004512	.0003881	347.7725	.0118131	.0448591	.0361934	24.04856
#2	.0005807	.0003712	347.9624	.0109558	.0440636	.0327547	24.06695
#3	.0005518	.0005462	348.5601	.0103112	.0453088	.0281817	24.21297

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.183944	15.72498	.0190209	.0020932	-1.13400	.0196697	.0453291
Stddev	.002629	.01052	.0004018	.0008179	.46225	.0071874	.0084383
%RSD	.0825548	.0669187	2.112405	39.07310	40.76246	36.54047	18.61567
#1	3.185233	15.72453	.0193786	.0016900	-.75652	.0250094	.0438379
#2	3.180920	15.73572	.0185862	.0015552	-.99594	.0114976	.0544137
#3	3.185678	15.71469	.0190980	.0030344	-1.64955	.0225019	.0377358

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1618295	.8982922	-.001056	.0018135	.2264604	1.865390	.0047267
Stddev	.0596994	.0037460	.001761	.0005357	.0063049	.009365	.0016946
%RSD	36.89031	.4170129	166.7972	29.53853	2.784099	.5020465	35.85155
#1	.1932370	.8980732	-.001474	.0023549	.2318357	1.854640	.0053545
#2	.0929826	.8946604	-.002571	.0012837	.2280248	1.871778	.0060178
#3	.1992689	.9021428	.000877	.0018020	.2195205	1.869753	.0028078

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-15DLX5 Acquired: 12/23/2024 18:21:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJE9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1336103	.1877428	.0045604
Stddev	.0025151	.0005535	.0044469
%RSD	1.882434	.2948125	97.51124
#1	.1357562	.1877865	-.000452
#2	.1308426	.1871687	.008030
#3	.1342321	.1882731	.006103

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2054.576	26926.17	2208.888	1768.536	1766.309
Stddev	2.007	211.81	5.146	10.813	1.845
%RSD	.0976608	.7866444	.2329512	.6113850	.1044293
#1	2056.319	26759.54	2205.955	1767.359	1767.012
#2	2055.025	27164.54	2214.829	1779.889	1767.699
#3	2052.382	26854.43	2205.879	1758.360	1764.216

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-16DLX5 Acquired: 12/23/2024 18:24:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJF0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011489	.0231043	.0906633	-.022388	.0055530	8.664271	.1426636
Stddev	.0060340	.0009636	.0030849	.000592	.0029060	.048648	.0009306
%RSD	525.2159	4.170529	3.402582	2.643681	52.33179	.5614725	.6522683
#1	.0063828	.0235678	.0873997	-.022932	.0081954	8.677331	.1427698
#2	.0025148	.0219965	.0935314	-.021757	.0024406	8.610427	.1416844
#3	-.005451	.0237485	.0910586	-.022475	.0060231	8.705056	.1435364

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006892	.0006221	545.5678	.0123917	.0521600	.0261224	29.53548
Stddev	.0000434	.0001063	1.5207	.0004670	.0005052	.0041996	.04830
%RSD	6.297997	17.08707	.2787336	3.768783	.9686165	16.07666	.1635249
#1	.0007387	.0005702	546.6087	.0128501	.0522642	.0218745	29.58910
#2	.0006575	.0005517	543.8227	.0124083	.0526050	.0302719	29.49539
#3	.0006715	.0007443	546.2721	.0119166	.0516108	.0262207	29.52195

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.814508	24.22157	.0218252	.0011876	-1.76879	.0161265	.0678452
Stddev	.023787	.20716	.0005138	.0004005	.29092	.0070007	.0114030
%RSD	.4940793	.8552577	2.353960	33.72211	16.44763	43.41142	16.80732
#1	4.833459	24.38887	.0219429	.0012519	-1.44355	.0096620	.0731672
#2	4.787813	23.98986	.0222699	.0015520	-1.85860	.0235621	.0547542
#3	4.822252	24.28598	.0212628	.0007589	-2.00423	.0151554	.0756142

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2235889	1.108999	-.004211	.0020056	.3098742	1.871246	.0103254
Stddev	.1269002	.002092	.000564	.0007247	.0027718	.004652	.0008936
%RSD	56.75602	.1886127	13.39276	36.13518	.8945018	.2485946	8.654610
#1	.0798386	1.107164	-.004389	.0017907	.3068597	1.876552	.0113551
#2	.2708562	1.108558	-.004664	.0014126	.3123130	1.867868	.0097530
#3	.3200719	1.111277	-.003579	.0028135	.3104499	1.869319	.0098681

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P4982-16DLX5 Acquired: 12/23/2024 18:24:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJF0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1524840	.2716635	.0062823
Stddev	.0030215	.0007260	.0051675
%RSD	1.981498	.2672346	82.25474
#1	.1527913	.2719379	.0003187
#2	.1493206	.2722122	.0090934
#3	.1553400	.2708403	.0094350

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2054.959	26931.27	2232.617	1769.306	1720.552
Stddev	3.967	95.57	9.154	8.508	1.359
%RSD	.1930634	.3548645	.4099979	.4808794	.0789640
#1	2057.128	26839.62	2222.112	1761.231	1720.827
#2	2050.380	26923.88	2238.880	1768.498	1719.077
#3	2057.369	27030.33	2236.860	1778.190	1721.752

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-02DLX5 Acquired: 12/23/2024 18:28:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006893	.0264219	.1036589	-.022874	.0012420	2.581575	.0292457
Stddev	.004469	.0029227	.0027456	.005176	.0034332	.007291	.0013540
%RSD	64.83191	11.06176	2.648660	22.62966	276.4203	.2824228	4.629769
#1	-.010482	.0288619	.1010295	-.017229	.0001943	2.574070	.0304199
#2	-.001888	.0272211	.1065075	-.023994	.0050770	2.582023	.0277646
#3	-.008310	.0231827	.1034397	-.027398	-.001545	2.588631	.0295526

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004618	.0020878	369.3511	.0088495	.0417532	.0134405	18.00434
Stddev	.0000880	.0001190	1.5519	.0012960	.0006105	.0108501	.06258
%RSD	19.06043	5.700875	.4201697	14.64475	1.462179	80.72706	.3475752
#1	.0003625	.0022230	370.9368	.0097862	.0415588	.0010116	18.05875
#2	.0004926	.0019991	367.8353	.0073705	.0424372	.0210210	17.93596
#3	.0005303	.0020412	369.2813	.0093919	.0412635	.0182888	18.01832

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.169048	211.2909	.0126973	.0008239	-1.39631	.0132469	.4506616
Stddev	.010796	1.0545	.0012656	.0009390	1.03705	.0036682	.0101771
%RSD	.4977083	.4990629	9.967737	113.9659	74.27103	27.69120	2.258259
#1	2.181413	212.4012	.0122120	.0019069	-2.50151	.0110788	.4415446
#2	2.164229	210.3030	.0141338	.0002368	-1.24292	.0111798	.4487988
#3	2.161501	211.1684	.0117462	.0003280	-.44449	.0174822	.4616414

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4554634	.3325242	.0090548	.0026794	3.399589	1.532068	.0177411
Stddev	.1021573	.0010877	.0015911	.0006932	.002072	.009750	.0010457
%RSD	22.42930	.3271126	17.57141	25.87115	.0609434	.6364031	5.893955
#1	.5554976	.3337761	.0076815	.0029705	3.400306	1.541652	.0187741
#2	.3513078	.3319860	.0107984	.0018881	3.397254	1.522160	.0166832
#3	.4595847	.3318105	.0086845	.0031796	3.401208	1.532391	.0177660

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-02DLX5 Acquired: 12/23/2024 18:28:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0215785	.0982554	.0034053
Stddev	.0068394	.0001775	.0031597
%RSD	31.69549	.1806926	92.78749
#1	.0194054	.0981370	.0001185
#2	.0160896	.0981697	.0036769
#3	.0292404	.0984596	.0064204

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1980.491	26243.33	2141.887	1708.454	1682.653
Stddev	7.437	174.24	12.501	13.373	3.027
%RSD	.3755091	.6639214	.5836414	.7827751	.1799154
#1	1983.758	26277.47	2130.056	1709.931	1683.198
#2	1971.980	26054.55	2140.641	1694.403	1679.391
#3	1985.735	26397.97	2154.964	1721.027	1685.372

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-03DLX5 Acquired: 12/23/2024 18:32:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006588	.0239341	.0831343	-.027282	.0048211	2.092789	.0515776
Stddev	.0025659	.0028377	.0020080	.001557	.0020763	.013461	.0010544
%RSD	389.4796	11.85624	2.415333	5.707520	43.06622	.6431880	2.044257
#1	-.000925	.0239403	.0848069	-.029075	.0071875	2.093727	.0526407
#2	-.000717	.0210934	.0809074	-.026265	.0033051	2.078884	.0515600
#3	.003619	.0267688	.0836886	-.026507	.0039706	2.105756	.0505321

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005163	.0011742	406.4793	.0068278	.0427413	.0202370	18.44085
Stddev	.0000813	.0001988	1.3190	.0005156	.0004960	.0047089	.03997
%RSD	15.74160	16.93308	.3244830	7.551236	1.160389	23.26899	.2167640
#1	.0004235	.0009865	404.9678	.0072002	.0433050	.0254309	18.39674
#2	.0005749	.0011535	407.3968	.0062393	.0425467	.0190335	18.45115
#3	.0005505	.0013825	407.0734	.0070439	.0423721	.0162466	18.47467

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.333547	230.2255	.0118840	.0008289	-.737505	.0055717	.2468732
Stddev	.008605	.6767	.0003246	.0008820	.747251	.0126021	.0127078
%RSD	.3687699	.2939333	2.731000	106.4024	101.3214	226.1807	5.147499
#1	2.332657	229.4583	.0117803	-.000188	-.971743	.0187854	.2533689
#2	2.325421	230.4808	.0116241	.001285	.098803	.0042434	.2550203
#3	2.342563	230.7375	.0122478	.001389	-1.33958	-.006314	.2322306

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4504427	.2353978	.0082981	.0028320	3.831516	1.329660	.0068418
Stddev	.2572071	.0023870	.0011284	.0003046	.003180	.004212	.0006967
%RSD	57.10095	1.014046	13.59874	10.75670	.0829892	.3168014	10.18359
#1	.1661581	.2334686	.0094793	.0025148	3.834729	1.324892	.0076364
#2	.6670308	.2346576	.0081840	.0031223	3.828371	1.331210	.0065534
#3	.5181392	.2380673	.0072311	.0028588	3.831447	1.332878	.0063356

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-03DLX5 Acquired: 12/23/2024 18:32:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0131964	.1083045	-.001472
Stddev	.0037222	.0003315	.002711
%RSD	28.20582	.3060529	184.1502
#1	.0174416	.1079375	.001302
#2	.0116553	.1083939	-.004116
#3	.0104923	.1085821	-.001603

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1962.389	25827.64	2131.022	1683.279	1664.981
Stddev	2.605	46.39	7.927	2.632	2.711
%RSD	.1327591	.1796185	.3719745	.1563615	.1628178
#1	1959.384	25799.22	2128.625	1681.107	1662.001
#2	1964.016	25802.54	2124.571	1682.524	1667.300
#3	1963.766	25881.18	2139.871	1686.206	1665.642

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-04DLX5 Acquired: 12/23/2024 18:36:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005392	.0284961	.3428788	-.027982	.0019532	1.849447	.0169262
Stddev	.003198	.0099637	.0003997	.003763	.0023027	.044669	.0011402
%RSD	59.30839	34.96516	.1165861	13.44914	117.8941	2.415248	6.736368
#1	-.006055	.0236701	.3426340	-.023933	.0003828	1.832293	.0170806
#2	-.008207	.0218643	.3433401	-.028640	.0008802	1.815898	.0179814
#3	-.001915	.0399538	.3426623	-.031373	.0045966	1.900150	.0157167

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003907	.0021180	400.9978	.0060913	.0415626	.0140085	19.11426
Stddev	.0001774	.0001023	1.6440	.0009120	.0006374	.0059930	.06186
%RSD	45.41367	4.831638	.4099824	14.97232	1.533624	42.78135	.3236367
#1	.0002095	.0020740	399.6815	.0054139	.0410097	.0072886	19.05477
#2	.0005640	.0020451	402.8406	.0071283	.0414183	.0187997	19.17825
#3	.0003985	.0022350	400.4714	.0057316	.0422597	.0159372	19.10976

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.434269	226.7441	.0104844	.0009095	-1.68723	.0157431	.4024766
Stddev	.009964	.7858	.0006136	.0015893	.16661	.0085271	.0025201
%RSD	.4093367	.3465602	5.852137	174.7575	9.874993	54.16403	.6261503
#1	2.425023	226.2362	.0106273	-.000898	-1.49798	.0183129	.4052008
#2	2.444823	227.6492	.0098121	.002089	-1.75188	.0062266	.4020005
#3	2.432962	226.3468	.0110140	.001538	-1.81183	.0226897	.4002285

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4038307	.2047228	.0060053	.0022968	4.996913	1.208607	.0061608
Stddev	.1237583	.0007154	.0025671	.0009255	.004010	.009544	.0015689
%RSD	30.64608	.3494618	42.74638	40.29541	.0802538	.7896987	25.46615
#1	.4391596	.2049742	.0059355	.0024116	4.992363	1.200362	.0045142
#2	.5060829	.2039157	.0086066	.0013193	4.998442	1.219063	.0063298
#3	.2662496	.2052787	.0034739	.0031597	4.999934	1.206396	.0076384

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-04DLX5 Acquired: 12/23/2024 18:36:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0080596	.1036663	-.001116
Stddev	.0037114	.0004663	.004007
%RSD	46.04919	.4498189	358.9712
#1	.0113432	.1031356	-.005108
#2	.0088029	.1040105	-.001148
#3	.0040329	.1038529	.002907

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1967.820	25909.71	2144.393	1685.646	1665.735
Stddev	3.498	56.83	16.036	9.275	2.406
%RSD	.1777674	.2193468	.7478331	.5502290	.1444689
#1	1964.583	25895.73	2154.954	1676.623	1664.339
#2	1971.531	25861.18	2125.940	1685.162	1668.514
#3	1967.347	25972.23	2152.285	1695.154	1664.352

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-05DLX5 Acquired: 12/23/2024 18:40:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001754	.0292548	.0714621	-.027320	.0052688	1.966409	.0165149
Stddev	.007529	.0015165	.0054422	.006557	.0007328	.025391	.0020055
%RSD	429.2260	5.183803	7.615546	24.00119	13.90860	1.291212	12.14343
#1	.000986	.0302044	.0694556	-.022657	.0056176	1.993899	.0150441
#2	.004021	.0300543	.0776227	-.024486	.0057621	1.943838	.0157012
#3	-.010270	.0275059	.0673080	-.034818	.0044268	1.961490	.0187993

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003757	.0186755	418.7312	.0068313	.0423623	.0194529	18.92598
Stddev	.0000860	.0000826	.7962	.0006851	.0004296	.0108785	.13553
%RSD	22.88863	.4423436	.1901445	10.02908	1.014055	55.92205	.7161005
#1	.0002850	.0186403	419.6488	.0075885	.0421014	.0070307	18.90387
#2	.0003859	.0186164	418.3216	.0066513	.0421274	.0240495	19.07121
#3	.0004561	.0187699	418.2231	.0062542	.0428581	.0272786	18.80287

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.454974	234.9157	.0098374	.0012096	-1.59853	.0028560	3.852280
Stddev	.009342	.9821	.0007622	.0013931	.56441	.0166762	.029183
%RSD	.3805497	.4180559	7.748197	115.1664	35.30825	583.8986	.7575629
#1	2.465439	235.9520	.0106580	-.000121	-2.24376	-.000013	3.833072
#2	2.452010	234.7963	.0097026	.001092	-1.19643	.020781	3.885862
#3	2.447473	233.9988	.0091515	.002658	-1.35539	-.012200	3.837906

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3193399	.2093327	.0089925	.0036428	5.622400	1.260976	.0100429
Stddev	.0758014	.0022090	.0007031	.0006370	.021818	.003038	.0021429
%RSD	23.73690	1.055261	7.818540	17.48653	.3880619	.2408983	21.33741
#1	.4059523	.2089887	.0086966	.0039530	5.599235	1.264182	.0087107
#2	.2869681	.2073159	.0097952	.0029101	5.642560	1.258141	.0089031
#3	.2650992	.2116936	.0084857	.0040652	5.625406	1.260604	.0125148

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-05DLX5 Acquired: 12/23/2024 18:40:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0138904	.1115539	-.002674
Stddev	.0026093	.0004794	.002096
%RSD	18.78460	.4297054	78.35603
#1	.0117930	.1119952	-.001472
#2	.0130658	.1110439	-.001457
#3	.0168123	.1116226	-.005094

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1932.187	25410.79	2099.174	1655.376	1631.970
Stddev	4.890	15.80	11.434	7.251	4.875
%RSD	.2530689	.0621869	.5447029	.4380303	.2987094
#1	1936.924	25405.59	2086.600	1655.929	1636.259
#2	1927.157	25398.24	2108.949	1647.864	1626.668
#3	1932.481	25428.54	2101.973	1662.334	1632.983

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-06DLX5 Acquired: 12/23/2024 18:44:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008676	.0226404	.0944708	-.032731	.0021269	4.451889	.0811229
Stddev	.004714	.0059048	.0018119	.005391	.0019453	.041038	.0016150
%RSD	54.33664	26.08070	1.917927	16.47145	91.45956	.9218180	1.990773
#1	-.010056	.0203426	.0962458	-.038853	.0043041	4.405148	.0793247
#2	-.003426	.0293487	.0926242	-.028692	.0005597	4.482014	.0815942
#3	-.012547	.0182300	.0945425	-.030648	.0015170	4.468503	.0824498

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005323	.0014468	399.9398	.0089355	.0415246	.0185599	17.95015
Stddev	.0000474	.0002024	2.1771	.0011417	.0003250	.0068211	.14571
%RSD	8.907792	13.98858	.5443664	12.77704	.7825879	36.75210	.8117479
#1	.0005868	.0012689	397.4531	.0084091	.0416618	.0133035	17.78353
#2	.0005003	.0016670	401.5027	.0081520	.0411535	.0262680	18.01316
#3	.0005098	.0014046	400.8637	.0102455	.0417584	.0161082	18.05374

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.460626	191.5481	.0117640	.0007527	-1.25869	.0102571	.3186947
Stddev	.023361	1.0303	.0003556	.0011149	.54851	.0009830	.0106128
%RSD	.9494059	.5378594	3.022784	148.1298	43.57795	9.583704	3.330077
#1	2.435356	190.3601	.0120467	.0017663	-1.36521	.0113863	.3115157
#2	2.465088	192.1959	.0118805	-.000441	-1.74612	.0095923	.3308852
#3	2.481435	192.0883	.0113648	.000933	-.66473	.0097928	.3136831

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1885476	.3389806	.0069871	.0030204	3.309096	2.238938	.0063669
Stddev	.0725911	.0008056	.0005738	.0007197	.014024	.010114	.0024087
%RSD	38.50017	.2376667	8.212196	23.82799	.4237999	.4517257	37.83221
#1	.2536585	.3389422	.0074085	.0024546	3.323988	2.234036	.0083473
#2	.1102767	.3398047	.0063336	.0038304	3.296141	2.250569	.0036854
#3	.2017075	.3381948	.0072192	.0027762	3.307161	2.232210	.0070679

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5008-06DLX5 Acquired: 12/23/2024 18:44:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJJ6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1147140	.2399615	-.000647
Stddev	.0000620	.0014461	.004746
%RSD	.0540509	.6026351	733.7122
#1	.1146845	.2382998	-.004653
#2	.1146722	.2409346	.004595
#3	.1147852	.2406502	-.001883

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1961.832	25979.67	2144.821	1689.362	1665.091
Stddev	5.606	76.02	10.513	6.033	3.010
%RSD	.2857545	.2926277	.4901435	.3571164	.1807778
#1	1957.912	26062.96	2146.123	1696.135	1662.100
#2	1968.253	25962.05	2133.717	1684.564	1668.120
#3	1959.331	25914.01	2154.621	1687.387	1665.053

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5183-20ADLX2 Acquired: 12/23/2024 18:48:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZD8A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4622246	-.125572	.3200555	.2386648	.1061540	183.9073	.3382911
Stddev	.0028728	.003315	.0008298	.0033250	.0012954	.3021	.0016271
%RSD	.6215253	2.640221	.2592740	1.393178	1.220323	.1642690	.4809657
#1	.4597157	-.121746	.3191407	.2414436	.1047973	184.2495	.3376592
#2	.4653585	-.127583	.3207597	.2349810	.1062868	183.6778	.3370749
#3	.4615997	-.127389	.3202662	.2395700	.1073780	183.7945	.3401394

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091249	.0107177	45.45790	2.233864	.3046100	5.353763	420.1484
Stddev	.0000772	.0001011	.15928	.006527	.0008565	.032041	1.0481
%RSD	.8458250	.9432726	.3503807	.2921972	.2811899	.5984833	.2494526
#1	.0090454	.0106028	45.64096	2.240609	.3041272	5.388692	421.2781
#2	.0091299	.0107933	45.38176	2.227579	.3041038	5.325733	419.2077
#3	.0091995	.0107569	45.35099	2.233404	.3055989	5.346864	419.9594

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.456250	139.1851	.5066699	.0087880	-.829030	1.012571	.7079383
Stddev	.019180	1.0326	.0005655	.0007269	.561301	.016202	.0106370
%RSD	.2572323	.7418801	.1116098	8.271586	67.70575	1.600115	1.502535
#1	7.477531	140.3548	.5072918	.0079991	-.861620	1.017054	.7085648
#2	7.440299	138.8008	.5065313	.0094306	-.252144	.994599	.6970019
#3	7.450920	138.3998	.5061867	.0089344	-1.37333	1.026060	.7182483

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6703665	2.177076	-.079826	-.000822	.3330764	7.326280	.0462852
Stddev	.1277364	.005174	.004894	.001054	.0056440	.028637	.0010134
%RSD	19.05471	.2376515	6.130385	128.2659	1.694518	.3908864	2.189557
#1	.5427411	2.178425	-.076121	-.000012	.3324964	7.355264	.0455108
#2	.6701450	2.171362	-.085373	-.000439	.3389881	7.325573	.0474322
#3	.7982136	2.181442	-.077984	-.002013	.3277448	7.298002	.0459127

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5183-20ADLX2 Acquired: 12/23/2024 18:48:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZD8A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	6.569096	-.277067	.0696705
Stddev	.022876	.000249	.0020130
%RSD	.3482440	.0897404	2.889298
#1	6.594770	-.277314	.0676762
#2	6.561643	-.276816	.0696337
#3	6.550876	-.277072	.0717016

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2209.135	28921.21	2385.876	1901.142	1844.768
Stddev	3.491	149.41	16.091	5.571	2.815
%RSD	.1580306	.5165957	.6744416	.2930466	.1526060
#1	2207.209	28754.55	2368.431	1896.206	1844.178
#2	2213.165	29043.14	2389.059	1900.036	1847.832
#3	2207.031	28965.93	2400.138	1907.183	1842.295

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5009-04A Acquired: 12/23/2024 18:52:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJQ3A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0692813	.0130976	.1886873	.1476454	.0299546	66.99090
Stddev	.0019867	.0049091	.0029220	.0068575	.0038345	.21676
%RSD	2.867542	37.48095	1.548608	4.644593	12.80086	.3235722
#1	.0673447	.0148292	.1867491	.1479207	.0343770	66.76110
#2	.0713145	.0169063	.1872645	.1543611	.0275565	67.01988
#3	.0691848	.0075574	.1920482	.1406543	.0279304	67.19171

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7823254	.0053926	.0069907	231.7730	.1135590	.1302838
Stddev	.0017531	.0000602	.0001570	.7668	.0013025	.0006049
%RSD	.2240886	1.116881	2.245248	.3308621	1.146976	.4643172
#1	.7805054	.0054534	.0068154	231.3378	.1150009	.1304758
#2	.7824681	.0053914	.0071180	231.3227	.1124677	.1307695
#3	.7840029	.0053329	.0070388	232.6584	.1132085	.1296062

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4081013	154.2592	12.07134	94.91377	.2084822	.0054240
Stddev	.0114847	.3507	.02191	.10022	.0009122	.0010219
%RSD	2.814171	.2273565	.1815161	.1055856	.4375493	18.84041
#1	.4119879	153.9318	12.07703	94.99411	.2090392	.0045911
#2	.3951776	154.2165	12.04714	94.80147	.2089778	.0065643
#3	.4171384	154.6294	12.08984	94.94572	.2074294	.0051166

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.368396	.1677963	1.805927	7.607620	F 11.58929	.0045136
Stddev	.321640	.0052534	.030858	.049560	.00932	.0021253
%RSD	87.30817	3.130800	1.708716	.6514494	.0804156	47.08652
#1	-.714905	.1626056	1.808810	7.564221	11.59081	.0037846
#2	-.079379	.1731101	1.773728	7.661624	11.57930	.0028487
#3	-.310905	.1676731	1.835242	7.597015	11.59775	.0069074

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5009-04A Acquired: 12/23/2024 18:52:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHJQ3A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049444	1.939975	8.477367	.0280806	1.359144	.0862852
Stddev	.0001221	.006495	.059182	.0035640	.004462	.0005818
%RSD	2.469035	.3348099	.6981203	12.69205	.3282989	.6742190
#1	.0049874	1.939115	8.512747	.0246943	1.361166	.0856329
#2	.0048067	1.946857	8.510312	.0277486	1.354029	.0867504
#3	.0050392	1.933952	8.409044	.0317991	1.362237	.0864723

Elem	Li6707
Units	ppm
Avg	.1147043
Stddev	.0033077
%RSD	2.883636
#1	.1159101
#2	.1172399
#3	.1109629

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2475.371	32462.53	2690.801	2115.998	1719.197
Stddev	7.232	162.59	20.131	9.359	2.746
%RSD	.2921628	.5008653	.7481368	.4423203	.1597477
#1	2469.697	32363.45	2683.509	2108.460	1716.606
#2	2472.902	32373.96	2675.333	2113.059	1718.907
#3	2483.515	32650.18	2713.562	2126.474	1722.076

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-07A Acquired: 12/23/2024 18:56:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1795409	-.078437	1.137132	.1788945	.0467682	103.0509	.7920809
Stddev	.0037665	.006947	.005839	.0024412	.0012444	.8388	.0056524
%RSD	2.097865	8.856630	.5134479	1.364599	2.660851	.8139732	.7136081
#1	.1804175	-.070839	1.136677	.1816549	.0473657	102.2228	.7857364
#2	.1754134	-.080009	1.143185	.1770197	.0453377	103.0300	.7939268
#3	.1827919	-.084464	1.131534	.1780089	.0476012	103.9000	.7965796

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0096993	.0081117	85.44023	.1526382	.1595219	.2967148	236.1313
Stddev	.0000646	.0000954	.56159	.0003751	.0005814	.0069019	1.7849
%RSD	.6657112	1.176535	.6572862	.2457245	.3644430	2.326108	.7558931
#1	.0096308	.0081481	84.85558	.1530625	.1601307	.2984551	234.1641
#2	.0097080	.0080034	85.48962	.1523507	.1594623	.3025800	236.5825
#3	.0097591	.0081836	85.97549	.1525015	.1589726	.2891093	237.6473

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.34341	33.54203	.2030754	.0087099	-.735231	.2286230	1.104654
Stddev	.11722	.15741	.0009069	.0005016	1.162032	.0046776	.021903
%RSD	.7172089	.4692783	.4466020	5.759194	158.0499	2.045973	1.982799
#1	16.22376	33.36147	.2030452	.0089176	-1.99239	.2324092	1.120067
#2	16.34844	33.61427	.2039971	.0081378	-.51284	.2233940	1.079582
#3	16.45803	33.65034	.2021840	.0090743	.29953	.2300657	1.114315

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.136192	3.651235	-.012288	.0062380	1.535114	11.85546	.0436749
Stddev	.126574	.012801	.002448	.0003201	.010950	.11726	.0011499
%RSD	2.464359	.3505830	19.92379	5.131180	.7133196	.9890806	2.632744
#1	5.076262	3.639415	-.013500	.0065953	1.530566	11.72914	.0445724
#2	5.281601	3.664831	-.013894	.0061413	1.547605	11.96083	.0423788
#3	5.050713	3.649459	-.009470	.0059774	1.527170	11.87643	.0440735

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: P5028-07A Acquired: 12/23/2024 18:56:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK40A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7919357	-.014884	.0877152
Stddev	.0033345	.000544	.0024420
%RSD	.4210625	3.656071	2.784039
#1	.7933823	-.014288	.0905091
#2	.7881222	-.015010	.0859879
#3	.7943027	-.015355	.0866486

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2740.530	35584.75	2872.882	2359.523	1859.512
Stddev	7.988	107.57	12.351	15.059	9.372
%RSD	.2914716	.3022998	.4299292	.6382343	.5039976
#1	2739.606	35463.14	2886.790	2342.958	1860.714
#2	2733.045	35667.47	2863.194	2372.387	1849.597
#3	2748.940	35623.63	2868.661	2363.222	1868.225

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV004 Acquired: 12/23/2024 19:00:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.019509	4.821603	24.42597	4.875769	4.851593	399.7338	10.08989
Stddev	.023783	.005401	.06830	.006974	.009453	1.7724	.03393
%RSD	.4738149	.1120076	.2796274	.1430278	.1948371	.4433912	.3362843
#1	4.993833	4.815518	24.34717	4.868180	4.843200	398.2401	10.06685
#2	5.023908	4.823466	24.46265	4.881895	4.849748	399.2690	10.07397
#3	5.040785	4.825825	24.46810	4.877232	4.861833	401.6923	10.12885

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5057061	2.454921	407.7454	15.31886	2.452838	15.08147	411.9755
Stddev	.0074066	.006038	1.7317	.02561	.005936	.05396	2.5316
%RSD	1.464598	.2459713	.4247025	.1671833	.2419997	.3578049	.6145055
#1	.4972752	2.448134	406.2024	15.34740	2.446440	15.05890	409.8047
#2	.5086780	2.459699	407.4154	15.31126	2.458166	15.04246	411.3653
#3	.5111651	2.456929	409.6183	15.29790	2.453908	15.14306	414.7564

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.00170	407.0850	2.479428	1.281834	404.3539	2.534611	15.47284
Stddev	.03900	1.8423	.003329	.002162	3.2269	.006036	.13283
%RSD	.2599990	.4525540	.1342604	.1686488	.7980417	.2381519	.8584841
#1	14.97020	405.4680	2.475659	1.284135	402.2385	2.535253	15.61449
#2	14.98956	406.6964	2.481969	1.279846	402.7551	2.528280	15.45297
#3	15.04533	409.0906	2.480655	1.281520	408.0680	2.540301	15.35106

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	150.8999	4.926005	4.829114	4.868374	4.889106	4.762549	4.962740
Stddev	.4358	.011972	.054141	.011856	.012509	.056815	.014097
%RSD	.2888269	.2430299	1.121136	.2435240	.2558560	1.192963	.2840483
#1	150.5456	4.915963	4.772093	4.863841	4.875045	4.697926	4.951286
#2	150.7676	4.939253	4.835426	4.859454	4.898998	4.785071	4.978483
#3	151.3866	4.922798	4.879822	4.881828	4.893275	4.804651	4.958451

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCV004 Acquired: 12/23/2024 19:00:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV004 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.999172	4.743997	5.064694
Stddev	.024382	.015818	.024304
%RSD	.4877159	.3334417	.4798645
#1	4.986671	4.728339	5.043354
#2	4.983577	4.743682	5.059579
#3	5.027269	4.759971	5.091148

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1786.292	24327.61	2090.581	1520.345	1562.435
Stddev	4.359	114.93	19.237	8.998	3.347
%RSD	.2440284	.4724192	.9201594	.5918565	.2142006
#1	1781.259	24210.58	2112.768	1514.151	1561.257
#2	1788.881	24331.92	2078.555	1516.218	1559.837
#3	1788.736	24440.31	2080.422	1530.667	1566.212

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB004 Acquired: 12/23/2024 19:03:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB004 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003056	.0010860	.0031785	.0048141	-.000613	.0611703	-.003997
Stddev	.003019	.0010582	.0006492	.0022029	.001990	.0118890	.002086
%RSD	98.79424	97.43986	20.42649	45.75841	324.6471	19.43588	52.18499
#1	-.002564	.0020620	.0031994	.0023437	-.001589	.0611508	-.003033
#2	-.000313	.0012347	.0025190	.0055246	-.001927	.0730691	-.006390
#3	-.006291	-.000039	.0038170	.0065740	.001677	.0492911	-.002567

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000885	-.000005	-.007757	-.000276	-.000150	.0089116	.0442300
Stddev	.0001850	.000023	.004700	.000610	.000194	.0139967	.0400063
%RSD	208.9664	486.3816	60.58704	220.9081	129.4071	157.0615	90.45069
#1	.0002824	.000022	-.013180	-.000285	-.000362	.0024689	.0214768
#2	-.000086	-.000022	-.004854	.000338	.000021	-.000704	.0207895
#3	.000069	-.000014	-.005238	-.000881	-.000110	.024970	.0904236

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019632	.0218244	.0007121	.0000137	-1.81516	.0003220	-.005952
Stddev	.0014355	.0230076	.0005021	.0007024	.23617	.0034703	.014331
%RSD	73.11929	105.4216	70.50619	5140.920	13.01087	1077.631	240.7758
#1	.0005056	.0161650	.0011655	-.000274	-2.08690	.0043286	-.010350
#2	.0020084	.0471335	.0007984	-.000499	-1.65949	-.001740	-.017568
#3	.0033755	.0021745	.0001725	.000814	-1.69908	-.001623	.010062

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.618107	.0003385	.0035311	.0010287	-.006932	-.080831	.0003060
Stddev	.210034	.0008145	.0025715	.0002541	.003160	.001023	.0010054
%RSD	33.98020	240.6078	72.82475	24.69505	45.58359	1.265557	328.5235
#1	-.722772	.0011327	.0031289	.0012449	-.010551	-.081843	.0004107
#2	-.376306	-.000495	.0011844	.0010925	-.004717	-.079797	.0012550
#3	-.755243	.000378	.0062801	.0007489	-.005529	-.080854	-.000748

Reviewed By:kareem
On:12/27/2024 4:23:37 PM
Inst Id :P5

Sample Name: CCB004 Acquired: 12/23/2024 19:03:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v39) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB004 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0034276	.0001392	.0052659
Stddev	.0033304	.0003006	.0022124
%RSD	97.16518	215.9678	42.01407
#1	.0009325	.0003213	.0036034
#2	.0021409	.0003040	.0044174
#3	.0072094	-.000208	.0077770

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2021.713	26570.15	2133.116	1751.389	1832.215
Stddev	5.537	98.23	12.034	12.238	3.680
%RSD	.2738572	.3696827	.5641562	.6987471	.2008499
#1	2019.378	26457.34	2119.485	1737.274	1828.230
#2	2017.726	26636.78	2137.591	1759.025	1832.932
#3	2028.034	26616.32	2142.271	1757.868	1835.485

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

Prep Standard - Chemical Standard Summary

Order ID : P5028

Test : Metals CLP Full

Prepbatch ID : PB165359,

Sequence ID/Qc Batch ID: LB133959,LB134069,

Standard ID :
MP83122,MP83134,MP83141,MP83147,MP83500,MP83501,MP83502,MP83503,MP83504,MP83505,MP83506,MP835
07,MP83508,MP83509,MP83510,MP83511,MP83513,MP83514,MP83619,MP83723,

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,M581
7,M5818,M5819,M5820,M5875,M5959,M5960,M5962,M5970,M5976,M5978,M5982,M5985,M5990,M5999,M6021,M60
23,M6025,M6028,M6030,M6033,M6111,M6116,M6117,M6121,M6125,M6126,W3112,

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP83619	12/13/2024	01/07/2025	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/17/2024

FROM 25.00000ml of M6121 + 4925.00000ml of W3112 + 50.00000ml of M6126 = Final Quantity: 5000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1883	SE 10PPM	MP83723	12/19/2024	01/07/2025	Sarabjit Jaswal	None	None	Mohan Bera 12/20/2024

FROM 0.10000ml of M5962 + 9.90000ml of MP83619 = Final Quantity: 10.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	12/28/2024	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	12/28/2024	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	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 #
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

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

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

R: 02/22/24 M5986 M5987, M5988, M5989-M5990

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-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:

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

R 8/15/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

617

CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

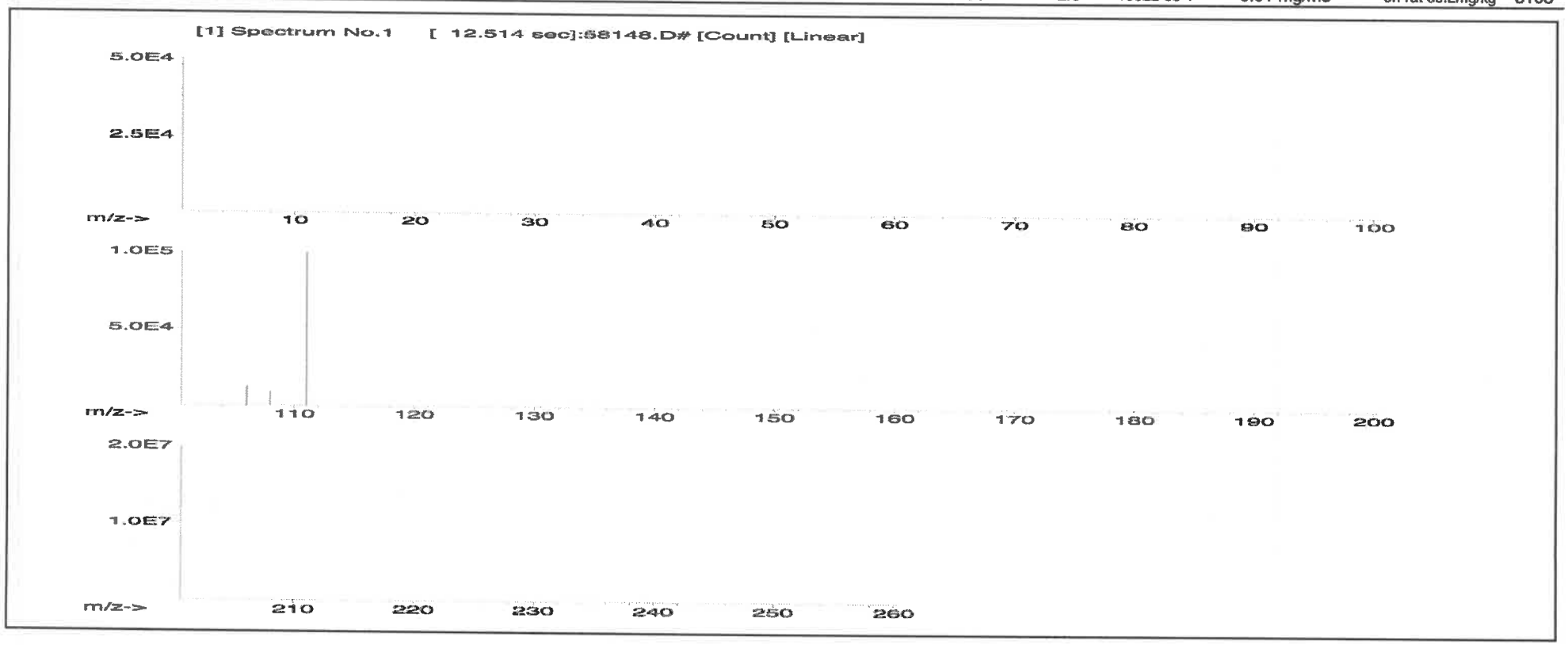
Aleah O'Brady

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



618

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

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-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.

619

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

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**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

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

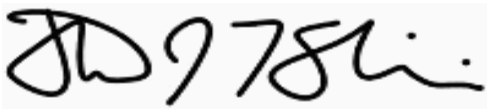
- Sealed TCT Bag Open Date: _____

- 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



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-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.

626

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**

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

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

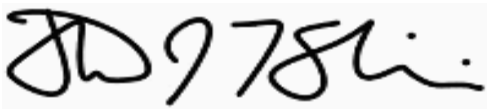
- Sealed TCT Bag Open Date: _____

- 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

629

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

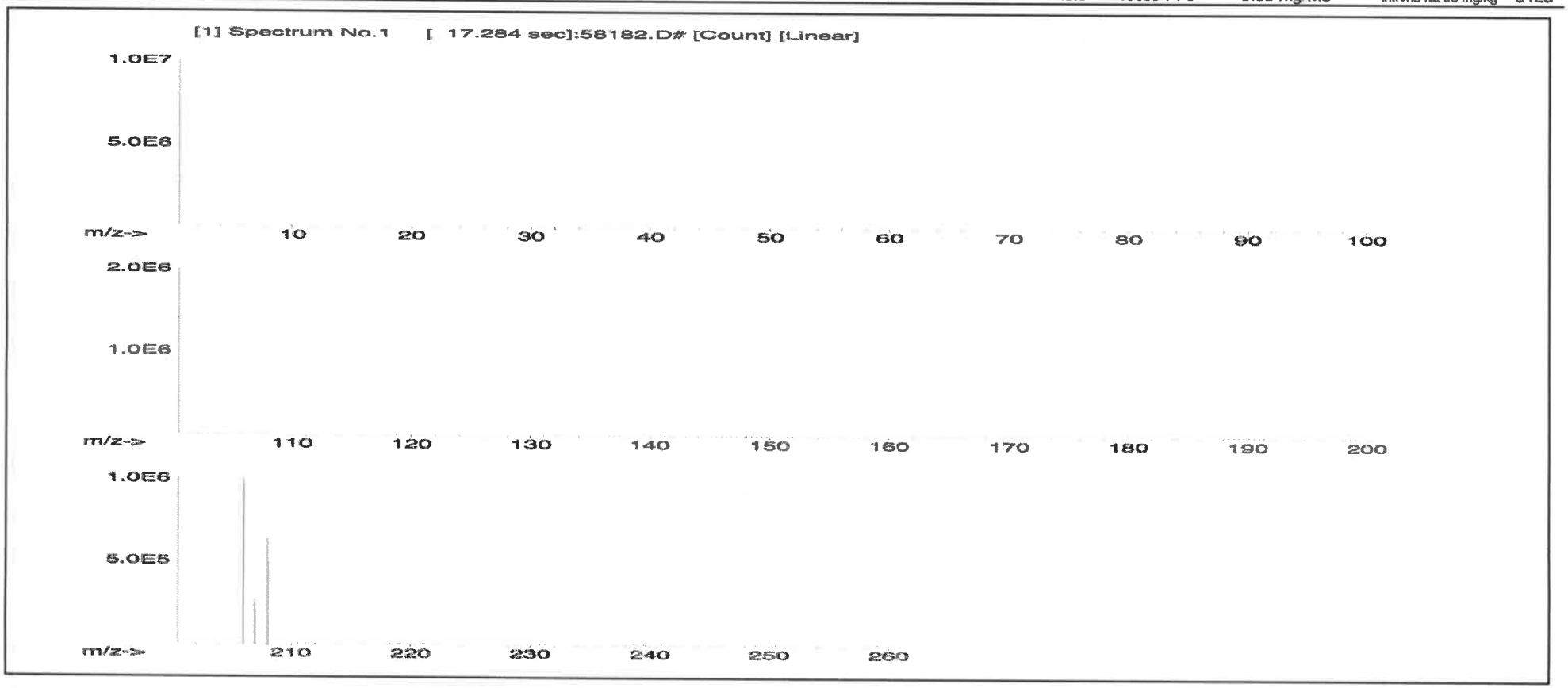
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance 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



630

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.

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

638

CERTIFIED WEIGHT REPORT:

Part Number: 58113
Lot Number: 070622
Description: Aluminum (Al)

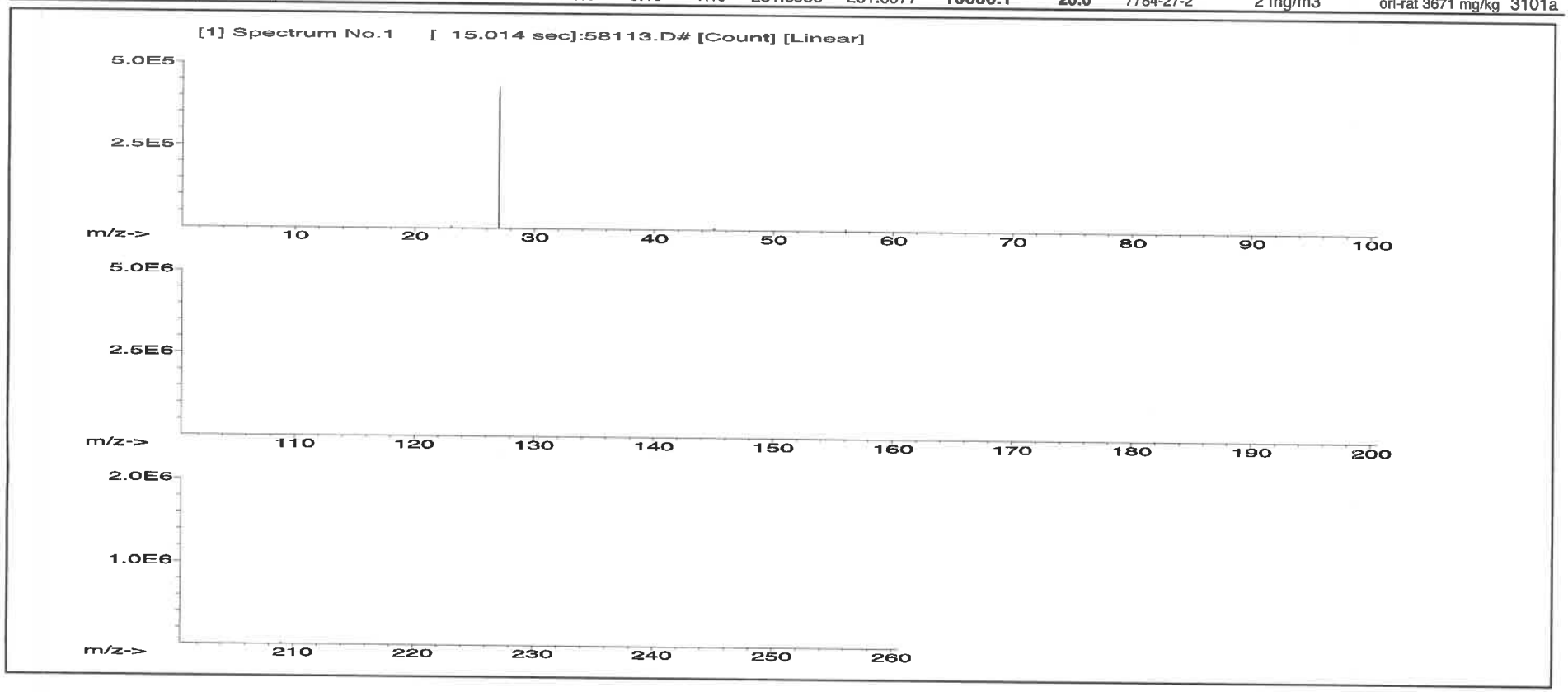
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20370011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

R: 09/08/22 (BH)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

642

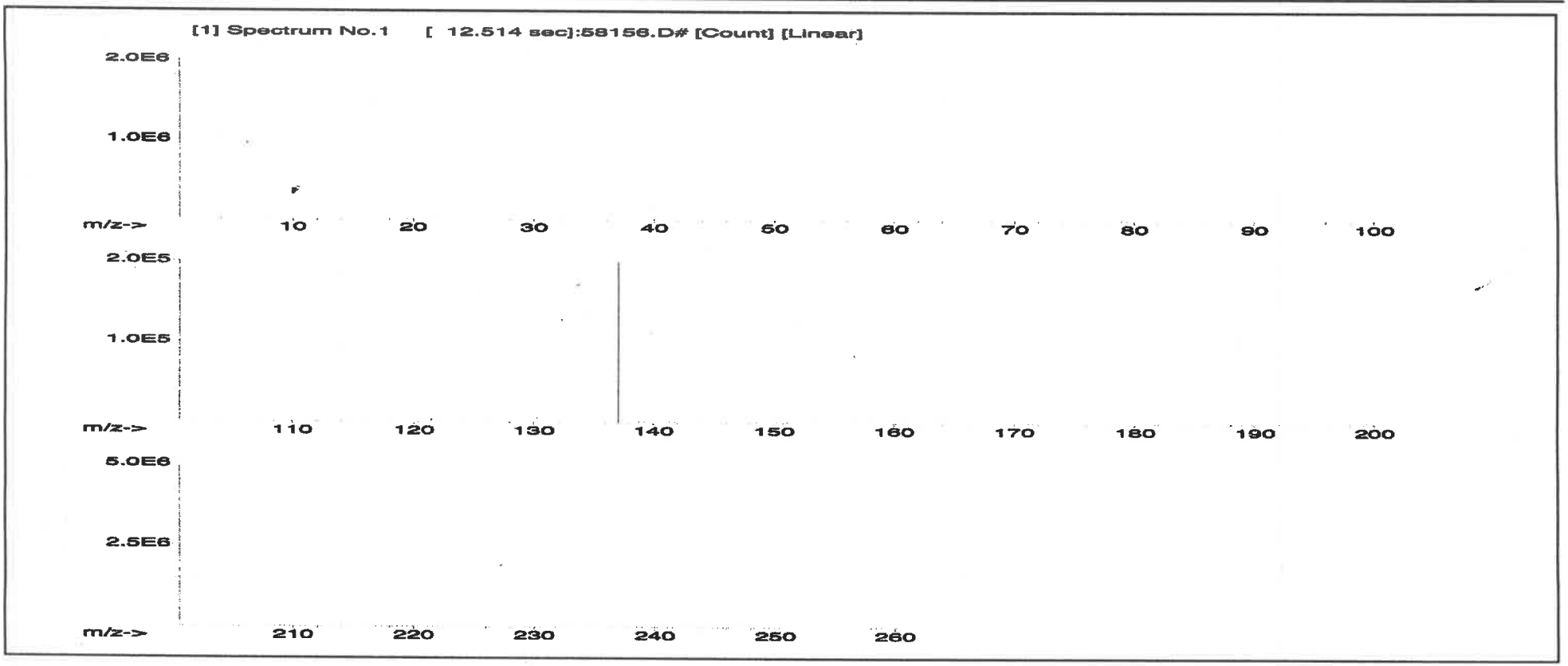
CERTIFIED WEIGHT REPORT:

		Lot #		
Part Number:	**57056**	**Solvent:**	20510011	Nitric Acid
Lot Number:	**072122**			
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).

643

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5429 R1 01/26/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

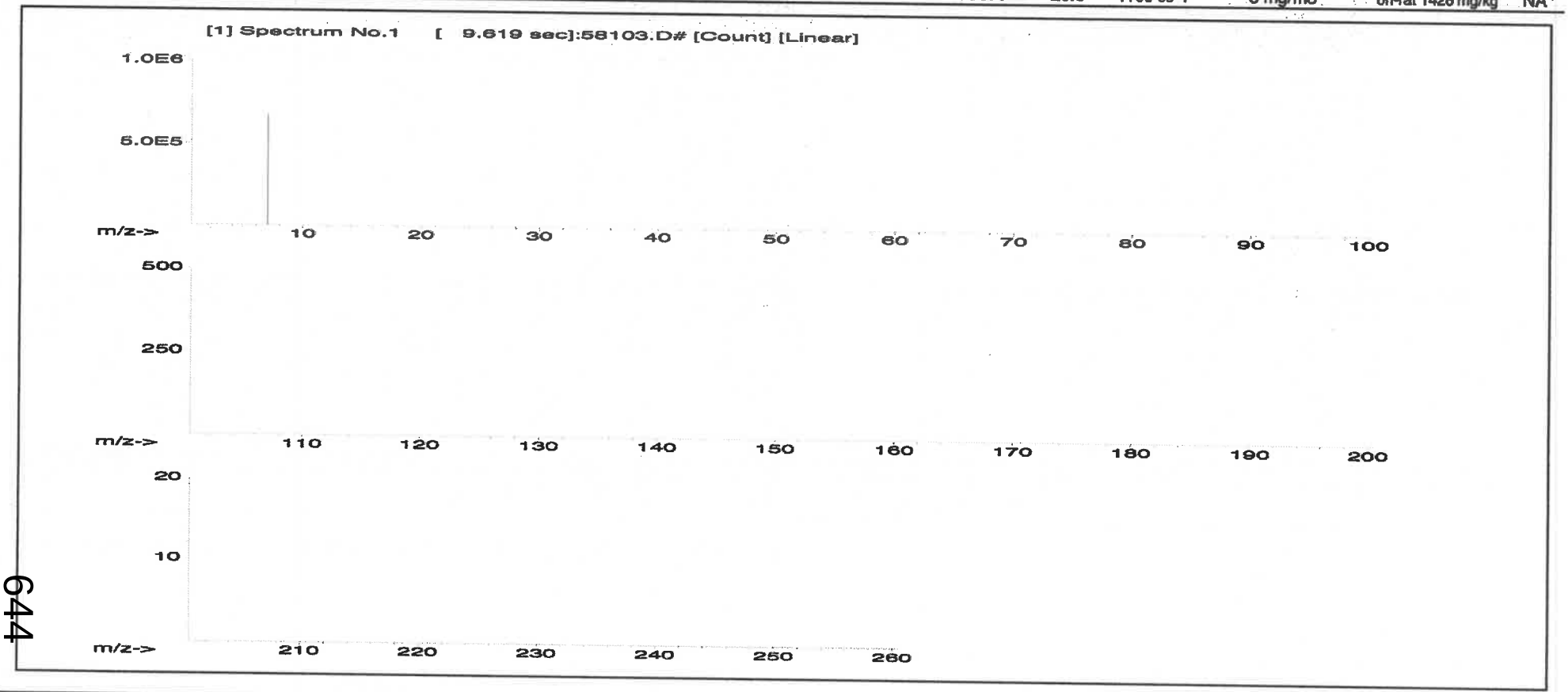
Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

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



644

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:

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).

645

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5497 - M5498 R: 03/17/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

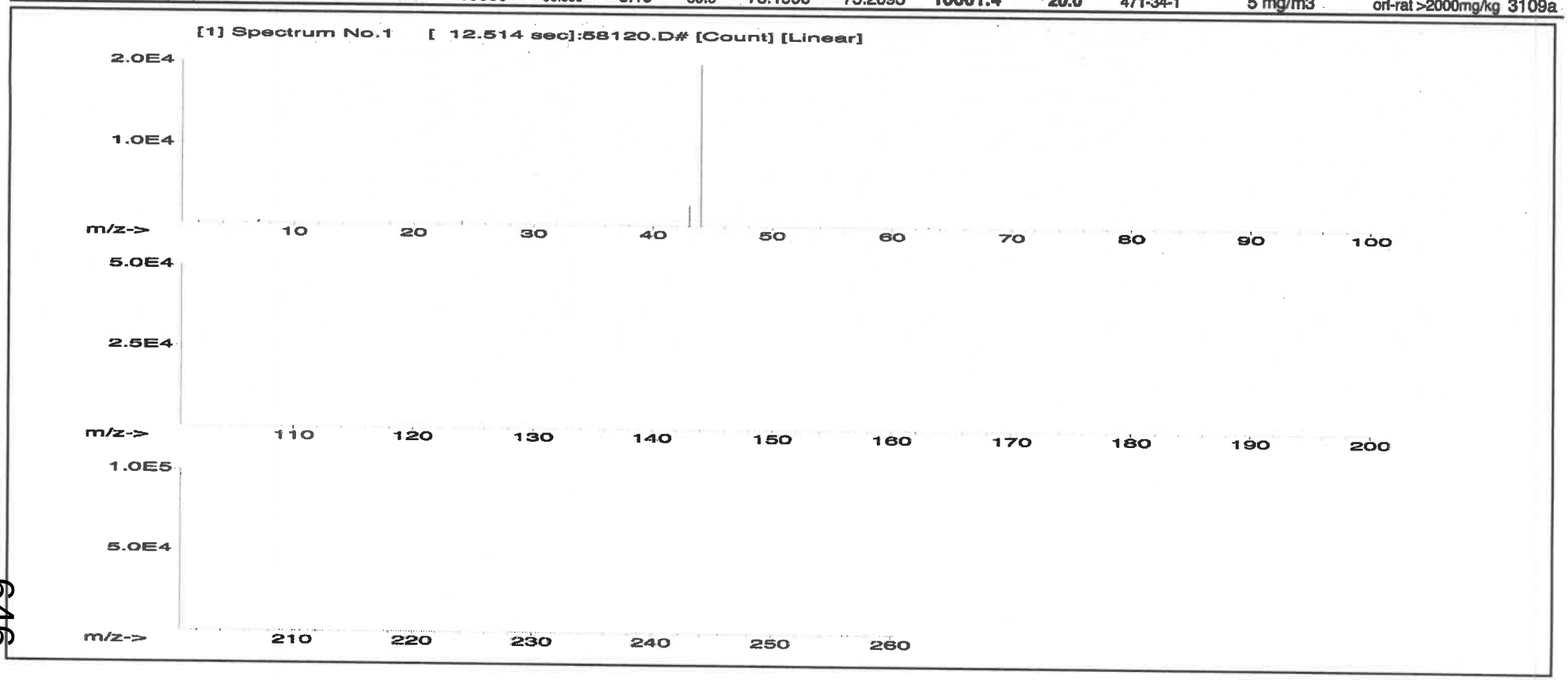
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

	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



646

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

647

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5497 - M5498 R: 03/17/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

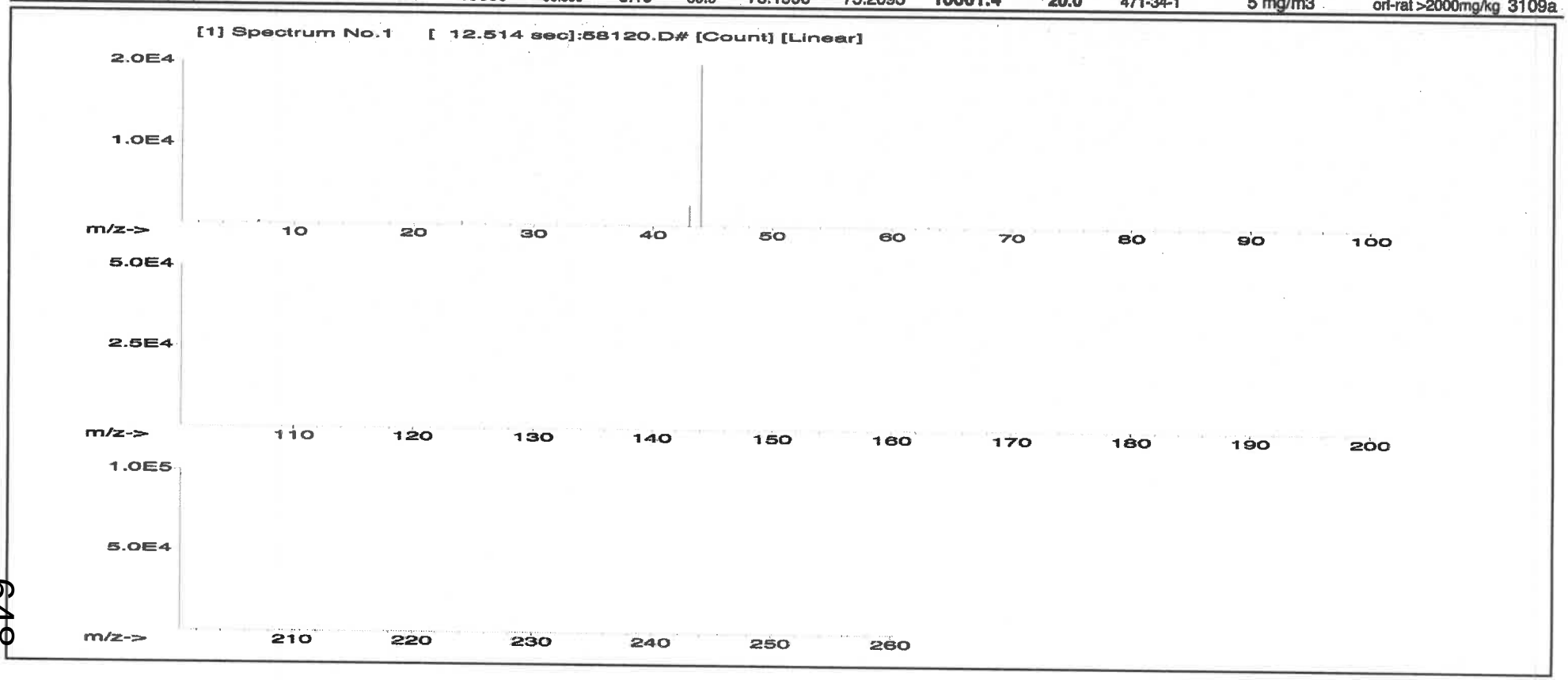
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

	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



648

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

9679

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

MS513 R:03/17/23 BF

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

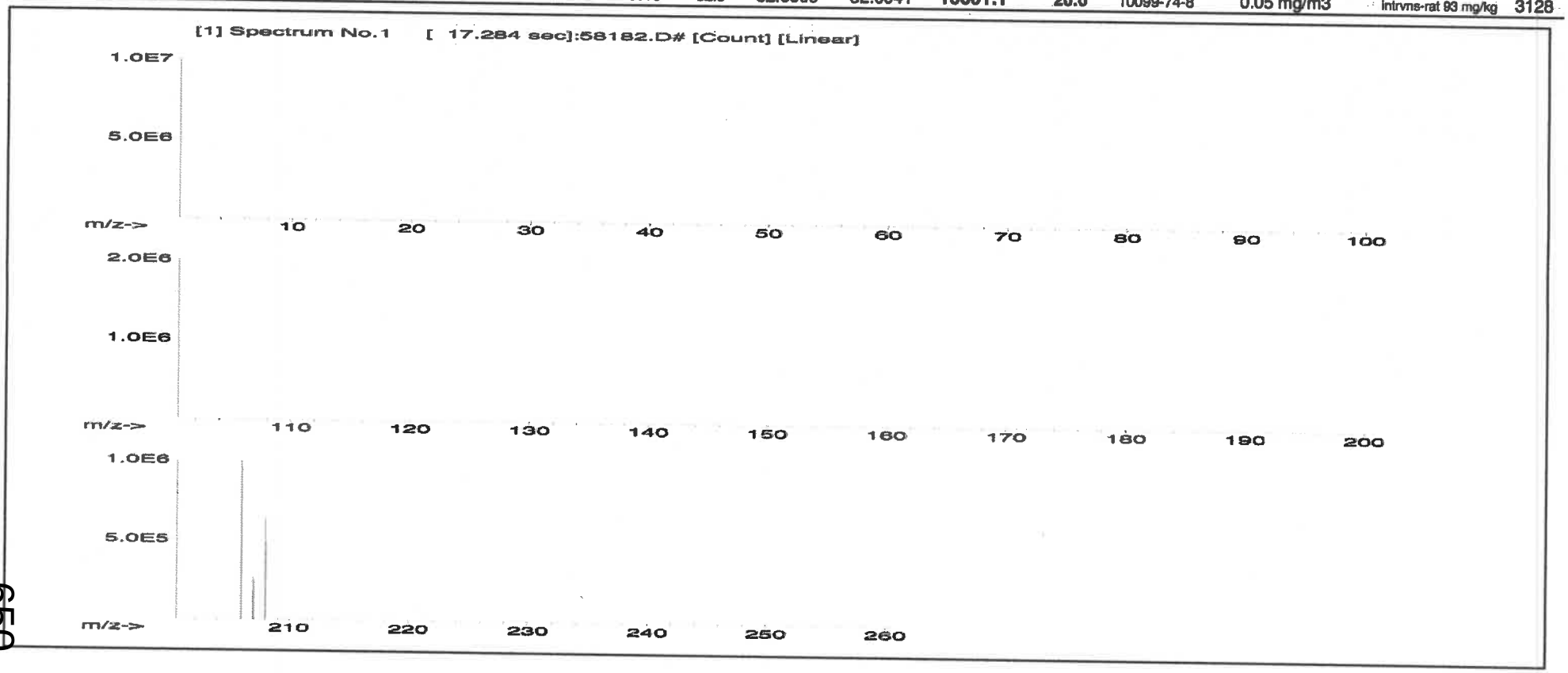
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



650

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).

TC-91

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5514 , M5515 R: 03/17/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

652

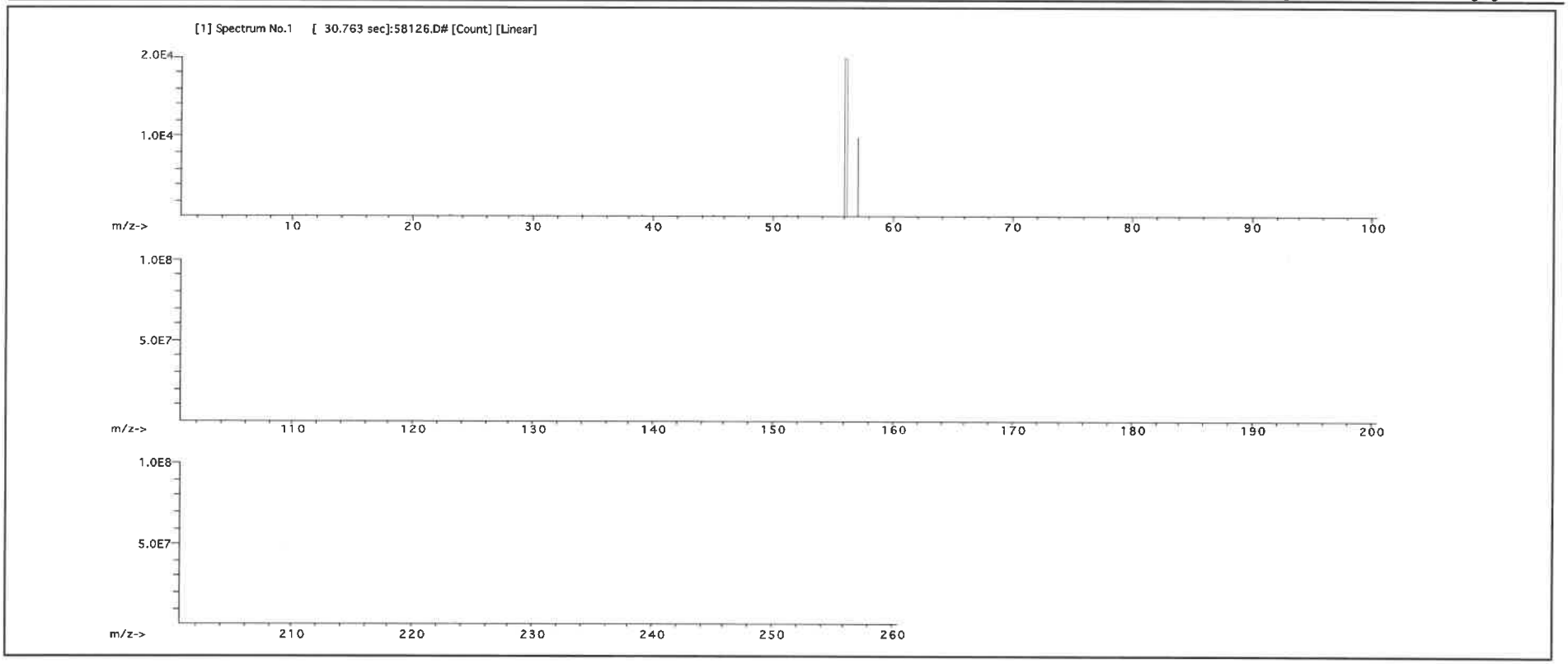
CERTIFIED WEIGHT REPORT:

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:

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).

953

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5519. M5520 (BH) R:03/17/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

654

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

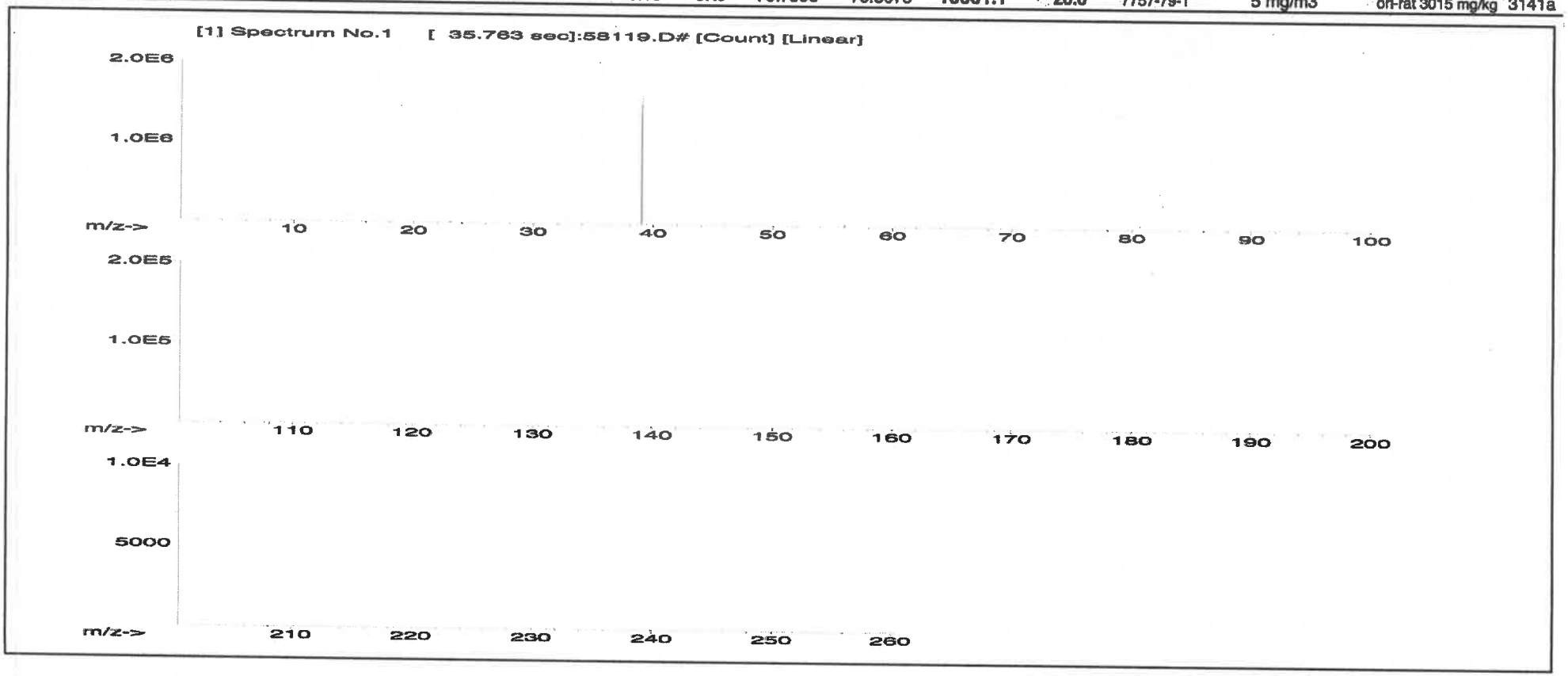
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

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



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	<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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5658 R ! 8/25/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

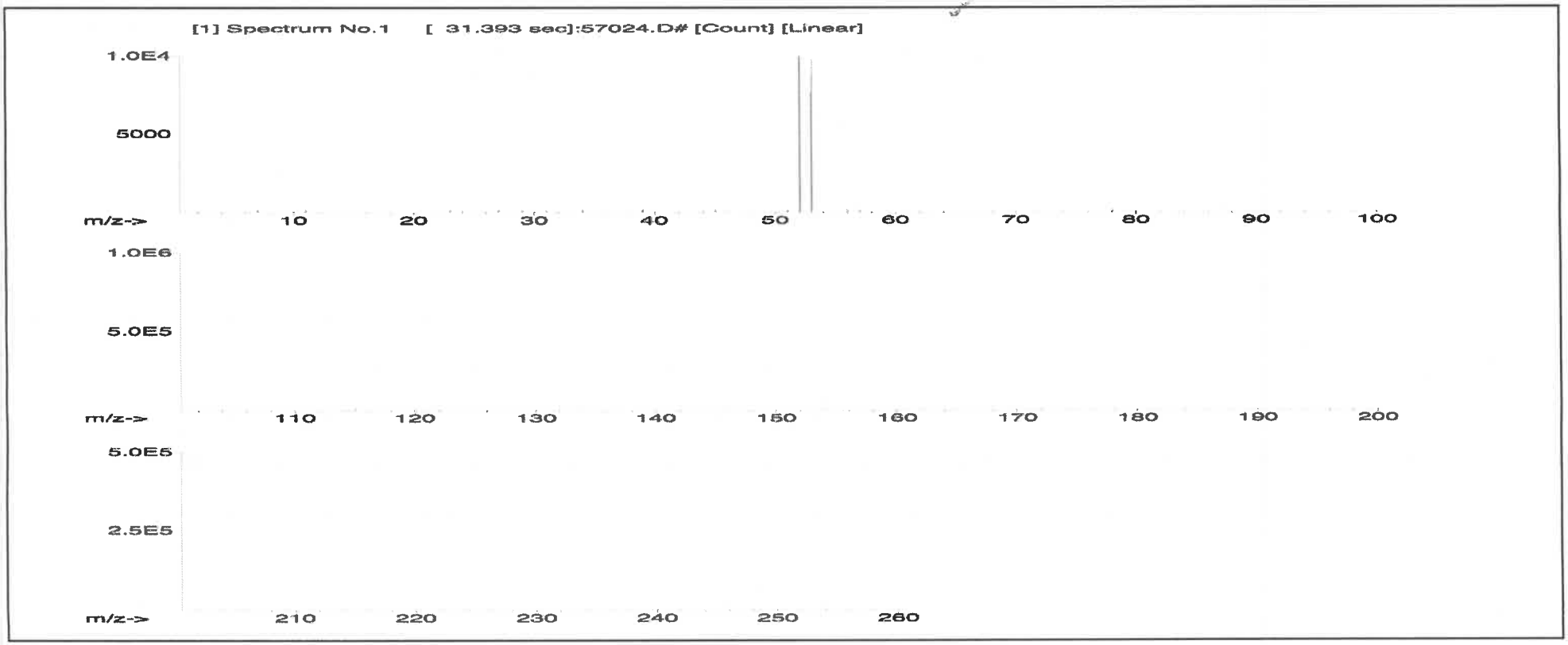
659

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	58024	21110221	Nitric Acid	
Lot Number:	060523			
Description:	Chromium (Cr)			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	1000			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



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	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5697 R: 10/27/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

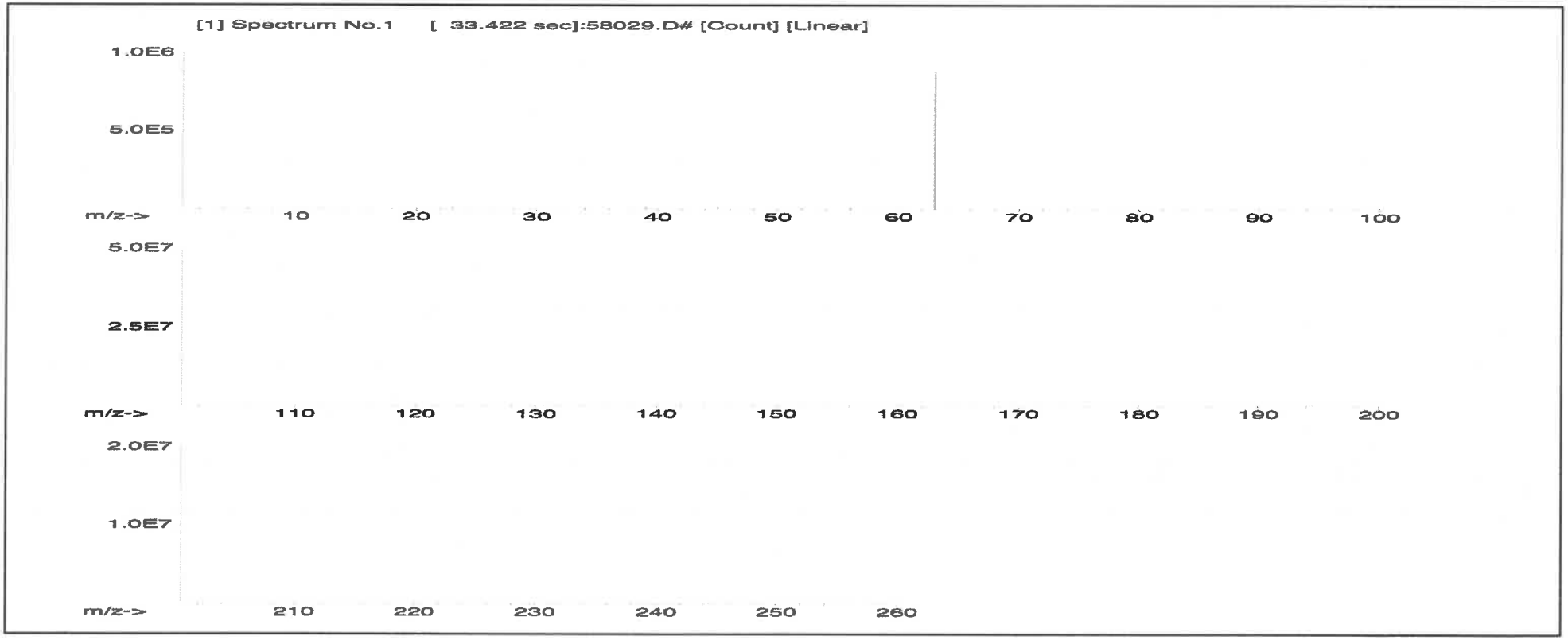
658

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**58029**	24002546	Nitric Acid		
Lot Number:	**102523**				
Description:	**Copper (Cu)**				
		2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	102526				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5648 R: 10/27/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

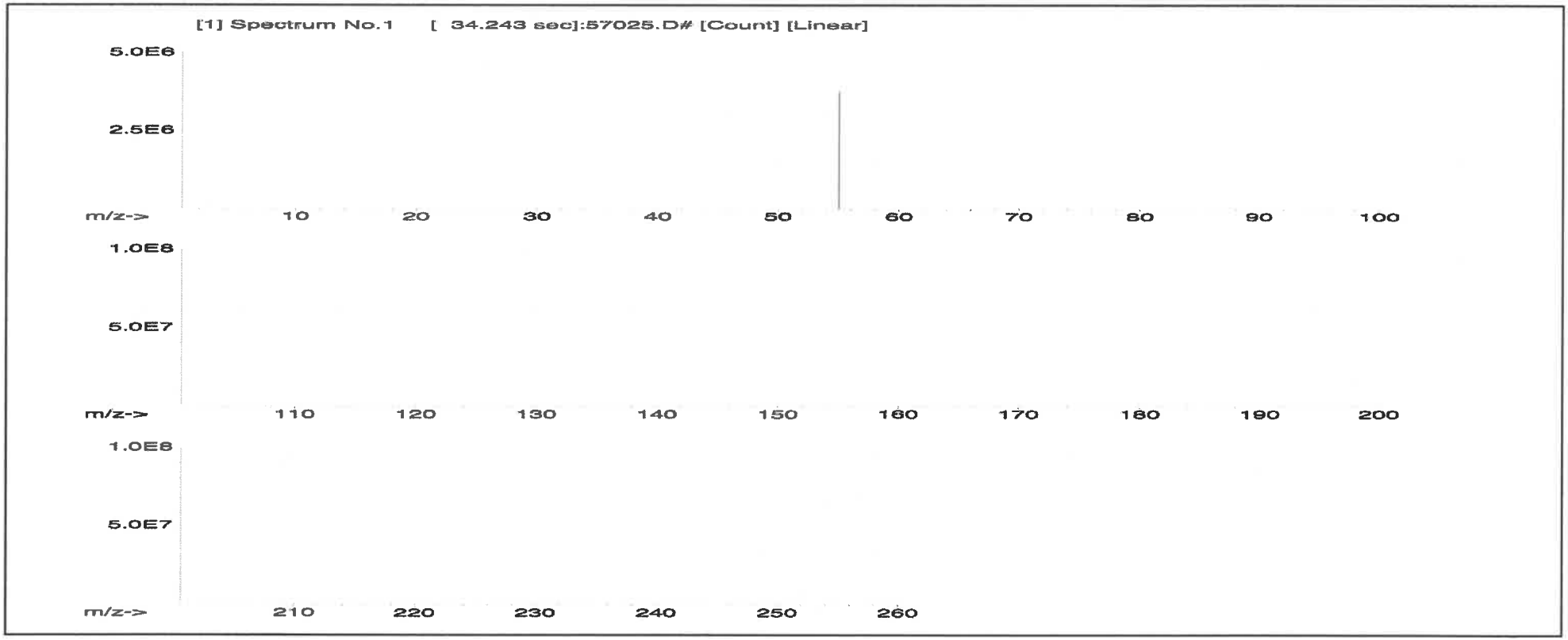
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

099

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



199

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:

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 balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/25/23 M5751

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

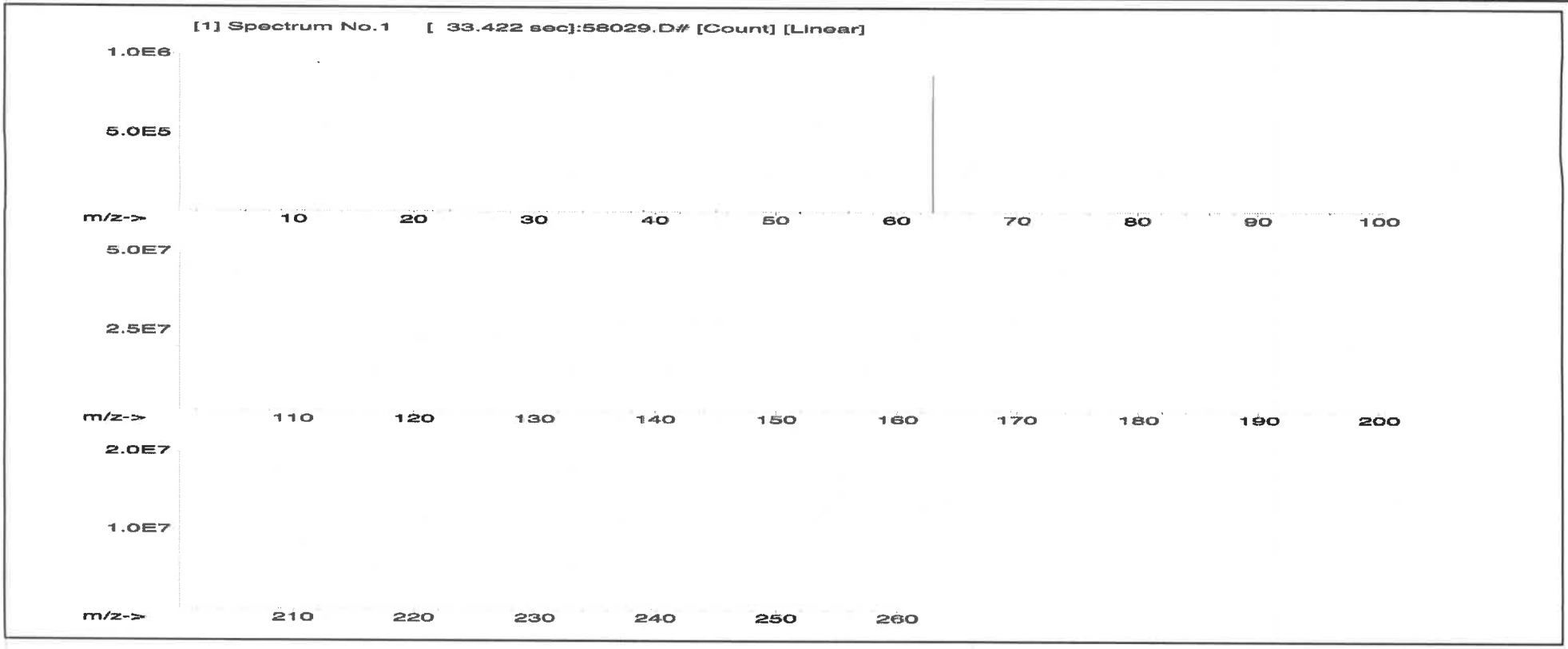
662

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



663

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.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5768 M5769 (BP) R:1/3/24

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

664

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

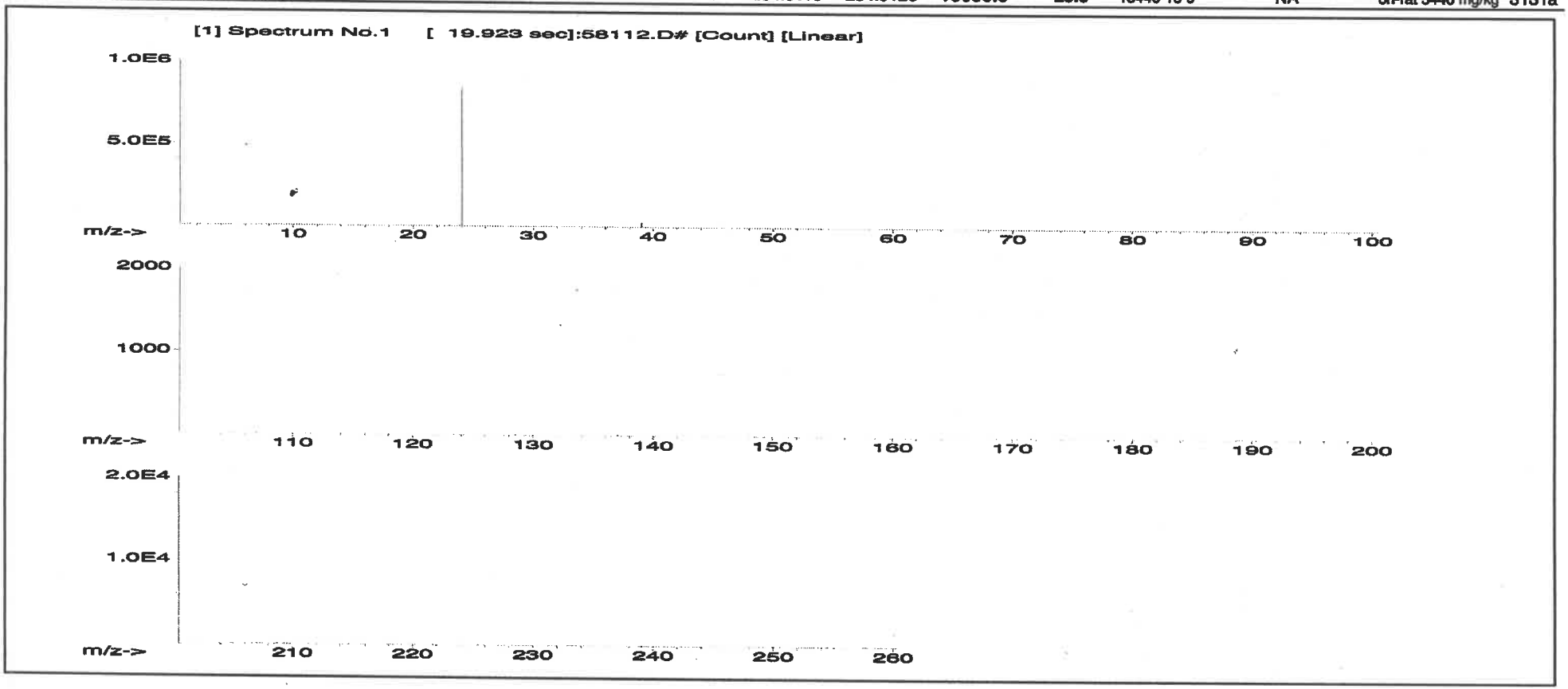
5E-05 Balance Uncertainty

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



665

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5768 M5769 (BP) R:1/3/24

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

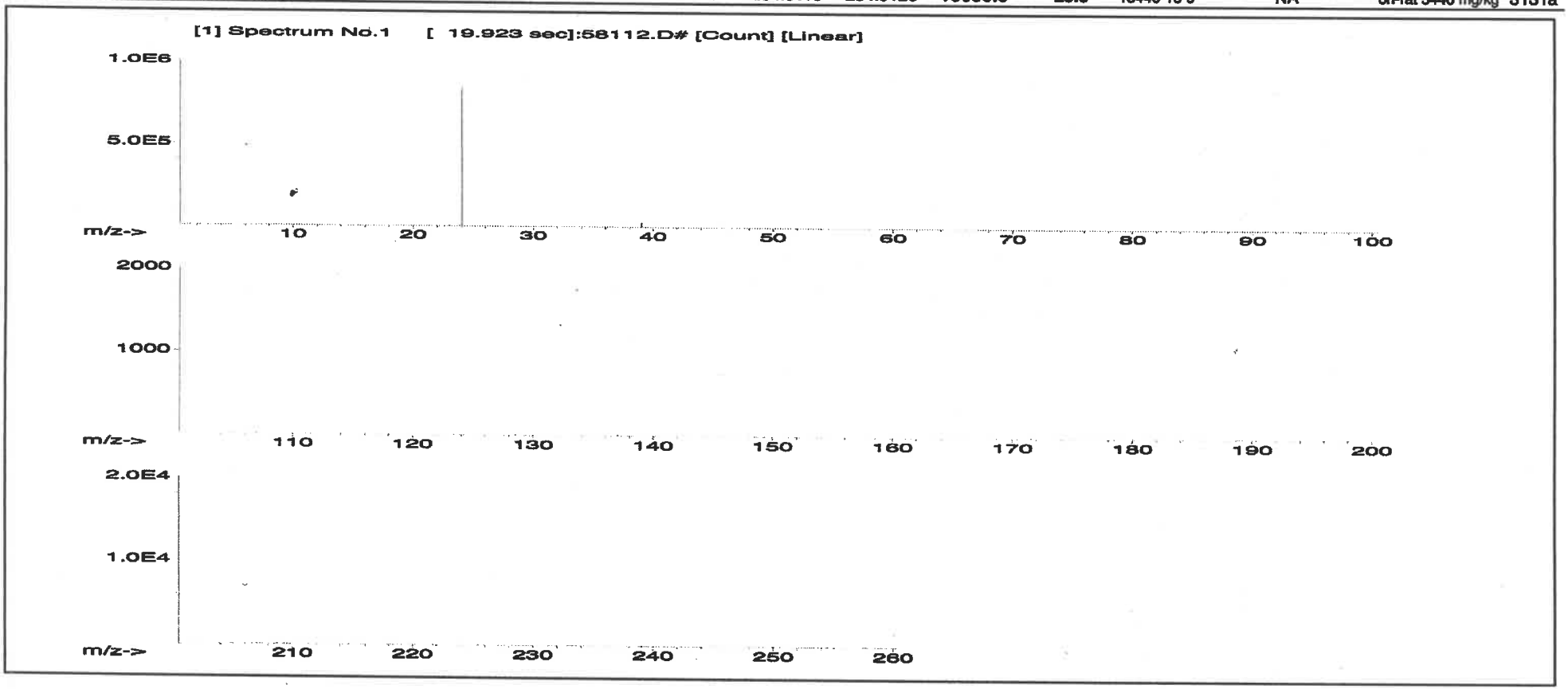
999

CERTIFIED WEIGHT REPORT:

			Lot #	
Part Number:	**58112**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**091823**			
Description:	**Magnesium (Mg)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	091826			
Recommended Storage:	Ambient (20 °C)	M5768, M5769 (BP) R: 1/3/24		
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 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	orl-rat 5440 mg/kg	3131a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5798

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

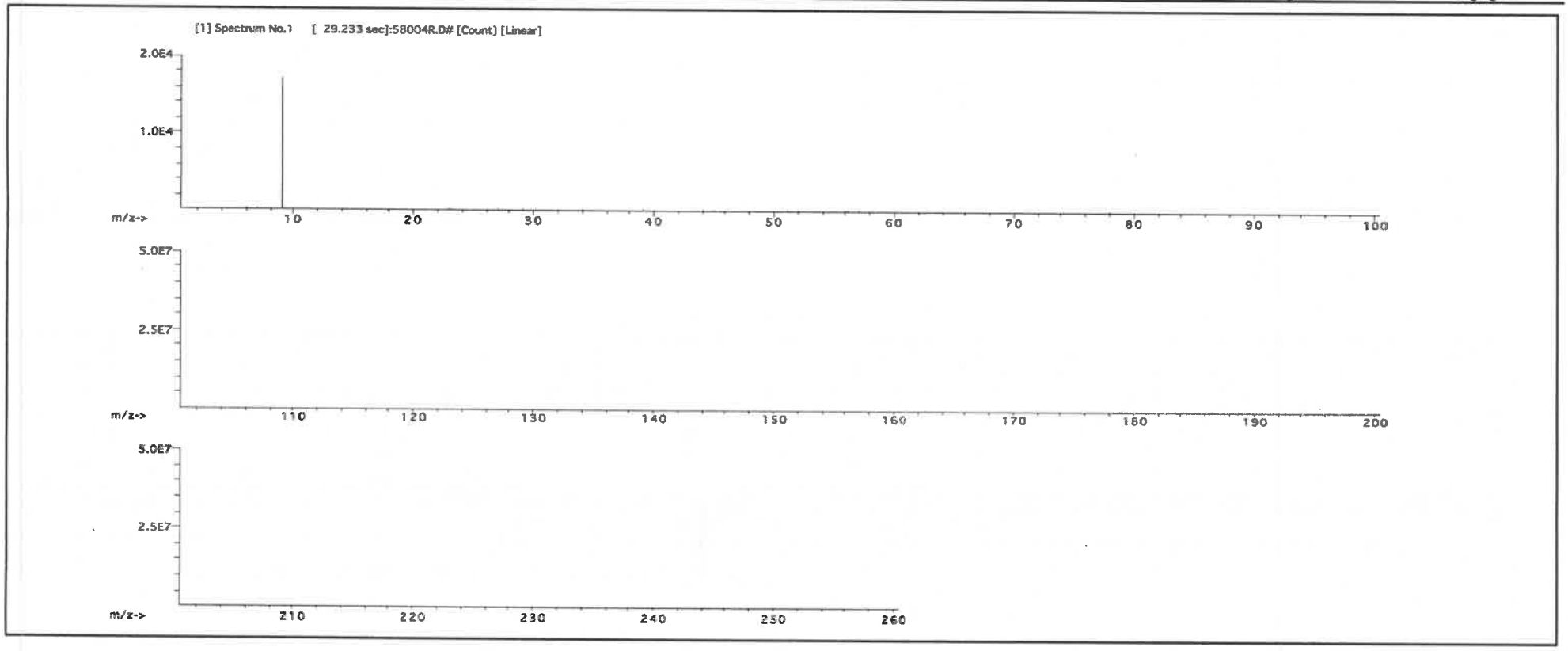
998

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.

* 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).

699

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R? 02/09/24 IM5799

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

670

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

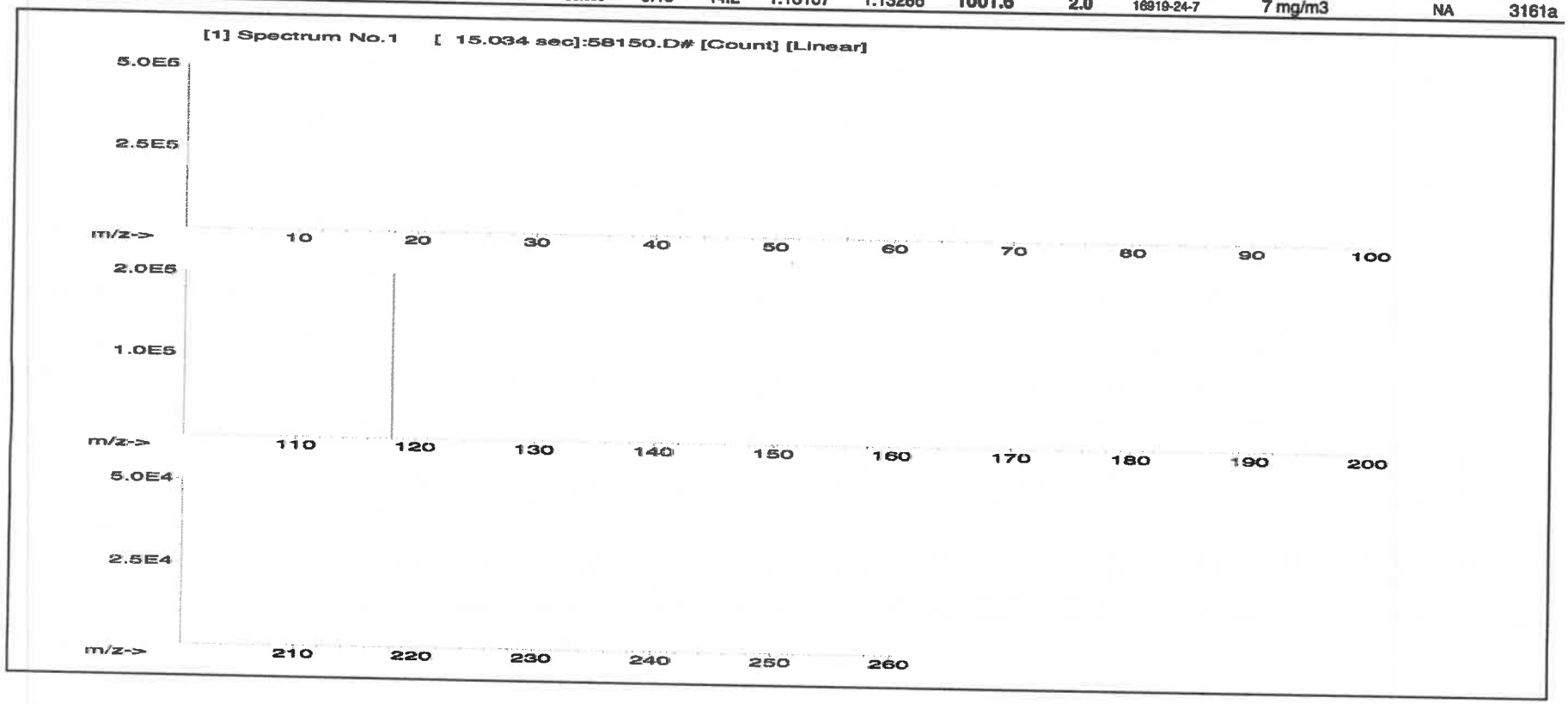
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



671

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5800 BH

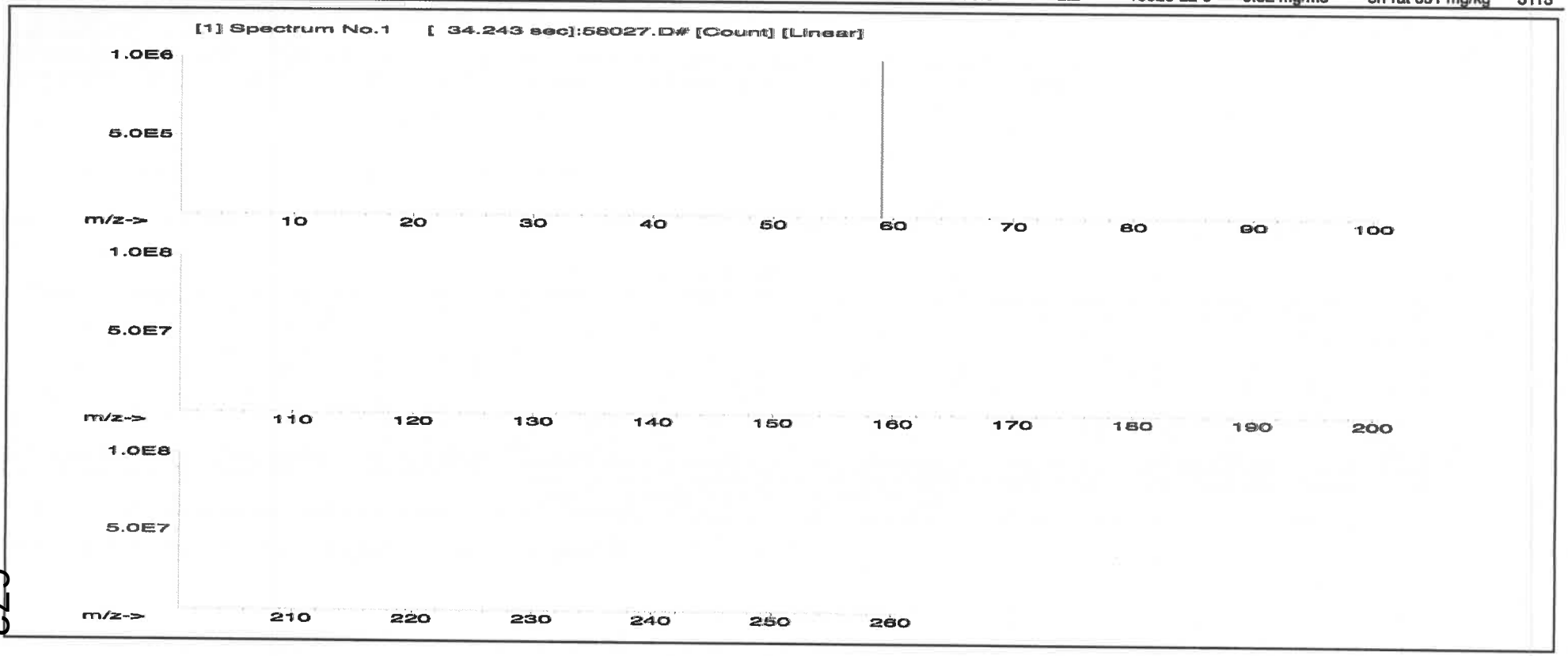
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	**2.2**	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



672

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

673

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5801 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

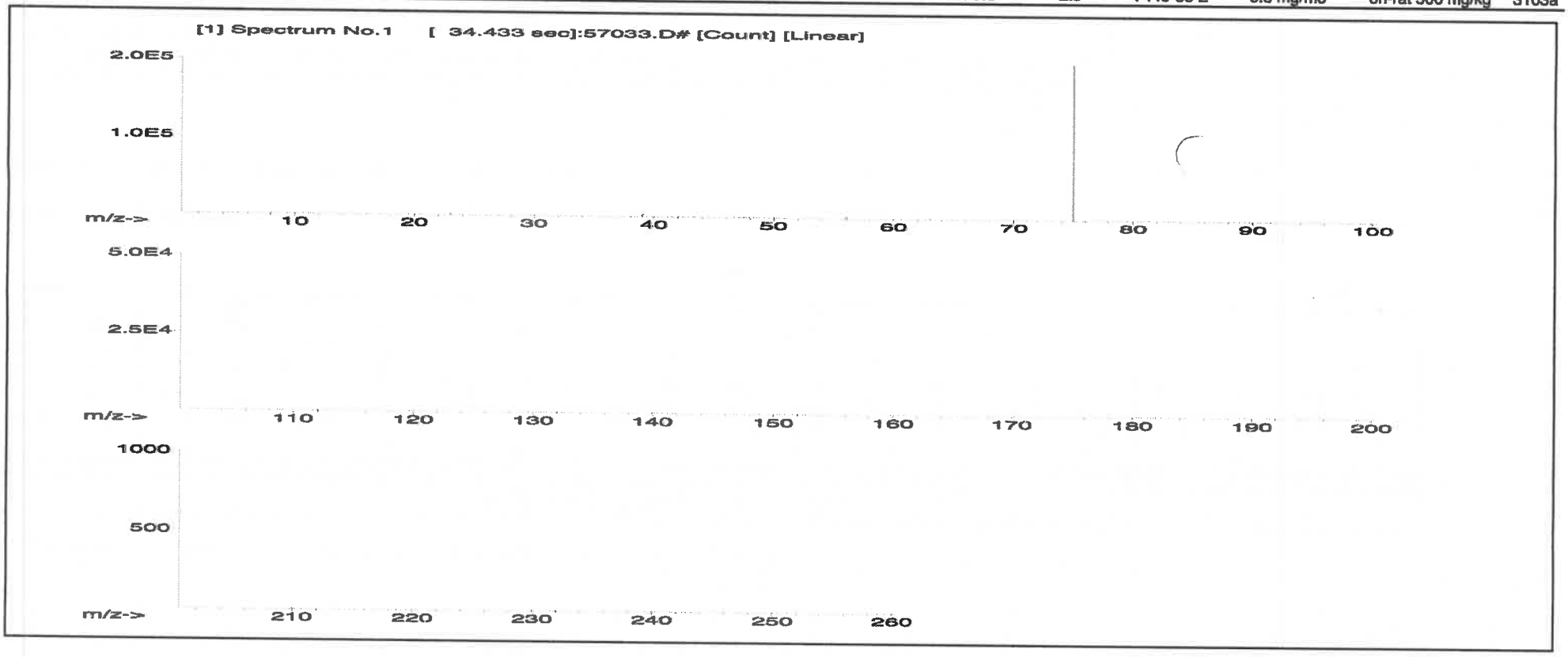
674

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



675

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R1 02/09/24. M58165

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

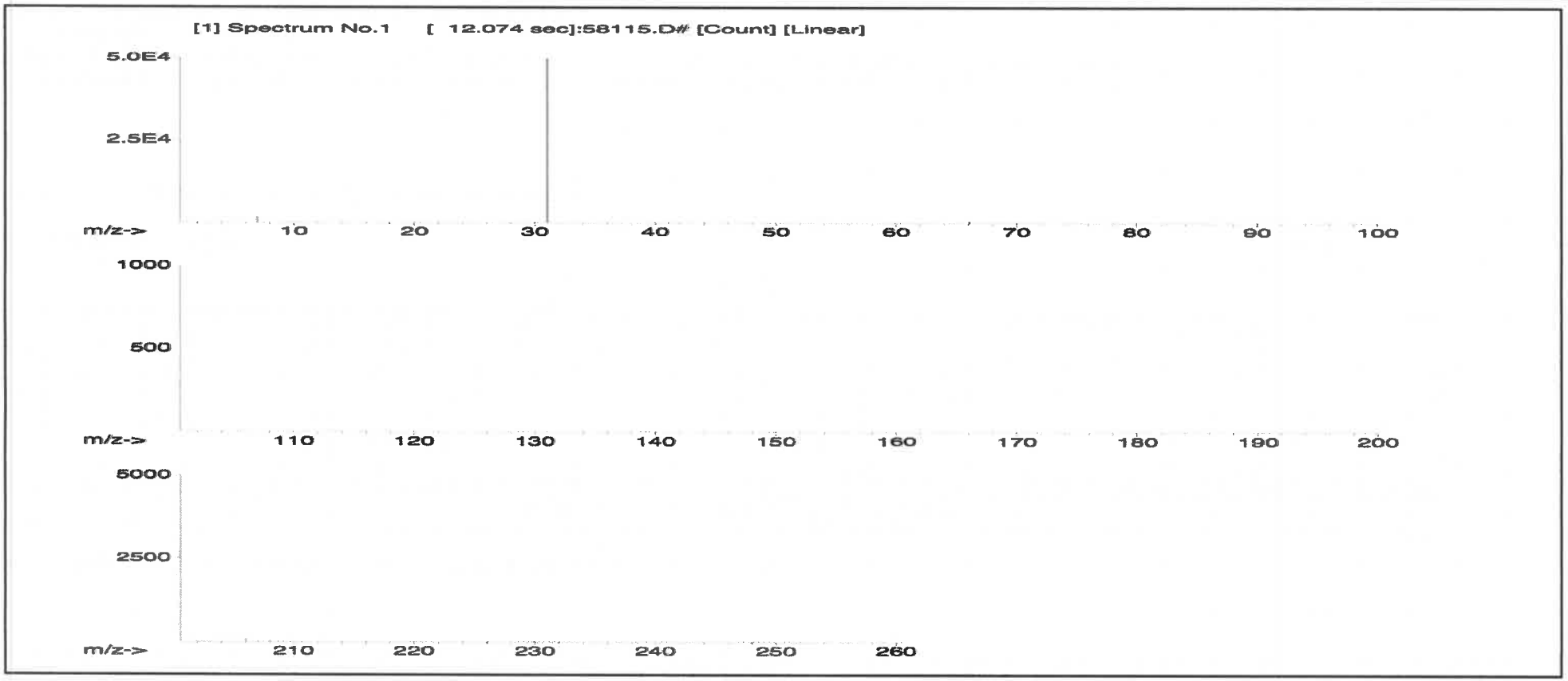
679

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5816

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

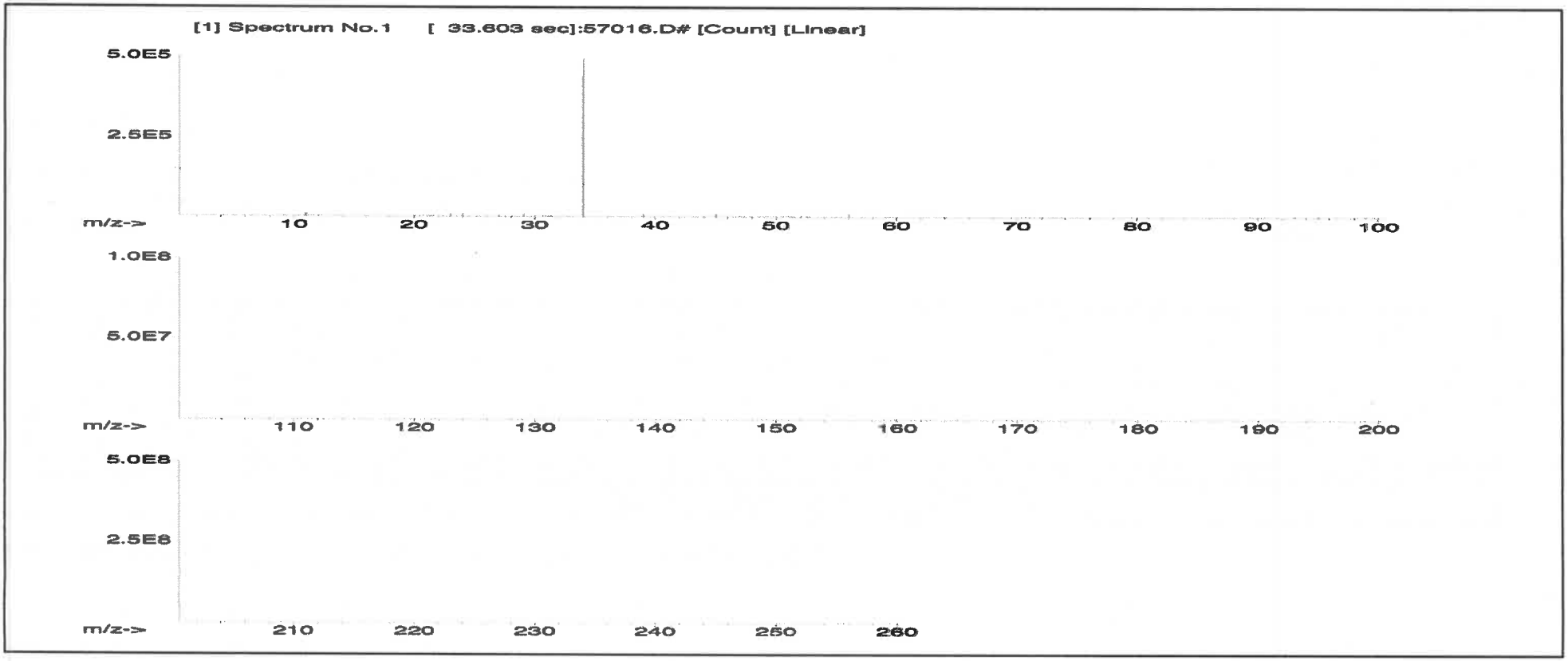
678

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

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



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	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5817

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

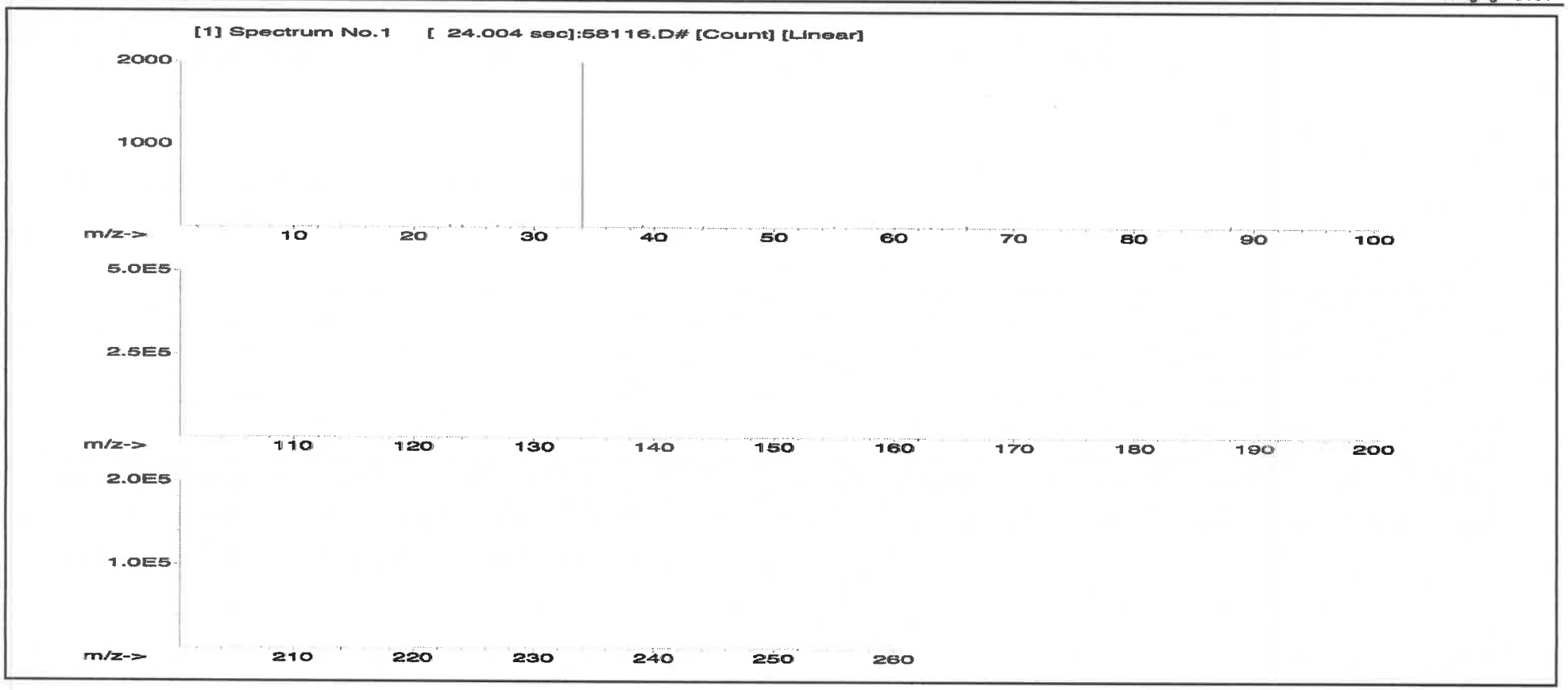
Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

680

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:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M.5818

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

682

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

Lot #

Solvent: 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

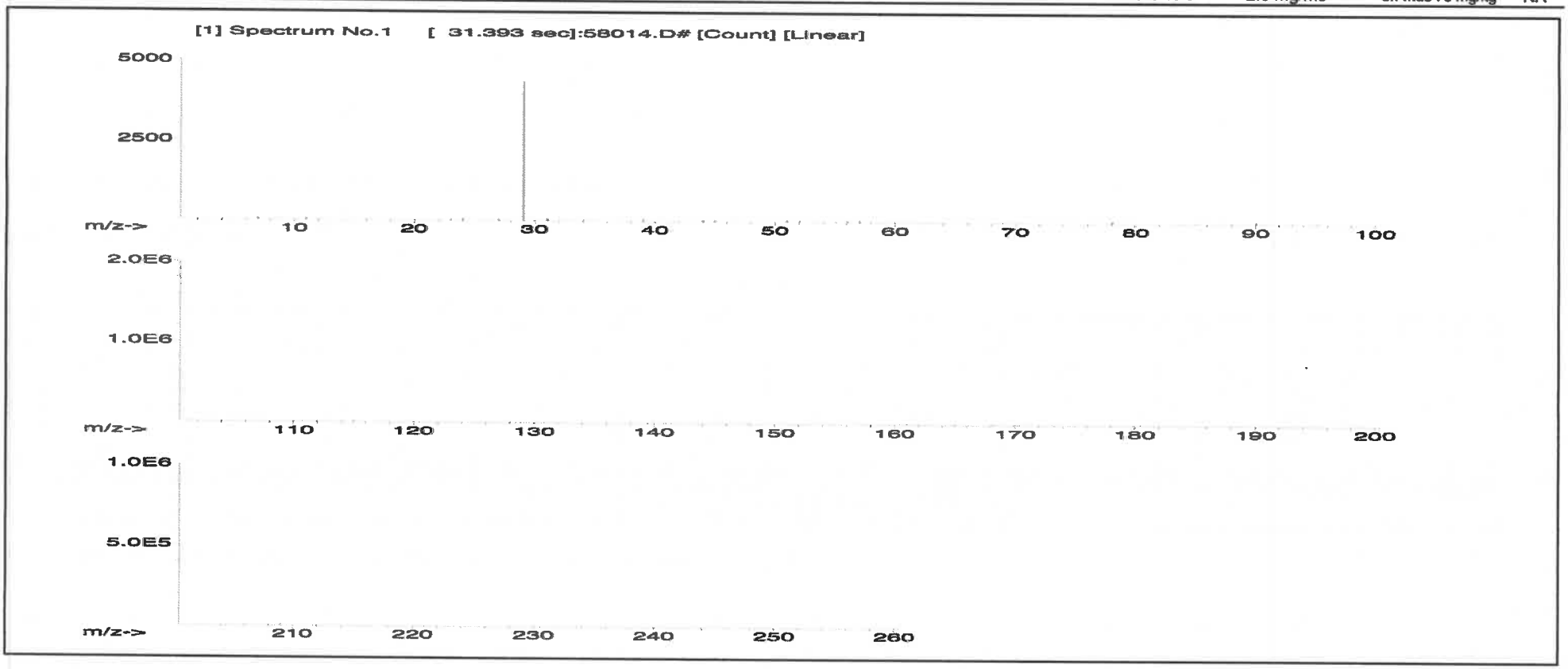
Aleah O'Brady

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



683

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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5819

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

684

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

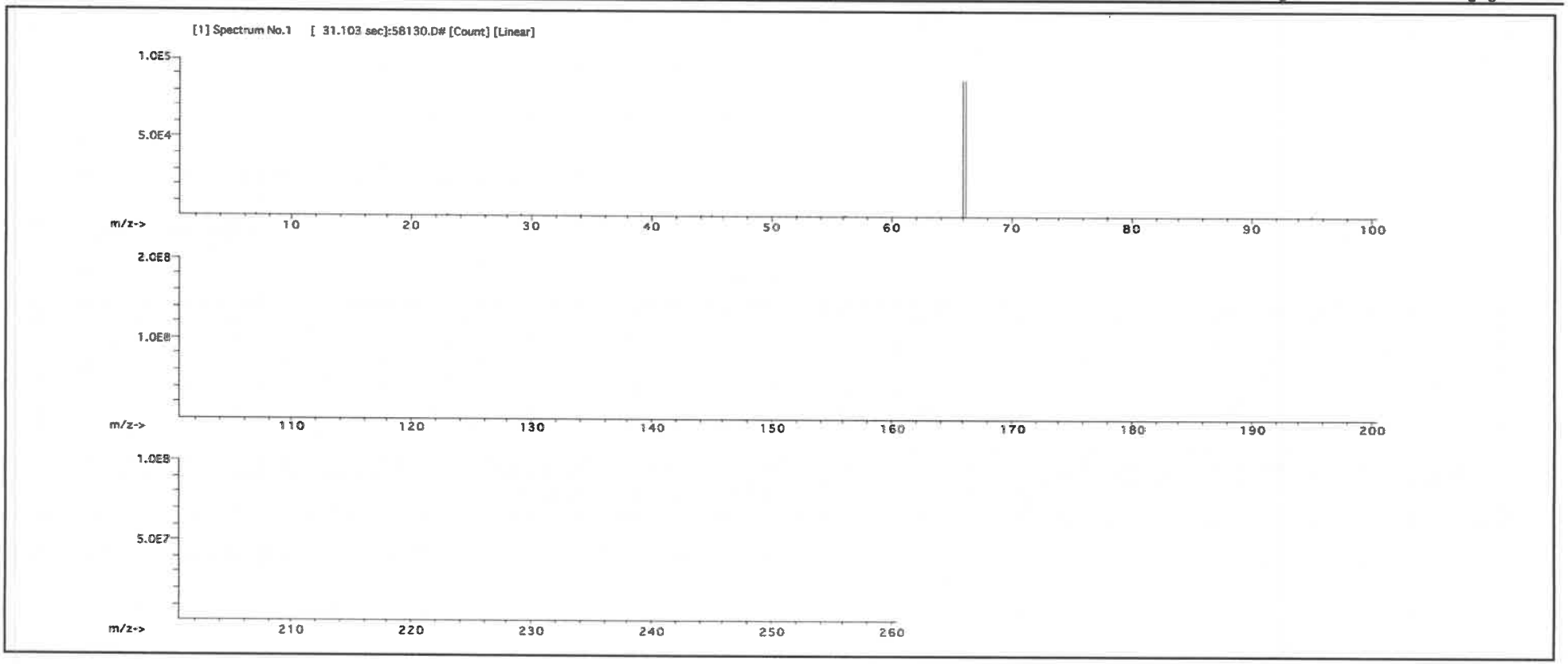
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

	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:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5820

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

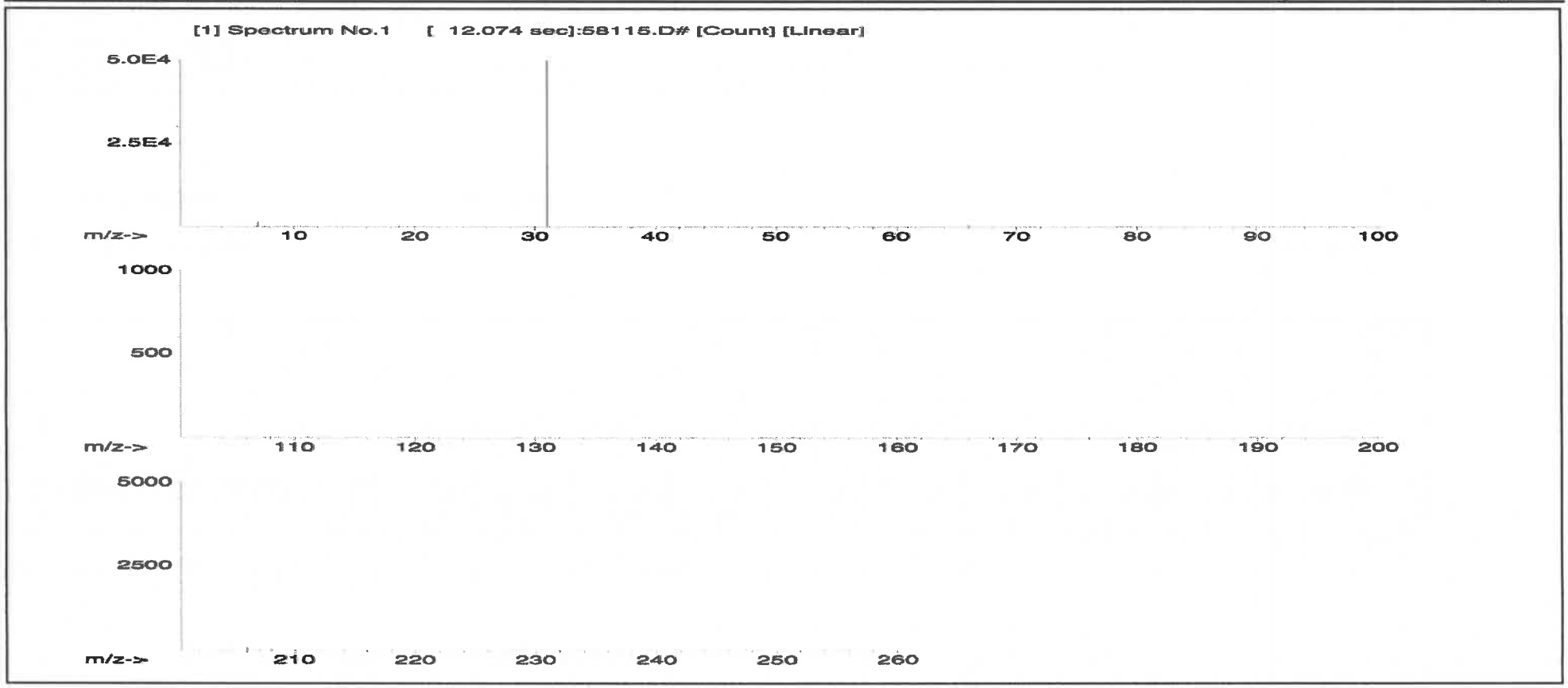
989

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	rl-rat >2000mg/k	3186



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

M5959 R: 6/14/24.

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 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.

688

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5960 KK R. 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57028
Lot Number: 041124
Description: Nickel (Ni)

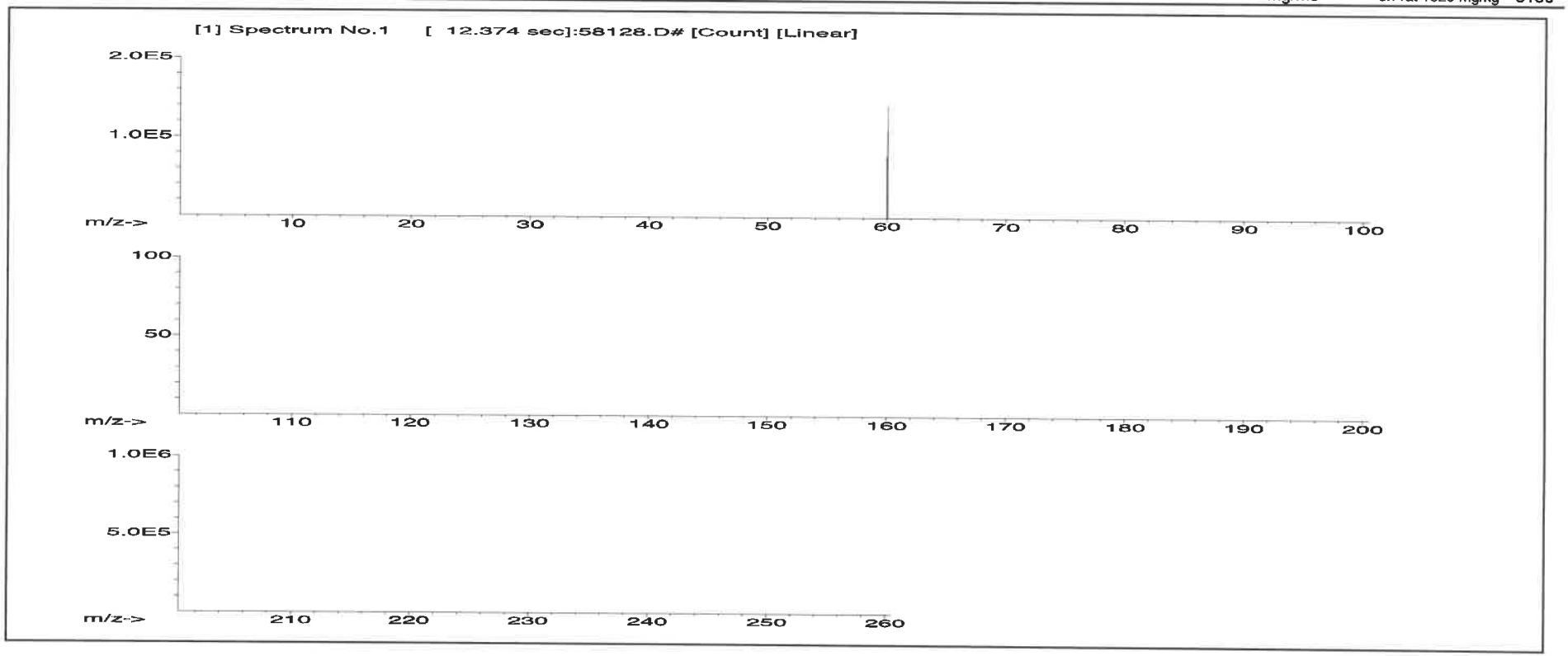
Expiration Date: 041127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 249.85

	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



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	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).

693

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

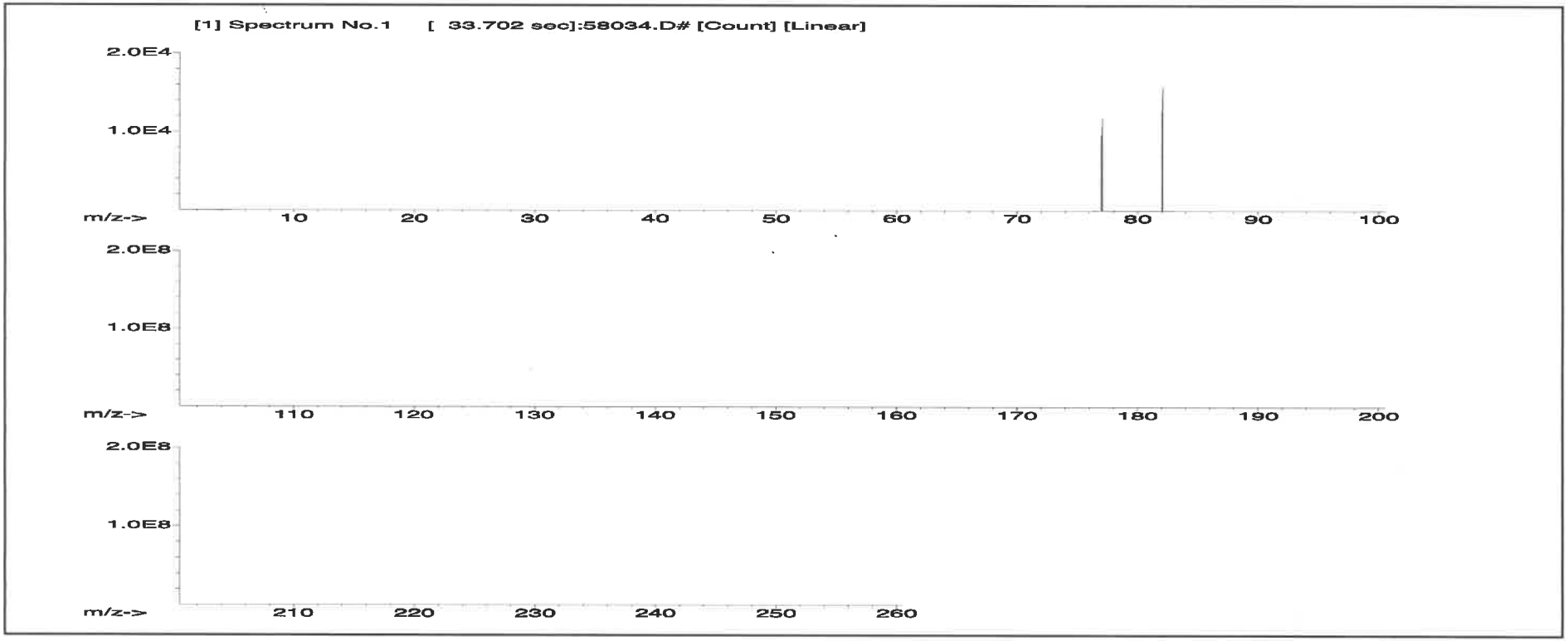
694

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



695

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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

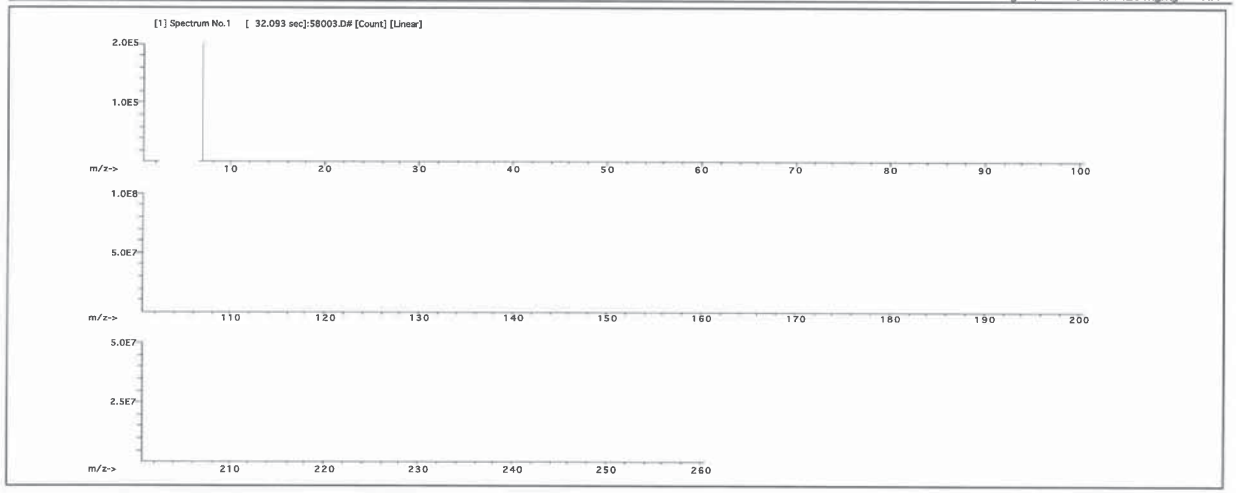
Giovanni Esposito

Formulated By: Giovanni Esposito 062124

Pedro Rentas

Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	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).

INORGANIC VENTURES
Refine your results. Redefine your industry.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

Certificate of Analysis

M5976, M5977
R: 02/22/24

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

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

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

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

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

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

11.2 Lot Expiration Date

- July 17, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M5978, M5979

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/24

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

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	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

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

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

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

11.2 Lot Expiration Date

- June 17, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

45982 R: 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

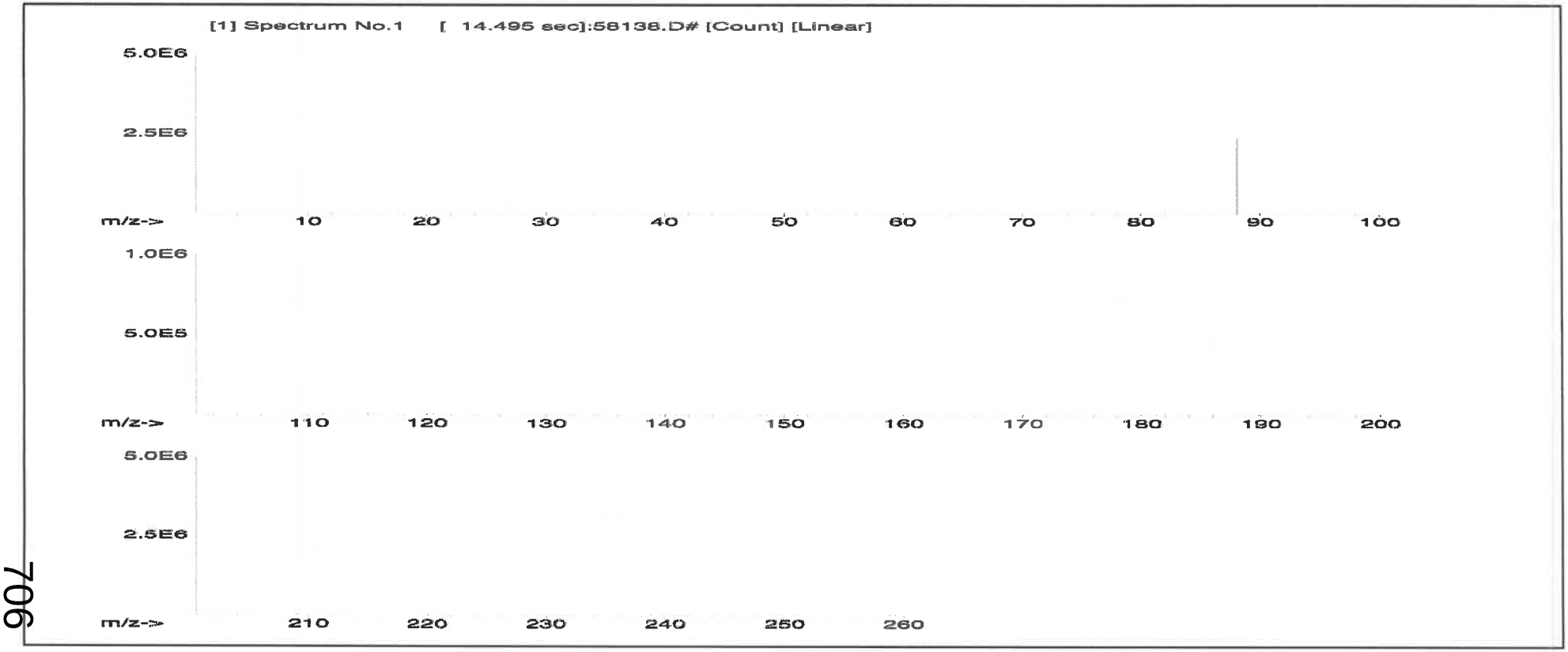
Part Number: 57038
Lot Number: 031524
Description: Strontium (Sr)

Expiration Date: 031527
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.100	Flask Uncertainty		

Formulated By:	Benson Chan	031524
Reviewed By:	Pedro L. Rentas	031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



706

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).

707

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

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



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/2024
M5999

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

716

CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Solvent:**	20510011	Nitric Acid
Lot Number:	**011623**				
Description:	**Aluminum (Al)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

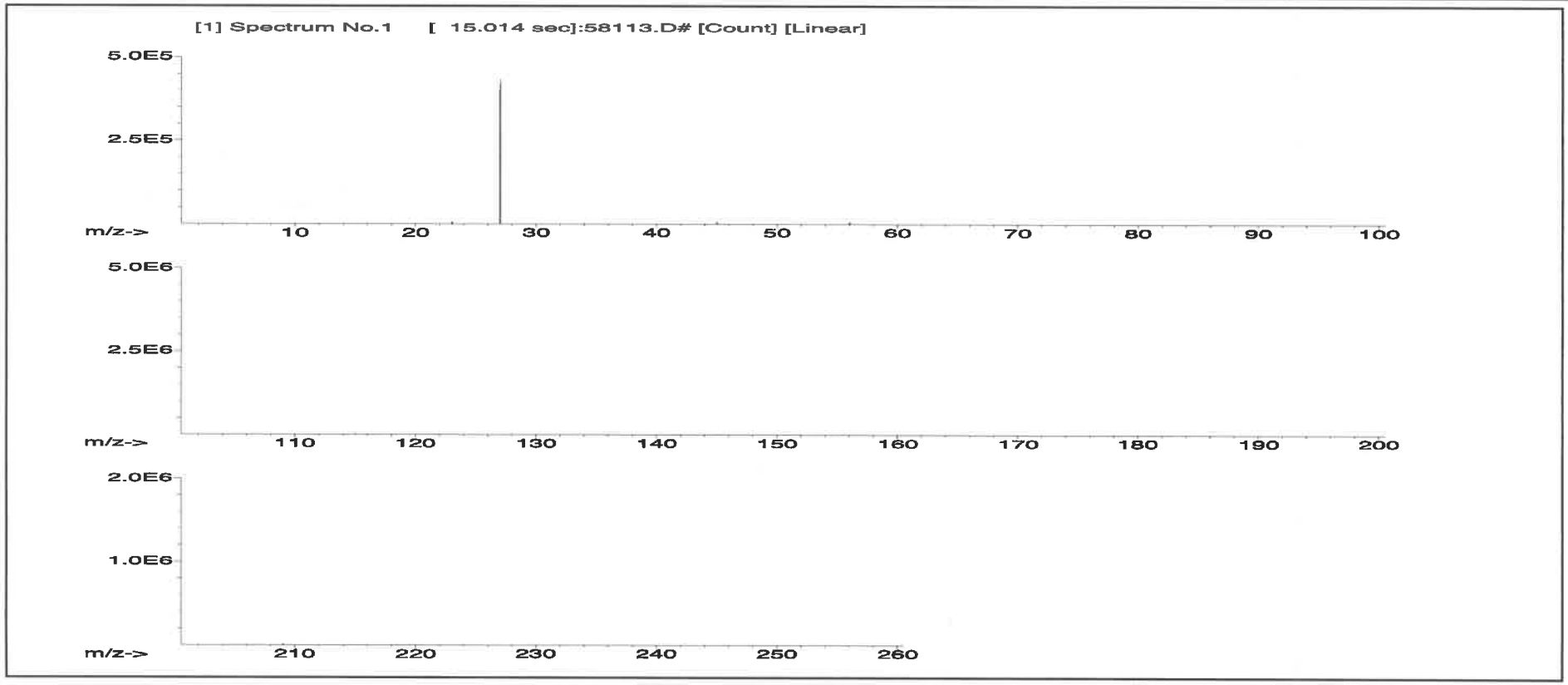
Giovanni Esposito

Formulated By:	Giovanni Esposito	011623

Pedro Rentas

Reviewed By:	Pedro L. Rentas	011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



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

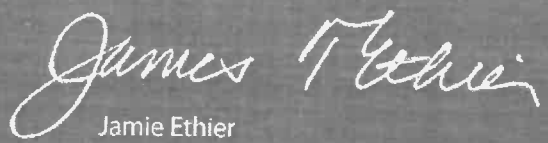
726

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

727

M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

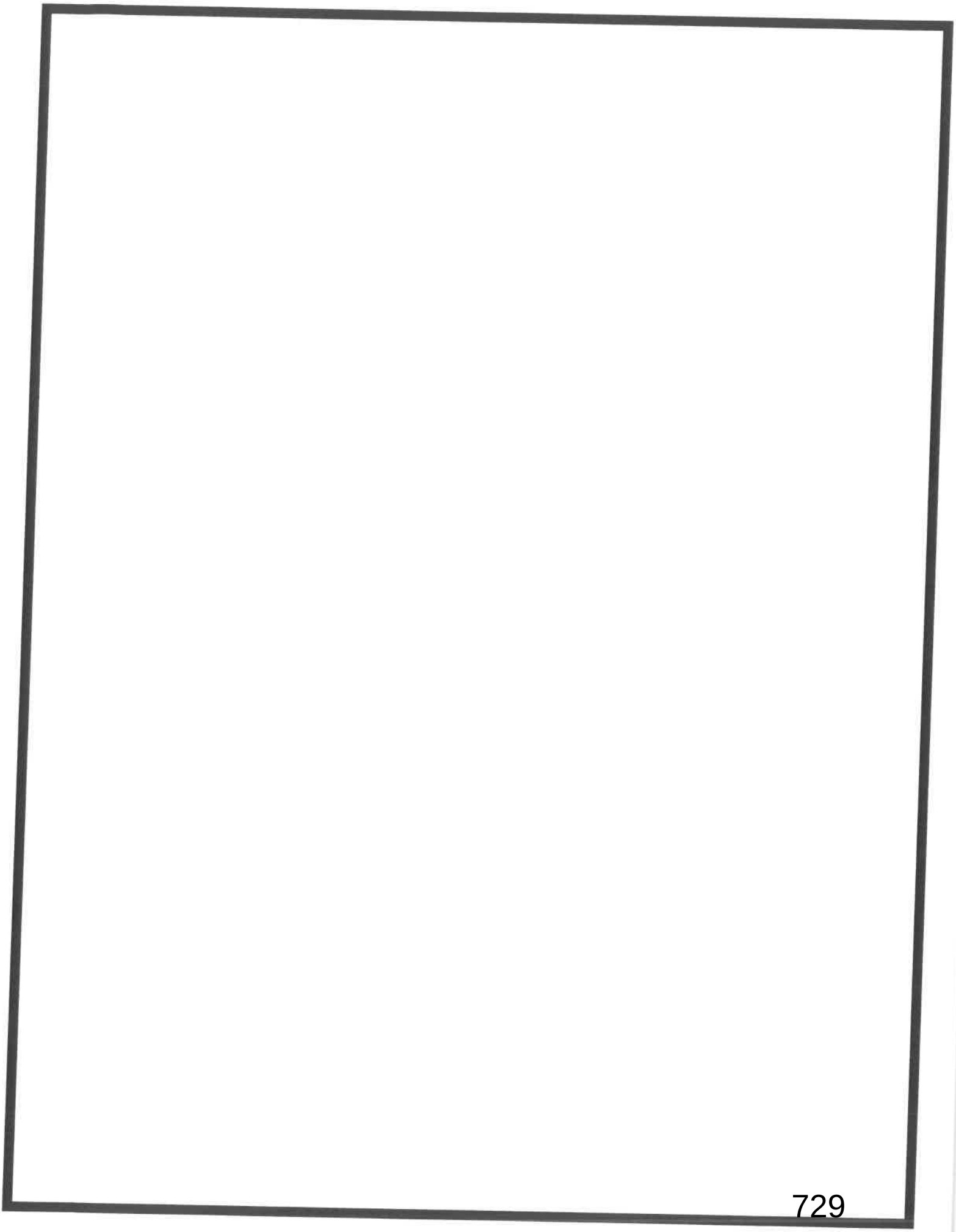
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

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

732

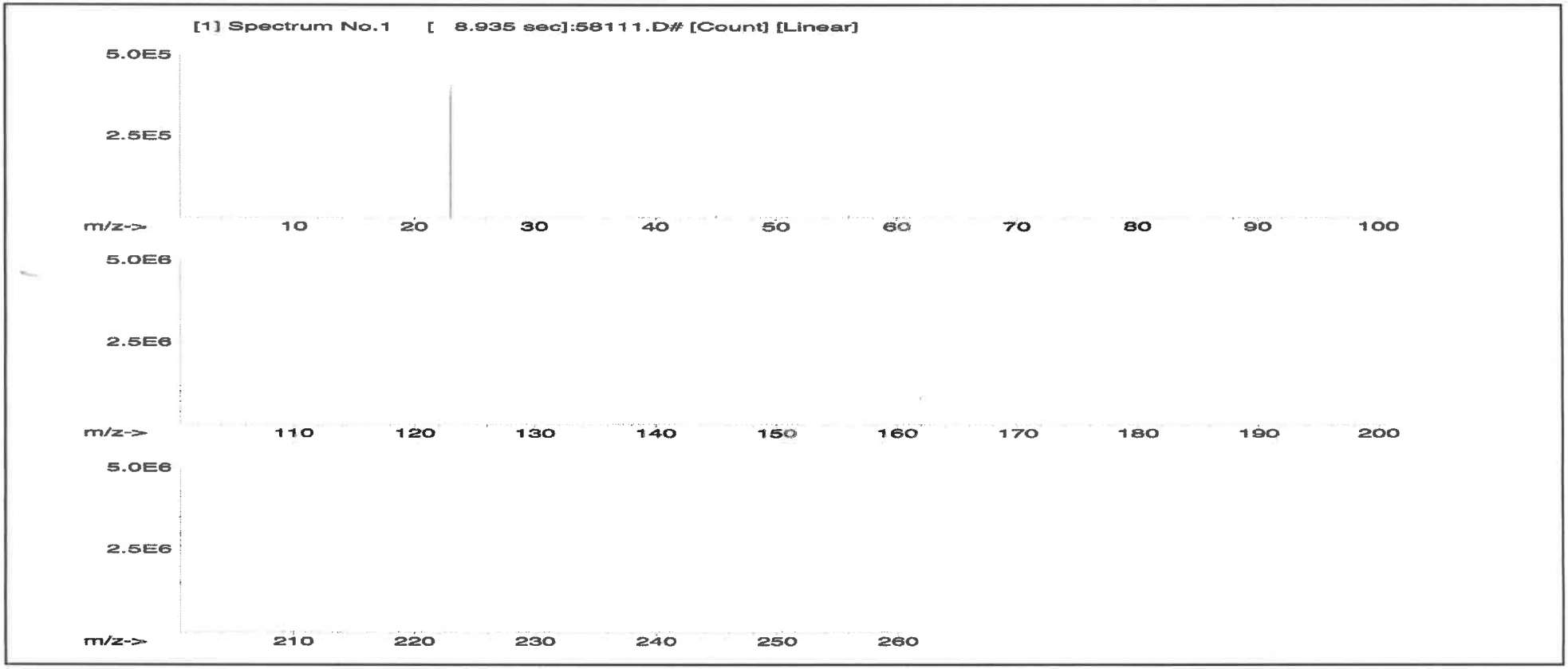
CERTIFIED WEIGHT REPORT:

			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



733

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R: 01/03/24 M5802, M5803

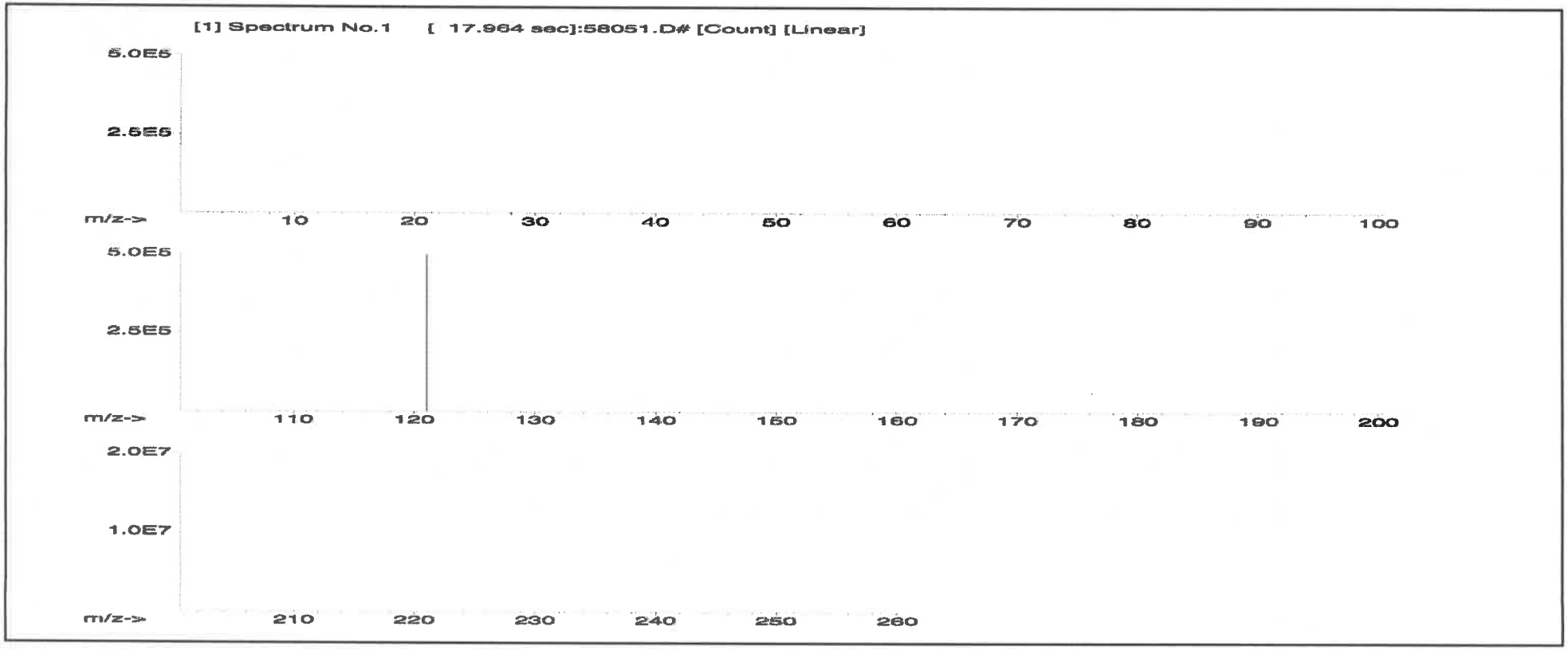
734

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



735

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

736

CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

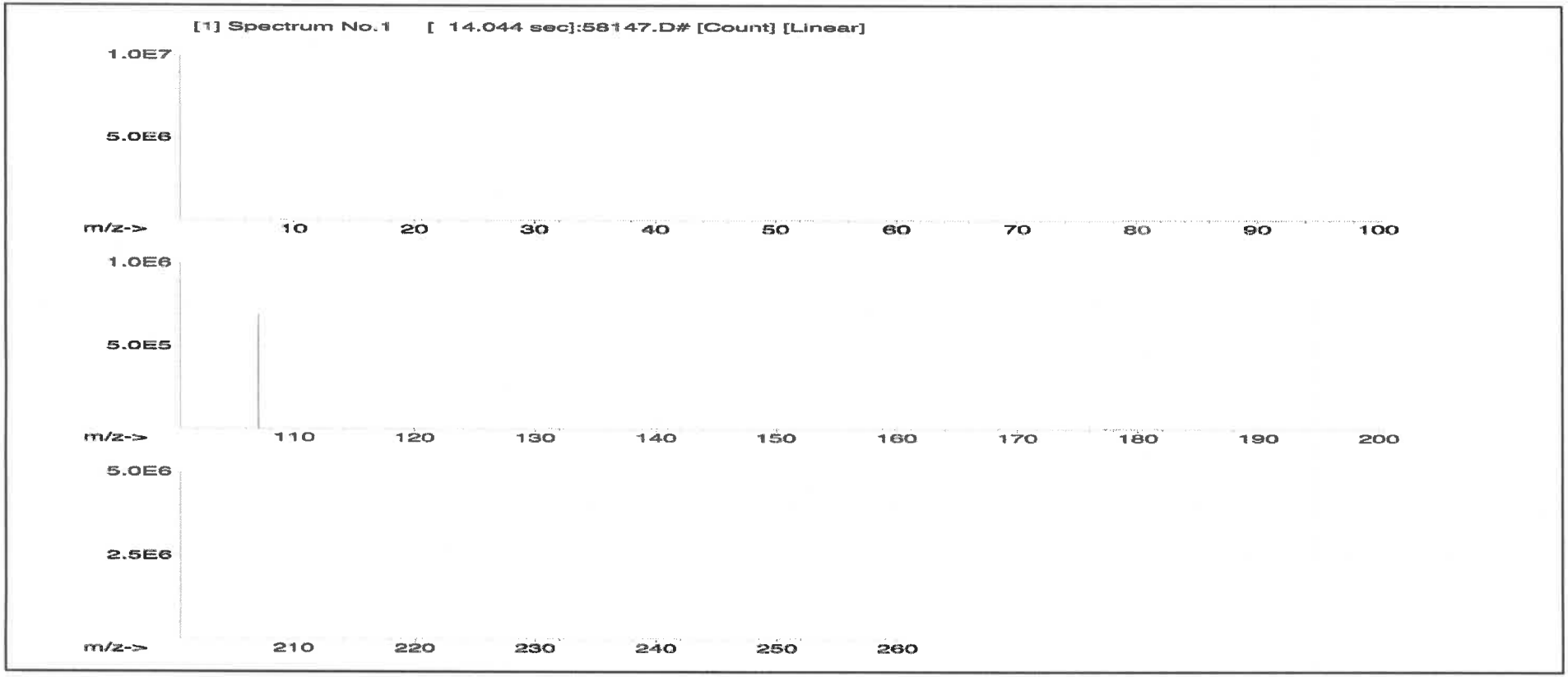
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



737

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:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 03/16/23 M5473, M5474, M5475, M5476

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

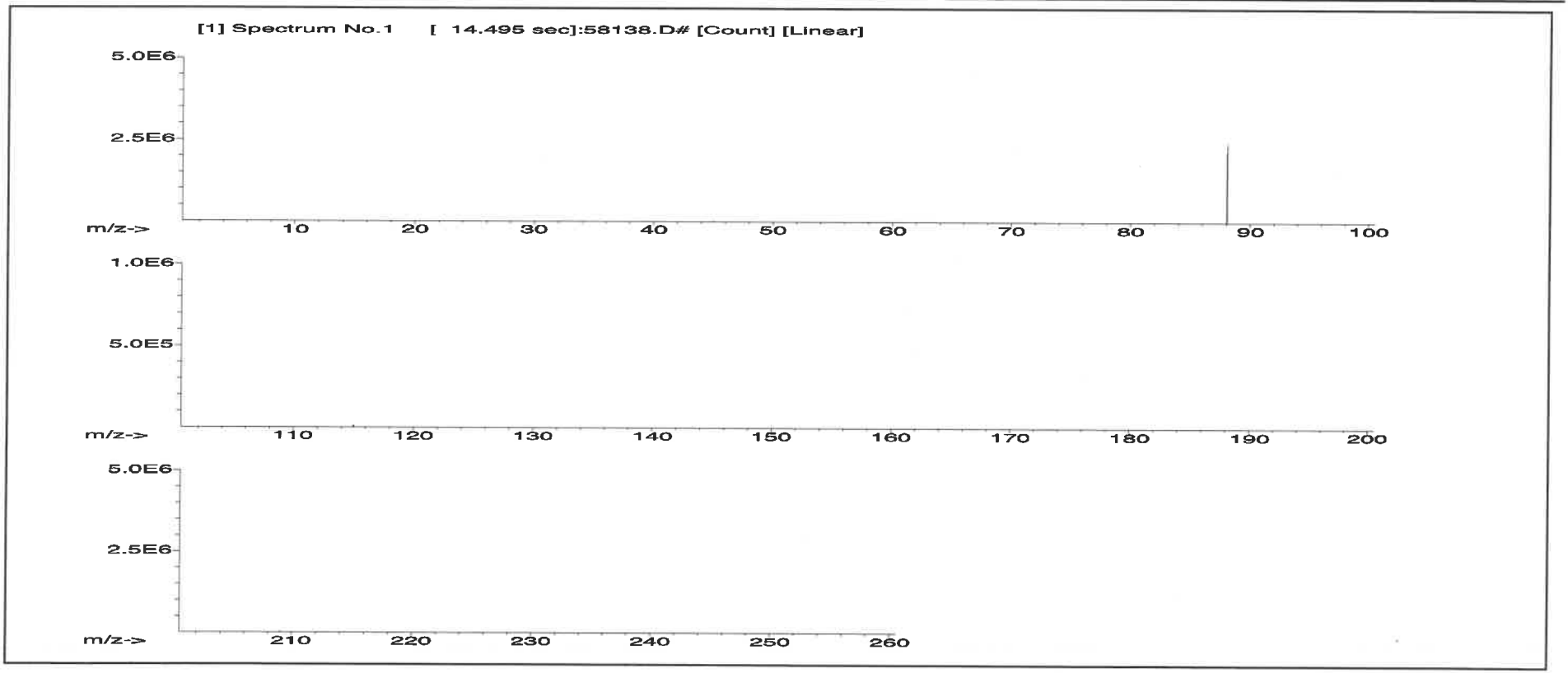
738

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



739

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 03/16/23 M5473, M5474, M5475, M5476

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

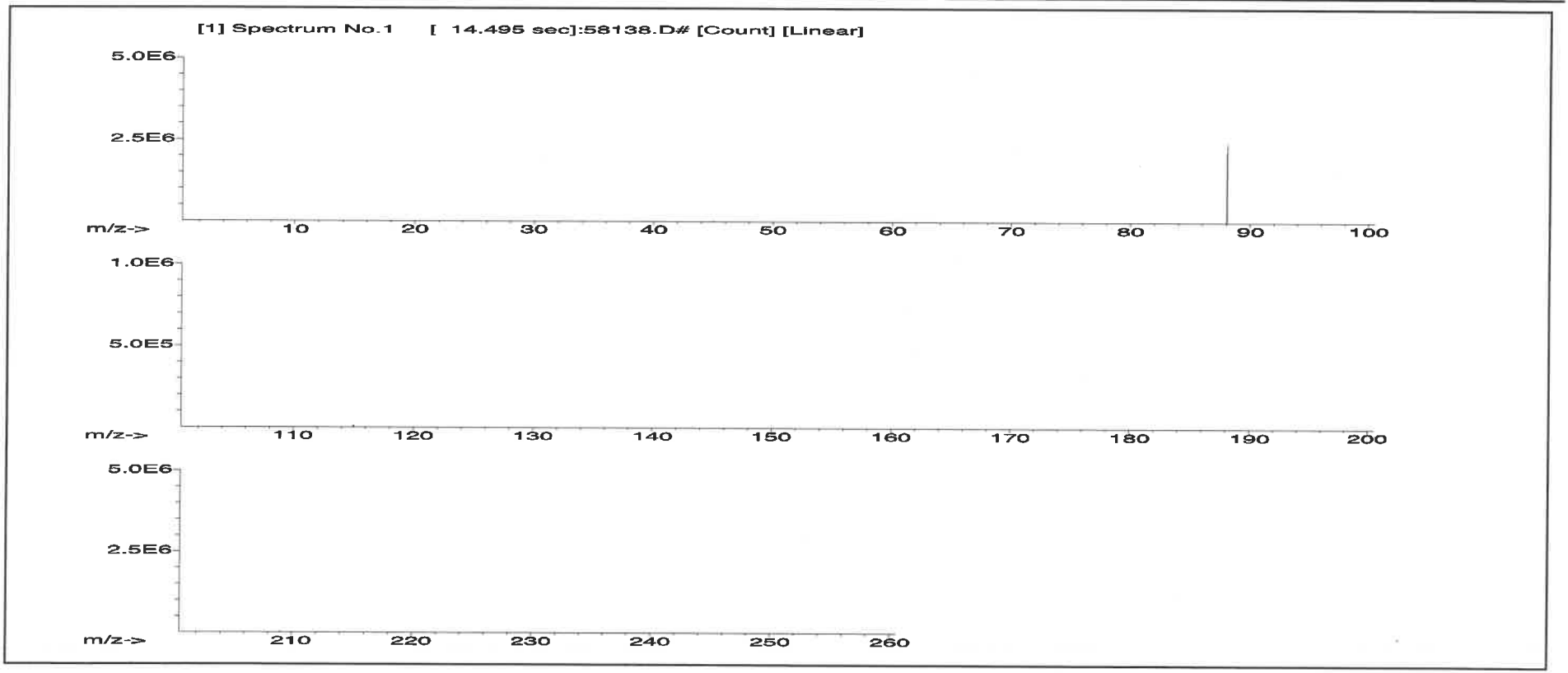
740

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



741

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

742

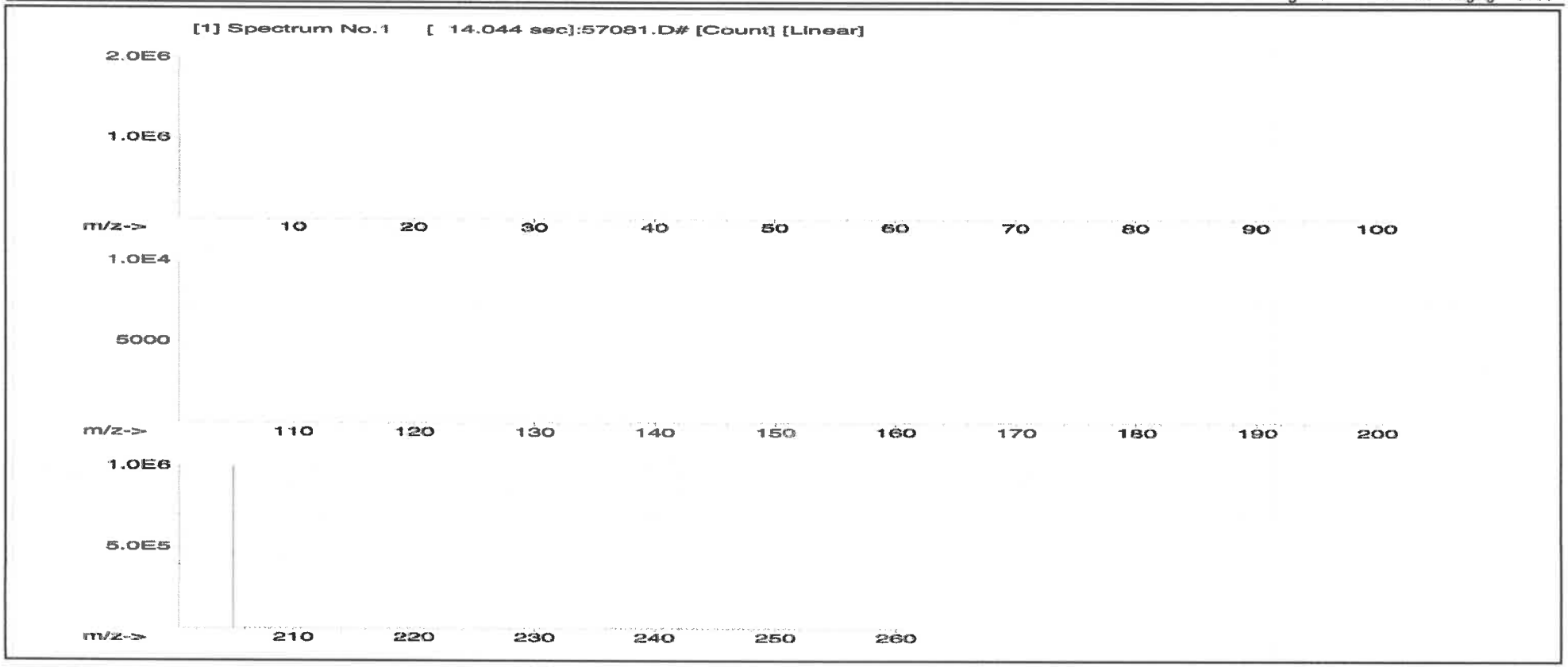
CERTIFIED WEIGHT REPORT:

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



743

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

744

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

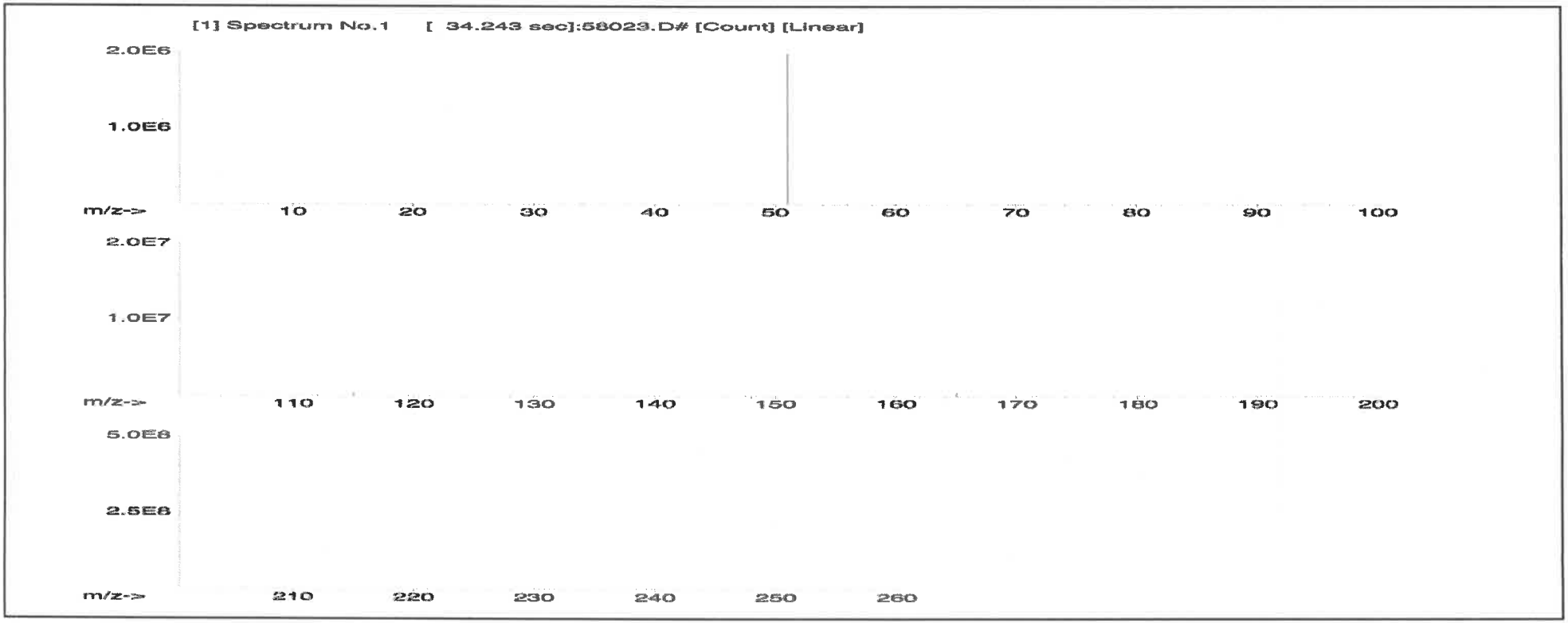
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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	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

PB165359

SOP ID : M3050B-Digestion-20, MSFAM01.1-Trace Metals-2

SDG No : MBHK34

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 #5 2. N/A

Start Digest Date: 12/04/2024 **Time :** 09:30 **Temp :** 96 °C

End Digest Date: 12/04/2024 **Time :** 11:40 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. # 5

Dig Technician Signature: jgp

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	M6126
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 #5 CELL #34 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/4/24 12:00	jgp Met dig.	Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB165359

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P5028-01	MBHK34	N/A	1.23	100	Brown	Yellow	Medium	N/A	N/A	1
P5028-02	MBHK35	N/A	1.34	100	Brown	Yellow	Medium	N/A	N/A	2
P5028-03	MBHK36	N/A	1.16	100	Brown	Yellow	Medium	N/A	N/A	3
P5028-04	MBHK37	N/A	1.32	100	Brown	Yellow	Medium	N/A	N/A	4
P5028-05	MBHK38	N/A	1.29	100	Brown	Yellow	Medium	N/A	N/A	5
P5028-06	MBHK39	N/A	1.30	100	Brown	Yellow	Medium	N/A	N/A	6
P5028-07	MBHK40	N/A	1.46	100	Brown	Yellow	Medium	N/A	N/A	7
P5028-08	MBHK40D	N/A	1.23	100	Brown	Yellow	Medium	N/A	N/A	8
P5028-09	MBHK40S	N/A	1.32	100	Brown	Yellow	Medium	N/A	MP83147	9
P5028-10	MBHKD2	N/A	1.38	100	Black	Yellow	Medium	N/A	N/A	10
P5028-11	MBHKD3	N/A	1.26	100	Black	Yellow	Medium	N/A	N/A	11
P5028-12	MBHKD4	N/A	1.30	100	Brown	Yellow	Medium	N/A	N/A	12
P5028-13	MBHKE5	N/A	1.26	100	Brown	Yellow	Medium	N/A	N/A	13
P5028-14	MBHKE6	N/A	1.36	100	Black	Yellow	Medium	N/A	N/A	14
P5028-15	MBHKE7	N/A	1.33	100	Brown	Yellow	Medium	N/A	N/A	15
P5028-16	MBHKE8	N/A	1.44	100	Brown	Yellow	Medium	N/A	N/A	16
P5028-17	MBHKE9	N/A	1.38	100	Brown	Yellow	Medium	N/A	N/A	17
P5028-18	MBHKF0	N/A	1.33	100	Brown	Yellow	Medium	N/A	N/A	18
P5028-19	MBHKF1	N/A	1.35	100	Brown	Yellow	Medium	N/A	N/A	19
P5028-20	MBHKF2	N/A	1.21	100	Brown	Yellow	Medium	N/A	N/A	20
P5028-21	MBHKG2	N/A	1.24	100	Brown	Yellow	Medium	N/A	N/A	21
P5028-22	MBHKG3	N/A	1.18	100	Brown	Yellow	Medium	N/A	N/A	22
PB165359BL	PBS359	N/A	1.00	100	Colorless	Colorless	Fine	N/A	N/A	23
PB165359BS	LCS359	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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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	12/15/24 17:13		Kareem	OK
2	S1	S01	CAL2	12/15/24 17:17		Kareem	OK
3	S2	S02	CAL3	12/15/24 17:21		Kareem	OK
4	S3	S03	CAL4	12/15/24 17:25		Kareem	OK
5	S4	S04	CAL5	12/15/24 17:29		Kareem	OK
6	S5	S05	CAL6	12/15/24 17:32		Kareem	OK
7	S6	S06	CAL7	12/15/24 17:36		Kareem	OK
8	ICV004	ICV004	ICV	12/15/24 17:40		Kareem	OK
9	ICB004	ICB004	ICB	12/15/24 17:44		Kareem	OK
10	ICSA004	ICSA004	ICSA	12/15/24 17:48		Kareem	OK
11	ICSAB004	ICSAB004	ICSAB	12/15/24 17:52		Kareem	OK
12	CCV029	CCV029	CCV	12/15/24 17:56		Kareem	OK
13	CCB029	CCB029	CCB	12/15/24 17:59		Kareem	OK
14	PB165442BL	PBS442	MB	12/15/24 18:03		Kareem	OK
15	PB165442BS	LCS442	LCS	12/15/24 18:07		Kareem	OK
16	PB165377BL	PBS377	MB	12/15/24 18:11		Kareem	OK
17	PB165377BS	LCS377	LCS	12/15/24 18:15		Kareem	OK
18	PB165359BL	PBS359	MB	12/15/24 18:19		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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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	PB165359BS	LCS359	LCS	12/15/24 18:23		Kareem	OK
20	PB165408BL	PBS408	MB	12/15/24 18:27		Kareem	OK
21	PB165408BS	LCS408	LCS	12/15/24 18:31		Kareem	OK
22	PB165373BL	PBS373	MB	12/15/24 18:35		Kareem	OK
23	PB165373BS	LCS373	LCS	12/15/24 18:39		Kareem	OK
24	P5012-17	MBHJP9	SAM	12/15/24 18:43		Kareem	OK
25	P5012-18	MBHJT9	SAM	12/15/24 18:47		Kareem	OK
26	P5012-19	MBHJW0	SAM	12/15/24 18:51		Kareem	OK
27	P5012-20	MBHJW1	SAM	12/15/24 18:55		Kareem	OK
28	P5012-21	MBHJW2	SAM	12/15/24 18:58		Kareem	OK
29	P5012-22	MBHJW3	SAM	12/15/24 19:02		Kareem	OK
30	P4907-01A	MBHHE1A	PS	12/15/24 19:06	PS for Be,Se(0.01ML MP83672,0.07ML MP83673-10ML SAMPLE)	Kareem	OK
31	P5067-01DL	ME28M0	SAM	12/15/24 19:10	2X For Ca,Fe , Still Ca High	Kareem	Dilution
32	P5067-02DL	ME28M1	SAM	12/15/24 19:14	2X For Ca,Fe , Still Ca High	Kareem	Dilution
33	P5067-03DL	ME28M2	SAM	12/15/24 19:17	2X For Ca	Kareem	Confirms
34	CCV030	CCV030	CCV	12/15/24 19:21		Kareem	OK
35	CCB030	CCB030	CCB	12/15/24 19:25		Kareem	OK
36	P5067-04DL	ME28M3	SAM	12/15/24 19:29	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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

37	P5067-05DL	ME28M4	SAM	12/15/24 19:33	2X For Ca,Mg , Still Ca High	Kareem	Dilution
38	P5067-08DL	ME28M7	SAM	12/15/24 19:37	2X For Ca	Kareem	Confirms
39	P5067-12DL	ME28N1	SAM	12/15/24 19:41	2X For Ca	Kareem	Confirms
40	P5067-18DL	ME28N7	SAM	12/15/24 19:44	2X For Ca	Kareem	Confirms
41	P4940-02DL	MBHHS8	SAM	12/15/24 19:48	2X For Ca	Kareem	Confirms
42	P4940-19DL	MBHHX9	SAM	12/15/24 19:52	2X For Ca	Kareem	Confirms
43	P4940-21DL	MBHHY1	SAM	12/15/24 19:56	2X For Ca	Kareem	Confirms
44	P4963-07DL	MBHJ00	SAM	12/15/24 20:00	2X For Ca	Kareem	Confirms
45	P4964-04DL	MBHJ02	SAM	12/15/24 20:04	2X For Ca	Kareem	Confirms
46	P4964-05DL	MBHJ03	SAM	12/15/24 20:07	2X For Ca,Mg , Still Ca High	Kareem	Dilution
47	P4964-06DL	MBHJ04	SAM	12/15/24 20:11	2X For Ca,Mg , Still Ca High	Kareem	Dilution
48	P4964-07DL	MBHJ05	SAM	12/15/24 20:15	2X For Ca	Kareem	Confirms
49	P4981-09DL	MBHJA6	SAM	12/15/24 20:19	2X For Ca	Kareem	Confirms
50	P4981-10DL	MBHJA7	SAM	12/15/24 20:23	2X For Ca	Kareem	Confirms
51	P4981-12DL	MBHJA9	SAM	12/15/24 20:27	2X For Ca	Kareem	Confirms
52	P4981-16DL	MBHJC7	SAM	12/15/24 20:30	2X For Ca	Kareem	Confirms
53	P4981-17DL	MBHJC8	SAM	12/15/24 20:34	2X For Ca	Kareem	Confirms
54	P4981-21DL	MBHJD0	SAM	12/15/24 20:38	2X For Ca	Kareem	Confirms
55	P4983-01DL	MBHJ97	SAM	12/15/24 20:42	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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

56	CCV031	CCV031	CCV	12/15/24 20:46		Kareem	OK
57	CCB031	CCB031	CCB	12/15/24 20:50		Kareem	OK
58	P4983-04DL	MBHJE6	SAM	12/15/24 20:54	Not use	Kareem	Not Ok
59	P4983-05DL	MBHJB6	SAM	12/15/24 20:57	2X For Ca	Kareem	Confirms
60	P4983-07DL	MBHJF9	SAM	12/15/24 21:01	2X For Ca	Kareem	Confirms
61	P4983-13DL	MBHJG3	SAM	12/15/24 21:05	2X For Ca	Kareem	Confirms
62	P4983-14DL	MBHJG4	SAM	12/15/24 21:09	2X For Ca	Kareem	Confirms
63	P4983-15DL	MBHJG5	SAM	12/15/24 21:13	2X For Ca	Kareem	Confirms
64	P4983-16DL	MBHJG6	SAM	12/15/24 21:17	2X For Ca	Kareem	Confirms
65	P4983-17DL	MBHJG7	SAM	12/15/24 21:20	2X For Ca	Kareem	Confirms
66	P4983-18DL	MBHJG8	SAM	12/15/24 21:24	2X For Ca	Kareem	Confirms
67	P4983-19DL	MBHJG9	SAM	12/15/24 21:28	Not Use	Kareem	Not Ok
68	P4983-20DL	MBHJH0	SAM	12/15/24 21:32	Not Use	Kareem	Not Ok
69	P5067-01DL2	ME28M0	SAM	12/15/24 21:36	4X For Ca	Kareem	Confirms
70	P5067-02DL2	ME28M1	SAM	12/15/24 21:40	4X For Ca	Kareem	Confirms
71	P5042-01	MBHKB0	SAM	12/15/24 21:43		Kareem	OK
72	P5042-02	MBHKB0D	DUP	12/15/24 21:47		Kareem	OK
73	P5042-01L	MBHKB0L	SD	12/15/24 21:51		Kareem	OK
74	P5042-03	MBHKB0S	MS	12/15/24 21:55	MS Fail for Sb,Ag,Se(Below RL)	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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

75	P4964-04DL2	MBHJ02	SAM	12/15/24 21:59	Not Required	Kareem	Not Ok
76	P4964-06DL2	MBHJ04	SAM	12/15/24 22:03	4X For Ca	Kareem	Confirms
77	P4983-04DL2	MBHJE6	SAM	12/15/24 22:07	4X For Ca	Kareem	Confirms
78	CCV032	CCV032	CCV	12/15/24 22:11		Kareem	OK
79	CCB032	CCB032	CCB	12/15/24 22:14		Kareem	OK
80	P4983-19DL2	MBHJG9	SAM	12/15/24 22:18	4X For Ca	Kareem	Confirms
81	P4983-20DL2	MBHJH0	SAM	12/15/24 22:22	Not Use	Kareem	Not Ok
82	P5039-01	MBHKJ1	SAM	12/15/24 22:27		Kareem	OK
83	P5039-02	MBHKJ2	SAM	12/15/24 22:31		Kareem	OK
84	P5039-03	MBHKJ3	SAM	12/15/24 22:35		Kareem	OK
85	P5039-04	MBHKJ4	SAM	12/15/24 22:39		Kareem	OK
86	P5039-05	MBHKJ5	SAM	12/15/24 22:42		Kareem	OK
87	P5039-06	MBHKJ6	SAM	12/15/24 22:46		Kareem	OK
88	P5039-07	MBHKJ7	SAM	12/15/24 22:50	Ca High	Kareem	Dilution
89	P5039-08	MBHKJ7D	DUP	12/15/24 22:54	Ca High	Kareem	Dilution
90	P5039-07L	MBHKJ7L	SD	12/15/24 22:58	Ca High	Kareem	Dilution
91	P5039-09	MBHKJ7S	MS	12/15/24 23:02	Ca high, MS Fail For Ag,Se(Below RL)	Kareem	Dilution
92	P5039-10	MBHKK5	SAM	12/15/24 23:05		Kareem	OK
93	P5039-11	MBHKK6	SAM	12/15/24 23:09		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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

94	P5039-12	MBHKK7	SAM	12/15/24 23:13		Kareem	OK
95	P5039-13	MBHKL5	SAM	12/15/24 23:17		Kareem	OK
96	P5039-14	MBHKL6	SAM	12/15/24 23:21		Kareem	OK
97	P5039-15	MBHKL7	SAM	12/15/24 23:25		Kareem	OK
98	P5039-16	MBHKL8	SAM	12/15/24 23:28	Ca High	Kareem	Dilution
99	P5039-17	MBHKL9	SAM	12/15/24 23:32		Kareem	OK
100	CCV033	CCV033	CCV	12/15/24 23:36		Kareem	OK
101	CCB033	CCB033	CCB	12/15/24 23:40		Kareem	OK
102	P5039-18	MBHKM0	SAM	12/15/24 23:44		Kareem	OK
103	P5039-19	MBHKM1	SAM	12/15/24 23:48		Kareem	OK
104	P5039-20	MBHKM3	SAM	12/15/24 23:51		Kareem	OK
105	P5039-21	MBHKM4	SAM	12/15/24 23:55		Kareem	OK
106	P5034-01	MBHKB4	SAM	12/15/24 23:59		Kareem	OK
107	P5034-02	MBHKB5	SAM	12/16/24 00:03		Kareem	OK
108	P5034-03	MBHKB6	SAM	12/16/24 00:07	Mn High	Kareem	Dilution
109	P5034-04	MBHKB6D	DUP	12/16/24 00:11	Mn High	Kareem	Dilution
110	P5034-03L	MBHKB6L	SD	12/16/24 00:14	Mn High	Kareem	Dilution
111	P5034-05	MBHKB6S	MS	12/16/24 00:18	Mn High , MS Fail For Sb,Cu,Se(BeloW RL),Ag,Zn	Kareem	Dilution
112	P5034-06	MBHKB7	SAM	12/16/24 00:22		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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

113	P5034-07	MBHKH4	SAM	12/16/24 00:26		Kareem	OK
114	P5034-08	MBHKH5	SAM	12/16/24 00:30		Kareem	OK
115	P5034-09	MBHKH6	SAM	12/16/24 00:34		Kareem	OK
116	P5034-10	MBHKH7	SAM	12/16/24 00:37		Kareem	OK
117	P5034-11	MBHKH8	SAM	12/16/24 00:41		Kareem	OK
118	P5034-12	MBHKH9	SAM	12/16/24 00:45		Kareem	OK
119	P5034-13	MBHKJ0	SAM	12/16/24 00:49	Ca High	Kareem	Dilution
120	P5034-14	MBHKP0	SAM	12/16/24 00:53		Kareem	OK
121	P5034-15	MBHKP1	SAM	12/16/24 00:57		Kareem	OK
122	CCV034	CCV034	CCV	12/16/24 01:10		Kareem	OK
123	CCB034	CCB034	CCB	12/16/24 01:13		Kareem	OK
124	P5034-16	MBHKP2	SAM	12/16/24 01:17		Kareem	OK
125	P5034-17	MBHKP3	SAM	12/16/24 01:21		Kareem	OK
126	P5034-18	MBHKP4	SAM	12/16/24 01:25		Kareem	OK
127	P5034-19	MBHKP5	SAM	12/16/24 01:29		Kareem	OK
128	P5034-20	MBHKP6	SAM	12/16/24 01:33		Kareem	OK
129	P5034-21	MBHKP8	SAM	12/16/24 01:36		Kareem	OK
130	P5034-22	MBHKP9	SAM	12/16/24 01:40		Kareem	OK
131	P5028-01	MBHK34	SAM	12/16/24 01:44	Ca High	Kareem	Dilution
132	P5028-02	MBHK35	SAM	12/16/24 01:48	Ca High	Kareem	Dilution

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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

133	P5028-03	MBHK36	SAM	12/16/24 01:52		Kareem	OK
134	P5028-04	MBHK37	SAM	12/16/24 01:56		Kareem	OK
135	P5028-05	MBHK38	SAM	12/16/24 01:59		Kareem	OK
136	P5028-06	MBHK39	SAM	12/16/24 02:03		Kareem	OK
137	P5028-07	MBHK40	SAM	12/16/24 02:07		Kareem	OK
138	P5028-08	MBHK40D	DUP	12/16/24 02:11		Kareem	OK
139	P5028-07L	MBHK40L	SD	12/16/24 02:28		Kareem	OK
140	P5028-09	MBHK40S	MS	12/16/24 02:32	MS Fail for Sb,Ag,Se(Below RL)	Kareem	OK
141	P5028-10	MBHKD2	SAM	12/16/24 02:36		Kareem	OK
142	P5028-11	MBHKD3	SAM	12/16/24 02:40		Kareem	OK
143	P5028-12	MBHKD4	SAM	12/16/24 02:44		Kareem	OK
144	CCV035	CCV035	CCV	12/16/24 03:04		Kareem	OK
145	CCB035	CCB035	CCB	12/16/24 03:08		Kareem	OK
146	P5028-13	MBHKE5	SAM	12/16/24 03:12		Kareem	OK
147	P5028-14	MBHKE6	SAM	12/16/24 03:16		Kareem	OK
148	P5028-15	MBHKE7	SAM	12/16/24 03:20		Kareem	OK
149	P5028-16	MBHKE8	SAM	12/16/24 03:24		Kareem	OK
150	P5028-17	MBHKE9	SAM	12/16/24 03:28		Kareem	OK
151	P5028-18	MBHKF0	SAM	12/16/24 03:32		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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

152	P5028-19	MBHKF1	SAM	12/16/24 03:36		Kareem	OK
153	P5028-20	MBHKF2	SAM	12/16/24 03:40		Kareem	OK
154	P5028-21	MBHKG2	SAM	12/16/24 03:43		Kareem	OK
155	P5028-22	MBHKG3	SAM	12/16/24 03:47		Kareem	OK
156	P5037-01	MBHK52	SAM	12/16/24 03:51		Kareem	OK
157	P5037-02	MBHK53	SAM	12/16/24 03:55		Kareem	OK
158	P5037-03	MBHK54	SAM	12/16/24 03:59		Kareem	OK
159	P5037-04	MBHKB8	SAM	12/16/24 04:03		Kareem	OK
160	P5037-05	MBHKB9	SAM	12/16/24 04:07		Kareem	OK
161	P5037-06	MBHKC0	SAM	12/16/24 04:11		Kareem	OK
162	P5037-07	MBHKC0D	DUP	12/16/24 04:15		Kareem	OK
163	P5037-06L	MBHKC0L	SD	12/16/24 04:19		Kareem	OK
164	P5037-08	MBHKC0S	MS	12/16/24 04:23	MS Fail For Ag,Se(Below RL)	Kareem	OK
165	P5037-09	MBHKC1	SAM	12/16/24 04:27		Kareem	OK
166	CCV036	CCV036	CCV	12/16/24 04:31		Kareem	OK
167	CCB036	CCB036	CCB	12/16/24 04:59	Inst. paused for review	Kareem	OK
168	P5037-10	MBHKC2	SAM	12/16/24 05:03		Kareem	OK
169	P5037-11	MBHKC3	SAM	12/16/24 05:07		Kareem	OK
170	P5037-12	MBHK75	SAM	12/16/24 05:11	Ca High	Kareem	Dilution

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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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	P5037-13	MBHK76	SAM	12/16/24 05:15		Kareem	OK
172	P5037-14	MBHK77	SAM	12/16/24 05:19		Kareem	OK
173	P5037-15	MBHK79	SAM	12/16/24 05:23		Kareem	OK
174	P5037-16	MBHK80	SAM	12/16/24 05:27		Kareem	OK
175	P5037-17	MBHK81	SAM	12/16/24 05:31		Kareem	OK
176	P5037-18	MBHK82	SAM	12/16/24 05:35		Kareem	OK
177	P5037-19	MBHKG6	SAM	12/16/24 05:38		Kareem	OK
178	P5037-20	MBHKG7	SAM	12/16/24 05:42	Ca High	Kareem	Dilution
179	P5033-01	MBHK93	SAM	12/16/24 05:46		Kareem	OK
180	P5033-02	MBHK94	SAM	12/16/24 05:50		Kareem	OK
181	P5033-03	MBHK95	SAM	12/16/24 05:54		Kareem	OK
182	P5033-04	MBHK96	SAM	12/16/24 05:58	Ca High	Kareem	Dilution
183	P5033-05	MBHK97	SAM	12/16/24 06:02		Kareem	OK
184	P5033-06	MBHK97D	DUP	12/16/24 06:05		Kareem	OK
185	P5033-05L	MBHK97L	SD	12/16/24 06:09		Kareem	OK
186	P5033-07	MBHK97S	MS	12/16/24 06:13	MS Fail For Ag,Se(Below RL),Zn	Kareem	OK
187	CCV037	CCV037	CCV	12/16/24 06:24		Kareem	OK
188	CCB037	CCB037	CCB	12/16/24 06:27		Kareem	OK
189	P5033-08	MBHK98	SAM	12/16/24 06:31		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 # LB133959

Review By	Sarabjit Jaswal	Review On	12/18/2024 3:01:58 AM
Supervise By	Mohan Bera	Supervise On	12/18/2024 3:02:43 AM

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

190	P5033-09	MBHK99	SAM	12/16/24 06:35		Kareem	OK
191	P5033-10	MBHKA0	SAM	12/16/24 06:39		Kareem	OK
192	P5033-11	MBHKA1	SAM	12/16/24 06:43		Kareem	OK
193	P5033-12	MBHKA2	SAM	12/16/24 06:47	Ca High	Kareem	Dilution
194	P5033-13	MBHKA3	SAM	12/16/24 06:50	Ca High	Kareem	Dilution
195	P5033-14	MBHKG8	SAM	12/16/24 06:54		Kareem	OK
196	P5033-15	MBHKG9	SAM	12/16/24 06:58		Kareem	OK
197	P5033-16	MBHKH0	SAM	12/16/24 07:02		Kareem	OK
198	P5033-17	MBHKH1	SAM	12/16/24 07:06		Kareem	OK
199	P5033-18	MBHKH2	SAM	12/16/24 07:10		Kareem	OK
200	P5033-19	MBHKH3	SAM	12/16/24 07:13		Kareem	OK
201	P5033-20	MBHKP7	SAM	12/16/24 07:17		Kareem	OK
202	CCV038	CCV038	CCV	12/16/24 07:21		Kareem	OK
203	CCB038	CCB038	CCB	12/16/24 07:25		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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	12/23/24 13:14		Kareem	OK
2	S1	S01	CAL2	12/23/24 13:18		Kareem	OK
3	S2	S02	CAL3	12/23/24 13:23		Kareem	OK
4	S3	S03	CAL4	12/23/24 13:26		Kareem	OK
5	S4	S04	CAL5	12/23/24 13:30		Kareem	OK
6	S5	S05	CAL6	12/23/24 13:34		Kareem	OK
7	S6	S06	CAL7	12/23/24 13:38		Kareem	OK
8	ICV001	ICV001	ICV	12/23/24 13:56	Inst. paused for calibration review	Kareem	OK
9	ICB001	ICB001	ICB	12/23/24 14:00		Kareem	OK
10	ICSA001	ICSA001	ICSA	12/23/24 14:04		Kareem	OK
11	ICSAB001	ICSAB001	ICSAB	12/23/24 14:08		Kareem	OK
12	CCV001	CCV001	CCV	12/23/24 14:12		Kareem	OK
13	CCB001	CCB001	CCB	12/23/24 14:16		Kareem	OK
14	P5033-04DL	MBHK96	SAM	12/23/24 14:28	2x for Ca	Kareem	Confirms
15	P5033-12DL	MBHKA2	SAM	12/23/24 14:32	2x for Ca	Kareem	Confirms
16	P5033-13DL	MBHKA3	SAM	12/23/24 14:36	2x for Ca	Kareem	Confirms
17	P5034-03DL	MBHKB6	SAM	12/23/24 14:40	2x for Mn	Kareem	Confirms
18	P5034-04DL	MBHKB6D	DUP	12/23/24 14:44	2x for Mn	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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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	P5034-03LDL	MBHKB6L	SD	12/23/24 14:48	10x for Mn	Kareem	Confirms
20	P5034-05DL	MBHKB6S	MS	12/23/24 14:52	2x for Mn	Kareem	Confirms
21	P5034-13DL	MBHKJ0	SAM	12/23/24 14:56	5x for Ca	Kareem	Confirms
22	P5233-03DL	ME28R7	SAM	12/23/24 15:00	2x for Ca	Kareem	Confirms
23	P5233-04DL	ME28R8	SAM	12/23/24 15:04	2x for Ca	Kareem	Confirms
24	P5233-06DL	ME28S0	SAM	12/23/24 15:08	2x for Ca	Kareem	Confirms
25	P5233-17DL	ME28T1	SAM	12/23/24 15:11	5x for Fe	Kareem	Confirms
26	P5233-19DL	ME28T3	SAM	12/23/24 15:15	2x for Fe	Kareem	Confirms
27	P5037-12DL	MBHK75	SAM	12/23/24 15:29	2x for Ca	Kareem	Confirms
28	P5037-20DL	MBHKG7	SAM	12/23/24 15:33	2x for Ca	Kareem	Confirms
29	P5028-01DL	MBHK34	SAM	12/23/24 15:37	2x for Ca	Kareem	Confirms
30	P5028-02DL	MBHK35	SAM	12/23/24 15:41	2x for Ca	Kareem	Confirms
31	P5009-21DL	MBHJZ3	SAM	12/23/24 15:45	2x for Ca	Kareem	Confirms
32	P4984-08DL	MBHJT5	SAM	12/23/24 15:49	5x for Ca	Kareem	Confirms
33	P4983-20DL	MBHJH0	SAM	12/23/24 15:53	5x for Ca	Kareem	Confirms
34	CCV002	CCV002	CCV	12/23/24 15:57		Kareem	OK
35	CCB002	CCB002	CCB	12/23/24 16:10	Inst. paused for review	Kareem	OK
36	P5039-07DL	MBHKJ7	SAM	12/23/24 16:14	2x for Ca	Kareem	Confirms
37	P5039-08DL	MBHKJ7D	DUP	12/23/24 16:18	2x for Ca	Kareem	Confirms
38	P5039-07LDL	MBHKJ7L	SD	12/23/24 16:21	10x 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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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	P5039-09DL	MBHKJ7S	MS	12/23/24 16:26	2x for Ca	Kareem	Confirms
40	P5039-16DL	MBHKL8	SAM	12/23/24 16:29	2x for Ca	Kareem	Confirms
41	P5180-01DL	MYCYW9	SAM	12/23/24 16:33	4x for Mn	Kareem	Confirms
42	P5180-03DL	MYCYX1	SAM	12/23/24 16:37	4x for Mn	Kareem	Confirms
43	P5180-04DL	MYCYX2	SAM	12/23/24 16:41	5x for Mn	Kareem	Confirms
44	P5180-05DL	MYCYX3	SAM	12/23/24 16:45	8x for Mn	Kareem	Confirms
45	P5180-06DL	MYCYX4	SAM	12/23/24 16:49	8x for Mn	Kareem	Confirms
46	P5180-07DL	MYCYX5	SAM	12/23/24 16:53	8x for Mn	Kareem	Confirms
47	P5180-08DL	MYCYX6	SAM	12/23/24 16:57	8x for Mn	Kareem	Confirms
48	P5180-09DL	MYCYX7	SAM	12/23/24 17:01	8x for Mn	Kareem	Confirms
49	P5180-10DL	MYCYX8	SAM	12/23/24 17:05	10x for Mn	Kareem	Confirms
50	P5181-10DL	MYCYY8	SAM	12/23/24 17:09	4x for Mn	Kareem	Confirms
51	P5184-20DL	MYCZF8	SAM	12/23/24 17:13		Kareem	OK
52	P5184-21DL	MYCZF8D	DUP	12/23/24 17:17		Kareem	OK
53	P5184-20LDL	MYCZF8L	SD	12/23/24 17:21		Kareem	OK
54	P5184-22DL	MYCZF8S	MS	12/23/24 17:25	MS fail for Cr (862.76 ppb), Zn (1114.67 ppb), Ag(Below RL)	Kareem	OK
55	P5154-09DL	ME28P7	SAM	12/23/24 17:29	5x for Ca	Kareem	Confirms
56	CCV003	CCV003	CCV	12/23/24 17:33		Kareem	OK
57	CCB003	CCB003	CCB	12/23/24 17:37		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

58	P4978-05DL	MBHJ51	SAM	12/23/24 17:41	5x for Ca	Kareem	Confirms
59	P4978-06DL	MBHJ52	SAM	12/23/24 17:45	5x for Ca	Kareem	Confirms
60	P4978-07DL	MBHJ53	SAM	12/23/24 17:49	5x for Ca	Kareem	Confirms
61	P4979-14DL	MBHJA2	SAM	12/23/24 17:53	2x for Ca	Kareem	Confirms
62	P4979-16DL	MBHJA4	SAM	12/23/24 17:57	5x for Ca	Kareem	Confirms
63	P4980-03DL	MBHJ72	SAM	12/23/24 18:01	5x for Ca	Kareem	Confirms
64	P4980-10DL	MBHJ86	SAM	12/23/24 18:05	5x for Ca	Kareem	Confirms
65	P4980-16DL	MBHJ90	SAM	12/23/24 18:09	5x for Ca	Kareem	Confirms
66	P4980-17DL	MBHJB0	SAM	12/23/24 18:13	5x for Ca	Kareem	Confirms
67	P4982-05DL	MBHJ37	SAM	12/23/24 18:17	5x for Ca	Kareem	Confirms
68	P4982-15DL	MBHJE9	SAM	12/23/24 18:21	5x for Ca	Kareem	Confirms
69	P4982-16DL	MBHJF0	SAM	12/23/24 18:24	5x for Ca	Kareem	Confirms
70	P5008-02DL	MBHJJ1	SAM	12/23/24 18:28	5x for Ca	Kareem	Confirms
71	P5008-03DL	MBHJJ3	SAM	12/23/24 18:32	5x for Ca	Kareem	Confirms
72	P5008-04DL	MBHJJ4	SAM	12/23/24 18:36	5x for Ca	Kareem	Confirms
73	P5008-05DL	MBHJJ5	SAM	12/23/24 18:40	5x for Ca	Kareem	Confirms
74	P5008-06DL	MBHJJ6	SAM	12/23/24 18:44	5x for Ca	Kareem	Confirms
75	P5183-20ADL	MYCZD8A	PS	12/23/24 18:48	PS For Cr(0.016ml m5658),Cu(-0.038ml m5697),Tl(0.05ml mp83745) - 10ml Sample	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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

76	P5009-04A	MBHJQ3A	PS	12/23/24 18:52	PS for Cu(0.0032ml m5697),Se(0.013ml mp83726),Tl(0.05ml mp83745), Zn(0.014ml m5819)- 10ml Sample	Kareem	OK
77	P5028-07A	MBHK40A	PS	12/23/24 18:56	PS for Se(0.07ml mp83723)- 10ml Sample	Kareem	OK
78	CCV004	CCV004	CCV	12/23/24 19:00		Kareem	OK
79	CCB004	CCB004	CCB	12/23/24 19:03		Kareem	OK
80	P5033-05A	MBHK97A	PS	12/23/24 19:07	PS for Se(0.07ml mp83723),Zn(0.037ml m5819) - 10ml Sample	Kareem	OK
81	P5034-03A	MBHKB6A	PS	12/23/24 19:11	PS For Cu(0.0053ml m5697),Se(0.07ml mp83723),Zn(0.013ml m5819) - 10ml Sample	Kareem	OK
82	P5037-06A	MBHKC0A	PS	12/23/24 19:15	PS for Se(0.07ml mp83723)- 10ml Sample	Kareem	OK
83	P5039-07A	MBHKJ7A	PS	12/23/24 19:19	PS for Se(0.07ml mp83723)- 10ml Sample	Kareem	OK
84	P5042-01A	MBHKB0A	PS	12/23/24 19:23	PS for Se(0.07ml mp83723)- 10ml Sample	Kareem	OK
85	P5090-01	MBHM14	SAM	12/23/24 19:27		Kareem	OK
86	P5090-02	MBHM15	SAM	12/23/24 19:31		Kareem	OK
87	P5090-03	MBHM16	SAM	12/23/24 19:34		Kareem	OK
88	P5090-04	MBHM17	SAM	12/23/24 19:38		Kareem	OK
89	P5090-05	MBHM18	SAM	12/23/24 19:42		Kareem	OK
90	P5090-06	MBHM19	SAM	12/23/24 19:46		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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	P5090-07	MBHM20	SAM	12/23/24 19:50		Kareem	OK
92	P5090-08	MBHM21	SAM	12/23/24 19:54		Kareem	OK
93	P5090-09	MBHM22	SAM	12/23/24 19:58		Kareem	OK
94	P5090-10	MBHM23	SAM	12/23/24 20:01		Kareem	OK
95	P5090-11	MBHM24	SAM	12/23/24 20:05		Kareem	OK
96	P5090-12	MBHM25	SAM	12/23/24 20:09		Kareem	OK
97	P5090-13	MBHM25D	DUP	12/23/24 20:13		Kareem	OK
98	P5090-12L	MBHM25L	SD	12/23/24 20:17		Kareem	OK
99	P5090-14	MBHM25S	MS	12/23/24 20:21	MS fail for As (243.86 ppb) , Ba (1459.46 ppb), Cu (427.24 ppb), Se (177 ppb), Zn (1503.85 ppb) & Tl (Below RL)	Kareem	OK
100	CCV005	CCV005	CCV	12/23/24 20:28		Kareem	OK
101	CCB005	CCB005	CCB	12/23/24 20:32		Kareem	OK
102	P5090-15	MBHM26	SAM	12/23/24 20:36		Kareem	OK
103	P5090-16	MBHM27	SAM	12/23/24 20:40		Kareem	OK
104	P5090-17	MBHM28	SAM	12/23/24 20:44		Kareem	OK
105	P5090-18	MBHM36	SAM	12/23/24 20:48		Kareem	OK
106	P5090-19	MBHM37	SAM	12/23/24 20:51		Kareem	OK
107	PB165739BL	PBS739	MB	12/23/24 20:55		Kareem	OK
108	PB165739BS	LCS739	LCS	12/23/24 20:59		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

109	P5063-01	MBHL28	SAM	12/23/24 21:03		Kareem	OK
110	P5063-02	MBHL29	SAM	12/23/24 21:07		Kareem	OK
111	P5063-03	MBHL30	SAM	12/23/24 21:11		Kareem	OK
112	P5063-04	MBHL31	SAM	12/23/24 21:15		Kareem	OK
113	P5063-05	MBHL32	SAM	12/23/24 21:19		Kareem	OK
114	P5063-06	MBHL33	SAM	12/23/24 21:23		Kareem	OK
115	P5063-07	MBHL34	SAM	12/23/24 21:26		Kareem	OK
116	P5063-08	MBHL34D	DUP	12/23/24 21:30		Kareem	OK
117	P5063-07L	MBHL34L	SD	12/23/24 21:34		Kareem	OK
118	P5063-09	MBHL34S	MS	12/23/24 21:38	MS fail for Cu (179.98 ppb), Zn (381.63 ppb) & Sb,Se,Ag (Below RL)	Kareem	OK
119	P5063-10	MBHL77	SAM	12/23/24 21:42		Kareem	OK
120	P5063-11	MBHL78	SAM	12/23/24 21:46		Kareem	OK
121	P5063-12	MBHL79	SAM	12/23/24 21:49		Kareem	OK
122	CCV006	CCV006	CCV	12/23/24 21:53		Kareem	OK
123	CCB006	CCB006	CCB	12/23/24 21:57		Kareem	OK
124	P5071-01	MBHKX5	SAM	12/23/24 22:01		Kareem	OK
125	P5071-02	MBHKX5D	DUP	12/23/24 22:05		Kareem	OK
126	P5071-01L	MBHKX5L	SD	12/23/24 22:09		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

127	P5071-03	MBHKX5S	MS	12/23/24 22:13	MS fail for Cu (86.93 ppb), Se (40.18 ppb), Zn (565.58 ppb) & Sb,Ag,Tl (Below RL)	Kareem	OK
128	PB165507BL	PBS507	MB	12/23/24 22:16		Kareem	OK
129	PB165507BS	LCS507	LCS	12/23/24 22:20		Kareem	OK
130	P5084-01	MBHLR0	SAM	12/23/24 22:24		Kareem	OK
131	P5084-02	MBHLW6	SAM	12/23/24 22:28		Kareem	OK
132	P5084-03	MBHLW7	SAM	12/23/24 22:32		Kareem	OK
133	P5084-04	MBHLW8	SAM	12/23/24 22:36		Kareem	OK
134	P5084-05	MBHLW9	SAM	12/23/24 22:40	Ca high	Kareem	Dilution
135	P5084-06	MBHLX0	SAM	12/23/24 22:43	Ca high	Kareem	Dilution
136	P5084-07	MBHLX1	SAM	12/23/24 22:47	Ca high	Kareem	Dilution
137	P5084-08	MBHLX2	SAM	12/23/24 22:51	Ca high	Kareem	Dilution
138	P5084-09	MBHLX3	SAM	12/23/24 22:55		Kareem	OK
139	P5084-10	MBHLX4	SAM	12/23/24 22:59		Kareem	OK
140	P5084-11	MBHLX5	SAM	12/23/24 23:03		Kareem	OK
141	P5084-12	MBHLX6	SAM	12/23/24 23:06		Kareem	OK
142	P5084-13	MBHLX7	SAM	12/23/24 23:10		Kareem	OK
143	P5084-14	MBHLX7D	DUP	12/23/24 23:14		Kareem	OK
144	CCV007	CCV007	CCV	12/23/24 23:18		Kareem	OK
145	CCB007	CCB007	CCB	12/23/24 23:22		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

146	P5084-13L	MBHLX7L	SD	12/23/24 23:26		Kareem	OK
147	P5084-15	MBHLX7S	MS	12/23/24 23:30	MS fail for Se (70.78 ppb) & Sb,Ag,Tl (Below RL)	Kareem	OK
148	P5084-16	MBHLX8	SAM	12/23/24 23:33		Kareem	OK
149	P5084-17	MBHLX9	SAM	12/23/24 23:37		Kareem	OK
150	P5084-18	MBHM32	SAM	12/23/24 23:41	Ca high	Kareem	Dilution
151	P5084-19	MBHM33	SAM	12/23/24 23:45		Kareem	OK
152	PB165713BL	PBS713	MB	12/23/24 23:49		Kareem	OK
153	PB165713BS	LCS713	LCS	12/23/24 23:53		Kareem	OK
154	P5091-01	MBHLR4	SAM	12/23/24 23:57	Ca high	Kareem	Dilution
155	P5091-02	MBHLR5	SAM	12/24/24	Ca high	Kareem	Dilution
156	P5091-03	MBHLR6	SAM	12/24/24 00:04	Ca high	Kareem	Dilution
157	P5091-04	MBHLR7	SAM	12/24/24 00:08		Kareem	OK
158	P5091-05	MBHLR8	SAM	12/24/24 00:12		Kareem	OK
159	P5091-06	MBHLR9	SAM	12/24/24 00:16		Kareem	OK
160	P5091-07	MBHLS0	SAM	12/24/24 00:20		Kareem	OK
161	P5091-08	MBHLS0D	DUP	12/24/24 00:23		Kareem	OK
162	P5091-07L	MBHLS0L	SD	12/24/24 00:27		Kareem	OK
163	P5091-09	MBHLS0S	MS	12/24/24 00:31	MS fail for Se (100.55 ppb) & Ag,Tl (Below RL)	Kareem	OK
164	P5091-10	MBHLS1	SAM	12/24/24 00:35		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

165	P5091-11	MBHLS2	SAM	12/24/24 00:39	Ca high	Kareem	Dilution
166	CCV008	CCV008	CCV	12/24/24 00:42		Kareem	OK
167	CCB008	CCB008	CCB	12/24/24 00:46		Kareem	OK
168	P5091-12	MBHLS3	SAM	12/24/24 00:50	Ca high	Kareem	Dilution
169	P5091-13	MBHLS4	SAM	12/24/24 00:54	Ca high	Kareem	Dilution
170	P5091-14	MBHLS5	SAM	12/24/24 00:58		Kareem	OK
171	P5091-15	MBHLS6	SAM	12/24/24 01:02		Kareem	OK
172	P5091-16	MBHLS7	SAM	12/24/24 01:06		Kareem	OK
173	P5091-17	MBHLS8	SAM	12/24/24 01:10		Kareem	OK
174	P5091-18	MBHLS9	SAM	12/24/24 01:13	Ca high	Kareem	Dilution
175	P5091-19	MBHLT0	SAM	12/24/24 01:17	Ca high	Kareem	Dilution
176	P5091-20	MBHLT1	SAM	12/24/24 01:21	Ca high	Kareem	Dilution
177	P5091-21	MBHLT2	SAM	12/24/24 01:25		Kareem	OK
178	P5091-22	MBHLT3	SAM	12/24/24 01:29		Kareem	OK
179	PB165740BL	PBS740	MB	12/24/24 01:33		Kareem	OK
180	PB165740BS	LCS740	LCS	12/24/24 01:37		Kareem	OK
181	P5015-02	MBHK13	SAM	12/24/24 01:41		Kareem	OK
182	P5033-21	MBHKQ4	SAM	12/24/24 01:45		Kareem	OK
183	P5059-20	MBHLD7	SAM	12/24/24 01:49		Kareem	OK
184	P5059-21	MBHLD8	SAM	12/24/24 01:53		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

185	P5092-20	MBHM40	SAM	12/24/24 01:57		Kareem	OK
186	P5132-21	MBHMN5	SAM	12/24/24 02:01		Kareem	OK
187	P5200-15	MBHNJ3	SAM	12/24/24 02:05		Kareem	OK
188	CCV009	CCV009	CCV	12/24/24 02:09		Kareem	OK
189	CCB009	CCB009	CCB	12/24/24 02:12		Kareem	OK
190	P5212-09	MBHNJ4	SAM	12/24/24 02:16		Kareem	OK
191	PB165669BL	PBW669	MB	12/24/24 02:20		Kareem	OK
192	PB165669BS	LCS669	LCS	12/24/24 02:24		Kareem	OK
193	P5086-01	MBHLM6	SAM	12/24/24 02:28		Kareem	OK
194	P5086-02	MBHLM7	SAM	12/24/24 02:32		Kareem	OK
195	P5086-03	MBHLM8	SAM	12/24/24 02:36		Kareem	OK
196	P5086-04	MBHLM9	SAM	12/24/24 02:40		Kareem	OK
197	P5086-05	MBHLN0	SAM	12/24/24 02:44		Kareem	OK
198	P5086-06	MBHLN1	SAM	12/24/24 02:48		Kareem	OK
199	P5086-07	MBHLN2	SAM	12/24/24 02:51		Kareem	OK
200	P5086-08	MBHLN2D	DUP	12/24/24 02:55		Kareem	OK
201	P5086-07L	MBHLN2L	SD	12/24/24 02:59		Kareem	OK
202	P5086-09	MBHLN2S	MS	12/24/24 03:03	MS fail for Be (8.0 ppb), Cu (169.15 ppb), Se (80.54 ppb), Zn (524.51 ppb) & Sb,Ag,Tl (Below RL)	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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

203	P5086-10	MBHLN3	SAM	12/24/24 03:07		Kareem	OK
204	P5086-11	MBHLN4	SAM	12/24/24 03:11		Kareem	OK
205	P5086-12	MBHLN5	SAM	12/24/24 03:14		Kareem	OK
206	P5086-13	MBHLN6	SAM	12/24/24 03:18		Kareem	OK
207	P5086-14	MBHLN7	SAM	12/24/24 03:22	Ca high	Kareem	Dilution
208	P5086-15	MBHLN8	SAM	12/24/24 03:26	Ca high	Kareem	Dilution
209	P5086-16	MBHLN9	SAM	12/24/24 03:30	Ca high	Kareem	Dilution
210	CCV010	CCV010	CCV	12/24/24 03:34		Kareem	OK
211	CCB010	CCB010	CCB	12/24/24 03:37		Kareem	OK
212	P5086-17	MBHLP7	SAM	12/24/24 03:42		Kareem	OK
213	P5086-18	MBHLP8	SAM	12/24/24 03:45		Kareem	OK
214	P5086-19	MBHLP9	SAM	12/24/24 03:49		Kareem	OK
215	P5086-20	MBHLQ0	SAM	12/24/24 03:53		Kareem	OK
216	P5086-21	MBHLQ1	SAM	12/24/24 03:57		Kareem	OK
217	P5086-22	MBHLQ2	SAM	12/24/24 04:01		Kareem	OK
218	PB165725BL	PBS725	MB	12/24/24 04:04		Kareem	OK
219	PB165725BS	LCS725	LCS	12/24/24 04:08		Kareem	OK
220	P5089-01	MBHLZ4	SAM	12/24/24 04:12		Kareem	OK
221	P5089-02	MBHLZ4D	DUP	12/24/24 04:16		Kareem	OK
222	P5089-01L	MBHLZ4L	SD	12/24/24 04:20		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

223	P5089-03	MBHLZ4S	MS	12/24/24 04:24	MS fail for As (201.58 ppb), Cu (299.10 ppb),Se (72.64 ppb), Zn (952.81 ppb) & Sb,Ag,Tl (Below RL)	Kareem	OK
224	P5089-04	MBHLZ5	SAM	12/24/24 04:28		Kareem	OK
225	P5089-05	MBHLZ6	SAM	12/24/24 04:32		Kareem	OK
226	P5089-06	MBHLZ7	SAM	12/24/24 04:35		Kareem	OK
227	P5089-07	MBHLZ8	SAM	12/24/24 04:39		Kareem	OK
228	P5089-08	MBHLZ9	SAM	12/24/24 04:43		Kareem	OK
229	P5089-09	MBHM00	SAM	12/24/24 04:47		Kareem	OK
230	P5089-10	MBHM01	SAM	12/24/24 04:51		Kareem	OK
231	P5089-11	MBHM02	SAM	12/24/24 04:55		Kareem	OK
232	CCV011	CCV011	CCV	12/24/24 04:58		Kareem	OK
233	CCB011	CCB011	CCB	12/24/24 05:02		Kareem	OK
234	P5089-12	MBHM03	SAM	12/24/24 05:06		Kareem	OK
235	P5089-13	MBHM04	SAM	12/24/24 05:10		Kareem	OK
236	P5089-14	MBHM05	SAM	12/24/24 05:14		Kareem	OK
237	P5089-15	MBHM06	SAM	12/24/24 05:17		Kareem	OK
238	P5089-16	MBHM07	SAM	12/24/24 05:21		Kareem	OK
239	P5089-17	MBHM08	SAM	12/24/24 05:25		Kareem	OK
240	P5089-18	MBHM09	SAM	12/24/24 05:29		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

241	P5089-19	MBHM10	SAM	12/24/24 05:33		Kareem	OK
242	P5089-20	MBHM11	SAM	12/24/24 05:37		Kareem	OK
243	P5089-21	MBHM12	SAM	12/24/24 05:40		Kareem	OK
244	P5089-22	MBHM13	SAM	12/24/24 05:44		Kareem	OK
245	PB165727BL	PBS727	MB	12/24/24 05:48		Kareem	OK
246	PB165727BS	LCS727	LCS	12/24/24 05:52		Kareem	OK
247	P5169-01	MJNLH1	SAM	12/24/24 05:56		Kareem	OK
248	P5169-02	MJNLH2	SAM	12/24/24 06:00		Kareem	OK
249	P5169-03	MJNLH5	SAM	12/24/24 06:04		Kareem	OK
250	P5169-04	MJNLH4	SAM	12/24/24 06:08	NOT USE	Kareem	Not Ok
251	P5169-05	MJNLH4D	DUP	12/24/24 06:12	NOT USE	Kareem	Not Ok
252	P5169-04L	MJNLH4L	SD	12/24/24 06:15	NOT USE	Kareem	Not Ok
253	CCV012	CCV012	CCV	12/24/24 06:19		Kareem	OK
254	CCB012	CCB012	CCB	12/24/24 06:23		Kareem	OK
255	P5169-06	MJNLH4S	MS	12/24/24 06:27	NOT USE	Kareem	Not Ok
256	PB165673BL	PBW673	MB	12/24/24 06:35	NOT USE	Kareem	Not Ok
257	PB165673BS	LCS673	LCS	12/24/24 06:39	NOT USE	Kareem	Not Ok
258	P5081-01	MBHLG0	SAM	12/24/24 06:43		Kareem	OK
259	P5081-02	MBHLG1	SAM	12/24/24 06:47	Ca high	Kareem	Dilution
260	P5081-03	MBHLG2	SAM	12/24/24 06:51	Ca high	Kareem	Dilution

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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

261	P5081-04	MBHLG3	SAM	12/24/24 06:54		Kareem	OK
262	P5081-05	MBHLG4	SAM	12/24/24 06:59		Kareem	OK
263	P5081-06	MBHLG4D	DUP	12/24/24 07:02		Kareem	OK
264	P5081-05L	MBHLG4L	SD	12/24/24 07:06		Kareem	OK
265	P5081-07	MBHLG4S	MS	12/24/24 07:10	MS fail for Be (7.17 ppb) , Cu (275.06 ppb), Se (59.69 ppb), V (178.80 ppb), Zn (1028.26) & Sb,Ag,Tl (Below RL)	Kareem	OK
266	P5081-08	MBHLG5	SAM	12/24/24 07:14		Kareem	OK
267	P5081-09	MBHLG6	SAM	12/24/24 07:18		Kareem	OK
268	P5081-10	MBHLJ1	SAM	12/24/24 07:22		Kareem	OK
269	P5081-11	MBHLJ2	SAM	12/24/24 07:25		Kareem	OK
270	P5081-12	MBHLJ3	SAM	12/24/24 07:29		Kareem	OK
271	P5081-13	MBHLJ4	SAM	12/24/24 07:33		Kareem	OK
272	P5081-14	MBHLJ5	SAM	12/24/24 07:37		Kareem	OK
273	P5081-15	MBHLJ6	SAM	12/24/24 07:41		Kareem	OK
274	CCV013	CCV013	CCV	12/24/24 07:45		Kareem	OK
275	CCB013	CCB013	CCB	12/24/24 07:48		Kareem	OK
276	P5081-16	MBHLJ7	SAM	12/24/24 07:52		Kareem	OK
277	P5081-17	MBHLK5	SAM	12/24/24 07:56		Kareem	OK
278	P5081-18	MBHLK6	SAM	12/24/24 08:00		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

279	P5081-19	MBHLK7	SAM	12/24/24 08:04		Kareem	OK
280	P5081-20	MBHLK8	SAM	12/24/24 08:08		Kareem	OK
281	P5081-21	MBHLK9	SAM	12/24/24 08:11		Kareem	OK
282	P5081-22	MBHLL0	SAM	12/24/24 08:15		Kareem	OK
283	PB165694BL	PBS694	MB	12/24/24 08:19		Kareem	OK
284	PB165694BS	LCS694	LCS	12/24/24 08:23		Kareem	OK
285	P5083-01	MBHLJ8	SAM	12/24/24 08:27		Kareem	OK
286	P5083-02	MBHLJ9	SAM	12/24/24 08:31		Kareem	OK
287	P5083-03	MBHLK0	SAM	12/24/24 08:35		Kareem	OK
288	P5083-04	MBHLK0D	DUP	12/24/24 08:39		Kareem	OK
289	P5083-03L	MBHLK0L	SD	12/24/24 08:42		Kareem	OK
290	P5083-05	MBHLK0S	MS	12/24/24 08:46	MS fail for Se (74.03 ppb), Zn (183 ppb) & Ag,Tl (Below RL)	Kareem	OK
291	P5083-06	MBHLK1	SAM	12/24/24 08:50		Kareem	OK
292	P5083-07	MBHLK2	SAM	12/24/24 08:54		Kareem	OK
293	P5083-08	MBHLK3	SAM	12/24/24 08:58		Kareem	OK
294	P5083-09	MBHLK4	SAM	12/24/24 09:02		Kareem	OK
295	CCV014	CCV014	CCV	12/24/24 09:05		Kareem	OK
296	CCB014	CCB014	CCB	12/24/24 09:09		Kareem	OK
297	P5083-10	MBHLL9	SAM	12/24/24 09:13		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 # LB134069

Review By	Sarabjit Jaswal	Review On	12/25/2024 11:40:50 PM
Supervise By	Kareem Khairalla	Supervise On	12/27/2024 4:23:37 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

298	P5083-11	MBHLM0	SAM	12/24/24 09:17		Kareem	OK
299	P5083-12	MBHLM1	SAM	12/24/24 09:21		Kareem	OK
300	P5083-13	MBHLM2	SAM	12/24/24 09:25		Kareem	OK
301	P5083-14	MBHLM3	SAM	12/24/24 09:28	Ca high	Kareem	Dilution
302	P5083-15	MBHLM4	SAM	12/24/24 09:32	Ca high	Kareem	Dilution
303	P5083-16	MBHLM5	SAM	12/24/24 09:36	Ca high	Kareem	Dilution
304	P5083-17	MBHLQ4	SAM	12/24/24 09:40		Kareem	OK
305	P5083-18	MBHLQ5	SAM	12/24/24 09:44		Kareem	OK
306	P5083-19	MBHLQ6	SAM	12/24/24 09:48		Kareem	OK
307	P5083-20	MBHLQ7	SAM	12/24/24 09:52		Kareem	OK
308	P5083-21	MBHLQ8	SAM	12/24/24 09:55		Kareem	OK
309	P5083-22	MBHLQ9	SAM	12/24/24 09:59		Kareem	OK
310	PB165632BL	PBS632	MB	12/24/24 10:03	NOT USE	Kareem	Not Ok
311	PB165632BS	LCS632	LCS	12/24/24 10:07	NOT USE	Kareem	Not Ok
312	CCV015	CCV015	CCV	12/24/24 10:11		Kareem	OK
313	CCB015	CCB015	CCB	12/24/24 10:15		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

3270
11.27
10:30
D

FedEx Express

FedEx
MPS# 0263 7702 6139 3270

WED – 27 NOV AA
PRIORITY OVERNIGHT

NF KBCA

11-27-24
1005

07092
NJ-US EWR

#6372226 11/26 5BCJ8/39D3/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 :	P5028	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 1:20:43 PM				

Sample ID	Client ID	Matrix	Sampling Date	Test	Test Group	Method	TAT Days	Fax Due Date	HC Due Date
P5028-01	MBHK34	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
P5028-02	MBHK35	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
P5028-03	MBHK36	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
P5028-04	MBHK37	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
P5028-05	MBHK38	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
P5028-06	MBHK39	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
P5028-07	MBHK40	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
P5028-08	MBHK40D	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
P5028-09	MBHK40S	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
P5028-10	MBHKD2	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

P5028-11	MBHKD3	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
P5028-12	MBHKD4	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
P5028-13	MBHKE5	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
P5028-14	MBHKE6	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
P5028-15	MBHKE7	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
P5028-16	MBHKE8	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
P5028-17	MBHKE9	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
P5028-18	MBHKF0	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
P5028-19	MBHKF1	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
P5028-20	MBHKF2	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
P5028-21	MBHKG2	Solid	11/20/2024		FD				
				Metals CLP Full		SFAM_AES	15	01/01/2025	01/01/2025
				Percent Solids		Chemtech -SOP	15	01/01/2025	01/01/2025
P5028-22	MBHKG3	Solid	11/20/2024		FD				
				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 : PB165359 **WorkList ID :** 185947 **Department :** Digestion **Date :** 12-04-2024 08:37:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5028-01	MBHK34	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-02	MBHK35	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-03	MBHK36	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-04	MBHK37	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-05	MBHK38	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-06	MBHK39	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-07	MBHK40	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-08	MBHK40D	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-09	MBHK40S	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-10	MBHKD2	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-11	MBHKD3	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-12	MBHKD4	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-13	MBHKE5	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-14	MBHKE6	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-15	MBHKE7	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-16	MBHKE8	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-17	MBHKE9	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-18	MBHKF0	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-19	MBHKF1	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-20	MBHKF2	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES
P5028-21	MBHKG2	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES

779

Date/Time 12/04/24 09:00

Raw Sample Received by: JSP (Met Div)

Raw Sample Relinquished by:

Date/Time 12/04/24 16:00

Raw Sample Received by:

Raw Sample Relinquished by: JSP (Met Div)

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB165359 **WorkList ID :** 185947 **Department :** Digestion **Date :** 12-04-2024 08:37:43

780

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5028-22	MBHKG3	Solid	Metals CLP Full	Cool 4 deg C	USEP01	C12	11/20/2024	SFAM_AES

Date/Time 12/4/24 9:00

Raw Sample Received by: JSP (Met dig)

Raw Sample Relinquished by:

Date/Time 12/4/24 16:00

Raw Sample Received by:

Raw Sample Relinquished by: JSP (Met dig)