EPA SAMPLE NO.

MBHK55

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-01

% Solids: 63.7 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	7100	*	12/29/2024	0453
7440-36-0	Antimony	2.6	J	12/29/2024	0453
7440-38-2	Arsenic	16		12/29/2024	0453
7440-39-3	Barium	190		12/29/2024	0453
7440-41-7	Beryllium	1.5		12/29/2024	0453
7440-43-9	Cadmium	0.90		12/29/2024	0453
7440-70-2	Calcium	8200	*	12/29/2024	0453
7440-47-3	Chromium	16		12/29/2024	0453
7440-48-4	Cobalt	7.3	*	12/29/2024	0453
7440-50-8	Copper	48	*	12/29/2024	0453
7439-89-6	Iron	17000	*	12/29/2024	0453
7439-92-1	Lead	400		12/29/2024	0453
7439-95-4	Magnesium	1900		12/29/2024	0453
7439-96-5	Manganese	870	*	12/29/2024	0453
7440-02-0	Nickel	23		12/29/2024	0453
7440-09-7	Potassium	1000		12/29/2024	0453
7782-49-2	Selenium	8.7	*	12/29/2024	0453
7440-22-4	Silver	0.46	J*	12/29/2024	0453
7440-23-5	Sodium	680	U	12/29/2024	0453
7440-28-0	Thallium	3.4	U*	12/29/2024	0453
7440-62-2	Vanadium	21		12/29/2024	0453
7440-66-6	Zinc	230	*	12/29/2024	0453

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

Comments:

EPA SAMPLE NO.

MBHK56

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-02

% Solids: 80.2 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	6400	*	12/29/2024	0457
7440-36-0	Antimony	2.1	J	12/29/2024	0457
7440-38-2	Arsenic	24		12/29/2024	0457
7440-39-3	Barium	91		12/29/2024	0457
7440-41-7	Beryllium	2.0		12/29/2024	0457
7440-43-9	Cadmium	0.48	J	12/29/2024	0457
7440-70-2	Calcium	6500	*	12/29/2024	0457
7440-47-3	Chromium	10		12/29/2024	0457
7440-48-4	Cobalt	5.2	J*	12/29/2024	0457
7440-50-8	Copper	29	*	12/29/2024	0457
7439-89-6	Iron	15000	*	12/29/2024	0457
7439-92-1	Lead	160		12/29/2024	0457
7439-95-4	Magnesium	720		12/29/2024	0457
7439-96-5	Manganese	330	*	12/29/2024	0457
7440-02-0	Nickel	15		12/29/2024	0457
7440-09-7	Potassium	580		12/29/2024	0457
7782-49-2	Selenium	8.1	*	12/29/2024	0457
7440-22-4	Silver	0.14	J*	12/29/2024	0457
7440-23-5	Sodium	130	J	12/29/2024	0457
7440-28-0	Thallium	2.8	U*	12/29/2024	0457
7440-62-2	Vanadium	18		12/29/2024	0457
7440-66-6	Zinc	98	*	12/29/2024	0457

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

Comments:

EPA SAMPLE NO.

MBHK57

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-03

% Solids: 85.7 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	7000	*	12/29/2024	0501
7440-36-0	Antimony	1.1	J	12/29/2024	0501
7440-38-2	Arsenic	11		12/29/2024	0501
7440-39-3	Barium	190		12/29/2024	0501
7440-41-7	Beryllium	1.2		12/29/2024	0501
7440-43-9	Cadmium	0.56		12/29/2024	0501
7440-70-2	Calcium	6600	*	12/29/2024	0501
7440-47-3	Chromium	14		12/29/2024	0501
7440-48-4	Cobalt	8.0	*	12/29/2024	0501
7440-50-8	Copper	42	*	12/29/2024	0501
7439-89-6	Iron	11000	*	12/29/2024	0501
7439-92-1	Lead	510		12/29/2024	0501
7439-95-4	Magnesium	940		12/29/2024	0501
7439-96-5	Manganese	480	*	12/29/2024	0501
7440-02-0	Nickel	19		12/29/2024	0501
7440-09-7	Potassium	1100		12/29/2024	0501
7782-49-2	Selenium	5.5	*	12/29/2024	0501
7440-22-4	Silver	0.95	U*	12/29/2024	0501
7440-23-5	Sodium	270	J	12/29/2024	0501
7440-28-0	Thallium	2.4	U*	12/29/2024	0501
7440-62-2	Vanadium	21		12/29/2024	0501
7440-66-6	Zinc	240	*	12/29/2024	0501

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

Comments:

EPA SAMPLE NO.

MBHK58

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-04

% Solids: 87.3 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	6500	*	12/29/2024	0513
7440-36-0	Antimony	6.1	U	12/29/2024	0513
7440-38-2	Arsenic	16		12/29/2024	0513
7440-39-3	Barium	150		12/29/2024	0513
7440-41-7	Beryllium	1.1		12/29/2024	0513
7440-43-9	Cadmium	0.83		12/29/2024	0513
7440-70-2	Calcium	17000	*	12/29/2024	0513
7440-47-3	Chromium	10		12/29/2024	0513
7440-48-4	Cobalt	8.6	*	12/29/2024	0513
7440-50-8	Copper	33	*	12/29/2024	0513
7439-89-6	Iron	14000	*	12/29/2024	0513
7439-92-1	Lead	640		12/29/2024	0513
7439-95-4	Magnesium	2800		12/29/2024	0513
7439-96-5	Manganese	1300	*	12/29/2024	0513
7440-02-0	Nickel	17		12/29/2024	0513
7440-09-7	Potassium	740		12/29/2024	0513
7782-49-2	Selenium	6.8	*	12/29/2024	0513
7440-22-4	Silver	0.19	J*	12/29/2024	0513
7440-23-5	Sodium	110	J	12/29/2024	0513
7440-28-0	Thallium	2.6	U*	12/29/2024	0513
7440-62-2	Vanadium	24		12/29/2024	0513
7440-66-6	Zinc	290	*	12/29/2024	0513

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

Comments:

EPA SAMPLE NO.

MBHK59

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-05

% 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	4600	*	12/29/2024	0517
7440-36-0	Antimony	1.8	J	12/29/2024	0517
7440-38-2	Arsenic	16		12/29/2024	0517
7440-39-3	Barium	80		12/29/2024	0517
7440-41-7	Beryllium	1.2		12/29/2024	0517
7440-43-9	Cadmium	0.76		12/29/2024	0517
7440-70-2	Calcium	100000	D*	12/30/2024	2033
7440-47-3	Chromium	7.5		12/29/2024	0517
7440-48-4	Cobalt	6.7	*	12/29/2024	0517
7440-50-8	Copper	23	*	12/29/2024	0517
7439-89-6	Iron	21000	*	12/29/2024	0517
7439-92-1	Lead	150		12/29/2024	0517
7439-95-4	Magnesium	20000		12/29/2024	0517
7439-96-5	Manganese	2000	*	12/29/2024	0517
7440-02-0	Nickel	16		12/29/2024	0517
7440-09-7	Potassium	700		12/29/2024	0517
7782-49-2	Selenium	9.4	*	12/29/2024	0517
7440-22-4	Silver	0.20	J*	12/29/2024	0517
7440-23-5	Sodium	500	U	12/29/2024	0517
7440-28-0	Thallium	2.5	U*	12/29/2024	0517
7440-62-2	Vanadium	18		12/29/2024	0517
7440-66-6	Zinc	140	*	12/29/2024	0517

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

Comments:

EPA SAMPLE NO.

MBHK60

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-06

% Solids: 89.4 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	3000	*	12/29/2024	0520
7440-36-0	Antimony	1.6	J	12/29/2024	0520
7440-38-2	Arsenic	8.5		12/29/2024	0520
7440-39-3	Barium	64		12/29/2024	0520
7440-41-7	Beryllium	1.1		12/29/2024	0520
7440-43-9	Cadmium	0.60		12/29/2024	0520
7440-70-2	Calcium	140000	D*	12/30/2024	2037
7440-47-3	Chromium	5.5		12/29/2024	0520
7440-48-4	Cobalt	5.6	*	12/29/2024	0520
7440-50-8	Copper	13	*	12/29/2024	0520
7439-89-6	Iron	22000	*	12/29/2024	0520
7439-92-1	Lead	26		12/29/2024	0520
7439-95-4	Magnesium	42000		12/29/2024	0520
7439-96-5	Manganese	3900	D*	12/30/2024	2037
7440-02-0	Nickel	13		12/29/2024	0520
7440-09-7	Potassium	600		12/29/2024	0520
7782-49-2	Selenium	11	*	12/29/2024	0520
7440-22-4	Silver	0.35	J*	12/29/2024	0520
7440-23-5	Sodium	94	J	12/29/2024	0520
7440-28-0	Thallium	2.3	U*	12/29/2024	0520
7440-62-2	Vanadium	12		12/29/2024	0520
7440-66-6	Zinc	29	*	12/29/2024	0520

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

Comments:

EPA SAMPLE NO.

MBHK61

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-07

% Solids: 93.3 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	4700	*	12/29/2024	0524
7440-36-0	Antimony	5.6	U	12/29/2024	0524
7440-38-2	Arsenic	5.2		12/29/2024	0524
7440-39-3	Barium	27		12/29/2024	0524
7440-41-7	Beryllium	0.81		12/29/2024	0524
7440-43-9	Cadmium	0.39	J	12/29/2024	0524
7440-70-2	Calcium	85000	D*	12/30/2024	2041
7440-47-3	Chromium	6.6		12/29/2024	0524
7440-48-4	Cobalt	7.3	*	12/29/2024	0524
7440-50-8	Copper	24	*	12/29/2024	0524
7439-89-6	Iron	13000	*	12/29/2024	0524
7439-92-1	Lead	27		12/29/2024	0524
7439-95-4	Magnesium	13000		12/29/2024	0524
7439-96-5	Manganese	870	*	12/29/2024	0524
7440-02-0	Nickel	14		12/29/2024	0524
7440-09-7	Potassium	800		12/29/2024	0524
7782-49-2	Selenium	3.3	*	12/29/2024	0524
7440-22-4	Silver	0.93	U*	12/29/2024	0524
7440-23-5	Sodium	94	J	12/29/2024	0524
7440-28-0	Thallium	2.3	U*	12/29/2024	0524
7440-62-2	Vanadium	9.0		12/29/2024	0524
7440-66-6	Zinc	41	*	12/29/2024	0524

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

Comments:

EPA SAMPLE NO.

MBHK62

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-08

% Solids: 70.9 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	7600	*	12/29/2024	0528
7440-36-0	Antimony	2.3	J	12/29/2024	0528
7440-38-2	Arsenic	20		12/29/2024	0528
7440-39-3	Barium	140		12/29/2024	0528
7440-41-7	Beryllium	1.3		12/29/2024	0528
7440-43-9	Cadmium	0.81		12/29/2024	0528
7440-70-2	Calcium	10000	*	12/29/2024	0528
7440-47-3	Chromium	26		12/29/2024	0528
7440-48-4	Cobalt	4.8	J*	12/29/2024	0528
7440-50-8	Copper	36	*	12/29/2024	0528
7439-89-6	Iron	18000	*	12/29/2024	0528
7439-92-1	Lead	180		12/29/2024	0528
7439-95-4	Magnesium	3100		12/29/2024	0528
7439-96-5	Manganese	890	*	12/29/2024	0528
7440-02-0	Nickel	22		12/29/2024	0528
7440-09-7	Potassium	1000		12/29/2024	0528
7782-49-2	Selenium	8.8	*	12/29/2024	0528
7440-22-4	Silver	0.35	J*	12/29/2024	0528
7440-23-5	Sodium	560	U	12/29/2024	0528
7440-28-0	Thallium	2.8	U*	12/29/2024	0528
7440-62-2	Vanadium	18		12/29/2024	0528
7440-66-6	Zinc	150	*	12/29/2024	0528

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

Comments:

EPA SAMPLE NO.

MBHK63

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-09

% Solids: 75.2 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	7900	*	12/29/2024	0532
7440-36-0	Antimony	2.3	J	12/29/2024	0532
7440-38-2	Arsenic	32		12/29/2024	0532
7440-39-3	Barium	140		12/29/2024	0532
7440-41-7	Beryllium	1.3		12/29/2024	0532
7440-43-9	Cadmium	0.95		12/29/2024	0532
7440-70-2	Calcium	7500	*	12/29/2024	0532
7440-47-3	Chromium	27		12/29/2024	0532
7440-48-4	Cobalt	4.7	J*	12/29/2024	0532
7440-50-8	Copper	36	*	12/29/2024	0532
7439-89-6	Iron	19000	*	12/29/2024	0532
7439-92-1	Lead	710		12/29/2024	0532
7439-95-4	Magnesium	3000		12/29/2024	0532
7439-96-5	Manganese	940	*	12/29/2024	0532
7440-02-0	Nickel	22		12/29/2024	0532
7440-09-7	Potassium	920		12/29/2024	0532
7782-49-2	Selenium	9.7	*	12/29/2024	0532
7440-22-4	Silver	0.27	J*	12/29/2024	0532
7440-23-5	Sodium	520	U	12/29/2024	0532
7440-28-0	Thallium	2.6	U*	12/29/2024	0532
7440-62-2	Vanadium	18		12/29/2024	0532
7440-66-6	Zinc	160	*	12/29/2024	0532

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

Comments:

EPA SAMPLE NO.

MBHK64

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-10

% Solids: 81.4 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	8000	*	12/29/2024	0536
7440-36-0	Antimony	2.6	J	12/29/2024	0536
7440-38-2	Arsenic	19		12/29/2024	0536
7440-39-3	Barium	130		12/29/2024	0536
7440-41-7	Beryllium	1.3		12/29/2024	0536
7440-43-9	Cadmium	0.89		12/29/2024	0536
7440-70-2	Calcium	8500	*	12/29/2024	0536
7440-47-3	Chromium	18		12/29/2024	0536
7440-48-4	Cobalt	4.6	J*	12/29/2024	0536
7440-50-8	Copper	24	*	12/29/2024	0536
7439-89-6	Iron	18000	*	12/29/2024	0536
7439-92-1	Lead	160		12/29/2024	0536
7439-95-4	Magnesium	3000		12/29/2024	0536
7439-96-5	Manganese	930	*	12/29/2024	0536
7440-02-0	Nickel	19		12/29/2024	0536
7440-09-7	Potassium	900		12/29/2024	0536
7782-49-2	Selenium	9.4	*	12/29/2024	0536
7440-22-4	Silver	0.16	J*	12/29/2024	0536
7440-23-5	Sodium	470	U	12/29/2024	0536
7440-28-0	Thallium	2.4	U*	12/29/2024	0536
7440-62-2	Vanadium	18		12/29/2024	0536
7440-66-6	Zinc	130	*	12/29/2024	0536

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

Comments:

EPA SAMPLE NO.

MBHK65

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-11

% Solids: 85 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	8100	*	12/29/2024	0540
7440-36-0	Antimony	2.3	J	12/29/2024	0540
7440-38-2	Arsenic	8.9		12/29/2024	0540
7440-39-3	Barium	100		12/29/2024	0540
7440-41-7	Beryllium	1.3		12/29/2024	0540
7440-43-9	Cadmium	0.59		12/29/2024	0540
7440-70-2	Calcium	13000	*	12/29/2024	0540
7440-47-3	Chromium	14		12/29/2024	0540
7440-48-4	Cobalt	4.2	J*	12/29/2024	0540
7440-50-8	Copper	9.7	*	12/29/2024	0540
7439-89-6	Iron	18000	*	12/29/2024	0540
7439-92-1	Lead	65		12/29/2024	0540
7439-95-4	Magnesium	3600		12/29/2024	0540
7439-96-5	Manganese	750	*	12/29/2024	0540
7440-02-0	Nickel	17		12/29/2024	0540
7440-09-7	Potassium	760		12/29/2024	0540
7782-49-2	Selenium	8.8	*	12/29/2024	0540
7440-22-4	Silver	1.0	U*	12/29/2024	0540
7440-23-5	Sodium	520	U	12/29/2024	0540
7440-28-0	Thallium	2.6	U*	12/29/2024	0540
7440-62-2	Vanadium	17		12/29/2024	0540
7440-66-6	Zinc	62	*	12/29/2024	0540

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

Comments:

EPA SAMPLE NO.

MBHK66

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-12

% Solids: 88.7 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	6300	*	12/29/2024	0544
7440-36-0	Antimony	0.81	J	12/29/2024	0544
7440-38-2	Arsenic	6.7		12/29/2024	0544
7440-39-3	Barium	69		12/29/2024	0544
7440-41-7	Beryllium	0.96		12/29/2024	0544
7440-43-9	Cadmium	0.37	J	12/29/2024	0544
7440-70-2	Calcium	43000	*	12/29/2024	0544
7440-47-3	Chromium	9.7		12/29/2024	0544
7440-48-4	Cobalt	6.2	*	12/29/2024	0544
7440-50-8	Copper	10	*	12/29/2024	0544
7439-89-6	Iron	16000	*	12/29/2024	0544
7439-92-1	Lead	19		12/29/2024	0544
7439-95-4	Magnesium	9100		12/29/2024	0544
7439-96-5	Manganese	880	*	12/29/2024	0544
7440-02-0	Nickel	20		12/29/2024	0544
7440-09-7	Potassium	640		12/29/2024	0544
7782-49-2	Selenium	5.7	*	12/29/2024	0544
7440-22-4	Silver	0.92	U*	12/29/2024	0544
7440-23-5	Sodium	460	U	12/29/2024	0544
7440-28-0	Thallium	2.3	U*	12/29/2024	0544
7440-62-2	Vanadium	13		12/29/2024	0544
7440-66-6	Zinc	35	*	12/29/2024	0544

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

Comments:

EPA SAMPLE NO.

MBHK67

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-13

% 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	6400	*	12/29/2024	0548
7440-36-0	Antimony	1.3	J	12/29/2024	0548
7440-38-2	Arsenic	6.3		12/29/2024	0548
7440-39-3	Barium	84		12/29/2024	0548
7440-41-7	Beryllium	0.92		12/29/2024	0548
7440-43-9	Cadmium	0.38	J	12/29/2024	0548
7440-70-2	Calcium	42000	*	12/29/2024	0548
7440-47-3	Chromium	10		12/29/2024	0548
7440-48-4	Cobalt	6.9	*	12/29/2024	0548
7440-50-8	Copper	11	*	12/29/2024	0548
7439-89-6	Iron	15000	*	12/29/2024	0548
7439-92-1	Lead	11		12/29/2024	0548
7439-95-4	Magnesium	10000		12/29/2024	0548
7439-96-5	Manganese	920	*	12/29/2024	0548
7440-02-0	Nickel	21		12/29/2024	0548
7440-09-7	Potassium	710		12/29/2024	0548
7782-49-2	Selenium	5.8	*	12/29/2024	0548
7440-22-4	Silver	0.82	U*	12/29/2024	0548
7440-23-5	Sodium	89	J	12/29/2024	0548
7440-28-0	Thallium	2.1	U*	12/29/2024	0548
7440-62-2	Vanadium	15		12/29/2024	0548
7440-66-6	Zinc	33	*	12/29/2024	0548

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

Comments:

EPA SAMPLE NO.

MBHK68

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-14

% Solids: 91.9 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	4800	*	12/29/2024	0551
7440-36-0	Antimony	0.89	J	12/29/2024	0551
7440-38-2	Arsenic	6.7		12/29/2024	0551
7440-39-3	Barium	58		12/29/2024	0551
7440-41-7	Beryllium	0.83		12/29/2024	0551
7440-43-9	Cadmium	0.29	J	12/29/2024	0551
7440-70-2	Calcium	49000	*	12/29/2024	0551
7440-47-3	Chromium	7.1		12/29/2024	0551
7440-48-4	Cobalt	6.3	*	12/29/2024	0551
7440-50-8	Copper	12	*	12/29/2024	0551
7439-89-6	Iron	15000	*	12/29/2024	0551
7439-92-1	Lead	8.4		12/29/2024	0551
7439-95-4	Magnesium	11000		12/29/2024	0551
7439-96-5	Manganese	610	*	12/29/2024	0551
7440-02-0	Nickel	16		12/29/2024	0551
7440-09-7	Potassium	530		12/29/2024	0551
7782-49-2	Selenium	5.4	*	12/29/2024	0551
7440-22-4	Silver	0.11	J*	12/29/2024	0551
7440-23-5	Sodium	82	J	12/29/2024	0551
7440-28-0	Thallium	2.0	U*	12/29/2024	0551
7440-62-2	Vanadium	11		12/29/2024	0551
7440-66-6	Zinc	28	*	12/29/2024	0551

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

Comments:

EPA SAMPLE NO.

MBHK69

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-15

% Solids: 81.1 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	3100	*	12/29/2024	0555
7440-36-0	Antimony	4.9	J	12/29/2024	0555
7440-38-2	Arsenic	14		12/29/2024	0555
7440-39-3	Barium	100		12/29/2024	0555
7440-41-7	Beryllium	1.8		12/29/2024	0555
7440-43-9	Cadmium	0.42	J	12/29/2024	0555
7440-70-2	Calcium	3300	*	12/29/2024	0555
7440-47-3	Chromium	7.7		12/29/2024	0555
7440-48-4	Cobalt	5.2	U*	12/29/2024	0555
7440-50-8	Copper	48	*	12/29/2024	0555
7439-89-6	Iron	25000	*	12/29/2024	0555
7439-92-1	Lead	110		12/29/2024	0555
7439-95-4	Magnesium	870		12/29/2024	0555
7439-96-5	Manganese	210	*	12/29/2024	0555
7440-02-0	Nickel	16		12/29/2024	0555
7440-09-7	Potassium	510	J	12/29/2024	0555
7782-49-2	Selenium	14	*	12/29/2024	0555
7440-22-4	Silver	1.0	U*	12/29/2024	0555
7440-23-5	Sodium	520	U	12/29/2024	0555
7440-28-0	Thallium	2.6	U*	12/29/2024	0555
7440-62-2	Vanadium	16		12/29/2024	0555
7440-66-6	Zinc	90	*	12/29/2024	0555

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

Comments:

EPA SAMPLE NO.

MBHK70

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-16

% Solids: 91.9 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	2800	*	12/29/2024	0559
7440-36-0	Antimony	5.3		12/29/2024	0559
7440-38-2	Arsenic	12		12/29/2024	0559
7440-39-3	Barium	110		12/29/2024	0559
7440-41-7	Beryllium	1.9		12/29/2024	0559
7440-43-9	Cadmium	0.38	J	12/29/2024	0559
7440-70-2	Calcium	2400	*	12/29/2024	0559
7440-47-3	Chromium	6.9		12/29/2024	0559
7440-48-4	Cobalt	4.4	U*	12/29/2024	0559
7440-50-8	Copper	20	*	12/29/2024	0559
7439-89-6	Iron	27000	*	12/29/2024	0559
7439-92-1	Lead	93		12/29/2024	0559
7439-95-4	Magnesium	570		12/29/2024	0559
7439-96-5	Manganese	180	*	12/29/2024	0559
7440-02-0	Nickel	16		12/29/2024	0559
7440-09-7	Potassium	460		12/29/2024	0559
7782-49-2	Selenium	16	*	12/29/2024	0559
7440-22-4	Silver	0.89	U*	12/29/2024	0559
7440-23-5	Sodium	440	U	12/29/2024	0559
7440-28-0	Thallium	2.2	U*	12/29/2024	0559
7440-62-2	Vanadium	15		12/29/2024	0559
7440-66-6	Zinc	57	*	12/29/2024	0559

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

Comments:

EPA SAMPLE NO.

MBHK71

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-17

% Solids: 91.4 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	5300	*	12/29/2024	0603
7440-36-0	Antimony	1.7	J	12/29/2024	0603
7440-38-2	Arsenic	8.8		12/29/2024	0603
7440-39-3	Barium	140		12/29/2024	0603
7440-41-7	Beryllium	1.1		12/29/2024	0603
7440-43-9	Cadmium	0.46	J	12/29/2024	0603
7440-70-2	Calcium	6300	*	12/29/2024	0603
7440-47-3	Chromium	8.3		12/29/2024	0603
7440-48-4	Cobalt	5.1	*	12/29/2024	0603
7440-50-8	Copper	27	*	12/29/2024	0603
7439-89-6	Iron	14000	*	12/29/2024	0603
7439-92-1	Lead	140		12/29/2024	0603
7439-95-4	Magnesium	1200		12/29/2024	0603
7439-96-5	Manganese	760	*	12/29/2024	0603
7440-02-0	Nickel	16		12/29/2024	0603
7440-09-7	Potassium	550		12/29/2024	0603
7782-49-2	Selenium	7.1	*	12/29/2024	0603
7440-22-4	Silver	1.0	U*	12/29/2024	0603
7440-23-5	Sodium	500	U	12/29/2024	0603
7440-28-0	Thallium	2.5	U*	12/29/2024	0603
7440-62-2	Vanadium	19		12/29/2024	0603
7440-66-6	Zinc	99	*	12/29/2024	0603

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

Comments:

EPA SAMPLE NO.

MBHK72

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-18

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

Analytical Method: ICP_AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7300	*	12/29/2024	0607
7440-36-0	Antimony	1.6	J	12/29/2024	0607
7440-38-2	Arsenic	11		12/29/2024	0607
7440-39-3	Barium	160		12/29/2024	0607
7440-41-7	Beryllium	1.1		12/29/2024	0607
7440-43-9	Cadmium	0.78		12/29/2024	0607
7440-70-2	Calcium	15000	*	12/29/2024	0607
7440-47-3	Chromium	11		12/29/2024	0607
7440-48-4	Cobalt	6.8	*	12/29/2024	0607
7440-50-8	Copper	18	*	12/29/2024	0607
7439-89-6	Iron	17000	*	12/29/2024	0607
7439-92-1	Lead	89		12/29/2024	0607
7439-95-4	Magnesium	2500		12/29/2024	0607
7439-96-5	Manganese	1900	*	12/29/2024	0607
7440-02-0	Nickel	17		12/29/2024	0607
7440-09-7	Potassium	780		12/29/2024	0607
7782-49-2	Selenium	9.0	*	12/29/2024	0607
7440-22-4	Silver	0.39	J*	12/29/2024	0607
7440-23-5	Sodium	470	U	12/29/2024	0607
7440-28-0	Thallium	2.4	U*	12/29/2024	0607
7440-62-2	Vanadium	16		12/29/2024	0607
7440-66-6	Zinc	65	*	12/29/2024	0607

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

Comments:

EPA SAMPLE NO.

MBHK73

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-21

% Solids: 86.4 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	7500	*	12/29/2024	0622
7440-36-0	Antimony	2.0	J	12/29/2024	0622
7440-38-2	Arsenic	9.6		12/29/2024	0622
7440-39-3	Barium	160		12/29/2024	0622
7440-41-7	Beryllium	1.2		12/29/2024	0622
7440-43-9	Cadmium	0.82		12/29/2024	0622
7440-70-2	Calcium	8900	*	12/29/2024	0622
7440-47-3	Chromium	12		12/29/2024	0622
7440-48-4	Cobalt	5.8	*	12/29/2024	0622
7440-50-8	Copper	14	*	12/29/2024	0622
7439-89-6	Iron	17000	*	12/29/2024	0622
7439-92-1	Lead	26		12/29/2024	0622
7439-95-4	Magnesium	2400		12/29/2024	0622
7439-96-5	Manganese	1800	*	12/29/2024	0622
7440-02-0	Nickel	17		12/29/2024	0622
7440-09-7	Potassium	560		12/29/2024	0622
7782-49-2	Selenium	9.1	*	12/29/2024	0622
7440-22-4	Silver	0.40	J*	12/29/2024	0622
7440-23-5	Sodium	460	U	12/29/2024	0622
7440-28-0	Thallium	2.3	U*	12/29/2024	0622
7440-62-2	Vanadium	15		12/29/2024	0622
7440-66-6	Zinc	51	*	12/29/2024	0622

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

Comments:

EPA SAMPLE NO.

MBHK74

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.: MBHK55

Matrix: SOIL Lab Sample ID: P5032-22

% Solids: 92.7 Date Received: 11/27/2024

Analytical Method: ICP_AES

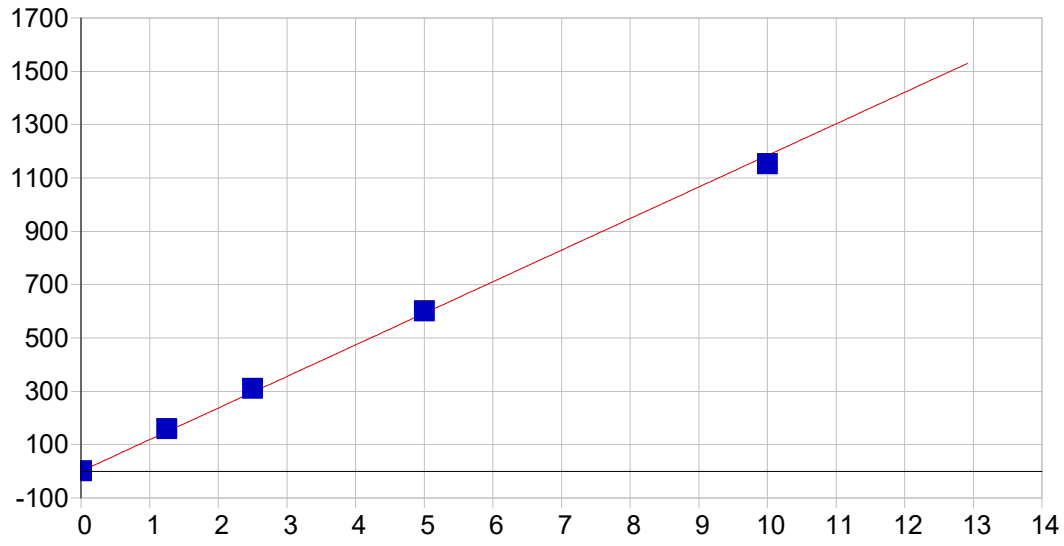
Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6200	*	12/29/2024	0626
7440-36-0	Antimony	0.47	J	12/29/2024	0626
7440-38-2	Arsenic	4.8		12/29/2024	0626
7440-39-3	Barium	110		12/29/2024	0626
7440-41-7	Beryllium	0.93		12/29/2024	0626
7440-43-9	Cadmium	0.48		12/29/2024	0626
7440-70-2	Calcium	70000	*	12/29/2024	0626
7440-47-3	Chromium	11		12/29/2024	0626
7440-48-4	Cobalt	5.8	*	12/29/2024	0626
7440-50-8	Copper	8.0	*	12/29/2024	0626
7439-89-6	Iron	13000	*	12/29/2024	0626
7439-92-1	Lead	19		12/29/2024	0626
7439-95-4	Magnesium	6700		12/29/2024	0626
7439-96-5	Manganese	610	*	12/29/2024	0626
7440-02-0	Nickel	14		12/29/2024	0626
7440-09-7	Potassium	470	J	12/29/2024	0626
7782-49-2	Selenium	4.1	*	12/29/2024	0626
7440-22-4	Silver	0.96	U*	12/29/2024	0626
7440-23-5	Sodium	480	U	12/29/2024	0626
7440-28-0	Thallium	2.4	U*	12/29/2024	0626
7440-62-2	Vanadium	12		12/29/2024	0626
7440-66-6	Zinc	40	*	12/29/2024	0626

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

Comments:

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



As 189.042 {478}

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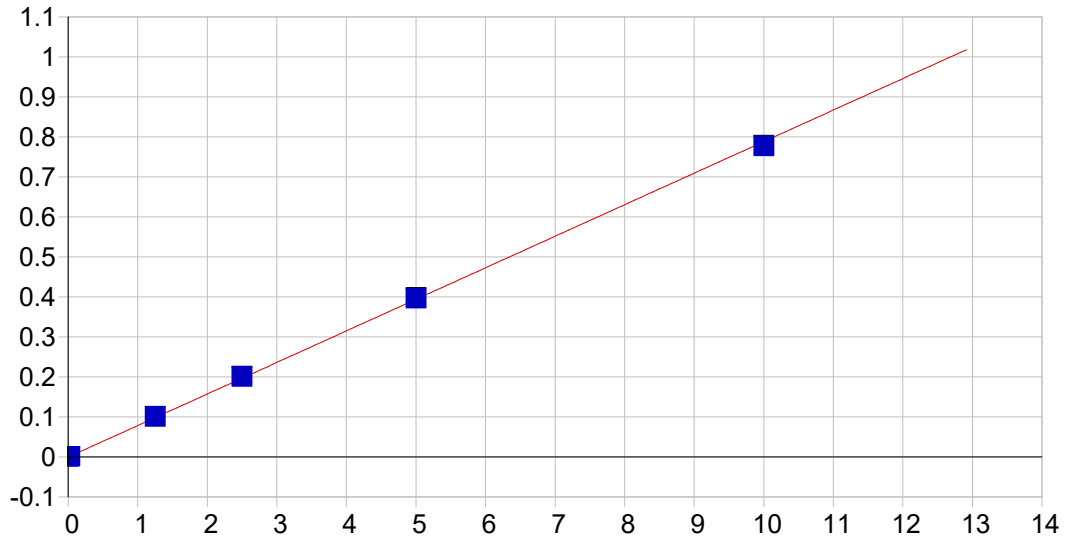
A0 (Offset):	0.448360	Re-Slope:	1.000000
A1 (Gain):	118.415562	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999465	Status:	OK.
Std Error of Est:	0.064686		
Predicted MDL:	0.006216		
Predicted MQL:	0.020719		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.44832	.500	1
S1	.01000	.00927	-.001	-7.31	1.5442	.163	1
S2	1.2500	1.3377	.088	7.02	158.23	.513	1
S3	2.5000	2.6157	.116	4.63	308.95	1.13	1
S4	5.0000	5.0692	.069	1.38	598.23	1.61	1
S5	10.000	9.7281	-.272	-2.72	1147.4	1.95	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



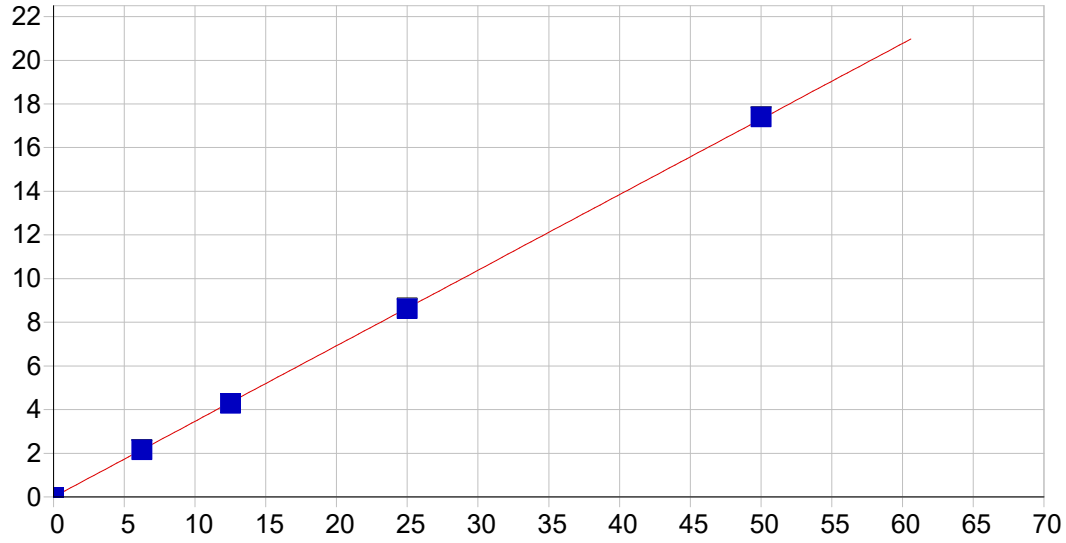
Tl 190.856 {477}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000390	Re-Slope:	1.000000
A1 (Gain):	0.078861	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.003985		
Predicted MQL:	0.013285		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00039	.000	1
S1	.02500	.02787	.003	11.5	.00174	.000	1
S2	1.2500	1.2856	.036	2.85	.10074	.000	1
S3	2.5000	2.5527	.053	2.11	.20041	.001	1
S4	5.0000	5.0416	.042	.831	.39618	.001	1
S5	10.000	9.8674	-.133	-1.33	.77573	.002	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



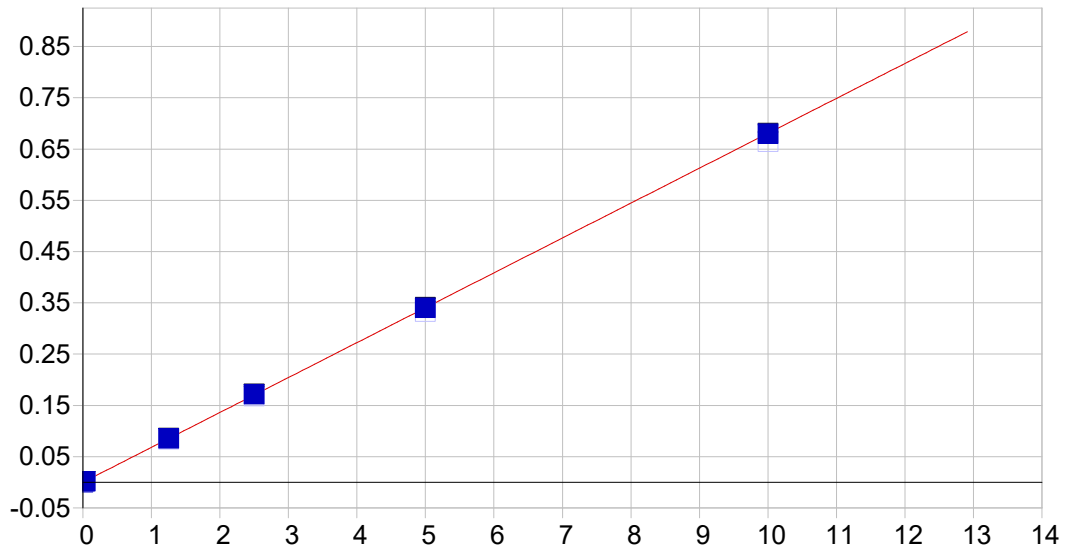
Pb 220.353 {453}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000899	Re-Slope:	1.000000
A1 (Gain):	0.346133	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000076		
Predicted MDL:	0.002171		
Predicted MQL:	0.007236		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00090	.000	1
S1	.01000	.00972	-.000	-2.76	.00425	.000	1
S2	6.2500	6.2027	-.047	-.757	2.1474	.005	1
S3	12.500	12.374	-.126	-1.01	4.2830	.003	1
S4	25.000	24.918	-.082	-.328	8.6240	.020	1
S5	50.000	50.256	.256	.511	17.392	.023	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



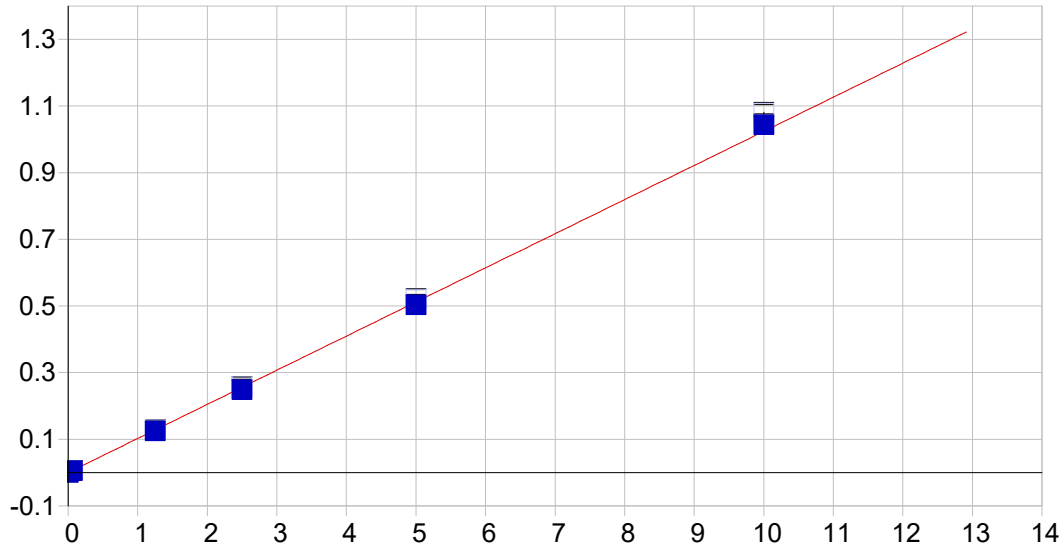
Se 196.090 {472}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000083	Re-Slope:	1.000000
A1 (Gain):	0.068066	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.000019		
Predicted MDL:	0.005525		
Predicted MQL:	0.018417		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00008	.000	1
S1	.03500	.02851	-.006	-18.5	.00202	.000	1
S2	1.2500	1.2578	.008	.620	.08378	.001	1
S3	2.5000	2.5191	.019	.764	.16772	.001	1
S4	5.0000	4.9991	-.001	-.017	.33270	.001	1
S5	10.000	9.9806	-.019	-.194	.66411	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



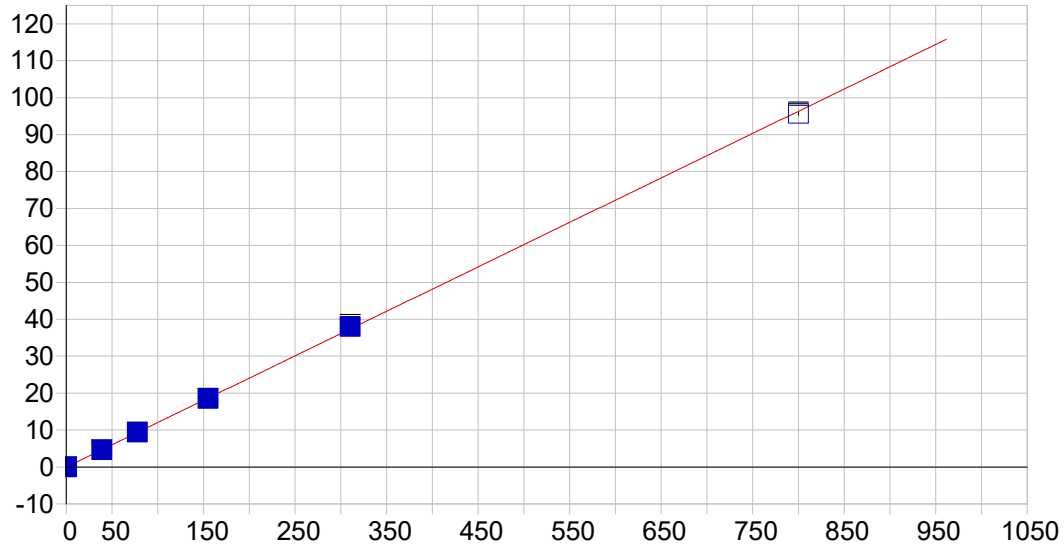
Sb 206.833 {463}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000004	Re-Slope:	1.000000
A1 (Gain):	0.102398	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999794	Status:	OK.
Std Error of Est:	0.000088		
Predicted MDL:	0.004494		
Predicted MQL:	0.014979		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00000	.000	1
S1	.06000	.05577	-.004	-7.05	.00572	.000	1
S2	1.2500	1.2137	-.036	-2.91	.12856	.000	1
S3	2.5000	2.4316	-.068	-2.74	.25755	.001	1
S4	5.0000	4.9169	-.083	-1.66	.52060	.001	1
S5	10.000	10.192	.192	1.92	1.0779	.003	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



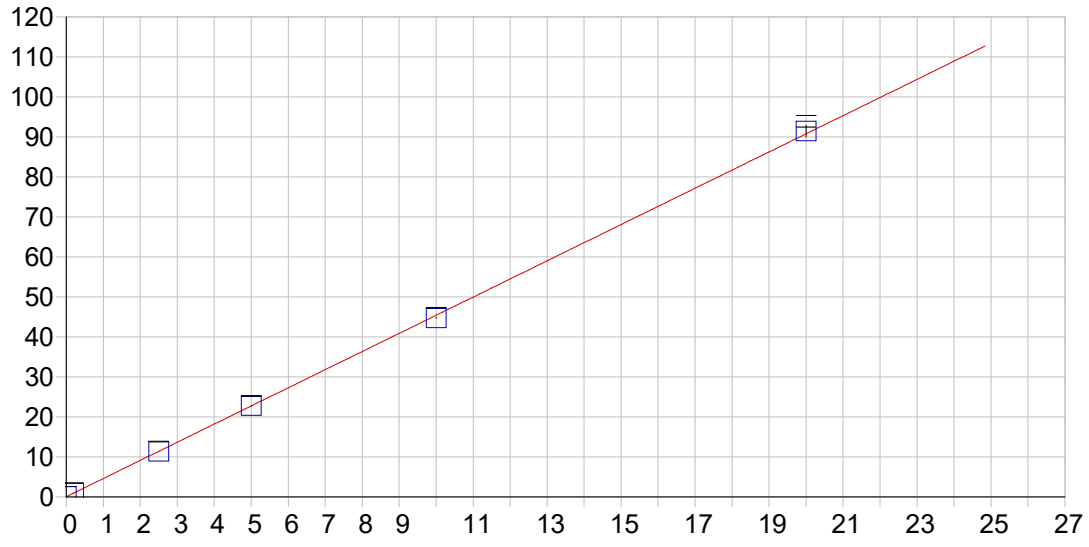
Al 396.152 { 85}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001994	Re-Slope:	1.000000
A1 (Gain):	0.120415	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999948	Status:	OK.
Std Error of Est:	0.000760		
Predicted MDL:	0.026066		
Predicted MQL:	0.086887		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00199	.003	1
S1	.20000	.20082	.001	.409	.02223	.001	1
S2	38.750	38.883	.133	.342	4.6851	.024	1
S3	77.500	77.982	.482	.622	9.3984	.037	1
S4	155.00	153.96	-1.04	-.671	18.557	.062	1
S5	310.00	315.55	5.55	1.79	38.035	.609	1
S6	800.00	794.87	-5.13	-.641	95.713	.392	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



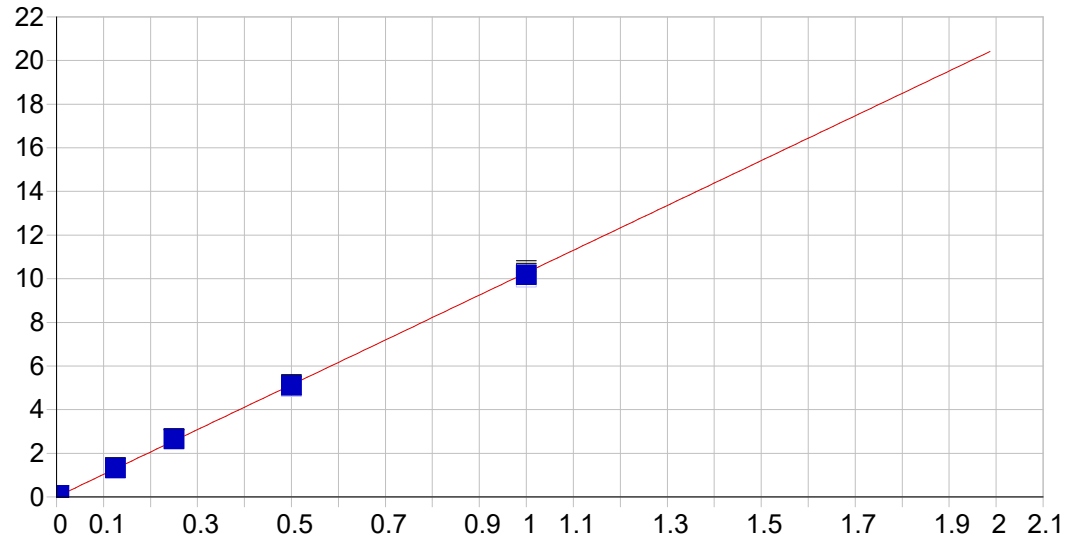
Ba 493.409 { 68}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.058496	Re-Slope:	1.000000
A1 (Gain):	4.535959	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999954	Status:	OK.
Std Error of Est:	0.004605		
Predicted MDL:	0.001461		
Predicted MQL:	0.004870		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.05848	.003	1
S1	.20000	.20647	.006	3.23	.99502	.007	1
S2	2.5000	2.4918	-.008	-.328	11.361	.096	1
S3	5.0000	5.0065	.006	.130	22.768	.118	1
S4	10.000	9.8525	-.147	-1.47	44.749	.142	1
S5	20.000	20.143	.143	.714	91.425	1.42	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



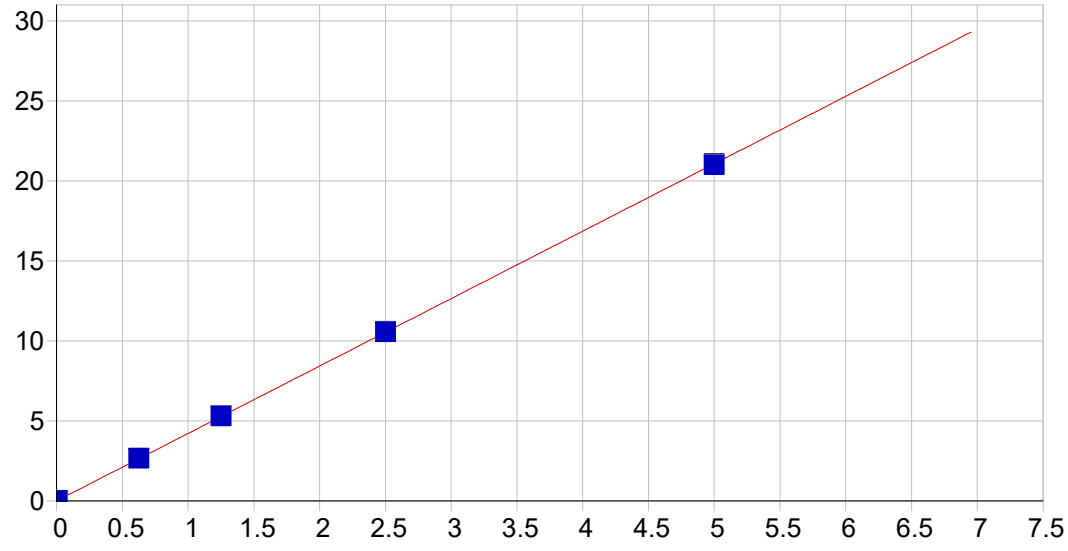
Be 234.861 {144}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002231	Re-Slope:	1.000000
A1 (Gain):	10.273377	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999866	Status:	OK.
Std Error of Est:	0.000624		
Predicted MDL:	0.000162		
Predicted MQL:	0.000540		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00223	.002	1
S1	.00500	.00518	.000	3.54	.05534	.003	1
S2	.12500	.12894	.004	3.15	1.3114	.005	1
S3	.25000	.25804	.008	3.22	2.6222	.018	1
S4	.50000	.49710	-.003	-.581	5.0470	.042	1
S5	1.0000	.99074	-.009	-.926	10.056	.190	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



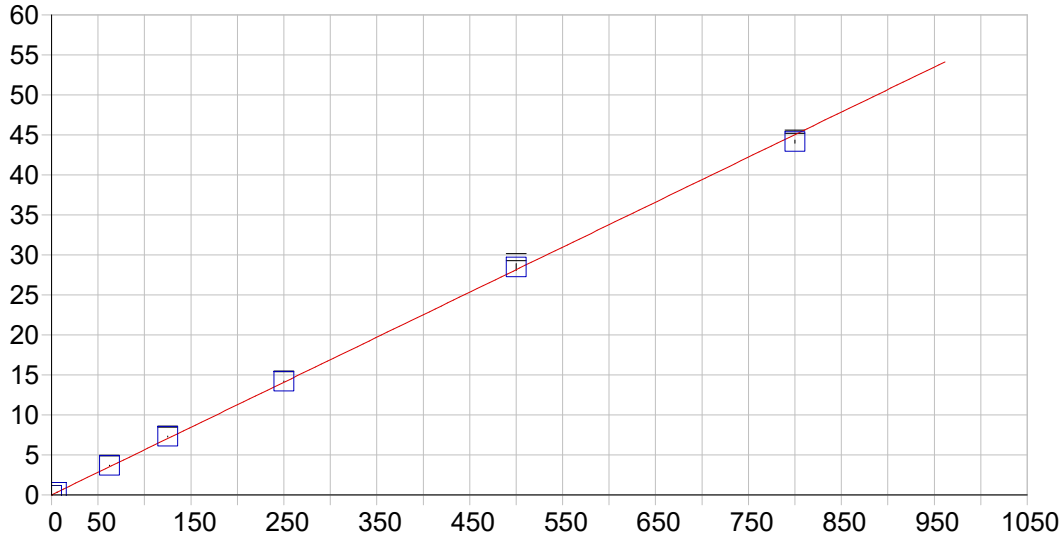
Cd 214.438 {457}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000592	Re-Slope:	1.000000
A1 (Gain):	4.214745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000153		
Predicted MDL:	0.000111		
Predicted MQL:	0.000371		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00059	.000	1
S1	.00500	.00507	.000	1.48	.02206	.001	1
S2	.62500	.63057	.006	.891	2.6623	.004	1
S3	1.2500	1.2585	.008	.677	5.3128	.005	1
S4	2.5000	2.5035	.003	.139	10.568	.035	1
S5	5.0000	4.9824	-.018	-.352	21.033	.040	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



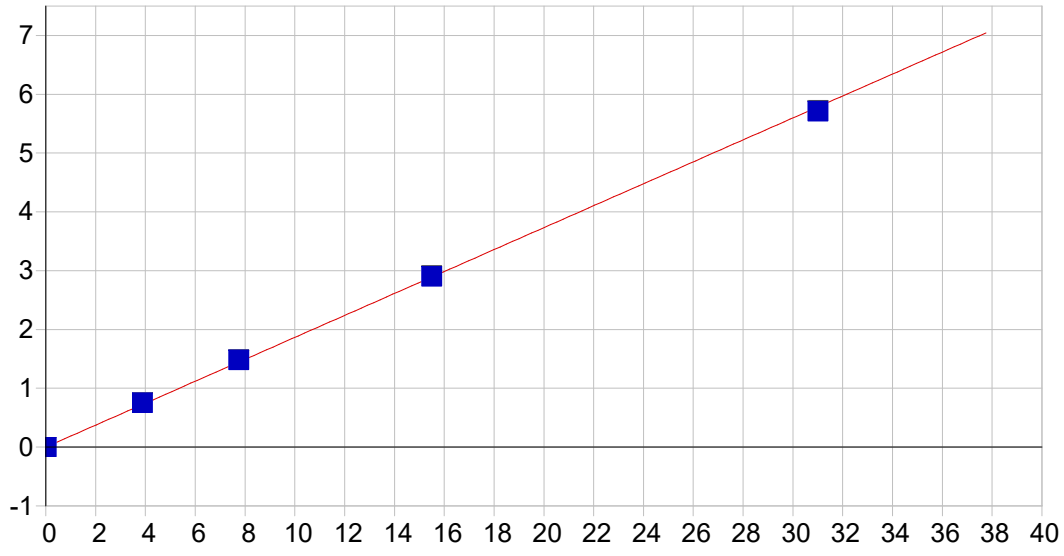
Ca 373.690 { 90}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008380	Re-Slope:	1.000000
A1 (Gain):	0.056286	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999801	Status:	OK.
Std Error of Est:	0.003920		
Predicted MDL:	0.037206		
Predicted MQL:	0.124020		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00070	-.001	.000	.00834	.002	1
S1	5.0000	5.2922	.292	5.84	.30626	.003	1
S2	62.500	65.208	2.71	4.33	3.6787	.028	1
S3	125.00	129.64	4.64	3.72	7.3056	.048	1
S4	250.00	252.27	2.27	.908	14.208	.043	1
S5	500.00	505.64	5.64	1.13	28.469	.432	1
S6	800.00	784.45	-15.6	-1.94	44.162	.209	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



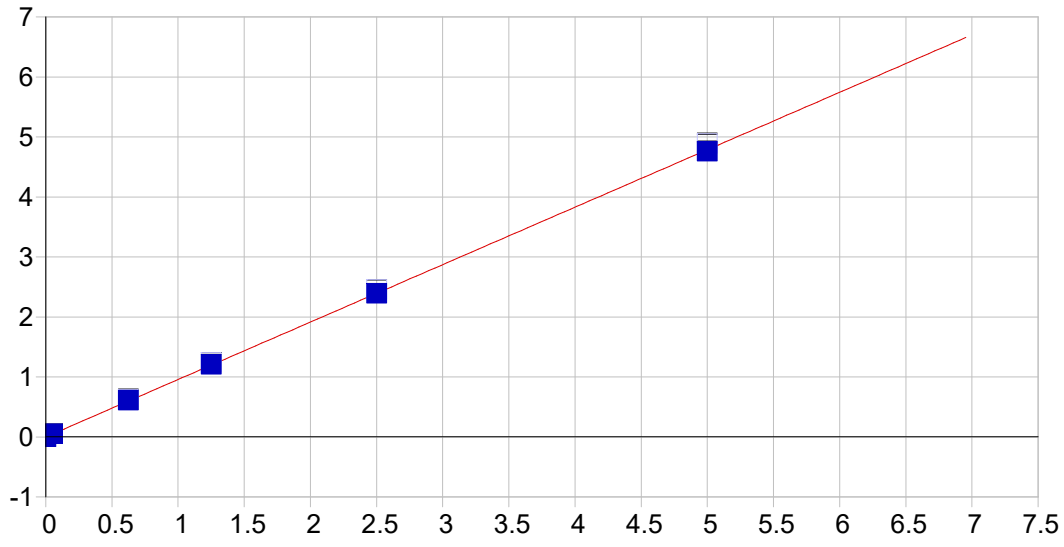
Cr 267.716 {126}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000005	Re-Slope:	1.000000
A1 (Gain):	0.186593	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999870	Status:	OK.
Std Error of Est:	0.000089		
Predicted MDL:	0.001035		
Predicted MQL:	0.003449		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.000	1
S1	.01000	.01055	.001	5.46	.00197	.000	1
S2	3.8750	4.0265	.152	3.91	.75189	.001	1
S3	7.7500	7.9262	.176	2.27	1.4801	.001	1
S4	15.500	15.561	.061	.392	2.9058	.004	1
S5	31.000	30.611	-.389	-1.25	5.7163	.008	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



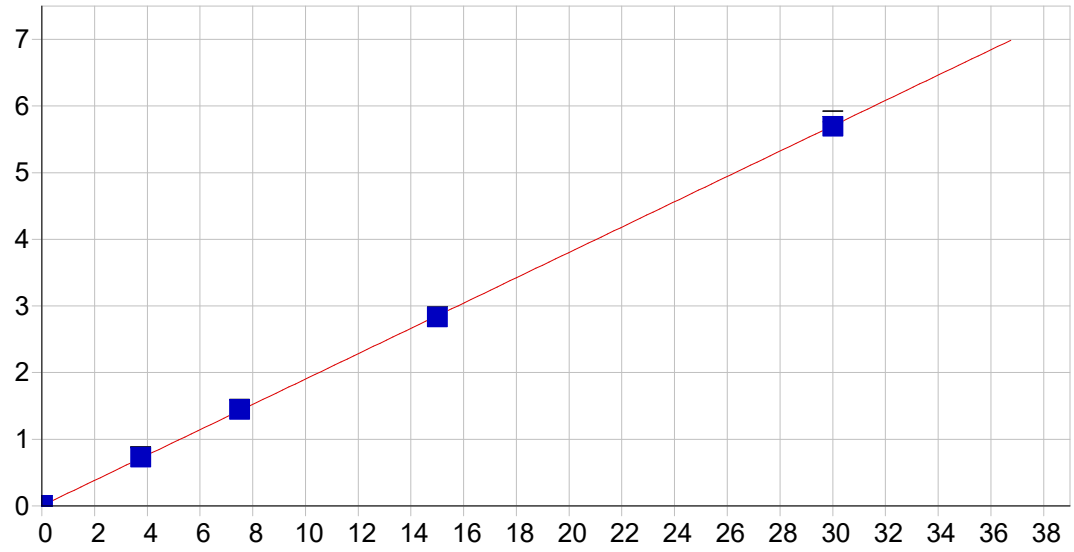
Co 228.616 {448}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000720	Re-Slope:	1.000000
A1 (Gain):	0.957363	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999942	Status:	OK.
Std Error of Est:	0.000282		
Predicted MDL:	0.000491		
Predicted MQL:	0.001638		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00073	.000	1
S1	.05000	.05504	.005	10.1	.05216	.001	1
S2	.62500	.63979	.015	2.37	.62808	.002	1
S3	1.2500	1.2626	.013	1.01	1.2407	.001	1
S4	2.5000	2.4968	-.003	-.128	2.4548	.003	1
S5	5.0000	4.9709	-.029	-.583	4.8885	.009	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



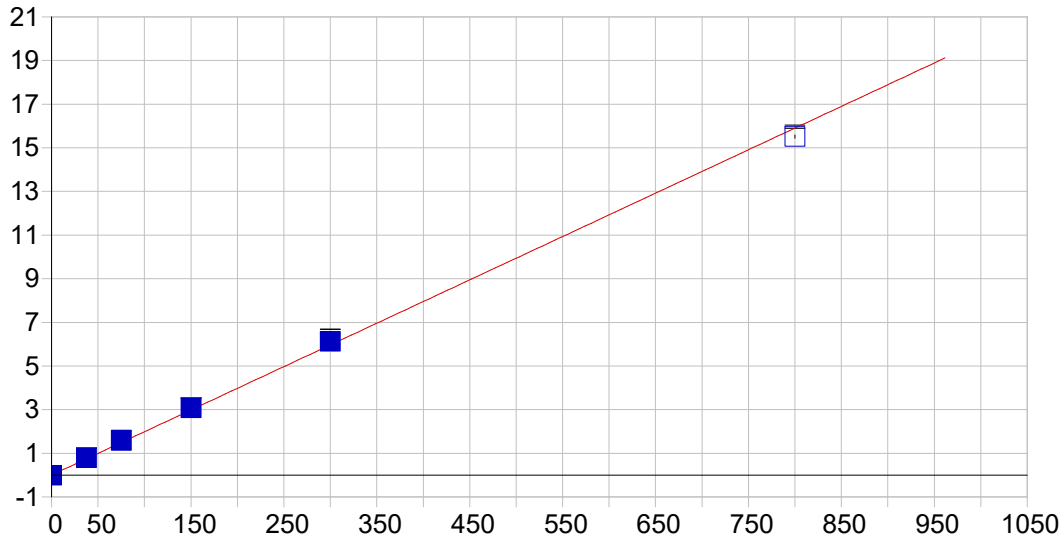
Cu 324.754 {104}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002973	Re-Slope:	1.000000
A1 (Gain):	0.190033	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.000073		
Predicted MDL:	0.008266		
Predicted MQL:	0.027555		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00297	.000	1
S1	.02500	.02242	-.003	-10.3	.00723	.002	1
S2	3.7500	3.8248	.075	1.99	.72972	.008	1
S3	7.5000	7.5934	.093	1.24	1.4458	.006	1
S4	15.000	14.882	-.118	-.790	2.8306	.014	1
S5	30.000	29.953	-.047	-.157	5.6944	.081	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



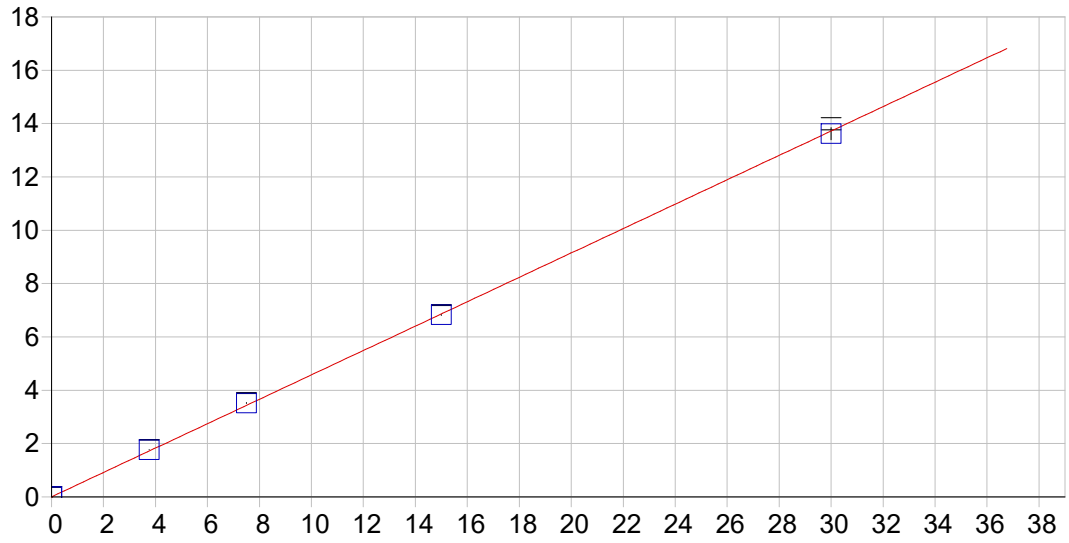
Fe 259.837 {130}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000101	Re-Slope:	1.000000
A1 (Gain):	0.019881	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999525	Status:	OK.
Std Error of Est:	0.000268		
Predicted MDL:	0.038303		
Predicted MQL:	0.127677		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00005	-.000	.000	.00010	.001	1
S1	.10000	.12973	.030	29.7	.00268	.000	1
S2	37.500	40.013	2.51	6.70	.79576	.006	1
S3	75.000	79.490	4.49	5.99	1.5808	.009	1
S4	150.00	154.81	4.81	3.21	3.0786	.008	1
S5	300.00	307.90	7.90	2.63	6.1228	.106	1
S6	800.00	780.25	-19.8	-2.47	15.512	.072	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



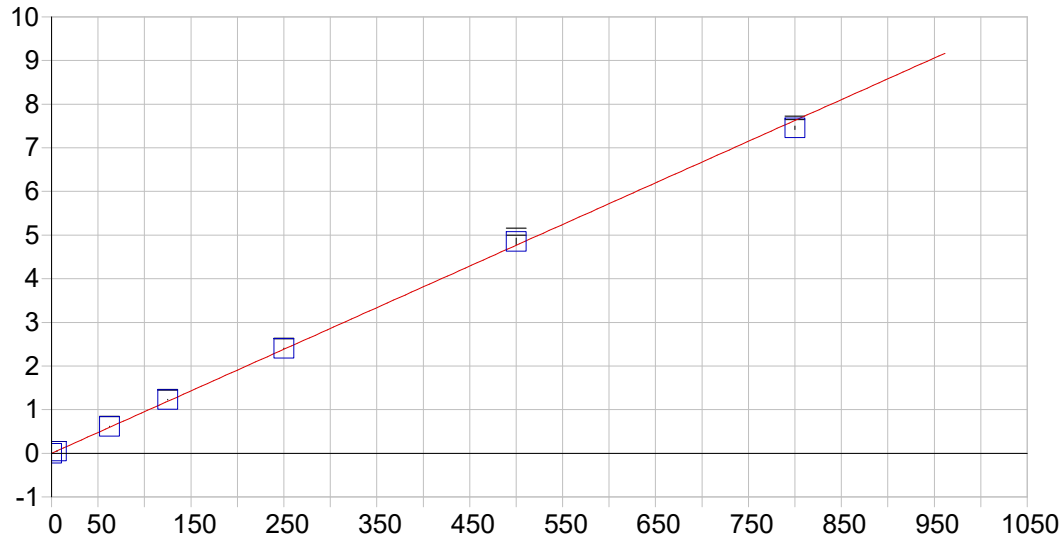
Mn 257.610 {131}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001233	Re-Slope:	1.000000
A1 (Gain):	0.457311	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999907	Status:	OK.
Std Error of Est:	0.000222		
Predicted MDL:	0.001458		
Predicted MQL:	0.004860		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00123	.001	1
S1	.01500	.01540	.000	2.69	.00828	.001	1
S2	3.7500	3.8622	.112	2.99	1.7675	.009	1
S3	7.5000	7.6928	.193	2.57	3.5192	.019	1
S4	15.000	14.919	-.081	-.542	6.8237	.016	1
S5	30.000	29.776	-.224	-.747	13.618	.229	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



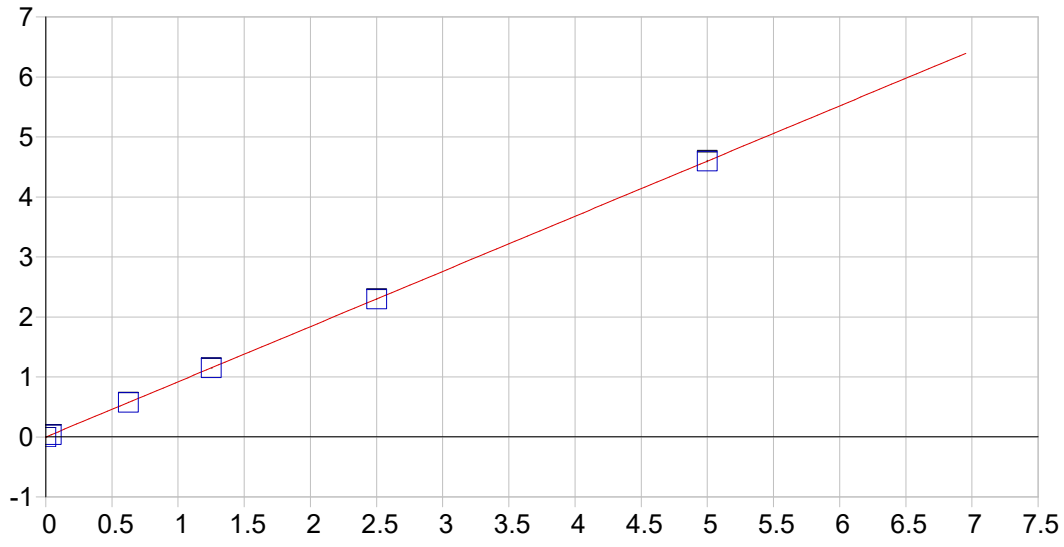
Mg 279.079 {121}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000488	Re-Slope:	1.000000
A1 (Gain):	0.009535	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999770	Status:	OK.
Std Error of Est:	0.000713		
Predicted MDL:	0.100492		
Predicted MQL:	0.334972		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00068	-.001	.000	-.00049	.002	1
S1	5.0000	5.3250	.325	6.50	.05028	.001	1
S2	62.500	64.663	2.16	3.46	.61606	.005	1
S3	125.00	128.96	3.96	3.17	1.2291	.007	1
S4	250.00	252.15	2.15	.860	2.4037	.007	1
S5	500.00	509.14	9.14	1.83	4.8540	.082	1
S6	800.00	782.26	-17.7	-2.22	7.4582	.042	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



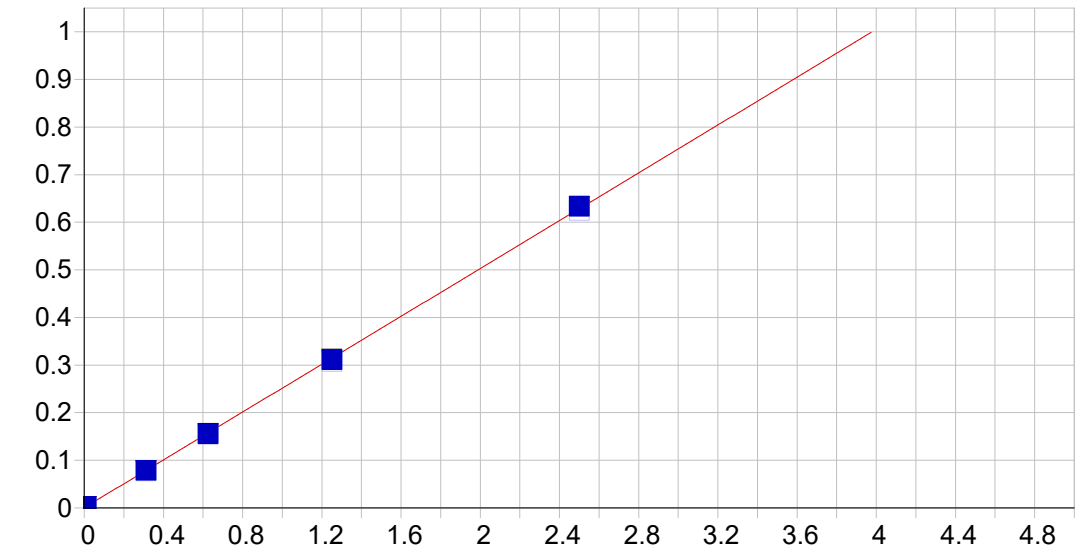
Ni 231.604 {446}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000531	Re-Slope:	1.000000
A1 (Gain):	0.919575	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999999	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.000616		
Predicted MQL:	0.002054		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00053	.000	1
S1	.04000	.04094	.001	2.35	.03712	.000	1
S2	.62500	.62509	.000	.015	.57429	.002	1
S3	1.2500	1.2509	.001	.073	1.1498	.001	1
S4	2.5000	2.4992	-.001	-.033	2.2976	.006	1
S5	5.0000	4.9989	-.001	-.022	4.5963	.012	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



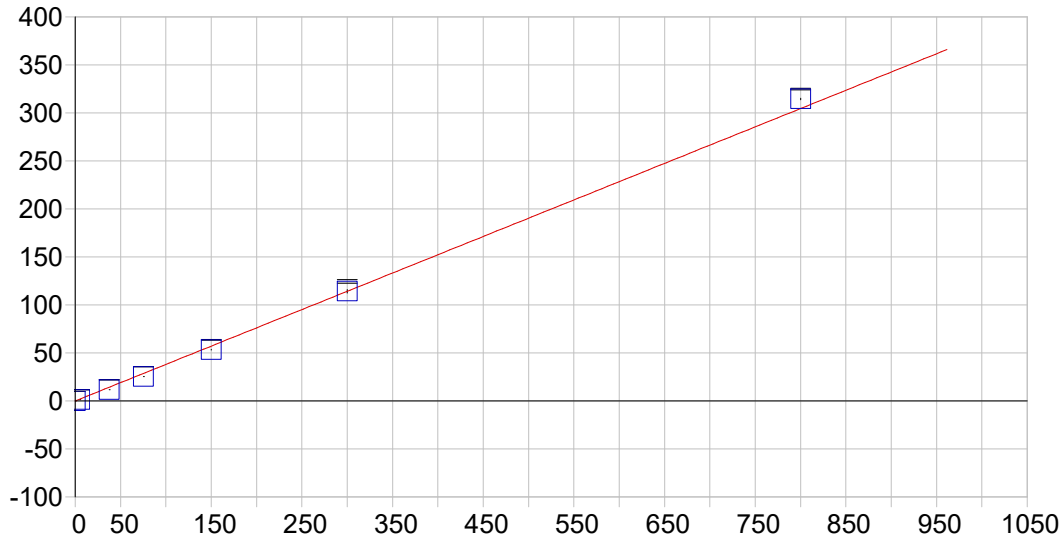
Ag 328.068 {103}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000486	Re-Slope:	1.000000
A1 (Gain):	0.251214	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.001441		
Predicted MQL:	0.004805		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00049	.000	1
S1	.01000	.00997	-.000	-.271	.00299	.000	1
S2	.31250	.30992	-.003	-.827	.07721	.000	1
S3	.62500	.61969	-.005	-.849	.15390	.000	1
S4	1.2500	1.2382	-.012	-.942	.30702	.001	1
S5	2.5000	2.5197	.020	.788	.62443	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



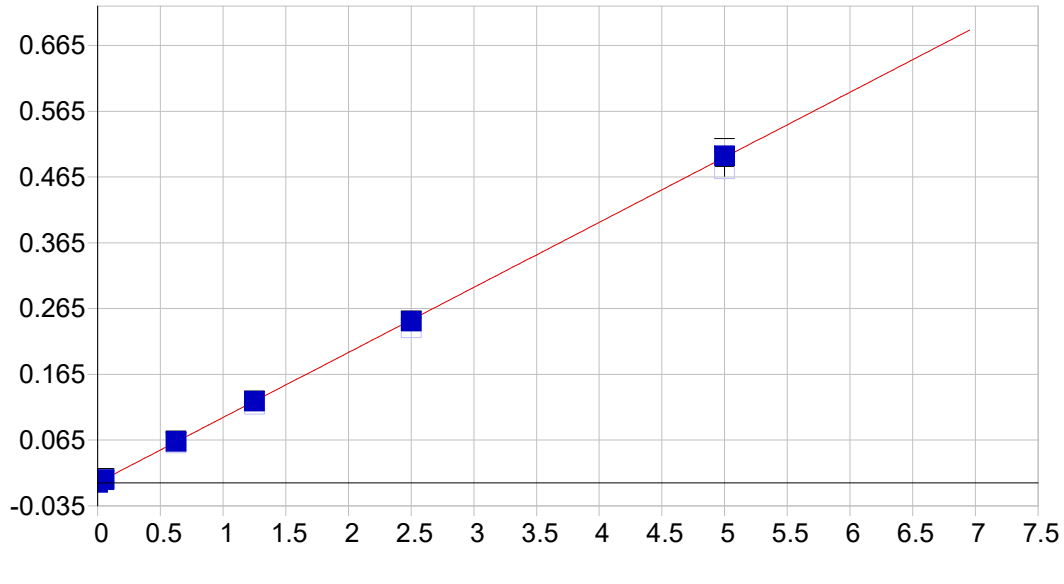
Na 818.326 { 41}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.023855	Re-Slope:	1.000000
A1 (Gain):	0.380679	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998474	Status:	OK.
Std Error of Est:	0.065106		
Predicted MDL:	0.027301		
Predicted MQL:	0.091005		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00309	.003	.000	-.02268	.010	1
S1	5.0000	3.5590	-1.44	-28.8	1.3310	.020	1
S2	37.500	30.514	-6.99	-18.6	11.592	.019	1
S3	75.000	66.613	-8.39	-11.2	25.334	.137	1
S4	150.00	140.14	-9.86	-6.57	53.326	.332	1
S5	300.00	300.14	.145	.048	114.23	1.74	1
S6	800.00	826.53	26.5	3.32	314.62	.793	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



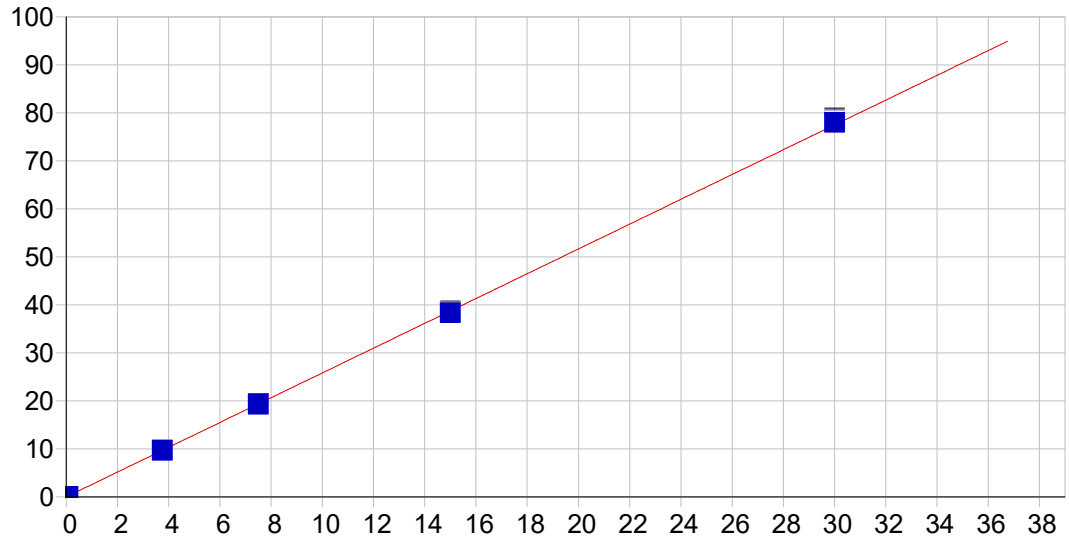
V 292.402 {115}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000489	Re-Slope:	1.000000
A1 (Gain):	0.098915	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999967	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.011745		
Predicted MQL:	0.039149		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00049	.001	1
S1	.05000	.04663	-.003	-6.74	.00509	.001	1
S2	.62500	.62958	.005	.734	.06029	.001	1
S3	1.2500	1.2483	-.002	-.135	.11901	.000	1
S4	2.5000	2.4773	-.023	-.908	.23562	.001	1
S5	5.0000	5.0233	.023	.466	.47755	.011	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



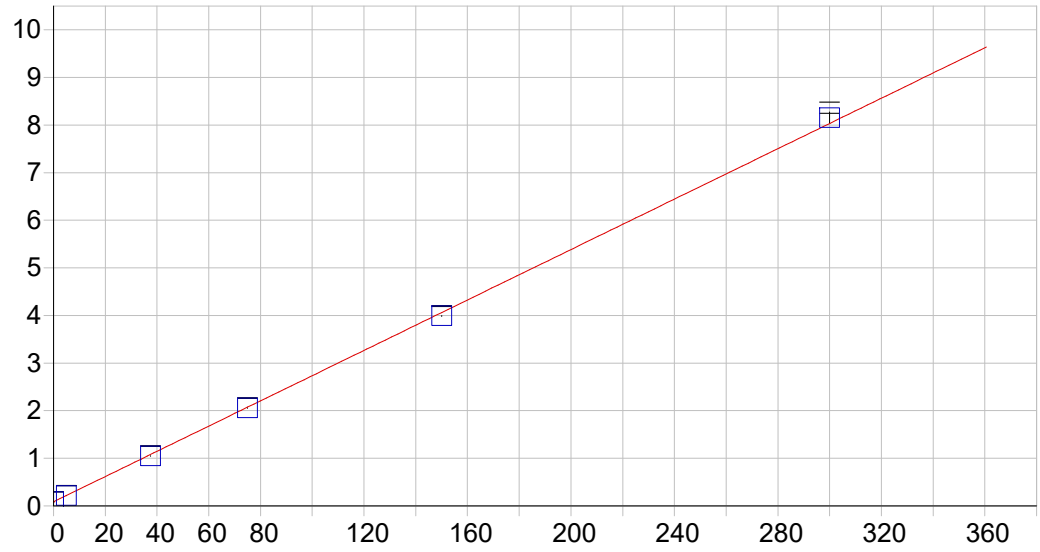
Zn 213.856 {158}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008135	Re-Slope:	1.000000
A1 (Gain):	2.582716	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.001444		
Predicted MDL:	0.000617		
Predicted MQL:	0.002058		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00813	.000	1
S1	.06000	.06267	.003	4.45	.17048	.002	1
S2	3.7500	3.7416	-.008	-.225	9.7189	.047	1
S3	7.5000	7.4577	-.042	-.564	19.364	.097	1
S4	15.000	14.841	-.159	-1.06	38.529	.172	1
S5	30.000	30.207	.207	.689	78.403	.507	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



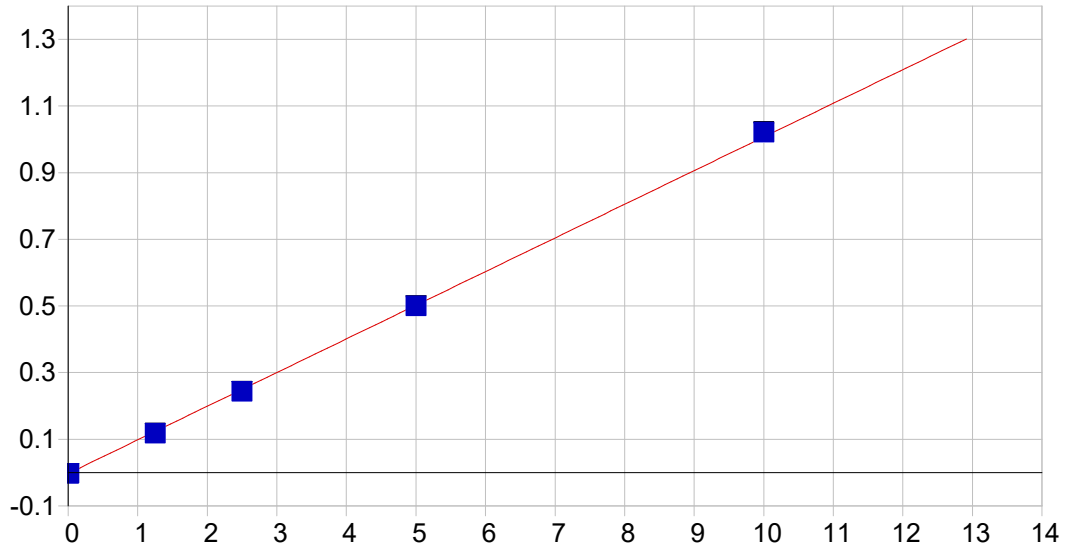
K 769.896 { 44}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.087242	Re-Slope:	1.000000
A1 (Gain):	0.026489	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999856	Status:	OK.
Std Error of Est:	0.000927		
Predicted MDL:	0.157273		
Predicted MQL:	0.524243		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00034	.000	.000	.08725	.001	1
S1	5.0000	4.8669	-.133	-2.66	.21616	.004	1
S2	37.500	36.366	-1.13	-3.02	1.0505	.006	1
S3	75.000	74.298	-.702	-.935	2.0553	.007	1
S4	150.00	147.33	-2.67	-1.78	3.9899	.008	1
S5	300.00	304.64	4.64	1.55	8.1567	.119	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



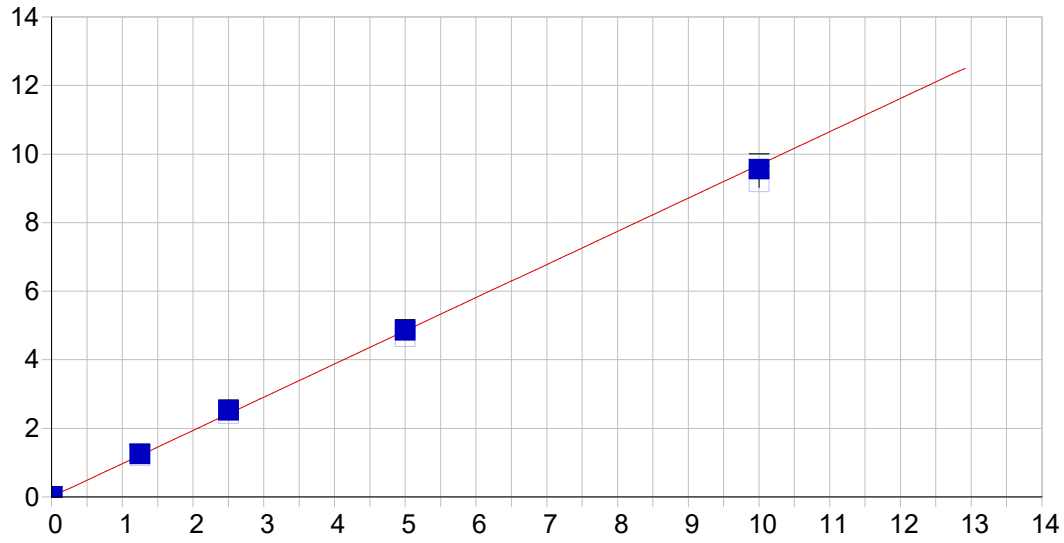
P 177.495 {490}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002756	Re-Slope:	1.000000
A1 (Gain):	0.100987	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999822	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.002776		
Predicted MQL:	0.009254		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00276	.000	1
S1	.01000	.00780	-.002	-22.0	-.00196	.000	1
S2	1.2500	1.1938	-.056	-4.50	.11762	.000	1
S3	2.5000	2.4387	-.061	-2.45	.24316	.001	1
S4	5.0000	4.9766	-.023	-.467	.49909	.002	1
S5	10.000	10.143	.143	1.43	1.0201	.002	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



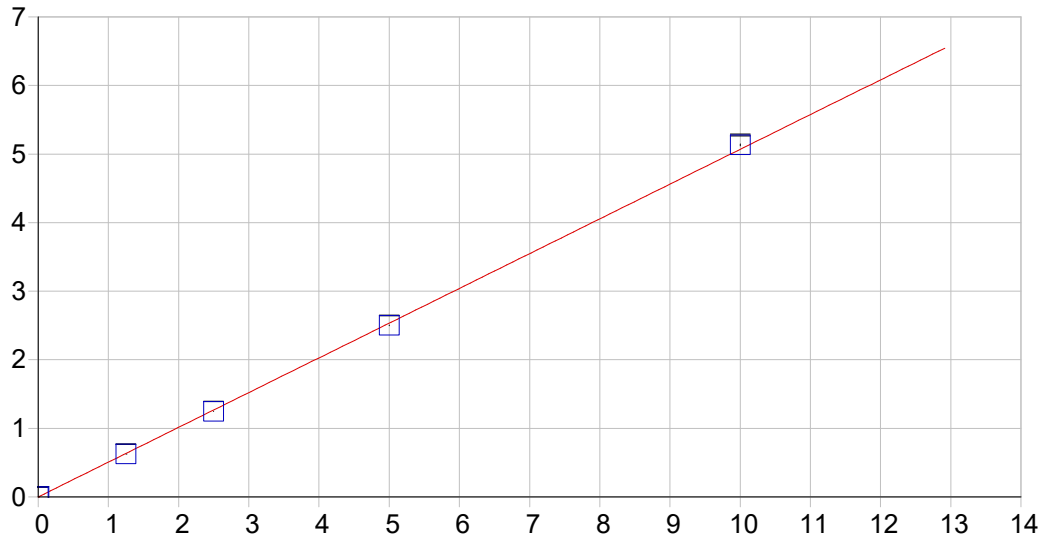
B 249.678 {135}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005014	Re-Slope:	1.000000
A1 (Gain):	0.967752	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999470	Status:	OK.
Std Error of Est:	0.000509		
Predicted MDL:	0.002022		
Predicted MQL:	0.006740		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00502	.002	1
S1	.01000	-.00078	-.011	-108.	.00421	.001	1
S2	1.2500	1.2832	.033	2.66	1.2008	.005	1
S3	2.5000	2.6021	.102	4.08	2.4312	.018	1
S4	5.0000	5.0077	.008	.154	4.6672	.027	1
S5	10.000	9.8681	-.132	-1.32	9.1869	.162	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



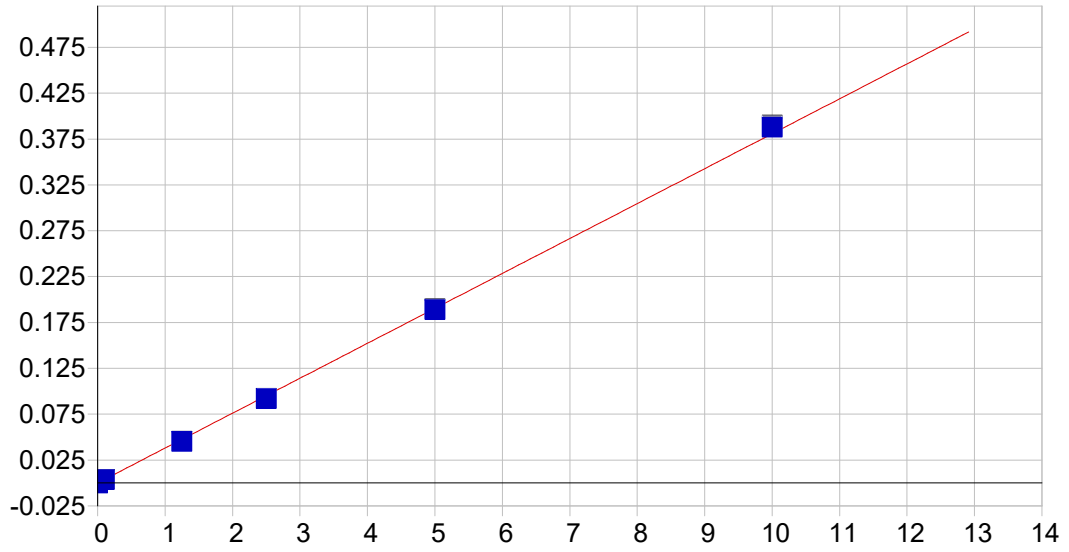
Mo 202.030 {467}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000168	Re-Slope:	1.000000
A1 (Gain):	0.506802	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999907	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.000637		
Predicted MQL:	0.002125		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00017	.000	1
S1	.01000	.01068	.001	6.75	.00558	.000	1
S2	1.2500	1.2314	-.019	-1.49	.62425	.001	1
S3	2.5000	2.4603	-.040	-1.59	1.2470	.002	1
S4	5.0000	4.9314	-.069	-1.37	2.4994	.005	1
S5	10.000	10.126	.126	1.26	5.1322	.013	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



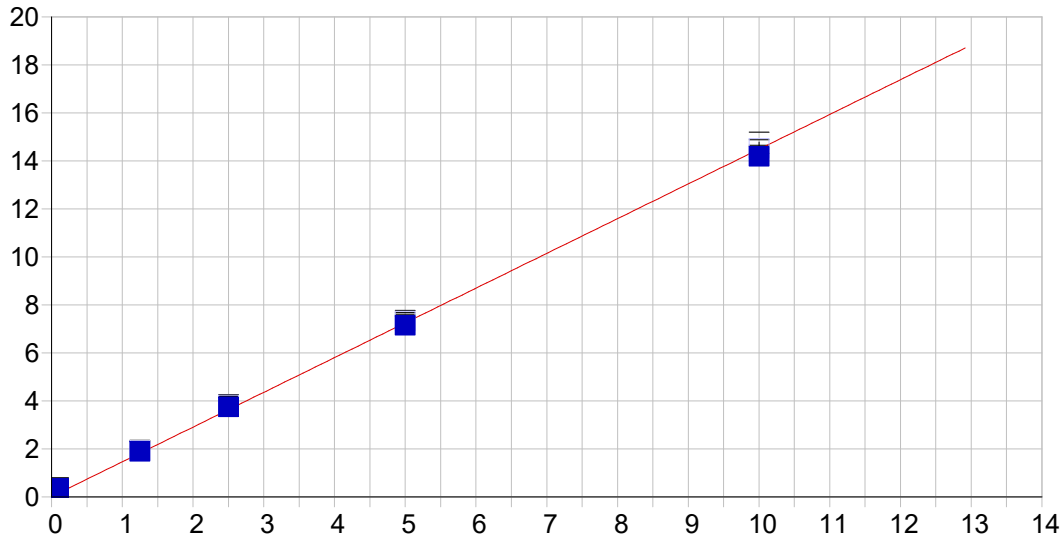
S 182.034 {485}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000074	Re-Slope:	1.000000
A1 (Gain):	0.038087	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999741	Status:	OK.
Std Error of Est:	0.000046		
Predicted MDL:	0.006109		
Predicted MQL:	0.020363		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00007	.000	1
S1	.10000	.09805	-.002	-1.95	.00366	.000	1
S2	1.2500	1.1884	-.062	-4.93	.04534	.000	1
S3	2.5000	2.4145	-.086	-3.42	.09219	.000	1
S4	5.0000	4.9614	-.039	-.771	.18950	.000	1
S5	10.000	10.188	.188	1.88	.38916	.001	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



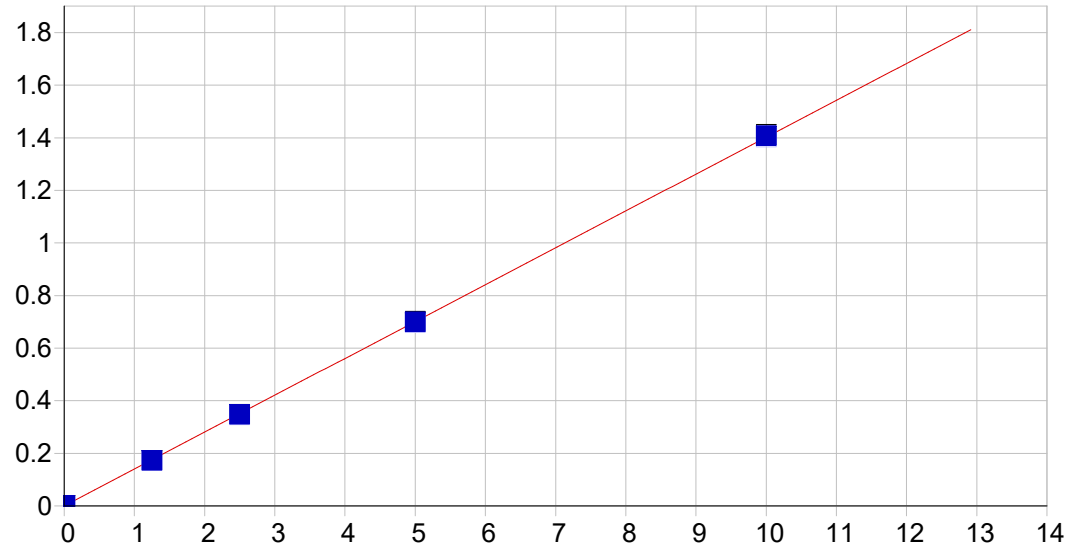
Si 251.611 {134}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.014545	Re-Slope:	1.000000
A1 (Gain):	1.447384	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.994149	Status:	OK.
Std Error of Est:	0.008546		
Predicted MDL:	0.001317		
Predicted MQL:	0.004390		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.01432	.003	1
S1	.10000	.24922	.149	149.	.37731	.004	1
S2	1.2500	1.2982	.048	3.86	1.9346	.008	1
S3	2.5000	2.5812	.081	3.25	3.8326	.027	1
S4	5.0000	4.9311	-.069	-1.38	7.3160	.046	1
S5	10.000	9.7915	-.208	-2.08	14.515	.275	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



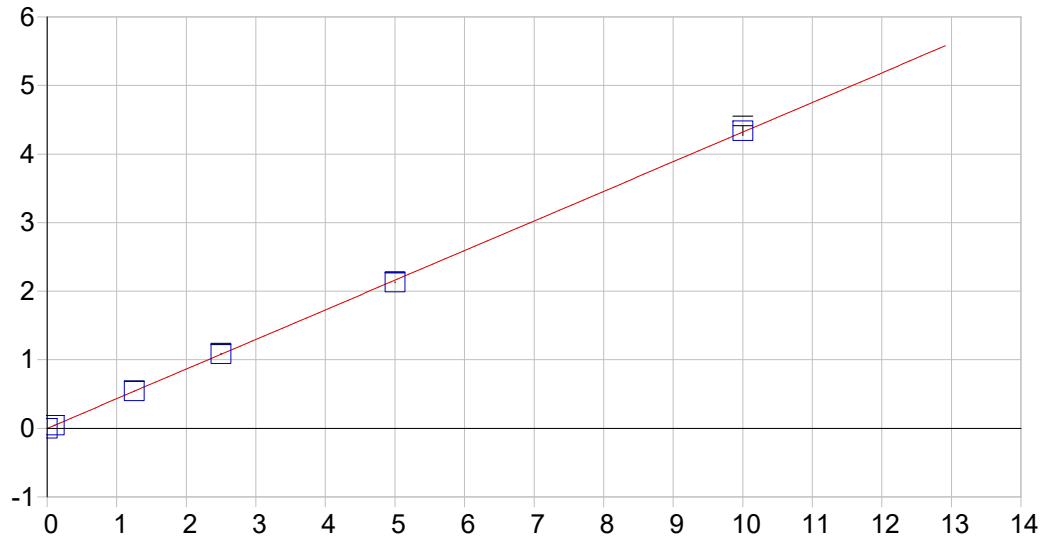
Sn 189.989 {478}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000291	Re-Slope:	1.000000
A1 (Gain):	0.140174	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.000013		
Predicted MDL:	0.001630		
Predicted MQL:	0.005434		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00029	.000	1
S1	.00700	.00763	.001	8.98	.00132	.000	1
S2	1.2500	1.2303	-.020	-1.58	.17186	.000	1
S3	2.5000	2.4796	-.020	-.818	.34611	.001	1
S4	5.0000	4.9930	-.007	-.141	.69667	.002	1
S5	10.000	10.047	.047	.466	1.4015	.004	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



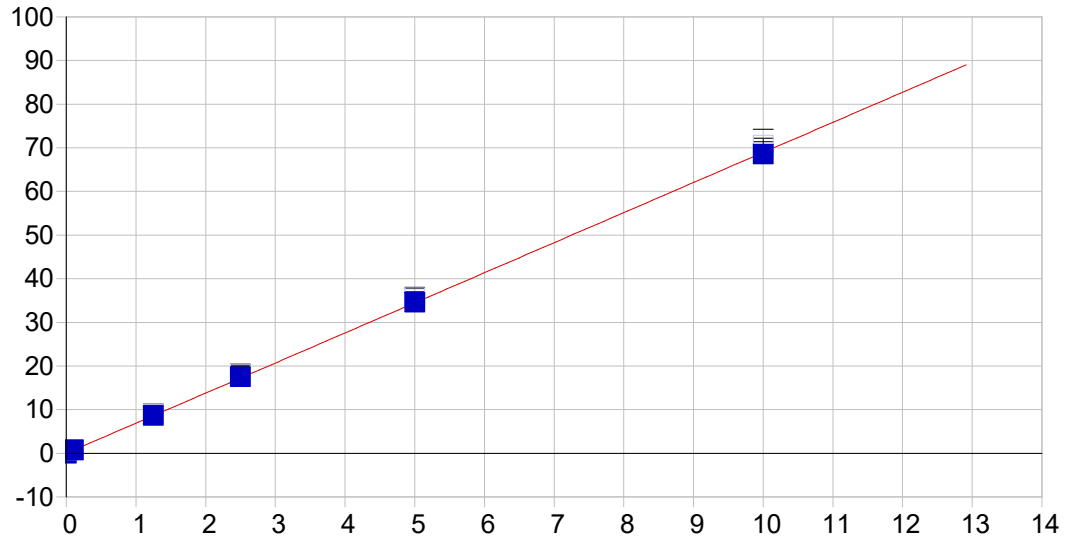
Ti 336.121 {100}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000132	Re-Slope:	1.000000
A1 (Gain):	0.431982	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000212		
Predicted MDL:	0.004090		
Predicted MQL:	0.013635		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00013	.001	1
S1	.10000	.10607	.006	6.07	.04595	.000	1
S2	1.2500	1.2553	.005	.427	.54241	.002	1
S3	2.5000	2.5144	.014	.576	1.0863	.008	1
S4	5.0000	4.9312	-.069	-1.38	2.1303	.007	1
S5	10.000	10.043	.043	.430	4.3385	.071	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5



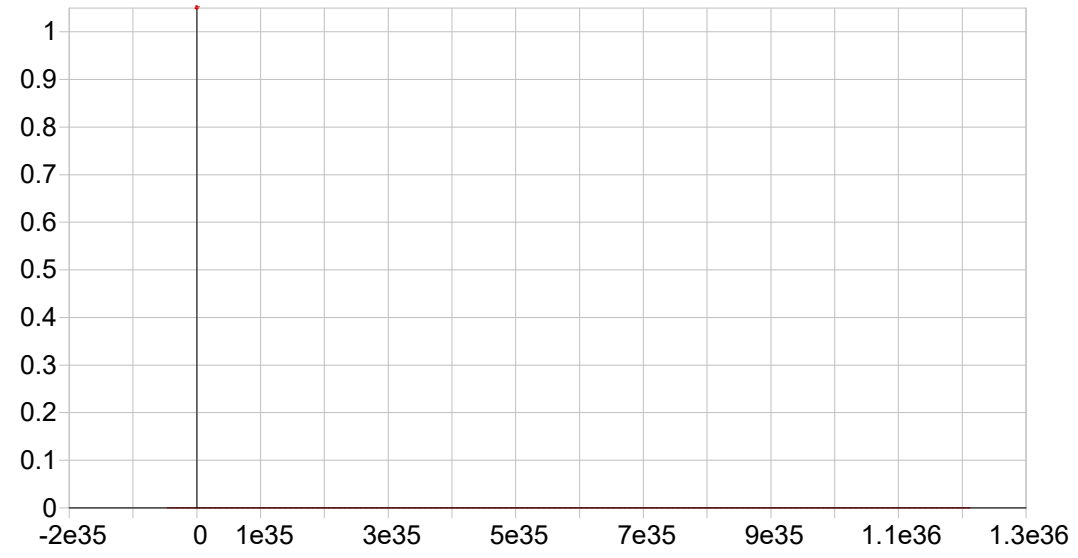
Sr 407.771 { 83}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002286	Re-Slope:	1.000000
A1 (Gain):	6.894000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.003216		
Predicted MDL:	0.000321		
Predicted MQL:	0.001071		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	-.00235	.003	1
S1	.10000	.10706	.007	7.06	.73647	.007	1
S2	1.2500	1.2565	.006	.518	8.9184	.082	1
S3	2.5000	2.5355	.036	1.42	17.995	.135	1
S4	5.0000	5.0130	.013	.259	35.591	.156	1
S5	10.000	9.9382	-.062	-.618	70.580	1.44	1

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

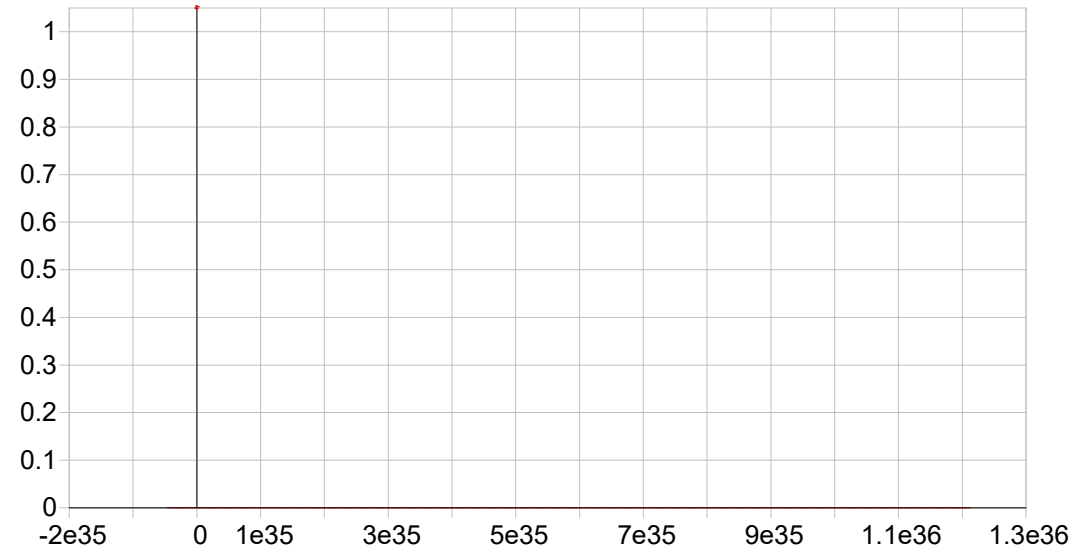


Y 224.306 {450}*

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

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

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



Y 360.073 { 94}*

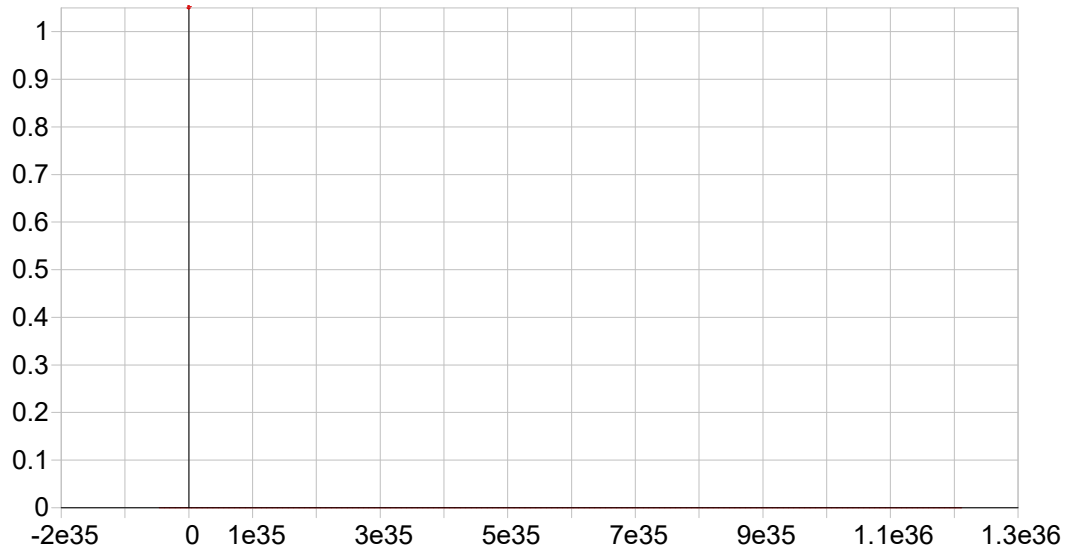
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:mohan
On:12/31/2024
11:25:59 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

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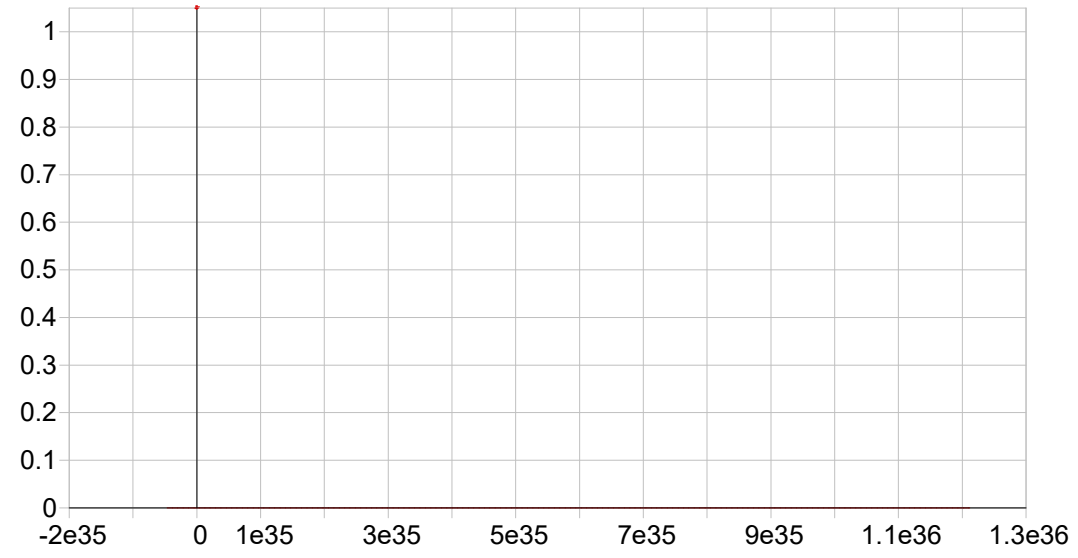
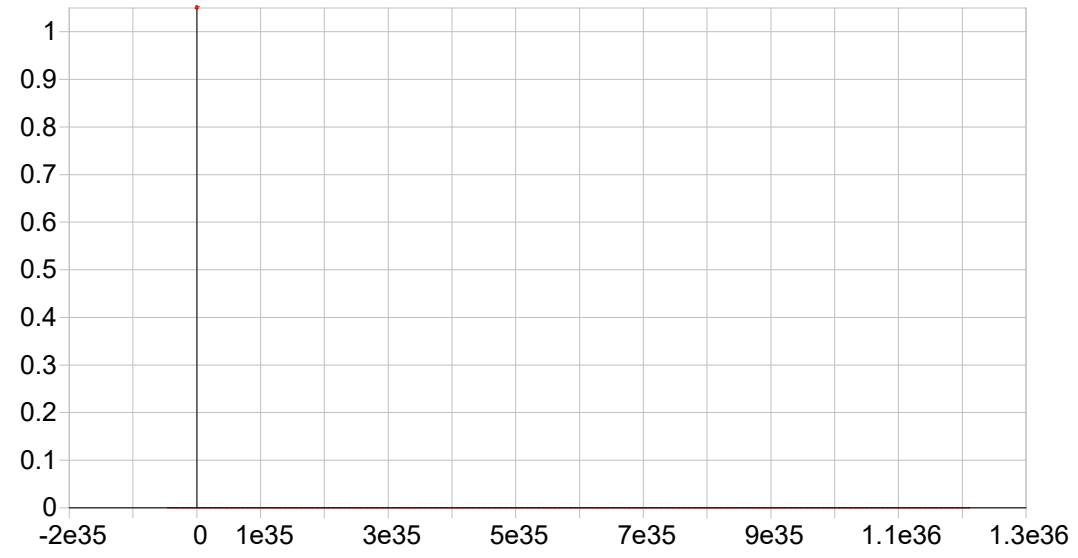


Y 224.306 {150}*

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

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

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



In 230.606 {446}*

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

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

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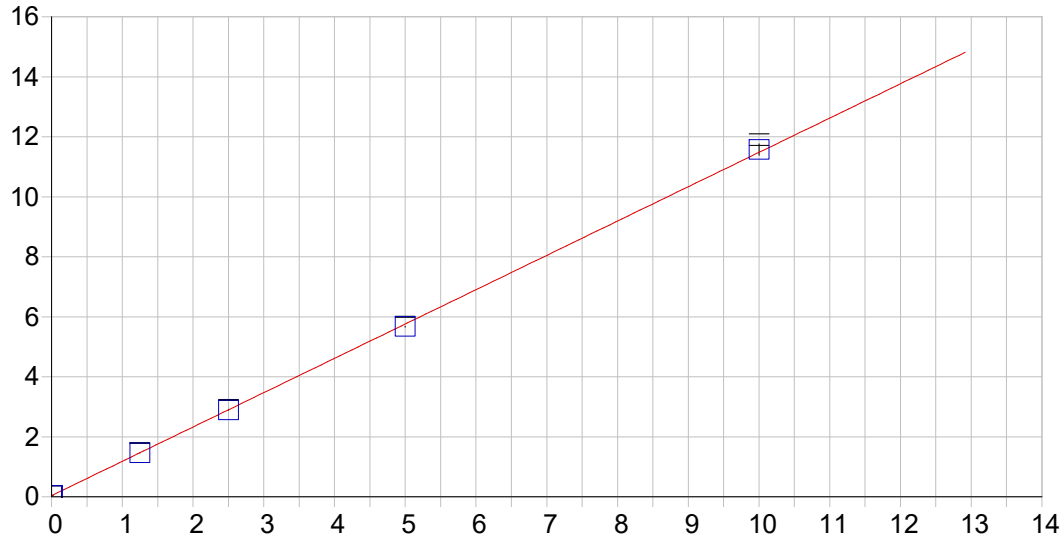
A2 (Curvature):	0.000000			
n (Exponent):	1.000000			
Correlation:	0.000000	Status:	Warning	Zero Gain
Std Error of Est:	0.000000			
Predicted MDL:	n/a			
Predicted MQL:	n/a			

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



Li 670.784 { 50}

Date of Fit:	12/29/2024 23:24:26	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.037148	Re-Slope:	1.000000
A1 (Gain):	1.144100	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000242		
Predicted MDL:	0.004104		
Predicted MQL:	0.013680		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.03715	.005	1
S5	10.000	10.086	.086	.861	11.577	.190	1
S4	5.0000	4.9234	-.077	-1.53	5.6700	.014	1
S3	2.5000	2.4978	-.002	-.088	2.8949	.017	1
S2	1.2500	1.2434	-.007	-.526	1.4597	.011	1
S1	.01500	.01428	-.001	-4.79	.05349	.002	1

Reviewed By:mohan
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Sample Name: S0 Acquired: 12/29/2024 1:11:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.44832	-.00039	.00090	.00008	.00000	-.00199	.05848	.00223
Stddev	.50001	.00014	.00015	.00014	.00002	.00313	.00317	.00180
%RSD	111.53	35.531	16.163	165.96	544.62	156.91	5.4269	80.801
#1	1.0256	-.00035	.00084	.00002	.00000	-.00258	.05913	.00126
#2	.15210	-.00054	.00079	-.00001	-.00002	-.00479	.05503	.00430
#3	.16725	-.00028	.00107	.00024	.00003	.00139	.06127	.00112

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	.00059	.00834	.00001	-.00073	.00297	.00010	.00123	-.00049
Stddev	.00019	.00215	.00003	.00015	.00042	.00068	.00057	.00165
%RSD	32.555	25.814	558.73	21.161	14.280	683.53	46.565	333.08
#1	.00062	.00888	-.00002	-.00068	.00319	.00087	.00067	.00139
#2	.00076	.00597	.00003	-.00060	.00325	-.00045	.00120	-.00163
#3	.00038	.01017	.00001	-.00090	.00248	-.00012	.00182	-.00125

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	-.00053	.00049	-.02268	.00049	.00813	.08725	-.00276	.00502
Stddev	.00037	.00015	.00998	.00065	.00018	.00087	.00027	.00249
%RSD	69.334	31.123	44.016	133.42	2.1644	.99502	9.9426	49.654
#1	-.00070	.00031	-.03362	.00096	.00794	.08770	-.00247	.00217
#2	-.00011	.00059	-.02034	.00077	.00815	.08780	-.00278	.00676
#3	-.00079	.00056	-.01407	-.00026	.00829	.08625	-.00302	.00615

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	.00017	-.00007	.01432	.00029	.00013	-.00235	.03715
Stddev	.00011	.00028	.00311	.00020	.00137	.00289	.00493
%RSD	63.236	376.99	21.679	68.952	1057.6	123.16	13.283
#1	.00016	-.00001	.01350	.00051	-.00071	.00097	.03372
#2	.00007	-.00038	.01776	.00012	-.00061	-.00367	.03492
#3	.00028	.00017	.01171	.00024	.00171	-.00433	.04280

Reviewed By:mohan
On:12/31/2024
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Sample Name: S0 Acquired: 12/29/2024 1:11:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	2045.6	25678.	1942.2	1298.6	1850.2
Stddev	5.5	195.	5.5	9.0	4.4
%RSD	.26710	.75996	.28553	.68971	.24028
#1	2039.6	25475.	1935.9	1289.3	1845.2
#2	2050.3	25864.	1946.4	1307.2	1853.4
#3	2046.9	25696.	1944.3	1299.3	1852.2

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

Sample Name: S1 Acquired: 12/29/2024 1:16:00 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1.5442	.00174	.00425	.00202	.00572	.02223	.99502	.05534
Stddev	.1633	.00044	.00038	.00038	.00036	.00074	.00724	.00257
%RSD	10.577	25.492	8.8234	19.040	6.3508	3.3175	.72754	4.6390
#1	1.4409	.00123	.00441	.00180	.00560	.02255	.99074	.05405
#2	1.7325	.00199	.00452	.00246	.00543	.02138	1.0034	.05830
#3	1.4592	.00200	.00382	.00180	.00612	.02275	.99094	.05368

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02206	.30626	.00197	.05216	.00723	.00268	.00828	.05028
Stddev	.00050	.00274	.00012	.00059	.00207	.00024	.00059	.00085
%RSD	2.2809	.89368	5.9792	1.1283	28.694	8.9452	7.0907	1.6872
#1	.02152	.30471	.00199	.05220	.00721	.00278	.00888	.05081
#2	.02251	.30942	.00209	.05156	.00516	.00241	.00824	.05074
#3	.02214	.30465	.00185	.05273	.00931	.00286	.00771	.04931

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	.03712	.00299	1.3310	.00509	.17048	.21616	-.00196	.00421
Stddev	.00032	.00014	.0196	.00134	.00157	.00357	.00049	.00065
%RSD	.87299	4.7825	1.4692	26.418	.92381	1.6518	24.692	15.347
#1	.03748	.00306	1.3119	.00373	.16975	.21222	-.00201	.00362
#2	.03687	.00282	1.3510	.00513	.16940	.21708	-.00243	.00412
#3	.03700	.00308	1.3300	.00641	.17228	.21918	-.00146	.00490

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	.00558	.00366	.37731	.00132	.04595	.73647	.05349
Stddev	.00041	.00016	.00368	.00012	.00006	.00701	.00205
%RSD	7.3530	4.4741	.97444	9.3576	.12622	.95184	3.8374
#1	.00576	.00384	.37546	.00130	.04602	.73104	.05123
#2	.00511	.00362	.38155	.00121	.04594	.74438	.05400
#3	.00587	.00352	.37493	.00145	.04590	.73398	.05523

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

Sample Name: S1 Acquired: 12/29/2024 1:16:00 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	2044.3	25511.	1957.2	1300.8	1854.6
Stddev	5.5	58.	24.2	8.4	3.4
%RSD	.27134	.22724	1.2343	.64574	.18103
#1	2038.9	25531.	1979.4	1308.8	1851.9
#2	2050.0	25556.	1931.5	1301.6	1858.3
#3	2044.0	25445.	1960.7	1292.0	1853.5

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

Sample Name: S2 Acquired: 12/29/2024 1:20:07 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	158.23	.10074	2.1474	.08378	.12856	4.6851	11.361	1.3114
Stddev	.51	.00028	.0046	.00056	.00017	.0237	.096	.0054
%RSD	.32399	.27596	.21183	.67039	.12903	.50523	.84786	.41070
#1	158.25	.10090	2.1483	.08330	.12875	4.7123	11.451	1.3110
#2	158.74	.10042	2.1424	.08365	.12847	4.6689	11.373	1.3169
#3	157.71	.10090	2.1514	.08439	.12846	4.6741	11.259	1.3062

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	2.6623	3.6787	.75189	.62808	.72972	.79576	1.7675	.61606
Stddev	.0041	.0284	.00057	.00164	.00762	.00597	.0090	.00496
%RSD	.15362	.77098	.07622	.26151	1.0445	.75031	.50731	.80448
#1	2.6649	3.7063	.75153	.62774	.73804	.80182	1.7758	.62029
#2	2.6576	3.6803	.75255	.62664	.72807	.79557	1.7686	.61728
#3	2.6645	3.6496	.75158	.62987	.72306	.78989	1.7580	.61061

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	.57429	.07721	11.592	.06029	9.7189	1.0505	.11762	1.2008
Stddev	.00211	.00019	.019	.00083	.0468	.0065	.00017	.0047
%RSD	.36827	.24261	.16482	1.3783	.48099	.61785	.14829	.39391
#1	.57601	.07735	11.581	.06118	9.7710	1.0563	.11771	1.1997
#2	.57193	.07700	11.614	.06014	9.6805	1.0518	.11742	1.2060
#3	.57493	.07728	11.581	.05954	9.7052	1.0435	.11772	1.1968

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	.62425	.04534	1.9346	.17186	.54241	8.9184	1.4597
Stddev	.00082	.00010	.0078	.00021	.00245	.0821	.0113
%RSD	.13183	.22218	.40114	.12156	.45156	.92077	.77339
#1	.62341	.04524	1.9383	.17200	.54517	9.0111	1.4699
#2	.62506	.04535	1.9399	.17162	.54158	8.8891	1.4617
#3	.62428	.04544	1.9257	.17196	.54049	8.8550	1.4476

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S2 Acquired: 12/29/2024 1:20:07 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	2032.2	25754.	2001.1	1296.0	1765.5
Stddev	1.0	160.	14.6	10.9	3.1
%RSD	.04798	.62193	.73163	.83722	.17780
#1	2032.3	25573.	1984.7	1283.8	1765.7
#2	2031.2	25877.	2006.0	1304.6	1768.5
#3	2033.1	25812.	2012.7	1299.7	1762.2

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/29/2024 1:23:57 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	308.95	.20041	4.2830	.16772	.25755	9.3984	22.768	2.6222
Stddev	1.13	.00100	.0028	.00056	.00109	.0365	.118	.0177
%RSD	.36566	.50111	.06462	.33259	.42359	.38881	.51611	.67447
#1	308.37	.20139	4.2802	.16710	.25874	9.4168	22.862	2.6408
#2	310.25	.20046	4.2831	.16819	.25730	9.4220	22.804	2.6056
#3	308.22	.19938	4.2857	.16786	.25660	9.3563	22.636	2.6201

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	5.3128	7.3056	1.4801	1.2407	1.4458	1.5808	3.5192	1.2291
Stddev	.0053	.0484	.0011	.0011	.0061	.0091	.0186	.0075
%RSD	.09944	.66308	.07323	.08555	.42203	.57539	.52735	.60777
#1	5.3067	7.3543	1.4814	1.2395	1.4516	1.5862	3.5363	1.2360
#2	5.3162	7.3049	1.4796	1.2408	1.4463	1.5858	3.5219	1.2302
#3	5.3155	7.2575	1.4794	1.2416	1.4395	1.5703	3.4995	1.2211

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	1.1498	.15390	25.334	.11901	19.364	2.0553	.24316	2.4312
Stddev	.0013	.00039	.137	.00040	.097	.0067	.00053	.0175
%RSD	.10861	.25460	.54200	.33952	.50001	.32545	.21917	.72161
#1	1.1488	.15348	25.491	.11926	19.375	2.0630	.24356	2.4494
#2	1.1512	.15425	25.275	.11923	19.455	2.0525	.24336	2.4143
#3	1.1494	.15397	25.237	.11854	19.262	2.0505	.24255	2.4300

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	1.2470	.09219	3.8326	.34611	1.0863	17.995	2.8949
Stddev	.0020	.00009	.0271	.00053	.0084	.135	.0173
%RSD	.16123	.09961	.70750	.15436	.77365	.75115	.59912
#1	1.2461	.09210	3.8618	.34549	1.0915	18.129	2.9060
#2	1.2493	.09229	3.8081	.34639	1.0908	17.997	2.9038
#3	1.2457	.09219	3.8280	.34644	1.0766	17.858	2.8749

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S3 Acquired: 12/29/2024 1:23:57 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1970.5	25133.	1947.7	1248.5	1688.6
Stddev	3.5	70.	7.8	5.8	2.9
%RSD	.17881	.27917	.40040	.46519	.17079
#1	1966.4	25208.	1939.2	1250.4	1685.4
#2	1972.7	25069.	1954.4	1241.9	1690.9
#3	1972.3	25122.	1949.6	1253.0	1689.6

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S4 Acquired: 12/29/2024 1:27:42 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	598.23	.39618	8.6240	.33270	.52060	18.557	44.749	5.0470
Stddev	1.61	.00126	.0198	.00082	.00138	.062	.142	.0424
%RSD	.26916	.31740	.22972	.24537	.26491	.33585	.31798	.83944
#1	597.10	.39521	8.6011	.33211	.51931	18.624	44.898	5.0919
#2	597.51	.39572	8.6360	.33235	.52044	18.548	44.734	5.0412
#3	600.07	.39760	8.6349	.33363	.52205	18.500	44.615	5.0078

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	10.568	14.208	2.9058	2.4548	2.8306	3.0786	6.8237	2.4037
Stddev	.035	.043	.0042	.0030	.0138	.0083	.0155	.0070
%RSD	.33319	.30504	.14585	.12249	.48665	.26861	.22765	.29262
#1	10.528	14.251	2.9067	2.4515	2.8375	3.0854	6.8410	2.4110
#2	10.588	14.208	2.9012	2.4553	2.8396	3.0809	6.8109	2.3970
#3	10.589	14.164	2.9095	2.4575	2.8148	3.0694	6.8193	2.4030

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	2.2976	.30702	53.326	.23562	38.529	3.9899	.49909	4.6672
Stddev	.0063	.00084	.332	.00091	.172	.0079	.00160	.0269
%RSD	.27325	.27423	.62175	.38526	.44675	.19705	.31978	.57686
#1	2.2906	.30651	53.671	.23576	38.473	3.9972	.49756	4.6955
#2	2.3026	.30657	53.298	.23465	38.391	3.9911	.50074	4.6642
#3	2.2997	.30799	53.009	.23645	38.722	3.9816	.49896	4.6419

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	2.4994	.18950	7.3160	.69667	2.1303	35.591	5.6700
Stddev	.0048	.00031	.0462	.00201	.0068	.156	.0140
%RSD	.19252	.16459	.63137	.28879	.31906	.43827	.24756
#1	2.4944	.18936	7.3670	.69449	2.1368	35.702	5.6843
#2	2.4997	.18929	7.3041	.69846	2.1309	35.658	5.6695
#3	2.5041	.18986	7.2769	.69704	2.1233	35.413	5.6562

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

Sample Name: S4 Acquired: 12/29/2024 1:27:42 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1883.5	24352.	1950.6	1182.1	1598.6
Stddev	2.7	61.	14.3	3.4	.8
%RSD	.14121	.24897	.73117	.28589	.04966
#1	1885.6	24381.	1939.5	1186.0	1599.5
#2	1884.3	24282.	1945.6	1179.8	1598.4
#3	1880.5	24393.	1966.7	1180.6	1598.0

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S5 Acquired: 12/29/2024 1:31:26 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1147.4	.77573	17.392	.66411	1.0779	38.035	91.425	10.056
Stddev	1.9	.00166	.023	.00139	.0033	.609	1.415	.190
%RSD	.16983	.21463	.13341	.20959	.31023	1.6010	1.5481	1.8883
#1	1146.2	.77744	17.417	.66453	1.0751	38.736	93.054	10.275
#2	1146.4	.77564	17.389	.66255	1.0769	37.641	90.495	9.9387
#3	1149.7	.77411	17.371	.66523	1.0816	37.728	90.727	9.9548

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	21.033	28.469	5.7163	4.8885	5.6944	6.1228	13.618	4.8540
Stddev	.040	.432	.0083	.0086	.0813	.1056	.229	.0823
%RSD	.19025	1.5192	.14538	.17611	1.4274	1.7241	1.6805	1.6948
#1	21.076	28.968	5.7094	4.8980	5.7876	6.2438	13.881	4.9480
#2	21.023	28.212	5.7255	4.8862	5.6568	6.0497	13.463	4.7953
#3	20.998	28.227	5.7139	4.8813	5.6387	6.0748	13.510	4.8186

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	4.5963	.62443	114.23	.47755	78.403	8.1567	1.0201	9.1869
Stddev	.0124	.00069	1.74	.01117	.507	.1186	.0017	.1625
%RSD	.27067	.10970	1.5194	2.3381	.64638	1.4534	.16685	1.7688
#1	4.6105	.62397	116.18	.49044	78.735	8.2936	1.0217	9.3738
#2	4.5913	.62521	113.68	.47083	78.654	8.0881	1.0202	9.0795
#3	4.5872	.62409	112.84	.47138	77.819	8.0885	1.0183	9.1073

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	5.1322	.38916	14.515	1.4015	4.3385	70.580	11.577
Stddev	.0133	.00104	.275	.0040	.0714	1.437	.190
%RSD	.26003	.26790	1.8922	.28199	1.6461	2.0356	1.6433
#1	5.1242	.39002	14.832	1.4059	4.4200	72.078	11.796
#2	5.1247	.38946	14.353	1.4005	4.2866	70.447	11.460
#3	5.1476	.38800	14.360	1.3982	4.3090	69.214	11.474

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

Sample Name: S5 Acquired: 12/29/2024 1:31:26 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1761.7	23541.	1903.6	1079.3	1506.9
Stddev	1.2	96.	36.7	8.9	3.6
%RSD	.06686	.40632	1.9301	.82311	.23779
#1	1762.7	23561.	1861.7	1076.1	1504.2
#2	1762.0	23437.	1919.1	1072.4	1505.4
#3	1760.4	23625.	1930.1	1089.3	1510.9

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: S6 Acquired: 12/29/2024 1:35:28 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	95.713	44.162	15.512	7.4582	314.62
Stddev	.392	.209	.072	.0423	.79
%RSD	.40908	.47427	.46164	.56647	.25214
#1	95.719	44.165	15.522	7.4669	314.01
#2	96.101	44.370	15.578	7.4954	315.51
#3	95.318	43.951	15.436	7.4123	314.32

Int. Std.	Y_3710
Units	Cts/S
Avg	1871.0
Stddev	.5
%RSD	.02652
#1	1870.9
#2	1870.5
#3	1871.5

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICV004 Acquired: 12/29/2024 1:54:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	1.098885	1.003591	.9734783	1.009322	.9639804	2.403303
Stddev	.005852	.008227	.0025810	.001266	.0042531	.013086
%RSD	.5325039	.8198048	.2651320	.1254604	.4412051	.5445062
#1	1.092139	1.000418	.9739037	1.009370	.9591191	2.409087
#2	1.102592	.997422	.9707111	1.008032	.9658071	2.388322
#3	1.101923	1.012933	.9758202	1.010563	.9670150	2.412501

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5122599	.5196395	.5026764	10.27296	.5434993	.5089894
Stddev	.0016213	.0008888	.0012486	.04958	.0004497	.0014306
%RSD	.3165091	.1710382	.2483804	.4826046	.0827374	.2810703
#1	.5104314	.5188555	.5015247	10.22950	.5430065	.5075325
#2	.5128257	.5194580	.5025013	10.32696	.5438873	.5090434
#3	.5135225	.5206050	.5040033	10.26241	.5436043	.5103922

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4868060	10.45946	.5173931	6.003799	.5120696	.2432002
Stddev	.0046707	.04868	.0025847	.044921	.0020766	.0004320
%RSD	.9594613	.4654409	.4995641	.7482155	.4055243	.1776279
#1	.4888287	10.40346	.5144764	6.033757	.5100618	.2430756
#2	.4814648	10.49170	.5193996	6.025492	.5119384	.2436808
#3	.4901244	10.48323	.5183032	5.952148	.5142087	.2428441

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.458800	.5080237	.9786025	9.066799	F .0023521	F .0048546
Stddev	.031423	.0155939	.0048954	.081798	.0012275	.0028686
%RSD	.3322088	3.069531	.5002418	.9021738	52.18773	59.08946
#1	9.423760	.5259446	.9815022	9.161252	.0030435	.0069267
#2	9.468161	.5005806	.9813548	9.019357	.0030778	.0015806
#3	9.484478	.4975460	.9729504	9.019789	.0009348	.0060565

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICV004 Acquired: 12/29/2024 1:54:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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 .0009572	F .0090615	F .0004874	F .0013679	F .0003981	F -.009259
Stddev	.0002041	.0033864	.0011532	.0003719	.0008774	.000343
%RSD	21.32138	37.37126	236.6251	27.19030	220.4138	3.704210
#1	.0007297	.0099955	.0003297	.0009421	-.000496	-.009040
#2	.0010176	.0118828	.0017113	.0015323	.001258	-.009082
#3	.0011243	.0053061	-.000579	.0016293	.000433	-.009654

Elem	Li6707
Units	ppm
Avg	F .0078623
Stddev	.0029066
%RSD	36.96823
#1	.0112183
#2	.0061482
#3	.0062204

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2102.323	26445.87	1985.334	1342.619	1887.452
Stddev	1.082	34.11	9.464	3.610	.332
%RSD	.0514530	.1289719	.4767162	.2688908	.0175814
#1	2101.099	26479.63	1993.699	1341.502	1887.263
#2	2102.719	26446.55	1987.241	1339.699	1887.257
#3	2103.150	26411.43	1975.061	1346.656	1887.835

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICB004 Acquired: 12/29/2024 1:58:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	-.000230	.0006604	.0001994	.0008052	-.000675	.0008452	-.001250
Stddev	.002840	.0013343	.0011193	.0031475	.000674	.0233225	.001723
%RSD	1233.084	202.0263	561.3142	390.8873	99.77258	2759.285	137.8507
#1	-.003102	.0018992	.0014729	.0044392	-.001330	-.006077	.000518
#2	.002578	-.000752	-.000629	-.000963	-.000713	.026845	-.002923
#3	-.000167	.000834	-.000246	-.001060	.000016	-.018233	-.001344

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000087	.0001137	.0273715	.0011604	.0003847	-.005304	.0128153
Stddev	.000007	.0000228	.0640886	.0009448	.0003721	.004668	.0214279
%RSD	8.423154	20.08205	234.1436	81.42155	96.74403	88.02114	167.2061
#1	-.000079	.0001107	.0727456	.0003029	.0000042	-.004484	.0284049
#2	-.000091	.0001380	-.045944	.0021733	.0007478	-.001099	.0216600
#3	-.000092	.0000926	.055313	.0010052	.0004020	-.010328	-.011619

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003813	.0229955	.0004191	-.000081	.0592061	-.008701	.0000101
Stddev	.0005487	.0055358	.0000573	.000788	.0194104	.005823	.0004367
%RSD	143.8905	24.07360	13.68091	972.0907	32.78444	66.92727	4321.374
#1	.0002040	.0270275	.0003536	.000040	.0654087	-.004287	-.000419
#2	-.000057	.0166838	.0004603	-.000922	.0374525	-.015301	-.000004
#3	.000997	.0252752	.0004434	.000639	.0747572	-.006515	.000454

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1357920	.0027407	.0013612	.0007353	-.000764	-.000488	-.000325
Stddev	.1884484	.0023609	.0036552	.0004355	.002046	.000459	.001231
%RSD	138.7772	86.14159	268.5292	59.22481	267.7613	93.93665	379.1307
#1	.2586942	.0032332	.0046431	.0011907	.001576	-.000614	.000768
#2	-.081171	.0001724	-.002578	.0003228	-.002218	.000020	-.000083
#3	.229853	.0048166	.002019	.0006925	-.001651	-.000872	-.001659

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICB004 Acquired: 12/29/2024 1:58:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.0020958	.0002520	.0057479
Stddev	.0020294	.0001810	.0038260
%RSD	96.83233	71.83588	66.56335
#1	.0036052	.0002624	.0013302
#2	.0028933	.0004275	.0079925
#3	-.000211	.0000660	.0079211

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2075.476	26009.49	1950.265	1317.034	1872.394
Stddev	4.698	46.37	26.768	3.106	1.720
%RSD	.2263563	.1782834	1.372534	.2358650	.0918862
#1	2070.784	26060.51	1953.087	1314.724	1872.862
#2	2075.464	25969.90	1975.510	1315.812	1870.488
#3	2080.180	25998.06	1922.198	1320.565	1873.833

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICSA004 Acquired: 12/29/2024 2:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.0020400	-.016230	-.007998	.0209043	-.004613	243.6935
Stddev	.0035318	.003847	.000636	.0104193	.006383	.2577
%RSD	173.1269	23.70195	7.947183	49.84303	138.3692	.1057617
#1	-.002016	-.014336	-.008481	.0194453	.001386	243.8923
#2	.004439	-.013698	-.008235	.0112913	-.011320	243.7859
#3	.003697	-.020657	-.007278	.0319762	-.003905	243.4023

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035555	.0045441	.0008689	248.9655	.0516854	.0053239
Stddev	.0005994	.0002461	.0001151	.4477	.0006116	.0003541
%RSD	16.85929	5.415423	13.24390	.1798238	1.183332	6.650519
#1	.0041802	.0043126	.0009744	249.4825	.0517059	.0051298
#2	.0029850	.0045172	.0007462	248.7049	.0522865	.0057326
#3	.0035014	.0048026	.0008861	248.7092	.0510638	.0051094

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.014790	103.1241	.0092838	261.4306	.0030770	.0007914
Stddev	.011698	.3453	.0008058	.3216	.0003618	.0008031
%RSD	79.09024	.3348273	8.680131	.1230092	11.75840	101.4814
#1	-.015725	103.0157	.0092739	261.0803	.0026610	.0017110
#2	-.002653	102.8460	.0100946	261.4989	.0032507	.0002282
#3	-.025992	103.5105	.0084830	261.7125	.0033191	.0004349

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1283626	.0124767	-.034618	-.252869	.0004366	F .0263406
Stddev	.0159392	.0089585	.000327	.092468	.0019205	.0011242
%RSD	12.41734	71.80212	.9451123	36.56753	439.9329	4.268098
#1	.1146006	.0227984	-.034462	-.299712	.0014115	.0275537
#2	.1458273	.0079081	-.034397	-.146353	.0016740	.0261341
#3	.1246599	.0067234	-.034994	-.312541	-.001776	.0253339

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICSA004 Acquired: 12/29/2024 2:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.0018990	.0113739	-.003332	F .0115438	.0027027	.0003317
Stddev	.0005765	.0011394	.000168	.0030977	.0009712	.0008366
%RSD	30.36046	10.01807	5.028410	26.83406	35.93411	252.1954
#1	.0021321	.0114779	-.003348	.0089960	.0017052	.0008485
#2	.0012424	.0101860	-.003491	.0149919	.0027576	.0007801
#3	.0023225	.0124578	-.003157	.0106436	.0036453	-.000633

Elem	Li6707
Units	ppm
Avg	.0142620
Stddev	.0015282
%RSD	10.71499
#1	.0125000
#2	.0152261
#3	.0150599

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1974.478	24733.18	1924.499	1262.417	1673.965
Stddev	3.007	110.34	4.143	10.032	3.043
%RSD	.1522877	.4461299	.2152954	.7946960	.1817705
#1	1974.062	24606.41	1919.834	1251.399	1677.241
#2	1977.671	24807.68	1925.909	1264.828	1673.426
#3	1971.701	24785.44	1927.753	1271.025	1671.227

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICSAB004 Acquired: 12/29/2024 2:06:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.1118776	.0902661	.0454975	.0671178	.6258105	241.7928
Stddev	.0027533	.0080685	.0011954	.0156508	.0039188	.1671
%RSD	2.460966	8.938586	2.627335	23.31846	.6262033	.0691190
#1	.1149922	.0993057	.0468375	.0654370	.6292711	241.8254
#2	.1108724	.0837930	.0445409	.0835411	.6215552	241.6118
#3	.1097681	.0876996	.0451139	.0523751	.6266052	241.9412

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5620740	.5698206	1.087140	246.4959	.6230870	.5447231
Stddev	.0025663	.0025451	.001308	.3235	.0024054	.0018359
%RSD	.4565821	.4466581	.1203552	.1312490	.3860538	.3370374
#1	.5609856	.5681219	1.086819	246.7250	.6205242	.5455640
#2	.5650052	.5727469	1.086022	246.6371	.6234407	.5426173
#3	.5602313	.5685930	1.088580	246.1258	.6252960	.5459879

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4882767	102.5813	.5603140	259.8846	1.080984	.2179611
Stddev	.0181526	.1212	.0014494	.9389	.001274	.0014534
%RSD	3.717698	.1181418	.2586804	.3612915	.1178463	.6668052
#1	.5078297	102.7210	.5619657	260.9668	1.081740	.2163477
#2	.4719596	102.5043	.5592544	259.2859	1.079513	.2183680
#3	.4850409	102.5185	.5597218	259.4012	1.081698	.2191678

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1163312	.5504531	1.042323	-.498539	.0006253	F .0264078
Stddev	.0297385	.0082175	.003599	.203992	.0055238	.0007416
%RSD	25.56360	1.492860	.3453101	40.91805	883.3752	2.808309
#1	.1384750	.5426655	1.040507	-.560669	.0007880	.0266951
#2	.1279886	.5590418	1.046469	-.664242	.0060659	.0255656
#3	.0825302	.5496521	1.039994	-.270705	-.004978	.0269629

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: ICSAB004 Acquired: 12/29/2024 2:06:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.0010875	.0221817	-.000917	F .0105060	-.003374	-.000398
Stddev	.0011451	.0026426	.001279	.0030422	.005351	.000730
%RSD	105.3022	11.91350	139.5579	28.95707	158.6099	183.5243
#1	.0021298	.0227342	-.000002	.0123220	-.008939	-.001218
#2	.0012709	.0193065	-.000369	.0069938	-.002917	.000182
#3	-.000138	.0245043	-.002379	.0122022	.001734	-.000158

Elem	Li6707
Units	ppm
Avg	.0070975
Stddev	.0037647
%RSD	53.04287
#1	.0031845
#2	.0106939
#3	.0074142

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1987.087	25013.61	1944.798	1271.857	1683.903
Stddev	3.367	120.94	1.297	3.867	2.833
%RSD	.1694210	.4834908	.0667023	.3040578	.1682220
#1	1990.056	25059.00	1946.293	1272.457	1685.564
#2	1987.774	25105.29	1943.970	1275.390	1685.513
#3	1983.429	24876.55	1944.132	1267.725	1680.632

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV033 Acquired: 12/29/2024 2:10:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	5.072976	4.786423	24.55027	5.011241	4.932659	398.6572	9.922427
Stddev	.007198	.004474	.00843	.014093	.009689	3.7633	.108083
%RSD	.1418799	.0934635	.0343494	.2812332	.1964209	.9439933	1.089280
#1	5.080031	4.791511	24.55657	5.001586	4.924731	400.2453	9.970314
#2	5.073254	4.784652	24.54069	5.027414	4.929786	394.3602	9.798674
#3	5.065644	4.783106	24.55354	5.004725	4.943459	401.3661	9.998294

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5123268	2.475789	398.8472	15.59437	2.387948	14.62614	404.8100
Stddev	.0060724	.001351	3.6243	.45867	.000692	.10301	3.1735
%RSD	1.185262	.0545657	.9086938	2.941246	.0289640	.7042882	.7839360
#1	.5193364	2.476113	400.8080	15.22180	2.388292	14.64650	406.1086
#2	.5089758	2.474305	394.6650	16.10664	2.388400	14.51447	401.1932
#3	.5086682	2.476948	401.0687	15.45465	2.387151	14.71745	407.1281

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.59925	399.7624	2.487871	1.282914	413.6465	2.465894	15.03623
Stddev	.14163	3.9731	.001312	.034682	3.8259	.024389	.46576
%RSD	.9701104	.9938543	.0527185	2.703403	.9249147	.9890461	3.097586
#1	14.67007	401.6970	2.489365	1.255058	417.2888	2.474441	14.62736
#2	14.43619	395.1926	2.487334	1.321759	409.6602	2.438382	15.54324
#3	14.69151	402.3976	2.486913	1.271923	413.9904	2.484859	14.93808

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	150.0521	4.964559	4.932342	4.924602	5.014034	4.849377	4.998613
Stddev	1.9241	.004830	.044727	.008284	.010835	.055390	.003551
%RSD	1.282317	.0972845	.9068076	.1682156	.2160973	1.142218	.0710325
#1	150.9262	4.970128	4.980959	4.917042	5.002401	4.908557	4.999739
#2	147.8461	4.961504	4.923126	4.933458	5.015860	4.840796	5.001465
#3	151.3841	4.962047	4.892942	4.923305	5.023839	4.798778	4.994636

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV033 Acquired: 12/29/2024 2:10:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	4.955065	4.612590	5.034153
Stddev	.049824	.039949	.058735
%RSD	1.005518	.8660783	1.166721
#1	4.986758	4.628979	5.060555
#2	4.897636	4.567053	4.966851
#3	4.980800	4.641737	5.075054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1835.412	23342.78	1906.191	1136.801	1548.289
Stddev	3.954	658.80	19.124	36.467	2.625
%RSD	.2154454	2.822268	1.003272	3.207898	.1695243
#1	1839.953	23911.46	1884.166	1169.887	1550.275
#2	1833.551	22620.87	1918.581	1097.700	1549.280
#3	1832.732	23496.00	1915.828	1142.814	1545.314

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCB033 Acquired: 12/29/2024 2:14:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	-.002973	-.000043	.0033779	-.000950	-.003358	-.027518
Stddev	.002013	.004577	.0012894	.005534	.002279	.028885
%RSD	67.70574	10764.56	38.17220	582.7386	67.88599	104.9696
#1	-.005142	.003730	.0019360	-.006934	-.003062	-.060685
#2	-.002614	.001276	.0044202	.003982	-.005771	-.007883
#3	-.001164	-.005133	.0037776	.000104	-.001241	-.013985

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001103	-.000017	.0000656	.0070440	.0005421	.0000038
Stddev	.001764	.000046	.0000955	.0061972	.0003477	.0005951
%RSD	159.8847	278.6767	145.5898	87.97833	64.13194	15862.33
#1	-.001344	.000036	-.000039	.0136483	.0002006	-.000456
#2	-.002735	-.000048	.000087	.0013559	.0005300	.000676
#3	.000769	-.000039	.000148	.0061277	.0008956	-.000209

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000212	.0260694	.0002083	-.059989	.0001182	-.000117
Stddev	.004010	.0210888	.0004465	.081109	.0002010	.000900
%RSD	1892.214	80.89489	214.3174	135.2076	170.0017	767.1565
#1	.003957	.0415334	-.000062	-.102679	.0001214	-.000575
#2	-.000552	.0020467	.000724	-.110837	.0003176	-.000695
#3	-.004041	.0346281	-.000037	.033550	-.000084	.000919

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0796504	-.003692	.0020285	.3251604	.0006514	.0110715
Stddev	.0406265	.016949	.0001238	.1335230	.0010860	.0026845
%RSD	51.00609	459.0789	6.104394	41.06374	166.7222	24.24691
#1	.0330594	-.021336	.0021456	.2827759	.0017868	.0119931
#2	.0982046	-.002203	.0020411	.2179740	-.000377	.0131738
#3	.1076871	.012463	.0018989	.4747312	.000545	.0080476

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCB033 Acquired: 12/29/2024 2:14:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	.0007256	.0063367	-.000421	-.000143	.0004941	.0000533
Stddev	.0003076	.0020552	.000107	.001280	.0021983	.0001638
%RSD	42.38430	32.43310	25.54548	898.3593	444.9540	307.3666
#1	.0003710	.0086888	-.000308	-.001149	.0027922	-.000135
#2	.0009198	.0054338	-.000433	-.000577	-.001589	.000137
#3	.0008861	.0048875	-.000522	.001299	.000278	.000158

Elem	Li6707
Units	ppm
Avg	F .0168108
Stddev	.0058634
%RSD	34.87900
#1	.0100621
#2	.0206550
#3	.0197154

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2077.598	26049.45	1938.825	1322.321	1875.729
Stddev	2.812	160.35	5.894	12.027	6.632
%RSD	.1353390	.6155609	.3040215	.9095623	.3535942
#1	2075.335	26204.64	1942.574	1332.860	1868.965
#2	2080.746	26059.33	1941.870	1324.885	1882.222
#3	2076.713	25884.40	1932.031	1309.218	1876.001

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165360BL Acquired: 12/29/2024 2:18:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS360 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005241	-.001248	-.000869	-.003772	-.002100	-.002027	-.001856
Stddev	.000808	.001027	.001396	.001515	.001700	.004813	.001140
%RSD	15.41545	82.24935	160.7296	40.17358	80.96838	237.3929	61.41491
#1	-.005610	-.002274	.000272	-.002257	-.003990	.002238	-.003163
#2	-.005799	-.000221	-.000452	-.003771	-.000696	-.007245	-.001069
#3	-.004315	-.001249	-.002425	-.005288	-.001613	-.001075	-.001335

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000104	-.000055	.0066567	-.000137	.0000236	-.007154	-.016769
Stddev	.000103	.000038	.0354285	.000610	.0006984	.007622	.022151
%RSD	98.75488	69.38875	532.2232	443.9157	2960.713	106.5411	132.0925
#1	-.000214	-.000025	.0014482	-.000710	-.000018	-.007030	.007422
#2	-.000012	-.000098	-.025879	.000503	.000742	.000405	-.036058
#3	-.000086	-.000041	.044401	-.000205	-.000653	-.014837	-.021670

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001589	-.062669	-.000408	-.000090	.0175610	-.001841	-.000553
Stddev	.002629	.094345	.000536	.001006	.0206390	.003610	.000279
%RSD	165.4568	150.5453	131.3821	1121.706	117.5271	196.1125	50.35113
#1	-.000250	-.133940	-.000173	.000027	.0383474	-.006006	-.000252
#2	.000101	.044320	-.000030	-.001149	.0172630	.000087	-.000606
#3	-.004618	-.098385	-.001021	.000853	-.002927	.000396	-.000802

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2015665	.0007209	.0027185	.0001266	.0048630	-.000627	-.001338
Stddev	.0199533	.0022907	.0019249	.0002336	.0039291	.001022	.002257
%RSD	9.899136	317.7670	70.80650	184.5673	80.79595	163.1540	168.7781
#1	.2062354	.0013173	.0008926	.0001521	.0005800	.000301	-.002382
#2	.2187714	.0026545	.0025338	-.000119	.0057084	-.000458	.001253
#3	.1796927	-.001809	.0047291	.000346	.0083006	-.001723	-.002883

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165360BL Acquired: 12/29/2024 2:18:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS360 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0006477	-.000100	.0077230
Stddev	.0015952	.000335	.0056340
%RSD	246.2955	336.2041	72.95135
#1	.0001158	-.000431	.0118855
#2	.0024409	.000238	.0013119
#3	-.000614	-.000106	.0099717

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2063.786	26166.07	1904.238	1327.918	1860.055
Stddev	1.835	63.50	9.839	.429	2.400
%RSD	.0889205	.2426690	.5166818	.0323412	.1290551
#1	2065.616	26150.11	1911.978	1327.573	1857.953
#2	2061.946	26236.03	1907.572	1327.782	1859.542
#3	2063.796	26112.08	1893.166	1328.399	1862.671

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165360BS Acquired: 12/29/2024 2:22:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS360 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0145751	.0497997	.0185250	.0653098	.1089777	.3747955
Stddev	.0009952	.0020420	.0013385	.0046672	.0025873	.0131998
%RSD	6.828264	4.100488	7.225147	7.146201	2.374141	3.521865
#1	.0135393	.0516889	.0174355	.0698000	.1087731	.3898345
#2	.0146621	.0476332	.0181204	.0656457	.1064988	.3694223
#3	.0155240	.0500772	.0200190	.0604838	.1116612	.3651298

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3937035	.0102966	.0096126	9.791184	.0207404	.1041248
Stddev	.0023972	.0002049	.0001625	.064039	.0007391	.0009754
%RSD	.6088960	1.989937	1.690460	.6540485	3.563456	.9367670
#1	.3909467	.0100745	.0097088	9.717357	.0212203	.1039394
#2	.3948654	.0104783	.0094249	9.824472	.0198893	.1032554
#3	.3952984	.0103369	.0097040	9.831724	.0211116	.1051796

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0540259	.2086816	.0291732	10.03812	.0776117	.0187700
Stddev	.0026747	.0136440	.0006749	.09577	.0006911	.0010626
%RSD	4.950806	6.538209	2.313275	.9541110	.8904408	5.661300
#1	.0559897	.2147821	.0286865	10.02472	.0775746	.0175926
#2	.0551085	.1930516	.0299436	10.13989	.0769399	.0190597
#3	.0509796	.2182109	.0288894	9.94975	.0783206	.0196578

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.212712	.0981009	.1200436	9.557450	.0191221	F .0016193
Stddev	.024134	.0054117	.0007698	.104179	.0013702	.0024093
%RSD	.3346098	5.516465	.6412328	1.090027	7.165282	148.7872
#1	7.189446	.0921922	.1191939	9.546916	.0175674	.0009714
#2	7.211059	.0992942	.1206944	9.458938	.0196456	.0042864
#3	7.237630	.1028164	.1202425	9.666495	.0201534	-.000400

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165360BS Acquired: 12/29/2024 2:22:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS360 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0206363	.1828277	F .4861489	.0123154	.2012396	.1971406
Stddev	.0001277	.0041561	.0034182	.0017256	.0023821	.0020483
%RSD	.6189947	2.273235	.7031274	14.01152	1.183700	1.039001
#1	.0206933	.1833404	.4840016	.0115546	.1985174	.1950238
#2	.0204900	.1784390	.4900907	.0142906	.2022596	.1991127
#3	.0207256	.1867036	.4843544	.0111009	.2029419	.1972854

Elem	Li6707
Units	ppm
Avg	F .0394626
Stddev	.0033208
%RSD	8.415051
#1	.0358686
#2	.0424172
#3	.0401019

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2080.056	26242.29	1940.563	1332.759	1875.171
Stddev	12.224	24.52	4.747	3.610	10.575
%RSD	.5876667	.0934393	.2446122	.2708337	.5639542
#1	2086.585	26246.65	1944.108	1334.948	1880.200
#2	2087.628	26215.88	1935.170	1328.593	1882.293
#3	2065.954	26264.34	1942.410	1334.736	1863.020

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165369BL Acquired: 12/29/2024 2:26:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS369 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001262	-.000662	-.001368	-.001814	-.004068	-.017166	-.001392
Stddev	.003409	.004643	.000830	.001283	.003416	.008890	.000880
%RSD	270.0979	701.5597	60.64564	70.74215	83.98321	51.79076	63.17868
#1	.000966	.004681	-.000519	-.002075	-.007357	-.022712	-.002020
#2	.000434	-.003715	-.002176	-.000420	-.004310	-.006911	-.001770
#3	-.005187	-.002952	-.001408	-.002945	-.000537	-.021874	-.000387

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000021	-.000094	-.003386	.0004407	-.000052	-.009033	-.009126
Stddev	.000033	.000037	.019861	.0005070	.000571	.007709	.013407
%RSD	159.6224	39.55399	586.5845	115.0531	1100.147	85.33860	146.9193
#1	.000017	-.000051	-.017694	-.000127	.000570	-.015102	.005310
#2	-.000045	-.000118	.019289	.000601	-.000551	-.011638	-.011498
#3	-.000034	-.000114	-.011753	.000848	-.000175	-.000359	-.021188

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000334	-.098420	-.000256	.0002290	.0327227	-.001272	-.002259
Stddev	.000589	.076853	.000233	.0008692	.0309152	.000788	.000400
%RSD	176.2281	78.08714	91.08978	379.6209	94.47650	61.96830	17.71427
#1	-.000097	-.186983	-.000280	-.000033	.0682245	-.001953	-.001823
#2	.000099	-.049253	-.000012	.001199	.0117368	-.001455	-.002609
#3	-.001004	-.059024	-.000477	-.000479	.0182066	-.000408	-.002347

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2244814	.0013409	-.001277	.0000686	.0034085	-.001085	-.001660
Stddev	.3450367	.0020952	.001045	.0004756	.0061562	.001247	.000795
%RSD	153.7039	156.2506	81.86124	693.1265	180.6117	114.9894	47.90729
#1	.5863104	-.000722	-.001894	-.000455	-.002619	-.001211	-.002566
#2	.1879973	.001278	-.000070	.000474	.003159	.000221	-.001339
#3	-.100864	.003467	-.001866	.000186	.009686	-.002264	-.001076

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165369BL Acquired: 12/29/2024 2:26:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS369 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0008218	-.000194	.0058163
Stddev	.0004096	.000362	.0024945
%RSD	49.83849	186.6365	42.88858
#1	.0009864	.000223	.0076354
#2	.0011235	-.000383	.0068410
#3	.0003556	-.000422	.0029726

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2079.488	26253.71	1948.682	1335.727	1878.077
Stddev	4.945	111.34	10.282	8.619	1.685
%RSD	.2378022	.4240951	.5276408	.6452465	.0897303
#1	2085.146	26131.98	1937.525	1325.853	1880.004
#2	2077.331	26278.74	1957.777	1339.588	1876.875
#3	2075.989	26350.40	1950.743	1341.740	1877.354

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165369BS Acquired: 12/29/2024 2:30:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS369 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156093	.0479353	.0175573	.0604666	.1070948	.3679428	.3837457
Stddev	.0018244	.0039263	.0004708	.0038371	.0009021	.0078269	.0023424
%RSD	11.68816	8.190857	2.681636	6.345786	.8423054	2.127210	.6104023
#1	.0168861	.0498684	.0177138	.0606428	.1081361	.3593105	.3820612
#2	.0135197	.0505203	.0179299	.0642126	.1065970	.3745771	.3827554
#3	.0164221	.0434172	.0170281	.0565445	.1065514	.3699407	.3864206

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098108	.0093975	9.600411	.0199538	.1013565	.0498359	.1907741
Stddev	.0002049	.0000300	.096694	.0004687	.0000867	.0023918	.0240212
%RSD	2.088370	.3190643	1.007182	2.348888	.0854951	4.799308	12.59144
#1	.0097655	.0093752	9.509885	.0194198	.1012676	.0525916	.1636199
#2	.0096323	.0094316	9.589077	.0202969	.1014408	.0486175	.2092510
#3	.0100345	.0093857	9.702273	.0201447	.1013611	.0482988	.1994513

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0294436	9.803131	.0753031	.0183411	6.988406	.0926337	.1147710
Stddev	.0005601	.072071	.0004628	.0004969	.106445	.0080455	.0004262
%RSD	1.902245	.7351795	.6145641	2.709093	1.523173	8.685288	.3713318
#1	.0288273	9.885346	.0748498	.0178160	6.932831	.0858186	.1152621
#2	.0299216	9.750858	.0752848	.0188038	6.921250	.1015090	.1144979
#3	.0295819	9.773188	.0757748	.0184034	7.111136	.0905734	.1145531

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.128015	.0185093	-.001811	.0190711	.1788929	.4685964	.0131402
Stddev	.158325	.0017372	.001410	.0008759	.0049813	.0055010	.0015333
%RSD	1.734499	9.385768	77.86397	4.592929	2.784536	1.173922	11.66859
#1	8.963973	.0199596	-.000522	.0200823	.1804449	.4644434	.0121087
#2	9.140148	.0189845	-.003318	.0185464	.1829134	.4665106	.0149021
#3	9.279926	.0165840	-.001594	.0185847	.1733203	.4748352	.0124096

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165369BS Acquired: 12/29/2024 2:30:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS369 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1960218	.1916168	.0329289
Stddev	.0071354	.0011220	.0006543
%RSD	3.640081	.5855652	1.987098
#1	.1877831	.1906001	.0332602
#2	.2000623	.1914296	.0321752
#3	.2002200	.1928206	.0333513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2119.304	26661.17	1980.065	1354.943	1913.682
Stddev	3.707	76.36	18.271	2.552	.573
%RSD	.1749082	.2863929	.9227252	.1883701	.0299449
#1	2116.945	26732.25	1996.990	1356.422	1914.100
#2	2123.577	26580.45	1982.509	1351.996	1913.029
#3	2117.390	26670.82	1960.695	1356.411	1913.918

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165395BL Acquired: 12/29/2024 2:34:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS395 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000891	.0006390	-.001288	.0002934	-.000916	-.017680	-.002417
Stddev	.003309	.0015559	.001206	.0009101	.002337	.032739	.001750
%RSD	371.2156	243.4756	93.65882	310.1873	255.1375	185.1719	72.38603
#1	-.004197	-.001141	-.000399	.0000408	.001492	-.044965	-.000576
#2	.002422	.001739	-.000804	.0013032	-.003175	.018622	-.002617
#3	-.000900	.001319	-.002661	-.000464	-.001066	-.026698	-.004058

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001866	-.000036	-.036486	-.000478	.0002745	-.004435	.0037184
Stddev	.0001093	.000133	.037688	.000578	.0001716	.004358	.0370404
%RSD	58.56508	366.4668	103.2937	121.0363	62.49638	98.26124	996.1318
#1	.0001329	-.000189	-.010830	-.000231	.0000778	-.005220	-.016679
#2	.0001146	.000035	-.018873	-.000064	.0003528	.000262	-.018640
#3	.0003124	.000046	-.079755	-.001139	.0003929	-.008348	.046474

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002983	-.042123	.0003044	.0001492	.0192357	-.001968	-.002272
Stddev	.0017953	.077006	.0005516	.0013365	.0116699	.006738	.000163
%RSD	601.8044	182.8117	181.2560	895.9170	60.66792	342.3511	7.161713
#1	-.001354	-.005278	-.000248	-.000485	.0228449	-.008707	-.002384
#2	.000040	-.130630	.000307	.001685	.0061876	-.001967	-.002086
#3	.002209	.009538	.000855	-.000752	.0286747	.004770	-.002347

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1538573	-.000047	-.002435	.0000169	.0025363	-.000266	-.000509
Stddev	.1648549	.002979	.002370	.0005507	.0027161	.000508	.001275
%RSD	107.1479	6326.577	97.35819	3259.992	107.0916	190.8990	250.6875
#1	-.027233	.003184	-.001010	-.000044	-.000186	.000244	.000624
#2	.193591	-.002685	-.001123	-.000501	.002548	-.000270	-.000260
#3	.295214	-.000641	-.005171	.000596	.005247	-.000773	-.001890

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165395BL Acquired: 12/29/2024 2:34:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS395 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0018975	.0000177	.0027182
Stddev	.0038536	.0004447	.0052072
%RSD	203.0923	2512.169	191.5666
#1	.0056580	.0005120	.0085643
#2	-.002043	-.000350	-.001423
#3	.002077	-.000109	.001013

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2082.687	26416.95	1949.419	1344.091	1881.408
Stddev	5.525	58.04	2.362	6.638	4.717
%RSD	.2652905	.2197226	.1211813	.4938752	.2507182
#1	2088.471	26481.97	1950.111	1346.936	1886.706
#2	2077.463	26370.36	1946.788	1336.504	1877.666
#3	2082.128	26398.51	1951.358	1348.831	1879.852

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165395BS Acquired: 12/29/2024 2:38:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS395 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147537	.0474446	.0167806	.0540696	.1067300	.3927263
Stddev	.0048038	.0006981	.0021548	.0036201	.0027779	.0249059
%RSD	32.55971	1.471316	12.84109	6.695247	2.602721	6.341793
#1	.0164460	.0475787	.0162784	.0517707	.1098441	.4202606
#2	.0093328	.0480658	.0191421	.0582425	.1045073	.3717689
#3	.0184823	.0466892	.0149211	.0521956	.1058385	.3861493

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3862778	.0099473	.0093545	9.653266	.0200717	.1015324
Stddev	.0009947	.0002687	.0001602	.037314	.0009387	.0000672
%RSD	.2575045	2.700812	1.712108	.3865467	4.676699	.0661619
#1	.3854146	.0096386	.0095260	9.631096	.0211482	.1015657
#2	.3860531	.0101281	.0093290	9.696347	.0194233	.1014551
#3	.3873656	.0100752	.0092087	9.632355	.0196437	.1015764

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486706	.1887063	.0288573	9.932938	.0750436	.0185276
Stddev	.0077641	.0181742	.0014738	.132966	.0001892	.0008705
%RSD	15.95241	9.630954	5.107116	1.338634	.2520918	4.698435
#1	.0397059	.1696238	.0285630	9.984879	.0751342	.0188831
#2	.0530673	.1906847	.0304560	9.781842	.0748261	.0175356
#3	.0532385	.2058104	.0275529	10.03209	.0751704	.0191641

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.768373	.0917771	.1152016	9.374356	.0195526	F -.002042
Stddev	.136816	.0074798	.0003246	.109547	.0036696	.001392
%RSD	1.761192	8.149941	.2817667	1.168578	18.76762	68.19011
#1	7.615665	.0875979	.1155646	9.285380	.0220238	-.003304
#2	7.809673	.0873209	.1149392	9.340979	.0212977	-.002272
#3	7.879781	.1004126	.1151009	9.496709	.0153361	-.000549

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165395BS Acquired: 12/29/2024 2:38:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS395 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0194642	.1813483	F .4737802	.0117451	.1902876	.1937825
Stddev	.0006109	.0056006	.0057944	.0003178	.0018463	.0012022
%RSD	3.138760	3.088321	1.223019	2.705500	.9702854	.6204018
#1	.0199574	.1857805	.4671084	.0120778	.1898985	.1933321
#2	.0187808	.1832106	.4766782	.0114448	.1886669	.1928705
#3	.0196545	.1750537	.4775538	.0117126	.1922975	.1951449

Elem	Li6707
Units	ppm
Avg	.0337440
Stddev	.0026869
%RSD	7.962654
#1	.0323491
#2	.0320414
#3	.0368415

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2093.763	26467.48	1973.017	1347.216	1893.213
Stddev	.501	266.71	15.889	16.632	2.034
%RSD	.0239487	1.007683	.8053295	1.234519	.1074113
#1	2093.483	26179.05	1985.955	1328.449	1891.390
#2	2093.465	26518.21	1977.813	1353.069	1895.406
#3	2094.342	26705.17	1955.282	1360.130	1892.843

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165396BL Acquired: 12/29/2024 2:42:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS396 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000291	.0020937	-.003321	-.002026	-.000433	-.016057	-.000915
Stddev	.004397	.0057806	.001619	.006350	.001020	.021314	.001059
%RSD	1508.958	276.0946	48.73814	313.4143	235.9258	132.7445	115.7284
#1	.000374	.0085032	-.001621	-.002592	.000619	-.030852	-.000359
#2	-.004983	.0005025	-.004843	.004588	-.001419	.008374	-.000250
#3	.003735	-.002725	-.003500	-.008074	-.000498	-.025692	-.002136

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000168	-.000103	-.033343	.0007810	-.000072	.0032191	.0236806
Stddev	.000093	.000042	.030529	.0000484	.000317	.0019949	.0100678
%RSD	55.54595	40.46378	91.56118	6.200584	441.3612	61.96970	42.51503
#1	-.000212	-.000083	.001325	.0007965	-.000412	.0013422	.0267436
#2	-.000061	-.000075	-.056214	.0008198	.000215	.0030011	.0318611
#3	-.000231	-.000151	-.045141	.0007267	-.000018	.0053141	.0124370

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001476	-.036577	.0004053	.0000789	.0072891	-.008158	-.002818
Stddev	.002001	.097665	.0003881	.0012789	.0205575	.008677	.000229
%RSD	135.5448	267.0133	95.76170	1621.036	282.0293	106.3644	8.142458
#1	-.000550	.076070	.0005987	.0003408	-.006601	-.013595	-.003077
#2	-.000106	-.097525	.0006588	.0012066	-.002436	.001849	-.002638
#3	-.003773	-.088276	-.000042	-.001311	.030905	-.012729	-.002741

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0946488	.0025828	-.004408	.0008377	.0030857	-.001236	-.001555
Stddev	.1171845	.0021712	.000509	.0001944	.0011244	.001297	.001055
%RSD	123.8097	84.06089	11.54789	23.20364	36.43869	104.9400	67.85489
#1	.0173153	.0039825	-.003996	.0009205	.0040640	-.002514	-.002416
#2	.2294761	.0036843	-.004977	.0009769	.0018573	.000079	-.000378
#3	.0371551	.0000817	-.004252	.0006156	.0033357	-.001273	-.001872

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

Sample Name: PB165396BL Acquired: 12/29/2024 2:42:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS396 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0063388	-.000180	.0003237
Stddev	.0036865	.000264	.0070555
%RSD	58.15719	146.9808	2179.728
#1	.0068712	.000108	.0054381
#2	.0024151	-.000411	-.007725
#3	.0097302	-.000236	.003258

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2097.808	26501.36	1961.102	1339.338	1903.268
Stddev	2.526	250.71	58.445	10.400	2.264
%RSD	.1203889	.9460423	2.980196	.7764725	.1189338
#1	2097.451	26766.27	1897.076	1351.339	1904.464
#2	2095.480	26470.01	1974.643	1333.700	1900.658
#3	2100.493	26267.79	2011.588	1332.975	1904.683

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165396BS Acquired: 12/29/2024 2:46:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS396 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0192401	.0479919	.0178305	.0609958	.1127922	.4079792
Stddev	.0008155	.0019630	.0003621	.0006739	.0081662	.0363561
%RSD	4.238546	4.090249	2.030642	1.104806	7.240082	8.911269
#1	.0183062	.0461210	.0178607	.0614564	.1035232	.3703359
#2	.0198112	.0478191	.0181765	.0602223	.1189274	.4107072
#3	.0196029	.0500356	.0174542	.0613086	.1159260	.4428945

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3897207	.0100422	.0097007	9.772591	.0210752	.1048302
Stddev	.0191110	.0004017	.0001154	.458849	.0004283	.0002818
%RSD	4.903763	4.000179	1.189486	4.695260	2.032064	.2687868
#1	.3720348	.0095852	.0095697	9.311834	.0210021	.1046830
#2	.3871339	.0103395	.0097450	9.776433	.0215353	.1046524
#3	.4099933	.0102018	.0097874	10.22951	.0206882	.1051550

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0397202	.1794466	.0314613	10.11432	.0782353	.0191450
Stddev	.0063983	.0097638	.0019375	.46120	.0004321	.0007868
%RSD	16.10855	5.441087	6.158473	4.559829	.5522407	4.109741
#1	.0403300	.1874301	.0292468	9.67223	.0786918	.0192422
#2	.0457919	.1823490	.0322927	10.07823	.0778327	.0183141
#3	.0330388	.1685606	.0328444	10.59250	.0781814	.0198787

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.203092	.1027307	.1197692	9.315703	.0203552	F -.002217
Stddev	.384556	.0118648	.0015165	.535441	.0010280	.000945
%RSD	4.178553	11.54940	1.266179	5.747728	5.050520	42.62991
#1	8.804465	.1060680	.1180671	8.729436	.0205157	-.003010
#2	9.232978	.0895546	.1209766	9.438791	.0192564	-.001171
#3	9.571833	.1125694	.1202638	9.778882	.0212936	-.002470

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

Sample Name: PB165396BS Acquired: 12/29/2024 2:46:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS396 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0204782	.1844796	F .4786554	.0116604	.1935522	.1974817
Stddev	.0009721	.0017081	.0215431	.0005589	.0105339	.0092613
%RSD	4.746782	.9258904	4.500748	4.793447	5.442401	4.689706
#1	.0193558	.1829308	.4558329	.0122924	.1833994	.1886512
#2	.0210364	.1841964	.4814962	.0114580	.1928274	.1966732
#3	.0210424	.1863116	.4986372	.0112309	.2044297	.2071208

Elem	Li6707
Units	ppm
Avg	.0315776
Stddev	.0064187
%RSD	20.32671
#1	.0250324
#2	.0318385
#3	.0378618

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2044.804	25694.75	1950.494	1303.314	1848.113
Stddev	4.260	109.87	71.237	3.179	5.114
%RSD	.2083233	.4275875	3.652235	.2439202	.2767079
#1	2047.294	25592.00	2024.328	1302.258	1851.010
#2	2047.233	25810.56	1944.978	1306.886	1851.120
#3	2039.886	25681.69	1882.176	1300.797	1842.208

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165434BL Acquired: 12/29/2024 2:51:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS434 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002084	.0010072	-.003004	-.002745	-.001363	.0034539	-.000524
Stddev	.002775	.0006947	.001137	.003051	.002358	.0341674	.001025
%RSD	133.1848	68.97454	37.84628	111.1532	173.0269	989.2402	195.4256
#1	-.001445	.0004067	-.001707	-.006126	-.003578	-.024994	-.001540
#2	.000317	.0017681	-.003829	-.001915	-.001624	.041352	.000509
#3	-.005122	.0008469	-.003475	-.000195	.001115	-.005996	-.000541

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000128	-.000055	-.026464	-.000736	.0001030	-.009443	-.011193
Stddev	.000134	.000072	.024157	.001062	.0002618	.019345	.047227
%RSD	104.7029	130.9851	91.28216	144.3686	254.2932	204.8720	421.9206
#1	-.000215	-.000024	.001373	-.001295	.0002471	.006396	-.031784
#2	.000026	-.000137	-.038838	.000489	-.000199	-.031004	-.044629
#3	-.000195	-.000004	-.041928	-.001402	.000261	-.003720	.042833

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000959	-.065482	.0003811	-.000438	-.021054	-.010224	-.003206
Stddev	.000886	.117175	.0005826	.000350	.049687	.001494	.000723
%RSD	92.40568	178.9430	152.8697	80.02282	235.9977	14.61110	22.55366
#1	-.000421	.056626	.0000442	-.000824	.026990	-.009401	-.003487
#2	-.001981	-.177007	.0010538	-.000141	-.072236	-.009322	-.002385
#3	-.000474	-.076065	.0000453	-.000348	-.017917	-.011948	-.003747

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0524357	.0007691	-.002898	-.000197	.0047815	-.002520	-.002002
Stddev	.1407496	.0009598	.001648	.000371	.0052572	.000563	.000901
%RSD	268.4234	124.7894	56.84342	188.2533	109.9487	22.34853	45.02265
#1	-.087502	.0008400	-.004797	.000211	.0046198	-.002747	-.000971
#2	.193984	.0016915	-.002059	-.000290	-.000393	-.001879	-.002398
#3	.050825	-.000224	-.001840	-.000513	.010118	-.002934	-.002638

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

Sample Name: PB165434BL Acquired: 12/29/2024 2:51:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS434 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0005064	.0001445	-.000692
Stddev	.0024321	.0002665	.002663
%RSD	480.3222	184.3636	384.5639
#1	.0017727	.0004461	-.002175
#2	.0020440	-.000059	.002382
#3	-.002298	.000047	-.002283

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2023.970	25483.85	1917.914	1290.053	1831.724
Stddev	3.522	53.73	11.560	6.854	1.339
%RSD	.1739905	.2108557	.6027432	.5313294	.0731124
#1	2024.216	25424.33	1930.249	1297.925	1833.204
#2	2027.363	25498.39	1907.328	1285.408	1831.372
#3	2020.333	25528.81	1916.165	1286.826	1830.595

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

Sample Name: PB165434BS Acquired: 12/29/2024 2:55:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS434 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0164334	.0498400	.0153327	.0535539	.1038283	.3603779
Stddev	.0039946	.0041954	.0015784	.0041804	.0011046	.0258820
%RSD	24.30796	8.417829	10.29420	7.805885	1.063869	7.181901
#1	.0208596	.0513297	.0150866	.0556033	.1048586	.3444190
#2	.0130962	.0451029	.0170196	.0563141	.1039642	.3464743
#3	.0153445	.0530872	.0138918	.0487443	.1026620	.3902402

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3782532	.0097549	.0093794	9.583180	.0193517	.1006559
Stddev	.0023895	.0002219	.0001344	.052199	.0008541	.0001539
%RSD	.6317337	2.275135	1.432519	.5446963	4.413370	.1529066
#1	.3810117	.0095496	.0093146	9.569551	.0201442	.1005714
#2	.3769283	.0097246	.0095339	9.539147	.0184471	.1008335
#3	.3768196	.0099904	.0092898	9.640842	.0194638	.1005627

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0431720	.1910609	.0280423	9.739074	.0743727	.0194595
Stddev	.0050879	.0558743	.0015242	.153332	.0006963	.0015214
%RSD	11.78512	29.24425	5.435420	1.574403	.9362858	7.818112
#1	.0402665	.1315494	.0276516	9.905602	.0747417	.0184981
#2	.0402026	.1992359	.0267515	9.707886	.0748070	.0186668
#3	.0490468	.2423974	.0297239	9.603733	.0735695	.0212135

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.741416	.0788800	.1131157	9.076595	.0206637	F -.005137
Stddev	.080691	.0076187	.0006157	.072234	.0020934	.001851
%RSD	.9230862	9.658614	.5442873	.7958281	10.13093	36.02712
#1	8.707611	.0856632	.1129802	9.159044	.0226722	-.003671
#2	8.833511	.0706370	.1137878	9.024444	.0184946	-.007217
#3	8.683125	.0803400	.1125790	9.046297	.0208242	-.004523

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165434BS Acquired: 12/29/2024 2:55:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS434 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0194195	.1739495	F .4641618	.0119337	.1871036	.1945887
Stddev	.0006099	.0086523	.0035111	.0042283	.0052367	.0011563
%RSD	3.140706	4.974015	.7564310	35.43171	2.798846	.5942167
#1	.0196316	.1645911	.4617923	.0129201	.1900371	.1951880
#2	.0187319	.1755993	.4681955	.0155816	.1810576	.1953224
#3	.0198951	.1816581	.4624975	.0072993	.1902160	.1932558

Elem	Li6707
Units	ppm
Avg	.0283772
Stddev	.0033052
%RSD	11.64740
#1	.0251865
#2	.0281590
#3	.0317861

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2077.328	26139.87	1970.618	1337.382	1877.209
Stddev	3.363	143.98	7.591	5.793	2.167
%RSD	.1619071	.5508073	.3851981	.4331517	.1154358
#1	2079.157	26180.99	1977.985	1337.645	1879.553
#2	2073.447	26258.82	1962.822	1343.039	1875.279
#3	2079.381	25979.80	1971.047	1331.462	1876.795

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165465BL Acquired: 12/29/2024 2:59:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS465 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002740	.0000377	-.002847	-.003725	-.002040	-.009924	-.002322
Stddev	.002631	.0014804	.002228	.000544	.003040	.011072	.000768
%RSD	96.02326	3927.563	78.25118	14.60139	149.0198	111.5700	33.08495
#1	-.000066	.0003076	-.003658	-.004095	-.004116	-.022181	-.002338
#2	-.002829	.0013646	-.004556	-.003100	-.003453	-.006944	-.003083
#3	-.005325	-.001559	-.000327	-.003979	.001449	-.000647	-.001546

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000114	-.000057	-.019327	.0003357	.0000079	-.008989	.0144926
Stddev	.000080	.000040	.013071	.0013293	.0002432	.000548	.0673391
%RSD	70.29506	70.08579	67.63356	395.9303	3064.494	6.091968	464.6439
#1	-.000204	-.000085	-.015913	.0018706	.0002826	-.008756	-.061577
#2	-.000049	-.000074	-.008301	-.000428	-.000180	-.009614	.038575
#3	-.000090	-.000011	-.033766	-.000436	-.000079	-.008595	.066479

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002190	-.009696	-.000061	-.000804	.0146897	-.014674	-.002676
Stddev	.001707	.077028	.000317	.001020	.0387114	.009951	.000560
%RSD	77.91891	794.4171	519.7791	126.9127	263.5285	67.81442	20.93019
#1	-.002556	.017720	-.000391	-.001104	.0387901	-.025979	-.002301
#2	-.003684	.049873	.000240	-.001641	.0352423	-.010804	-.003319
#3	-.000330	-.096682	-.000032	.000333	-.029963	-.007239	-.002406

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.030492	.0011814	-.002395	-.000223	.0025401	-.000918	-.003571
Stddev	.013134	.0010624	.001486	.000412	.0059615	.000968	.001227
%RSD	43.07571	89.92169	62.01939	184.5312	234.6922	105.4625	34.35712
#1	-.015877	.0011354	-.002293	-.000005	-.003282	-.000382	-.003391
#2	-.041309	.0022661	-.000964	-.000698	.008632	-.000336	-.002444
#3	-.034288	.0001429	-.003929	.000034	.002270	-.002035	-.004878

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165465BL Acquired: 12/29/2024 2:59:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS465 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0009438	-.000167	-.004045
Stddev	.0026228	.000400	.006521
%RSD	277.9043	239.1348	161.2078
#1	.0035303	-.000272	-.003279
#2	-.001714	-.000504	-.010916
#3	.001015	.000274	.002059

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2090.874	26209.24	1977.458	1323.866	1887.689
Stddev	1.737	237.58	16.606	11.783	1.789
%RSD	.0830775	.9064711	.8397718	.8900441	.0947787
#1	2091.650	26405.18	1958.328	1331.576	1889.631
#2	2088.884	25944.99	1988.152	1310.303	1886.109
#3	2092.088	26277.55	1985.896	1329.720	1887.325

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165465BS Acquired: 12/29/2024 3:03:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS465 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0231373	.0487896	.0159731	.0574278	.1057745	.3955640
Stddev	.0022799	.0041671	.0022227	.0015260	.0036701	.0069812
%RSD	9.853691	8.540862	13.91495	2.657251	3.469703	1.764875
#1	.0257554	.0535346	.0178593	.0590721	.1040477	.4032974
#2	.0215895	.0457259	.0135227	.0571542	.1032863	.3897267
#3	.0220670	.0471081	.0165372	.0560571	.1099895	.3936678

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3898906	.0100723	.0094652	9.733947	.0204789	.1027179
Stddev	.0042903	.0001896	.0000926	.132769	.0010168	.0005387
%RSD	1.100376	1.881961	.9787097	1.363980	4.964938	.5244225
#1	.3907071	.0100478	.0093583	9.821738	.0213657	.1033397
#2	.3937139	.0102729	.0095221	9.798896	.0207018	.1023922
#3	.3852507	.0098961	.0095153	9.581207	.0193692	.1024219

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0377417	.1776266	.0273938	9.876404	.0765703	.0197843
Stddev	.0057495	.0427851	.0012196	.070710	.0003238	.0009033
%RSD	15.23392	24.08712	4.451954	.7159438	.4229287	4.565952
#1	.0443293	.2120098	.0278623	9.943987	.0763673	.0195406
#2	.0351624	.1911583	.0283096	9.882288	.0764000	.0207846
#3	.0337335	.1297118	.0260094	9.802936	.0769438	.0190279

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.980116	.0947935	.1168290	9.225723	.0198985	F -.002892
Stddev	.135240	.0041468	.0008592	.108041	.0022722	.002356
%RSD	1.505993	4.374537	.7354675	1.171089	11.41883	81.45647
#1	9.018699	.0992216	.1161496	9.229080	.0217003	-.003017
#2	9.091871	.0941573	.1177949	9.332046	.0173459	-.000476
#3	8.829777	.0910016	.1165424	9.116042	.0206491	-.005184

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165465BS Acquired: 12/29/2024 3:03:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS465 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197885	.1872356	F .4736512	.0116941	.1928600	.1978052
Stddev	.0003037	.0036579	.0068325	.0006029	.0059600	.0018144
%RSD	1.534669	1.953622	1.442509	5.155277	3.090298	.9172825
#1	.0194493	.1886396	.4745173	.0112500	.1993685	.1993865
#2	.0200352	.1830837	.4800094	.0114519	.1915425	.1982048
#3	.0198810	.1899835	.4664271	.0123804	.1876691	.1958243

Elem	Li6707
Units	ppm
Avg	.0246227
Stddev	.0028611
%RSD	11.61968
#1	.0267463
#2	.0257527
#3	.0213692

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2081.990	26214.60	1974.006	1334.479	1879.880
Stddev	2.515	282.77	27.234	11.612	1.606
%RSD	.1208168	1.078686	1.379625	.8701558	.0854055
#1	2084.883	26511.23	1963.154	1344.622	1880.699
#2	2080.316	25948.09	1953.872	1321.813	1880.911
#3	2080.772	26184.48	2004.993	1337.001	1878.030

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165488BL Acquired: 12/29/2024 3:07:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS488 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006122	.0002238	-.004451	-.003246	-.001321	-.009422	-.000899
Stddev	.002122	.0048542	.002532	.004089	.002017	.019002	.001026
%RSD	34.66118	2168.674	56.87998	125.9572	152.6849	201.6751	114.0874
#1	-.006290	.0055807	-.006386	.000066	-.003393	-.026871	-.000607
#2	-.008155	-.003883	-.001586	-.001989	.000637	-.012219	-.000051
#3	-.003921	-.001026	-.005383	-.007816	-.001207	.010824	-.002039

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000055	-.000027	-.017188	-.000647	.0003976	-.011068	-.022115
Stddev	.000148	.000066	.007082	.000880	.0001442	.008232	.033679
%RSD	270.8018	243.4065	41.20147	136.1465	36.25373	74.37783	152.2889
#1	-.000214	-.000064	-.012938	-.001547	.0002479	-.001833	.006344
#2	.000080	-.000066	-.025364	-.000606	.0004097	-.013737	-.013392
#3	-.000031	.000049	-.013263	.000213	.0005354	-.017635	-.059298

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001894	-.026011	-.000522	.0004847	.0229791	-.004459	-.002219
Stddev	.001557	.114333	.000366	.0010023	.0355846	.009864	.000483
%RSD	82.24047	439.5608	70.14289	206.7907	154.8563	221.2256	21.75373
#1	-.000130	-.127379	-.000839	.0012063	.0065942	-.008402	-.001915
#2	-.003080	.097922	-.000606	.0009076	-.001461	.006767	-.001967
#3	-.002471	-.048576	-.000121	-.000660	.063805	-.011741	-.002776

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.079591	-.000028	-.004063	-.000019	-.002185	-.001325	-.001053
Stddev	.115364	.003455	.001604	.000578	.004329	.001404	.001279
%RSD	144.9460	12454.13	39.47697	3064.831	198.1781	105.9228	121.4663
#1	-.209661	-.003266	-.002766	-.000676	-.000705	-.001939	.000111
#2	-.039460	-.000426	-.003567	.000408	-.007060	-.002317	-.000848
#3	.010348	.003609	-.005857	.000212	.001211	.000281	-.002421

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

Sample Name: PB165488BL Acquired: 12/29/2024 3:07:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS488 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0022260	-.000104	-.006945
Stddev	.0045722	.000066	.000854
%RSD	205.4006	63.82885	12.29090
#1	-.002939	-.000097	-.007875
#2	.005756	-.000174	-.006198
#3	.003861	-.000041	-.006760

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2089.067	26080.60	1972.370	1322.057	1885.920
Stddev	.856	157.07	9.273	13.221	3.654
%RSD	.0409841	.6022548	.4701688	1.000058	.1937257
#1	2089.212	26188.97	1982.228	1325.803	1884.410
#2	2088.148	25900.46	1963.819	1307.366	1883.263
#3	2089.842	26152.36	1971.063	1333.001	1890.086

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165488BS Acquired: 12/29/2024 3:11:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS488 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0238740	.0485024	.0148332	.0582887	.1073497	.4009119
Stddev	.0042882	.0045181	.0024680	.0026085	.0010864	.0184018
%RSD	17.96166	9.315232	16.63844	4.475145	1.012024	4.589976
#1	.0224015	.0511579	.0170983	.0612346	.1081108	.3809919
#2	.0287044	.0432856	.0151983	.0562723	.1078328	.4044674
#3	.0205161	.0510637	.0122030	.0573592	.1061055	.4172766

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3887606	.0099774	.0095157	9.793779	.0204490	.1028120
Stddev	.0054544	.0003208	.0000702	.102188	.0007799	.0005088
%RSD	1.403034	3.215054	.7376565	1.043402	3.814093	.4948639
#1	.3948920	.0098123	.0095492	9.911771	.0199091	.1026371
#2	.3869420	.0097728	.0094351	9.733793	.0213432	.1033852
#3	.3844478	.0103471	.0095629	9.735774	.0200947	.1024138

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0445658	.2307566	.0289556	10.05085	.0767432	.0173209
Stddev	.0085852	.0271931	.0027027	.05128	.0008207	.0015336
%RSD	19.26415	11.78434	9.333786	.5102155	1.069346	8.853888
#1	.0418962	.2521112	.0319263	10.07387	.0758431	.0170942
#2	.0376326	.2400155	.0282979	10.08658	.0774499	.0159133
#3	.0541687	.2001431	.0266424	9.99209	.0769365	.0189552

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.949352	.0998108	.1171617	9.428030	.0198170	F -.003027
Stddev	.065807	.0021471	.0010151	.288715	.0025790	.002110
%RSD	.7353223	2.151181	.8664260	3.062306	13.01416	69.71083
#1	9.016632	.0979566	.1168474	9.703082	.0168536	-.000593
#2	8.885125	.0993126	.1163408	9.453647	.0215535	-.004147
#3	8.946299	.1021632	.1182967	9.127359	.0210440	-.004342

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: PB165488BS Acquired: 12/29/2024 3:11:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS488 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193268	.1803390	F .4732374	.0110670	.1952332	.1986391
Stddev	.0003826	.0069716	.0030520	.0009297	.0051201	.0031148
%RSD	1.979595	3.865810	.6449171	8.400251	2.622536	1.568092
#1	.0193852	.1869483	.4756479	.0108412	.2011380	.2018666
#2	.0189183	.1730543	.4698058	.0102710	.1925359	.1984002
#3	.0196767	.1810144	.4742586	.0120888	.1920258	.1956506

Elem	Li6707
Units	ppm
Avg	.0218573
Stddev	.0056830
%RSD	26.00050
#1	.0159890
#2	.0273349
#3	.0222479

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2090.002	26299.01	1978.458	1334.174	1887.591
Stddev	1.455	130.34	20.789	13.057	1.196
%RSD	.0696093	.4955896	1.050770	.9786838	.0633778
#1	2088.592	26151.46	1955.242	1320.674	1886.428
#2	2091.498	26347.13	1995.353	1346.738	1888.818
#3	2089.916	26398.44	1984.778	1335.112	1887.526

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-01 Acquired: 12/29/2024 3:15:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK41 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1463630	-.159005	1.750721	.2170751	.0715134	96.66161
Stddev	.0014979	.003098	.002090	.0037833	.0011440	.64102
%RSD	1.023379	1.948244	.1194022	1.742837	1.599681	.6631560
#1	.1473952	-.156970	1.749270	.2136024	.0717929	95.92183
#2	.1470489	-.157474	1.749777	.2211067	.0702556	97.05266
#3	.1446451	-.162570	1.753117	.2165162	.0724918	97.01034

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.057762	.0237052	.0078709	111.5652	.1279395	-.019296
Stddev	.008195	.0002112	.0001281	.7081	.0009696	.001804
%RSD	.7747332	.8908936	1.627389	.6347391	.7578370	9.346598
#1	1.048353	.0235958	.0077388	110.7643	.1290277	-.017239
#2	1.063334	.0239486	.0079946	112.1087	.1276232	-.020604
#3	1.061598	.0235711	.0078793	111.8224	.1271675	-.020046

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1776267	387.7172	9.780538	50.87502	.2028598	.0026568
Stddev	.0066732	3.1290	.082890	.38432	.0012479	.0007915
%RSD	3.756880	.8070215	.8474953	.7554271	.6151360	29.79292
#1	.1752947	384.1327	9.685335	50.44093	.2037453	.0019014
#2	.1851529	389.9021	9.836680	51.01218	.2034014	.0025889
#3	.1724323	389.1167	9.819600	51.17195	.2014326	.0034801

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5474760	.2511179	.8721306	11.81448	F 10.93557	.1442247
Stddev	.0543258	.0118338	.0024962	.21091	.02073	.0061901
%RSD	9.922961	4.712439	.2862138	1.785211	.1895219	4.291983
#1	.5364793	.2377476	.8750122	11.86317	10.95522	.1371678
#2	.4994898	.2602453	.8707442	11.99679	10.93756	.1467700
#3	.6064590	.2553607	.8706353	11.58348	10.91391	.1487364

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-01 Acquired: 12/29/2024 3:15:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK41 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079569	5.031465	13.18990	.0667018	1.001848	-.175852
Stddev	.0002509	.005408	.04843	.0029777	.006881	.001179
%RSD	3.153569	.1074736	.3671586	4.464251	.6868504	.6705879
#1	.0080842	5.030767	13.23847	.0656076	.994657	-.174504
#2	.0076678	5.026441	13.14161	.0700718	1.008371	-.176361
#3	.0081185	5.037188	13.18961	.0644260	1.002516	-.176691

Elem	Li6707
Units	ppm
Avg	.1097696
Stddev	.0013126
%RSD	1.195745
#1	.1082587
#2	.1104209
#3	.1106291

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2463.880	30856.37	2367.876	1566.336	1873.190
Stddev	3.041	88.48	7.297	2.543	1.025
%RSD	.1234049	.2867621	.3081746	.1623460	.0547024
#1	2466.259	30915.62	2367.453	1568.872	1872.036
#2	2464.927	30898.82	2375.376	1566.348	1873.993
#3	2460.454	30754.65	2360.800	1563.787	1873.541

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-02 Acquired: 12/29/2024 3:19:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK42 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1609571	-.054255	3.218585	.1055491	.0218032	92.52334	1.189512
Stddev	.0094211	.002626	.009483	.0070023	.0054283	.48909	.004664
%RSD	5.853174	4.841066	.2946431	6.634185	24.89685	.5286147	.3920891
#1	.1715301	-.054152	3.211205	.0975790	.0165843	93.04136	1.194895
#2	.1534534	-.056931	3.215268	.1107132	.0274191	92.45916	1.186682
#3	.1578878	-.051681	3.229281	.1083551	.0214063	92.06951	1.186959

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147774	.0089642	119.2024	.1515204	.0652965	.3020112	200.6600
Stddev	.0001312	.0000843	.4667	.0001728	.0008838	.0030193	.8855
%RSD	.8879263	.9402889	.3914880	.1140374	1.353503	.9997232	.4412860
#1	.0147976	.0088672	119.6259	.1513970	.0642770	.3000877	201.6823
#2	.0146372	.0090203	119.2791	.1517179	.0658448	.3054911	200.1645
#3	.0148973	.0090049	118.7021	.1514464	.0657677	.3004548	200.1332

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.89893	51.65427	.2550616	.0022932	.5314412	.2161816	1.253712
Stddev	.05511	.31893	.0008437	.0001797	.0207666	.0032596	.005949
%RSD	.4631894	.6174415	.3307656	7.834060	3.907592	1.507796	.4745366
#1	11.96167	51.78765	.2549160	.0023768	.5198137	.2157849	1.258474
#2	11.87677	51.88486	.2543002	.0020870	.5190931	.2131385	1.255619
#3	11.85834	51.29029	.2559686	.0024158	.5554167	.2196214	1.247043

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.34601	9.926209	.1073646	.0103826	5.279164	12.68114	.0806380
Stddev	.07696	.029015	.0013554	.0009085	.007010	.08570	.0016884
%RSD	.6782725	.2923062	1.262426	8.750666	.1327790	.6757963	2.093790
#1	11.43437	9.920543	.1081315	.0094690	5.279192	12.77804	.0796512
#2	11.30992	9.900445	.1081626	.0112860	5.272141	12.65007	.0796752
#3	11.29373	9.957639	.1057996	.0103927	5.286160	12.61532	.0825875

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-02 Acquired: 12/29/2024 3:19:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK42 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.042649	.0228593	.1084351
Stddev	.002620	.0007021	.0025922
%RSD	.2512596	3.071431	2.390568
#1	1.045087	.0231335	.1064635
#2	1.039879	.0220615	.1074705
#3	1.042982	.0233830	.1113714

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2543.235	31975.36	2405.487	1623.708	1834.017
Stddev	5.826	50.49	12.823	4.153	4.442
%RSD	.2290967	.1579182	.5330549	.2557738	.2422011
#1	2547.989	31925.97	2390.681	1618.952	1836.057
#2	2544.980	32026.89	2412.854	1625.549	1837.074
#3	2536.735	31973.22	2412.926	1626.622	1828.922

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-03 Acquired: 12/29/2024 3:23:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK43 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2090971	-.060112	4.889952	.1094327	.0241046	82.79550
Stddev	.0048623	.003274	.013658	.0107974	.0016515	.25071
%RSD	2.325356	5.447013	.2793016	9.866697	6.851177	.3028105
#1	.2123033	-.061326	4.874903	.1063858	.0235308	82.96748
#2	.2114854	-.062605	4.893392	.1004862	.0228167	82.50783
#3	.2035025	-.056404	4.901561	.1214262	.0259665	82.91119

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.234106	.0142652	.0119395	98.55484	.1412919	.0749064
Stddev	.004827	.0002334	.0000750	.20026	.0004429	.0008567
%RSD	.3911169	1.636136	.6284093	.2032003	.3134610	1.143727
#1	1.234893	.0144761	.0119547	98.73731	.1408676	.0754809
#2	1.228934	.0143050	.0120057	98.34058	.1412568	.0739217
#3	1.238491	.0140144	.0118580	98.58664	.1417513	.0753167

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4480507	198.3693	14.22448	36.17607	.2979263	.0040819
Stddev	.0104321	.6339	.06644	.16232	.0015779	.0008754
%RSD	2.328320	.3195539	.4670562	.4486825	.5296129	21.44662
#1	.4576663	198.9149	14.27478	36.28971	.2961105	.0039767
#2	.4369594	197.6739	14.14917	35.99018	.2987049	.0050052
#3	.4495263	198.5191	14.24949	36.24833	.2989636	.0032638

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4719113	.2140762	1.522498	9.801546	F 10.48362	.1084030
Stddev	.0268415	.0113357	.003184	.059100	.02555	.0021342
%RSD	5.687818	5.295192	.2090997	.6029694	.2437342	1.968739
#1	.4416346	.2009869	1.525647	9.734198	10.46603	.1075384
#2	.4813091	.2205672	1.519281	9.844762	10.51293	.1068368
#3	.4927902	.2206744	1.522566	9.825679	10.47190	.1108338

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-03 Acquired: 12/29/2024 3:23:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK43 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107109	4.577994	11.80004	.1217919	1.005226	.0124731
Stddev	.0002459	.010857	.04779	.0016316	.006471	.0006755
%RSD	2.296237	.2371581	.4049588	1.339699	.6437224	5.416013
#1	.0105139	4.567298	11.84453	.1207758	1.012324	.0125366
#2	.0106323	4.589006	11.80607	.1236740	.999656	.0131146
#3	.0109866	4.577678	11.74953	.1209260	1.003697	.0117680

Elem	Li6707
Units	ppm
Avg	.0912714
Stddev	.0021907
%RSD	2.400182
#1	.0887531
#2	.0923231
#3	.0927378

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.805	32942.47	2491.205	1674.344	1838.591
Stddev	7.334	238.52	16.335	7.045	1.699
%RSD	.2799382	.7240364	.6557240	.4207868	.0924175
#1	2619.332	32796.94	2472.746	1667.573	1839.849
#2	2627.363	33217.73	2497.073	1681.635	1839.265
#3	2612.719	32812.74	2503.795	1673.823	1836.658

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-04 Acquired: 12/29/2024 3:27:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2673423	-.074750	5.102137	.1409318	.0354449	88.17917
Stddev	.0029061	.002570	.034112	.0052454	.0007311	.29048
%RSD	1.087046	3.438412	.6685827	3.721908	2.062711	.3294167
#1	.2659277	-.077306	5.073985	.1450678	.0355408	87.90912
#2	.2654143	-.074776	5.140072	.1426957	.0346706	88.48648
#3	.2706849	-.072166	5.092356	.1350319	.0361233	88.14190

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.300262	.0165473	.0134803	93.73716	.1670647	.0809681
Stddev	.003412	.0000581	.0001955	.19176	.0007291	.0009976
%RSD	.2623735	.3513175	1.450089	.2045758	.4364113	1.232124
#1	1.296355	.0164826	.0132888	93.52220	.1673418	.0810775
#2	1.301781	.0165950	.0136796	93.89065	.1662376	.0799203
#3	1.302650	.0165645	.0134726	93.79862	.1676145	.0819066

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4924001	244.0990	16.91175	33.08288	.3051263	.0057162
Stddev	.0070126	1.0398	.05925	.17851	.0025519	.0017593
%RSD	1.424172	.4259734	.3503564	.5395760	.8363588	30.77799
#1	.4857439	243.2162	16.84762	32.88719	.3044394	.0037306
#2	.4997217	245.2452	16.96446	33.23680	.3079514	.0070810
#3	.4917347	243.8357	16.92316	33.12466	.3029881	.0063370

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5095922	.2277521	1.421525	8.336619	F 11.77534	.1106744
Stddev	.0406066	.0073975	.007341	.089212	.08637	.0012162
%RSD	7.968456	3.248052	.5163971	1.070126	.7335102	1.098890
#1	.5353766	.2277842	1.415012	8.235916	11.71077	.1103761
#2	.5306157	.2203387	1.429480	8.368181	11.87345	.1096352
#3	.4627844	.2351336	1.420083	8.405760	11.74179	.1120120

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-04 Acquired: 12/29/2024 3:27:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099988	3.779626	12.47545	.0934257	.7972505	-.044572
Stddev	.0002287	.031655	.14079	.0004533	.0073617	.000835
%RSD	2.287224	.8375193	1.128516	.4852495	.9233900	1.872970
#1	.0097363	3.757577	12.49175	.0930157	.8055967	-.043897
#2	.0101046	3.815898	12.60738	.0939126	.7916808	-.045506
#3	.0101554	3.765404	12.32722	.0933487	.7944740	-.044313

Elem	Li6707
Units	ppm
Avg	.0907086
Stddev	.0023002
%RSD	2.535858
#1	.0894765
#2	.0933624
#3	.0892869

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2676.787	33631.47	2565.624	1714.341	1823.218
Stddev	6.548	188.38	19.584	10.114	7.564
%RSD	.2446392	.5601333	.7633054	.5899759	.4148467
#1	2683.903	33664.42	2562.852	1725.010	1827.423
#2	2671.015	33801.20	2547.575	1713.121	1814.487
#3	2675.441	33428.79	2586.446	1704.892	1827.745

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-05 Acquired: 12/29/2024 3:31:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2631522	-.072265	4.812199	.1344588	.0348988	84.24845
Stddev	.0020108	.002105	.041123	.0015702	.0022626	.22466
%RSD	.7641210	2.912702	.8545639	1.167768	6.483388	.2666636
#1	.2636417	-.071740	4.787614	.1330715	.0362970	84.46750
#2	.2609418	-.074583	4.789308	.1341416	.0322883	84.25928
#3	.2648730	-.070473	4.859674	.1361634	.0361110	84.01857

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.244073	.0157609	.0127578	89.66916	.1602416	.0750555
Stddev	.003864	.0001424	.0002018	.27598	.0010133	.0024676
%RSD	.3105998	.9035764	1.581701	.3077809	.6323403	3.287659
#1	1.248044	.0156367	.0125957	89.97251	.1613495	.0733538
#2	1.243850	.0157297	.0126938	89.60204	.1600137	.0739271
#3	1.240326	.0159163	.0129838	89.43292	.1593618	.0778855

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4675949	233.1865	16.15060	31.68008	.2884471	.0036638
Stddev	.0047300	.8633	.04944	.01863	.0021385	.0002402
%RSD	1.011560	.3702188	.3061104	.0588164	.7413917	6.555664
#1	.4701044	234.0571	16.20456	31.65989	.2880622	.0033936
#2	.4621389	233.1718	16.13976	31.69661	.2865272	.0037447
#3	.4705412	232.3307	16.10748	31.68375	.2907519	.0038530

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4833822	.2075009	1.368308	7.985648	F 11.10022	.1064656
Stddev	.0132216	.0016021	.005798	.020453	.08729	.0026546
%RSD	2.735234	.7720923	.4237497	.2561270	.7864245	2.493427
#1	.4950739	.2083464	1.361710	7.995138	11.06294	.1093965
#2	.4860387	.2056532	1.372591	7.962174	11.03776	.1057774
#3	.4690340	.2085031	1.370623	7.999633	11.19997	.1042228

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-05 Acquired: 12/29/2024 3:31:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091290	3.573437	12.03966	.0898828	.7657725	-.041837
Stddev	.0002629	.019315	.06816	.0029276	.0049131	.000582
%RSD	2.879826	.5405035	.5661357	3.257168	.6415874	1.391595
#1	.0092769	3.563472	11.98159	.0865267	.7712826	-.042482
#2	.0092846	3.561140	12.11470	.0912092	.7618479	-.041351
#3	.0088254	3.595699	12.02268	.0919124	.7641870	-.041678

Elem	Li6707
Units	ppm
Avg	.0840984
Stddev	.0011809
%RSD	1.404228
#1	.0838947
#2	.0853679
#3	.0830326

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2786.447	34997.50	2650.531	1777.773	1924.413
Stddev	22.041	142.47	3.708	4.380	17.569
%RSD	.7910240	.4070801	.1398882	.2464006	.9129776
#1	2798.561	34878.74	2654.350	1777.189	1933.373
#2	2799.775	35155.46	2646.946	1782.416	1935.696
#3	2761.006	34958.28	2650.298	1773.713	1904.170

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-04LX5 Acquired: 12/29/2024 3:35:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0464693	-.019081	.9925688	.0248409	.0038491	21.06240	.3109699
Stddev	.0040397	.002527	.0029276	.0029436	.0025587	.28574	.0038932
%RSD	8.693207	13.24421	.2949533	11.84986	66.47616	1.356614	1.251966
#1	.0487994	-.018423	.9936640	.0251168	.0032234	20.95343	.3096859
#2	.0488037	-.021872	.9892515	.0276367	.0016612	21.38659	.3153430
#3	.0418047	-.016948	.9947909	.0217690	.0066626	20.84719	.3078809

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042404	.0023648	22.52935	.0394492	.0209306	.1150000	58.92649
Stddev	.0000417	.0000520	.28795	.0007606	.0001879	.0010976	.70646
%RSD	.9824295	2.197086	1.278097	1.927984	.8978205	.9544261	1.198888
#1	.0042522	.0023620	22.45201	.0394167	.0207844	.1162504	58.73882
#2	.0042748	.0023143	22.84807	.0387054	.0208647	.1141957	59.70784
#3	.0041940	.0024181	22.28797	.0402255	.0211426	.1145539	58.33282

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.111245	7.934428	.0586778	.0015517	.1111036	.0401030	.3451110
Stddev	.059050	.094569	.0000461	.0013524	.0131948	.0100648	.0005994
%RSD	1.436309	1.191878	.0784986	87.15896	11.87608	25.09743	.1736865
#1	4.096220	7.947379	.0587081	.0026974	.1012561	.0516092	.3457720
#2	4.176356	8.021854	.0587006	.0018978	.1260957	.0357661	.3446027
#3	4.061159	7.834052	.0586248	.0000598	.1059590	.0329336	.3449583

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.966092	2.293109	.0242216	.0022392	.7395020	3.087831	.0178751
Stddev	.059311	.008331	.0027475	.0000927	.0047256	.043633	.0020149
%RSD	3.016716	.3633129	11.34316	4.137721	.6390287	1.413051	11.27220
#1	1.947658	2.299416	.0258937	.0021379	.7433728	3.071995	.0194570
#2	1.918186	2.283665	.0210506	.0023196	.7408974	3.137170	.0185617
#3	2.032431	2.296247	.0257204	.0022602	.7342358	3.054327	.0156066

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-04LX5 Acquired: 12/29/2024 3:35:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1932578	-.011185	.0166581
Stddev	.0015902	.000208	.0045898
%RSD	.8228236	1.859761	27.55273
#1	.1915092	-.011043	.0119791
#2	.1946174	-.011424	.0168421
#3	.1936467	-.011088	.0211532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2252.215	28280.44	2096.856	1437.585	1909.225
Stddev	4.154	130.55	31.523	4.573	3.878
%RSD	.1844286	.4616101	1.503326	.3181117	.2031085
#1	2247.446	28263.69	2105.578	1433.762	1906.210
#2	2254.150	28159.07	2061.891	1436.342	1913.599
#3	2255.047	28418.55	2123.099	1442.651	1907.866

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV034 Acquired: 12/29/2024 3:39:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	5.081333	4.734131	24.27078	4.964531	4.888245	399.6703	9.956456
Stddev	.013900	.018855	.07353	.014227	.013391	1.5963	.039367
%RSD	.2735598	.3982682	.3029383	.2865652	.2739350	.3994045	.3953899
#1	5.068769	4.730687	24.23577	4.967039	4.891282	400.2392	9.982948
#2	5.078965	4.717235	24.22131	4.949217	4.873597	397.8675	9.911220
#3	5.096266	4.754469	24.35527	4.977337	4.899857	400.9042	9.975200

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5126186	2.448403	399.6341	15.15410	2.357587	14.61847	405.0345
Stddev	.0051099	.006010	1.8443	.01151	.005516	.03998	2.0948
%RSD	.9968229	.2454818	.4615012	.0759577	.2339615	.2735189	.5171932
#1	.5163274	2.446850	400.7524	15.15522	2.353196	14.61760	405.9831
#2	.5067899	2.443321	397.5053	15.16502	2.355786	14.57892	402.6332
#3	.5147384	2.455037	400.6445	15.14208	2.363778	14.65888	406.4872

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.61115	400.0810	2.460042	1.252059	410.6452	2.451951	14.60519
Stddev	.07169	1.9204	.004559	.000492	3.4242	.018874	.05025
%RSD	.4906535	.4800086	.1853272	.0392938	.8338516	.7697650	.3440402
#1	14.63436	400.5890	2.457062	1.251523	411.7206	2.470586	14.57921
#2	14.53073	397.9576	2.457773	1.252164	406.8124	2.432847	14.66311
#3	14.66836	401.6963	2.465290	1.252490	413.4026	2.452421	14.57325

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	149.8953	4.917804	4.940079	4.865406	4.967343	4.850763	4.929492
Stddev	.6542	.008984	.041406	.006421	.028941	.035647	.009600
%RSD	.4364302	.1826808	.8381636	.1319822	.5826264	.7348828	.1947389
#1	150.2134	4.915485	4.968893	4.872597	4.933946	4.872352	4.923625
#2	149.1428	4.910206	4.892630	4.860243	4.983021	4.809617	4.924281
#3	150.3295	4.927720	4.958715	4.863380	4.985063	4.870319	4.940571

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV034 Acquired: 12/29/2024 3:39:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	4.955387	4.621376	5.037160
Stddev	.024140	.012680	.013833
%RSD	.4871391	.2743802	.2746167
#1	4.971407	4.632303	5.037197
#2	4.927623	4.607472	5.023308
#3	4.967133	4.624353	5.050974

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1858.863	23982.27	1909.705	1172.094	1567.019
Stddev	5.574	81.98	15.276	7.507	4.599
%RSD	.2998724	.3418173	.7999082	.6404405	.2934761
#1	1854.343	23939.97	1896.191	1171.125	1567.007
#2	1865.092	23930.09	1926.279	1165.119	1571.623
#3	1857.156	24076.76	1906.645	1180.038	1562.426

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCB034 Acquired: 12/29/2024 3:42:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB034 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035315	.0007507	.0022614	.0006241	-.003852	-.015481	-.000072
Stddev	.0021031	.0044909	.0007566	.0026328	.002584	.013963	.000156
%RSD	59.55439	598.2124	33.45536	421.8649	67.09361	90.19407	217.2609
#1	.0038830	-.002466	.0031070	-.002371	-.001159	-.025366	-.000247
#2	.0012747	-.001164	.0016487	.002574	-.006312	-.021570	.000052
#3	.0054367	.005882	.0020285	.001669	-.004085	.000492	-.000021

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000554	.0000284	-.009293	-.000309	.0000861	-.004569	-.006787
Stddev	.0000188	.0001484	.012208	.001157	.0006588	.005000	.005915
%RSD	33.91822	522.3901	131.3627	374.0911	765.2868	109.4242	87.14691
#1	.0000400	.0001035	.002072	.001026	-.000423	-.008906	-.012184
#2	.0000764	.0001242	-.007754	-.000942	.000830	.000899	-.000464
#3	.0000498	-.000142	-.022198	-.001012	-.000148	-.005700	-.007713

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001400	-.109393	.0001128	.0001483	.0826512	-.011704	.0026223
Stddev	.000807	.078998	.0006616	.0012458	.0144417	.011838	.0011776
%RSD	57.62051	72.21472	586.6996	840.1075	17.47304	101.1451	44.90806
#1	-.001662	-.122722	.0004430	.0001632	.0800598	-.020282	.0035297
#2	-.000495	-.180878	.0005442	-.001105	.0696806	.001802	.0030455
#3	-.002044	-.024579	-.000649	.001387	.0982131	-.016631	.0012915

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0751523	-.000284	.0104587	.0001486	.0016780	.0003263	-.000291
Stddev	.2437157	.002704	.0003130	.0003991	.0005909	.0005378	.000979
%RSD	324.2956	953.7824	2.992604	268.6448	35.21307	164.8207	336.3375
#1	-.186791	-.002194	.0103842	-.000241	.0023303	-.000244	.000501
#2	.117037	-.001467	.0101896	.000131	.0011785	.000399	.000012
#3	.295212	.002811	.0108022	.000556	.0015253	.000824	-.001385

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

Sample Name: CCB034 Acquired: 12/29/2024 3:42:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB034 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0030903	-.000113	.0116582
Stddev	.0016416	.000337	.0020129
%RSD	53.12149	299.4899	17.26594
#1	.0017138	.000271	.0125964
#2	.0049071	-.000247	.0093475
#3	.0026499	-.000362	.0130308

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2032.501	25499.19	1919.163	1296.751	1832.266
Stddev	9.816	899.91	22.460	41.985	10.221
%RSD	.4829525	3.529171	1.170304	3.237723	.5578609
#1	2032.660	26034.12	1944.852	1318.934	1830.143
#2	2022.607	26003.23	1909.405	1322.991	1823.273
#3	2042.237	24460.21	1903.233	1248.327	1843.382

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-06 Acquired: 12/29/2024 3:46:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3419226	-.002701	4.834845	.2774898	.1819826	88.61579
Stddev	.0031284	.004944	.010647	.0018925	.0009987	.22133
%RSD	.9149498	183.0712	.2202175	.6820101	.5487872	.2497616
#1	.3447169	-.001157	4.830942	.2781587	.1808317	88.76131
#2	.3385428	-.008232	4.826700	.2753537	.1826208	88.72497
#3	.3425083	.001288	4.846893	.2789570	.1824954	88.36108

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.303417	.0928353	.1058123	90.78350	.4837573	1.030202
Stddev	.010137	.0004601	.0004143	.15136	.0011741	.002414
%RSD	.2355607	.4955774	.3915586	.1667208	.2427030	.2343327
#1	4.308268	.0933550	.1060378	90.71997	.4834214	1.032151
#2	4.310218	.0926705	.1053342	90.95626	.4827878	1.027502
#3	4.291766	.0924803	.1060650	90.67426	.4850627	1.030955

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8492089	237.2452	17.06947	32.09725	1.245821	.0595937
Stddev	.0042569	.3274	.03467	.08572	.003160	.0009467
%RSD	.5012787	.1379989	.2031300	.2670647	.2536433	1.588583
#1	.8447464	237.2452	17.09409	32.10019	1.248102	.0601110
#2	.8532251	237.5727	17.08450	32.01009	1.242214	.0601691
#3	.8496552	236.9179	17.02981	32.18146	1.247148	.0585011

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5244464	.9958298	2.115370	8.166533	F 11.06142	.1108611
Stddev	.0070002	.0073353	.004873	.164837	.02494	.0016864
%RSD	1.334769	.7366050	.2303389	2.018447	.2254766	1.521159
#1	.5207566	1.000975	2.120502	8.242183	11.08188	.1093626
#2	.5325195	.999084	2.110807	8.279966	11.03363	.1105335
#3	.5200630	.987430	2.114800	7.977450	11.06874	.1126872

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-06 Acquired: 12/29/2024 3:46:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0092201	3.534575	12.13086	.0914454	.7719896	-.043234
Stddev	.0003758	.007416	.02323	.0007566	.0028840	.000562
%RSD	4.076235	.2098258	.1915117	.8274194	.3735811	1.299851
#1	.0091288	3.542934	12.15103	.0911751	.7717243	-.042730
#2	.0096332	3.532008	12.13609	.0923001	.7749970	-.043132
#3	.0088983	3.528783	12.10546	.0908610	.7692474	-.043840

Elem	Li6707
Units	ppm
Avg	.0887708
Stddev	.0027367
%RSD	3.082848
#1	.0863840
#2	.0881707
#3	.0917577

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2691.451	33909.39	2567.810	1715.277	1868.151
Stddev	3.120	108.18	7.049	6.310	4.444
%RSD	.1159272	.3190325	.2745033	.3678964	.2378762
#1	2691.899	33895.83	2559.827	1710.113	1867.632
#2	2694.324	34023.72	2573.176	1722.311	1872.831
#3	2688.132	33808.63	2570.427	1713.407	1863.989

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-07 Acquired: 12/29/2024 3:50:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK45 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2179198	-.052832	3.346650	.1091996	.0262871	86.50454	1.101809
Stddev	.0047958	.000206	.007583	.0044730	.0028267	.74321	.010190
%RSD	2.200701	.3906478	.2265942	4.096170	10.75306	.8591554	.9248271
#1	.2156610	-.052598	3.347507	.1053363	.0256303	85.65154	1.090148
#2	.2146705	-.052986	3.338675	.1141001	.0238466	86.84943	1.106274
#3	.2234278	-.052913	3.353768	.1081626	.0293843	87.01265	1.109003

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149364	.0114701	97.51545	.1337284	.0868009	.3323914	204.8613
Stddev	.0000969	.0001925	.83255	.0015624	.0008228	.0052709	1.8166
%RSD	.6487224	1.678457	.8537601	1.168342	.9479230	1.585753	.8867435
#1	.0149510	.0116919	96.55422	.1353316	.0877507	.3265545	202.7642
#2	.0148331	.0113453	97.98285	.1322103	.0863078	.3368033	205.9487
#3	.0150252	.0113733	98.00926	.1336435	.0863441	.3338165	205.8711

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.53242	31.37636	.2474038	.0028447	.5021671	.2109354	1.094999
Stddev	.15517	.27931	.0014008	.0008894	.0050990	.0068588	.002031
%RSD	.9989787	.8901772	.5662158	31.26388	1.015402	3.251615	.1855196
#1	15.35325	31.07550	.2481181	.0018180	.4977122	.2179697	1.096005
#2	15.62075	31.62741	.2457898	.0033754	.5077285	.2105697	1.092661
#3	15.62325	31.42617	.2483036	.0033408	.5010606	.2042668	1.096332

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.155901	8.401602	.1092126	.0083779	3.734407	11.08860	.0790667
Stddev	.071233	.019714	.0027871	.0002673	.004315	.01595	.0015037
%RSD	.8733866	.2346466	2.551949	3.190199	.1155506	.1438611	1.901757
#1	8.077605	8.391977	.1061714	.0086681	3.729846	11.07204	.0792196
#2	8.216875	8.388549	.1116448	.0081419	3.734952	11.08989	.0774925
#3	8.173222	8.424280	.1098216	.0083237	3.738424	11.10387	.0804881

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-07 Acquired: 12/29/2024 3:50:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK45 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8312728	-.001274	.0880719
Stddev	.0036788	.001384	.0021849
%RSD	.4425480	108.6205	2.480858
#1	.8270688	-.000024	.0857038
#2	.8328471	-.002762	.0900097
#3	.8339025	-.001037	.0885022

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2763.483	34915.85	2637.642	1770.455	1810.196
Stddev	6.686	151.94	6.283	3.491	3.905
%RSD	.2419418	.4351487	.2381960	.1971761	.2157159
#1	2770.760	34935.48	2643.092	1770.276	1813.463
#2	2762.077	34755.05	2630.770	1767.057	1811.252
#3	2757.611	35057.01	2639.062	1774.032	1805.871

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-08 Acquired: 12/29/2024 3:54:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK46 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2063577	-.055498	2.139523	.1028243	.0237047	79.64315	1.058728
Stddev	.0014122	.004493	.007212	.0019489	.0046387	.15319	.002960
%RSD	.6843323	8.094861	.3370617	1.895318	19.56883	.1923437	.2795935
#1	.2065705	-.051377	2.145744	.1042525	.0190125	79.47430	1.055463
#2	.2048511	-.054831	2.131618	.1006041	.0238136	79.68194	1.059482
#3	.2076513	-.060287	2.141205	.1036162	.0282880	79.77322	1.061238

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0151658	.0085437	143.0220	.1159402	.0680313	.3212645	201.1998
Stddev	.0001078	.0001277	.4239	.0004976	.0009424	.0056887	.9033
%RSD	.7108454	1.495293	.2963733	.4292146	1.385198	1.770734	.4489600
#1	.0152047	.0084610	142.6322	.1164849	.0677516	.3151691	200.1567
#2	.0150440	.0084794	142.9605	.1158260	.0672605	.3221919	201.7141
#3	.0152488	.0086909	143.4733	.1155095	.0690819	.3264326	201.7284

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.01839	34.75360	.2037214	.0032607	.6335414	.1945763	.9436590
Stddev	.03911	.12321	.0020491	.0007434	.0038935	.0013275	.0057749
%RSD	.3254589	.3545347	1.005838	22.79760	.6145616	.6822536	.6119735
#1	11.97441	34.62839	.2035405	.0024674	.6292871	.1930711	.9407592
#2	12.03148	34.75769	.2017687	.0039412	.6369275	.1955800	.9503092
#3	12.04928	34.87471	.2058549	.0033734	.6344095	.1950777	.9399087

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.080457	7.909462	.1261234	.0081072	4.618072	10.97524	.0696353
Stddev	.184960	.014242	.0019272	.0002553	.024768	.06343	.0013933
%RSD	2.036901	.1800657	1.527985	3.148878	.5363248	.5778973	2.000828
#1	8.889774	7.903937	.1245408	.0078394	4.600536	10.95052	.0711619
#2	9.092490	7.898810	.1282695	.0083478	4.607274	10.92791	.0684322
#3	9.259106	7.925639	.1255600	.0081342	4.646406	11.04731	.0693118

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

Sample Name: P5030-08 Acquired: 12/29/2024 3:54:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK46 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9389791	.0955469	.0915708
Stddev	.0048211	.0018667	.0019350
%RSD	.5134361	1.953683	2.113166
#1	.9389282	.0944733	.0896372
#2	.9341836	.0944651	.0915679
#3	.9438253	.0977023	.0935073

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2562.546	32298.77	2481.097	1639.798	1797.650
Stddev	3.563	118.91	6.127	10.613	2.795
%RSD	.1390453	.3681529	.2469637	.6472161	.1555080
#1	2558.560	32209.11	2480.546	1642.343	1794.525
#2	2563.656	32253.55	2487.482	1628.144	1799.914
#3	2565.422	32433.66	2475.264	1648.907	1798.511

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-09 Acquired: 12/29/2024 3:58:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK47 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1685342	-.043071	1.439818	.0947027	.0188119	80.94927	1.024450
Stddev	.0040457	.001591	.001540	.0027720	.0054411	.34117	.003188
%RSD	2.400509	3.694858	.1069716	2.927015	28.92386	.4214646	.3111462
#1	.1727391	-.043003	1.441069	.0935893	.0161332	80.99527	1.024165
#2	.1681942	-.041515	1.438098	.0926605	.0250730	80.58744	1.021414
#3	.1646692	-.044696	1.440287	.0978582	.0152294	81.26512	1.027770

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0137889	.0071502	189.3699	.1069087	.0817532	.2857009	189.2688
Stddev	.0001501	.0001820	.9691	.0008975	.0000886	.0031199	.6702
%RSD	1.088437	2.545108	.5117600	.8395009	.1084105	1.092008	.3541108
#1	.0139470	.0071591	189.6495	.1058760	.0816646	.2866466	189.3827
#2	.0136483	.0073276	188.2918	.1073497	.0817530	.2822175	188.5490
#3	.0137715	.0069640	190.1686	.1075003	.0818419	.2882384	189.8748

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.24017	38.48906	.1847396	.0024171	.5732466	.1777443	.7654455
Stddev	.03367	.20389	.0001767	.0012131	.0059310	.0165368	.0025696
%RSD	.2542969	.5297265	.0956588	50.18934	1.034627	9.303690	.3356978
#1	13.25675	38.67974	.1848918	.0012056	.5796551	.1968253	.7678759
#2	13.20143	38.27414	.1847811	.0036318	.5679507	.1675702	.7657044
#3	13.26233	38.51331	.1845458	.0024137	.5721340	.1688374	.7627563

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.366595	7.479805	.1076790	.0076321	2.973114	10.71574	.0554558
Stddev	.048985	.023039	.0028876	.0010022	.013924	.13311	.0010637
%RSD	.5229805	.3080166	2.681679	13.13169	.4683211	1.242220	1.918062
#1	9.355371	7.465174	.1052821	.0065685	2.957360	10.75302	.0542286
#2	9.324196	7.467879	.1108848	.0085588	2.978212	10.56796	.0561135
#3	9.420219	7.506362	.1068702	.0077688	2.983770	10.82624	.0560253

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-09 Acquired: 12/29/2024 3:58:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK47 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7750058	.1157227	.0896467
Stddev	.0014781	.0025098	.0013037
%RSD	.1907235	2.168813	1.454246
#1	.7742279	.1161919	.0903176
#2	.7740791	.1130114	.0881442
#3	.7767104	.1179648	.0904783

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2576.550	32588.49	2504.111	1645.082	1786.671
Stddev	5.379	172.85	22.109	6.712	3.814
%RSD	.2087547	.5303877	.8829007	.4080246	.2134513
#1	2578.767	32710.84	2496.498	1650.923	1791.059
#2	2570.417	32390.75	2529.021	1637.750	1784.153
#3	2580.466	32663.86	2486.815	1646.574	1784.801

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-10 Acquired: 12/29/2024 4:02:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0323348	.0144719	.2199476	-.004709	-.017346	26.54638
Stddev	.0061215	.0068700	.0034815	.001874	.001816	.05310
%RSD	18.93175	47.47165	1.582891	39.79419	10.47226	.2000458
#1	.0252770	.0168239	.2212204	-.003193	-.016578	26.48525
#2	.0362005	.0067347	.2160088	-.006804	-.016039	26.57280
#3	.0355270	.0198570	.2226137	-.004129	-.019420	26.58110

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0754424	.0061752	.0025524	F 1246.911	.0545162	.0758249
Stddev	.0006649	.0003882	.0001811	.442	.0008747	.0004054
%RSD	.8812646	6.286716	7.093700	.0354613	1.604558	.5346359
#1	.0748322	.0058543	.0023437	1246.543	.0548455	.0754043
#2	.0753441	.0060645	.0026457	1247.401	.0535247	.0758573
#3	.0761509	.0066067	.0026677	1246.789	.0551786	.0762131

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492490	83.18088	5.193891	668.3116	.1005192	.0015972
Stddev	.0012612	.25845	.014278	1.4098	.0001425	.0009363
%RSD	2.560846	.3107119	.2748907	.2109476	.1417418	58.62333
#1	.0478358	82.88266	5.180475	668.4888	.1004238	.0025599
#2	.0496511	83.33990	5.192301	669.6244	.1006829	.0006896
#3	.0502601	83.32008	5.208897	666.8216	.1004507	.0015422

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.768701	.0515257	.5015344	15.37752	1.827439	.1898552
Stddev	.020388	.0083751	.0021027	.08872	.001472	.0019858
%RSD	1.152731	16.25426	.4192498	.5769257	.0805757	1.045957
#1	1.777427	.0598716	.5022075	15.47604	1.825740	.1916756
#2	1.745402	.0515838	.4991775	15.30396	1.828220	.1877375
#3	1.783275	.0431217	.5032181	15.35255	1.828355	.1901525

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

Sample Name: P5030-10 Acquired: 12/29/2024 4:02:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000571	30.63787	6.364922	.0202087	.0575181	.6203872
Stddev	.000772	.09822	.012896	.0013382	.0043678	.0025001
%RSD	135.1402	.3205700	.2026100	6.621676	7.593745	.4029975
#1	.000085	30.52762	6.378073	.0198432	.0565377	.6208862
#2	-.000376	30.66997	6.364397	.0216916	.0622928	.6176752
#3	-.001421	30.71602	6.352297	.0190912	.0537239	.6226002

Elem	Li6707
Units	ppm
Avg	.0897855
Stddev	.0021114
%RSD	2.351631
#1	.0880523
#2	.0921370
#3	.0891672

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2039.899	26162.82	2093.242	1303.033	1509.032
Stddev	6.064	82.43	6.448	5.382	5.061
%RSD	.2972522	.3150486	.3080605	.4130186	.3354051
#1	2034.352	26101.03	2086.359	1299.116	1505.339
#2	2046.372	26256.41	2094.221	1309.170	1514.802
#3	2038.972	26131.02	2099.144	1300.814	1506.956

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-11 Acquired: 12/29/2024 4:06:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0325543	.0210511	.8141696	-.003616	-.023776	22.40412
Stddev	.0066461	.0017381	.0003021	.014710	.005998	.05418
%RSD	20.41551	8.256329	.0371091	406.7860	25.22708	.2418378
#1	.0289759	.0219793	.8138236	.011797	-.025823	22.46158
#2	.0284640	.0190460	.8143040	-.017505	-.017023	22.35396
#3	.0402228	.0221279	.8143812	-.005141	-.028484	22.39683

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1476691	.0061358	.0092774	F 1850.292	.0740492	.0708374
Stddev	.0001907	.0002000	.0002110	12.814	.0007722	.0014885
%RSD	.1291118	3.259972	2.274811	.6925650	1.042836	2.101271
#1	.1475652	.0063668	.0095169	1835.698	.0749408	.0699509
#2	.1475530	.0060237	.0091967	1855.474	.0735953	.0725559
#3	.1478891	.0060170	.0091187	1859.703	.0736115	.0700055

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0606459	94.62805	6.370674	F 1048.706	.0945866	.0010085
Stddev	.0141948	.20452	.012086	3.269	.0007573	.0018812
%RSD	23.40611	.2161339	.1897091	.3117091	.8005894	186.5321
#1	.0454850	94.83046	6.384179	1050.261	.0938412	-.000414
#2	.0736211	94.42147	6.366969	1050.907	.0953552	.000298
#3	.0628315	94.63223	6.360875	1044.950	.0945633	.003142

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.353899	.0411526	2.069327	11.86236	2.007568	.1772778
Stddev	.013631	.0085642	.009583	.04182	.002339	.0011972
%RSD	.5790710	20.81083	.4631179	.3525809	.1165135	.6753473
#1	2.350822	.0502929	2.080053	11.90926	2.004915	.1759371
#2	2.342071	.0333135	2.066321	11.84889	2.009334	.1782401
#3	2.368806	.0398513	2.061607	11.82894	2.008456	.1776563

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-11 Acquired: 12/29/2024 4:06:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000199	48.43142	7.122129	.0230828	.0936265	.7637709
Stddev	.0012978	.08910	.017692	.0025274	.0019186	.0022205
%RSD	6516.231	.1839743	.2484068	10.94939	2.049199	.2907319
#1	.0014522	48.33546	7.142480	.0217087	.0920099	.7658945
#2	-.000314	48.51154	7.113492	.0215402	.0931230	.7614647
#3	-.001078	48.44725	7.110414	.0259996	.0957467	.7639534

Elem	Li6707
Units	ppm
Avg	.0803086
Stddev	.0035462
%RSD	4.415759
#1	.0817974
#2	.0828678
#3	.0762607

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1966.271	25153.87	2030.526	1241.374	1436.262
Stddev	2.635	108.63	15.407	8.173	1.233
%RSD	.1340281	.4318692	.7587757	.6583900	.0858531
#1	1968.527	25047.93	2014.630	1232.079	1437.204
#2	1966.911	25265.00	2045.392	1247.435	1436.717
#3	1963.374	25148.69	2031.556	1244.609	1434.866

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-12 Acquired: 12/29/2024 4:10:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0416345	.0134415	2.645773	.0013340	-.018955	14.94570
Stddev	.0068427	.0036042	.007865	.0060342	.001671	.07152
%RSD	16.43514	26.81387	.2972835	452.3361	8.815827	.4785611
#1	.0491967	.0175585	2.636762	-.002606	-.017137	14.87805
#2	.0358703	.0119096	2.651264	.008281	-.019304	15.02055
#3	.0398367	.0108563	2.649292	-.001673	-.020424	14.93849

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1619912	.0067261	.0306431	F 2224.019	.0482448	.0578917
Stddev	.0016919	.0001545	.0002820	19.702	.0007019	.0011472
%RSD	1.044461	2.296992	.9201338	.8858789	1.454838	1.981646
#1	.1603858	.0067971	.0303234	2215.289	.0474355	.0571629
#2	.1637581	.0065488	.0308564	2246.578	.0486120	.0572981
#3	.1618298	.0068323	.0307495	2210.191	.0486870	.0592141

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0327143	122.0702	7.691195	F 1252.918	.0885150	.0019171
Stddev	.0065132	.4706	.038395	4.991	.0005643	.0011149
%RSD	19.90934	.3855387	.4992076	.3983650	.6375098	58.15236
#1	.0401744	121.5268	7.646987	1247.585	.0891544	.0008129
#2	.0298099	122.3366	7.716210	1257.477	.0883036	.0030423
#3	.0281585	122.3473	7.710386	1253.692	.0880869	.0018963

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.716993	.0557028	5.575534	9.092567	1.096621	.1665616
Stddev	.036514	.0054680	.010633	.065951	.008256	.0022026
%RSD	1.343929	9.816326	.1907017	.7253262	.7528667	1.322398
#1	2.709479	.0494085	5.586262	9.167501	1.087471	.1641145
#2	2.756680	.0584204	5.575342	9.043346	1.098878	.1671850
#3	2.684820	.0592797	5.564999	9.066854	1.103514	.1683853

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-12 Acquired: 12/29/2024 4:10:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022411	98.19683	6.149214	.0259046	.0017310	.7440101
Stddev	.0003226	.59982	.005693	.0009715	.0033611	.0043130
%RSD	14.39524	.6108381	.0925862	3.750264	194.1777	.5797013
#1	.0021582	97.54371	6.145922	.0260372	-.001607	.7416545
#2	.0019680	98.32374	6.145932	.0268029	.005115	.7489880
#3	.0025971	98.72305	6.155788	.0248736	.001685	.7413877

Elem	Li6707
Units	ppm
Avg	.0656358
Stddev	.0012385
%RSD	1.886918
#1	.0642058
#2	.0663369
#3	.0663648

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1908.976	24490.87	1995.699	1206.517	1397.021
Stddev	4.707	73.42	6.650	5.482	2.791
%RSD	.2465773	.2997812	.3331927	.4543502	.1998118
#1	1911.933	24478.04	1997.607	1202.036	1399.877
#2	1903.548	24424.71	1988.305	1204.886	1394.299
#3	1911.447	24569.86	2001.187	1212.630	1396.888

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-13 Acquired: 12/29/2024 4:14:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2235744	-.072111	.6326948	.1350963	.0402090	88.77365	.6261557
Stddev	.0008145	.005177	.0033293	.0011545	.0010342	.29113	.0005767
%RSD	.3643213	7.179009	.5262090	.8545745	2.572143	.3279467	.0921088
#1	.2244860	-.075667	.6364716	.1344953	.0405558	89.03710	.6266788
#2	.2229182	-.066172	.6314278	.1343662	.0390460	88.82276	.6255372
#3	.2233190	-.074494	.6301851	.1364273	.0410254	88.46109	.6262511

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0148946	.0047271	28.86268	.1174858	.0939025	.3888793	221.2117
Stddev	.0002741	.0001208	.05668	.0002429	.0013116	.0056199	.7356
%RSD	1.840213	2.556129	.1963750	.2067707	1.396807	1.445149	.3325500
#1	.0151484	.0047994	28.92790	.1172154	.0952833	.3830735	221.9182
#2	.0149315	.0045876	28.83474	.1175565	.0926731	.3892717	221.2670
#3	.0146039	.0047944	28.82539	.1176856	.0937512	.3942927	220.4500

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.26935	20.87442	.1906226	.0015323	.3361109	.1732610	.6305217
Stddev	.07341	.01651	.0013937	.0008222	.0200129	.0070148	.0019891
%RSD	.3621942	.0790948	.7311239	53.65875	5.954257	4.048676	.3154713
#1	20.33117	20.87265	.1910986	.0007250	.3514423	.1653185	.6326230
#2	20.28868	20.85887	.1890533	.0015033	.3434194	.1786089	.6302741
#3	20.18821	20.89175	.1917160	.0023687	.3134710	.1758554	.6286679

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.677680	2.699652	.0918013	.0101073	.8440712	10.49549	.0261916
Stddev	.057517	.015004	.0004888	.0003361	.0140332	.10482	.0012716
%RSD	.7491400	.5557818	.5324205	3.324840	1.662566	.9987472	4.855002
#1	7.666953	2.716315	.0912412	.0100566	.8528953	10.59180	.0265032
#2	7.739805	2.687212	.0920210	.0097994	.8514292	10.51081	.0272784
#3	7.626282	2.695430	.0921416	.0104658	.8278891	10.38384	.0247931

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

Sample Name: P5030-13 Acquired: 12/29/2024 4:14:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5067299	-.078501	.0818565
Stddev	.0050805	.000871	.0021832
%RSD	1.002612	1.109764	2.667162
#1	.5084242	-.079101	.0804191
#2	.5107468	-.078899	.0843688
#3	.5010187	-.077502	.0807816

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2886.766	36117.91	2703.717	1837.413	1858.424
Stddev	14.184	196.00	22.740	4.361	11.805
%RSD	.4913495	.5426731	.8410683	.2373513	.6352105
#1	2876.992	36184.84	2678.936	1837.849	1848.084
#2	2903.035	36271.69	2708.589	1841.540	1871.286
#3	2880.271	35897.21	2723.626	1832.851	1855.901

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-14 Acquired: 12/29/2024 4:18:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1263744	-.051339	6.769343	.0854763	.0216041	77.61853
Stddev	.0068687	.006801	.016762	.0053952	.0021590	3.12016
%RSD	5.435204	13.24737	.2476153	6.311960	9.993635	4.019868
#1	.1187479	-.043823	6.754031	.0814972	.0219028	74.03563
#2	.1283016	-.053126	6.766746	.0833145	.0235982	79.08207
#3	.1320736	-.057069	6.787252	.0916172	.0193112	79.73789

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.351218	.0127947	.0179693	80.89841	.2247904	.0538297
Stddev	.125225	.0005197	.0002912	3.09599	.0003836	.0028248
%RSD	3.736691	4.061889	1.620556	3.827009	.1706263	5.247639
#1	3.206843	.0121986	.0182749	77.32348	.2247635	.0569159
#2	3.416474	.0131524	.0176951	82.69471	.2251867	.0532009
#3	3.430338	.0130331	.0179379	82.67703	.2244211	.0513723

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7267991	162.4107	6.527641	24.44384	.2358295	.0049180
Stddev	.0253305	6.1599	.250252	.87663	.0007382	.0009198
%RSD	3.485218	3.792791	3.833734	3.586312	.3130341	18.70266
#1	.6987632	155.3021	6.238870	23.43906	.2359011	.0038776
#2	.7480370	165.7538	6.662818	24.83998	.2350581	.0056231
#3	.7335972	166.1764	6.681234	25.05249	.2365293	.0052534

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6657312	.2065052	4.777013	7.589719	F 16.82013	.0989364
Stddev	.0101698	.0050622	.034056	.550395	.05380	.0038180
%RSD	1.527617	2.451383	.7129104	7.251845	.3198693	3.859068
#1	.6556488	.2018171	4.791619	6.967378	16.76136	.0945709
#2	.6759862	.2118729	4.801330	7.789295	16.83206	.1005861
#3	.6655586	.2058256	4.738091	8.012483	16.86696	.1016521

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

Sample Name: P5030-14 Acquired: 12/29/2024 4:18:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0113871	5.234045	11.31807	.1798742	1.103884	.2212424
Stddev	.0007767	.013815	.35583	.0021551	.044136	.0083630
%RSD	6.820520	.2639471	3.143895	1.198095	3.998231	3.780029
#1	.0105545	5.235931	10.90765	.1780932	1.053396	.2116019
#2	.0120921	5.219384	11.50662	.1822698	1.123110	.2255775
#3	.0115147	5.246821	11.53996	.1792597	1.135146	.2265478

Elem	Li6707
Units	ppm
Avg	.1239826
Stddev	.0099101
%RSD	7.993141
#1	.1127276
#2	.1278205
#3	.1313998

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2468.705	30970.30	2415.962	1572.853	1851.963
Stddev	2.373	54.69	85.540	9.962	1.211
%RSD	.0961258	.1765805	3.540621	.6334005	.0653687
#1	2466.893	30988.06	2513.654	1570.845	1853.244
#2	2467.831	31013.91	2379.739	1564.048	1850.838
#3	2471.391	30908.94	2354.493	1583.667	1851.808

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

Sample Name: P5030-15 Acquired: 12/29/2024 4:22:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2223565	-.092918	8.685747	.1394764	.0436424	85.37290
Stddev	.0066623	.002398	.011084	.0022726	.0048388	.36728
%RSD	2.996236	2.580715	.1276063	1.629358	11.08749	.4302042
#1	.2152494	-.093694	8.680243	.1417492	.0491470	85.72383
#2	.2233600	-.094832	8.678494	.1372041	.0417206	84.99121
#3	.2284602	-.090228	8.698506	.1394759	.0400597	85.40366

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.421138	.0178284	.0254491	114.1514	.2335760	.0430272
Stddev	.017736	.0003316	.0000775	.5007	.0013365	.0014665
%RSD	.4011672	1.860164	.3045745	.4386079	.5721780	3.408347
#1	4.437706	.0181687	.0253651	114.6292	.2321382	.0432628
#2	4.402428	.0178106	.0254645	113.6306	.2347804	.0414572
#3	4.423279	.0175061	.0255178	114.1943	.2338095	.0443617

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9155107	257.1377	7.555239	26.51735	.2822544	.0058861
Stddev	.0052247	.6896	.019761	.08464	.0013311	.0012300
%RSD	.5706918	.2681937	.2615514	.3191690	.4715879	20.89756
#1	.9096020	257.8966	7.573226	26.52375	.2810884	.0055859
#2	.9195203	256.9670	7.534086	26.59860	.2819701	.0072384
#3	.9174099	256.5494	7.558405	26.42970	.2837046	.0048338

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.336615	.2603449	6.214655	8.152603	F 20.30942	.1269559
Stddev	.032570	.0169987	.014201	.107545	.03609	.0021805
%RSD	2.436736	6.529298	.2285148	1.319153	.1777233	1.717544
#1	1.372917	.2499835	6.198317	8.129208	20.27344	.1274843
#2	1.326975	.2510882	6.224049	8.269920	20.30918	.1245597
#3	1.309953	.2799629	6.221598	8.058681	20.34563	.1288236

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

Sample Name: P5030-15 Acquired: 12/29/2024 4:22:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149513	4.424441	11.31627	.9395766	1.256975	.2979246
Stddev	.0002346	.010519	.16353	.0038222	.005681	.0040455
%RSD	1.569082	.2377572	1.445114	.4067957	.4519903	1.357887
#1	.0152093	4.432802	11.49645	.9387521	1.250776	.3014991
#2	.0147507	4.412630	11.27512	.9362339	1.258216	.2935329
#3	.0148940	4.427892	11.17724	.9437437	1.261934	.2987419

Elem	Li6707
Units	ppm
Avg	.1351299
Stddev	.0034741
%RSD	2.570942
#1	.1375168
#2	.1311442
#3	.1367286

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2463.331	31022.53	2364.413	1576.980	1846.298
Stddev	6.868	142.34	23.814	11.294	3.374
%RSD	.2788247	.4588326	1.007171	.7161777	.1827398
#1	2456.096	31168.54	2337.729	1587.577	1844.565
#2	2469.762	31014.89	2372.006	1578.262	1850.186
#3	2464.133	30884.17	2383.505	1565.099	1844.143

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

Sample Name: P5030-16 Acquired: 12/29/2024 4:26:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1671487	-.064538	2.884543	.1010123	.0274738	94.71021
Stddev	.0053289	.001715	.003578	.0020910	.0016947	.14914
%RSD	3.188091	2.656573	.1240461	2.070014	6.168517	.1574704
#1	.1698615	-.062561	2.882293	.1029643	.0268812	94.87739
#2	.1705754	-.065618	2.888669	.1012670	.0293853	94.59083
#3	.1610093	-.065435	2.882668	.0988057	.0261550	94.66240

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.295724	.0146453	.0125310	74.60802	.1813777	.0610583
Stddev	.001751	.0000414	.0000290	.11584	.0019397	.0005042
%RSD	.0762526	.2828239	.2312816	.1552582	1.069421	.8257833
#1	2.297660	.0146604	.0125081	74.73702	.1793815	.0606558
#2	2.295257	.0146770	.0125636	74.57415	.1814964	.0616239
#3	2.294253	.0145984	.0125213	74.51289	.1832554	.0608953

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3808986	196.2900	11.59884	27.08277	.2154683	.0034071
Stddev	.0038816	.1563	.03440	.16053	.0005537	.0007689
%RSD	1.019076	.0796026	.2965653	.5927235	.2569712	22.56840
#1	.3839634	196.2399	11.62425	27.11989	.2160906	.0025266
#2	.3821986	196.1649	11.55969	26.90694	.2152842	.0039461
#3	.3765338	196.4652	11.61257	27.22149	.2150302	.0037488

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5942951	.2536249	2.295904	7.723258	F 14.09524	.0915215
Stddev	.0207984	.0085303	.018041	.105673	.02626	.0019183
%RSD	3.499667	3.363354	.7857696	1.368240	.1862800	2.095981
#1	.5808944	.2606235	2.297040	7.801983	14.07712	.0937343
#2	.5837360	.2561281	2.277322	7.764632	14.08324	.0904997
#3	.6182548	.2441230	2.313350	7.603158	14.12535	.0903304

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-16 Acquired: 12/29/2024 4:26:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC7 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0113743	3.075805	11.97200	.1246326	1.000740	.1246031
Stddev	.0008422	.003672	.07079	.0028828	.003046	.0010798
%RSD	7.404645	.1193960	.5913006	2.313044	.3043591	.8665764
#1	.0104877	3.071566	12.04466	.1267906	1.001334	.1254813
#2	.0121637	3.077808	11.96808	.1213586	.997441	.1249304
#3	.0114713	3.078039	11.90324	.1257485	1.003445	.1233975

Elem	Li6707
Units	ppm
Avg	.1608960
Stddev	.0024905
%RSD	1.547899
#1	.1596294
#2	.1592934
#3	.1637652

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2614.786	32464.25	2502.333	1648.983	1847.352
Stddev	4.793	362.40	1.071	17.587	1.708
%RSD	.1833113	1.116304	.0428171	1.066554	.0924424
#1	2610.323	32709.98	2501.392	1655.857	1845.727
#2	2614.184	32634.73	2503.499	1662.095	1847.198
#3	2619.853	32048.05	2502.109	1628.997	1849.132

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-17 Acquired: 12/29/2024 4:30:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0996525	-.064689	.7072809	.0909494	.0233805	106.3343
Stddev	.0078082	.003995	.0033441	.0034883	.0020634	1.4688
%RSD	7.835401	6.176219	.4728138	3.835394	8.825279	1.381328
#1	.0922774	-.060733	.7083932	.0894486	.0239103	106.5448
#2	.1078315	-.064610	.7099272	.0884628	.0211038	104.7716
#3	.0988486	-.068723	.7035224	.0949369	.0251273	107.6865

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.449746	.0148999	.0082849	395.4196	.1957501	.0581658
Stddev	.016751	.0001427	.0001169	6.7982	.0010637	.0017459
%RSD	1.155436	.9577320	1.411228	1.719227	.5434087	3.001594
#1	1.452516	.0148728	.0083635	396.6578	.1948168	.0582591
#2	1.431783	.0147727	.0081505	388.0875	.1969083	.0598631
#3	1.464940	.0150542	.0083406	401.5136	.1955252	.0563751

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1575227	208.5895	6.413797	55.12334	.2148310	.0018143
Stddev	.0077667	3.0674	.092665	.51236	.0008255	.0013000
%RSD	4.930526	1.470539	1.444777	.9294826	.3842700	71.65398
#1	.1617942	209.2001	6.424600	55.44005	.2149223	.0010096
#2	.1485578	205.2627	6.316204	54.53222	.2156070	.0011192
#3	.1622160	211.3056	6.500587	55.39775	.2139635	.0033140

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6764991	.2351638	.8236097	7.507341	F 12.17086	.0964880
Stddev	.0228198	.0093117	.0026619	.261512	.01645	.0013260
%RSD	3.373214	3.959648	.3232025	3.483420	.1351230	1.374259
#1	.7009486	.2457747	.8211789	7.469565	12.16018	.0977433
#2	.6557651	.2283540	.8264543	7.266772	12.16260	.0951011
#3	.6727836	.2313627	.8231959	7.785687	12.18980	.0966194

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-17 Acquired: 12/29/2024 4:30:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058917	2.787400	10.57376	.0466997	1.140283	.1429669
Stddev	.0002001	.010626	.11851	.0006491	.010407	.0028974
%RSD	3.396653	.3812284	1.120768	1.389988	.9126456	2.026605
#1	.0060902	2.786693	10.65025	.0469992	1.145816	.1434494
#2	.0056900	2.777145	10.43725	.0459548	1.128278	.1398585
#3	.0058950	2.798363	10.63377	.0471449	1.146754	.1455927

Elem	Li6707
Units	ppm
Avg	.1820265
Stddev	.0040062
%RSD	2.200890
#1	.1826441
#2	.1777473
#3	.1856880

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2604.979	32823.35	2535.087	1660.868	1768.345
Stddev	11.023	124.65	29.697	8.194	5.453
%RSD	.4231618	.3797515	1.171450	.4933521	.3083418
#1	2599.388	32945.17	2525.645	1669.294	1764.704
#2	2617.678	32828.83	2568.357	1660.383	1774.614
#3	2597.872	32696.06	2511.259	1652.927	1765.718

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

Sample Name: P5030-18 Acquired: 12/29/2024 4:34:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0589099	-.042550	.2581734	.0716627	.0169224	76.16062	.8698866
Stddev	.0041999	.003353	.0015715	.0069232	.0032580	.50317	.0058681
%RSD	7.129404	7.881209	.6087160	9.660813	19.25279	.6606673	.6745786
#1	.0545406	-.046415	.2571087	.0698966	.0141306	75.86037	.8661292
#2	.0592721	-.040825	.2599784	.0657936	.0205022	75.87997	.8668821
#3	.0629169	-.040410	.2574332	.0792979	.0161344	76.74152	.8766485

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0119358	.0044825	617.5616	.1138967	.0646154	.1346416	190.8217
Stddev	.0002113	.0001281	4.1235	.0002371	.0005392	.0015298	1.2763
%RSD	1.770728	2.857913	.6677112	.2082003	.8344434	1.136235	.6688308
#1	.0116934	.0043598	614.7900	.1138404	.0645798	.1329280	189.9137
#2	.0120322	.0046154	615.5944	.1141570	.0651715	.1351267	190.2703
#3	.0120818	.0044723	622.3003	.1136929	.0640949	.1358701	192.2809

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.731249	127.7344	.2150447	-.000776	1.176733	.1654305	.5053699
Stddev	.052510	1.1161	.0008062	.000748	.039964	.0030778	.0057557
%RSD	.7800972	.8737869	.3749150	96.35956	3.396168	1.860462	1.138919
#1	6.688619	127.2380	.2159217	-.000856	1.131335	.1638695	.5090061
#2	6.715224	126.9526	.2143358	-.001480	1.206600	.1634461	.4987339
#3	6.789905	129.0126	.2148766	.000008	1.192263	.1689760	.5083697

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.898240	7.738268	.0939235	.0053756	1.136197	10.59760	.0329624
Stddev	.266062	.029644	.0018287	.0006856	.006941	.06141	.0013491
%RSD	3.368629	.3830820	1.946987	12.75407	.6109350	.5794329	4.092775
#1	7.764867	7.713405	.0954754	.0046602	1.128182	10.53065	.0344668
#2	7.725244	7.730323	.0919074	.0060269	1.140271	10.61085	.0318602
#3	8.204610	7.771074	.0943875	.0054397	1.140137	10.65130	.0325600

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

Sample Name: P5030-18 Acquired: 12/29/2024 4:34:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKC9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.397275	.4956914	.1403358
Stddev	.008334	.0027374	.0012533
%RSD	.5964715	.5522450	.8931045
#1	1.402302	.4946008	.1402265
#2	1.387655	.4936674	.1391406
#3	1.401870	.4988061	.1416401

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2369.942	29965.15	2356.339	1503.276	1686.702
Stddev	4.643	130.09	14.501	12.877	2.403
%RSD	.1959132	.4341477	.6154020	.8565879	.1424882
#1	2366.797	29879.65	2370.076	1499.501	1689.466
#2	2367.754	30114.86	2357.762	1517.619	1685.104
#3	2375.274	29900.93	2341.179	1492.709	1685.537

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

Sample Name: P5030-19 Acquired: 12/29/2024 4:38:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0462027	-.035931	.1046537	.0619321	.0110186	68.78017	.6507544
Stddev	.0019939	.003493	.0031026	.0085495	.0021488	.54257	.0046173
%RSD	4.315494	9.721977	2.964656	13.80460	19.50204	.7888482	.7095335
#1	.0441071	-.031943	.1024370	.0646183	.0085933	69.35709	.6560111
#2	.0480762	-.038449	.1081995	.0523621	.0117775	68.70327	.6488975
#3	.0464248	-.037402	.1033248	.0688159	.0126850	68.28015	.6473547

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107750	.0032172	476.1992	.1003373	.0723160	.1228642	171.8166
Stddev	.0003236	.0001417	2.2364	.0005503	.0011373	.0008670	1.4681
%RSD	3.003462	4.403231	.4696250	.5484548	1.572725	.7056656	.8544372
#1	.0111477	.0032242	478.7129	.1003341	.0716873	.1223529	173.4226
#2	.0106115	.0030721	475.4543	.0997887	.0716318	.1223745	171.4835
#3	.0105657	.0033552	474.4303	.1008893	.0736289	.1238653	170.5437

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.779646	116.5093	.2118175	-.000709	.9648184	.1534198	.3544020
Stddev	.046147	.9652	.0004227	.000911	.0206730	.0066173	.0009839
%RSD	.6806638	.8284281	.1995331	128.4715	2.142683	4.313220	.2776081
#1	6.822901	117.4213	.2114299	.000312	.9886679	.1587072	.3549921
#2	6.784966	116.6080	.2122681	-.000999	.9520136	.1555534	.3532662
#3	6.731069	115.4985	.2117545	-.001440	.9537738	.1459989	.3549477

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.660318	7.013817	.0822888	.0048179	.6336580	9.664723	.0224794
Stddev	.085149	.005184	.0020148	.0004839	.0092759	.065987	.0022889
%RSD	1.111564	.0739078	2.448485	10.04334	1.463872	.6827626	10.18243
#1	7.617753	7.013987	.0809144	.0047725	.6418948	9.711285	.0218848
#2	7.758358	7.008550	.0846017	.0053230	.6236101	9.693674	.0250069
#3	7.604845	7.018913	.0813504	.0043584	.6354692	9.589209	.0205464

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

Sample Name: P5030-19 Acquired: 12/29/2024 4:38:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.384952	.4623062	.1252917
Stddev	.003130	.0021387	.0016704
%RSD	.2260044	.4626243	1.333201
#1	1.384228	.4643249	.1238012
#2	1.388381	.4600649	.1270971
#3	1.382248	.4625287	.1249768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.916	29895.18	2311.176	1508.863	1714.034
Stddev	4.904	110.90	10.962	5.784	5.450
%RSD	.2078858	.3709718	.4743245	.3833449	.3179495
#1	2356.478	30012.16	2303.474	1506.878	1711.622
#2	2355.709	29791.56	2306.328	1504.334	1710.206
#3	2364.561	29881.83	2323.727	1515.379	1720.273

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

Sample Name: P5030-20 Acquired: 12/29/2024 4:42:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0724122	-.033769	.1054803	.0627528	.0120612	75.87354	.6255160
Stddev	.0046811	.007321	.0011720	.0009726	.0051711	.31810	.0030989
%RSD	6.464464	21.68102	1.111107	1.549858	42.87344	.4192559	.4954190
#1	.0760739	-.025594	.1067045	.0638736	.0093652	75.51673	.6222653
#2	.0671380	-.039722	.1043686	.0622540	.0087953	75.97643	.6284368
#3	.0740246	-.035990	.1053678	.0621308	.0180231	76.12747	.6258458

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0109637	.0032577	522.8859	.1081465	.0797165	.1324544	170.5290
Stddev	.0001198	.0000695	2.3353	.0001589	.0004400	.0055867	.4453
%RSD	1.092462	2.134068	.4466119	.1469169	.5519012	4.217797	.2611154
#1	.0110976	.0031991	520.1977	.1079794	.0799554	.1260136	170.0238
#2	.0109266	.0033345	524.0464	.1081646	.0799854	.1353615	170.8644
#3	.0108668	.0032394	524.4135	.1082956	.0792088	.1359880	170.6987

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.688083	111.8324	.2219985	-.000351	1.104716	.1694384	.3778453
Stddev	.014203	.3774	.0016169	.000723	.012153	.0133004	.0038207
%RSD	.2497047	.3374949	.7283544	205.7291	1.100141	7.849694	1.011182
#1	5.671698	111.4009	.2225442	-.001172	1.111731	.1837477	.3816390
#2	5.695653	112.1011	.2201793	.000189	1.111734	.1671140	.3739981
#3	5.696899	111.9953	.2232720	-.000070	1.090682	.1574533	.3778987

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.928358	7.214936	.0788930	.0040785	.6788246	11.49171	.0213699
Stddev	.058778	.014038	.0006993	.0006500	.0029434	.01200	.0015783
%RSD	.7413611	.1945699	.8864559	15.93649	.4336013	.1044063	7.385415
#1	7.949477	7.219402	.0792068	.0037386	.6754346	11.50280	.0199014
#2	7.861939	7.199208	.0793804	.0048280	.6807305	11.49336	.0211695
#3	7.973658	7.226197	.0780917	.0036690	.6803088	11.47897	.0230388

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-20 Acquired: 12/29/2024 4:42:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKD1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.415946	.5378416	.1428535
Stddev	.006649	.0019916	.0054720
%RSD	.4695824	.3702934	3.830507
#1	1.408924	.5362579	.1365651
#2	1.416768	.5371894	.1454637
#3	1.422146	.5400776	.1465317

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2368.717	30019.89	2304.959	1505.218	1697.855
Stddev	3.316	113.08	8.581	8.640	2.501
%RSD	.1399955	.3766906	.3722977	.5740118	.1472848
#1	2364.975	30129.19	2313.968	1505.318	1695.012
#2	2369.881	30027.11	2304.028	1513.809	1699.716
#3	2371.293	29903.37	2296.881	1496.529	1698.835

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-21 Acquired: 12/29/2024 4:45:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0642520	-.038594	.1088591	.0615444	.0152514	76.24008	.6115035
Stddev	.0033776	.002151	.0034386	.0070675	.0049924	1.06422	.0100661
%RSD	5.256850	5.572937	3.158802	11.48360	32.73392	1.395883	1.646120
#1	.0678584	-.039711	.1124733	.0636290	.0200660	77.46791	.6231181
#2	.0611627	-.039956	.1056281	.0536691	.0155896	75.58253	.6053063
#3	.0637350	-.036114	.1084760	.0673352	.0100985	75.66981	.6060861

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0112873	.0029838	470.5185	.1060905	.0753433	.1343531	176.1622
Stddev	.0002240	.0000388	6.3724	.0008597	.0009235	.0081726	2.4848
%RSD	1.984096	1.301685	1.354328	.8103058	1.225765	6.082890	1.410534
#1	.0114206	.0029483	477.8708	.1052722	.0744109	.1347610	179.0254
#2	.0114126	.0029779	466.5872	.1060132	.0753614	.1259843	174.8921
#3	.0110288	.0030253	467.0975	.1069863	.0762577	.1423141	174.5691

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.976421	108.8903	.2106136	.0003180	1.006285	.1682757	.3709866
Stddev	.072057	1.4973	.0006544	.0004179	.023920	.0155200	.0014565
%RSD	1.447963	1.375060	.3107157	131.4104	2.377076	9.222949	.3926133
#1	5.059080	110.6192	.2098877	-.000126	1.021568	.1861888	.3697695
#2	4.943330	108.0126	.2111585	.000376	.978718	.1597776	.3726004
#3	4.926854	108.0392	.2107945	.000704	1.018568	.1588607	.3705899

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.867604	7.087870	.0846486	.0035420	.6151418	10.86465	.0236371
Stddev	.052615	.016257	.0019083	.0002920	.0106728	.10189	.0033929
%RSD	.5933420	.2293602	2.254339	8.244157	1.735022	.9378552	14.35407
#1	8.896503	7.081324	.0867373	.0032225	.6211925	10.97618	.0240533
#2	8.899437	7.075907	.0829964	.0036084	.6028185	10.84134	.0200553
#3	8.806873	7.106380	.0842121	.0037950	.6214142	10.77642	.0268027

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-21 Acquired: 12/29/2024 4:45:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.527053	.4855971	.1390509
Stddev	.023549	.0068092	.0032910
%RSD	1.542088	1.402236	2.366791
#1	1.554243	.4932898	.1406639
#2	1.513665	.4803427	.1412243
#3	1.513250	.4831589	.1352645

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2321.527	29614.99	2250.526	1490.243	1675.068
Stddev	5.411	16.65	20.934	4.130	4.033
%RSD	.2330973	.0562279	.9301622	.2771483	.2407876
#1	2326.883	29608.73	2226.355	1494.981	1676.881
#2	2321.636	29633.86	2262.405	1488.342	1677.877
#3	2316.062	29602.37	2262.817	1487.405	1670.447

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-22 Acquired: 12/29/2024 4:49:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1944030	-.112282	.5129073	.1644619	.0525250	102.4335	.6864725
Stddev	.0039509	.004957	.0016543	.0041641	.0017293	1.2205	.0102891
%RSD	2.032310	4.414797	.3225292	2.531970	3.292379	1.191509	1.498838
#1	.1898578	-.117967	.5141877	.1682632	.0530843	102.9960	.6910496
#2	.1963358	-.110013	.5134947	.1651113	.0539054	103.2712	.6936789
#3	.1970154	-.108866	.5110395	.1600112	.0505852	101.0332	.6746891

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0168369	.0055559	23.37630	.1417435	.0479116	.2646732	268.1891
Stddev	.0001105	.0001990	.32412	.0004944	.0006091	.0016636	3.2117
%RSD	.6560025	3.582224	1.386531	.3488004	1.271307	.6285605	1.197569
#1	.0167791	.0057332	23.49846	.1419368	.0476145	.2665494	269.2974
#2	.0167674	.0053406	23.62160	.1411816	.0475080	.2633779	270.6999
#3	.0169643	.0055937	23.00886	.1421120	.0486122	.2640922	264.5700

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.06980	25.09844	.1883135	.0020532	5.880561	.2417812	.7685598
Stddev	.21417	.27102	.0004784	.0003308	.040664	.0078406	.0026378
%RSD	1.254676	1.079840	.2540278	16.11036	.6914911	3.242847	.3432151
#1	17.16212	25.14844	.1882857	.0023046	5.881338	.2327964	.7715918
#2	17.22234	25.34099	.1888051	.0016785	5.920831	.2453086	.7672952
#3	16.82496	24.80590	.1878496	.0021766	5.839515	.2472384	.7667923

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.681827	2.961106	.1110181	.0052198	2.724458	11.15226	.0320802
Stddev	.185408	.004641	.0038870	.0007319	.016652	.06566	.0012473
%RSD	2.135584	.1567338	3.501251	14.02136	.6112112	.5887251	3.888089
#1	8.633727	2.959934	.1128156	.0060381	2.706418	11.09714	.0307447
#2	8.886544	2.966220	.1136811	.0046278	2.739241	11.22490	.0322808
#3	8.525209	2.957163	.1065577	.0049936	2.727714	11.13473	.0332150

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5030-22 Acquired: 12/29/2024 4:49:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKG5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.206880	-.164106	.0985085
Stddev	.009829	.001886	.0054334
%RSD	.8144336	1.149086	5.515664
#1	1.204825	-.164518	.0991625
#2	1.217574	-.165753	.1035853
#3	1.198240	-.162049	.0927777

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2559.142	32294.55	2432.948	1647.047	1828.019
Stddev	2.833	158.92	18.868	5.990	2.056
%RSD	.1106924	.4921025	.7755062	.3636899	.1124805
#1	2557.459	32154.26	2441.292	1641.450	1829.185
#2	2557.555	32262.24	2411.347	1646.325	1825.645
#3	2562.413	32467.14	2446.206	1653.365	1829.227

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-01 Acquired: 12/29/2024 4:53:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK55 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1203315	-.033670	2.951218	.0638859	.0192583	51.90131
Stddev	.0018297	.001155	.007720	.0022265	.0062623	.17109
%RSD	1.520562	3.429217	.2615823	3.485187	32.51762	.3296374
#1	.1208893	-.032442	2.943399	.0645351	.0264487	52.02343
#2	.1182878	-.034733	2.951420	.0657157	.0149995	51.70577
#3	.1218174	-.033836	2.958834	.0614069	.0163266	51.97474

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.400620	.0110157	.0065634	59.67670	.1200074	.0533817
Stddev	.007707	.0002101	.0000811	.09764	.0013959	.0008209
%RSD	.5502642	1.907145	1.236044	.1636174	1.163214	1.537862
#1	1.409272	.0112472	.0066527	59.57078	.1205649	.0524849
#2	1.394490	.0109626	.0064943	59.69620	.1210385	.0540961
#3	1.398099	.0108372	.0065431	59.76312	.1184189	.0535642

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3540095	124.4942	6.356625	13.62088	.1700882	.0033304
Stddev	.0009004	.2933	.032436	.17127	.0003520	.0009782
%RSD	.2543411	.2355757	.5102708	1.257421	.2069577	29.37221
#1	.3541975	124.8114	6.393368	13.81588	.1702331	.0039262
#2	.3548011	124.2329	6.331962	13.55194	.1703446	.0038635
#3	.3530300	124.4385	6.344547	13.49482	.1696868	.0022014

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6784071	.1558154	1.674464	7.360749	F 14.40303	.0868605
Stddev	.0288623	.0144694	.010538	.025274	.04347	.0022256
%RSD	4.254428	9.286241	.6293093	.3433552	.3018367	2.562277
#1	.6900422	.1441986	1.666187	7.366819	14.36287	.0844589
#2	.6455432	.1512242	1.686327	7.332993	14.39703	.0872692
#3	.6996359	.1720234	1.670879	7.382435	14.44920	.0888534

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-01 Acquired: 12/29/2024 4:53:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK55 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0132857	6.773430	9.395986	.1066163	.7826686	.2343045
Stddev	.0003052	.015608	.071281	.0006609	.0015636	.0002843
%RSD	2.297009	.2304289	.7586299	.6198629	.1997733	.1213220
#1	.0133236	6.778493	9.457056	.1069758	.7841681	.2341797
#2	.0129633	6.755919	9.413240	.1070196	.7827895	.2346299
#3	.0135701	6.785877	9.317662	.1058536	.7810480	.2341041

Elem	Li6707
Units	ppm
Avg	.0600578
Stddev	.0013005
%RSD	2.165492
#1	.0594525
#2	.0591702
#3	.0615506

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2417.794	30538.68	2293.448	1545.611	1901.394
Stddev	5.076	149.06	16.760	5.832	5.447
%RSD	.2099611	.4881049	.7307591	.3773401	.2864914
#1	2419.666	30657.33	2274.109	1551.879	1902.941
#2	2421.669	30587.33	2302.502	1544.611	1905.901
#3	2412.048	30371.37	2303.733	1540.344	1895.341

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-02 Acquired: 12/29/2024 4:57:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK56 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2185459	-.047100	1.452741	.0726354	.0188287	57.30974
Stddev	.0070356	.003659	.005803	.0042157	.0030183	.13050
%RSD	3.219287	7.767850	.3994322	5.803915	16.03041	.2277098
#1	.2201904	-.050934	1.448609	.0767190	.0194724	57.16082
#2	.2108336	-.043647	1.459375	.0682990	.0214732	57.36426
#3	.2246135	-.046720	1.450240	.0728882	.0155404	57.40413

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8182015	.0180885	.0042881	57.93315	.0898572	.0462247
Stddev	.0018089	.0001044	.0000611	.11423	.0005981	.0003771
%RSD	.2210881	.5771829	1.425625	.1971834	.6655620	.8158112
#1	.8174214	.0179695	.0042992	57.80129	.0899730	.0457936
#2	.8169134	.0181646	.0042222	58.00231	.0892097	.0463868
#3	.8202696	.0181314	.0043429	57.99584	.0903889	.0464936

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2594478	136.9527	2.953999	6.507321	.1384212	.0012379
Stddev	.0060386	.4458	.006378	.065381	.0001794	.0006142
%RSD	2.327494	.3255239	.2158943	1.004725	.1295936	49.61836
#1	.2526003	136.6258	2.947886	6.435413	.1386283	.0007806
#2	.2617318	136.7718	2.960612	6.523358	.1383189	.0019360
#3	.2640114	137.4605	2.953499	6.563190	.1383164	.0009970

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.153353	.1616417	.8787042	5.207971	F 10.71831	.0981164
Stddev	.016282	.0157988	.0054940	.045141	.01607	.0017937
%RSD	1.411735	9.773965	.6252348	.8667730	.1498989	1.828099
#1	1.159144	.1698905	.8849906	5.251636	10.70969	.1000540
#2	1.134967	.1434258	.8748234	5.210791	10.70839	.0977811
#3	1.165948	.1716087	.8762985	5.161486	10.73684	.0965140

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-02 Acquired: 12/29/2024 4:57:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK56 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156102	6.820837	7.076286	.0654933	1.661463	.2536752
Stddev	.0005151	.008384	.026583	.0002979	.015396	.0006655
%RSD	3.299572	.1229199	.3756689	.4547864	.9266491	.2623563
#1	.0161981	6.818074	7.057967	.0656533	1.663804	.2529199
#2	.0152383	6.830254	7.106776	.0656769	1.645031	.2541757
#3	.0153942	6.814183	7.064115	.0651497	1.675555	.2539299

Elem	Li6707
Units	ppm
Avg	.0403608
Stddev	.0032395
%RSD	8.026437
#1	.0409035
#2	.0368842
#3	.0432948

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2330.583	29478.00	2169.550	1494.649	1895.190
Stddev	12.024	140.91	6.603	12.194	7.066
%RSD	.5159080	.4780242	.3043502	.8158169	.3728346
#1	2343.769	29322.37	2164.614	1480.579	1903.071
#2	2327.750	29596.93	2166.985	1501.224	1893.077
#3	2320.228	29514.70	2177.051	1502.143	1889.421

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-03 Acquired: 12/29/2024 5:01:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK57 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1170559	-.037778	5.413705	.0581468	.0113717	73.30417
Stddev	.0043561	.003853	.009369	.0038379	.0010079	.30592
%RSD	3.721342	10.19812	.1730611	6.600422	8.863453	.4173237
#1	.1220718	-.033952	5.417337	.0537328	.0103789	72.97683
#2	.1148726	-.041657	5.403064	.0606963	.0113421	73.58281
#3	.1142232	-.037726	5.420714	.0600113	.0123941	73.35289

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.042836	.0124499	.0058805	69.62234	.1443344	.0847534
Stddev	.007751	.0002310	.0001315	.23939	.0020041	.0002115
%RSD	.3794076	1.855362	2.236073	.3438383	1.388507	.2495537
#1	2.035819	.0122595	.0060310	69.39506	.1450676	.0848612
#2	2.051155	.0123832	.0058229	69.87223	.1420670	.0845098
#3	2.041533	.0127068	.0057877	69.59972	.1458687	.0848894

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4430799	119.6022	5.032908	9.850656	.1962281	.0007224
Stddev	.0090581	.5675	.009903	.180829	.0011467	.0002073
%RSD	2.044340	.4744564	.1967592	1.835701	.5843663	28.68779
#1	.4489870	119.0746	5.022799	9.661555	.1974997	.0009499
#2	.4326512	120.2025	5.042591	9.868529	.1959118	.0005443
#3	.4476015	119.5295	5.033334	10.02188	.1952728	.0006731

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.820482	.2252634	2.490431	11.70138	F 22.92082	.1100280
Stddev	.011938	.0079969	.003702	.11578	.06637	.0017893
%RSD	.4232569	3.550019	.1486509	.9894156	.2895532	1.626220
#1	2.811448	.2226985	2.492647	11.59119	22.99540	.1111087
#2	2.815983	.2188637	2.486158	11.82203	22.86826	.1079626
#3	2.834016	.2342281	2.492490	11.69091	22.89881	.1110127

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-03 Acquired: 12/29/2024 5:01:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK57 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0162913	3.197374	9.328454	.1243163	1.397132	.7462087
Stddev	.0011092	.006037	.015961	.0032164	.001849	.0040554
%RSD	6.808461	.1888144	.1711017	2.587238	.1323689	.5434733
#1	.0169701	3.201042	9.342547	.1277022	1.396659	.7415436
#2	.0168924	3.190407	9.331693	.1213017	1.395566	.7481884
#3	.0150113	3.200675	9.311122	.1239450	1.399172	.7488940

Elem	Li6707
Units	ppm
Avg	.0965796
Stddev	.0037489
%RSD	3.881688
#1	.0923151
#2	.0993561
#3	.0980677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2399.926	30181.33	2261.393	1528.879	1861.098
Stddev	5.702	63.31	9.721	6.744	3.529
%RSD	.2375759	.2097815	.4298630	.4411287	.1896227
#1	2400.162	30118.32	2266.499	1528.058	1858.718
#2	2394.110	30180.74	2250.183	1522.582	1859.423
#3	2405.506	30244.95	2267.497	1535.996	1865.152

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV035 Acquired: 12/29/2024 5:05:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	5.056951	4.828862	24.69422	5.103009	4.993810	407.1872	10.06755
Stddev	.018447	.019821	.02868	.010365	.009683	12.8825	.31862
%RSD	.3647931	.4104630	.1161276	.2031160	.1939091	3.163775	3.164812
#1	5.061545	4.850931	24.66111	5.092245	4.982629	392.3517	9.70123
#2	5.036641	4.823080	24.71139	5.103857	4.999382	415.5483	10.28035
#3	5.072667	4.812575	24.71016	5.112923	4.999421	413.6617	10.22106

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5133500	2.486667	403.1379	15.57269	2.409872	14.85081	408.7950
Stddev	.0150065	.001914	12.3080	.05954	.004832	.40200	13.0313
%RSD	2.923251	.0769609	3.053044	.3823658	.2005094	2.706938	3.187734
#1	.4960263	2.484460	388.9290	15.53322	2.415446	14.38682	393.7663
#2	.5216771	2.487868	410.4991	15.64118	2.407279	15.09475	416.9571
#3	.5223467	2.487673	409.9857	15.54367	2.406889	15.07086	415.6615

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.72101	403.4109	2.508948	1.289991	424.0965	2.490280	15.21644
Stddev	.46947	12.0758	.005046	.006012	15.0405	.081834	.01728
%RSD	3.189128	2.993424	.2011212	.4660569	3.546479	3.286148	.1135605
#1	14.18087	389.5333	2.503288	1.283712	406.7293	2.396569	15.20385
#2	15.03098	411.5260	2.510580	1.295695	432.7859	2.547649	15.20933
#3	14.95118	409.1734	2.512976	1.290566	432.7744	2.526622	15.23614

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.0092	5.005879	4.967473	5.017898	5.055999	4.847656	5.026952
Stddev	4.6260	.017359	.155170	.009168	.019859	.151004	.007734
%RSD	3.043249	.3467746	3.123721	.1826986	.3927848	3.114993	.1538411
#1	146.6693	4.987049	4.788441	5.013551	5.035960	4.674966	5.018196
#2	154.5610	5.009341	5.050804	5.028431	5.056365	4.913121	5.029813
#3	154.7974	5.021246	5.063174	5.011713	5.075673	4.954880	5.032847

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV035 Acquired: 12/29/2024 5:05:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	4.993908	4.673709	5.153885
Stddev	.159098	.140527	.160901
%RSD	3.185838	3.006752	3.121934
#1	4.812934	4.511443	4.970110
#2	5.111752	4.755082	5.269414
#3	5.057039	4.754602	5.222133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1801.249	23294.88	1902.220	1127.113	1533.096
Stddev	8.304	221.84	56.136	6.329	4.899
%RSD	.4609978	.9522972	2.951073	.5615662	.3195801
#1	1804.522	23288.49	1966.198	1124.300	1535.587
#2	1791.808	23076.31	1861.214	1122.678	1527.451
#3	1807.418	23519.84	1879.247	1134.362	1536.249

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

Sample Name: CCB035 Acquired: 12/29/2024 5:09:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB035 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000194	.0021408	.0036185	-.000328	.0012870	-.032376	-.000661
Stddev	.002662	.0028440	.0012644	.001206	.0033195	.013417	.002654
%RSD	1368.860	132.8488	34.94258	367.5297	257.9299	41.44013	401.7544
#1	-.002690	-.000179	.0023379	-.001090	-.000616	-.019617	.002400
#2	.002608	.001288	.0048660	.001062	.005120	-.031146	-.002324
#3	-.000501	.005314	.0036517	-.000956	-.000643	-.046366	-.002057

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000035	.0000600	-.016627	.0012289	.0006355	-.007345	.0121232
Stddev	.0001575	.0001947	.029098	.0002744	.0003421	.004080	.0286398
%RSD	4501.329	324.6856	175.0016	22.33143	53.82727	55.54848	236.2391
#1	.0001769	.0002842	-.049258	.0009674	.0010162	-.006335	.0214939
#2	-.000036	-.000038	.006622	.0012048	.0005364	-.011835	.0349039
#3	-.000131	-.000066	-.007245	.0015147	.0003539	-.003865	-.020028

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000671	-.043895	.0001036	-.000107	.0410313	-.010813	.0021656
Stddev	.001266	.130282	.0003883	.000881	.0334081	.010498	.0004018
%RSD	188.7648	296.8050	374.8032	822.1767	81.42087	97.08669	18.55372
#1	-.000474	-.082569	-.000264	-.000956	.0279031	-.006247	.0025521
#2	-.002023	-.150461	.000066	.000802	.0161815	-.022820	.0017501
#3	.000485	.101345	.000510	-.000168	.0790094	-.003371	.0021944

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1909806	.0003166	.0092393	.0003305	.0100498	.0004734	.0001158
Stddev	.0410113	.0001885	.0016893	.0003196	.0017944	.0019929	.0007499
%RSD	21.47404	59.54476	18.28347	96.71301	17.85481	420.9915	647.4018
#1	.1959581	.0001586	.0111069	-.000017	.0120887	.0010686	.0009175
#2	.2292760	.0002660	.0087931	.000612	.0087109	.0021008	-.000001
#3	.1477078	.0005253	.0078180	.000396	.0093498	-.001749	-.000569

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

Sample Name: CCB035 Acquired: 12/29/2024 5:09:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB035 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0024778	.0000257	.0139934
Stddev	.0031536	.0003609	.0027727
%RSD	127.2715	1402.266	19.81428
#1	.0014507	-.000222	.0171879
#2	.0060169	-.000140	.0122111
#3	-.000034	.000440	.0125813

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2030.918	25929.85	1941.774	1310.178	1847.171
Stddev	7.408	186.96	8.078	8.815	4.096
%RSD	.3647575	.7210241	.4159982	.6728421	.2217419
#1	2028.683	25721.29	1940.598	1300.070	1846.282
#2	2039.186	26082.43	1950.375	1314.195	1851.638
#3	2024.885	25985.82	1934.348	1316.270	1843.593

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-04 Acquired: 12/29/2024 5:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK58 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1572303	-.019180	6.265091	.0661949	.0032191	63.45867
Stddev	.0032365	.000912	.018779	.0056065	.0020726	.19306
%RSD	2.058460	4.756089	.2997341	8.469651	64.38537	.3042275
#1	.1558006	-.018177	6.261545	.0626975	.0054481	63.32468
#2	.1549548	-.019404	6.248338	.0726615	.0013502	63.37137
#3	.1609354	-.019960	6.285390	.0632257	.0028588	63.67996

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.450185	.0107263	.0080924	166.7085	.1016622	.0843734
Stddev	.003398	.0002624	.0001868	.8352	.0014615	.0003609
%RSD	.2342894	2.446589	2.308338	.5009972	1.437628	.4276818
#1	1.451494	.0104717	.0080732	165.9584	.1032070	.0847636
#2	1.446328	.0107112	.0079159	166.5587	.1014781	.0840517
#3	1.452734	.0109959	.0082880	167.6085	.1003014	.0843050

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3178374	134.1838	12.53337	27.42689	.1618071	.0018547
Stddev	.0067352	.5112	.04932	.22787	.0007254	.0011198
%RSD	2.119079	.3809407	.3934772	.8308154	.4483397	60.37522
#1	.3229860	133.8321	12.53671	27.43842	.1610428	.0016799
#2	.3203110	133.9492	12.48247	27.19348	.1618922	.0030517
#3	.3102151	134.7702	12.58093	27.64878	.1624862	.0008326

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.113173	.2335577	2.816606	7.250864	F 15.52829	.0888808
Stddev	.008076	.0090464	.006525	.209203	.06002	.0019043
%RSD	.7255192	3.873290	.2316775	2.885217	.3865461	2.142519
#1	1.119078	.2439927	2.822074	7.424288	15.53029	.0869765
#2	1.103969	.2279281	2.818361	7.018519	15.46730	.0888808
#3	1.116471	.2287523	2.809382	7.309785	15.58730	.0907851

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

Sample Name: P5032-04 Acquired: 12/29/2024 5:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK58 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0186413	1.981848	11.27908	.1209999	.6544848	.4274745
Stddev	.0002129	.019442	.06997	.0022608	.0026438	.0027994
%RSD	1.142137	.9810120	.6203123	1.868458	.4039487	.6548771
#1	.0186267	1.959660	11.32568	.1206890	.6549913	.4246160
#2	.0184360	1.989980	11.19862	.1189106	.6568387	.4275964
#3	.0188611	1.995904	11.31293	.1234001	.6516244	.4302109

Elem	Li6707
Units	ppm
Avg	.1087855
Stddev	.0027899
%RSD	2.564567
#1	.1091016
#2	.1114039
#3	.1058510

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.606	32126.76	2475.724	1625.590	1853.057
Stddev	3.717	168.81	22.310	3.984	2.463
%RSD	.1457954	.5254636	.9011515	.2450969	.1329297
#1	2546.640	32315.43	2477.485	1629.188	1853.269
#2	2548.402	32074.85	2497.102	1626.273	1855.408
#3	2553.776	31989.99	2452.586	1621.308	1850.495

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-05 Acquired: 12/29/2024 5:17:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1638386	-.024153	1.512361	.0943485	.0184473	45.76731
Stddev	.0064817	.001564	.004187	.0042732	.0035732	.75356
%RSD	3.956179	6.473418	.2768632	4.529152	19.36958	1.646502
#1	.1675133	-.022807	1.508210	.0899591	.0186463	44.89745
#2	.1563545	-.025868	1.512289	.0984952	.0219168	46.22138
#3	.1676480	-.023786	1.516583	.0945912	.0147788	46.18308

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8001774	.0120027	.0076282	F 884.1817	.0747941	.0672236
Stddev	.0125139	.0002734	.0002290	14.3850	.0002708	.0012240
%RSD	1.563891	2.277664	3.002051	1.626926	.3620189	1.820849
#1	.7857278	.0117005	.0078051	867.5802	.0751059	.0683539
#2	.8073322	.0120749	.0077101	892.9536	.0746584	.0659235
#3	.8074722	.0122328	.0073696	892.0112	.0746181	.0673933

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2336591	213.5416	20.44726	203.0806	.1624312	.0019806
Stddev	.0048273	3.5949	.31974	3.1917	.0006156	.0009881
%RSD	2.065953	1.683457	1.563711	1.571654	.3789673	49.89161
#1	.2350536	209.3907	20.07822	199.4140	.1618646	.0012741
#2	.2376356	215.5888	20.62258	204.5912	.1630862	.0015579
#3	.2282880	215.6453	20.64100	205.2366	.1623428	.0031097

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9590301	.1824983	1.374430	7.007059	F 12.74690	.1157691
Stddev	.0084264	.0069335	.004934	.237987	.03414	.0003181
%RSD	.8786327	3.799231	.3589615	3.396396	.2678550	.2747261
#1	.9498321	.1745463	1.376676	6.745114	12.72099	.1154908
#2	.9663769	.1856697	1.368773	7.066084	12.73412	.1157007
#3	.9608812	.1872790	1.377841	7.209979	12.78559	.1161158

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

Sample Name: P5032-05 Acquired: 12/29/2024 5:17:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156842	1.851003	10.22808	.0879497	.4368058	.4988144
Stddev	.0008768	.002817	.14672	.0019589	.0089617	.0082195
%RSD	5.590529	.1521765	1.434521	2.227257	2.051636	1.647813
#1	.0154338	1.850600	10.06633	.0890322	.4265526	.4893931
#2	.0149599	1.854000	10.26528	.0891284	.4407215	.5045199
#3	.0166590	1.848410	10.35262	.0856885	.4431432	.5025303

Elem	Li6707
Units	ppm
Avg	.0864391
Stddev	.0023110
%RSD	2.673546
#1	.0838084
#2	.0873666
#3	.0881423

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.950	29820.48	2411.441	1499.586	1594.595
Stddev	5.382	70.95	35.763	2.223	3.380
%RSD	.2281592	.2379278	1.483067	.1482201	.2119439
#1	2364.136	29900.37	2450.873	1500.598	1597.127
#2	2359.321	29764.82	2402.345	1501.121	1595.901
#3	2353.391	29796.24	2381.103	1497.037	1590.758

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

Sample Name: P5032-06 Acquired: 12/29/2024 5:20:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0915716	-.010986	.2832068	.1148974	.0173646	32.13985
Stddev	.0029074	.003032	.0028852	.0025624	.0034212	.10699
%RSD	3.174990	27.60208	1.018756	2.230186	19.70206	.3328812
#1	.0942988	-.012609	.2854917	.1169426	.0162253	32.24645
#2	.0919036	-.012862	.2799647	.1157266	.0212101	32.14063
#3	.0885125	-.007488	.2841641	.1120231	.0146585	32.03248

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6830659	.0116551	.0063961	F 1280.607	.0584384	.0596534
Stddev	.0019971	.0000803	.0001797	17.145	.0013118	.0004290
%RSD	.2923776	.6888433	2.809390	1.338823	2.244689	.7190947
#1	.6853652	.0116985	.0062694	1299.837	.0569243	.0597257
#2	.6817630	.0117043	.0066017	1266.918	.0591595	.0591928
#3	.6820695	.0115624	.0063171	1275.065	.0592314	.0600416

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1408047	240.2684	F 35.74600	451.5832	.1413762	.0037222
Stddev	.0028689	1.0899	.13212	1.5789	.0008920	.0007976
%RSD	2.037536	.4536305	.3696201	.3496271	.6309227	21.42909
#1	.1384378	241.4311	35.89820	453.2904	.1413694	.0036192
#2	.1399807	240.1040	35.66083	451.2836	.1404876	.0029811
#3	.1439954	239.2700	35.67896	450.1756	.1422715	.0045664

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.010627	.1292359	.3094582	6.479365	F 10.30781	.1397762
Stddev	.053254	.0045883	.0003535	.106910	.00933	.0015941
%RSD	5.269368	3.550352	.1142445	1.650009	.0904771	1.140450
#1	1.053225	.1299803	.3092977	6.598712	10.29829	.1406093
#2	1.027734	.1334066	.3098635	6.447022	10.30821	.1379382
#3	.950923	.1243209	.3092134	6.392361	10.31693	.1407811

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-06 Acquired: 12/29/2024 5:20:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0124640	2.024179	7.578079	.0404311	.1452891	.5972928
Stddev	.0007770	.020259	.076959	.0018807	.0029389	.0027590
%RSD	6.233721	1.000839	1.015552	4.651503	2.022779	.4619158
#1	.0115668	2.043852	7.634587	.0424390	.1469831	.6001720
#2	.0129159	2.025305	7.609221	.0401434	.1418956	.5946722
#3	.0129093	2.003381	7.490429	.0387109	.1469886	.5970342

Elem	Li6707
Units	ppm
Avg	.0620298
Stddev	.0037694
%RSD	6.076730
#1	.0658606
#2	.0583250
#3	.0619038

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2348.372	29879.00	2455.433	1495.673	1517.876
Stddev	9.108	144.31	15.623	4.947	4.983
%RSD	.3878225	.4829929	.6362813	.3307610	.3282775
#1	2356.026	30045.08	2447.707	1500.150	1521.734
#2	2338.300	29807.81	2445.177	1496.506	1512.250
#3	2350.792	29784.12	2473.414	1490.362	1519.644

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-07 Acquired: 12/29/2024 5:24:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0561294	-.004241	.2888609	.0351825	-.003683	50.48175
Stddev	.0037445	.007384	.0041454	.0034701	.000817	.10900
%RSD	6.671243	174.1083	1.435071	9.863262	22.18304	.2159254
#1	.0526111	-.005407	.2897051	.0314787	-.004590	50.39015
#2	.0600651	.003656	.2925192	.0357102	-.003004	50.45279
#3	.0557119	-.010972	.2843584	.0383585	-.003455	50.60231

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2911388	.0087156	.0041255	F 836.4036	.0709979	.0787440
Stddev	.0003877	.0000705	.0001609	2.0632	.0003740	.0004463
%RSD	.1331580	.8084076	3.901189	.2466692	.5267139	.5667911
#1	.2915156	.0087692	.0040494	834.5244	.0710724	.0783429
#2	.2907411	.0086358	.0040167	836.0751	.0713290	.0792248
#3	.2911597	.0087419	.0043103	838.6113	.0705923	.0786642

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524907	133.6679	9.381941	141.8542	.1467043	.0000256
Stddev	.0003468	.4555	.014389	.2909	.0012968	.0007413
%RSD	.1373325	.3407455	.1533713	.2050451	.8839665	2894.422
#1	.2522106	133.1423	9.365794	141.7296	.1481912	.0008111
#2	.2528785	133.9140	9.393405	141.6465	.1458070	-.000662
#3	.2523830	133.9474	9.386624	142.1867	.1461148	-.000073

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.007085	.0961067	.4403763	8.568378	F 10.65091	.0937422
Stddev	.034806	.0096670	.0021097	.112395	.00801	.0011806
%RSD	3.456155	10.05858	.4790775	1.311741	.0751581	1.259430
#1	.996496	.0871421	.4405419	8.441632	10.65715	.0923793
#2	.978802	.0948290	.4381887	8.607582	10.65371	.0944004
#3	1.045956	.1063490	.4423984	8.655920	10.64189	.0944471

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

Sample Name: P5032-07 Acquired: 12/29/2024 5:24:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028357	1.351829	9.833291	.0260086	.4503707	.6284078
Stddev	.0007529	.006871	.076473	.0026560	.0035477	.0024503
%RSD	26.55130	.5082573	.7776960	10.21190	.7877370	.3899211
#1	.0035351	1.358529	9.753196	.0270333	.4469284	.6263037
#2	.0029332	1.352160	9.841138	.0229929	.4540152	.6278217
#3	.0020388	1.344799	9.905538	.0279996	.4501686	.6310980

Elem	Li6707
Units	ppm
Avg	.0996048
Stddev	.0023199
%RSD	2.329051
#1	.0998426
#2	.1017967
#3	.0971753

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2349.726	29747.23	2363.390	1498.670	1615.259
Stddev	9.102	66.32	16.508	1.148	4.329
%RSD	.3873641	.2229307	.6985036	.0765802	.2680189
#1	2341.801	29670.68	2379.995	1497.506	1611.371
#2	2347.710	29787.28	2363.195	1499.800	1614.482
#3	2359.667	29783.72	2346.980	1498.703	1619.924

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-08 Acquired: 12/29/2024 5:28:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK62 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1772098	-.045127	1.574243	.0784852	.0203878	67.71674
Stddev	.0076769	.000612	.004154	.0020144	.0031375	.02784
%RSD	4.332113	1.355244	.2638795	2.566600	15.38902	.0411137
#1	.1857953	-.045452	1.573599	.0805366	.0169396	67.74889
#2	.1748282	-.044421	1.578682	.0765100	.0230743	67.70064
#3	.1710059	-.045507	1.570449	.0784090	.0211496	67.70069

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.248714	.0114954	.0072026	89.57283	.2345846	.0427162
Stddev	.002347	.0001026	.0002287	.20775	.0021903	.0007781
%RSD	.1879136	.8928339	3.174554	.2319319	.9336756	1.821464
#1	1.251423	.0115808	.0069607	89.77917	.2368318	.0419735
#2	1.247409	.0115240	.0074151	89.36370	.2344658	.0435254
#3	1.247310	.0113815	.0072321	89.57563	.2324561	.0426496

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3174107	160.3848	7.932107	27.97843	.1942259	.0031282
Stddev	.0035020	.2650	.014604	.15244	.0008507	.0006152
%RSD	1.103305	.1652180	.1841183	.5448617	.4379708	19.66553
#1	.3197968	160.5573	7.947157	28.15156	.1950366	.0027788
#2	.3190450	160.0797	7.917993	27.91939	.1933403	.0027673
#3	.3133903	160.5173	7.931171	27.86433	.1943007	.0038385

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4319991	.1636533	1.314830	9.112603	F 14.30906	.0971369
Stddev	.0036430	.0042577	.001457	.171340	.02119	.0009781
%RSD	.8432800	2.601648	.1108503	1.880254	.1480831	1.006917
#1	.4334454	.1626780	1.316109	8.914823	14.31005	.0977227
#2	.4278551	.1683139	1.313243	9.215933	14.32973	.0976803
#3	.4346968	.1599678	1.315139	9.207053	14.28739	.0960078

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-08 Acquired: 12/29/2024 5:28:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK62 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076419	4.772336	12.51260	.0906683	.8347487	.0399040
Stddev	.0005826	.012371	.05099	.0021577	.0040581	.0001361
%RSD	7.623845	.2592175	.4074819	2.379736	.4861415	.3409529
#1	.0069695	4.778330	12.56979	.0900939	.8326292	.0400086
#2	.0079597	4.780569	12.49609	.0930550	.8321893	.0397502
#3	.0079964	4.758111	12.47190	.0888559	.8394276	.0399531

Elem	Li6707
Units	ppm
Avg	.0947720
Stddev	.0024720
%RSD	2.608409
#1	.0931982
#2	.0934966
#3	.0976213

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.426	31984.60	2424.687	1616.829	1898.902
Stddev	5.565	126.40	10.481	4.946	3.381
%RSD	.2189766	.3951905	.4322721	.3059105	.1780574
#1	2547.746	31872.65	2412.650	1614.864	1902.249
#2	2537.262	31959.48	2429.617	1613.167	1895.488
#3	2539.268	32121.68	2431.795	1622.455	1898.970

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-09 Acquired: 12/29/2024 5:32:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK63 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3052274	-.056846	6.856441	.0942552	.0220678	76.10383
Stddev	.0021500	.003306	.010554	.0040500	.0009298	.35140
%RSD	.7043820	5.816597	.1539270	4.296798	4.213541	.4617342
#1	.3065736	-.060591	6.868625	.0950557	.0210081	75.78940
#2	.3063607	-.055613	6.850538	.0978451	.0224481	76.48315
#3	.3027478	-.054332	6.850158	.0898647	.0227472	76.03894

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.315850	.0128808	.0092017	72.30760	.2603826	.0452362
Stddev	.006378	.0002485	.0001512	.26017	.0017580	.0009039
%RSD	.4847133	1.929209	1.642784	.3598153	.6751729	1.998109
#1	1.310570	.0129536	.0090973	72.06505	.2596406	.0462706
#2	1.322937	.0130847	.0093750	72.58239	.2623900	.0445985
#3	1.314044	.0126040	.0091327	72.27535	.2591172	.0448394

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3502160	179.1011	9.097995	29.53532	.2106955	.0025750
Stddev	.0052331	.7122	.019221	.04411	.0001163	.0010905
%RSD	1.494250	.3976566	.2112717	.1493359	.0552114	42.35058
#1	.3486046	178.6290	9.086189	29.48669	.2105936	.0013615
#2	.3560652	179.9203	9.120175	29.57273	.2106707	.0034730
#3	.3459780	178.7540	9.087621	29.54653	.2108222	.0028905

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4574329	.1768267	1.595150	8.926862	F 14.29517	.1016239
Stddev	.0202018	.0088453	.002381	.032366	.04111	.0031236
%RSD	4.416334	5.002218	.1492434	.3625722	.2875851	3.073652
#1	.4804210	.1777004	1.597672	8.904241	14.30884	.0998556
#2	.4425079	.1852027	1.594835	8.963937	14.32770	.1052305
#3	.4493699	.1675770	1.592942	8.912409	14.24896	.0997858

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

Sample Name: P5032-09 Acquired: 12/29/2024 5:32:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK63 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077938	4.675190	10.65209	.3021114	.8746367	.0112345
Stddev	.0005710	.017025	.02070	.0004802	.0011545	.0010822
%RSD	7.325919	.3641585	.1942916	.1589500	.1319978	9.632596
#1	.0073080	4.692611	10.66774	.3023215	.8759624	.0101868
#2	.0076507	4.674366	10.62863	.3024507	.8738526	.0111686
#3	.0084227	4.658591	10.65991	.3015619	.8740951	.0123481

Elem	Li6707
Units	ppm
Avg	.1109244
Stddev	.0026309
%RSD	2.371814
#1	.1138036
#2	.1103242
#3	.1086455

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2482.473	31239.24	2400.751	1582.843	1830.902
Stddev	2.290	67.25	8.653	8.121	6.401
%RSD	.0922415	.2152860	.3604223	.5130356	.3496219
#1	2483.150	31196.17	2390.762	1577.810	1828.852
#2	2479.921	31204.81	2405.563	1578.508	1825.776
#3	2484.348	31316.74	2405.928	1592.212	1838.077

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-10 Acquired: 12/29/2024 5:36:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK64 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1974355	-.059533	1.700388	.0996219	.0270805	84.18696
Stddev	.0049207	.002272	.005513	.0033009	.0027521	.41702
%RSD	2.492293	3.815502	.3242068	3.313403	10.16253	.4953540
#1	.2005982	-.058314	1.697743	.1024758	.0267750	83.73252
#2	.1917662	-.062154	1.696697	.0960070	.0244940	84.27625
#3	.1999420	-.058132	1.706725	.1003830	.0299726	84.55210

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.365254	.0136776	.0094493	89.67932	.1858818	.0487252
Stddev	.004206	.0003160	.0000770	.32900	.0023113	.0004574
%RSD	.3080935	2.310506	.8145969	.3668669	1.243448	.9387305
#1	1.360625	.0134100	.0093793	89.33749	.1883477	.0489776
#2	1.366295	.0140263	.0094369	89.70668	.1855332	.0490009
#3	1.368842	.0135966	.0095317	89.99378	.1837646	.0481973

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2560615	190.4497	9.787138	31.31603	.2056733	.0016976
Stddev	.0077295	1.0589	.041740	.19988	.0007796	.0004471
%RSD	3.018613	.5559855	.4264785	.6382799	.3790575	26.33472
#1	.2471876	189.3964	9.743745	31.09326	.2049976	.0018436
#2	.2613264	190.4388	9.790668	31.47970	.2054961	.0011958
#3	.2596705	191.5141	9.827000	31.37514	.2065263	.0020534

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6152726	.1882092	1.334808	9.518473	F 15.02153	.1036742
Stddev	.0162791	.0113016	.014670	.141222	.06160	.0016359
%RSD	2.645837	6.004810	1.099064	1.483664	.4100459	1.577937
#1	.6326998	.2012483	1.351123	9.553334	15.00712	.1018254
#2	.6004574	.1812287	1.330601	9.363086	14.96841	.1049344
#3	.6126608	.1821507	1.322702	9.639000	15.08905	.1042627

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-10 Acquired: 12/29/2024 5:36:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK64 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071673	3.982809	12.18751	.0684094	.8825437	.0121415
Stddev	.0004559	.030842	.11801	.0002146	.0036209	.0006912
%RSD	6.360544	.7743814	.9683261	.3136873	.4102837	5.692531
#1	.0066767	3.965226	12.05669	.0683678	.8863707	.0128754
#2	.0072473	3.964778	12.21989	.0686418	.8791718	.0120464
#3	.0075778	4.018421	12.28596	.0682187	.8820885	.0115029

Elem	Li6707
Units	ppm
Avg	.1273966
Stddev	.0021864
%RSD	1.716207
#1	.1253916
#2	.1297277
#3	.1270705

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2572.984	32268.43	2506.579	1640.730	1849.108
Stddev	4.871	234.74	21.070	15.665	5.986
%RSD	.1893314	.7274645	.8405707	.9547716	.3237188
#1	2568.625	32011.36	2529.833	1623.000	1848.226
#2	2578.242	32322.52	2501.147	1646.490	1855.486
#3	2572.086	32471.40	2488.758	1652.700	1843.612

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-11 Acquired: 12/29/2024 5:40:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK65 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0856718	-.049534	.6231302	.0844031	.0215798	77.32833
Stddev	.0021571	.005264	.0049197	.0019377	.0013401	.11801
%RSD	2.517820	10.62622	.7895194	2.295779	6.209956	.1526095
#1	.0855312	-.045213	.6264221	.0824867	.0219993	77.19670
#2	.0835884	-.055396	.6254938	.0843613	.0226599	77.42466
#3	.0878957	-.047994	.6174747	.0863614	.0200801	77.36364

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9927546	.0123258	.0056652	125.5683	.1369518	.0406366
Stddev	.0031923	.0001423	.0000710	.1696	.0013469	.0011539
%RSD	.3215637	1.154541	1.253212	.1351002	.9834747	2.839512
#1	.9891286	.0122224	.0057147	125.3991	.1382376	.0414895
#2	.9951421	.0122668	.0055838	125.7384	.1355512	.0410967
#3	.9939929	.0124881	.0056970	125.5674	.1370665	.0393237

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0927203	176.7826	7.227399	34.93200	.1592000	.0004723
Stddev	.0033898	.2823	.011247	.16993	.0020886	.0003239
%RSD	3.655934	.1597086	.1556097	.4864622	1.311929	68.56529
#1	.0933037	176.4935	7.215461	34.81269	.1610516	.0008134
#2	.0957806	177.0577	7.237795	35.12656	.1596124	.0004347
#3	.0890767	176.7965	7.228942	34.85674	.1569360	.0001689

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4550182	.1595386	.5988381	7.324351	F 10.57929	.0832604
Stddev	.0137849	.0132629	.0022461	.135596	.06766	.0011576
%RSD	3.029532	8.313281	.3750750	1.851307	.6395239	1.390273
#1	.4455032	.1747105	.5989719	7.393454	10.61480	.0843975
#2	.4708266	.1537596	.5965282	7.411474	10.62180	.0820834
#3	.4487247	.1501458	.6010144	7.168124	10.50127	.0833002

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-11 Acquired: 12/29/2024 5:40:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK65 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055100	2.065211	12.53455	.0318702	.8139354	.0000836
Stddev	.0003540	.015534	.10898	.0019938	.0052253	.0002811
%RSD	6.424885	.7521852	.8694455	6.256036	.6419821	336.3877
#1	.0051465	2.074523	12.46103	.0336950	.8182593	-.000063
#2	.0058537	2.073833	12.65976	.0321735	.8081290	.000408
#3	.0055298	2.047279	12.48287	.0297421	.8154178	-.000093

Elem	Li6707
Units	ppm
Avg	.1146932
Stddev	.0005406
%RSD	.4713094
#1	.1152969
#2	.1145288
#3	.1142540

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2511.335	31715.69	2445.539	1607.609	1830.083
Stddev	13.193	135.72	15.833	14.912	14.933
%RSD	.5253377	.4279194	.6474174	.9275658	.8159720
#1	2507.932	31576.58	2455.243	1594.447	1824.344
#2	2500.177	31847.74	2427.269	1623.804	1818.871
#3	2525.896	31722.74	2454.106	1604.574	1847.034

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-12 Acquired: 12/29/2024 5:44:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK66 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0723666	-.028451	.1999403	.0620444	.0087701	68.09139	.7478586
Stddev	.0070548	.003787	.0027018	.0057364	.0039757	.26539	.0046849
%RSD	9.748750	13.31166	1.351323	9.245672	45.33279	.3897581	.6264469
#1	.0804843	-.031527	.2030248	.0598456	.0096648	67.81583	.7428604
#2	.0677182	-.029605	.1988039	.0577326	.0044233	68.34529	.7521499
#3	.0688973	-.024221	.1979924	.0685549	.0122223	68.11303	.7485657

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104071	.0040366	459.6733	.1046841	.0674352	.1099543	167.4490
Stddev	.0001301	.0000467	2.2102	.0009164	.0004888	.0098897	.7110
%RSD	1.249742	1.157238	.4808162	.8753999	.7247722	8.994371	.4245969
#1	.0105249	.0040441	457.3528	.1046789	.0674868	.0986522	166.7167
#2	.0102675	.0040791	461.7536	.1037703	.0669227	.1141900	168.1366
#3	.0104290	.0039866	459.9133	.1056031	.0678961	.1170206	167.4937

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.540550	98.94037	.2133531	-.000726	.9333871	.1439055	.3814760
Stddev	.048132	.03148	.0003653	.000139	.0097480	.0029638	.0009594
%RSD	.5044946	.0318211	.1712345	19.16038	1.044371	2.059571	.2514855
#1	9.487640	98.97600	.2137746	-.000699	.9326486	.1471842	.3810279
#2	9.581736	98.91629	.2131581	-.000877	.9240293	.1431158	.3808227
#3	9.552274	98.92882	.2131266	-.000603	.9434833	.1414165	.3825774

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.924004	8.083461	.0789607	.0049416	.9564219	11.72789	.0297579
Stddev	.097048	.004079	.0029306	.0002573	.0110116	.00216	.0007003
%RSD	1.401617	.0504605	3.711491	5.207241	1.151330	.0184486	2.353459
#1	6.866937	8.080775	.0804093	.0048785	.9684978	11.72605	.0290264
#2	7.036059	8.088155	.0808849	.0052246	.9538310	11.72734	.0298251
#3	6.869017	8.081454	.0755879	.0047217	.9469367	11.73027	.0304223

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-12 Acquired: 12/29/2024 5:44:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK66 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.143806	.4215205	.1161305
Stddev	.009079	.0019112	.0000846
%RSD	.7937555	.4534110	.0728253
#1	1.133334	.4193293	.1161986
#2	1.148608	.4223885	.1160358
#3	1.149475	.4228437	.1161570

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2359.626	29879.37	2331.677	1507.024	1705.183
Stddev	1.329	38.80	5.807	4.350	1.304
%RSD	.0563254	.1298573	.2490695	.2886352	.0764589
#1	2358.233	29922.38	2337.302	1508.438	1706.522
#2	2359.764	29868.73	2325.702	1510.491	1705.108
#3	2360.880	29846.99	2332.028	1502.144	1703.918

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-13 Acquired: 12/29/2024 5:48:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK67 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0758754	-.038102	.1381964	.0697540	.0157117	77.17285	1.024140
Stddev	.0078573	.001985	.0026033	.0032259	.0046717	.24753	.003895
%RSD	10.35553	5.208826	1.883774	4.624672	29.73372	.3207457	.3803045
#1	.0726135	-.035998	.1400546	.0691431	.0205726	77.28798	1.023102
#2	.0701745	-.038367	.1393136	.0668772	.0112557	76.88873	1.020870
#3	.0848383	-.039941	.1352209	.0732417	.0153067	77.34185	1.028449

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0111828	.0046105	503.1181	.1248808	.0839933	.1328812	186.2644
Stddev	.0001020	.0000983	1.4539	.0003841	.0009369	.0005133	.3033
%RSD	.9124745	2.132665	.2889828	.3075722	1.115434	.3862836	.1628595
#1	.0110703	.0046794	504.2533	.1248793	.0838147	.1327772	186.3860
#2	.0112694	.0046541	501.4793	.1244974	.0831585	.1334386	185.9192
#3	.0112087	.0044979	503.6216	.1252656	.0850066	.1324279	186.4882

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.11203	124.6678	.2566424	.0000734	1.078084	.1831331	.3951026
Stddev	.01795	.4178	.0011576	.0000753	.018646	.0071546	.0023392
%RSD	.1615813	.3351312	.4510704	102.4898	1.729561	3.906781	.5920448
#1	11.11280	124.7951	.2578600	.0000481	1.081235	.1910289	.3929970
#2	11.09370	124.2011	.2555559	.0000141	1.094953	.1812900	.3976205
#3	11.12959	125.0071	.2565113	.0001581	1.058063	.1770803	.3946902

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.653554	8.877844	.0922579	.0029555	.8017764	11.61924	.0242087
Stddev	.115304	.000894	.0014318	.0001968	.0020927	.05300	.0025895
%RSD	1.332445	.0100669	1.551909	6.660444	.2610066	.4561460	10.69676
#1	8.637716	8.878757	.0935085	.0027438	.8007720	11.62641	.0271789
#2	8.775958	8.876971	.0906961	.0029896	.8041819	11.56302	.0230221
#3	8.546988	8.877802	.0925692	.0031330	.8003752	11.66829	.0224250

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-13 Acquired: 12/29/2024 5:48:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK67 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.382270	.4564149	.1402852
Stddev	.011329	.0011561	.0024003
%RSD	.8195801	.2533050	1.711002
#1	1.382961	.4577497	.1377988
#2	1.370612	.4557689	.1425890
#3	1.393238	.4557262	.1404677

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2381.412	30121.45	2386.537	1514.983	1673.890
Stddev	7.562	64.81	10.795	9.077	5.172
%RSD	.3175371	.2151615	.4523426	.5991477	.3089998
#1	2374.712	30156.37	2383.411	1517.992	1668.588
#2	2379.912	30046.67	2398.550	1504.784	1674.161
#3	2389.611	30161.31	2377.650	1522.173	1678.921

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-14 Acquired: 12/29/2024 5:51:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK68 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0846135	-.034858	.1052100	.0683544	.0112135	60.36573	.7280546
Stddev	.0014541	.006630	.0014910	.0059055	.0037125	.21235	.0016614
%RSD	1.718514	19.01988	1.417167	8.639543	33.10765	.3517761	.2281957
#1	.0862727	-.038335	.1056215	.0615611	.0090034	60.59096	.7297819
#2	.0835613	-.039025	.1035565	.0712378	.0091374	60.33706	.7264681
#3	.0840063	-.027213	.1064521	.0722644	.0154997	60.16917	.7279136

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104786	.0036321	614.6531	.0892018	.0796392	.1478544	182.2014
Stddev	.0001279	.0001739	.8720	.0012255	.0005072	.0028846	.4397
%RSD	1.220858	4.787905	.1418744	1.373872	.6368781	1.950967	.2413050
#1	.0105948	.0037949	615.6598	.0880468	.0792480	.1482764	182.6611
#2	.0103415	.0036526	614.1676	.0904874	.0802122	.1505048	182.1583
#3	.0104995	.0034489	614.1318	.0890713	.0794572	.1447821	181.7849

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.692801	134.4452	.1975698	.0014348	1.037561	.1371700	.3541114
Stddev	.028780	.2465	.0006550	.0004261	.041676	.0034015	.0022274
%RSD	.3741205	.1833290	.3315185	29.69585	4.016754	2.479801	.6290205
#1	7.723682	134.6553	.1976698	.0012794	1.085165	.1399730	.3558903
#2	7.666726	134.5063	.1981691	.0011083	1.007655	.1381514	.3516132
#3	7.687995	134.1739	.1968706	.0019168	1.019861	.1333857	.3548306

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.641863	6.945605	.0768786	.0035840	.7054940	11.01995	.0226720
Stddev	.150133	.009255	.0011097	.0004455	.0092950	.17242	.0024640
%RSD	2.260403	.1332451	1.443447	12.42944	1.317512	1.564577	10.86811
#1	6.546556	6.937762	.0769320	.0032308	.6976304	11.21637	.0254885
#2	6.814925	6.955813	.0779606	.0034369	.7157518	10.89359	.0209143
#3	6.564108	6.943240	.0757431	.0040845	.7030997	10.94990	.0216133

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-14 Acquired: 12/29/2024 5:51:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK68 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.016719	.4994746	.1153063
Stddev	.004315	.0027313	.0057200
%RSD	.4243599	.5468389	4.960715
#1	1.017333	.4972022	.1198275
#2	1.012131	.4987167	.1088759
#3	1.020694	.5025048	.1172156

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2307.325	29265.47	2311.527	1473.202	1674.446
Stddev	8.028	149.58	22.053	1.106	5.278
%RSD	.3479399	.5111116	.9540267	.0750633	.3151929
#1	2305.953	29414.37	2286.596	1473.964	1675.960
#2	2315.950	29115.22	2328.481	1471.934	1678.802
#3	2300.071	29266.80	2319.504	1473.709	1668.577

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-15 Acquired: 12/29/2024 5:55:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK69 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1333971	-.112324	1.049527	.1393848	.0471621	30.18983	.9996031
Stddev	.0047363	.004670	.001609	.0037730	.0024975	.14551	.0045574
%RSD	3.550525	4.157487	.1533048	2.706894	5.295669	.4819850	.4559244
#1	.1350647	-.115499	1.050365	.1366468	.0480760	30.22300	1.001656
#2	.1370742	-.114511	1.050544	.1436886	.0490740	30.31590	1.002773
#3	.1280526	-.106962	1.047672	.1378190	.0443363	30.03060	.994380

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0169341	.0040573	31.87358	.0744970	-.019181	.4598296	240.1972
Stddev	.0001912	.0000923	.16487	.0003533	.000952	.0049489	1.2795
%RSD	1.129162	2.274534	.5172594	.4742976	4.965889	1.076249	.5327078
#1	.0171534	.0039639	31.85066	.0745243	-.019132	.4543409	240.3024
#2	.0168466	.0040597	32.04870	.0741308	-.020157	.4639514	241.4209
#3	.0168023	.0041484	31.72136	.0748359	-.018254	.4611965	238.8683

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.008950	8.350942	.1542603	.0006959	.5178076	.1579456	.8638084
Stddev	.013590	.125635	.0008047	.0007228	.0160958	.0065776	.0017016
%RSD	.6764954	1.504441	.5216273	103.8570	3.108457	4.164496	.1969899
#1	2.004570	8.234570	.1536501	.0008209	.5326901	.1654747	.8656623
#2	2.024190	8.484143	.1551723	.0013480	.5007248	.1550476	.8623177
#3	1.998089	8.334112	.1539586	-.000081	.5200077	.1533147	.8634451

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.870741	7.298003	.1030771	.0167174	9.711495	5.925696	.0726667
Stddev	.104881	.013049	.0043147	.0005324	.018517	.070427	.0020796
%RSD	2.153294	.1788038	4.185929	3.184677	.1906681	1.188498	2.861799
#1	4.775371	7.293836	.0989891	.0168151	9.690141	5.976035	.0702895
#2	4.983067	7.312626	.1075875	.0171942	9.723093	5.955839	.0735617
#3	4.853784	7.287546	.1026545	.0161429	9.721253	5.845215	.0741490

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-15 Acquired: 12/29/2024 5:55:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK69 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.771090	-.022286	.0288864
Stddev	.016219	.000230	.0034522
%RSD	.9157388	1.031081	11.95078
#1	1.769775	-.022026	.0251851
#2	1.787926	-.022372	.0320187
#3	1.755568	-.022460	.0294553

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2315.394	29275.74	2200.502	1490.549	1928.086
Stddev	2.158	153.81	14.886	7.601	1.548
%RSD	.0931872	.5253864	.6764681	.5099358	.0803105
#1	2313.822	29333.88	2190.292	1494.886	1926.890
#2	2314.506	29392.00	2193.631	1494.988	1927.532
#3	2317.854	29101.33	2217.582	1481.772	1929.835

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-16 Acquired: 12/29/2024 5:59:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK70 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1336820	-.142851	1.050578	.1771324	.0601715	31.97975	1.208111
Stddev	.0043144	.000741	.003130	.0012779	.0011020	.08823	.000857
%RSD	3.227384	.5186113	.2978927	.7214495	1.831392	.2758890	.0709097
#1	.1386597	-.142260	1.050898	.1756591	.0589109	31.99003	1.208998
#2	.1313695	-.142609	1.053536	.1777976	.0606515	31.88684	1.207289
#3	.1310169	-.143682	1.047301	.1779405	.0609520	32.06239	1.208045

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214400	.0042534	27.58952	.0778678	-.036172	.2223194	299.5287
Stddev	.0000525	.0000634	.08953	.0006702	.000827	.0063943	.5585
%RSD	.2449247	1.491245	.3245230	.8607421	2.287610	2.876167	.1864649
#1	.0214587	.0042134	27.60343	.0772553	-.035289	.2254257	298.9188
#2	.0214806	.0043265	27.49384	.0777642	-.036930	.2149654	299.6520
#3	.0213807	.0042202	27.67129	.0785838	-.036298	.2265671	300.0152

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.054773	6.423049	.1857537	.0006928	.5822055	.1737144	.6415291
Stddev	.006265	.047813	.0009054	.0008695	.0176035	.0117732	.0051808
%RSD	.3048985	.7443940	.4874300	125.5092	3.023592	6.777312	.8075755
#1	2.061004	6.371249	.1867831	-.000311	.5632352	.1756780	.6440900
#2	2.054841	6.465491	.1853971	.001208	.5980136	.1610829	.6449308
#3	2.048474	6.432407	.1850809	.001182	.5853678	.1843823	.6355665

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.200999	7.357982	.1205428	.0239984	16.06078	6.095729	.0841838
Stddev	.156918	.027102	.0036972	.0004921	.08920	.052085	.0009505
%RSD	3.017066	.3683287	3.067091	2.050573	.5553715	.8544556	1.129124
#1	5.154160	7.384678	.1195436	.0245627	16.16041	6.078262	.0849663
#2	5.072834	7.358776	.1246368	.0237743	16.03356	6.054622	.0844591
#3	5.376002	7.330492	.1174479	.0236582	15.98836	6.154303	.0831260

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-16 Acquired: 12/29/2024 5:59:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK70 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.827352	-.033390	.0350230
Stddev	.005772	.000377	.0033058
%RSD	.3158412	1.130518	9.438849
#1	1.827256	-.032955	.0388329
#2	1.821629	-.033577	.0329137
#3	1.833171	-.033637	.0333225

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2339.636	29602.04	2222.827	1506.388	1907.445
Stddev	2.414	95.55	15.553	11.068	4.398
%RSD	.1031649	.3227693	.6996912	.7347700	.2305568
#1	2338.941	29579.41	2228.532	1504.864	1902.509
#2	2342.321	29519.84	2234.722	1496.160	1910.946
#3	2337.646	29706.87	2205.227	1518.139	1908.879

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-17 Acquired: 12/29/2024 6:03:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK71 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0883476	-.043494	1.412623	.0714020	.0169952	53.06830
Stddev	.0006967	.000493	.001638	.0025598	.0026671	.21160
%RSD	.7885820	1.134262	.1159256	3.585028	15.69322	.3987254
#1	.0879635	-.042933	1.413673	.0686100	.0195650	52.82680
#2	.0891518	-.043858	1.410736	.0736383	.0142404	53.15697
#3	.0879275	-.043693	1.413460	.0719576	.0171803	53.22114

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.409265	.0114617	.0046015	63.06216	.0836971	.0507699
Stddev	.004012	.0000677	.0000710	.10997	.0009431	.0005845
%RSD	.2847211	.5911380	1.543811	.1743889	1.126854	1.151362
#1	1.404635	.0114102	.0046766	63.04488	.0847051	.0509009
#2	1.411420	.0114364	.0045925	63.17975	.0835502	.0501310
#3	1.411739	.0115384	.0045354	62.96185	.0828361	.0512779

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2745474	139.7822	7.667890	11.55595	.1591383	-.000033
Stddev	.0023709	.5555	.033561	.02795	.0007563	.000253
%RSD	.8635790	.3973895	.4376758	.2418987	.4752456	768.6971
#1	.2748414	139.1897	7.629813	11.56629	.1595406	.000257
#2	.2767576	139.8656	7.680687	11.52430	.1582659	-.000210
#3	.2720432	140.2912	7.693169	11.57725	.1596085	-.000146

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8067693	.1867929	.9982014	5.532837	F 19.79749	.0756062
Stddev	.0237869	.0067872	.0007653	.033203	.01256	.0032697
%RSD	2.948411	3.633543	.0766681	.6001022	.0634659	4.324607
#1	.8224324	.1941865	.9987066	5.570910	19.81011	.0722692
#2	.7793976	.1808451	.9973209	5.517706	19.78498	.0788041
#3	.8184778	.1853471	.9985767	5.509895	19.79737	.0757452

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-17 Acquired: 12/29/2024 6:03:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK71 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0180004	4.098189	8.818198	.0645556	.8698943	.3881414
Stddev	.0003458	.016785	.067085	.0004748	.0064869	.0016368
%RSD	1.921061	.4095596	.7607506	.7355578	.7457093	.4217091
#1	.0179488	4.105557	8.867397	.0642121	.8631366	.3865141
#2	.0183691	4.078980	8.741783	.0643573	.8760713	.3897876
#3	.0176832	4.110029	8.845415	.0650975	.8704749	.3881227

Elem	Li6707
Units	ppm
Avg	.0821953
Stddev	.0037108
%RSD	4.514578
#1	.0779119
#2	.0842432
#3	.0844309

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2474.293	31334.38	2377.805	1595.478	1911.232
Stddev	5.745	161.04	4.391	9.460	1.551
%RSD	.2321796	.5139380	.1846828	.5929006	.0811510
#1	2480.426	31415.74	2372.746	1605.812	1912.901
#2	2469.037	31148.90	2380.635	1587.246	1909.834
#3	2473.417	31438.52	2380.035	1593.376	1910.963

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-18 Acquired: 12/29/2024 6:07:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1131910	-.028385	.9370323	.0952941	.0163909	77.71877
Stddev	.0050820	.003095	.0029153	.0049769	.0037286	.19316
%RSD	4.489792	10.90513	.3111212	5.222716	22.74809	.2485338
#1	.1073789	-.025236	.9338683	.0980300	.0202929	77.58178
#2	.1153961	-.028494	.9376188	.0895494	.0128640	77.63484
#3	.1167981	-.031424	.9396097	.0983030	.0160158	77.93970

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.652985	.0120279	.0083029	155.9052	.1203978	.0716115
Stddev	.004788	.0001725	.0001763	.4930	.0004286	.0010036
%RSD	.2896277	1.434334	2.123325	.3162372	.3559983	1.401497
#1	1.648263	.0118523	.0081219	155.7314	.1199271	.0722864
#2	1.652856	.0121972	.0083125	155.5226	.1207656	.0720899
#3	1.657835	.0120343	.0084741	156.4616	.1205008	.0704581

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1936713	181.4264	19.62952	26.84380	.1778149	.0041742
Stddev	.0077990	.5334	.06232	.17247	.0012460	.0012061
%RSD	4.026913	.2940270	.3174586	.6424935	.7007143	28.89490
#1	.2025999	181.3730	19.59664	26.77005	.1791268	.0027911
#2	.1881898	180.9216	19.59052	26.72046	.1766474	.0050068
#3	.1902244	181.9845	19.70138	27.04088	.1776706	.0047249

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5000218	.1737722	.6826232	8.296119	F 17.13401	.0917602
Stddev	.0187225	.0040979	.0009466	.027355	.02098	.0010719
%RSD	3.744328	2.358180	.1386696	.3297287	.1224479	1.168147
#1	.4878397	.1720757	.6815977	8.314816	17.15774	.0908835
#2	.4906459	.1784458	.6828084	8.308817	17.12637	.0914419
#3	.5215798	.1707950	.6834636	8.264723	17.11793	.0929552

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-18 Acquired: 12/29/2024 6:07:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0133149	3.072331	13.72886	.0380256	.6095398	.1268994
Stddev	.0003510	.004743	.06321	.0008685	.0032875	.0009084
%RSD	2.636247	.1543698	.4604460	2.283889	.5393384	.7158444
#1	.0129102	3.068744	13.67106	.0381453	.6058931	.1260147
#2	.0134974	3.077709	13.79636	.0371035	.6104503	.1268536
#3	.0135370	3.070541	13.71915	.0388280	.6122761	.1278298

Elem	Li6707
Units	ppm
Avg	.1224332
Stddev	.0031288
%RSD	2.555540
#1	.1192596
#2	.1255153
#3	.1225245

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2647.149	33386.78	2599.598	1694.118	1831.455
Stddev	10.681	108.75	14.387	11.044	7.613
%RSD	.4034771	.3257234	.5534201	.6519184	.4156573
#1	2634.820	33470.25	2615.890	1702.913	1822.683
#2	2653.562	33426.28	2594.262	1697.717	1835.356
#3	2653.067	33263.80	2588.642	1681.723	1836.327

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-19 Acquired: 12/29/2024 6:11:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1127858	-.034089	.9295442	.0941511	.0180014	78.13528
Stddev	.0027788	.005615	.0028094	.0062677	.0053144	.17874
%RSD	2.463748	16.47270	.3022311	6.657102	29.52239	.2287629
#1	.1095793	-.036716	.9315446	.1001068	.0214930	78.13274
#2	.1142871	-.027642	.9307557	.0947345	.0118853	77.95782
#3	.1144910	-.037910	.9263324	.0876121	.0206259	78.31528

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.664329	.0123977	.0081952	156.0859	.1200267	.0706215
Stddev	.002753	.0001137	.0001185	.4903	.0011187	.0009441
%RSD	.1653940	.9166907	1.445314	.3141476	.9320141	1.336847
#1	1.666465	.0122683	.0083058	155.9488	.1210346	.0710923
#2	1.661223	.0124431	.0080703	155.6787	.1202225	.0712377
#3	1.665299	.0124816	.0082096	156.6302	.1188231	.0695346

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1978093	182.3968	19.69838	26.98928	.1773787	.0047093
Stddev	.0029063	.2526	.04413	.13063	.0005219	.0005820
%RSD	1.469218	.1384634	.2240036	.4840237	.2942359	12.35747
#1	.1956251	182.6827	19.70525	26.94417	.1779811	.0051822
#2	.2011078	182.2041	19.65122	26.88717	.1770941	.0040594
#3	.1966951	182.3036	19.73866	27.13649	.1770610	.0048864

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5172588	.1809578	.6728654	8.178783	F 17.03416	.0879326
Stddev	.0292483	.0132737	.0015767	.101844	.01034	.0017995
%RSD	5.654484	7.335216	.2343312	1.245222	.0606879	2.046431
#1	.5330862	.1962664	.6712130	8.292746	17.04190	.0886058
#2	.5351828	.1739565	.6730296	8.146933	17.02242	.0892983
#3	.4835075	.1726506	.6743537	8.096672	17.03816	.0858935

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-19 Acquired: 12/29/2024 6:11:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0133629	3.059741	13.95828	.0409161	.6224470	.1256119
Stddev	.0001540	.018620	.06331	.0021235	.0029997	.0010632
%RSD	1.152654	.6085488	.4535312	5.189795	.4819212	.8464124
#1	.0131865	3.060415	13.97029	.0385846	.6249520	.1246579
#2	.0134712	3.078015	13.88983	.0427393	.6191228	.1254199
#3	.0134308	3.040793	14.01471	.0414245	.6232661	.1267581

Elem	Li6707
Units	ppm
Avg	.1224152
Stddev	.0041136
%RSD	3.360401
#1	.1202943
#2	.1197949
#3	.1271565

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2648.382	33199.59	2532.049	1690.531	1836.363
Stddev	3.337	56.20	10.425	3.832	2.750
%RSD	.1260020	.1692673	.4117414	.2266552	.1497374
#1	2644.536	33251.72	2536.098	1694.846	1833.199
#2	2650.101	33206.99	2539.843	1687.525	1838.178
#3	2650.509	33140.06	2520.207	1689.223	1837.711

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-18LX5 Acquired: 12/29/2024 6:15:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0258043	-.007637	.1911073	.0200979	.0029228	18.79954	.3981297
Stddev	.0059289	.002991	.0012710	.0071973	.0045150	.07303	.0004823
%RSD	22.97640	39.15939	.6650855	35.81108	154.4720	.3884826	.1211311
#1	.0314518	-.009968	.1922517	.0242630	-.001125	18.77625	.3983721
#2	.0196292	-.008677	.1913309	.0117872	.007792	18.74099	.3975743
#3	.0263319	-.004265	.1897393	.0242434	.002102	18.88137	.3984425

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030670	.0014553	22.00001	.0277944	.0197317	.0469037	44.77179
Stddev	.0002004	.0000938	.07001	.0007174	.0004054	.0085866	.09762
%RSD	6.534006	6.447956	.3182411	2.581132	2.054323	18.30683	.2180447
#1	.0032927	.0014907	21.96367	.0279086	.0193889	.0544604	44.66510
#2	.0029099	.0013489	21.95564	.0270268	.0201791	.0375664	44.85665
#3	.0029984	.0015263	22.08072	.0284479	.0196272	.0486844	44.79362

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.854049	6.399572	.0358759	.0005338	.1144555	.0381684	.1703840
Stddev	.001986	.147713	.0004322	.0017337	.0042717	.0060753	.0007017
%RSD	.0409204	2.308171	1.204783	324.7828	3.732224	15.91710	.4118159
#1	4.853636	6.403733	.0356928	-.001337	.1169997	.0361637	.1711936
#2	4.852302	6.249822	.0355653	.000852	.1095237	.0333488	.1700061
#3	4.856209	6.545161	.0363695	.002086	.1168431	.0449927	.1699523

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.915323	3.616888	.0167355	.0037684	.6132401	3.073096	.0075499
Stddev	.120081	.010158	.0007585	.0002428	.0078142	.015798	.0000864
%RSD	6.269506	.2808625	4.532552	6.442688	1.274240	.5140674	1.144702
#1	1.850205	3.611959	.0158840	.0040370	.6221950	3.055581	.0074538
#2	1.841867	3.610134	.0173389	.0035646	.6097211	3.077439	.0075743
#3	2.053897	3.628570	.0169837	.0037035	.6078042	3.086269	.0076214

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-18LX5 Acquired: 12/29/2024 6:15:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1588976	.0105170	.0330730
Stddev	.0015306	.0006870	.0027473
%RSD	.9632747	6.532563	8.306669
#1	.1604490	.0110402	.0344779
#2	.1588552	.0107718	.0348337
#3	.1573886	.0097390	.0299074

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2219.708	27995.92	2083.299	1426.590	1887.626
Stddev	2.600	33.30	2.764	6.247	2.617
%RSD	.1171471	.1189605	.1326506	.4379051	.1386465
#1	2222.701	27976.88	2084.371	1420.747	1890.489
#2	2218.417	27976.50	2085.366	1425.849	1887.035
#3	2218.005	28034.37	2080.160	1433.175	1885.356

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-20 Acquired: 12/29/2024 6:19:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1941696	.0421303	.9339330	.2334791	.1685444	79.49120
Stddev	.0033098	.0048281	.0005072	.0027698	.0021317	.28303
%RSD	1.704609	11.45980	.0543042	1.186305	1.264796	.3560532
#1	.1978570	.0406474	.9336689	.2366534	.1692167	79.28617
#2	.1931959	.0382177	.9336123	.2322298	.1661576	79.81412
#3	.1914558	.0475259	.9345177	.2315540	.1702590	79.37331

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.772493	.0916682	.1020510	152.6755	.4473109	1.037699
Stddev	.018479	.0008932	.0000468	.8654	.0012620	.002331
%RSD	.3871934	.9743977	.0458438	.5668474	.2821274	.2246274
#1	4.766315	.0913189	.1020226	151.9294	.4460195	1.039803
#2	4.793270	.0926832	.1020253	153.6243	.4473720	1.035193
#3	4.757895	.0910023	.1021050	152.4729	.4485413	1.038103

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5553803	179.1122	19.95309	26.48362	1.141501	.0622330
Stddev	.0068237	.9449	.08325	.17184	.001414	.0010059
%RSD	1.228655	.5275712	.4172369	.6488436	.1239092	1.616288
#1	.5512469	178.1775	19.88623	26.30702	1.142716	.0611967
#2	.5632564	180.0671	20.04634	26.65025	1.141840	.0622968
#3	.5516377	179.0920	19.92671	26.49360	1.139949	.0632054

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5990579	.9669547	1.418280	8.164786	F 16.42230	.0829575
Stddev	.0079218	.0067295	.004159	.089066	.01938	.0044895
%RSD	1.322372	.6959498	.2932238	1.090850	.1180027	5.411844
#1	.5905187	.9591965	1.420838	8.134597	16.44460	.0783578
#2	.6061676	.9704548	1.420521	8.265022	16.41268	.0831866
#3	.6004874	.9712129	1.413482	8.094739	16.40960	.0873281

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

Sample Name: P5032-20 Acquired: 12/29/2024 6:19:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0126954	2.916389	13.86411	.0381232	.6070057	.1236198
Stddev	.0000841	.010346	.11630	.0011988	.0036438	.0005994
%RSD	.6625626	.3547408	.8388314	3.144586	.6002938	.4848581
#1	.0126131	2.904459	13.85625	.0393369	.6073084	.1233597
#2	.0127812	2.921806	13.98413	.0380929	.6032200	.1243053
#3	.0126920	2.922900	13.75194	.0369398	.6104887	.1231944

Elem	Li6707
Units	ppm
Avg	.1217761
Stddev	.0021931
%RSD	1.800939
#1	.1227595
#2	.1192634
#3	.1233053

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2632.283	33368.90	2531.947	1688.740	1844.623
Stddev	12.673	220.11	24.932	11.702	7.182
%RSD	.4814593	.6596225	.9846994	.6929488	.3893622
#1	2645.794	33614.40	2555.692	1702.171	1851.899
#2	2630.398	33303.09	2505.977	1680.742	1844.433
#3	2620.658	33189.20	2534.172	1683.307	1837.538

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-21 Acquired: 12/29/2024 6:22:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK73 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1057094	-.035948	.2840994	.0992949	.0224062	82.47039
Stddev	.0045661	.003704	.0019121	.0011965	.0015229	.04605
%RSD	4.319515	10.30516	.6730245	1.205004	6.796624	.0558394
#1	.1098410	-.032142	.2820991	.0995789	.0241110	82.52050
#2	.1008069	-.039542	.2842903	.1003238	.0211806	82.46075
#3	.1064804	-.036160	.2859089	.0979819	.0219269	82.42992

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.777387	.0126571	.0090105	97.80256	.1282583	.0637414
Stddev	.002184	.0001655	.0000321	.10707	.0013798	.0006662
%RSD	.1228571	1.307170	.3562760	.1094720	1.075789	1.045169
#1	1.779123	.0128140	.0089734	97.81462	.1281790	.0643691
#2	1.778102	.0126732	.0090305	97.90308	.1269198	.0638127
#3	1.774935	.0124842	.0090275	97.68997	.1296760	.0630425

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1575177	182.5314	19.77464	26.29853	.1856373	.0043654
Stddev	.0060927	.3017	.03897	.16353	.0017178	.0004614
%RSD	3.867925	.1652674	.1970461	.6218143	.9253720	10.56960
#1	.1505405	182.5258	19.81866	26.15824	.1875018	.0048368
#2	.1617870	182.2326	19.76064	26.25922	.1852915	.0043447
#3	.1602257	182.8359	19.74460	26.47813	.1841188	.0039147

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4010902	.1684352	.5632973	6.176106	F 12.13464	.0834919
Stddev	.0300765	.0041250	.0037076	.137874	.01197	.0020910
%RSD	7.498689	2.449012	.6581865	2.232375	.0986136	2.504449
#1	.3672926	.1711600	.5623192	6.277411	12.13015	.0851269
#2	.4110688	.1636894	.5673958	6.231813	12.12558	.0811358
#3	.4249092	.1704562	.5601768	6.019095	12.14821	.0842131

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-21 Acquired: 12/29/2024 6:22:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK73 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081677	2.860038	12.27672	.0227087	.5506356	-.011752
Stddev	.0004315	.002377	.05477	.0019948	.0028704	.001025
%RSD	5.282478	.0831045	.4461457	8.784066	.5212953	8.719496
#1	.0086658	2.860223	12.27190	.0213419	.5494446	-.011035
#2	.0079107	2.862318	12.22452	.0217865	.5485524	-.011296
#3	.0079265	2.857575	12.33375	.0249977	.5539098	-.012926

Elem	Li6707
Units	ppm
Avg	.1201892
Stddev	.0022878
%RSD	1.903490
#1	.1198517
#2	.1226269
#3	.1180888

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	34466.85	2588.041	1746.103	1851.197
Stddev	10.018	126.50	15.921	5.299	4.280
%RSD	.3678576	.3670300	.6151823	.3034613	.2311932
#1	2718.109	34321.57	2571.772	1740.800	1848.198
#2	2717.034	34552.68	2603.590	1746.112	1849.294
#3	2734.898	34526.31	2588.762	1751.398	1856.098

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-22 Acquired: 12/29/2024 6:26:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK74 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501814	-.017570	.1930435	.0426003	.0049163	64.76995	1.164173
Stddev	.0059738	.007226	.0007846	.0062590	.0042367	.04466	.001745
%RSD	11.90433	41.12826	.4064583	14.69231	86.17529	.0689445	.1498941
#1	.0451564	-.025776	.1938668	.0353852	.0029322	64.77872	1.165776
#2	.0567863	-.014772	.1929594	.0465704	.0097810	64.72156	1.162314
#3	.0486016	-.012161	.1923043	.0458453	.0020359	64.80957	1.164430

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0096082	.0049660	724.5105	.1118296	.0600330	.0830525	138.7733
Stddev	.0001555	.0001021	1.8574	.0013134	.0001751	.0095272	.4365
%RSD	1.618005	2.054956	.2563696	1.174459	.2917308	11.47134	.3145493
#1	.0097836	.0048856	725.1233	.1103199	.0599857	.0928745	139.1680
#2	.0095535	.0049315	722.4241	.1127098	.0598863	.0738503	138.3045
#3	.0094874	.0050808	725.9841	.1124590	.0602269	.0824327	138.8475

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.315150	69.65744	.1440791	.0006566	.7510316	.1259186	.4191905
Stddev	.028266	.39508	.0006975	.0011933	.0323893	.0029327	.0025064
%RSD	.4475839	.5671807	.4841395	181.7462	4.312644	2.329009	.5979056
#1	6.344340	70.09472	.1448485	.0018246	.7479015	.1226908	.4184420
#2	6.287909	69.55141	.1434880	.0007058	.7848724	.1284192	.4219858
#3	6.313202	69.32619	.1439007	-.000561	.7203210	.1266459	.4171437

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.834891	8.109120	.0674519	.0016794	2.368477	11.32852	.0220872
Stddev	.141973	.021940	.0007556	.0002581	.006317	.00774	.0016135
%RSD	2.936434	.2705572	1.120276	15.37071	.2667178	.0683171	7.305098
#1	4.691907	8.092410	.0676262	.0017606	2.361280	11.32430	.0211745
#2	4.975832	8.100986	.0666244	.0013904	2.373107	11.32380	.0239501
#3	4.836934	8.133966	.0681052	.0018871	2.371042	11.33745	.0211369

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: P5032-22 Acquired: 12/29/2024 6:26:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK74 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7579307	.3348513	.1104270
Stddev	.0079544	.0008500	.0047179
%RSD	1.049486	.2538578	4.272436
#1	.7661573	.3338871	.1057416
#2	.7502798	.3354925	.1103625
#3	.7573549	.3351743	.1151768

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2308.424	29182.57	2282.720	1468.539	1662.082
Stddev	4.202	117.08	10.620	5.704	4.154
%RSD	.1820325	.4011858	.4652356	.3884224	.2499366
#1	2305.654	29199.25	2278.209	1472.608	1663.232
#2	2313.259	29058.05	2275.101	1462.019	1665.541
#3	2306.359	29290.41	2294.851	1470.991	1657.474

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV036 Acquired: 12/29/2024 6:30:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV036 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.023542	4.730378	24.23133	5.014959	4.922767	403.3438	9.990623
Stddev	.006850	.007943	.04225	.011034	.003305	.4753	.014060
%RSD	.1363538	.1679225	.1743408	.2200200	.0671309	.1178499	.1407298
#1	5.015802	4.738586	24.22848	5.002256	4.919849	402.9741	9.975326
#2	5.025999	4.722729	24.19059	5.020463	4.922096	403.1774	9.993561
#3	5.028824	4.729817	24.27493	5.022158	4.926356	403.8800	10.00298

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5093261	2.442223	400.6735	15.30303	2.359789	14.75874	403.7316
Stddev	.0045407	.003761	.6632	.02555	.004055	.03587	.8104
%RSD	.8915209	.1539913	.1655257	.1669601	.1718490	.2430461	.2007314
#1	.5144103	2.443307	400.9387	15.27745	2.360816	14.73434	403.2508
#2	.5056740	2.438040	399.9187	15.30309	2.355319	14.79992	403.2767
#3	.5078941	2.445323	401.1630	15.32855	2.363232	14.74194	404.6673

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.52572	399.4230	2.459784	1.265496	411.9751	2.460364	14.81071
Stddev	.01887	.5890	.004115	.002814	4.5049	.018219	.10493
%RSD	.1299067	.1474608	.1672811	.2223996	1.093494	.7404893	.7084991
#1	14.51039	399.7427	2.463387	1.265614	417.0275	2.479205	14.69056
#2	14.51996	398.7433	2.455300	1.262625	408.3768	2.459049	14.88434
#3	14.54679	399.7831	2.460665	1.268250	410.5209	2.442839	14.85722

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	150.7825	4.913622	4.977927	4.900726	4.956154	4.848115	4.938807
Stddev	.0969	.019429	.035224	.003618	.001557	.036420	.006181
%RSD	.0642724	.3954111	.7075985	.0738254	.0314066	.7512247	.1251602
#1	150.7716	4.934954	5.014208	4.897117	4.957520	4.888014	4.935756
#2	150.8844	4.896940	4.943865	4.900707	4.954460	4.816656	4.934744
#3	150.6915	4.908972	4.975708	4.904353	4.956482	4.839676	4.945921

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCV036 Acquired: 12/29/2024 6:30:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV036 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.926787	4.695510	5.112140
Stddev	.005474	.002529	.008240
%RSD	.1111153	.0538542	.1611873
#1	4.920762	4.692746	5.102642
#2	4.931457	4.697707	5.117369
#3	4.928142	4.696076	5.116410

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1823.740	23512.76	1898.237	1139.175	1548.895
Stddev	3.693	7.19	14.967	5.413	4.048
%RSD	.2024806	.0305874	.7884739	.4751326	.2613502
#1	1825.910	23506.72	1881.840	1145.331	1547.337
#2	1825.834	23510.86	1911.164	1135.161	1553.490
#3	1819.476	23520.72	1901.707	1137.034	1545.857

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

Sample Name: CCB036 Acquired: 12/29/2024 6:34:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) 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	-.000995	.0020927	.0001836	-.001860	-.001904	.0095906
Stddev	.001766	.0010541	.0025681	.001135	.000819	.0163486
%RSD	177.4956	50.36904	1398.565	61.00520	43.01654	170.4642
#1	-.001102	.0032486	.0031332	-.001893	-.000964	-.000924
#2	.000822	.0011846	-.001026	-.002977	-.002282	.028426
#3	-.002704	.0018448	-.001556	-.000709	-.002465	.001270

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000771	.0001056	-.000016	.0093589	.0006788	-.000175
Stddev	.000940	.0003413	.000102	.0396248	.0006854	.000246
%RSD	121.9496	323.2726	650.8653	423.3902	100.9653	140.4286
#1	.000275	-.000129	-.000093	.0535083	.0003233	-.000260
#2	-.001546	.000497	-.000054	-.023120	.0014689	.000102
#3	-.001043	-.000052	.000100	-.002311	.0002443	-.000368

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001541	.0368026	.0007719	-.018491	.0004075	.0004257
Stddev	.006612	.0308625	.0010215	.061149	.0003019	.0014761
%RSD	428.9695	83.85959	132.3369	330.6940	74.07801	346.7575
#1	-.004284	.0565365	-.000406	-.082624	.0003016	-.001060
#2	-.006340	.0012369	.001309	-.012009	.0007481	.001892
#3	.006001	.0526343	.001412	.039159	.0001729	.000446

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0345821	-.001558	.0016852	.1534823	.0011931	.0103698
Stddev	.0356641	.014547	.0008247	.0936763	.0005330	.0005412
%RSD	103.1290	933.9141	48.93545	61.03396	44.66946	5.219374
#1	.0571945	.010027	.0025475	.1817383	.0014690	.0104298
#2	.0530825	-.017884	.0016041	.2297780	.0015316	.0098011
#3	-.006531	.003184	.0009042	.0489305	.0005788	.0108786

Reviewed By:mohan
On:12/31/2024
11:25:59 PM
Inst Id :P5

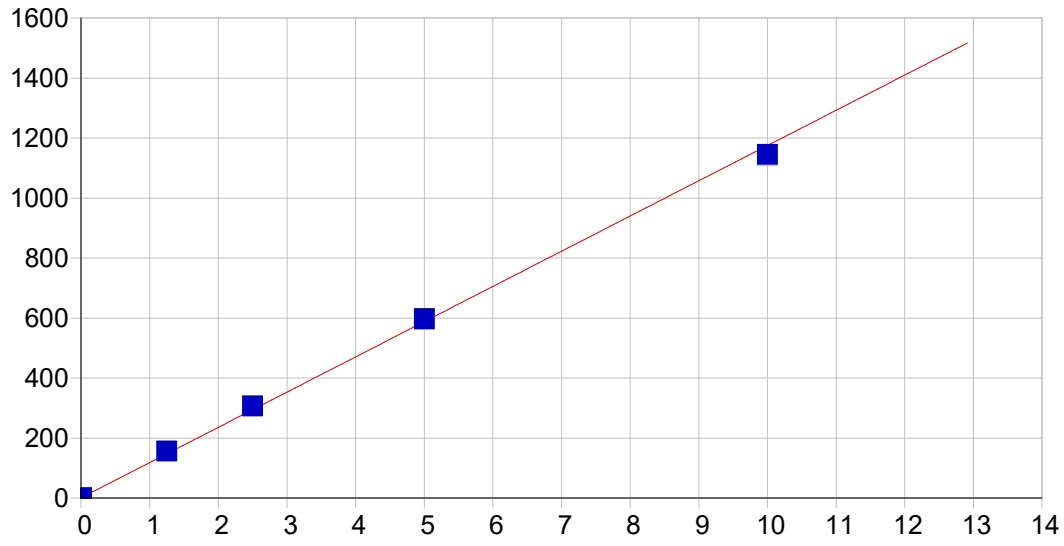
Sample Name: CCB036 Acquired: 12/29/2024 6:34:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v49) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB036 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008380	-.001025	.0002490	-.000588	.0040247	-.000144
Stddev	.0003001	.001761	.0018293	.001026	.0021408	.000167
%RSD	35.81647	171.8454	734.6669	174.5404	53.19126	116.0355
#1	.0009682	-.002909	-.000761	.000306	.0023503	-.000139
#2	.0004947	.000579	.002361	-.001708	.0032870	.000021
#3	.0010511	-.000743	-.000853	-.000362	.0064369	-.000313

Elem	Li6707
Units	ppm
Avg	F .0210260
Stddev	.0043333
%RSD	20.60930
#1	.0259675
#2	.0192363
#3	.0178743

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2052.811	25801.49	1970.589	1309.311	1856.430
Stddev	5.756	141.96	17.997	2.610	2.603
%RSD	.2804135	.5502126	.9132593	.1993170	.1402185
#1	2047.805	25686.15	1959.402	1307.127	1854.984
#2	2059.101	25758.27	1991.349	1308.605	1859.435
#3	2051.527	25960.04	1961.017	1312.201	1854.871

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



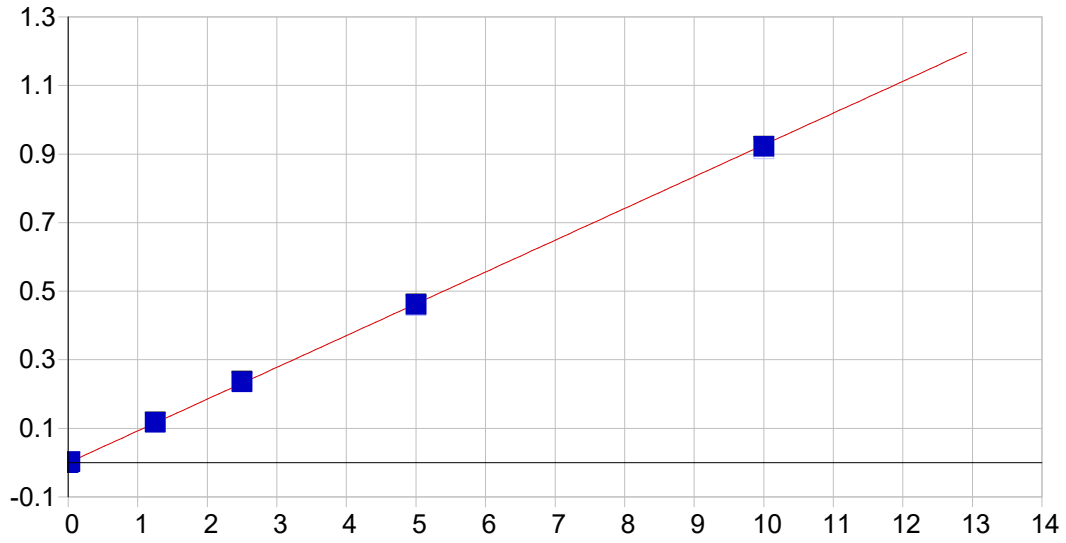
As 189.042 {478}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.487541	Re-Slope:	1.000000
A1 (Gain):	117.421288	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999548	Status:	OK.
Std Error of Est:	0.058949		
Predicted MDL:	0.006092		
Predicted MQL:	0.020308		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.48771	.366	1
S1	.01000	.00763	-.002	-23.7	1.3820	.511	1
S2	1.2500	1.3236	.074	5.89	155.29	.349	1
S3	2.5000	2.6043	.104	4.17	305.05	.377	1
S4	5.0000	5.0772	.077	1.54	594.19	.796	1
S5	10.000	9.7473	-.253	-2.53	1140.1	.765	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



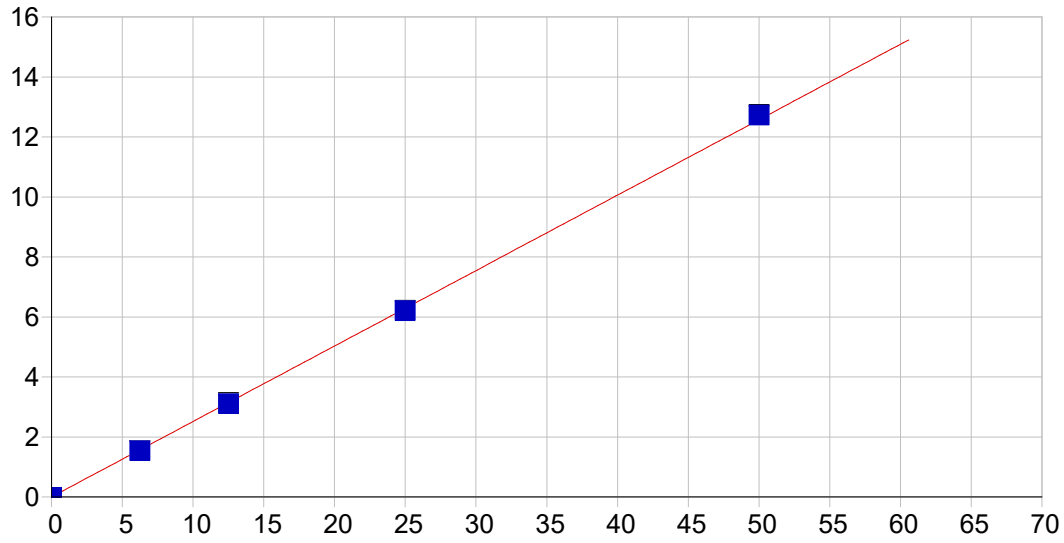
Tl 190.856 {477}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000178	Re-Slope:	1.000000
A1 (Gain):	0.092687	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000025		
Predicted MDL:	0.003364		
Predicted MQL:	0.011214		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00018	.000	1
S1	.02500	.02740	.002	9.61	.00228	.000	1
S2	1.2500	1.2724	.022	1.79	.11676	.000	1
S3	2.5000	2.5488	.049	1.95	.23407	.002	1
S4	5.0000	4.9764	-.024	-.472	.45709	.002	1
S5	10.000	9.9501	-.050	-.499	.91411	.001	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



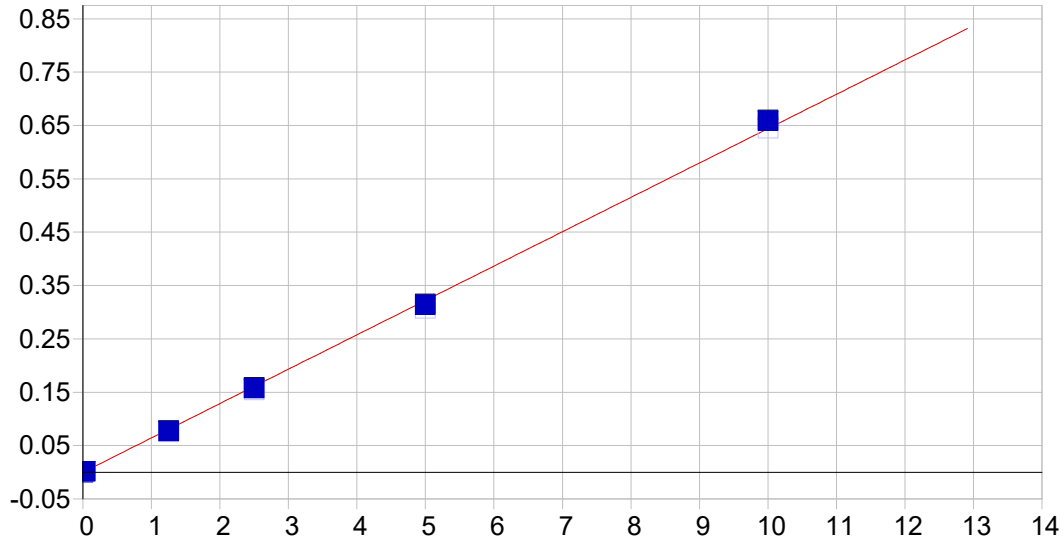
Pb 220.353 {453}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000232	Re-Slope:	1.000000
A1 (Gain):	0.251458	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999915	Status:	OK.
Std Error of Est:	0.000123		
Predicted MDL:	0.002610		
Predicted MQL:	0.008701		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00023	.000	1
S1	.01000	.01046	.000	4.55	.00285	.000	1
S2	6.2500	6.1203	-.130	-2.08	1.5375	.002	1
S3	12.500	12.360	-.140	-1.12	3.1049	.033	1
S4	25.000	24.669	-.331	-1.32	6.1967	.019	1
S5	50.000	50.600	.600	1.20	12.710	.018	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



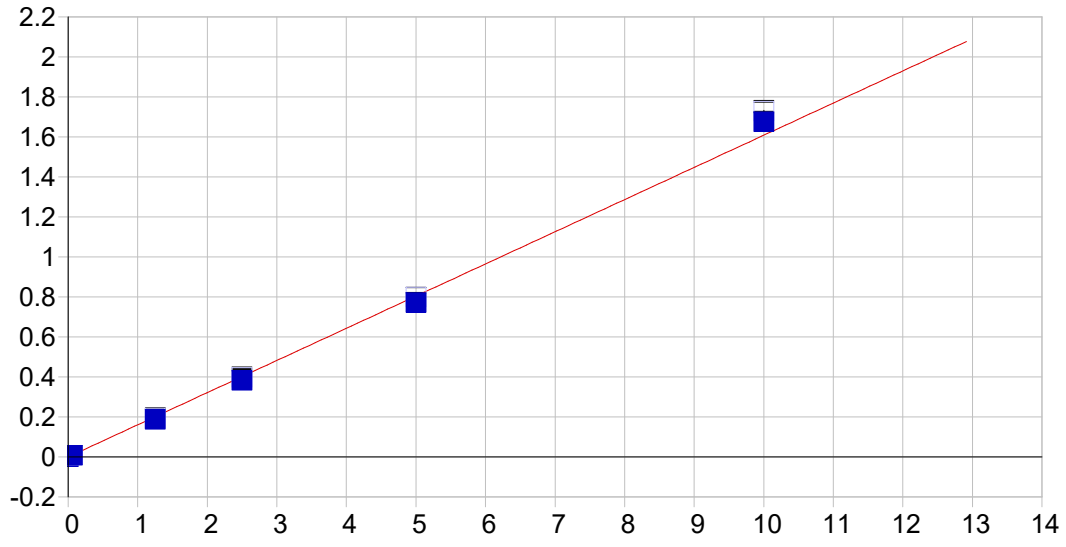
Se 196.090 {472}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000074	Re-Slope:	1.000000
A1 (Gain):	0.064417	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999649	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.006553		
Predicted MQL:	0.021842		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00007	.000	1
S1	.03500	.02902	-.006	-17.1	.00179	.000	1
S2	1.2500	1.1970	-.053	-4.24	.07522	.001	1
S3	2.5000	2.4479	-.052	-2.08	.15399	.001	1
S4	5.0000	4.8798	-.120	-2.40	.30702	.001	1
S5	10.000	10.231	.231	2.31	.64451	.001	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



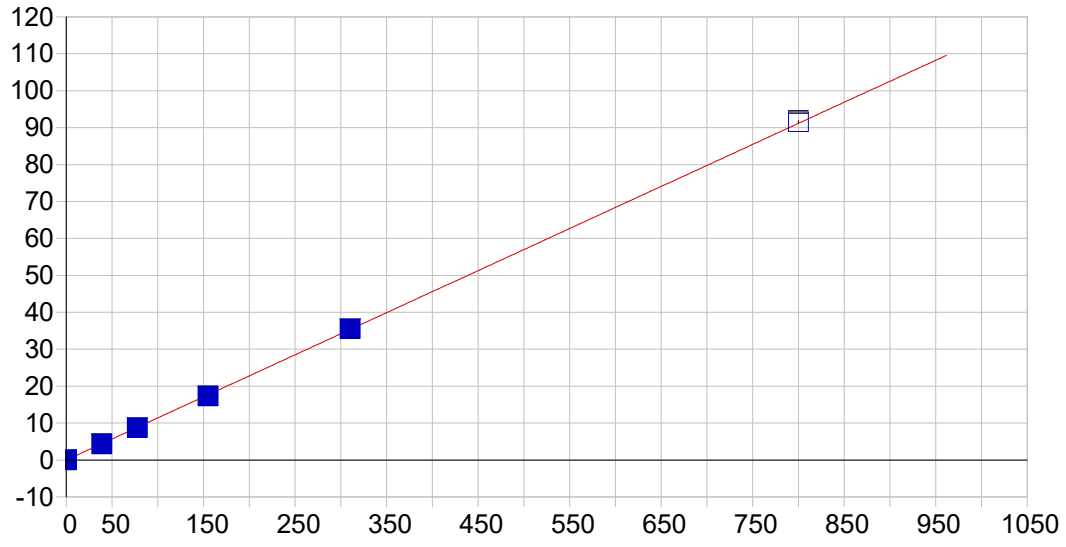
Sb 206.833 {463}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000312	Re-Slope:	1.000000
A1 (Gain):	0.160865	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999083	Status:	OK.
Std Error of Est:	0.000293		
Predicted MDL:	0.003552		
Predicted MQL:	0.011838		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	-.00031	.000	1
S1	.06000	.05564	-.004	-7.27	.00864	.001	1
S2	1.2500	1.1671	-.083	-6.63	.19415	.000	1
S3	2.5000	2.3809	-.119	-4.76	.39614	.004	1
S4	5.0000	4.7946	-.205	-4.11	.79786	.001	1
S5	10.000	10.412	.412	4.12	1.7283	.004	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



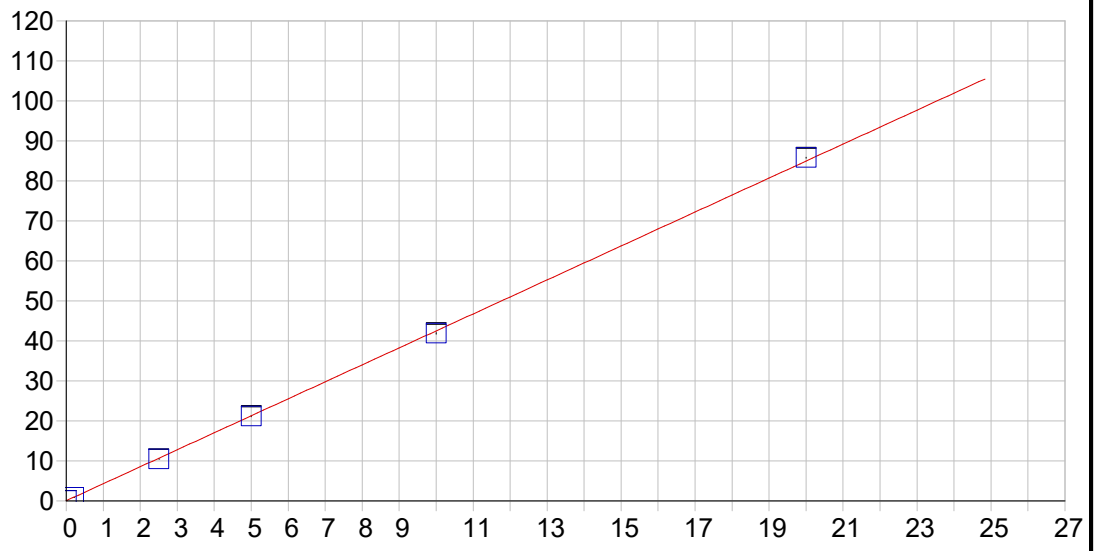
Al 396.152 { 85}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000875	Re-Slope:	1.000000
A1 (Gain):	0.113968	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999951	Status:	OK.
Std Error of Est:	0.000702		
Predicted MDL:	0.024766		
Predicted MQL:	0.082552		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00088	.004	1
S1	.20000	.19692	-.003	-1.54	.02336	.004	1
S2	38.750	37.889	-.861	-2.22	4.3239	.022	1
S3	77.500	76.718	-.782	-1.01	8.7538	.052	1
S4	155.00	151.41	-3.59	-2.32	17.276	.046	1
S5	310.00	311.86	1.86	.599	35.581	.036	1
S6	800.00	803.38	3.38	.423	91.561	.340	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



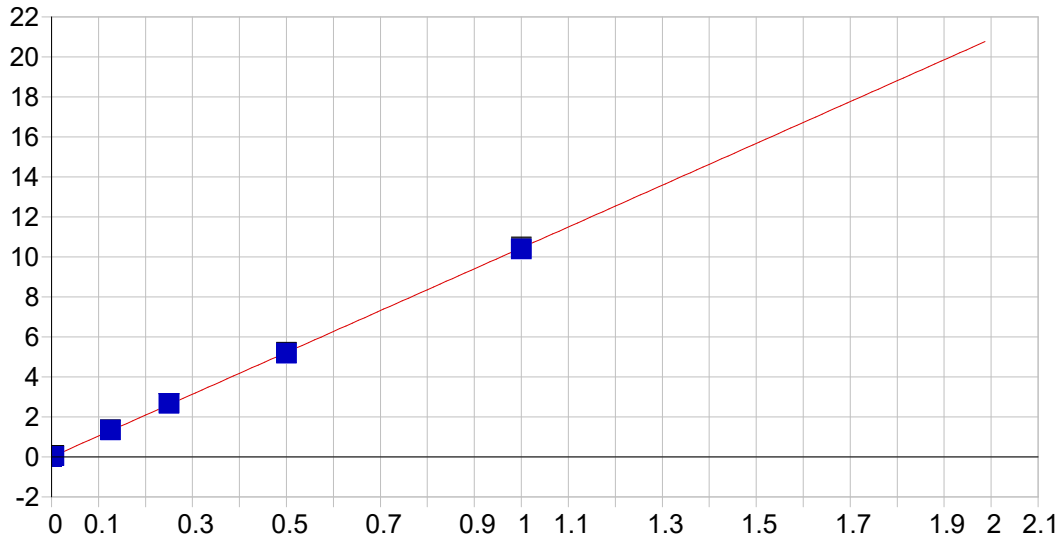
Ba 493.409 { 68}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.053605	Re-Slope:	1.000000
A1 (Gain):	4.245252	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999935	Status:	OK.
Std Error of Est:	0.005162		
Predicted MDL:	0.001435		
Predicted MQL:	0.004784		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.05361	.002	1
S1	.20000	.20272	.003	1.36	.91421	.000	1
S2	2.5000	2.4567	-.043	-1.73	10.483	.032	1
S3	5.0000	4.9861	-.014	-.278	21.221	.148	1
S4	10.000	9.8546	-.145	-1.45	41.889	.180	1
S5	20.000	20.200	.200	.999	85.807	.127	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



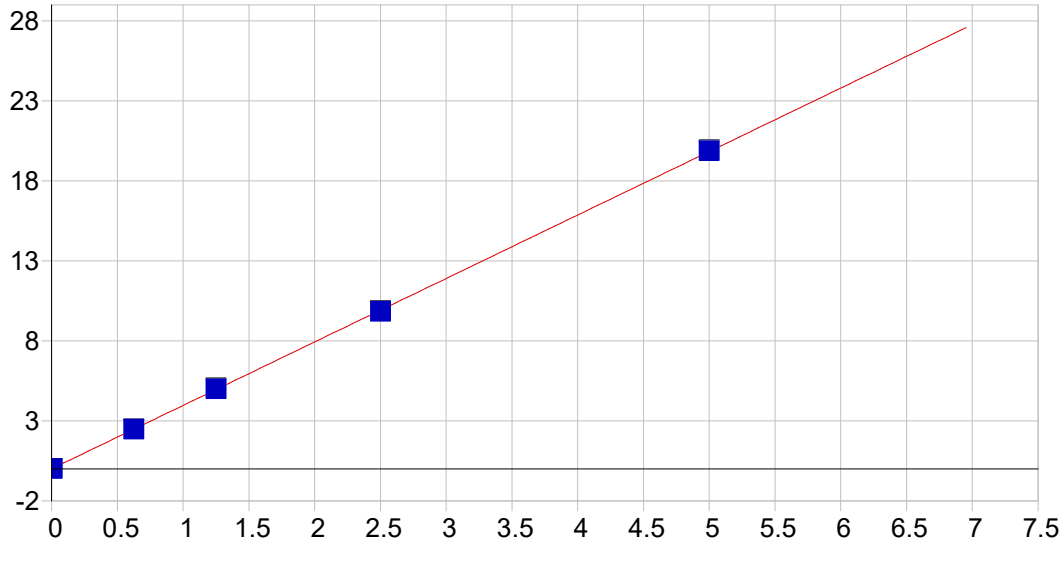
Be 234.861 {144}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000173	Re-Slope:	1.000000
A1 (Gain):	10.450081	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000477		
Predicted MDL:	0.000141		
Predicted MQL:	0.000469		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00018	.001	1
S1	.00500	.00532	.000	6.46	.05540	.002	1
S2	.12500	.12825	.003	2.60	1.3341	.006	1
S3	.25000	.25540	.005	2.16	2.6568	.005	1
S4	.50000	.49601	-.004	-.799	5.1591	.043	1
S5	1.0000	.99502	-.005	-.498	10.350	.101	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



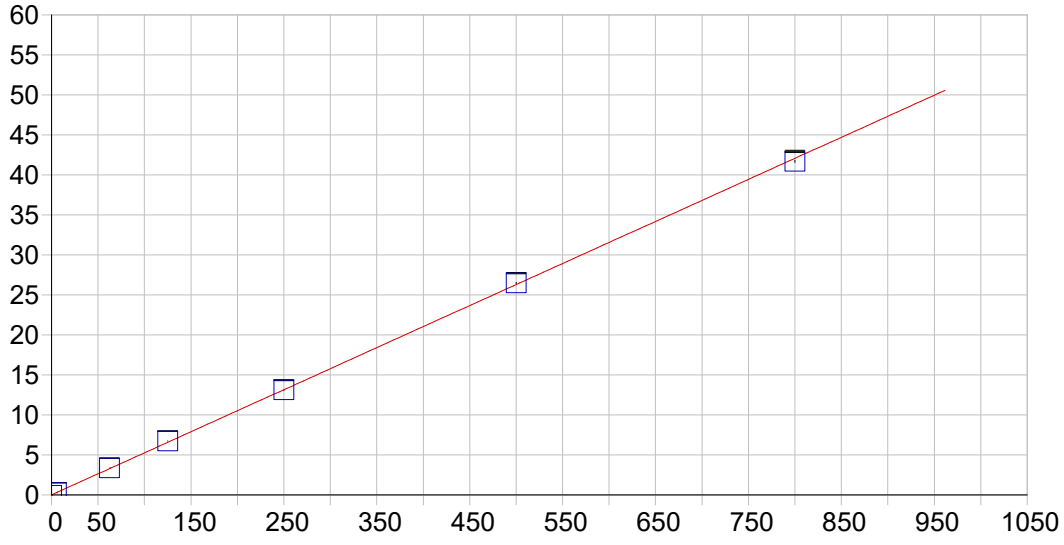
Cd 214.438 {457}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000151	Re-Slope:	1.000000
A1 (Gain):	3.967115	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999988	Status:	OK.
Std Error of Est:	0.000162		
Predicted MDL:	0.000112		
Predicted MQL:	0.000372		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00015	.000	1
S1	.00500	.00494	-.000	-1.24	.01982	.000	1
S2	.62500	.62359	-.001	-.226	2.4778	.003	1
S3	1.2500	1.2579	.008	.633	4.9981	.056	1
S4	2.5000	2.4813	-.019	-.747	9.8590	.027	1
S5	5.0000	5.0122	.012	.245	19.915	.032	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



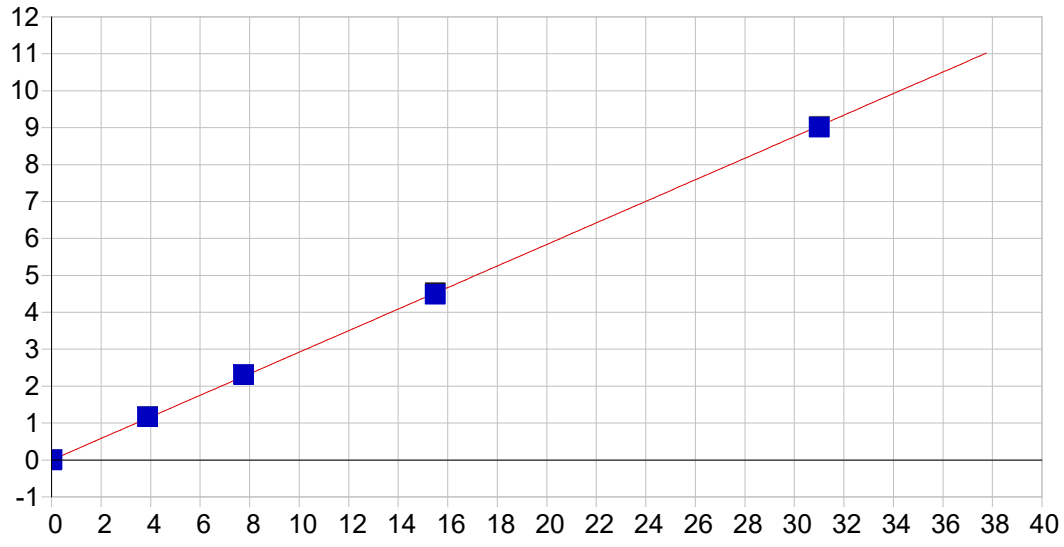
Ca 373.690 { 90}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005249	Re-Slope:	1.000000
A1 (Gain):	0.052583	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.001892		
Predicted MDL:	0.035846		
Predicted MQL:	0.119486		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00025	-.000	.000	.00524	.000	1
S1	5.0000	5.0615	.061	1.23	.27139	.003	1
S2	62.500	63.753	1.25	2.01	3.3576	.009	1
S3	125.00	127.86	2.86	2.29	6.7287	.027	1
S4	250.00	249.14	-.856	-.342	13.106	.057	1
S5	500.00	503.75	3.75	.751	26.494	.078	1
S6	800.00	792.92	-7.08	-.885	41.699	.136	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



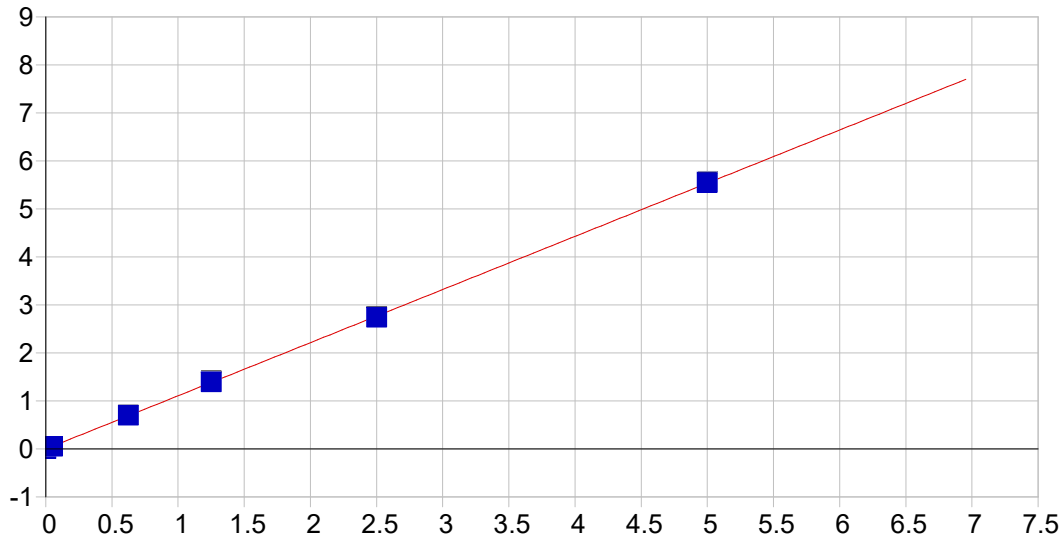
Cr 267.716 {126}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000123	Re-Slope:	1.000000
A1 (Gain):	0.291879	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999926	Status:	OK.
Std Error of Est:	0.000105		
Predicted MDL:	0.000838		
Predicted MQL:	0.002792		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00012	.000	1
S1	.01000	.01079	.001	7.89	.00303	.000	1
S2	3.8750	3.9911	.116	3.00	1.1657	.001	1
S3	7.7500	7.9095	.159	2.06	2.3102	.002	1
S4	15.500	15.363	-.137	-.887	4.4874	.036	1
S5	31.000	30.861	-.139	-.448	9.0146	.021	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



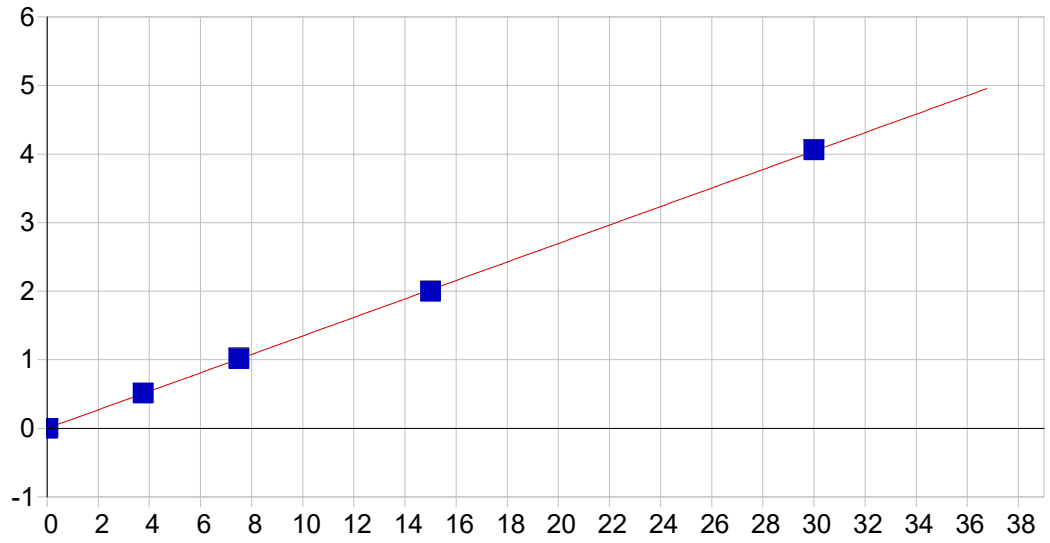
Co 228.616 {448}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000442	Re-Slope:	1.000000
A1 (Gain):	1.107243	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.000202		
Predicted MDL:	0.000431		
Predicted MQL:	0.001438		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00044	.000	1
S1	.05000	.05071	.001	1.42	.05588	.001	1
S2	.62500	.63052	.006	.883	.69992	.001	1
S3	1.2500	1.2609	.011	.869	1.4001	.016	1
S4	2.5000	2.4738	-.026	-1.05	2.7476	.008	1
S5	5.0000	5.0091	.009	.181	5.5637	.012	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



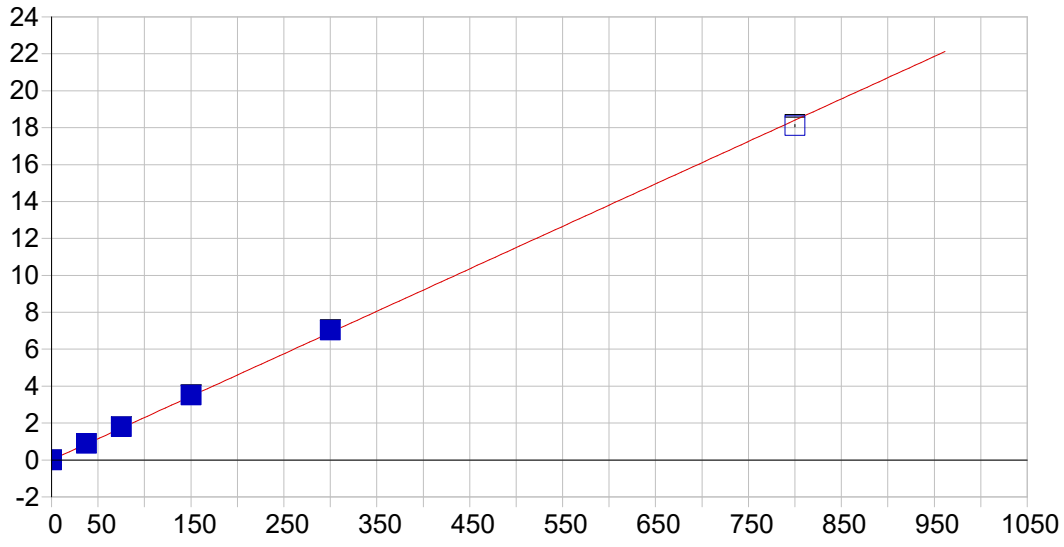
Cu 324.754 {104}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000698	Re-Slope:	1.000000
A1 (Gain):	0.134754	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999947	Status:	OK.
Std Error of Est:	0.000064		
Predicted MDL:	0.009928		
Predicted MQL:	0.033093		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00001	-.000	.000	.00070	.001	1
S1	.02500	.03233	.007	29.3	.00505	.001	1
S2	3.7500	3.7869	.037	.984	.51094	.001	1
S3	7.5000	7.5440	.044	.586	1.0172	.006	1
S4	15.000	14.796	-.204	-1.36	1.9943	.007	1
S5	30.000	30.116	.116	.387	4.0585	.009	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



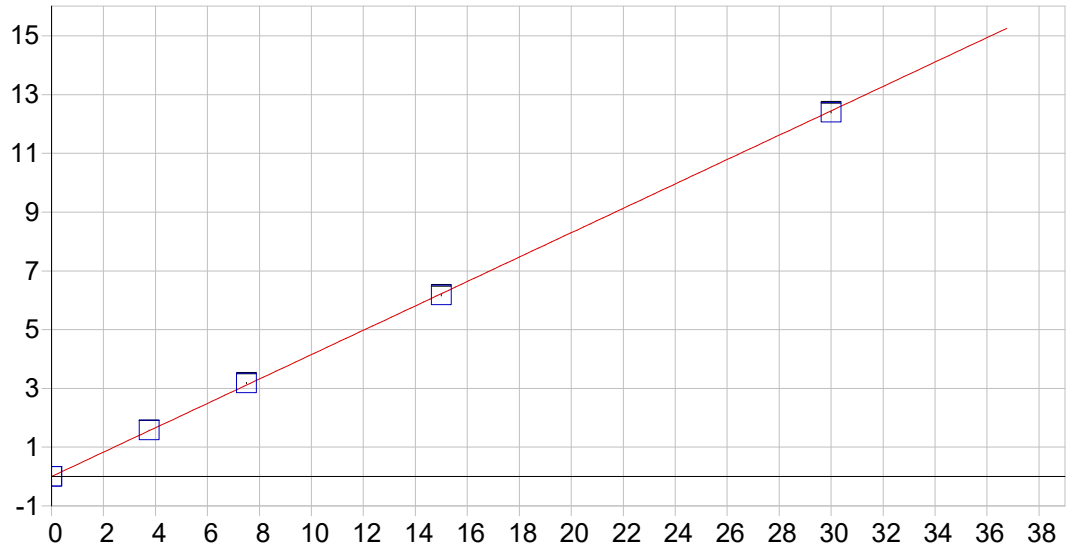
Fe 259.837 {130}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000335	Re-Slope:	1.000000
A1 (Gain):	0.023007	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999784	Status:	OK.
Std Error of Est:	0.000209		
Predicted MDL:	0.030909		
Predicted MQL:	0.103030		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00033	.001	1
S1	.10000	.07923	-.021	-20.8	.00216	.001	1
S2	37.500	38.915	1.41	3.77	.89583	.003	1
S3	75.000	78.396	3.40	4.53	1.8044	.011	1
S4	150.00	152.69	2.69	1.79	3.5140	.010	1
S5	300.00	305.77	5.77	1.92	7.0366	.023	1
S6	800.00	786.75	-13.2	-1.66	18.101	.066	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



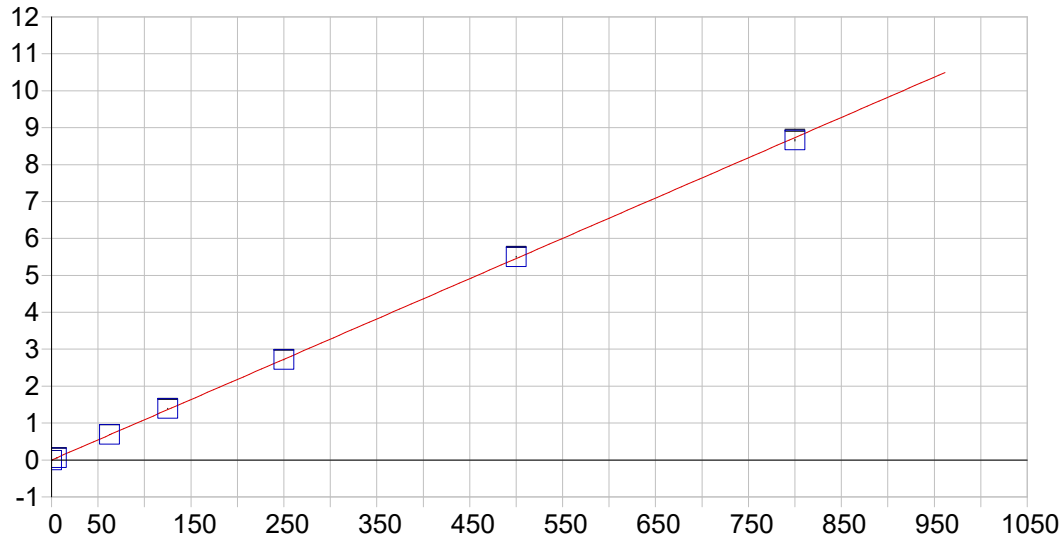
Mn 257.610 {131}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000007	Re-Slope:	1.000000
A1 (Gain):	0.414990	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999945	Status:	OK.
Std Error of Est:	0.000155		
Predicted MDL:	0.001440		
Predicted MQL:	0.004801		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00001	.001	1
S1	.01500	.01584	.001	5.58	.00658	.000	1
S2	3.7500	3.8023	.052	1.40	1.5779	.005	1
S3	7.5000	7.6753	.175	2.34	3.1852	.022	1
S4	15.000	14.886	-.114	-.757	6.1778	.027	1
S5	30.000	29.885	-.115	-.383	12.402	.029	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



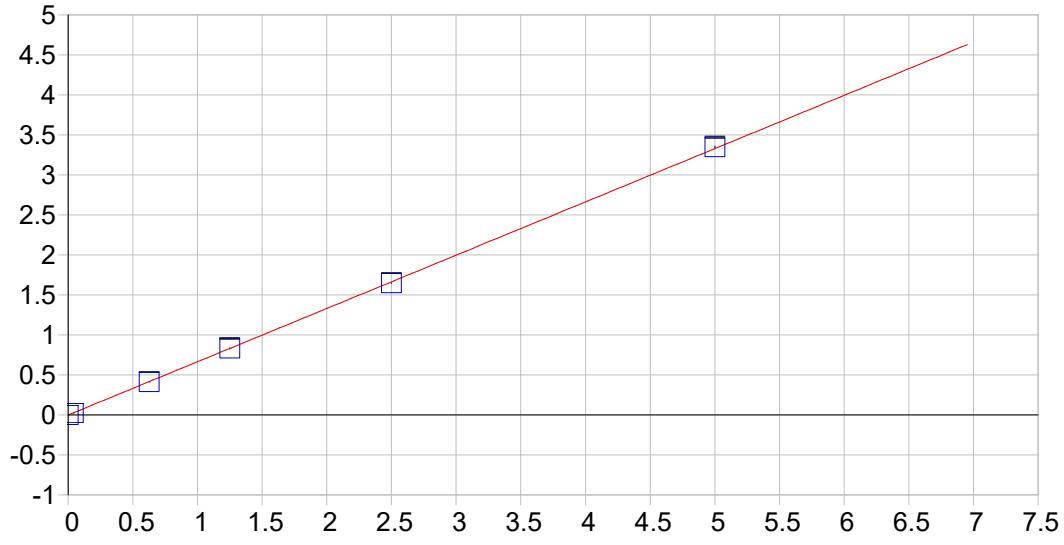
Mg 279.079 {121}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001169	Re-Slope:	1.000000
A1 (Gain):	0.010916	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999957	Status:	OK.
Std Error of Est:	0.000352		
Predicted MDL:	0.082729		
Predicted MQL:	0.275763		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00030	-.000	.000	-.00117	.001	1
S1	5.0000	5.1700	.170	3.40	.05527	.000	1
S2	62.500	63.240	.740	1.18	.68914	.000	1
S3	125.00	127.33	2.33	1.87	1.3888	.012	1
S4	250.00	248.82	-1.18	-.473	2.7148	.010	1
S5	500.00	504.23	4.23	.846	5.5028	.016	1
S6	800.00	793.71	-6.29	-.786	8.6628	.025	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



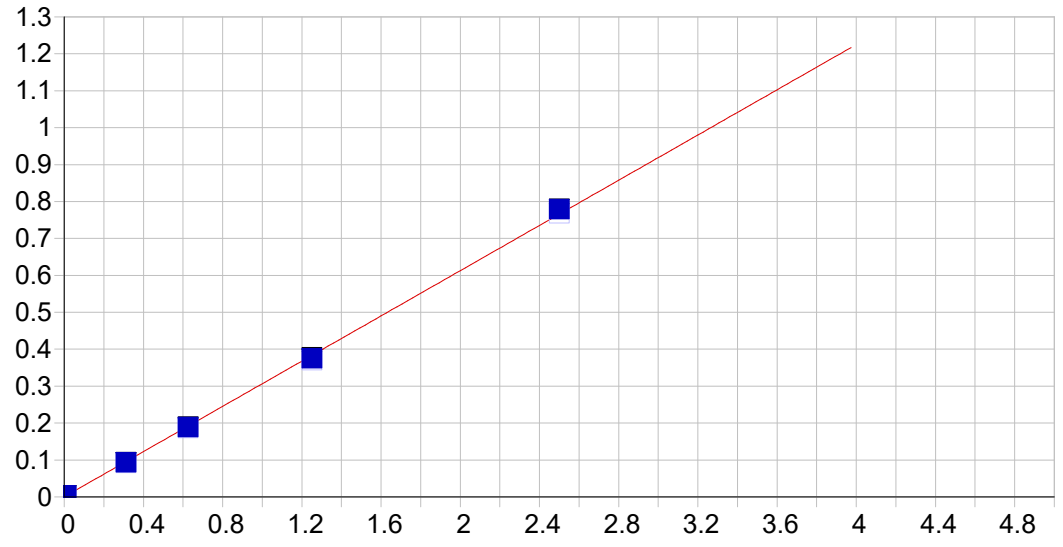
Ni 231.604 {446}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001016	Re-Slope:	1.000000
A1 (Gain):	0.665882	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000115		
Predicted MDL:	0.000743		
Predicted MQL:	0.002475		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00102	.000	1
S1	.04000	.03859	-.001	-3.54	.02468	.001	1
S2	.62500	.61828	-.007	-1.07	.41069	.000	1
S3	1.2500	1.2512	.001	.094	.83212	.009	1
S4	2.5000	2.4775	-.023	-.901	1.6487	.003	1
S5	5.0000	5.0295	.029	.590	3.3480	.011	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



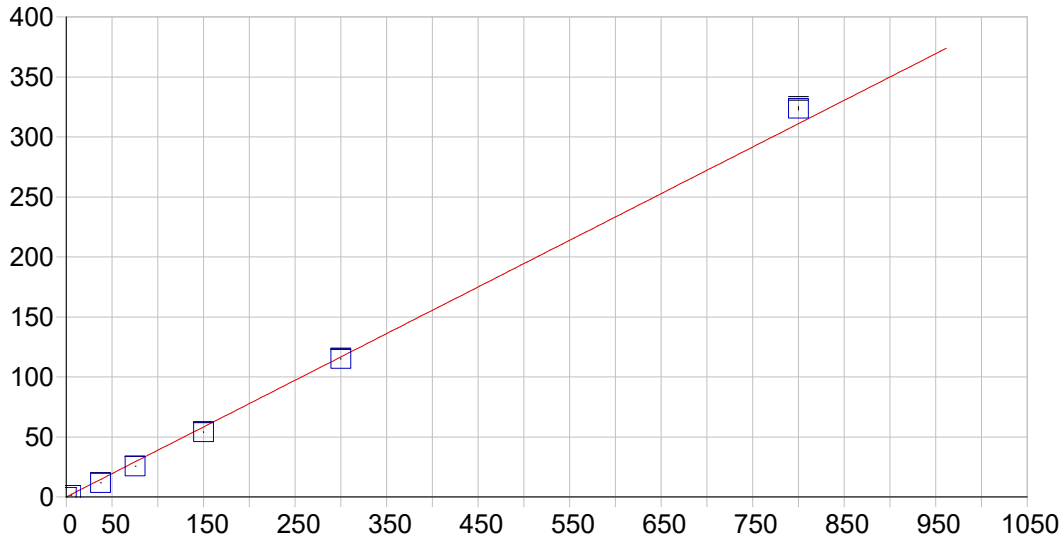
Ag 328.068 {103}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000378	Re-Slope:	1.000000
A1 (Gain):	0.306197	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999823	Status:	OK.
Std Error of Est:	0.000048		
Predicted MDL:	0.001408		
Predicted MQL:	0.004694		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00038	.000	1
S1	.01000	.01034	.000	3.36	.00354	.000	1
S2	.31250	.30442	-.008	-2.58	.09221	.000	1
S3	.62500	.61524	-.010	-1.56	.18601	.001	1
S4	1.2500	1.2247	-.025	-2.02	.36987	.003	1
S5	2.5000	2.5428	.043	1.71	.76795	.001	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



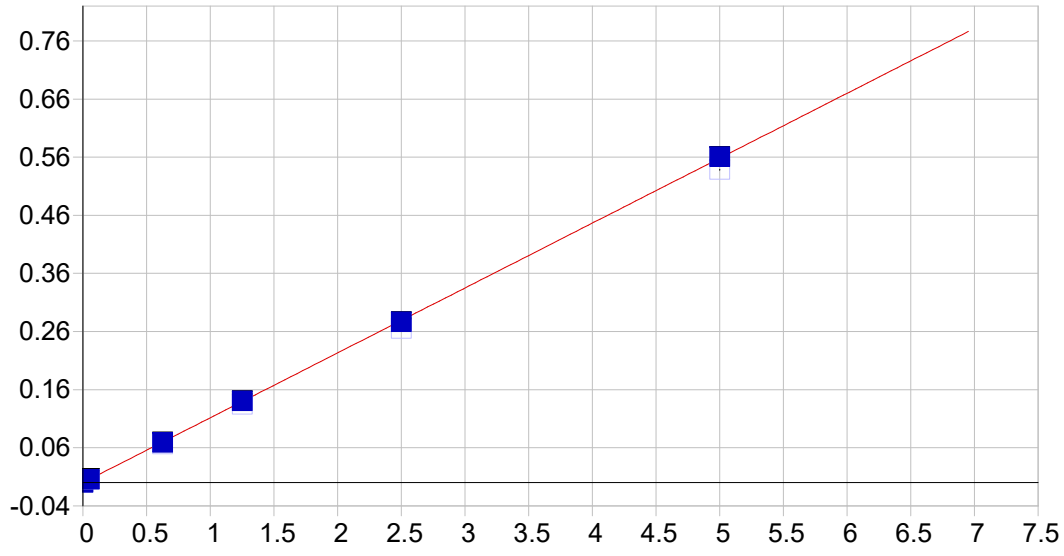
Na 818.326 { 41}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006771	Re-Slope:	1.000000
A1 (Gain):	0.388794	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998069	Status:	OK.
Std Error of Est:	0.074804		
Predicted MDL:	0.024427		
Predicted MQL:	0.081424		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00338	.003	.000	.00809	.008	1
S1	5.0000	3.4397	-1.56	-31.2	1.3441	.018	1
S2	37.500	30.223	-7.28	-19.4	11.757	.037	1
S3	75.000	65.587	-9.41	-12.6	25.506	.035	1
S4	150.00	138.97	-11.0	-7.35	54.039	.366	1
S5	300.00	296.33	-3.67	-1.22	115.22	.528	1
S6	800.00	832.94	32.9	4.12	323.85	1.50	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



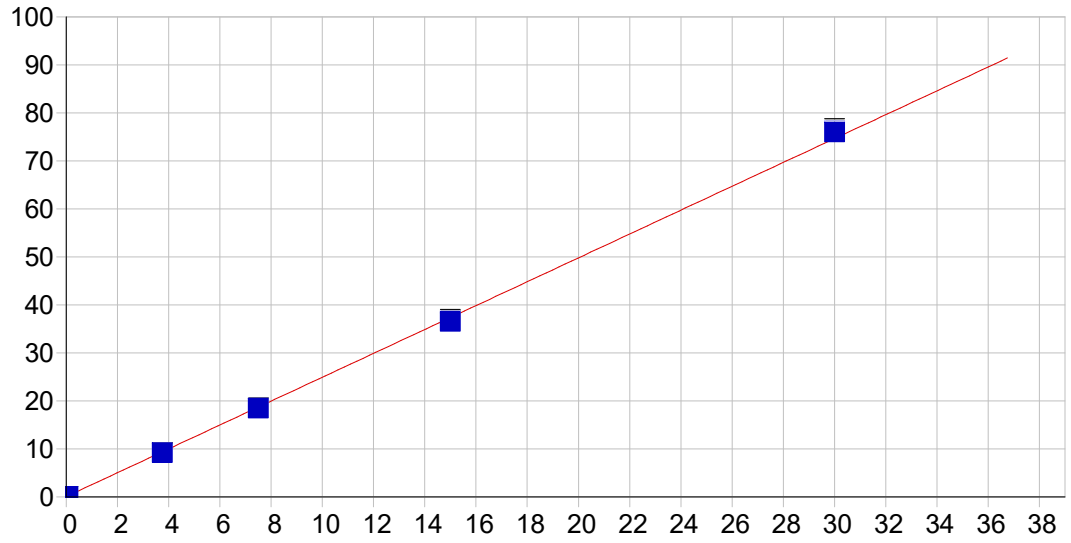
V 292.402 {115}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000002	Re-Slope:	1.000000
A1 (Gain):	0.111652	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000020		
Predicted MDL:	0.009828		
Predicted MQL:	0.032760		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00000	.000	1
S1	.05000	.04957	-.000	-.863	.00552	.002	1
S2	.62500	.61975	-.005	-.839	.06640	.001	1
S3	1.2500	1.2573	.007	.585	.13479	.001	1
S4	2.5000	2.4760	-.024	-.962	.26526	.001	1
S5	5.0000	5.0224	.022	.449	.53839	.001	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



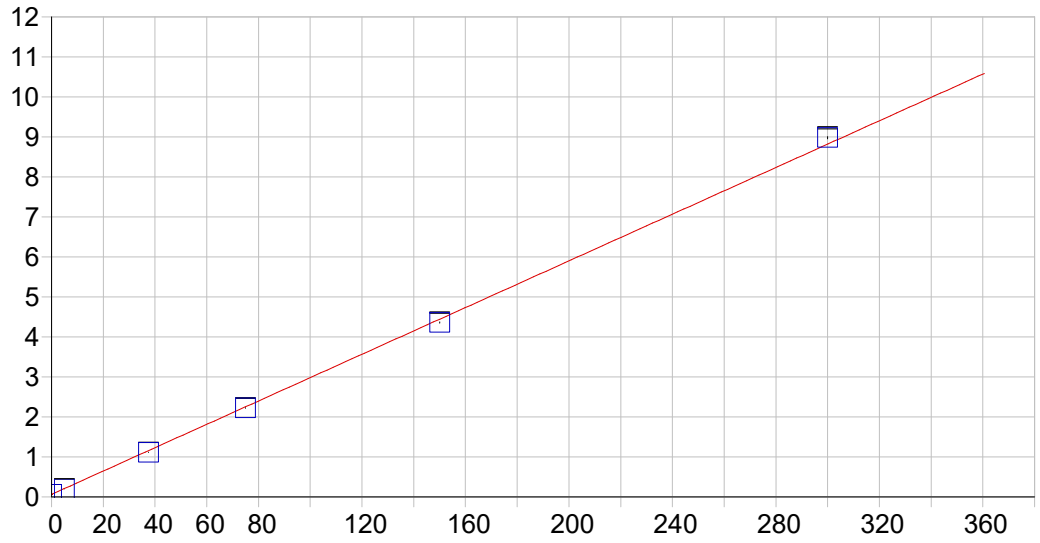
Zn 213.856 {158}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.070515	Re-Slope:	1.000000
A1 (Gain):	2.486116	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999817	Status:	OK.
Std Error of Est:	0.003397		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.07052	.000	1
S1	.06000	.05901	-.001	-1.65	.21769	.003	1
S2	3.7500	3.6616	-.088	-2.36	9.2194	.074	1
S3	7.5000	7.3918	-.108	-1.44	18.539	.042	1
S4	15.000	14.663	-.337	-2.25	36.707	.266	1
S5	30.000	30.535	.535	1.78	76.348	.417	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



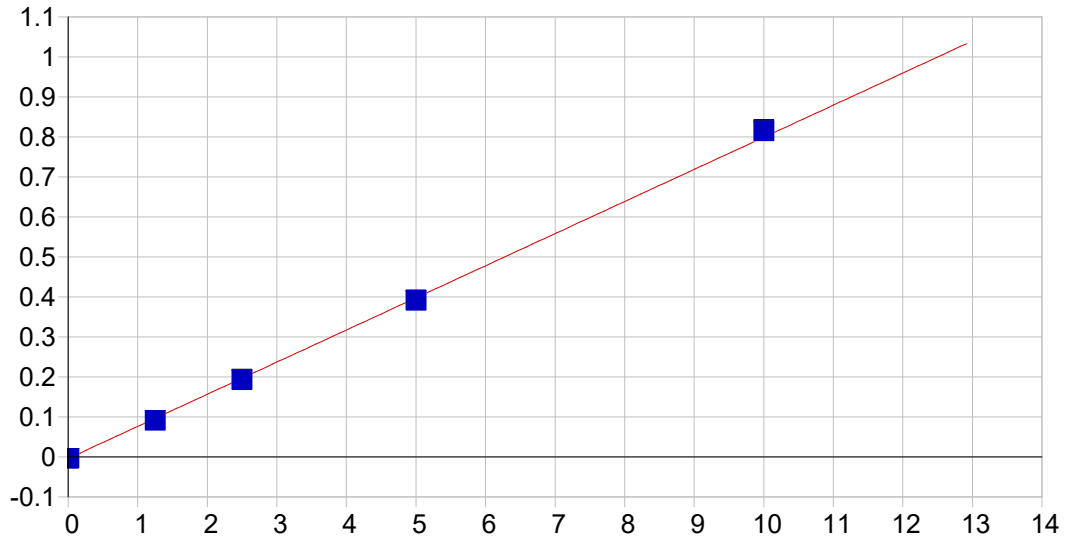
K 769.896 { 44}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.063542	Re-Slope:	1.000000
A1 (Gain):	0.029187	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999790	Status:	OK.
Std Error of Est:	0.001234		
Predicted MDL:	0.139000		
Predicted MQL:	0.463334		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00053	.001	.000	.06356	.003	1
S1	5.0000	4.7361	-.264	-5.28	.20177	.004	1
S2	37.500	36.018	-1.48	-3.95	1.1148	.003	1
S3	75.000	73.917	-1.08	-1.44	2.2209	.007	1
S4	150.00	147.30	-2.70	-1.80	4.3628	.017	1
S5	300.00	305.53	5.53	1.84	8.9808	.025	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



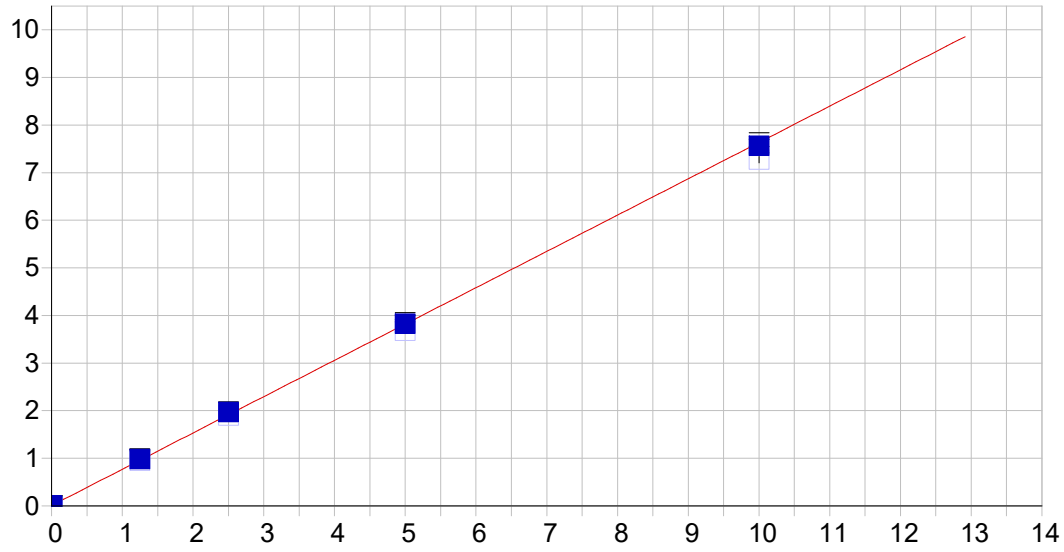
P 177.495 {490}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003951	Re-Slope:	1.000000
A1 (Gain):	0.080303	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999733	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.003405		
Predicted MQL:	0.011350		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00395	.000	1
S1	.01000	.00769	-.002	-23.1	-.00333	.000	1
S2	1.2500	1.1868	-.063	-5.05	.09121	.000	1
S3	2.5000	2.4484	-.052	-2.07	.19237	.002	1
S4	5.0000	4.9194	-.081	-1.61	.39050	.001	1
S5	10.000	10.198	.198	1.98	.81379	.003	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



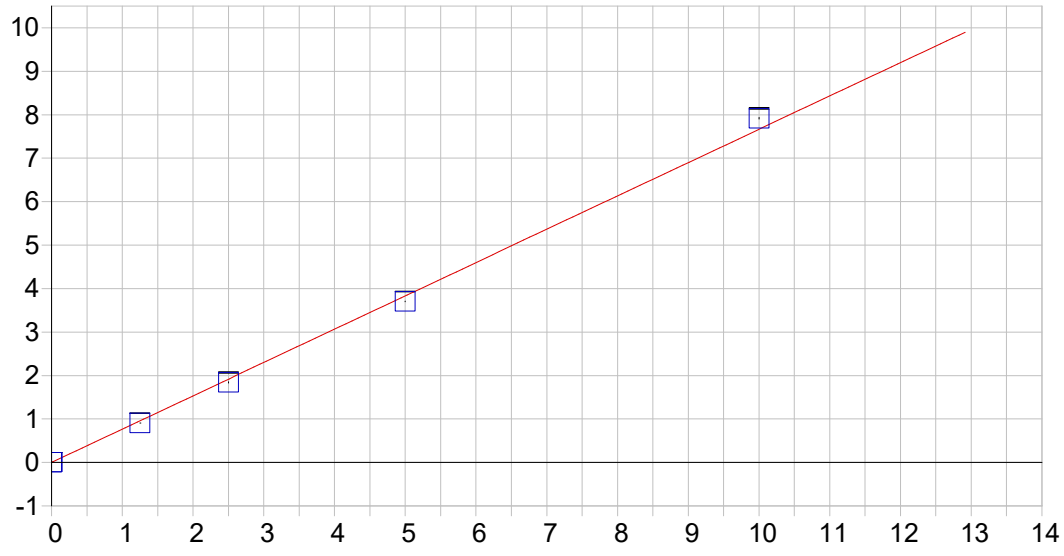
B 249.678 {135}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006534	Re-Slope:	1.000000
A1 (Gain):	0.762832	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999296	Status:	OK.
Std Error of Est:	0.000462		
Predicted MDL:	0.002176		
Predicted MQL:	0.007255		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00654	.002	1
S1	.01000	-.00434	-.014	-143.	.00318	.001	1
S2	1.2500	1.2817	.032	2.54	.94803	.001	1
S3	2.5000	2.5736	.074	2.94	1.8972	.006	1
S4	5.0000	5.0044	.004	.089	3.6790	.025	1
S5	10.000	9.9050	-.095	-.950	7.2723	.067	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



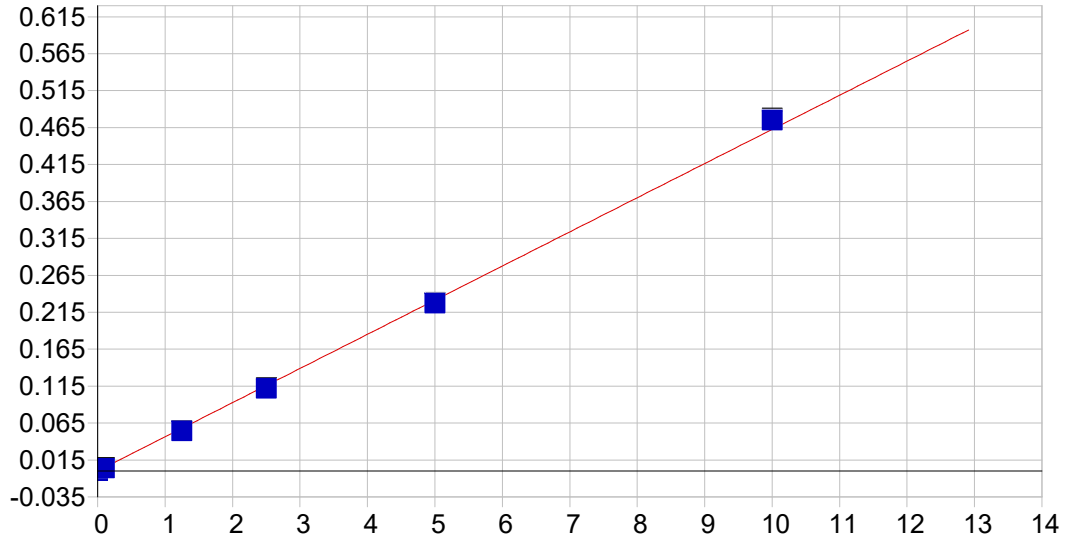
Mo 202.030 {467}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000025	Re-Slope:	1.000000
A1 (Gain):	0.766525	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999370	Status:	OK.
Std Error of Est:	0.000456		
Predicted MDL:	0.000537		
Predicted MQL:	0.001789		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00002	.000	1
S1	.01000	.00944	-.001	-5.57	.00721	.000	1
S2	1.2500	1.1830	-.067	-5.36	.90680	.004	1
S3	2.5000	2.4057	-.094	-3.77	1.8440	.014	1
S4	5.0000	4.8325	-.168	-3.35	3.7042	.008	1
S5	10.000	10.329	.329	3.29	7.9177	.019	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



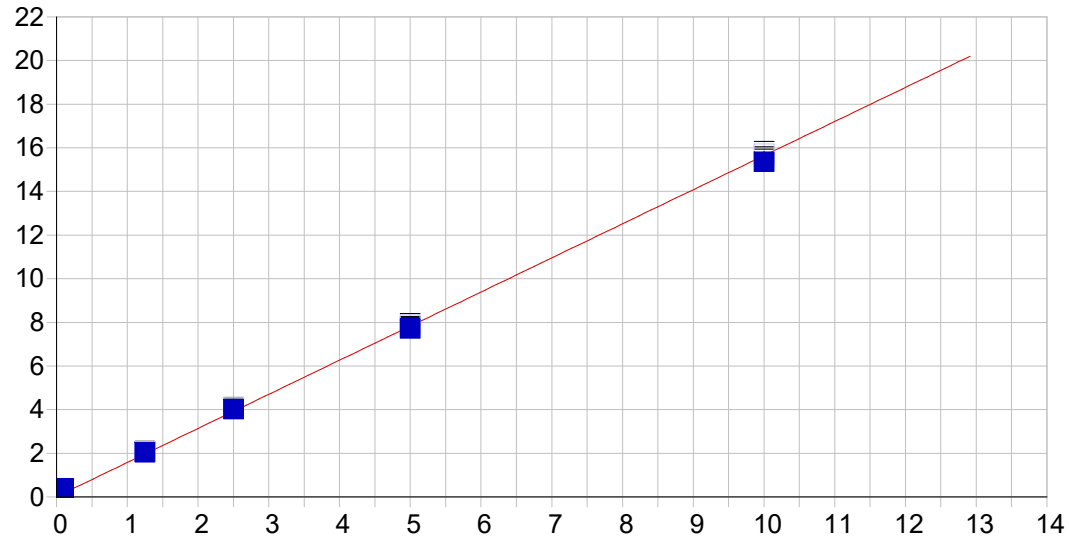
S 182.034 {485}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000099	Re-Slope:	1.000000
A1 (Gain):	0.046242	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999510	Status:	OK.
Std Error of Est:	0.000077		
Predicted MDL:	0.005146		
Predicted MQL:	0.017152		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00010	.000	1
S1	.10000	.08812	-.012	-11.9	.00417	.000	1
S2	1.2500	1.1663	-.084	-6.69	.05422	.000	1
S3	2.5000	2.4155	-.084	-3.38	.11217	.001	1
S4	5.0000	4.9120	-.088	-1.76	.22798	.001	1
S5	10.000	10.268	.268	2.68	.47640	.002	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



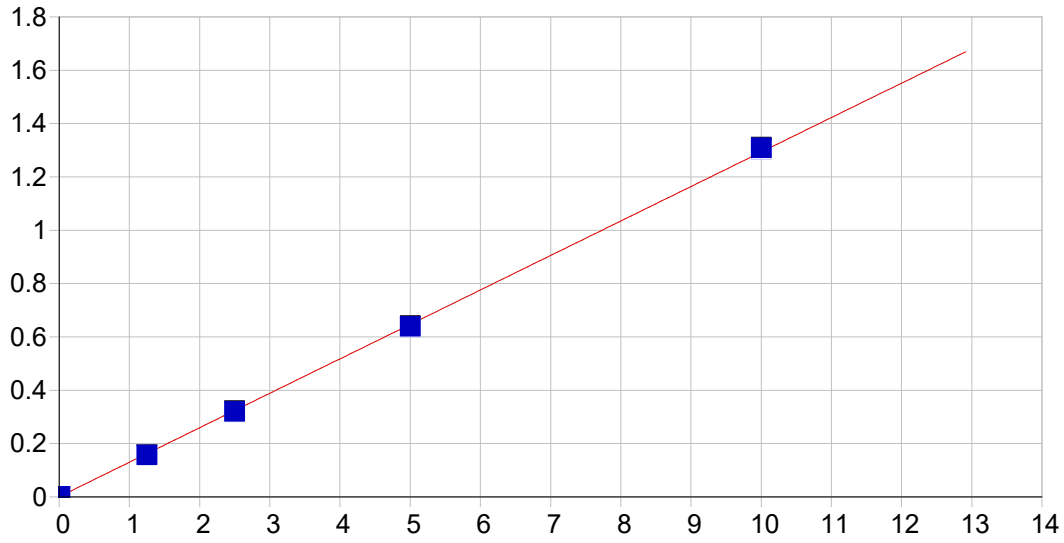
Si 251.611 {134}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013342	Re-Slope:	1.000000
A1 (Gain):	1.563030	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.994404	Status:	OK.
Std Error of Est:	0.009024		
Predicted MDL:	0.001097		
Predicted MQL:	0.003655		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.01311	.003	1
S1	.10000	.24651	.147	147.	.40085	.003	1
S2	1.2500	1.2974	.047	3.79	2.0855	.005	1
S3	2.5000	2.5611	.061	2.44	4.1051	.007	1
S4	5.0000	4.9262	-.074	-1.48	7.8905	.066	1
S5	10.000	9.8201	-.180	-1.80	15.717	.129	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



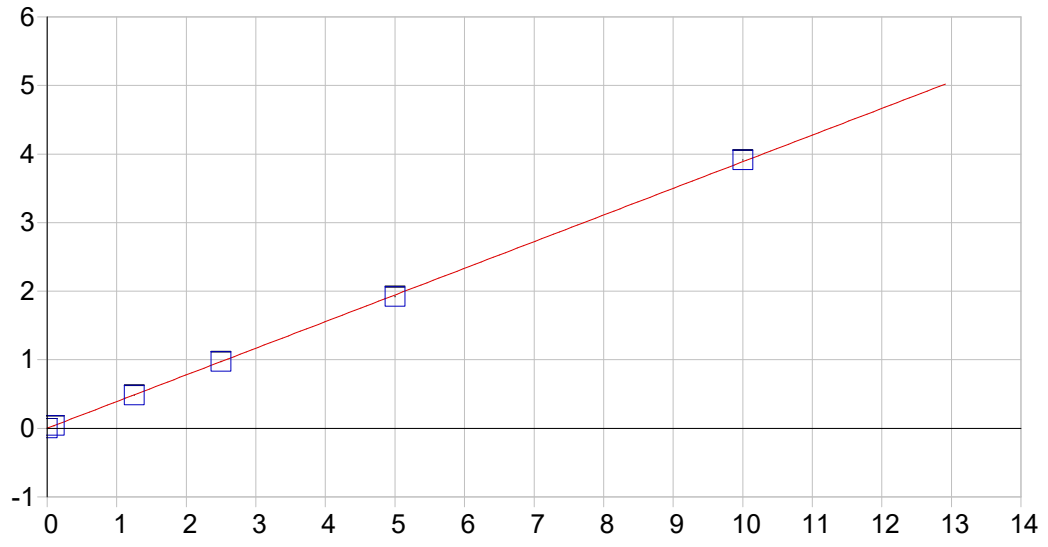
Sn 189.989 {478}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000797	Re-Slope:	1.000000
A1 (Gain):	0.129221	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999898	Status:	OK.
Std Error of Est:	0.000026		
Predicted MDL:	0.001670		
Predicted MQL:	0.005568		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00080	.000	1
S1	.00700	.00560	-.001	-20.1	.00148	.000	1
S2	1.2500	1.2142	-.036	-2.86	.15689	.000	1
S3	2.5000	2.4716	-.028	-1.14	.31856	.003	1
S4	5.0000	4.9428	-.057	-1.14	.63628	.002	1
S5	10.000	10.123	.123	1.23	1.3024	.003	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



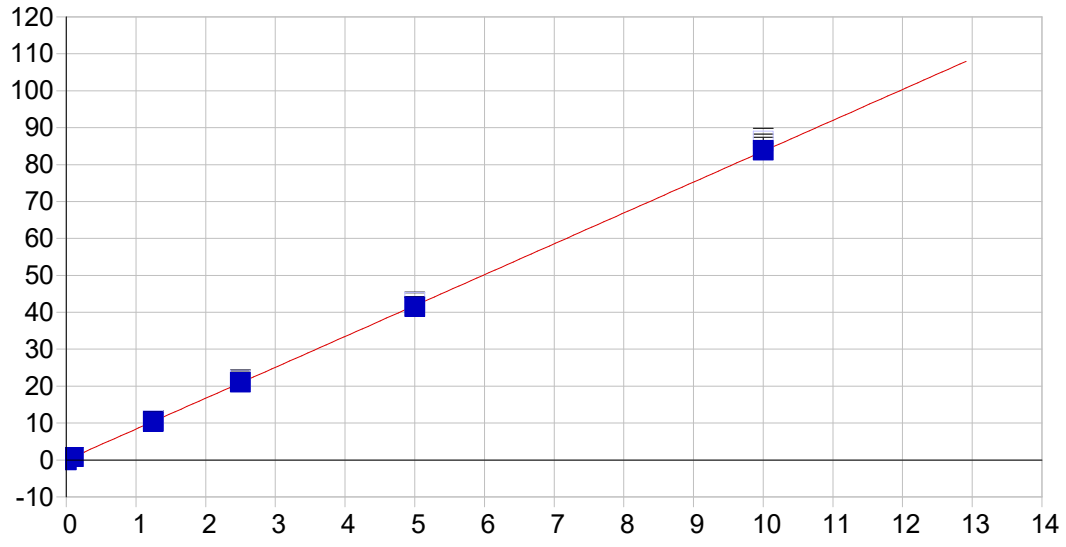
Ti 336.121 {100}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002097	Re-Slope:	1.000000
A1 (Gain):	0.388603	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.000173		
Predicted MDL:	0.004024		
Predicted MQL:	0.013415		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00210	.002	1
S1	.10000	.09714	-.003	-2.86	.03985	.002	1
S2	1.2500	1.2373	-.013	-1.02	.48291	.004	1
S3	2.5000	2.5026	.003	.103	.97461	.005	1
S4	5.0000	4.9439	-.056	-1.12	1.9233	.008	1
S5	10.000	10.069	.069	.691	3.9150	.005	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



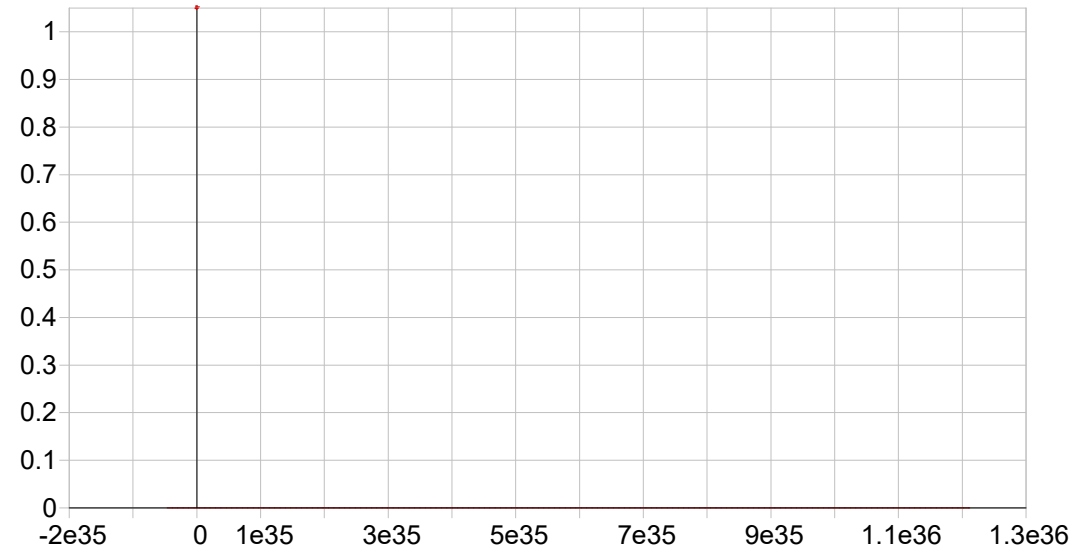
Sr 407.771 { 83}

Date of Fit:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001176	Re-Slope:	1.000000
A1 (Gain):	8.362116	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.002942		
Predicted MDL:	0.000258		
Predicted MQL:	0.000859		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00120	.002	1
S1	.10000	.10392	.004	3.92	.86866	.004	1
S2	1.2500	1.2398	-.010	-.818	10.680	.048	1
S3	2.5000	2.5160	.016	.639	21.665	.084	1
S4	5.0000	4.9568	-.043	-.864	42.702	.098	1
S5	10.000	10.034	.034	.336	86.410	.786	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

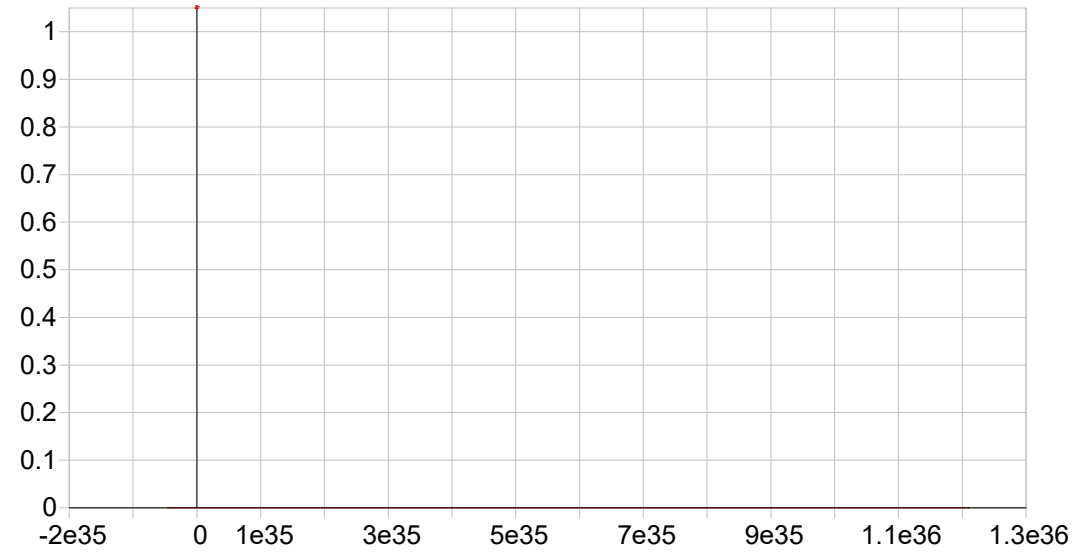


Y 224.306 {450}*

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}*

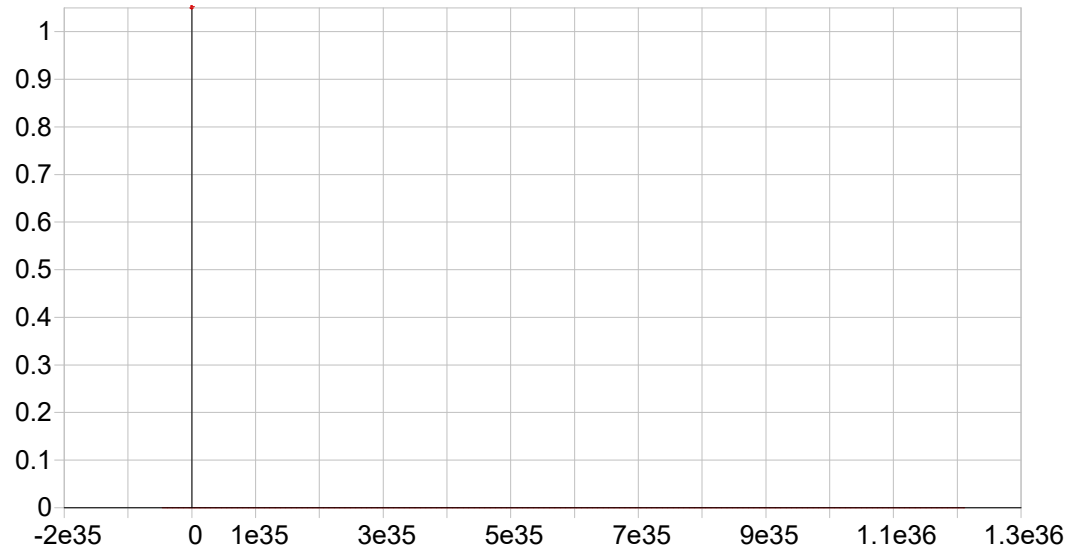
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:mohan
On:1/2/2025 2:18:34 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



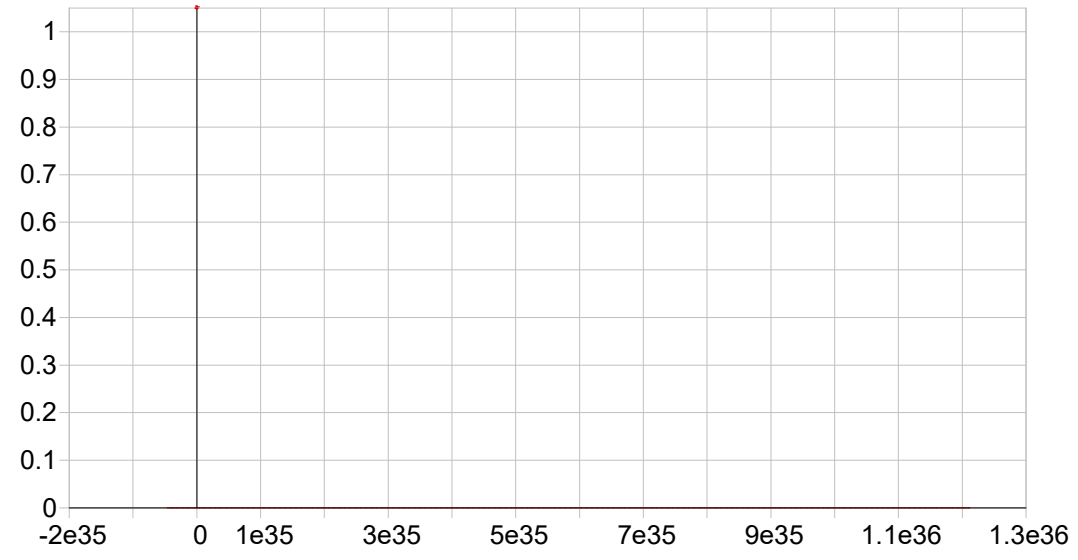
Y 371.030 { 91}*

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

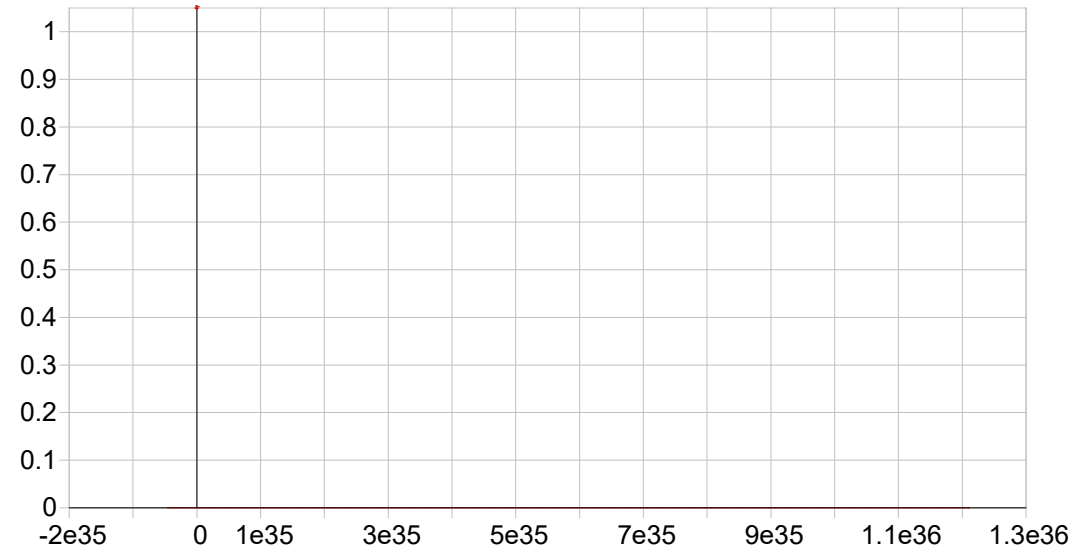
Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5



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



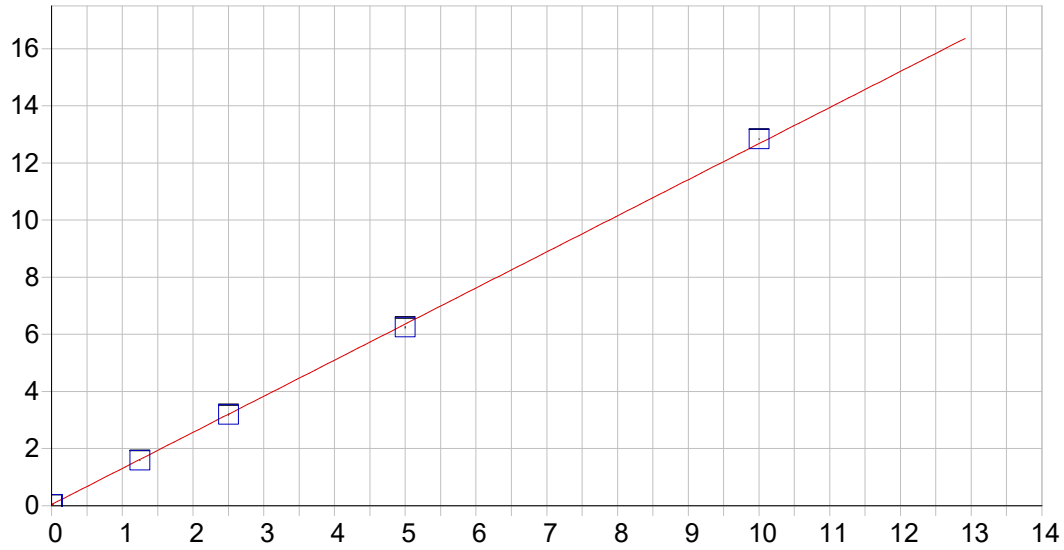
In 230.606 {446}*

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:1/2/2025 2:18:34 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:	12/30/2024 18:57:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042925	Re-Slope:	1.000000
A1 (Gain):	1.263612	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999886	Status:	OK.
Std Error of Est:	0.000391		
Predicted MDL:	0.003626		
Predicted MQL:	0.012087		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.04293	.005	1
S5	10.000	10.124	.124	1.24	12.836	.010	1
S4	5.0000	4.9118	-.088	-1.76	6.2495	.028	1
S3	2.5000	2.4909	-.009	-.366	3.1904	.024	1
S2	1.2500	1.2263	-.024	-1.90	1.5925	.008	1
S1	.01500	.01181	-.003	-21.3	.05784	.004	1

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/30/2024 18:31:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.48771	-.00018	.00023	-.00007	-.00031	.00088	.05361	-.00018
Stddev	.36601	.00012	.00021	.00027	.00041	.00428	.00201	.00143
%RSD	75.047	67.224	89.359	364.32	132.22	488.47	3.7550	802.64
#1	.06555	-.00021	.00000	-.00036	-.00052	.00551	.05197	-.00104
#2	.68158	-.00028	.00040	.00017	-.00057	.00005	.05301	.00147
#3	.71602	-.00004	.00030	-.00003	.00016	-.00293	.05586	-.00096

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00015	.00524	-.00012	-.00044	.00070	.00033	.00001	-.00117
Stddev	.00040	.00019	.00013	.00009	.00090	.00069	.00067	.00112
%RSD	262.17	3.5611	104.42	20.663	128.77	205.07	10345.	95.638
#1	-.00013	.00509	-.00026	-.00047	.00018	.00054	-.00042	-.00004
#2	.00061	.00517	-.00010	-.00034	.00173	-.00043	.00078	-.00228
#3	-.00002	.00545	-.00001	-.00052	.00018	.00090	-.00034	-.00120

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00102	.00038	.00809	-.00000	.07052	.06356	-.00395	.00654
Stddev	.00048	.00014	.00777	.00033	.00026	.00290	.00010	.00228
%RSD	46.986	36.901	96.117	20248.	.36704	4.5598	2.4303	34.807
#1	-.00067	.00026	.00212	-.00009	.07040	.06675	-.00386	.00500
#2	-.00156	.00035	.01687	.00036	.07082	.06108	-.00405	.00548
#3	-.00082	.00053	.00526	-.00028	.07035	.06285	-.00395	.00916

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00002	.00010	.01311	.00080	.00210	-.00120	.04293
Stddev	.00026	.00038	.00263	.00017	.00218	.00183	.00544
%RSD	1113.1	381.33	20.034	20.718	103.87	152.07	12.677
#1	-.00003	-.00018	.01612	.00095	-.00037	.00088	.03678
#2	-.00028	-.00005	.01127	.00063	.00376	-.00256	.04711
#3	.00024	.00053	.01194	.00081	.00290	-.00193	.04490

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/30/2024 18:31:54 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S0 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1639.6	20600.	2264.6	1361.8	1934.7
Stddev	5.3	91.	17.0	1.3	3.6
%RSD	.32023	.44136	.75257	.09292	.18563
#1	1634.2	20686.	2256.6	1363.2	1930.9
#2	1640.1	20609.	2284.2	1360.7	1935.3
#3	1644.6	20504.	2253.0	1361.4	1938.0

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/30/2024 18:36:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.3820	.00228	.00285	.00179	.00864	.02336	.91421	.05540
Stddev	.5105	.00020	.00007	.00027	.00094	.00350	.00047	.00156
%RSD	36.939	8.7924	2.4382	15.327	10.933	14.998	.05156	2.8150
#1	.91488	.00250	.00292	.00170	.00917	.01942	.91368	.05582
#2	1.3043	.00211	.00284	.00157	.00755	.02612	.91459	.05671
#3	1.9270	.00223	.00278	.00210	.00921	.02453	.91434	.05368

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01982	.27139	.00303	.05588	.00505	.00216	.00658	.05527
Stddev	.00013	.00313	.00013	.00053	.00057	.00051	.00029	.00039
%RSD	.67127	1.1522	4.2074	.94534	11.267	23.597	4.4785	.70442
#1	.01972	.27257	.00311	.05647	.00515	.00182	.00692	.05545
#2	.01976	.26785	.00288	.05574	.00556	.00191	.00639	.05552
#3	.01997	.27376	.00309	.05544	.00444	.00274	.00643	.05482

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02468	.00354	1.3441	.00552	.21769	.20177	-.00333	.00318
Stddev	.00051	.00015	.0179	.00181	.00266	.00354	.00036	.00070
%RSD	2.0528	4.3105	1.3288	32.737	1.2220	1.7551	10.706	22.053
#1	.02490	.00361	1.3612	.00540	.21973	.20077	-.00372	.00391
#2	.02503	.00336	1.3256	.00377	.21468	.20571	-.00326	.00251
#3	.02410	.00365	1.3456	.00738	.21865	.19884	-.00301	.00313

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00721	.00417	.40085	.00148	.03985	.86866	.05784
Stddev	.00039	.00007	.00346	.00015	.00199	.00369	.00355
%RSD	5.3484	1.7529	.86390	9.9932	4.9955	.42486	6.1326
#1	.00703	.00422	.40047	.00156	.04171	.86598	.05417
#2	.00766	.00421	.39760	.00131	.03775	.86714	.05811
#3	.00695	.00409	.40449	.00157	.04009	.87287	.06125

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/30/2024 18:36:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S01 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1671.7	20999.	2283.5	1389.8	1978.9
Stddev	3.6	63.	10.6	2.1	3.5
%RSD	.21736	.29841	.46504	.15268	.17545
#1	1675.6	21058.	2276.4	1387.8	1982.8
#2	1668.5	21006.	2295.7	1392.0	1977.7
#3	1670.9	20933.	2278.4	1389.6	1976.2

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/30/2024 18:40:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	155.29	.11676	1.5375	.07522	.19415	4.3239	10.483	1.3341
Stddev	.35	.00025	.0019	.00060	.00043	.0220	.032	.0058
%RSD	.22466	.21246	.12189	.79447	.22352	.50772	.30081	.43554
#1	155.69	.11648	1.5358	.07477	.19376	4.3037	10.449	1.3279
#2	155.04	.11694	1.5395	.07500	.19407	4.3472	10.512	1.3395
#3	155.13	.11686	1.5373	.07590	.19462	4.3207	10.488	1.3347

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.4778	3.3576	1.1657	.69992	.51094	.89583	1.5779	.68914
Stddev	.0030	.0093	.0009	.00131	.00134	.00271	.0046	.00014
%RSD	.11954	.27582	.08027	.18775	.26195	.30272	.28911	.02071
#1	2.4744	3.3473	1.1667	.69960	.51028	.89678	1.5769	.68919
#2	2.4798	3.3601	1.1652	.70137	.51248	.89794	1.5829	.68898
#3	2.4793	3.3653	1.1650	.69880	.51006	.89277	1.5740	.68924

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.41069	.09221	11.757	.06640	9.2194	1.1148	.09121	.94803
Stddev	.00021	.00018	.037	.00087	.0742	.0031	.00018	.00121
%RSD	.05046	.19289	.31262	1.3055	.80526	.28113	.20013	.12792
#1	.41046	.09242	11.725	.06627	9.1533	1.1119	.09141	.94672
#2	.41074	.09212	11.749	.06560	9.2053	1.1143	.09115	.94911
#3	.41086	.09210	11.797	.06732	9.2997	1.1181	.09106	.94826

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.90680	.05422	2.0855	.15689	.48291	10.680	1.5925
Stddev	.00351	.00016	.0051	.00050	.00362	.048	.0083
%RSD	.38728	.28681	.24254	.31819	.74884	.45263	.51824
#1	.90315	.05404	2.0798	.15638	.48191	10.624	1.5836
#2	.90709	.05433	2.0875	.15738	.48692	10.710	1.5939
#3	.91015	.05428	2.0893	.15691	.47990	10.705	1.6000

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/30/2024 18:40:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S02 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.5	20628.	2283.7	1343.4	1841.2
Stddev	3.5	54.	7.9	8.8	2.7
%RSD	.21621	.26008	.34596	.65207	.14665
#1	1621.4	20585.	2290.9	1349.6	1842.2
#2	1616.3	20688.	2284.9	1347.3	1838.1
#3	1614.7	20613.	2275.2	1333.4	1843.2

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/30/2024 18:44:01 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	305.05	.23407	3.1049	.15399	.39614	8.7538	21.221	2.6568
Stddev	.38	.00207	.0328	.00135	.00427	.0517	.147	.0054
%RSD	.12356	.88581	1.0574	.87878	1.0792	.59121	.69510	.20348
#1	304.94	.23416	3.1080	.15400	.39737	8.6985	21.061	2.6621
#2	304.74	.23610	3.1361	.15534	.39967	8.7621	21.248	2.6568
#3	305.47	.23195	3.0707	.15263	.39139	8.8010	21.353	2.6513

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.9981	6.7287	2.3102	1.4001	1.0172	1.8044	3.1852	1.3888
Stddev	.0564	.0274	.0024	.0156	.0064	.0107	.0221	.0120
%RSD	1.1286	.40670	.10165	1.1133	.62877	.59271	.69314	.86705
#1	4.9991	6.6994	2.3076	1.4019	1.0100	1.7924	3.1681	1.3825
#2	5.0539	6.7330	2.3112	1.4147	1.0191	1.8080	3.1773	1.3812
#3	4.9411	6.7537	2.3120	1.3837	1.0223	1.8128	3.2101	1.4027

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.83212	.18601	25.506	.13479	18.539	2.2209	.19237	1.8972
Stddev	.00905	.00123	.035	.00094	.042	.0073	.00163	.0064
%RSD	1.0876	.66380	.13767	.69406	.22900	.32713	.84583	.33568
#1	.83279	.18482	25.474	.13378	18.502	2.2126	.19226	1.8977
#2	.84081	.18728	25.543	.13494	18.585	2.2247	.19404	1.9034
#3	.82275	.18592	25.502	.13564	18.529	2.2255	.19079	1.8907

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.8440	.11217	4.1051	.31856	.97461	21.665	3.1904
Stddev	.0137	.00121	.0066	.00312	.00538	.084	.0242
%RSD	.74473	1.0793	.15964	.97865	.55245	.38935	.75691
#1	1.8446	.11220	4.0977	.31816	.96887	21.573	3.1671
#2	1.8574	.11336	4.1073	.32186	.97540	21.682	3.1887
#3	1.8299	.11094	4.1102	.31567	.97955	21.739	3.2154

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/30/2024 18:44:01 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S03 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1561.5	20211.	2259.2	1295.9	1763.7
Stddev	14.8	50.	3.7	3.4	19.6
%RSD	.94807	.24650	.16502	.26284	1.1134
#1	1556.8	20266.	2263.4	1299.2	1760.1
#2	1549.5	20199.	2256.3	1292.3	1746.1
#3	1578.0	20168.	2257.9	1296.1	1784.9

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/30/2024 18:47:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	594.19	.45709	6.1967	.30702	.79786	17.276	41.889	5.1591
Stddev	.80	.00152	.0186	.00115	.00133	.046	.180	.0428
%RSD	.13396	.33317	.29951	.37504	.16721	.26773	.42994	.83007
#1	595.10	.45637	6.1879	.30758	.79926	17.301	41.967	5.1630
#2	593.84	.45607	6.1843	.30570	.79772	17.304	42.017	5.1999
#3	593.63	.45884	6.2181	.30778	.79660	17.223	41.683	5.1145

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.8590	13.106	4.4874	2.7476	1.9943	3.5140	6.1778	2.7148
Stddev	.0270	.057	.0355	.0083	.0067	.0095	.0271	.0097
%RSD	.27331	.43262	.79189	.30304	.33537	.27053	.43881	.35654
#1	9.8472	13.153	4.4478	2.7459	1.9980	3.5192	6.1949	2.7128
#2	9.8401	13.121	4.5164	2.7403	1.9982	3.5197	6.1918	2.7254
#3	9.8899	13.043	4.4979	2.7567	1.9865	3.5030	6.1465	2.7064

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.6487	.36987	54.039	.26526	36.707	4.3628	.39050	3.6790
Stddev	.0030	.00289	.366	.00083	.266	.0167	.00113	.0250
%RSD	.18373	.78165	.67732	.31359	.72487	.38380	.28878	.67872
#1	1.6498	.36654	54.230	.26437	36.426	4.3779	.39131	3.6739
#2	1.6452	.37175	54.269	.26602	36.955	4.3658	.38921	3.7062
#3	1.6510	.37132	53.617	.26539	36.739	4.3448	.39098	3.6570

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.7042	.22798	7.8905	.63628	1.9233	42.702	6.2495
Stddev	.0076	.00053	.0662	.00239	.0082	.098	.0279
%RSD	.20655	.23070	.83839	.37525	.42790	.23019	.44639
#1	3.7083	.22767	7.8990	.63532	1.9317	42.771	6.2568
#2	3.6954	.22769	7.9520	.63452	1.9230	42.747	6.2731
#3	3.7089	.22859	7.8205	.63900	1.9152	42.590	6.2187

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/30/2024 18:47:50 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S04 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1499.0	19874.	2261.1	1243.3	1699.6
Stddev	2.1	76.	21.0	5.2	5.5
%RSD	.14157	.38012	.92956	.41884	.32074
#1	1499.2	19938.	2247.1	1246.4	1702.5
#2	1501.0	19790.	2251.0	1237.3	1702.9
#3	1496.8	19892.	2285.3	1246.3	1693.3

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/30/2024 18:51:37 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934	Be2348
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1140.1	.91411	12.710	.64451	1.7283	35.581	85.807	10.350
Stddev	.8	.00117	.018	.00139	.0041	.036	.127	.101
%RSD	.06710	.12806	.14539	.21644	.23912	.10092	.14769	.97868
#1	1140.6	.91279	12.712	.64489	1.7289	35.589	85.952	10.467
#2	1139.2	.91455	12.691	.64297	1.7239	35.541	85.717	10.289
#3	1140.4	.91500	12.728	.64568	1.7321	35.612	85.752	10.294

Elem	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598	Mn2576	Mg2790
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.915	26.494	9.0146	5.5637	4.0585	7.0366	12.402	5.5028
Stddev	.032	.078	.0211	.0124	.0091	.0226	.029	.0155
%RSD	.16066	.29331	.23397	.22230	.22492	.32061	.23783	.28171
#1	19.915	26.566	9.0291	5.5589	4.0661	7.0627	12.430	5.5199
#2	19.883	26.411	9.0243	5.5544	4.0484	7.0235	12.371	5.4895
#3	19.947	26.504	8.9904	5.5777	4.0611	7.0236	12.404	5.4992

Elem	Ni2316	Ag3280	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.3480	.76795	115.22	.53839	76.348	8.9808	.81379	7.2723
Stddev	.0110	.00063	.53	.00057	.417	.0254	.00315	.0670
%RSD	.32868	.08189	.45805	.10559	.54574	.28279	.38680	.92133
#1	3.3518	.76856	115.58	.53830	75.968	9.0094	.81357	7.3478
#2	3.3356	.76730	114.61	.53900	76.283	8.9609	.81076	7.2198
#3	3.3567	.76799	115.47	.53787	76.794	8.9720	.81704	7.2493

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.9177	.47640	15.717	1.3024	3.9150	86.410	12.836
Stddev	.0191	.00174	.129	.0025	.0053	.786	.010
%RSD	.24092	.36460	.81948	.19257	.13590	.90961	.08134
#1	7.9092	.47744	15.866	1.3014	3.9211	85.799	12.841
#2	7.9043	.47439	15.633	1.3006	3.9121	87.297	12.824
#3	7.9396	.47735	15.653	1.3052	3.9117	86.134	12.843

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/30/2024 18:51:37 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S05 Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1332.0	18781.	2196.3	1101.3	1563.0
Stddev	2.4	13.	15.3	7.2	2.4
%RSD	.18182	.06791	.69769	.65430	.15263
#1	1334.3	18789.	2179.4	1108.8	1565.2
#2	1332.3	18767.	2209.2	1100.8	1563.4
#3	1329.5	18788.	2200.5	1094.4	1560.5

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: S6 Acquired: 12/30/2024 18:55:40 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: S06 Custom ID2: Custom ID3:
Comment:

Elem	Al3961	Ca3736	Fe2598	Mg2790	Na8183
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	91.561	41.699	18.101	8.6628	323.85
Stddev	.340	.136	.066	.0251	1.50
%RSD	.37135	.32567	.36613	.28962	.46347
#1	91.559	41.747	18.130	8.6725	323.18
#2	91.222	41.546	18.025	8.6343	325.57
#3	91.902	41.804	18.148	8.6815	322.80

Int. Std.	Y_3710
Units	Cts/S
Avg	2140.5
Stddev	2.6
%RSD	.12357
#1	2140.0
#2	2138.1
#3	2143.3

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICV005 Acquired: 12/30/2024 19:07:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.080223	1.029759	.9950504	1.002528	.9538177	2.512872
Stddev	.006231	.003851	.0014438	.008291	.0025610	.031874
%RSD	.5768535	.3739331	.1450981	.8270506	.2684958	1.268415
#1	1.082836	1.025542	.9966301	1.005659	.9542617	2.496117
#2	1.084722	1.033088	.9937991	.993127	.9510637	2.549629
#3	1.073110	1.030647	.9947220	1.008797	.9561276	2.492870

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5410605	.5418135	.5131480	10.63053	.5619677	.5137286
Stddev	.0115337	.0093399	.0007659	.23816	.0075221	.0001505
%RSD	2.131690	1.723813	.1492525	2.240294	1.338531	.0292946
#1	.5376641	.5380958	.5125968	10.49550	.5688669	.5137301
#2	.5539110	.5524397	.5128248	10.90551	.5539483	.5135774
#3	.5316063	.5349049	.5140226	10.49057	.5630878	.5138784

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5330611	10.90618	.5503640	6.441025	.5209222	.2501392
Stddev	.0036034	.24624	.0084662	.095550	.0004804	.0025269
%RSD	.6759847	2.257772	1.538295	1.483457	.0922211	1.010200
#1	.5304848	10.74570	.5479440	6.414045	.5208427	.2518996
#2	.5371788	11.18969	.5597768	6.547164	.5204865	.2472438
#3	.5315195	10.78315	.5433713	6.361866	.5214374	.2512741

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.432906	.5373080	.9847268	9.838333	F -.002858	F -.022855
Stddev	.115921	.0244940	.0156095	.112916	.003258	.000228
%RSD	1.228903	4.558655	1.585158	1.147713	113.9792	.9955645
#1	9.380408	.5333702	.9967002	9.732140	-.002683	-.022994
#2	9.565789	.5635324	.9670725	9.956945	-.006200	-.022980
#3	9.352522	.5150214	.9904077	9.825915	.000309	-.022593

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICV005 Acquired: 12/30/2024 19:07:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0007553	F .0103732	F .0002918	F .0014187	F .0004416	F -.009780
Stddev	.0001869	.0019412	.0008796	.0004184	.0046983	.000215
%RSD	24.73849	18.71314	301.4705	29.49398	1063.990	2.193752
#1	.0008575	.0119618	.0009212	.0010072	-.001756	-.009668
#2	.0005397	.0082095	.0006675	.0014052	.005836	-.010027
#3	.0008688	.0109484	-.000713	.0018437	-.002755	-.009644

Elem	Li6707
Units	ppm
Avg	F .0206045
Stddev	.0063842
%RSD	30.98433
#1	.0166640
#2	.0279703
#3	.0171792

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1665.388	20948.27	2254.700	1386.999	1953.339
Stddev	.951	323.02	30.597	26.015	1.037
%RSD	.0571213	1.541967	1.357019	1.875631	.0530879
#1	1665.616	20722.96	2275.379	1370.115	1952.328
#2	1666.205	21318.35	2219.552	1416.958	1954.400
#3	1664.344	20803.51	2269.169	1373.925	1953.288

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICB005 Acquired: 12/30/2024 19:11:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004422	-.000055	.0006760	.0094432	.0032602	-.017424
Stddev	.000589	.003508	.0012038	.0063903	.0008928	.034597
%RSD	13.31514	6376.647	178.0634	67.67020	27.38489	198.5532
#1	-.005050	.002086	.0020641	.0092697	.0039381	-.005690
#2	-.003883	-.004103	.0000456	.0159185	.0035939	.009779
#3	-.004332	.001852	-.000082	.0031415	.0022486	-.056362

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018960	.0001969	.0000913	.0117123	-.000236	-.000205
Stddev	.0008401	.0001511	.0000552	.0144878	.000398	.000308
%RSD	44.30695	76.73582	60.39428	123.6977	169.0779	150.1010
#1	.0028649	.0002296	.0001479	-.004512	-.000642	-.000371
#2	.0013708	.0003289	.0000377	.016291	-.000219	.000150
#3	.0014524	.0000321	.0000884	.023357	.000154	-.000395

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061687	-.023173	-.000546	.0481811	-.000764	.0008865
Stddev	.0089478	.014484	.001420	.0353511	.000402	.0011057
%RSD	145.0504	62.50541	260.2503	73.37118	52.61609	124.7215
#1	.0147270	-.030691	-.001316	.0120598	-.001218	.0020471
#2	-.003123	-.006475	.001093	.0497756	-.000623	-.000155
#3	.006903	-.032352	-.001414	.0827080	-.000452	.000767

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0262150	-.007058	.0006547	.1011701	-.001412	-.001380
Stddev	.0123692	.006383	.0000754	.1566626	.001358	.001677
%RSD	47.18383	90.43841	11.51386	154.8506	96.17765	121.5110
#1	.0197096	-.004658	.0005681	.0568419	-.002017	-.000752
#2	.0184559	-.002222	.0007059	.2752204	.000143	-.000108
#3	.0404793	-.014293	.0006900	-.028552	-.002363	-.003281

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICB005 Acquired: 12/30/2024 19:11:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004424	.0011069	.0001734	.0008751	-.001252	-.000130
Stddev	.0004210	.0022354	.0010305	.0010993	.002767	.000249
%RSD	95.15588	201.9442	594.1416	125.6246	220.9722	190.6955
#1	.0008973	-.000199	-.000174	.0021129	.000030	-.000046
#2	.0003632	.003688	-.000639	.0000127	.000641	.000065
#3	.0000667	-.000168	.001333	.0004996	-.004428	-.000410

Elem	Li6707
Units	ppm
Avg	F .0201766
Stddev	.0028008
%RSD	13.88160
#1	.0217487
#2	.0218383
#3	.0169429

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.831	20661.87	2244.670	1370.334	1905.590
Stddev	21.190	131.88	16.038	8.275	24.201
%RSD	1.309759	.6382684	.7144734	.6038481	1.270015
#1	1639.371	20747.44	2226.211	1377.092	1929.791
#2	1597.010	20728.18	2252.616	1372.805	1881.389
#3	1617.111	20510.00	2255.183	1361.106	1905.590

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICSA005 Acquired: 12/30/2024 19:15:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019224	.0064219	.0070429	-.006256	.0029989	247.5376
Stddev	.0056777	.0073943	.0009340	.004508	.0029282	.4298
%RSD	295.3463	115.1420	13.26176	72.06210	97.64188	.1736117
#1	-.001574	.0017314	.0059875	-.010565	.0016897	247.6627
#2	-.001133	.0149457	.0073784	-.006632	.0063534	247.8909
#3	.008474	.0025885	.0077629	-.001572	.0009537	247.0592

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069434	.0014372	.0009415	254.8073	.0546590	.0362012
Stddev	.0003974	.0000756	.0000864	.1908	.0008419	.0006535
%RSD	5.723151	5.260761	9.175395	.0748799	1.540249	1.805307
#1	.0067619	.0014009	.0009821	254.9558	.0554176	.0356354
#2	.0066692	.0013865	.0010001	254.8739	.0548062	.0360516
#3	.0073992	.0015241	.0008423	254.5921	.0537533	.0369166

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040628	104.5612	.0081151	265.9305	.0072743	-.005853
Stddev	.0140723	.1068	.0005219	1.0380	.0008964	.000520
%RSD	346.3688	.1021870	6.431323	.3903212	12.32247	8.889388
#1	.0195258	104.6501	.0087000	265.8863	.0062648	-.006372
#2	-.007993	104.5908	.0076968	266.9899	.0079770	-.005331
#3	.000656	104.4426	.0079487	264.9154	.0075810	-.005857

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1246495	.0057452	-.022565	-.217994	.0058272	F -.244283
Stddev	.0361432	.0033235	.000251	.046698	.0041154	.005263
%RSD	28.99587	57.84806	1.110835	21.42165	70.62349	2.154508
#1	.1481180	.0049062	-.022385	-.242136	.0014085	-.245926
#2	.1428025	.0094078	-.022459	-.164167	.0095507	-.238395
#3	.0830279	.0029216	-.022851	-.247679	.0065225	-.248529

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICSA005 Acquired: 12/30/2024 19:15:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024792	.0159462	-.001970	F .0146502	-.005251	.0039033
Stddev	.0005627	.0087397	.000571	.0010760	.001646	.0003420
%RSD	22.69673	54.80710	28.99347	7.344695	31.34462	8.762206
#1	.0030583	.0091696	-.001514	.0143841	-.003557	.0036702
#2	.0019344	.0128584	-.001786	.0158343	-.006845	.0037439
#3	.0024449	.0258106	-.002611	.0137322	-.005351	.0042960

Elem	Li6707
Units	ppm
Avg	F .0249194
Stddev	.0031040
%RSD	12.45628
#1	.0228785
#2	.0284916
#3	.0233883

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1570.153	19536.80	2239.211	1305.365	1734.218
Stddev	7.818	110.80	17.790	3.274	4.926
%RSD	.4979338	.5671282	.7944773	.2508457	.2840742
#1	1572.784	19553.67	2219.631	1305.838	1737.591
#2	1576.317	19418.53	2254.383	1301.879	1736.499
#3	1561.358	19638.20	2243.618	1308.377	1728.565

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICSAB005 Acquired: 12/30/2024 19:50:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB005 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1018566	.0998692	.0576695	.0392489	.5991666	231.7798
Stddev	.0087626	.0051157	.0041732	.0025021	.0026822	.8584
%RSD	8.602880	5.122373	7.236340	6.374888	.4476521	.3703320
#1	.1117581	.0953886	.0624386	.0397611	.5994371	230.8086
#2	.0987096	.0987759	.0558827	.0414552	.5963595	232.4369
#3	.0951021	.1054432	.0546873	.0365303	.6017033	232.0938

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5424965	.5405325	1.061315	240.3109	.6203899	.5472687
Stddev	.0017840	.0053971	.002727	.5044	.0016266	.0016058
%RSD	.3288520	.9984758	.2569782	.2099028	.2621899	.2934155
#1	.5405982	.5416880	1.060308	239.7791	.6217169	.5463216
#2	.5427530	.5452582	1.059235	240.3713	.6208775	.5463618
#3	.5441385	.5346512	1.064403	240.7825	.6185753	.5491228

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4965447	98.16970	.5467131	248.7891	1.054149	.2109795
Stddev	.0148174	.29137	.0034264	.7576	.002468	.0013625
%RSD	2.984093	.2968029	.6267227	.3045110	.2341084	.6457770
#1	.5081233	98.05458	.5436099	247.9197	1.053344	.2123633
#2	.5016645	97.95347	.5461391	249.1404	1.052183	.2096394
#3	.4798464	98.50104	.5503902	249.3074	1.056918	.2109358

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0714130	.5313850	1.008942	-.628636	.0017804	F -.238675
Stddev	.0119023	.0095604	.004816	.200760	.0048004	.004835
%RSD	16.66690	1.799156	.4773220	31.93583	269.6189	2.025929
#1	.0682484	.5208842	1.013824	-.672055	.0000757	-.243424
#2	.0614127	.5336856	1.008806	-.804135	-.001935	-.238844
#3	.0845777	.5395853	1.004195	-.409720	.007201	-.233757

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: ICSAB005 Acquired: 12/30/2024 19:50:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB005 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025634	.0324169	.0005468	F .0112974	-.007134	.0036982
Stddev	.0003400	.0051773	.0016273	.0012809	.000854	.0006773
%RSD	13.26177	15.97086	297.6038	11.33775	11.96583	18.31451
#1	.0029113	.0275147	.0018078	.0106119	-.006225	.0038987
#2	.0025470	.0319049	.0011228	.0127751	-.007257	.0042526
#3	.0022320	.0378311	-.001290	.0105052	-.007919	.0029433

Elem	Li6707
Units	ppm
Avg	.0008555
Stddev	.0034199
%RSD	399.7545
#1	-.003093
#2	.002809
#3	.002850

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1577.431	19662.38	2278.562	1311.421	1746.493
Stddev	1.087	25.04	14.844	5.340	3.671
%RSD	.0688916	.1273550	.6514606	.4071694	.2101737
#1	1577.503	19633.49	2272.191	1305.447	1749.292
#2	1578.480	19675.91	2267.967	1315.730	1747.850
#3	1576.310	19677.75	2295.528	1313.085	1742.337

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV049 Acquired: 12/30/2024 19:54:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV049 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.954220	4.820814	24.67484	4.928340	4.904377	403.6664
Stddev	.007127	.007446	.03523	.013375	.003710	.9030
%RSD	.1438658	.1544526	.1427659	.2713935	.0756367	.2236967
#1	4.945997	4.816615	24.64162	4.915678	4.901798	404.7090
#2	4.958622	4.829411	24.67113	4.942329	4.902706	403.1340
#3	4.958041	4.816416	24.71178	4.927014	4.908629	403.1561

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.08487	.5058581	2.489382	410.2640	15.50336	2.486900
Stddev	.01531	.0032236	.003768	1.2386	.01266	.004228
%RSD	.1518013	.6372583	.1513674	.3019055	.0816549	.1700255
#1	10.10234	.5086082	2.485410	411.6817	15.48968	2.483209
#2	10.07379	.5066555	2.489831	409.7188	15.51465	2.485977
#3	10.07847	.5023106	2.492906	409.3915	15.50576	2.491513

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.10156	409.0644	15.03071	403.3444	2.512215	1.264303
Stddev	.05823	1.4306	.04156	1.3341	.003856	.000396
%RSD	.3856014	.3497168	.2765299	.3307560	.1535020	.0312870
#1	15.16880	410.7104	15.07272	404.3779	2.510054	1.264560
#2	15.06804	408.3616	15.02979	403.8170	2.509923	1.264502
#3	15.06784	408.1212	14.98961	401.8384	2.516667	1.263848

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	408.0286	2.487329	14.90307	152.7635	4.894061	F 4.350231
Stddev	.7441	.021434	.10303	.5062	.004398	.025270
%RSD	.1823611	.8617170	.6913187	.3313353	.0898542	.5808821
#1	408.6593	2.511326	14.84620	153.3260	4.892494	4.378696
#2	407.2079	2.480575	14.84100	152.6196	4.890661	4.341554
#3	408.2185	2.470086	15.02200	152.3448	4.899027	4.330443

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV049 Acquired: 12/30/2024 19:54:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV049 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.808307	4.977871	4.974573	5.033391	5.032397	4.821186
Stddev	.010329	.002191	.032792	.003314	.003508	.011616
%RSD	.2148122	.0440048	.6592003	.0658485	.0697171	.2409266
#1	4.811806	4.979539	5.007911	5.029929	5.034703	4.833882
#2	4.796683	4.978684	4.973453	5.036535	5.028359	4.818582
#3	4.816432	4.975390	4.942354	5.033709	5.034128	4.811094

Elem	Li6707
Units	ppm
Avg	5.079033
Stddev	.007151
%RSD	.1407868
#1	5.080603
#2	5.071227
#3	5.085268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1433.484	18782.51	2183.176	1178.744	1607.459
Stddev	3.230	15.63	13.211	8.838	2.571
%RSD	.2253068	.0832173	.6051132	.7497961	.1599591
#1	1429.774	18799.28	2169.567	1183.743	1604.982
#2	1435.017	18779.90	2184.012	1183.950	1607.281
#3	1435.662	18768.35	2195.949	1168.539	1610.116

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB049 Acquired: 12/30/2024 19:58:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB049 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000949	-.003074	.0029558	.0010957	-.000451	.0226319	.0009061
Stddev	.005150	.001956	.0013712	.0069894	.003450	.0108423	.0008298
%RSD	542.9495	63.64263	46.38867	637.8645	765.5776	47.90740	91.57721
#1	-.003628	-.003773	.0014111	-.006901	.003000	.0296089	.0018244
#2	.004989	-.000864	.0040290	.004148	-.000451	.0101407	.0002100
#3	-.004206	-.004585	.0034273	.006040	-.003900	.0281460	.0006840

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001324	.0001528	.0424126	.0006210	-.000032	.0018386	.0400512
Stddev	.0000846	.0001138	.0206334	.0004698	.000216	.0055688	.0126412
%RSD	63.92587	74.50172	48.64930	75.64381	679.4934	302.8769	31.56255
#1	.0001725	.0000235	.0655014	.0000787	-.000154	-.003238	.0263144
#2	.0001895	.0002381	.0359590	.0008831	.000218	.000959	.0426450
#3	.0000352	.0001968	.0257773	.0009013	-.000160	.007795	.0511944

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004557	.0982321	-.000608	.0011610	.0644596	.0010683	.0026544
Stddev	.0013445	.0577988	.000352	.0010077	.0186929	.0105502	.0011254
%RSD	295.0460	58.83898	57.95804	86.79613	28.99945	987.5905	42.39569
#1	.0002183	.1615614	-.000987	.0000443	.0763259	.0035315	.0039440
#2	.0019031	.0848089	-.000546	.0014362	.0741412	-.010496	.0021476
#3	-.000754	.0483261	-.000290	.0020026	.0429118	.010169	.0018716

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0807830	-.002732	.0110931	.0006819	-.000283	.0009773	.0000654
Stddev	.1041563	.002413	.0038659	.0008693	.002653	.0009751	.0027229
%RSD	128.9334	88.34133	34.84942	127.4760	938.4186	99.77931	4164.445
#1	.0028219	-.000841	.0066842	.0016815	.002056	.0020288	.0013661
#2	.0404535	-.005450	.0126923	.0002610	.000261	.0001028	.0018940
#3	.1990736	-.001904	.0139028	.0001032	-.003166	.0008003	-.003064

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB049 Acquired: 12/30/2024 19:58:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB049 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.002024	.0001103	.0129394
Stddev	.002339	.0001582	.0023618
%RSD	115.5596	143.4285	18.25233
#1	-.000220	.0001140	.0156661
#2	-.004667	.0002665	.0115308
#3	-.001186	-.000050	.0116215

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1682.786	21083.90	2236.699	1399.218	1981.144
Stddev	16.505	315.78	29.053	22.991	19.347
%RSD	.9808192	1.497727	1.298921	1.643165	.9765643
#1	1692.481	20723.13	2211.502	1372.684	1991.795
#2	1692.148	21310.08	2268.478	1413.235	1992.826
#3	1663.728	21218.51	2230.118	1411.735	1958.812

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-07DLX2 Acquired: 12/30/2024 20:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0434769	.0152753	.1535327	-.010542	-.001019	29.50271	.4568861
Stddev	.0048016	.0029561	.0011148	.005923	.003943	.31674	.0036984
%RSD	11.04408	19.35199	.7260735	56.18337	386.9164	1.073607	.8094768
#1	.0379325	.0130014	.1523278	-.010729	.003094	29.15822	.4527649
#2	.0462272	.0186169	.1545273	-.004528	-.001386	29.56854	.4579774
#3	.0462710	.0142076	.1537431	-.016369	-.004765	29.78136	.4599161

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026668	.0024728	521.4104	.0505103	.0832344	.1460967	87.91561
Stddev	.0000291	.0000549	4.6044	.0017262	.0004957	.0130964	.91273
%RSD	1.090688	2.219615	.8830671	3.417497	.5954972	8.964195	1.038185
#1	.0026796	.0024948	516.1791	.0486272	.0829271	.1423857	86.94671
#2	.0026873	.0024104	523.2038	.0520178	.0838062	.1606481	88.04091
#3	.0026335	.0025133	524.8482	.0508858	.0829698	.1352562	88.75921

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.524421	200.4422	.0989303	-.003429	.9743230	.0839301	.2318832
Stddev	.097009	1.9120	.0008919	.000394	.0052467	.0091151	.0049619
%RSD	1.018526	.9539038	.9015509	11.49256	.5384931	10.86034	2.139806
#1	9.413764	198.3301	.0999109	-.002977	.9701377	.0747330	.2298778
#2	9.564687	200.9413	.0981674	-.003613	.9726224	.0840964	.2375338
#3	9.594812	202.0551	.0987127	-.003698	.9802091	.0929610	.2282378

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.548820	3.422686	-.159906	.0023690	.8012198	5.040831	.0129702
Stddev	.085756	.015837	.001230	.0005166	.0048860	.048420	.0014488
%RSD	1.545490	.4627029	.7689385	21.80501	.6098213	.9605602	11.17050
#1	5.458350	3.407501	-.160379	.0018836	.7968836	5.014882	.0125860
#2	5.559190	3.421455	-.158510	.0023115	.8002620	5.010916	.0145725
#3	5.628920	3.439102	-.160828	.0029119	.8065137	5.096695	.0117522

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-07DLX2 Acquired: 12/30/2024 20:02:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK19 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5939829	.2956660	.0803411
Stddev	.0070245	.0017308	.0042452
%RSD	1.182609	.5854063	5.283919
#1	.5865940	.2938127	.0850147
#2	.5947796	.2972405	.0792846
#3	.6005750	.2959447	.0767239

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1728.204	21664.23	2489.576	1417.586	1697.679
Stddev	4.479	392.98	16.633	24.680	3.417
%RSD	.2591981	1.813954	.6680963	1.740962	.2012988
#1	1728.233	21884.92	2505.587	1430.153	1700.772
#2	1723.710	21210.51	2490.756	1389.152	1694.010
#3	1732.669	21897.26	2472.385	1433.453	1698.256

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-13DLX2 Acquired: 12/30/2024 20:06:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0580937	.0103484	.3262740	.0004320	.0024288	35.08406	.6049268
Stddev	.0075167	.0069200	.0012861	.0050586	.0029262	.45199	.0071075
%RSD	12.93890	66.87013	.3941804	1170.952	120.4785	1.288309	1.174929
#1	.0499609	.0081716	.3276401	-.001468	.0008137	34.62289	.5968587
#2	.0647858	.0047785	.3250865	.006165	.0006661	35.10301	.6076588
#3	.0595343	.0180950	.3260956	-.003402	.0058066	35.52627	.6102629

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038395	.0033934	611.7892	.0581775	.0864383	.2000040	90.97233
Stddev	.0001401	.0001222	5.1209	.0005526	.0004154	.0069012	.86534
%RSD	3.650095	3.600275	.8370397	.9498399	.4805242	3.450527	.9512107
#1	.0039182	.0033591	606.3923	.0585159	.0869176	.2079120	90.04368
#2	.0036777	.0035290	612.3951	.0584768	.0861829	.1951990	91.11724
#3	.0039227	.0032920	616.5802	.0575398	.0862145	.1969009	91.75606

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.010547	53.02422	.0939538	-.003085	.5768913	.0843874	.4749167
Stddev	.058443	.75308	.0005495	.000601	.0148632	.0056459	.0011618
%RSD	.9723470	1.420248	.5848752	19.47017	2.576421	6.690417	.2446370
#1	5.951096	52.21052	.0945861	-.002747	.5651840	.0891141	.4740317
#2	6.012616	53.16547	.0935926	-.003778	.5936132	.0859123	.4762324
#3	6.067928	53.69666	.0936825	-.002729	.5718768	.0781357	.4744861

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.485326	4.069600	-.160573	.0030091	1.050995	5.453320	.0341282
Stddev	.204710	.013572	.002359	.0001781	.006494	.033933	.0013950
%RSD	2.734821	.3334896	1.468907	5.917778	.6178887	.6222391	4.087527
#1	7.253695	4.077374	-.159185	.0030318	1.057830	5.420552	.0356846
#2	7.641965	4.053929	-.163296	.0028208	1.044906	5.451102	.0337094
#3	7.560318	4.077498	-.159237	.0031748	1.050247	5.488308	.0329905

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-13DLX2 Acquired: 12/30/2024 20:06:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK23 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3202627	.4610435	.0675465
Stddev	.0078198	.0040460	.0038397
%RSD	2.441697	.8775810	5.684528
#1	.3123699	.4567498	.0662864
#2	.3204108	.4615956	.0644952
#3	.3280075	.4647852	.0718579

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1795.661	22722.39	2559.554	1486.537	1727.095
Stddev	3.799	82.70	10.815	2.342	4.158
%RSD	.2115717	.3639530	.4225368	.1575140	.2407441
#1	1792.971	22655.16	2570.484	1486.775	1724.240
#2	1800.007	22697.27	2559.321	1484.085	1731.865
#3	1794.004	22814.73	2548.858	1488.750	1725.180

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-14DLX2 Acquired: 12/30/2024 20:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0536274	.0148332	.2585458	-.004387	-.003227	29.99283	.3959171
Stddev	.0023569	.0047180	.0024000	.000456	.005561	.11192	.0026728
%RSD	4.394880	31.80682	.9282750	10.39385	172.3572	.3731402	.6750995
#1	.0559850	.0095077	.2566094	-.004895	-.009373	29.88220	.3937628
#2	.0536259	.0184903	.2577971	-.004014	-.001763	29.99032	.3950803
#3	.0512712	.0165016	.2612309	-.004252	.001456	30.10599	.3989082

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028649	.0036196	623.0600	.0485587	.0883845	.1831172	85.88856
Stddev	.0000623	.0000840	3.1653	.0008382	.0001652	.0100484	.53369
%RSD	2.175552	2.321185	.5080301	1.726099	.1869100	5.487426	.6213797
#1	.0028248	.0035238	619.4597	.0494535	.0885734	.1946696	85.36017
#2	.0029367	.0036809	624.3147	.0477918	.0883133	.1782780	85.87810
#3	.0028331	.0036540	625.4057	.0484309	.0882668	.1764040	86.42741

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.477869	69.85676	.0918938	-.002459	.8027131	.0815111	.6663326
Stddev	.031825	.14128	.0006842	.000544	.0158954	.0061581	.0034675
%RSD	.4255852	.2022404	.7445482	22.14581	1.980208	7.554919	.5203904
#1	7.450154	69.74537	.0926451	-.003002	.7880935	.0760294	.6688004
#2	7.470827	69.80922	.0917299	-.001913	.8196335	.0803296	.6678293
#3	7.512624	70.01567	.0913064	-.002460	.8004121	.0881743	.6623681

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.190310	7.601224	-.156952	.0045916	.9077847	5.228611	.0282725
Stddev	.049401	.018547	.002428	.0006528	.0100594	.013119	.0012023
%RSD	.9517936	.2440014	1.547161	14.21664	1.108131	.2508984	4.252690
#1	5.198329	7.597071	-.159332	.0053030	.8970923	5.235675	.0282632
#2	5.137391	7.585105	-.157045	.0040202	.9092005	5.236683	.0270748
#3	5.235212	7.621495	-.154478	.0044516	.9170612	5.213474	.0294795

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-14DLX2 Acquired: 12/30/2024 20:10:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK24 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5137295	.5452238	.0636905
Stddev	.0047193	.0042832	.0023767
%RSD	.9186420	.7855931	3.731565
#1	.5106212	.5402833	.0652205
#2	.5114074	.5478920	.0648985
#3	.5191600	.5474963	.0609525

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1805.903	22559.84	2587.391	1486.042	1716.802
Stddev	2.963	28.31	8.721	4.404	1.289
%RSD	.1640700	.1254694	.3370761	.2963247	.0751095
#1	1809.175	22577.33	2580.987	1482.940	1718.290
#2	1803.403	22527.18	2583.862	1484.104	1716.024
#3	1805.129	22575.01	2597.324	1491.082	1716.091

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-15DLX2 Acquired: 12/30/2024 20:14:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0397766	.0214879	.0636681	-.028189	-.006000	20.26041	.3428308
Stddev	.0032157	.0034830	.0009764	.007246	.004547	.21154	.0045712
%RSD	8.084387	16.20930	1.533518	25.70389	75.78489	1.044117	1.333363
#1	.0374935	.0253014	.0643190	-.034807	-.000803	20.01685	.3375799
#2	.0434542	.0184745	.0641397	-.020447	-.007951	20.39831	.3449910
#3	.0383822	.0206880	.0625454	-.029314	-.009245	20.36608	.3459215

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019996	.0023251	488.6351	.0426390	.0764463	.0999365	55.65061
Stddev	.0001177	.0000686	5.2570	.0009071	.0006889	.0041684	.50736
%RSD	5.887339	2.948742	1.075858	2.127479	.9011329	4.171097	.9116953
#1	.0019872	.0022598	483.0047	.0416904	.0758919	.1034186	55.15670
#2	.0018885	.0023965	493.4150	.0427288	.0772175	.1010733	56.17044
#3	.0021230	.0023189	489.4857	.0434980	.0762295	.0953175	55.62467

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.087665	21.79728	.0624460	-.002048	.4227535	.0352964	.1798317
Stddev	.047357	.24424	.0004281	.000772	.0282039	.0083330	.0007123
%RSD	.9308200	1.120508	.6854650	37.70840	6.671489	23.60871	.3960772
#1	5.034833	21.51658	.0627520	-.002937	.3960661	.0332751	.1792574
#2	5.126300	21.96131	.0626291	-.001540	.4199324	.0281600	.1806287
#3	5.101862	21.91394	.0619568	-.001667	.4522620	.0444541	.1796088

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.121523	4.171243	-.099240	.0063253	.5335168	5.210184	.0111181
Stddev	.082212	.001566	.002993	.0003920	.0102113	.017358	.0013447
%RSD	1.605224	.0375308	3.016094	6.197428	1.913960	.3331575	12.09420
#1	5.027332	4.169517	-.099389	.0064739	.5289737	5.227764	.0119587
#2	5.158381	4.171640	-.102155	.0066212	.5452113	5.209731	.0095673
#3	5.178856	4.172572	-.096174	.0058807	.5263655	5.193057	.0118284

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-15DLX2 Acquired: 12/30/2024 20:14:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK25 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3487715	.3187374	.0430200
Stddev	.0069614	.0043855	.0103670
%RSD	1.995965	1.375906	24.09804
#1	.3412551	.3142136	.0315729
#2	.3500624	.3229701	.0517763
#3	.3549971	.3190286	.0457106

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1726.894	21797.32	2438.080	1434.772	1783.644
Stddev	4.017	61.86	7.247	6.717	3.558
%RSD	.2326077	.2838074	.2972258	.4681483	.1994687
#1	1722.960	21748.48	2440.621	1437.250	1779.543
#2	1730.989	21776.60	2429.905	1427.169	1785.906
#3	1726.733	21866.88	2443.714	1439.898	1785.482

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-17DLX2 Acquired: 12/30/2024 20:17:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079321	.0337417	.0386367	-.059444	-.018527	3.740971
Stddev	.0114662	.0014946	.0042286	.009310	.002611	.066382
%RSD	144.5538	4.429439	10.94447	15.66139	14.09221	1.774458
#1	-.004804	.0328219	.0379551	-.048759	-.021542	3.668964
#2	.011168	.0354662	.0347903	-.063767	-.017077	3.799729
#3	.017433	.0329371	.0431646	-.065807	-.016964	3.754220

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0277708	.0010782	.0007658	F 1291.503	.0262064	.0522824
Stddev	.0009119	.0001410	.0001223	18.833	.0004479	.0009197
%RSD	3.283762	13.07839	15.97090	1.458204	1.709138	1.759164
#1	.0276415	.0010044	.0008354	1276.726	.0256947	.0512208
#2	.0287405	.0012408	.0006246	1312.708	.0263969	.0528386
#3	.0269304	.0009895	.0008374	1285.074	.0265275	.0527879

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090678	20.46903	.6691677	58.89462	.0353388	-.000910
Stddev	.0058597	.19135	.0088488	.87453	.0014202	.000790
%RSD	64.62119	.9348162	1.322356	1.484913	4.018701	86.75671
#1	.0050774	20.27878	.6609195	58.06866	.0349869	-.001762
#2	.0157952	20.66146	.6785145	59.81074	.0369019	-.000202
#3	.0063308	20.46687	.6680691	58.80447	.0341277	-.000767

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8174411	.0145783	.1079640	2.374843	.6524216	-.020310
Stddev	.0291345	.0043222	.0010407	.191902	.0080907	.000868
%RSD	3.564107	29.64852	.9638850	8.080637	1.240107	4.274847
#1	.8256493	.0195646	.1086629	2.242627	.6610866	-.020378
#2	.8415910	.0122692	.1084610	2.594950	.6511138	-.021143
#3	.7850831	.0119010	.1067680	2.286952	.6450645	-.019410

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-17DLX2 Acquired: 12/30/2024 20:17:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK27 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035319	14.62169	3.029351	.0095312	-.006435	.8529834
Stddev	.0005418	.00605	.042751	.0024568	.003908	.0125724
%RSD	15.33919	.0414111	1.411241	25.77666	60.72842	1.473931
#1	.0041423	14.62175	3.013964	.0122624	-.006502	.8435726
#2	.0031080	14.62772	3.077666	.0075011	-.002495	.8672618
#3	.0033454	14.61561	2.996424	.0088301	-.010310	.8481157

Elem	Li6707
Units	ppm
Avg	.0280142
Stddev	.0041455
%RSD	14.79784
#1	.0233026
#2	.0296381
#3	.0311020

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.581	20640.60	2344.226	1346.883	1680.756
Stddev	2.730	47.84	36.256	11.887	3.247
%RSD	.1671928	.2317875	1.546627	.8825209	.1931767
#1	1630.399	20592.64	2354.377	1338.215	1677.752
#2	1631.702	20640.84	2303.976	1342.001	1680.314
#3	1635.642	20688.32	2374.325	1360.433	1684.200

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-10DLX2 Acquired: 12/30/2024 20:21:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099155	.0282640	.1234359	-.039048	-.013768	13.80895	.0394042
Stddev	.0077967	.0040048	.0023295	.008539	.002835	.08496	.0009147
%RSD	78.63110	14.16932	1.887180	21.86694	20.58887	.6152685	2.321239
#1	.0184939	.0290579	.1207508	-.034615	-.011918	13.72200	.0385738
#2	.0032607	.0318125	.1246415	-.033638	-.012355	13.89178	.0403846
#3	.0079919	.0239217	.1249155	-.048892	-.017032	13.81307	.0392542

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020148	.0012205	664.8337	.0303679	.0640053	.0483471	44.01879
Stddev	.0000135	.0000434	2.1724	.0003129	.0003882	.0048560	.20499
%RSD	.6709663	3.552208	.3267559	1.030422	.6065352	10.04413	.4656945
#1	.0020190	.0012613	662.4755	.0306623	.0644355	.0534603	43.79456
#2	.0019997	.0012251	666.7533	.0304021	.0638991	.0437974	44.19659
#3	.0020258	.0011750	665.2723	.0300393	.0636812	.0477837	44.06521

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.804957	353.4758	.0538243	-.000828	.9238745	.0251931	.2590000
Stddev	.013877	1.1816	.0009372	.001622	.0219556	.0041600	.0014751
%RSD	.4947297	.3342905	1.741151	195.8841	2.376465	16.51264	.5695509
#1	2.792372	352.3520	.0527422	-.002031	.9055718	.0282370	.2595826
#2	2.819839	354.7079	.0543681	.001017	.9482181	.0268893	.2573225
#3	2.802659	353.3675	.0543628	-.001470	.9178336	.0204529	.2600948

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.878635	.9125984	-.008169	.0010382	14.73552	3.720595	.0088576
Stddev	.023876	.0046350	.001282	.0004899	.02213	.018239	.0018952
%RSD	.3030461	.5078873	15.69439	47.19164	.1501866	.4902282	21.39584
#1	7.881162	.9116064	-.009125	.0015860	14.74983	3.735316	.0097863
#2	7.853596	.9176491	-.008669	.0006420	14.74671	3.726279	.0066772
#3	7.901147	.9085398	-.006712	.0008865	14.71003	3.700191	.0101093

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-10DLX2 Acquired: 12/30/2024 20:21:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK48 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0285731	.3295543	.0411102
Stddev	.0031601	.0013356	.0020419
%RSD	11.05980	.4052687	4.966913
#1	.0249340	.3308906	.0414462
#2	.0301595	.3295530	.0389212
#3	.0306257	.3282194	.0429633

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1624.802	20526.58	2355.912	1348.661	1677.547
Stddev	2.356	118.46	10.060	6.754	1.405
%RSD	.1450070	.5770826	.4270281	.5008092	.0837770
#1	1623.557	20474.69	2349.845	1345.722	1675.937
#2	1627.520	20662.13	2350.365	1356.387	1678.173
#3	1623.330	20442.92	2367.525	1343.875	1678.530

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-11DLX2 Acquired: 12/30/2024 20:25:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0132751	.0237057	.4183176	-.047361	-.015705	11.51761
Stddev	.0069128	.0047474	.0051107	.007936	.001714	.04682
%RSD	52.07335	20.02622	1.221728	16.75684	10.91130	.4064997
#1	.0207022	.0279905	.4129686	-.047522	-.017487	11.46983
#2	.0070288	.0245243	.4231509	-.039346	-.015559	11.51959
#3	.0120943	.0186023	.4188335	-.055216	-.014070	11.56341

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0762997	.0018489	.0046122	F 980.1238	.0396173	.0651560
Stddev	.0012679	.0000684	.0001681	5.8294	.0004047	.0004667
%RSD	1.661688	3.702034	3.645842	.5947644	1.021472	.7162679
#1	.0767460	.0019275	.0047697	973.9092	.0399855	.0656627
#2	.0772841	.0018019	.0046316	980.9914	.0396823	.0650615
#3	.0748691	.0018174	.0044351	985.4708	.0391840	.0647437

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0372822	49.46481	3.400884	546.0403	.0516490	-.001937
Stddev	.0044612	.34471	.019516	3.7657	.0003041	.000922
%RSD	11.96612	.6968756	.5738424	.6896381	.5887212	47.59868
#1	.0416542	49.12683	3.385600	541.7315	.0517257	-.002913
#2	.0374556	49.45174	3.394185	547.6886	.0513140	-.001080
#3	.0327368	49.81587	3.422867	548.7008	.0519074	-.001819

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.242105	.0246641	1.053924	6.025246	.9894511	-.030828
Stddev	.008639	.0099360	.002231	.121126	.0045213	.004440
%RSD	.6954976	40.28507	.2116611	2.010313	.4569520	14.40228
#1	1.241038	.0295428	1.051366	5.885702	.9851893	-.027933
#2	1.234050	.0312176	1.054942	6.086829	.9941935	-.035939
#3	1.251228	.0132319	1.055464	6.103209	.9889706	-.028610

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-11DLX2 Acquired: 12/30/2024 20:25:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK49 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014203	23.13428	4.065107	.0118491	.0440856	.3987235
Stddev	.0004455	.05831	.022290	.0020197	.0037497	.0005899
%RSD	31.36310	.2520637	.5483309	17.04546	8.505502	.1479418
#1	.0017508	23.08523	4.086760	.0128482	.0473398	.3980432
#2	.0009137	23.19875	4.066330	.0131745	.0399850	.3990929
#3	.0015964	23.11884	4.042230	.0095245	.0449319	.3990343

Elem	Li6707
Units	ppm
Avg	.0386572
Stddev	.0035001
%RSD	9.054083
#1	.0359129
#2	.0374600
#3	.0425988

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1569.136	20072.83	2313.992	1309.722	1599.604
Stddev	3.915	89.30	3.102	4.862	6.248
%RSD	.2495198	.4448587	.1340532	.3712410	.3906086
#1	1573.647	20172.40	2310.552	1315.185	1606.676
#2	1567.148	20046.25	2314.849	1305.869	1594.831
#3	1566.615	19999.85	2316.575	1308.112	1597.305

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-12DLX2 Acquired: 12/30/2024 20:29:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0139581	.0184250	1.320186	-.030378	-.015268	7.831066
Stddev	.0068813	.0028345	.006263	.009291	.003939	.056578
%RSD	49.29929	15.38391	.4744334	30.58491	25.79714	.7224861
#1	.0110913	.0189728	1.327416	-.035122	-.011023	7.775362
#2	.0089738	.0209456	1.316731	-.036339	-.015977	7.829357
#3	.0218093	.0153566	1.316411	-.019672	-.018804	7.888480

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0827917	.0018233	.0149798	F 1186.411	.0270655	.0647188
Stddev	.0017558	.0001719	.0000864	2.317	.0007065	.0006972
%RSD	2.120712	9.427094	.5768160	.1952601	2.610241	1.077263
#1	.0809817	.0019124	.0148811	1184.916	.0265242	.0645299
#2	.0829058	.0019324	.0150421	1185.238	.0268076	.0654910
#3	.0844877	.0016251	.0150160	1189.080	.0278647	.0641356

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0287839	64.44469	4.157253	658.3639	.0480961	.0001920
Stddev	.0020681	.27404	.015962	2.1741	.0006457	.0007423
%RSD	7.185083	.4252286	.3839627	.3302249	1.342453	386.6879
#1	.0263958	64.19094	4.146466	657.2610	.0481405	-.000590
#2	.0299776	64.40783	4.149704	656.9624	.0487185	.000887
#3	.0299783	64.73529	4.175590	660.8684	.0474294	.000278

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.379398	.0242053	2.846177	4.635684	.5260061	-.074999
Stddev	.037123	.0085664	.012328	.083860	.0010464	.000998
%RSD	2.691229	35.39077	.4331429	1.809003	.1989386	1.330101
#1	1.347015	.0249107	2.853031	4.541336	.5248038	-.073928
#2	1.419912	.0323972	2.853555	4.663984	.5267114	-.075169
#3	1.371267	.0153079	2.831945	4.701733	.5265032	-.075901

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-12DLX2 Acquired: 12/30/2024 20:29:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK50 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027165	46.25797	3.479757	.0146657	.0028766	.3902675
Stddev	.0006830	.13947	.007084	.0009196	.0023667	.0009279
%RSD	25.14276	.3015130	.2035771	6.270662	82.27489	.2377526
#1	.0024866	46.36837	3.487106	.0144319	.0007099	.3906663
#2	.0034847	46.10122	3.479195	.0156796	.0054023	.3892069
#3	.0021780	46.30432	3.472971	.0138855	.0025175	.3909293

Elem	Li6707
Units	ppm
Avg	.0323806
Stddev	.0051898
%RSD	16.02741
#1	.0280897
#2	.0309032
#3	.0381488

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.197	19939.72	2317.757	1300.962	1608.703
Stddev	1.953	48.34	.200	6.159	5.213
%RSD	.1236641	.2424114	.0086139	.4734091	.3240273
#1	1577.107	19991.61	2317.865	1303.415	1603.872
#2	1580.976	19931.58	2317.527	1293.955	1614.228
#3	1579.507	19895.97	2317.880	1305.517	1608.011

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-05DLX2 Acquired: 12/30/2024 20:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0770724	.0033416	.7826234	.0140419	.0047378	25.27143	.4440852
Stddev	.0017154	.0032902	.0044737	.0037181	.0044356	.06604	.0019360
%RSD	2.225745	98.46227	.5716230	26.47864	93.62064	.2613083	.4359589
#1	.0752149	-.000382	.7780979	.0172540	.0002977	25.26987	.4447446
#2	.0774055	.004551	.7870433	.0099689	.0047468	25.33823	.4419056
#3	.0785969	.005856	.7827290	.0149027	.0091688	25.20619	.4456055

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032986	.0033047	500.3123	.0442720	.0852953	.1430900	120.8493
Stddev	.0001285	.0001650	1.0184	.0004290	.0001596	.0026940	.2605
%RSD	3.896336	4.993477	.2035547	.9690156	.1871070	1.882756	.2155533
#1	.0031502	.0034917	501.4792	.0446253	.0853740	.1417935	120.6355
#2	.0033700	.0031798	499.8549	.0443962	.0854002	.1461872	120.7730
#3	.0033757	.0032425	499.6027	.0437946	.0851116	.1412894	121.1394

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.84621	114.6830	.0879194	-.002805	.5255535	.1084705	.7475267
Stddev	.01516	.2248	.0004793	.000183	.0102150	.0016305	.0045001
%RSD	.1279482	.1959923	.5451420	6.530899	1.943668	1.503214	.6019943
#1	11.83278	114.4791	.0876714	-.003016	.5307921	.1079658	.7490828
#2	11.84320	114.6460	.0876149	-.002687	.5137820	.1071520	.7424551
#3	11.86265	114.9240	.0884719	-.002713	.5320866	.1102938	.7510421

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.986135	6.336467	-.257005	.0093522	.9374934	6.271100	.0444684
Stddev	.033090	.009986	.002850	.0006558	.0069375	.057718	.0010467
%RSD	.8301333	.1575959	1.108820	7.012561	.7400091	.9203868	2.353931
#1	3.949194	6.335281	-.258024	.0096959	.9295431	6.256880	.0437553
#2	3.996147	6.327126	-.253786	.0097646	.9423193	6.221820	.0439798
#3	4.013062	6.346992	-.259205	.0085959	.9406178	6.334599	.0456701

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-05DLX2 Acquired: 12/30/2024 20:33:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK59 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2472109	.2789600	.0341459
Stddev	.0018939	.0024150	.0024274
%RSD	.7661223	.8657037	7.108789
#1	.2492080	.2811007	.0367440
#2	.2469841	.2794373	.0337576
#3	.2454406	.2763421	.0319361

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1773.122	22228.83	2527.614	1468.094	1763.451
Stddev	3.298	105.07	16.976	5.184	4.678
%RSD	.1860158	.4726662	.6716319	.3530789	.2652730
#1	1776.053	22114.44	2530.512	1465.385	1768.750
#2	1773.763	22251.05	2542.955	1474.071	1761.712
#3	1769.551	22321.02	2509.376	1464.827	1759.892

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-06DLX2 Acquired: 12/30/2024 20:37:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0454914	.0092931	.1679383	.0210328	.0084297	17.85559	.3801514
Stddev	.0041856	.0049218	.0011188	.0066006	.0019761	.06434	.0002456
%RSD	9.200885	52.96243	.6661972	31.38256	23.44260	.3603509	.0645943
#1	.0406607	.0038805	.1691334	.0209610	.0079906	17.91975	.3803039
#2	.0480396	.0104984	.1669158	.0144684	.0105884	17.79107	.3798681
#3	.0477739	.0135003	.1677659	.0276691	.0067100	17.85597	.3802821

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027346	.0027336	738.7848	.0344801	.0877611	.0899887	137.1512
Stddev	.0000870	.0000986	1.1225	.0006409	.0005969	.0072776	.2225
%RSD	3.181220	3.606688	.1519347	1.858798	.6801738	8.087266	.1622510
#1	.0028316	.0028467	740.0044	.0349499	.0881241	.0982950	137.1802
#2	.0027084	.0026654	737.7950	.0337500	.0880870	.0869397	136.9156
#3	.0026636	.0026888	738.5552	.0347403	.0870722	.0847316	137.3579

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.96692	257.4808	.0799205	-.002821	.5501284	.0675911	.1689408
Stddev	.00196	.2861	.0009620	.001572	.0295603	.0091498	.0018169
%RSD	.0093349	.1111140	1.203765	55.72495	5.373344	13.53705	1.075436
#1	20.96891	257.7070	.0809241	-.004230	.5379337	.0772087	.1672516
#2	20.96687	257.1592	.0790062	-.003108	.5286163	.0665699	.1687080
#3	20.96499	257.5763	.0798312	-.001125	.5838351	.0589947	.1708629

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.704808	5.085254	-.285505	.0085040	1.013741	4.799894	.0208530
Stddev	.028134	.009515	.005393	.0009204	.005308	.051741	.0015745
%RSD	.7594003	.1871033	1.889000	10.82378	.5235637	1.077953	7.550634
#1	3.677961	5.095814	-.290367	.0087271	1.010120	4.839060	.0224419
#2	3.702390	5.082600	-.286445	.0074925	1.019834	4.819382	.0208237
#3	3.734074	5.077348	-.279704	.0092924	1.011269	4.741239	.0192933

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-06DLX2 Acquired: 12/30/2024 20:37:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK60 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0787777	.3343793	.0224111
Stddev	.0031238	.0012373	.0039873
%RSD	3.965382	.3700451	17.79146
#1	.0818263	.3357756	.0215035
#2	.0755837	.3339433	.0189558
#3	.0789232	.3334189	.0267739

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1736.095	22004.85	2510.868	1446.496	1675.222
Stddev	4.671	200.93	22.243	10.925	3.934
%RSD	.2690569	.9131091	.8858703	.7552747	.2348463
#1	1730.776	22080.76	2495.331	1457.304	1670.683
#2	1737.982	22156.77	2500.925	1446.728	1677.347
#3	1739.528	21777.03	2536.348	1435.457	1677.637

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-07DLX2 Acquired: 12/30/2024 20:41:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225109	.0183794	.1544769	-.020227	-.004532	26.61781	.1549077
Stddev	.0027230	.0036411	.0047593	.003099	.002609	.07247	.0006017
%RSD	12.09625	19.81096	3.080933	15.31898	57.57210	.2722725	.3884293
#1	.0256351	.0142118	.1599046	-.017490	-.005565	26.62658	.1544726
#2	.0206416	.0209441	.1525091	-.019599	-.006467	26.54135	.1546560
#3	.0212560	.0199824	.1510171	-.023591	-.001565	26.68550	.1555943

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026252	.0017444	454.9794	.0394921	.0725077	.1531952	72.16054
Stddev	.0001152	.0000236	1.5380	.0005689	.0016365	.0055206	.20303
%RSD	4.388236	1.355728	.3380467	1.440639	2.257009	3.603648	.2813588
#1	.0026406	.0017635	454.6024	.0391640	.0740166	.1476189	72.19669
#2	.0025030	.0017519	453.6648	.0391632	.0727383	.1586584	71.94186
#3	.0027319	.0017180	456.6708	.0401490	.0707681	.1533082	72.34307

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.231090	77.22059	.0747605	-.001191	.5365697	.0533780	.2307199
Stddev	.022636	.40271	.0012001	.000709	.0266241	.0097242	.0015537
%RSD	.4327213	.5215110	1.605304	59.55821	4.961903	18.21761	.6733903
#1	5.242429	77.32538	.0760734	-.001481	.5654201	.0501415	.2315400
#2	5.205025	76.77584	.0744883	-.000383	.5129476	.0643078	.2289280
#3	5.245815	77.56054	.0737199	-.001710	.5313412	.0456848	.2316916

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.474017	5.052149	-.141566	.0030094	.6717474	5.744468	.0122768
Stddev	.090821	.063899	.000753	.0003273	.0114627	.014676	.0011029
%RSD	2.029974	1.264782	.5318473	10.87556	1.706400	.2554737	8.983163
#1	4.576283	5.123569	-.140929	.0028928	.6846117	5.757097	.0131126
#2	4.443002	5.032484	-.142397	.0033790	.6680127	5.747939	.0110268
#3	4.402766	5.000394	-.141373	.0027564	.6626178	5.728368	.0126911

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-07DLX2 Acquired: 12/30/2024 20:41:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK61 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.2432369	.3379085	.0332405
Stddev	.0056709	.0024015	.0017321
%RSD	2.331429	.7106931	5.210922
#1	.2367189	.3353149	.0352274
#2	.2470400	.3383558	.0320483
#3	.2459518	.3400550	.0324459

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1778.983	22298.23	2503.955	1470.102	1799.133
Stddev	11.860	140.83	10.782	9.242	17.477
%RSD	.6666931	.6315528	.4305875	.6286880	.9714174
#1	1766.395	22177.32	2491.681	1462.385	1780.870
#2	1780.606	22452.85	2508.290	1480.345	1800.831
#3	1789.948	22264.51	2511.895	1467.576	1815.700

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-08DLX2 Acquired: 12/30/2024 20:45:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0634160	.0136663	1.959905	-.019193	-.000209	20.61737
Stddev	.0066322	.0046554	.001871	.006520	.001296	.04412
%RSD	10.45819	34.06502	.0954765	33.97145	620.2637	.2140078
#1	.0675340	.0177737	1.960570	-.014255	-.001668	20.58538
#2	.0557653	.0146159	1.957792	-.026584	.000235	20.59902
#3	.0669488	.0086093	1.961354	-.016739	.000807	20.66771

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6078060	.0026273	.0056857	F 843.6060	.0887184	.0768290
Stddev	.0014942	.0003511	.0001732	1.3564	.0007726	.0007677
%RSD	.2458344	13.36471	3.046171	.1607891	.8708318	.9992197
#1	.6093473	.0022257	.0056456	843.8503	.0878277	.0772933
#2	.6063638	.0028762	.0058754	842.1441	.0892076	.0759429
#3	.6077069	.0027800	.0055361	844.8238	.0891198	.0772508

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2850232	83.49426	5.504634	89.58710	.0798922	-.000390
Stddev	.0091863	.17901	.011707	.43554	.0007460	.000293
%RSD	3.222993	.2143977	.2126670	.4861654	.9337006	75.15432
#1	.2896272	83.44674	5.504041	89.56565	.0806165	-.000482
#2	.2744454	83.34380	5.493235	89.16268	.0799338	-.000627
#3	.2909971	83.69223	5.516625	90.03297	.0791263	-.000062

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8581375	.0627088	1.842426	2.452147	4.688598	-.166963
Stddev	.0261034	.0097875	.011573	.123907	.011505	.003088
%RSD	3.041868	15.60784	.6281568	5.052996	.2453920	1.849426
#1	.8315414	.0541821	1.829321	2.471790	4.689351	-.164544
#2	.8591524	.0605483	1.851246	2.565060	4.676734	-.170441
#3	.8837186	.0733961	1.846710	2.319592	4.699708	-.165904

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-08DLX2 Acquired: 12/30/2024 20:45:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK88 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038855	1.490180	5.274852	.1265216	.2355107	.4962138
Stddev	.0003162	.002763	.022640	.0034918	.0047611	.0005658
%RSD	8.138927	.1853969	.4292016	2.759853	2.021591	.1140262
#1	.0042422	1.486990	5.253960	.1226009	.2304300	.4968669
#2	.0036395	1.491783	5.271689	.1276676	.2398698	.4959008
#3	.0037748	1.491768	5.298907	.1292965	.2362322	.4958736

Elem	Li6707
Units	ppm
Avg	.0182313
Stddev	.0048088
%RSD	26.37646
#1	.0147637
#2	.0162093
#3	.0237209

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.519	21389.38	2416.140	1402.580	1700.717
Stddev	4.471	32.28	11.237	2.573	3.063
%RSD	.2662237	.1509093	.4650725	.1834792	.1801277
#1	1680.920	21420.46	2415.857	1401.039	1702.617
#2	1674.515	21356.03	2427.515	1401.150	1697.183
#3	1683.122	21391.66	2405.047	1405.551	1702.351

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-15DLX2 Acquired: 12/30/2024 20:49:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053926	.0280241	.5031683	-.048235	-.015576	14.28467
Stddev	.0046193	.0039805	.0019336	.005264	.003064	.37632
%RSD	85.65936	14.20389	.3842742	10.91286	19.67327	2.634448
#1	.0020573	.0268247	.5049732	-.044206	-.018622	14.04388
#2	.0106650	.0324663	.5011277	-.054191	-.015612	14.09180
#3	.0034554	.0247811	.5034039	-.046309	-.012494	14.71833

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1344386	.0014276	.0044984	F 816.2273	.0378147	.0584548
Stddev	.0027996	.0000944	.0001460	20.0560	.0009451	.0007025
%RSD	2.082398	6.611780	3.246169	2.457155	2.499254	1.201723
#1	.1330253	.0015366	.0045352	804.2233	.0367393	.0580360
#2	.1326274	.0013742	.0046225	805.0779	.0381920	.0592658
#3	.1376631	.0013720	.0043375	839.3807	.0385129	.0580626

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0444772	44.53398	4.484706	426.0423	.0521107	-.001059
Stddev	.0028881	1.00019	.090887	9.7870	.0008413	.001612
%RSD	6.493417	2.245902	2.026601	2.297179	1.614380	152.2564
#1	.0443547	43.94730	4.422797	420.1048	.0512099	.000392
#2	.0416522	43.96579	4.442271	420.6838	.0528760	-.002795
#3	.0474245	45.68885	4.589049	437.3384	.0522461	-.000775

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9040362	.0631643	.7896274	1.390576	1.570580	-.069388
Stddev	.0274835	.0141980	.0003363	.137071	.005195	.001358
%RSD	3.040084	22.47781	.0425925	9.857156	.3307499	1.956566
#1	.8943037	.0470049	.7898370	1.234666	1.565067	-.070945
#2	.8827434	.0688490	.7898058	1.444922	1.575383	-.068769
#3	.9350616	.0736391	.7892395	1.492142	1.571290	-.068450

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-15DLX2 Acquired: 12/30/2024 20:49:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019945	8.043955	4.990583	.0188539	.1558197	.2568009
Stddev	.0001103	.026470	.075587	.0014504	.0041502	.0065996
%RSD	5.531631	.3290730	1.514583	7.692858	2.663458	2.569926
#1	.0019002	8.031929	4.975626	.0192133	.1511173	.2529223
#2	.0019675	8.074304	4.923594	.0172576	.1573709	.2530594
#3	.0021159	8.025633	5.072530	.0200909	.1589708	.2644211

Elem	Li6707
Units	ppm
Avg	.0147990
Stddev	.0030531
%RSD	20.63069
#1	.0114527
#2	.0174330
#3	.0155114

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1560.669	20027.93	2341.868	1307.430	1615.540
Stddev	2.532	50.96	32.709	2.463	4.714
%RSD	.1622164	.2544595	1.396707	.1883934	.2918171
#1	1562.418	20084.72	2349.269	1308.117	1619.328
#2	1557.766	20012.92	2370.243	1309.477	1610.260
#3	1561.822	19986.16	2306.093	1304.697	1617.033

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-16DLX2 Acquired: 12/30/2024 20:52:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029864	.0255793	.0849543	-.044734	-.012702	21.27622	.1400296
Stddev	.0032890	.0029423	.0025299	.004127	.005681	.05809	.0014023
%RSD	110.1320	11.50285	2.978002	9.225657	44.72717	.2730293	1.001407
#1	.0022149	.0275081	.0875208	-.044404	-.018978	21.22852	.1412808
#2	.0065926	.0221927	.0848797	-.040782	-.011219	21.25923	.1402940
#3	.0001517	.0270371	.0824626	-.049016	-.007910	21.34091	.1385139

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015998	.0014411	546.9444	.0313501	.0513613	.0366131	38.28404
Stddev	.0001026	.0001294	1.9124	.0002843	.0004488	.0085183	.15091
%RSD	6.410088	8.977170	.3496536	.9069317	.8738381	23.26574	.3941888
#1	.0016164	.0013687	544.7362	.0312523	.0511343	.0269523	38.11230
#2	.0016930	.0013642	548.0640	.0316705	.0518782	.0430442	38.39549
#3	.0014899	.0015905	548.0329	.0311277	.0510713	.0398430	38.34432

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.282624	161.4135	.0436045	-.000267	.6727229	.0482201	.2448848
Stddev	.005032	1.0795	.0013277	.001376	.0196005	.0052965	.0043340
%RSD	.2204330	.6687586	3.044815	515.6868	2.913601	10.98402	1.769801
#1	2.279386	160.1931	.0446685	-.001320	.6504544	.0543354	.2495484
#2	2.280066	162.2433	.0440283	.001290	.6803552	.0452313	.2409810
#3	2.288421	161.8040	.0421166	-.000770	.6873591	.0450935	.2441248

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3993125	.9733149	-.046410	.0097707	8.695395	8.016388	.0089174
Stddev	.0243001	.0018993	.001427	.0003401	.012616	.095511	.0004181
%RSD	6.085483	.1951373	3.074020	3.480362	.1450911	1.191443	4.688864
#1	.3932328	.9742995	-.046401	.0094381	8.684867	7.955385	.0093810
#2	.3786295	.9711254	-.044988	.0097562	8.691939	8.126459	.0085689
#3	.4260751	.9745197	-.047841	.0101177	8.709379	7.967319	.0088022

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-16DLX2 Acquired: 12/30/2024 20:52:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7076012	.3179595	-.000214
Stddev	.0075973	.0020838	.004818
%RSD	1.073670	.6553703	2255.818
#1	.7028159	.3156286	-.005657
#2	.7163613	.3196422	.003504
#3	.7036263	.3186077	.001513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1621.301	20368.22	2317.090	1340.072	1727.695
Stddev	1.598	292.72	25.114	20.025	3.967
%RSD	.0985580	1.437117	1.083864	1.494358	.2296241
#1	1620.454	20030.29	2330.700	1318.279	1732.250
#2	1620.304	20531.08	2288.108	1357.663	1725.839
#3	1623.144	20543.28	2332.461	1344.275	1724.995

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-17DLX2 Acquired: 12/30/2024 20:56:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075128	.0234952	.2616126	-.034675	-.016475	10.34350
Stddev	.0047675	.0033565	.0038328	.002862	.001391	.09691
%RSD	63.45779	14.28585	1.465071	8.252492	8.440226	.9368828
#1	.0123353	.0196332	.2577278	-.036787	-.015883	10.23455
#2	.0074010	.0257091	.2617188	-.031418	-.018063	10.42008
#3	.0028023	.0251432	.2653912	-.035820	-.015478	10.37586

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1287838	.0015244	.0036256	F 923.7737	.0304536	.0577709
Stddev	.0018038	.0002228	.0000467	5.1276	.0004648	.0009056
%RSD	1.400657	14.61291	1.289135	.5550748	1.526328	1.567548
#1	.1308564	.0012686	.0036530	918.4027	.0307274	.0567316
#2	.1279261	.0016752	.0035716	928.6172	.0307165	.0581906
#3	.1275688	.0016296	.0036521	924.3012	.0299169	.0583905

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0371568	51.87307	4.382138	484.1897	.0550607	-.001239
Stddev	.0003913	.32179	.028551	3.5968	.0011709	.000344
%RSD	1.053038	.6203349	.6515364	.7428452	2.126539	27.76803
#1	.0371051	51.57112	4.350902	481.2790	.0553616	-.001130
#2	.0367939	52.21157	4.406889	488.2107	.0537687	-.001625
#3	.0375713	51.83651	4.388625	483.0793	.0560517	-.000963

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.014865	.0397610	.6794441	1.801885	1.174292	-.076643
Stddev	.038947	.0007508	.0032089	.062267	.002563	.001680
%RSD	3.837621	1.888243	.4722851	3.455659	.2182750	2.192155
#1	1.058431	.0389059	.6758230	1.740358	1.172354	-.075093
#2	.983419	.0403124	.6805742	1.864867	1.177199	-.076409
#3	1.002745	.0400645	.6819350	1.800429	1.173324	-.078428

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-17DLX2 Acquired: 12/30/2024 20:56:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033913	18.05706	4.748546	.0138660	.0816691	.3860318
Stddev	.0004546	.03144	.023876	.0020503	.0051282	.0029790
%RSD	13.40428	.1741242	.5027997	14.78672	6.279213	.7716995
#1	.0030686	18.06534	4.721116	.0115484	.0791854	.3827620
#2	.0031942	18.02230	4.759860	.0154435	.0875662	.3867417
#3	.0039112	18.08353	4.764661	.0146062	.0782557	.3885918

Elem	Li6707
Units	ppm
Avg	.0078930
Stddev	.0010324
%RSD	13.07955
#1	.0090446
#2	.0070504
#3	.0075839

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1568.252	19863.95	2288.350	1296.868	1627.618
Stddev	3.759	93.18	9.977	7.367	1.161
%RSD	.2396701	.4690732	.4359783	.5680347	.0713292
#1	1565.371	19867.88	2282.983	1290.035	1627.863
#2	1572.504	19768.87	2282.205	1295.897	1628.636
#3	1566.881	19955.10	2299.861	1304.672	1626.354

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-18DLX2 Acquired: 12/30/2024 21:00:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0291530	.0203127	.9841245	-.037964	-.010297	15.99588	.3919684
Stddev	.0018559	.0018126	.0018713	.005516	.000648	.27176	.0065168
%RSD	6.365925	8.923543	.1901524	14.52870	6.293105	1.698947	1.662576
#1	.0278657	.0182463	.9820017	-.043728	-.011035	15.98078	.3932025
#2	.0283129	.0210575	.9855357	-.037429	-.010034	15.73198	.3849229
#3	.0312803	.0216342	.9848360	-.032736	-.009822	16.27488	.3977799

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021850	.0036962	637.0969	.0391334	.0623937	.1435112	52.19191
Stddev	.0000479	.0000321	10.9056	.0008952	.0000848	.0102101	1.00650
%RSD	2.190237	.8673086	1.711770	2.287589	.1358745	7.114487	1.928466
#1	.0021411	.0036806	636.9538	.0392009	.0624386	.1529262	52.07548
#2	.0022360	.0036749	626.2635	.0382064	.0622959	.1326585	51.24868
#3	.0021777	.0037330	648.0734	.0399930	.0624465	.1449488	53.25156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.324355	345.1545	.0600930	-.000418	.7514779	.0408389	.8246647
Stddev	.057897	5.6564	.0005642	.001434	.0204958	.0042839	.0022342
%RSD	1.741614	1.638812	.9388599	342.8604	2.727393	10.48977	.2709226
#1	3.320554	344.2341	.0607435	.001234	.7751041	.0442706	.8267059
#2	3.268451	340.0147	.0597372	-.001336	.7384706	.0360377	.8222778
#3	3.384058	351.2147	.0597983	-.001152	.7408590	.0422085	.8250105

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.314764	2.344334	-.091716	.0029708	12.28897	4.929067	.0355262
Stddev	.159795	.007968	.003075	.0003302	.04099	.053133	.0025013
%RSD	6.903289	.3398812	3.353013	11.11638	.3335181	1.077955	7.040850
#1	2.158133	2.352830	-.090500	.0032442	12.32729	4.930054	.0369344
#2	2.308612	2.343147	-.095214	.0030643	12.29385	4.875447	.0326382
#3	2.477545	2.337027	-.089435	.0026039	12.24575	4.981699	.0370060

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-18DLX2 Acquired: 12/30/2024 21:00:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKA9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1578239	1.062058	.0150609
Stddev	.0068493	.017883	.0042019
%RSD	4.339854	1.683792	27.89937
#1	.1635863	1.064856	.0127696
#2	.1596342	1.042941	.0125027
#3	.1502513	1.078376	.0199104

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.892	20796.31	2412.015	1361.372	1685.608
Stddev	3.466	38.42	25.718	2.069	2.721
%RSD	.2103034	.1847607	1.066255	.1519667	.1614362
#1	1643.991	20753.87	2410.463	1362.762	1683.109
#2	1650.613	20828.74	2438.474	1362.360	1685.207
#3	1649.074	20806.32	2387.107	1358.995	1688.507

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5266-18DLX2 Acquired: 12/30/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2903 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1067487	-.146903	3.182111	.3141003	.1539216	30.71852
Stddev	.0020422	.001521	.002721	.0084350	.0061007	.26068
%RSD	1.913141	1.035423	.0855123	2.685442	3.963494	.8486072
#1	.1056717	-.145150	3.182226	.3100620	.1472741	30.45363
#2	.1054704	-.147870	3.184773	.3237953	.1552264	30.72715
#3	.1091040	-.147689	3.179335	.3084436	.1592643	30.97477

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5271403	.0116709	.0174185	253.9450	1.233524	.0832770
Stddev	.0056068	.0003907	.0000900	2.1148	.004621	.0005748
%RSD	1.063621	3.347550	.5167791	.8327971	.3746383	.6902734
#1	.5207029	.0120472	.0175208	251.6748	1.233461	.0828709
#2	.5297631	.0116983	.0173835	254.3008	1.228935	.0830254
#3	.5309550	.0112672	.0173513	255.8593	1.238177	.0839348

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2286944	645.9123	23.01727	49.68624	.6391422	-.018644
Stddev	.0020967	5.1688	.19228	.51910	.0016359	.000880
%RSD	.9168304	.8002308	.8353848	1.044754	.2559491	4.721160
#1	.2262781	640.1354	22.81857	49.09344	.6386027	-.017652
#2	.2297710	647.5019	23.03081	49.90579	.6378442	-.019331
#3	.2300342	650.0996	23.20242	50.05949	.6409797	-.018950

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.027365	.1564128	5.828271	4.006914	4.286381	F -1.38618
Stddev	.030315	.0062955	.007730	.008702	.003580	.01184
%RSD	2.950748	4.024899	.1326349	.2171782	.0835180	.8543948
#1	1.044563	.1623423	5.831039	4.016318	4.284439	-1.39816
#2	1.045170	.1498062	5.834236	4.005276	4.290513	-1.37448
#3	.992362	.1570899	5.819538	3.999147	4.284193	-1.38592

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5266-18DLX2 Acquired: 12/30/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME2903 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0451689	5.129105	6.596744	.0825551	1.119571	-.213817
Stddev	.0002293	.006092	.018785	.0014358	.016683	.002375
%RSD	.5076783	.1187664	.2847631	1.739237	1.490119	1.110908
#1	.0453730	5.133495	6.598706	.0826143	1.101430	-.211138
#2	.0449208	5.131670	6.577055	.0839604	1.123032	-.215665
#3	.0452128	5.122151	6.614471	.0810906	1.134253	-.214649

Elem	Li6707
Units	ppm
Avg	.0128837
Stddev	.0027529
%RSD	21.36715
#1	.0098556
#2	.0135604
#3	.0152352

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.636	20832.60	2340.940	1366.148	1867.286
Stddev	6.005	34.65	7.178	1.367	5.771
%RSD	.3644900	.1663111	.3066464	.1000298	.3090343
#1	1649.557	20820.93	2333.456	1364.590	1865.715
#2	1652.446	20871.58	2347.767	1366.712	1873.680
#3	1640.905	20805.30	2341.598	1367.142	1862.465

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-12DLX2 Acquired: 12/30/2024 21:08:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0410487	.0020017	.1032533	-.000247	.0063167	36.75294	.2973920
Stddev	.0028402	.0029388	.0010109	.007601	.0057849	.11721	.0023945
%RSD	6.918977	146.8141	.9790802	3082.408	91.58043	.3189212	.8051606
#1	.0411140	.0006816	.1044114	-.005499	.0094959	36.80036	.3000845
#2	.0381764	.0053692	.1025469	-.003709	.0098147	36.83902	.2965900
#3	.0438556	-.000045	.1028018	.008469	-.000361	36.61945	.2955014

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039659	.0021296	447.5727	.0796295	.0919373	.0912863	116.0985
Stddev	.0001371	.0000641	2.1404	.0006643	.0008293	.0024879	.2461
%RSD	3.457012	3.010461	.4782160	.8341909	.9020600	2.725384	.2119914
#1	.0038627	.0020721	449.1511	.0803461	.0910906	.0911008	116.1258
#2	.0041215	.0021178	448.4304	.0795083	.0927480	.0938618	116.3298
#3	.0039135	.0021987	445.1365	.0790343	.0919733	.0888964	115.8398

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.980082	67.79481	.1560311	-.004544	.5093130	.0992221	.4567266
Stddev	.013773	.24945	.0004078	.000441	.0039144	.0052871	.0044755
%RSD	.4621822	.3679461	.2613652	9.704281	.7685570	5.328576	.9799054
#1	2.983134	67.91532	.1560853	-.004792	.5113899	.1022834	.4608108
#2	2.992073	67.96112	.1564092	-.004035	.5047979	.1022660	.4574267
#3	2.965038	67.50799	.1555990	-.004805	.5117513	.0931171	.4519423

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.908013	2.496334	-.237939	.0246651	2.163766	4.091548	.0166429
Stddev	.071479	.004728	.002749	.0007738	.002247	.038645	.0022882
%RSD	1.209860	.1893933	1.155471	3.137341	.1038252	.9445156	13.74884
#1	5.957779	2.497739	-.236874	.0247730	2.163193	4.110517	.0142537
#2	5.826106	2.500201	-.241062	.0238429	2.166244	4.117043	.0188146
#3	5.940154	2.491063	-.235881	.0253792	2.161862	4.047083	.0168604

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-12DLX2 Acquired: 12/30/2024 21:08:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6752053	.4375542	.0516295
Stddev	.0043504	.0029441	.0055016
%RSD	.6443042	.6728533	10.65598
#1	.6720122	.4395370	.0482453
#2	.6734434	.4389542	.0579776
#3	.6801603	.4341713	.0486656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1711.977	21395.01	2427.246	1411.247	1794.023
Stddev	3.932	73.79	18.289	1.879	5.082
%RSD	.2296663	.3448725	.7534783	.1331645	.2832517
#1	1715.365	21422.17	2417.978	1410.540	1798.312
#2	1707.666	21451.36	2415.446	1409.823	1788.411
#3	1712.902	21311.49	2448.313	1413.377	1795.346

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-14DLX2 Acquired: 12/30/2024 21:12:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0257297	.0158750	.0522529	-.034082	-.005358	22.28767	.5343548
Stddev	.0033492	.0041541	.0014671	.001480	.002149	.04805	.0003219
%RSD	13.01701	26.16787	2.807637	4.341663	40.10078	.2155909	.0602387
#1	.0289516	.0110783	.0511774	-.035790	-.007734	22.33781	.5342577
#2	.0259712	.0183022	.0516571	-.033284	-.004791	22.24203	.5340926
#3	.0222662	.0182443	.0539241	-.033173	-.003550	22.28315	.5347140

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021861	.0020422	636.9479	.0521352	.0726791	.0817863	69.09924
Stddev	.0000367	.0001520	.4355	.0003949	.0006473	.0056178	.16975
%RSD	1.678184	7.441190	.0683745	.7575469	.8906631	6.868920	.2456547
#1	.0021837	.0019721	637.2931	.0520292	.0733778	.0847858	68.95541
#2	.0022239	.0019380	637.0919	.0525724	.0720997	.0753053	69.05584
#3	.0021507	.0022166	636.4586	.0518041	.0725599	.0852676	69.28647

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.702514	191.7388	.0998536	-.002194	.7244717	.0752231	.2116891
Stddev	.005504	.7007	.0005088	.000961	.0246390	.0032373	.0009575
%RSD	.3232676	.3654313	.5095343	43.79126	3.400967	4.303546	.4523176
#1	1.696164	191.2284	.0995103	-.002571	.7456907	.0762630	.2118205
#2	1.705490	191.4505	.0996124	-.002910	.6974488	.0715937	.2125741
#3	1.705890	192.5377	.1004382	-.001102	.7302756	.0778126	.2106727

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.809960	1.620362	-.124446	.0221179	21.08478	3.381853	.0162210
Stddev	.115897	.002162	.001991	.0006981	.04773	.013048	.0020587
%RSD	3.041939	.1334460	1.599746	3.156453	.2263615	.3858279	12.69138
#1	3.879419	1.617866	-.126600	.0213613	21.11776	3.396485	.0175803
#2	3.874295	1.621678	-.122673	.0227371	21.03005	3.377648	.0172303
#3	3.676167	1.621541	-.124065	.0222554	21.10653	3.371425	.0138525

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-14DLX2 Acquired: 12/30/2024 21:12:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28X8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5963156	3.878261	.0383796
Stddev	.0057778	.010296	.0014563
%RSD	.9689143	.2654866	3.794389
#1	.5899144	3.885715	.0399325
#2	.5978880	3.882555	.0381619
#3	.6011445	3.866512	.0370445

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.959	20587.88	2339.162	1349.385	1713.719
Stddev	2.458	32.00	10.974	2.906	3.331
%RSD	.1505288	.1554437	.4691257	.2153789	.1943960
#1	1635.225	20566.72	2327.947	1346.421	1716.153
#2	1633.306	20624.70	2339.662	1349.506	1715.081
#3	1630.346	20572.24	2349.878	1352.230	1709.922

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-20DLX2 Acquired: 12/30/2024 21:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0345750	.0051322	.0868962	-.001157	.0077393	35.98056	.3194953
Stddev	.0050978	.0018623	.0039299	.003895	.0018177	.07376	.0011171
%RSD	14.74413	36.28542	4.522509	336.5928	23.48622	.2050029	.3496347
#1	.0389139	.0041569	.0913836	.002614	.0063741	36.00578	.3190843
#2	.0289606	.0072796	.0840682	-.000920	.0070413	35.89749	.3186419
#3	.0358504	.0039603	.0852366	-.005165	.0098025	36.03840	.3207596

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036548	.0020840	442.6321	.1009184	.0857032	.0785578	103.7381
Stddev	.0001761	.0000807	1.2965	.0001421	.0008439	.0116285	.3594
%RSD	4.818970	3.874192	.2929126	.1408388	.9846860	14.80245	.3464227
#1	.0037222	.0021745	443.5389	.1007601	.0847627	.0670240	104.0600
#2	.0034550	.0020195	441.1470	.1009600	.0859527	.0902787	103.3504
#3	.0037874	.0020579	443.2103	.1010350	.0863943	.0783707	103.8041

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.248040	91.52643	.1418867	-.003996	.6070770	.0990389	.2669450
Stddev	.005727	.21113	.0002172	.000083	.0078287	.0051073	.0011519
%RSD	.2547351	.2306732	.1530495	2.081019	1.289578	5.156838	.4315200
#1	2.254264	91.56929	.1421010	-.003906	.5984443	.0939811	.2678880
#2	2.242995	91.29716	.1416668	-.004012	.6090701	.1041943	.2656611
#3	2.246862	91.71284	.1418923	-.004070	.6137164	.0989413	.2672859

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.044354	2.080542	-.204917	.0194831	13.95171	4.680108	.0153047
Stddev	.023267	.010955	.003675	.0001246	.02239	.064276	.0008478
%RSD	.3849417	.5265619	1.793358	.6395133	.1605080	1.373396	5.539317
#1	6.040846	2.080564	-.204244	.0193400	13.97164	4.695730	.0150753
#2	6.069177	2.069576	-.201625	.0195676	13.92748	4.609460	.0145953
#3	6.023041	2.091487	-.208882	.0195417	13.95600	4.735133	.0162436

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-20DLX2 Acquired: 12/30/2024 21:16:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5744581	.4362065	.0648738
Stddev	.0061910	.0008231	.0008392
%RSD	1.077705	.1886962	1.293611
#1	.5790810	.4357432	.0654327
#2	.5674244	.4357196	.0639088
#3	.5768689	.4371569	.0652800

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1680.234	21171.59	2374.523	1398.132	1776.844
Stddev	6.495	95.53	17.441	3.123	5.233
%RSD	.3865774	.4512224	.7344987	.2233984	.2945154
#1	1687.675	21214.78	2373.345	1400.285	1781.448
#2	1677.326	21062.09	2392.523	1394.549	1777.932
#3	1675.700	21237.89	2357.701	1399.561	1771.153

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV050 Acquired: 12/30/2024 21:20:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV050 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.930407	4.755433	24.38187	4.853586	4.817536	405.7120
Stddev	.012680	.017704	.02221	.006347	.002665	1.1653
%RSD	.2571817	.3722803	.0910836	.1307683	.0553172	.2872272
#1	4.919618	4.763208	24.40683	4.858729	4.820540	407.0282
#2	4.944374	4.735172	24.36432	4.855537	4.815454	404.8119
#3	4.927230	4.767919	24.37446	4.846493	4.816616	405.2958

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.08952	.5057314	2.458517	410.8749	15.54501	2.454927
Stddev	.03107	.0017709	.002232	.9893	.07757	.001727
%RSD	.3079492	.3501734	.0907894	.2407879	.4990315	.0703662
#1	10.12533	.5062945	2.460883	412.0156	15.58106	2.456715
#2	10.07357	.5037473	2.456449	410.3569	15.59800	2.453267
#3	10.06967	.5071523	2.458219	410.2520	15.45597	2.454799

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.11072	410.3914	15.09348	406.5694	2.478886	1.270489
Stddev	.01697	1.2363	.05527	1.8722	.004997	.007213
%RSD	.1122846	.3012546	.3661736	.4604811	.2015657	.5677577
#1	15.13001	411.5252	15.14285	408.7105	2.483938	1.274938
#2	15.09813	409.0733	15.03377	405.2403	2.473946	1.274362
#3	15.10401	410.5757	15.10381	405.7575	2.478775	1.262166

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	411.6580	2.496128	14.88302	153.0550	4.840022	F 4.342615
Stddev	2.0127	.008435	.10032	.5002	.009217	.026418
%RSD	.4889211	.3379367	.6740562	.3268316	.1904419	.6083376
#1	413.8177	2.503812	14.94422	153.5571	4.847120	4.357642
#2	409.8348	2.497470	14.93759	152.5566	4.829604	4.312111
#3	411.3214	2.487102	14.76724	153.0512	4.843341	4.358091

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV050 Acquired: 12/30/2024 21:20:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV050 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.741539	4.896273	4.989297	4.958816	5.035435	4.817609
Stddev	.002921	.005074	.024250	.008498	.014905	.001469
%RSD	.0616049	.1036201	.4860467	.1713659	.2959975	.0304991
#1	4.744570	4.898217	5.002633	4.967723	5.052528	4.816192
#2	4.738742	4.900087	4.961305	4.957930	5.025150	4.819125
#3	4.741304	4.890515	5.003952	4.950797	5.028627	4.817510

Elem	Li6707
Units	ppm
Avg	5.098836
Stddev	.016850
%RSD	.3304710
#1	5.118282
#2	5.088553
#3	5.089674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1450.215	18782.35	2187.450	1181.685	1623.867
Stddev	1.667	111.06	8.985	7.505	3.376
%RSD	.1149380	.5913116	.4107414	.6351358	.2079259
#1	1448.479	18726.11	2179.399	1176.276	1622.102
#2	1451.803	18710.66	2197.142	1178.525	1627.760
#3	1450.363	18910.28	2185.808	1190.253	1621.740

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB050 Acquired: 12/30/2024 21:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB050 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004040	-.001370	.0019890	.0058435	.0031484	-.005453	.0003322
Stddev	.003737	.001575	.0014023	.0008808	.0025574	.014416	.0002500
%RSD	92.48369	114.9977	70.50250	15.07339	81.22782	264.3788	75.25992
#1	-.008346	-.002566	.0011955	.0054665	.0002673	-.002279	.0000851
#2	-.001650	.000415	.0011634	.0068500	.0051497	-.021191	.0005850
#3	-.002124	-.001958	.0036082	.0052139	.0040283	.007111	.0003263

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002629	.0002408	.0315557	.0015187	.0002469	.0046798	.0331732
Stddev	.0001338	.0000635	.0167619	.0003598	.0003221	.0169227	.0209174
%RSD	50.90596	26.36111	53.11856	23.69057	130.4840	361.6109	63.05512
#1	.0001087	.0001908	.0124726	.0018508	.0000356	.0241286	.0149953
#2	.0003306	.0002195	.0382974	.0015687	.0006176	-.003405	.0284886
#3	.0003493	.0003122	.0438971	.0011365	.0000874	-.006684	.0560358

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014178	.1034333	-.000251	.0011397	.0496476	-.005387	.0026383
Stddev	.0013226	.1081158	.000504	.0017556	.0414117	.015561	.0003657
%RSD	93.29096	104.5271	200.6833	154.0462	83.41121	288.8813	13.86144
#1	.0028277	.1558833	-.000222	.0030770	.0755412	.012239	.0029454
#2	.0002045	.1753195	-.000769	-.000346	.0715156	-.011174	.0027357
#3	.0012211	-.020903	.000237	.000688	.0018860	-.017225	.0022338

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0735260	-.001480	.0110022	.0003556	.0002746	.0006148	-.000521
Stddev	.0634451	.001999	.0037062	.0002370	.0064710	.0003893	.000985
%RSD	86.28931	135.0790	33.68658	66.63705	2356.769	63.31914	188.9918
#1	.0321205	-.003623	.0110308	.0005939	.0038421	.0007603	-.001512
#2	.0418889	-.001149	.0146940	.0001200	-.007195	.0009105	-.000510
#3	.1465687	.000333	.0072817	.0003529	.004177	.0001737	.000458

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB050 Acquired: 12/30/2024 21:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB050 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001931	.0003255	.0078899
Stddev	.003138	.0004216	.0050451
%RSD	162.5736	129.5471	63.94317
#1	.000594	.0006628	.0102695
#2	-.005444	-.000147	.0020952
#3	-.000941	.000461	.0113051

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1651.730	20850.48	2251.576	1384.177	1947.192
Stddev	6.904	94.67	5.754	5.521	7.634
%RSD	.4179809	.4540331	.2555520	.3988694	.3920541
#1	1646.487	20742.01	2246.961	1378.163	1938.630
#2	1649.150	20893.01	2249.743	1385.350	1949.655
#3	1659.552	20916.43	2258.023	1389.016	1953.290

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-21DLX2 Acquired: 12/30/2024 21:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0472713	-.001421	.0846425	.0136016	.0067599	40.21872	.4002722
Stddev	.0019219	.003701	.0032681	.0027167	.0017306	.14471	.0026561
%RSD	4.065731	260.5287	3.861020	19.97337	25.60110	.3597986	.6635767
#1	.0494805	-.000156	.0839746	.0158917	.0060364	40.28333	.4030257
#2	.0459840	-.005588	.0881929	.0143132	.0087348	40.31985	.4000654
#3	.0463494	.001483	.0817600	.0105999	.0055084	40.05296	.3977255

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041700	.0021671	469.1640	.0797140	.0951847	.1035088	126.6536
Stddev	.0001817	.0001565	1.9314	.0001737	.0005556	.0053117	.6402
%RSD	4.358180	7.221764	.4116775	.2179137	.5837354	5.131653	.5054864
#1	.0040613	.0023234	469.8347	.0796332	.0952900	.1093803	127.0251
#2	.0040690	.0020104	470.6707	.0795954	.0956802	.0990372	127.0214
#3	.0043799	.0021675	466.9866	.0799134	.0945840	.1021089	125.9144

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.562981	87.31283	.1637734	-.006056	.7673971	.1038018	.2965723
Stddev	.012715	.74950	.0019455	.000653	.0224742	.0112209	.0030604
%RSD	.4961020	.8584098	1.187910	10.78162	2.928624	10.80994	1.031913
#1	2.565184	87.43352	.1627333	-.006594	.7728895	.0916688	.2978745
#2	2.574451	87.99467	.1660178	-.005330	.7866160	.1138056	.2930762
#3	2.549309	86.51031	.1625690	-.006245	.7426859	.1059309	.2987661

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.727975	2.360819	-.244155	.0428434	15.36509	4.339354	.0214743
Stddev	.096861	.006641	.003741	.0010481	.01330	.034299	.0011498
%RSD	1.439681	.2813109	1.532162	2.446382	.0865398	.7904180	5.354453
#1	6.628651	2.353567	-.244365	.0428693	15.35508	4.366907	.0202856
#2	6.822169	2.366605	-.247787	.0438784	15.36001	4.350216	.0225809
#3	6.733106	2.362284	-.240314	.0417826	15.38018	4.300939	.0215563

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5259-21DLX2 Acquired: 12/30/2024 21:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7330896	.5536875	.0800161
Stddev	.0033373	.0012088	.0040159
%RSD	.4552367	.2183161	5.018880
#1	.7366577	.5531788	.0794734
#2	.7325661	.5550675	.0762991
#3	.7300449	.5528163	.0842757

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1696.449	21428.75	2405.428	1414.515	1772.072
Stddev	4.408	17.18	17.436	8.209	2.121
%RSD	.2598657	.0801559	.7248772	.5803419	.1196917
#1	1699.423	21420.00	2392.753	1407.429	1774.480
#2	1691.384	21417.71	2398.217	1423.510	1770.481
#3	1698.540	21448.54	2425.313	1412.605	1771.256

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-02DLX2 Acquired: 12/30/2024 21:31:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0620528	-.004552	.0797783	.0006889	.0070645	35.99263	.2725931
Stddev	.0063219	.001033	.0018143	.0102650	.0024089	.08928	.0014902
%RSD	10.18790	22.68752	2.274132	1490.057	34.09908	.2480564	.5466817
#1	.0589162	-.003660	.0806169	.0088032	.0042832	35.93683	.2731054
#2	.0693296	-.004314	.0776965	.0041142	.0084893	35.94546	.2737596
#3	.0579125	-.005683	.0810217	-.010851	.0084211	36.09560	.2709143

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038469	.0016051	528.5826	.0633168	.0834776	.0969392	117.2804
Stddev	.0002872	.0000917	1.3788	.0000917	.0001994	.0103807	.2157
%RSD	7.464891	5.714384	.2608413	.1448077	.2388350	10.70848	.1839027
#1	.0035694	.0014993	528.1853	.0633964	.0837072	.0872978	117.4484
#2	.0038283	.0016535	527.4461	.0632165	.0833779	.1079277	117.3556
#3	.0041429	.0016625	530.1164	.0633374	.0833478	.0955922	117.0372

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.619622	77.36733	.1371995	-.004442	.6425915	.0787613	.2543927
Stddev	.003650	.18067	.0003919	.000434	.0120451	.0065343	.0016320
%RSD	.2253869	.2335160	.2856096	9.780490	1.874450	8.296288	.6415240
#1	1.617174	77.57518	.1373958	-.003944	.6458127	.0860928	.2562264
#2	1.623818	77.27888	.1374544	-.004636	.6526984	.0735516	.2530997
#3	1.617874	77.24794	.1367483	-.004745	.6292633	.0766396	.2538519

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.634520	2.480943	-.237681	.0213714	.9443148	5.289131	.0183065
Stddev	.041980	.004026	.003861	.0008050	.0033315	.033953	.0002344
%RSD	.7450564	.1622902	1.624291	3.766803	.3527962	.6419318	1.280399
#1	5.613762	2.485335	-.241502	.0215189	.9407733	5.321602	.0183423
#2	5.606963	2.480070	-.233782	.0220925	.9447848	5.291921	.0180563
#3	5.682836	2.477425	-.237758	.0205029	.9473864	5.253869	.0185210

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-02DLX2 Acquired: 12/30/2024 21:31:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8099812	.6556978	.0546099
Stddev	.0044953	.0043532	.0033777
%RSD	.5549861	.6639095	6.185173
#1	.8113769	.6532449	.0531739
#2	.8049536	.6531244	.0521874
#3	.8136130	.6607240	.0584683

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1699.797	21469.23	2386.188	1413.632	1773.067
Stddev	2.184	141.19	12.114	9.484	2.095
%RSD	.1284712	.6576617	.5076679	.6708608	.1181445
#1	1702.053	21427.84	2373.874	1405.327	1775.467
#2	1699.643	21626.50	2386.598	1423.965	1771.609
#3	1697.694	21353.36	2398.091	1411.603	1772.124

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-03DLX2 Acquired: 12/30/2024 21:35:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0152049	.0256635	.0516055	-.029314	-.007544	23.66781	.6052085
Stddev	.0062026	.0023910	.0012159	.009241	.001679	.06333	.0019913
%RSD	40.79329	9.316790	2.356227	31.52301	22.26284	.2675737	.3290344
#1	.0179780	.0239659	.0530074	-.025240	-.008693	23.59549	.6029584
#2	.0195371	.0283979	.0509710	-.022811	-.005616	23.71337	.6059238
#3	.0080996	.0246267	.0508381	-.039892	-.008322	23.69456	.6067435

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023656	.0019266	798.9207	.0523173	.0701217	.0564589	58.65355
Stddev	.0000826	.0001810	1.0124	.0007460	.0006982	.0099661	.22730
%RSD	3.493343	9.397244	.1267191	1.425871	.9957454	17.65200	.3875353
#1	.0023264	.0021355	797.8874	.0519234	.0699016	.0478826	58.52527
#2	.0024605	.0018164	798.9639	.0518509	.0709035	.0541018	58.91599
#3	.0023098	.0018278	799.9108	.0531777	.0695601	.0673923	58.51939

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.334500	328.4756	.0944756	-.002377	.8358044	.0858686	.1810534
Stddev	.005285	.4297	.0006302	.001075	.0216423	.0068611	.0004912
%RSD	.3960360	.1308241	.6670883	45.22483	2.589398	7.990280	.2713139
#1	1.340387	327.9919	.0939734	-.001258	.8460904	.0795216	.1813937
#2	1.332948	328.6219	.0942705	-.003401	.8109374	.0931484	.1812763
#3	1.330164	328.8132	.0951828	-.002471	.8503855	.0849356	.1804903

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.305930	1.420145	-.098990	.0257616	12.27692	4.688773	.0144577
Stddev	.099077	.015993	.002988	.0001837	.01267	.041019	.0031299
%RSD	2.300932	1.126174	3.018010	.7130623	.1031624	.8748280	21.64908
#1	4.418821	1.415499	-.098354	.0259317	12.28064	4.716574	.0126363
#2	4.233423	1.406988	-.096371	.0257864	12.26281	4.641663	.0180718
#3	4.265548	1.437946	-.102244	.0255668	12.28730	4.708081	.0126649

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-03DLX2 Acquired: 12/30/2024 21:35:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Q8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6108719	7.050066	.0455273
Stddev	.0013332	.015134	.0010009
%RSD	.2182416	.2146652	2.198374
#1	.6115448	7.034001	.0444130
#2	.6117345	7.064055	.0463499
#3	.6093364	7.052143	.0458190

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1595.266	20166.36	2301.545	1319.423	1659.848
Stddev	6.329	59.95	10.373	3.552	6.286
%RSD	.3967265	.2972968	.4506925	.2692431	.3787067
#1	1594.484	20205.19	2298.680	1317.358	1661.440
#2	1601.950	20097.31	2313.049	1317.387	1665.185
#3	1589.365	20196.58	2292.906	1323.525	1652.919

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-08DLX2 Acquired: 12/30/2024 21:39:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0436121	-.018080	.2487736	.0388478	.0202248	44.17257	.4651570
Stddev	.0009179	.002506	.0004843	.0038496	.0027029	.03297	.0010411
%RSD	2.104765	13.86020	.1946691	9.909481	13.36410	.0746465	.2238246
#1	.0446679	-.018746	.2482194	.0401509	.0176520	44.21060	.4644300
#2	.0430030	-.020186	.2491149	.0345158	.0199810	44.15522	.4663497
#3	.0431654	-.015309	.2489867	.0418767	.0230412	44.15190	.4646912

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0051728	.0035153	444.3647	.6193211	.0832892	.0946451	181.2196
Stddev	.0001534	.0001761	.3899	.0019825	.0006061	.0101688	.5515
%RSD	2.966155	5.009200	.0877422	.3201033	.7277596	10.74408	.3043263
#1	.0053019	.0033248	444.8134	.6197019	.0828037	.0947800	181.7550
#2	.0050031	.0036722	444.1729	.6210856	.0830952	.0844096	181.2505
#3	.0052133	.0035488	444.1079	.6171759	.0839686	.1047458	180.6533

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.62425	135.2717	.2621750	-.005116	.8142329	.2157034	.7485596
Stddev	.00702	.4700	.0013548	.000375	.0181501	.0038198	.0030849
%RSD	.0603882	.3474609	.5167427	7.329022	2.229104	1.770873	.4121163
#1	11.63222	135.8048	.2623907	-.005075	.8073543	.2200351	.7521199
#2	11.62158	134.9171	.2634090	-.004764	.8005276	.2142577	.7466804
#3	11.61897	135.0931	.2607253	-.005510	.8348169	.2128175	.7468784

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.725057	2.769844	-.355375	.0197220	4.149095	6.053384	.0325622
Stddev	.010478	.010644	.005571	.0003704	.001892	.050958	.0014179
%RSD	.1558068	.3842848	1.567684	1.877926	.0455889	.8418049	4.354529
#1	6.729988	2.778662	-.359787	.0195144	4.151154	6.094530	.0341238
#2	6.732161	2.758021	-.349115	.0195020	4.148696	5.996384	.0313553
#3	6.713024	2.772849	-.357222	.0201496	4.147435	6.069239	.0322076

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-08DLX2 Acquired: 12/30/2024 21:39:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.167871	.7497202	.0600868
Stddev	.011792	.0022764	.0038436
%RSD	1.009710	.3036305	6.396788
#1	1.155620	.7474179	.0587211
#2	1.168848	.7497731	.0571126
#3	1.179143	.7519697	.0644268

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1675.154	21214.72	2397.722	1395.228	1766.680
Stddev	4.487	76.88	16.762	8.426	7.511
%RSD	.2678391	.3624119	.6990760	.6039413	.4251341
#1	1680.056	21177.37	2382.237	1385.963	1774.901
#2	1674.157	21163.64	2415.520	1397.288	1764.960
#3	1671.250	21303.14	2395.408	1402.433	1760.178

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-10DLX2 Acquired: 12/30/2024 21:43:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0655687	-.103169	.4832778	.2046957	.0857918	34.69360
Stddev	.0016019	.003566	.0034799	.0059507	.0036187	.03331
%RSD	2.443093	3.456936	.7200712	2.907115	4.217947	.0960100
#1	.0639209	-.107228	.4868896	.2110749	.0883663	34.71633
#2	.0656647	-.100536	.4829970	.1992946	.0873548	34.65537
#3	.0671204	-.101742	.4799468	.2037177	.0816543	34.70911

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5667293	.0083298	.0066299	638.1728	.8336270	.0838528
Stddev	.0017236	.0000897	.0001014	1.2776	.0027488	.0006587
%RSD	.3041381	1.076980	1.530046	.2002014	.3297381	.7855615
#1	.5687019	.0084100	.0067275	639.6091	.8367271	.0842896
#2	.5655134	.0083466	.0065250	637.1629	.8314873	.0830952
#3	.5659726	.0082329	.0066372	637.7464	.8326666	.0841737

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1204210	484.1999	19.04694	245.0276	.2690713	-.013950
Stddev	.0145137	.9846	.05544	.6363	.0006859	.001595
%RSD	12.05244	.2033470	.2910910	.2597031	.2549251	11.43625
#1	.1113763	485.1892	19.08574	245.4564	.2686850	-.015444
#2	.1371618	483.2201	18.98344	244.2965	.2686656	-.012269
#3	.1127248	484.1903	19.07164	245.3300	.2698633	-.014138

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.031115	.3282792	1.781497	3.098682	2.920257	F -1.11386
Stddev	.008327	.0051153	.003343	.131242	.005439	.00345
%RSD	.8075713	1.558217	.1876273	4.235401	.1862435	.3098428
#1	1.021994	.3274353	1.785348	2.975409	2.926182	-1.11113
#2	1.038309	.3337639	1.779802	3.083983	2.915491	-1.11773
#3	1.033043	.3236383	1.779342	3.236654	2.919097	-1.11271

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-10DLX2 Acquired: 12/30/2024 21:43:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0143375	5.781396	3.760924	.0510969	1.177303	1.553200
Stddev	.0002772	.015498	.018419	.0007092	.009074	.004531
%RSD	1.933455	.2680665	.4897515	1.387923	.7707020	.2917244
#1	.0141682	5.792871	3.781246	.0502847	1.186367	1.558369
#2	.0141870	5.787550	3.745329	.0514120	1.168220	1.549914
#3	.0146575	5.763766	3.756196	.0515938	1.177323	1.551318

Elem	Li6707
Units	ppm
Avg	.0354645
Stddev	.0034974
%RSD	9.861785
#1	.0315827
#2	.0383701
#3	.0364406

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.925	20516.68	2311.629	1343.515	1739.902
Stddev	6.574	54.40	13.853	1.179	5.959
%RSD	.4080749	.2651723	.5992740	.0877286	.3424711
#1	1616.428	20456.31	2295.981	1343.146	1746.669
#2	1612.701	20561.90	2322.326	1344.834	1737.596
#3	1603.645	20531.84	2316.580	1342.566	1735.442

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-11DLX2 Acquired: 12/30/2024 21:47:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0298745	.0055538	.1342092	-.004738	.0036748	36.41970	.2768377
Stddev	.0036547	.0053823	.0021739	.009655	.0000663	.23575	.0036001
%RSD	12.23352	96.91181	1.619780	203.7708	1.804584	.6473266	1.300434
#1	.0340011	.0020816	.1352301	.005837	.0037189	36.38060	.2765754
#2	.0285762	.0028259	.1317127	-.013083	.0037070	36.67256	.2805617
#3	.0270461	.0117539	.1356847	-.006968	.0035985	36.20594	.2733759

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038329	.0037703	455.6713	.1548305	.0790255	.0871220	105.0463
Stddev	.0000456	.0001758	2.7886	.0004926	.0000824	.0041519	.8745
%RSD	1.188412	4.662573	.6119866	.3181575	.1043253	4.765643	.8324733
#1	.0038508	.0037956	455.4129	.1548492	.0789304	.0918168	104.8201
#2	.0038667	.0039320	458.5802	.1543287	.0790768	.0856156	106.0117
#3	.0037811	.0035832	453.0209	.1553134	.0790692	.0839335	104.3072

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.803675	160.9573	.1313899	-.003167	.6479362	.1104206	.3946864
Stddev	.028370	1.3764	.0005198	.000668	.0209918	.0108570	.0033896
%RSD	.7458487	.8551483	.3956300	21.09884	3.239794	9.832429	.8588123
#1	3.791911	160.6046	.1319693	-.002484	.6710391	.1221085	.3973552
#2	3.836034	162.4757	.1312360	-.003820	.6427365	.1085032	.3958316
#3	3.783079	159.7915	.1309645	-.003199	.6300329	.1006499	.3908726

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.333094	2.253455	-.218318	.0135274	9.090645	5.668397	.0118866
Stddev	.091496	.018776	.002582	.0004724	.051884	.032812	.0012703
%RSD	2.111554	.8332011	1.182611	3.492288	.5707380	.5788636	10.68716
#1	4.262696	2.254782	-.218088	.0131646	9.133522	5.695421	.0125143
#2	4.436517	2.271533	-.215859	.0140616	9.105444	5.677884	.0127208
#3	4.300069	2.234052	-.221007	.0133560	9.032970	5.631887	.0104246

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-11DLX2 Acquired: 12/30/2024 21:47:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3802295	.6534186	.0525068
Stddev	.0035621	.0038711	.0023627
%RSD	.9368346	.5924442	4.499760
#1	.3839848	.6503183	.0500911
#2	.3798050	.6577575	.0526167
#3	.3768986	.6521801	.0548127

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1664.131	21106.66	2336.836	1386.828	1758.951
Stddev	8.185	121.08	22.671	11.165	7.990
%RSD	.4918657	.5736694	.9701694	.8050443	.4542533
#1	1658.649	21100.81	2331.109	1386.420	1754.589
#2	1660.205	20988.61	2317.577	1375.873	1754.090
#3	1673.540	21230.56	2361.821	1398.191	1768.172

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-12DLX2 Acquired: 12/30/2024 21:50:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0359000	-.006188	.1704069	.0353143	.0157568	35.89278	.3943828
Stddev	.0032786	.002379	.0014222	.0072221	.0029279	.03800	.0016666
%RSD	9.132663	38.44543	.8345958	20.45098	18.58158	.1058670	.4225922
#1	.0393691	-.008439	.1706041	.0330891	.0191340	35.93653	.3928787
#2	.0354783	-.003699	.1717201	.0294667	.0139326	35.86798	.3961745
#3	.0328527	-.006426	.1688963	.0433872	.0142038	35.87384	.3940953

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033945	.0023001	482.9991	.7824974	.0772708	.0997968	162.4807
Stddev	.0000308	.0001549	.7230	.0023379	.0005975	.0080647	.3571
%RSD	.9066548	6.735703	.1496883	.2987784	.7732474	8.081079	.2197921
#1	.0034258	.0021683	483.4784	.7813218	.0767933	.0938051	162.5253
#2	.0033643	.0022614	483.3515	.7851898	.0770783	.0966190	162.8134
#3	.0033934	.0024708	482.1675	.7809806	.0779408	.1089662	162.1033

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.04905	177.9685	.2445837	-.004754	.6190464	.2679697	.4537720
Stddev	.03543	.2095	.0010291	.000590	.0259995	.0094868	.0024845
%RSD	.1962987	.1176935	.4207485	12.41262	4.199924	3.540266	.5475259
#1	18.07737	178.0329	.2448188	-.005242	.5945507	.2788557	.4559455
#2	18.06044	178.1381	.2434575	-.004921	.6463257	.2614678	.4543068
#3	18.00932	177.7344	.2454750	-.004098	.6162629	.2635855	.4510636

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.312877	2.660731	-.333755	.0157389	5.002442	6.198059	.0195721
Stddev	.109105	.009357	.000404	.0005271	.018361	.018130	.0024084
%RSD	3.293372	.3516659	.1209450	3.349248	.3670357	.2925115	12.30551
#1	3.279865	2.654129	-.333733	.0153009	4.987870	6.211300	.0201636
#2	3.434676	2.671439	-.334170	.0163239	4.996392	6.205482	.0216297
#3	3.224090	2.656624	-.333363	.0155920	5.023064	6.177396	.0169230

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-12DLX2 Acquired: 12/30/2024 21:50:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9866734	.6512038	.0440762
Stddev	.0055309	.0008807	.0026529
%RSD	.5605622	.1352452	6.018976
#1	.9912820	.6519622	.0410742
#2	.9805400	.6514114	.0450491
#3	.9881981	.6502379	.0461054

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1640.869	20918.37	2337.432	1370.011	1746.729
Stddev	4.655	83.42	6.244	4.660	4.579
%RSD	.2836790	.3987947	.2671300	.3401483	.2621380
#1	1643.251	20968.62	2338.740	1370.990	1749.558
#2	1643.851	20822.07	2330.638	1364.939	1749.183
#3	1635.505	20964.42	2342.919	1374.104	1741.447

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-13DLX2 Acquired: 12/30/2024 21:54:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0809531	-.082649	2.031196	.2035347	.0852783	54.95340
Stddev	.0031166	.005230	.004702	.0096230	.0042701	.41484
%RSD	3.849867	6.327512	.2315073	4.727921	5.007206	.7548869
#1	.0845408	-.079964	2.027373	.1970053	.0810867	54.64927
#2	.0789159	-.088675	2.029768	.1990131	.0896227	54.78497
#3	.0794025	-.079307	2.036447	.2145857	.0851254	55.42596

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7389446	.0088850	.0140609	441.4162	1.505693	.0945890
Stddev	.0040573	.0001115	.0001231	2.0682	.001524	.0012731
%RSD	.5490608	1.255211	.8752537	.4685417	.1012452	1.345916
#1	.7383303	.0087611	.0140693	440.3282	1.505999	.0945256
#2	.7352296	.0089774	.0139339	440.1191	1.504038	.0933488
#3	.7432740	.0089165	.0141796	443.8013	1.507041	.0958926

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3034629	452.2030	F 31.65503	87.40918	.5606803	-.013054
Stddev	.0063102	3.1804	.18670	.53532	.0011045	.001480
%RSD	2.079394	.7033111	.5897925	.6124294	.1969946	11.34107
#1	.2961817	449.4634	31.53674	87.48640	.5604347	-.014620
#2	.3073414	451.4548	31.55809	86.83944	.5618870	-.012863
#3	.3068655	455.6908	31.87025	87.90169	.5597193	-.011678

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.343388	.4889409	4.217494	6.731705	4.946280	-.926882
Stddev	.013211	.0181783	.005370	.119754	.008968	.022281
%RSD	.9834028	3.717894	.1273244	1.778948	.1813098	2.403826
#1	1.331925	.4877981	4.223486	6.770866	4.956616	-.950078
#2	1.340404	.4713610	4.213118	6.597274	4.940570	-.905646
#3	1.357836	.5076637	4.215879	6.826975	4.941653	-.924924

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-13DLX2 Acquired: 12/30/2024 21:54:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28T9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0315703	5.990794	6.920368	.0524611	1.997491	.6173681
Stddev	.0009074	.026179	.083814	.0004456	.013478	.0012652
%RSD	2.874368	.4369843	1.211122	.8493453	.6747699	.2049337
#1	.0325051	6.014308	6.998646	.0519507	1.989120	.6187611
#2	.0306930	5.962586	6.831942	.0527728	1.990314	.6162904
#3	.0315129	5.995490	6.930515	.0526597	2.013039	.6170528

Elem	Li6707
Units	ppm
Avg	.0656923
Stddev	.0018724
%RSD	2.850325
#1	.0637139
#2	.0659261
#3	.0674368

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1671.922	21264.29	2381.973	1394.644	1806.580
Stddev	5.905	63.23	25.898	5.500	5.286
%RSD	.3532022	.2973454	1.087258	.3943990	.2926161
#1	1671.731	21194.25	2354.591	1389.005	1807.827
#2	1677.920	21317.16	2406.075	1399.995	1811.131
#3	1666.114	21281.47	2385.251	1394.932	1800.781

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-14DLX2 Acquired: 12/30/2024 21:58:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0989572	-.151520	2.083272	.3447981	.1457724	41.27661
Stddev	.0013153	.008851	.004644	.0183992	.0083482	1.39151
%RSD	1.329206	5.841683	.2229134	5.336226	5.726849	3.371177
#1	.0996554	-.152781	2.084761	.3638433	.1462542	41.96431
#2	.0974400	-.142105	2.078066	.3271213	.1371938	39.67515
#3	.0997762	-.159673	2.086988	.3434298	.1538693	42.19038

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6211474	.0111185	.0166347	408.0440	2.179901	.0778564
Stddev	.0230896	.0004327	.0004649	13.5430	.008681	.0010259
%RSD	3.717246	3.891878	2.794862	3.319004	.3982366	1.317691
#1	.6334021	.0111818	.0163096	414.6860	2.177794	.0787231
#2	.5945141	.0106576	.0171673	392.4622	2.189442	.0781225
#3	.6355260	.0115161	.0164273	416.9836	2.172468	.0767237

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1720125	704.6971	F 46.67829	73.52433	.5143280	-.025220
Stddev	.0056276	23.6323	1.56157	2.43938	.0006919	.002511
%RSD	3.271606	3.353544	3.345388	3.317790	.1345229	9.958395
#1	.1673068	716.4446	47.42436	74.63154	.5149510	-.023938
#2	.1704843	677.4930	44.88363	70.72771	.5144495	-.028113
#3	.1782463	720.1536	47.72689	75.21376	.5135834	-.023608

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.483725	.5846944	6.686058	4.125433	4.805451	F -1.55689
Stddev	.060162	.0164831	.015625	.357613	.016156	.04345
%RSD	4.054817	2.819102	.2336932	8.668495	.3362074	2.790566
#1	1.527128	.5852182	6.680695	4.093017	4.790522	-1.58103
#2	1.415049	.5679556	6.703658	3.785131	4.822604	-1.50673
#3	1.508998	.6009094	6.673821	4.498150	4.803227	-1.58291

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-14DLX2 Acquired: 12/30/2024 21:58:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0318705	4.395835	6.650357	.1043076	3.046175	.2379554
Stddev	.0001500	.012505	.216950	.0017369	.102032	.0085759
%RSD	.4706342	.2844799	3.262234	1.665147	3.349515	3.603986
#1	.0320437	4.384817	6.746970	.1032026	3.088250	.2414057
#2	.0317818	4.393260	6.401883	.1034106	2.929833	.2281917
#3	.0317861	4.409427	6.802218	.1063096	3.120441	.2442687

Elem	Li6707
Units	ppm
Avg	.0285478
Stddev	.0024739
%RSD	8.665985
#1	.0292964
#2	.0257861
#3	.0305610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.552	20407.64	2346.748	1333.894	1812.440
Stddev	4.548	113.14	69.268	8.653	4.571
%RSD	.2825361	.5544162	2.951677	.6487034	.2521874
#1	1607.109	20383.81	2307.020	1331.536	1808.137
#2	1606.748	20308.30	2426.732	1326.664	1811.945
#3	1614.799	20530.79	2306.494	1343.482	1817.238

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-15DLX2 Acquired: 12/30/2024 22:02:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0801370	-.099575	1.603064	.2095568	.0958661	54.18059
Stddev	.0024845	.006529	.002218	.0066471	.0056738	2.30199
%RSD	3.100301	6.556661	.1383385	3.171964	5.918500	4.248742
#1	.0787232	-.093030	1.604893	.2030497	.0896733	51.90536
#2	.0830058	-.099609	1.603702	.2092851	.1008144	54.12797
#3	.0786821	-.106088	1.600598	.2163355	.0971105	56.50844

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5141317	.0095931	.0119745	352.1083	1.965954	.0803627
Stddev	.0224418	.0000291	.0005512	15.4188	.008605	.0004715
%RSD	4.364986	.3027971	4.603531	4.378987	.4377222	.5866621
#1	.4923915	.0095619	.0126077	336.4600	1.974156	.0798557
#2	.5127889	.0096194	.0117143	352.5780	1.956996	.0804444
#3	.5372147	.0095980	.0116016	367.2869	1.966711	.0807879

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1768318	479.6143	28.39859	63.98487	.4506056	-.016000
Stddev	.0048138	19.9297	1.22858	2.56575	.0010449	.001633
%RSD	2.722252	4.155366	4.326194	4.009936	.2318809	10.20561
#1	.1721417	460.0272	27.19320	61.37336	.4496280	-.017885
#2	.1765934	478.9457	28.35346	64.07897	.4517067	-.015057
#3	.1817604	499.8699	29.64911	66.50227	.4504819	-.015057

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.543069	.4078499	4.776826	7.009490	3.633148	F -1.02071
Stddev	.049743	.0189953	.011219	.540103	.008780	.03805
%RSD	3.223668	4.657428	.2348727	7.705319	.2416736	3.728095
#1	1.488460	.3868974	4.788651	6.518217	3.642955	-.98147
#2	1.554952	.4127077	4.766331	6.922409	3.626017	-1.02321
#3	1.585794	.4239446	4.775497	7.587842	3.630473	-1.05745

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-15DLX2 Acquired: 12/30/2024 22:02:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0332107	3.654614	5.771964	.0751159	2.243606	.4070586
Stddev	.0006769	.007177	.210810	.0031025	.096890	.0202247
%RSD	2.038195	.1963695	3.652306	4.130228	4.318476	4.968509
#1	.0327977	3.650876	5.563411	.0754851	2.149027	.3850983
#2	.0328425	3.662888	5.767521	.0718453	2.239140	.4111577
#3	.0339919	3.650078	5.984960	.0780172	2.342652	.4249198

Elem	Li6707
Units	ppm
Avg	.0555015
Stddev	.0039650
%RSD	7.143906
#1	.0521489
#2	.0544776
#3	.0598780

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1645.795	20827.53	2419.693	1362.461	1812.400
Stddev	2.677	71.44	85.629	1.653	4.601
%RSD	.1626630	.3429894	3.538828	.1213058	.2538389
#1	1642.707	20797.19	2509.065	1364.212	1807.424
#2	1647.218	20909.13	2411.636	1362.243	1813.277
#3	1647.461	20776.27	2338.377	1360.928	1816.498

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-16DLX2 Acquired: 12/30/2024 22:06:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0746995	-.080025	1.935774	.1894079	.0788561	67.49574	.6709631
Stddev	.0044319	.006231	.008160	.0098367	.0058930	.50452	.0048464
%RSD	5.932992	7.786646	.4215206	5.193371	7.473063	.7474829	.7223006
#1	.0794210	-.082599	1.936148	.1856837	.0720753	67.30788	.6722380
#2	.0706292	-.072919	1.927434	.1819771	.0817545	67.11211	.6656067
#3	.0740481	-.084557	1.943741	.2005628	.0827386	68.06724	.6750446

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136216	.0114788	436.5258	1.478713	.0812625	.1828757	425.0692
Stddev	.0003201	.0002047	4.1576	.006333	.0002025	.0104183	3.7157
%RSD	2.349794	1.783379	.9524384	.4282775	.2492096	5.696910	.8741347
#1	.0139848	.0116108	436.0992	1.479425	.0814836	.1708998	424.8221
#2	.0133809	.0115825	432.5980	1.472054	.0810860	.1898500	421.4833
#3	.0134989	.0112430	440.8804	1.484660	.0812179	.1878774	428.9023

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.70454	106.8619	.5582515	-.011926	1.587650	.2878696	4.039165
Stddev	.18947	.8244	.0002757	.000629	.031475	.0067241	.039679
%RSD	.8729313	.7714336	.0493920	5.276151	1.982464	2.335830	.9823608
#1	21.69457	106.9869	.5585084	-.012054	1.622481	.2830425	4.081775
#2	21.52026	105.9821	.5582860	-.012481	1.561249	.2850165	4.003274
#3	21.89880	107.6165	.5579602	-.011242	1.579219	.2955499	4.032446

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.419586	3.168529	-.806927	.0448185	5.022106	6.557522	.0691507
Stddev	.117263	.004791	.004641	.0010207	.013149	.062082	.0019901
%RSD	1.826642	.1512006	.5751518	2.277474	.2618164	.9467333	2.877964
#1	6.335260	3.163631	-.811908	.0436399	5.032705	6.598127	.0711096
#2	6.553496	3.173205	-.802724	.0454156	5.007392	6.486057	.0692119
#3	6.370003	3.168752	-.806149	.0454001	5.026220	6.588382	.0671307

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-16DLX2 Acquired: 12/30/2024 22:06:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.579061	.5568599	.0673977
Stddev	.019972	.0063046	.0064160
%RSD	1.264827	1.132167	9.519658
#1	1.580248	.5550162	.0601081
#2	1.558521	.5516827	.0698975
#3	1.598413	.5638808	.0721877

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1720.003	21763.29	2455.877	1425.373	1793.207
Stddev	4.664	30.64	18.488	10.306	4.615
%RSD	.2711503	.1407721	.7528002	.7230574	.2573707
#1	1716.794	21754.17	2442.709	1413.939	1789.387
#2	1725.353	21797.46	2477.013	1433.948	1798.335
#3	1717.862	21738.26	2447.908	1428.232	1791.899

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-17DLX2 Acquired: 12/30/2024 22:09:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0691773	-.074282	1.849179	.1780454	.0755592	64.74697	.6429524
Stddev	.0036140	.004032	.008324	.0055563	.0034827	.15768	.0031946
%RSD	5.224282	5.427813	.4501473	3.120715	4.609218	.2435401	.4968605
#1	.0732973	-.070780	1.849403	.1731107	.0740210	64.67970	.6425664
#2	.0665428	-.073375	1.840746	.1840637	.0731105	64.63407	.6399684
#3	.0676917	-.078690	1.857390	.1769619	.0795462	64.92713	.6463225

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0129308	.0110097	416.7298	1.415950	.0785036	.1751125	406.6037
Stddev	.0000306	.0002434	1.0992	.000508	.0008385	.0030579	.9172
%RSD	.2366873	2.210886	.2637655	.0358935	1.068168	1.746220	.2255805
#1	.0129488	.0107820	416.6080	1.416104	.0787127	.1775510	406.0783
#2	.0128955	.0109810	415.6966	1.415382	.0775804	.1716817	406.0701
#3	.0129483	.0112662	417.8848	1.416363	.0792179	.1761047	407.6628

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.75424	102.5534	.5336907	-.013078	1.531801	.2717231	3.849011
Stddev	.03902	.0990	.0006804	.000662	.015975	.0147005	.009778
%RSD	.1880094	.0965464	.1274914	5.063232	1.042888	5.410087	.2540301
#1	20.71515	102.4835	.5343598	-.013842	1.549800	.2645106	3.859446
#2	20.75438	102.5101	.5329995	-.012694	1.526300	.2886368	3.847525
#3	20.79319	102.6667	.5337127	-.012697	1.519304	.2620219	3.840061

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.119095	3.021365	-.756311	.0430125	4.791702	6.336279	.0669855
Stddev	.097577	.005070	.016263	.0005786	.005771	.067869	.0020441
%RSD	1.594624	.1678160	2.150368	1.345161	.1204326	1.071123	3.051519
#1	6.131847	3.015684	-.773382	.0436788	4.791492	6.411058	.0687517
#2	6.209669	3.022977	-.754554	.0427216	4.797575	6.278583	.0674582
#3	6.015770	3.025433	-.740998	.0426371	4.786040	6.319196	.0647464

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-17DLX2 Acquired: 12/30/2024 22:09:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.512349	.5271318	.0611702
Stddev	.012290	.0028688	.0034037
%RSD	.8126625	.5442280	5.564289
#1	1.503457	.5259525	.0591617
#2	1.507216	.5250407	.0592488
#3	1.526373	.5304024	.0651001

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1759.234	22238.06	2526.269	1459.718	1839.899
Stddev	1.214	46.49	18.688	.813	4.111
%RSD	.0689971	.2090346	.7397357	.0556749	.2234399
#1	1759.814	22290.19	2506.128	1458.908	1844.517
#2	1757.839	22223.04	2543.046	1459.712	1836.638
#3	1760.050	22200.93	2529.633	1460.533	1838.540

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-16LDLX10 Acquired: 12/30/2024 22:13:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063505	-.001416	.4055015	.0086659	.0088358	14.87211	.1482259
Stddev	.0050919	.004340	.0016988	.0052616	.0013874	.05134	.0015253
%RSD	80.18108	306.5469	.4189249	60.71637	15.70206	.3451818	1.029036
#1	.0108501	.001009	.4035411	.0129005	.0077195	14.82816	.1467043
#2	.0073784	-.006427	.4065408	.0103217	.0103891	14.85963	.1482184
#3	.0008231	.001170	.4064225	.0027756	.0083988	14.92853	.1497549

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032009	.0022573	95.69223	.3295771	.0348715	.0448146	94.12142
Stddev	.0000947	.0000807	.32734	.0014445	.0003165	.0093729	.50505
%RSD	2.960180	3.574531	.3420707	.4382761	.9075355	20.91485	.5365992
#1	.0033010	.0023403	95.55935	.3284875	.0352122	.0408719	93.54063
#2	.0031126	.0022524	95.45224	.3290282	.0348155	.0380571	94.45761
#3	.0031892	.0021791	96.06512	.3312155	.0345867	.0555148	94.36601

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.811781	23.61650	.1130093	-.001861	.3168605	.0709366	.8802200
Stddev	.015202	.19783	.0007317	.000761	.0071779	.0050663	.0047356
%RSD	.3159355	.8376826	.6474917	40.91669	2.265303	7.141976	.5380023
#1	4.794344	23.40371	.1136508	-.002736	.3170012	.0678117	.8850102
#2	4.818747	23.65091	.1131646	-.001495	.3239670	.0767820	.8755410
#3	4.822252	23.79486	.1122123	-.001351	.3096134	.0682161	.8801088

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.196017	.6275737	-.183450	.0110185	1.004855	1.886039	.0147048
Stddev	.090951	.0013933	.005072	.0001040	.011439	.034234	.0012580
%RSD	7.604517	.2220174	2.765005	.9439813	1.138333	1.815102	8.555018
#1	1.243067	.6291551	-.177881	.0109201	1.012169	1.908817	.0135450
#2	1.091179	.6265264	-.187807	.0110080	.991673	1.846671	.0160421
#3	1.253806	.6270396	-.184661	.0111273	1.010723	1.902629	.0145273

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-16LDLX10 Acquired: 12/30/2024 22:13:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3605445	.1182684	.0006471
Stddev	.0026214	.0011608	.0056823
%RSD	.7270533	.9814960	878.1404
#1	.3589726	.1193886	-.005530
#2	.3635706	.1170709	.001820
#3	.3590902	.1183457	.005651

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1682.148	21151.66	2329.112	1402.638	1909.937
Stddev	.835	53.08	7.060	2.015	.453
%RSD	.0496655	.2509602	.3031271	.1436505	.0237342
#1	1682.259	21187.03	2325.706	1401.903	1910.364
#2	1682.922	21090.62	2337.230	1404.917	1909.987
#3	1681.263	21177.34	2324.402	1401.094	1909.461

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-18DLX2 Acquired: 12/30/2024 22:17:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1149824	-.032801	1.918163	.2640540	.1671053	68.16601	2.556126
Stddev	.0030393	.003694	.006597	.0142767	.0004853	.15269	.005121
%RSD	2.643261	11.26099	.3439123	5.406730	.2903935	.2239950	.2003495
#1	.1152157	-.034953	1.925476	.2492051	.1673325	68.23568	2.557786
#2	.1178982	-.034915	1.912661	.2652771	.1674352	67.99091	2.550380
#3	.1118331	-.028536	1.916353	.2776797	.1665481	68.27144	2.560211

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0610758	.0610425	427.9620	1.648656	.5736895	.4021199	418.5131
Stddev	.0007270	.0001692	1.3407	.004715	.0009254	.0046638	.4019
%RSD	1.190314	.2772085	.3132761	.2860184	.1613125	1.159803	.0960357
#1	.0615498	.0610813	426.9513	1.653554	.5740845	.3991366	418.7561
#2	.0602388	.0608573	427.4518	1.648269	.5726321	.4074943	418.0492
#3	.0614388	.0611889	429.4829	1.644147	.5743519	.3997287	418.7340

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.82415	104.9287	1.053552	.0250554	1.579294	.7759416	4.395766
Stddev	.00744	.2181	.000399	.0011704	.018908	.0074017	.011121
%RSD	.0341115	.2078200	.0378379	4.671069	1.197256	.9538993	.2529960
#1	21.83000	105.1297	1.053696	.0257395	1.585380	.7843493	4.408437
#2	21.81577	104.9596	1.053102	.0237040	1.558093	.7704082	4.387626
#3	21.82668	104.6969	1.053860	.0257227	1.594411	.7730673	4.391235

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.243177	3.095040	-.789260	.0437371	4.938149	6.386249	.0673428
Stddev	.068434	.002880	.007057	.0007240	.005305	.067379	.0011539
%RSD	1.096133	.0930623	.8940985	1.655371	.1074291	1.055071	1.713452
#1	6.166467	3.098290	-.796235	.0432393	4.938714	6.427427	.0685116
#2	6.297957	3.094028	-.782124	.0445676	4.932584	6.308491	.0662045
#3	6.265109	3.092802	-.789422	.0434043	4.943149	6.422829	.0673122

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-18DLX2 Acquired: 12/30/2024 22:17:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W2S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.550473	.5388811	.0596091
Stddev	.008114	.0056888	.0021353
%RSD	.5233248	1.055676	3.582192
#1	1.546688	.5334355	.0572015
#2	1.544943	.5384224	.0603523
#3	1.559788	.5447854	.0612735

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1726.463	21771.41	2464.899	1428.424	1801.288
Stddev	6.819	168.39	18.934	10.737	5.609
%RSD	.3949776	.7734632	.7681321	.7516728	.3113747
#1	1733.674	21713.37	2443.074	1422.771	1807.012
#2	1725.598	21639.71	2476.930	1421.694	1801.051
#3	1720.119	21961.15	2474.692	1440.807	1795.802

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-21DLX2 Acquired: 12/30/2024 22:21:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2488316	-.204089	3.785960	.4100899	.1980894	28.26455
Stddev	.0058147	.003140	.008036	.0041487	.0024224	.08670
%RSD	2.336807	1.538512	.2122598	1.011667	1.222868	.3067310
#1	.2441183	-.200537	3.792479	.4066164	.1960297	28.16918
#2	.2553295	-.206495	3.776981	.4089694	.1974802	28.28587
#3	.2470472	-.205235	3.788420	.4146838	.2007582	28.33859

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.659667	.0146116	.0187958	226.5920	1.956574	.0921555
Stddev	.005577	.0001949	.0002833	.8276	.004104	.0002133
%RSD	.3360579	1.333846	1.507364	.3652279	.2097715	.2314467
#1	1.653261	.0144017	.0188657	225.6764	1.960456	.0919100
#2	1.662298	.0147869	.0184841	226.8127	1.952279	.0922954
#3	1.663442	.0146462	.0190377	227.2868	1.956988	.0922612

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.666525	F 844.2688	19.30875	37.38711	1.093237	-.026725
Stddev	.024674	2.2920	.07262	.26930	.001967	.000743
%RSD	.3218415	.2714811	.3761077	.7203023	.1799670	2.781738
#1	7.649242	841.7105	19.23700	37.26100	1.092037	-.025867
#2	7.655552	844.9611	19.30704	37.20401	1.092166	-.027171
#3	7.694783	846.1350	19.38221	37.69632	1.095508	-.027138

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.231585	.1615026	10.23224	2.891987	3.082436	F -1.92654
Stddev	.013944	.0087981	.07120	.162470	.005806	.02496
%RSD	1.132172	5.447686	.6958564	5.617921	.1883587	1.295686
#1	1.245005	.1574521	10.17653	2.761564	3.086567	-1.91008
#2	1.217171	.1715964	10.31246	2.840413	3.075797	-1.95526
#3	1.232579	.1554592	10.20773	3.073983	3.084943	-1.91428

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-21DLX2 Acquired: 12/30/2024 22:21:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2064900	10.44184	5.589936	.2658563	.9946852	-.238619
Stddev	.0004501	.02780	.038947	.0034648	.0057434	.000530
%RSD	.2179586	.2662310	.6967257	1.303264	.5774074	.2223187
#1	.2059840	10.47212	5.564720	.2646431	.9881209	-.238020
#2	.2066404	10.41747	5.634792	.2631613	.9971498	-.239031
#3	.2068456	10.43594	5.570296	.2697646	.9987850	-.238804

Elem	Li6707
Units	ppm
Avg	.0175640
Stddev	.0011801
%RSD	6.718565
#1	.0186844
#2	.0176754
#3	.0163322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1657.032	21061.02	2368.928	1370.875	1905.059
Stddev	2.182	75.73	11.837	6.214	3.753
%RSD	.1316665	.3595733	.4996885	.4533057	.1969993
#1	1659.524	20976.17	2366.661	1371.250	1907.078
#2	1655.465	21121.78	2358.388	1364.481	1907.371
#3	1656.108	21085.10	2381.735	1376.893	1900.729

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-22DLX2 Acquired: 12/30/2024 22:25:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1772947	-.142069	2.477688	.2862318	.1356625	34.41898
Stddev	.0032452	.001283	.006171	.0057776	.0012650	.14162
%RSD	1.830403	.9027435	.2490607	2.018496	.9324578	.4114543
#1	.1758870	-.140738	2.471598	.2857867	.1343629	34.25632
#2	.1810061	-.143296	2.477530	.2806897	.1357348	34.48573
#3	.1749910	-.142172	2.483937	.2922191	.1368897	34.51489

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.749840	.0117589	.0120631	209.0280	1.405157	.0993235
Stddev	.007724	.0000733	.0001020	.6232	.001360	.0004128
%RSD	.4414067	.6229370	.8457377	.2981404	.0967914	.4155865
#1	1.741721	.0116964	.0120311	208.3316	1.406117	.0997919
#2	1.750700	.0117408	.0121773	209.2190	1.405752	.0991655
#3	1.757097	.0118395	.0119809	209.5333	1.403600	.0990130

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.847771	616.6116	14.20486	40.62340	.8360721	-.022259
Stddev	.021852	2.8771	.07819	.17497	.0017556	.000855
%RSD	.5679133	.4665945	.5504520	.4307070	.2099863	3.839808
#1	3.830115	613.3556	14.12538	40.42292	.8345864	-.022351
#2	3.840988	617.6684	14.20751	40.74533	.8356206	-.023064
#3	3.872211	618.8109	14.28169	40.70194	.8380094	-.021362

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9056905	.1660597	6.414393	4.052277	3.460842	F -1.43012
Stddev	.0204117	.0078056	.023382	.034182	.010782	.01091
%RSD	2.253719	4.700468	.3645311	.8435200	.3115405	.7629201
#1	.9243088	.1683099	6.426717	4.024674	3.451458	-1.43837
#2	.9088978	.1573762	6.429035	4.090511	3.458448	-1.43424
#3	.8838651	.1724930	6.387426	4.041645	3.472620	-1.41775

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5156-22DLX2 Acquired: 12/30/2024 22:25:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28W6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1462749	9.887408	6.041185	.1594482	.8825770	.0951648
Stddev	.0009214	.037216	.014446	.0018344	.0047931	.0017385
%RSD	.6299022	.3763948	.2391277	1.150445	.5430756	1.826855
#1	.1473387	9.875680	6.032678	.1587363	.8798489	.0971661
#2	.1457358	9.857469	6.057865	.1615318	.8797707	.0940276
#3	.1457500	9.929075	6.033011	.1580766	.8881113	.0943007

Elem	Li6707
Units	ppm
Avg	.0235481
Stddev	.0026331
%RSD	11.18185
#1	.0253584
#2	.0205274
#3	.0247584

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1680.873	21370.58	2392.006	1398.278	1886.520
Stddev	2.085	50.15	4.927	6.105	2.867
%RSD	.1240347	.2346881	.2059797	.4366192	.1519846
#1	1682.790	21331.52	2391.284	1393.637	1889.824
#2	1678.653	21353.08	2387.479	1396.004	1885.060
#3	1681.177	21427.14	2397.254	1405.194	1884.678

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/30/2024 22:28:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001362	-.003624	-.002616	-.000886	-.001396	.0058362
Stddev	.004300	.003767	.000686	.004463	.003031	.0114976
%RSD	315.6879	103.9432	26.20407	503.8674	217.1385	197.0060
#1	-.001670	-.000671	-.003361	.001037	.001484	.0172301
#2	-.005500	-.007866	-.002475	.002293	-.004558	.0060407
#3	.003084	-.002335	-.002012	-.005987	-.001114	-.005762

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020385	.0002357	.0000258	.0029858	.0001356	-.000374
Stddev	.0022510	.0000816	.0000666	.0557031	.0003757	.000443
%RSD	110.4215	34.61925	258.6403	1865.622	277.0920	118.4038
#1	-.000096	.0002372	.0000605	.0591049	.0001724	-.000884
#2	.001821	.0001534	-.000051	.0021441	.0004916	-.000154
#3	.004390	.0003165	.000068	-.052292	-.000257	-.000084

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0109430	.0158310	.0019908	.0011576	-.000461	.0003400
Stddev	.0051393	.0122344	.0009555	.0903984	.000219	.0007250
%RSD	46.96393	77.28151	47.99710	7809.354	47.43172	213.2119
#1	.0105327	.0163468	.0010011	.0452284	-.000493	.0010684
#2	.0060212	.0277993	.0029081	.0610684	-.000228	-.000381
#3	.0162751	.0033468	.0020632	-.102824	-.000663	.000333

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.039332	-.003878	.0029053	-.417289	-.003336	-.004569
Stddev	.017951	.005247	.0007346	.082128	.002016	.002724
%RSD	45.64014	135.2970	25.28639	19.68141	60.44964	59.62588
#1	-.044899	-.003302	.0028588	-.353194	-.003709	-.006981
#2	-.019257	-.009389	.0036620	-.509867	-.001159	-.001614
#3	-.053840	.001057	.0021949	-.388805	-.005140	-.005113

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165326BL Acquired: 12/30/2024 22:28:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000654	.0013822	.0005515	-.002579	-.004720	-.000231
Stddev	.0002026	.0022555	.0006624	.000593	.004025	.000096
%RSD	309.7062	163.1755	120.1104	22.99832	85.28335	41.73264
#1	-.000012	.0012962	.0011809	-.003095	-.000173	-.000161
#2	.000295	-.000829	-.000140	-.002711	-.006157	-.000341
#3	-.000087	.003680	.000613	-.001931	-.007828	-.000191

Elem	Li6707
Units	ppm
Avg	F -.022341
Stddev	.002972
%RSD	13.30348
#1	-.021106
#2	-.020186
#3	-.025732

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1654.712	20699.24	2253.207	1372.540	1948.299
Stddev	4.354	78.42	45.769	8.616	2.763
%RSD	.2631058	.3788339	2.031280	.6277429	.1418399
#1	1652.216	20750.17	2217.173	1374.303	1945.580
#2	1659.739	20608.94	2304.705	1363.178	1951.105
#3	1652.180	20738.60	2237.743	1380.138	1948.214

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165326BS Acquired: 12/30/2024 22:32:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0197018	.0503997	.0185482	.0600995	.1096520	.4105000
Stddev	.0018605	.0017362	.0040789	.0065169	.0029795	.0058362
%RSD	9.443475	3.444869	21.99078	10.84347	2.717243	1.421729
#1	.0213597	.0521485	.0148275	.0668098	.1124404	.4038626
#2	.0176896	.0486763	.0179075	.0537950	.1100031	.4148287
#3	.0200561	.0503744	.0229095	.0596937	.1065125	.4128086

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4090659	.0106733	.0099401	10.34428	.0214047	.1016843
Stddev	.0018470	.0002431	.0000244	.09343	.0002199	.0003688
%RSD	.4515155	2.277420	.2451098	.9031573	1.027479	.3626558
#1	.4111985	.0109053	.0099311	10.40394	.0212822	.1015167
#2	.4080151	.0104205	.0099677	10.39230	.0216586	.1021071
#3	.4079840	.0106942	.0099215	10.23661	.0212733	.1014290

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0584732	.2272363	.0320006	10.57722	.0787463	.0195321
Stddev	.0095398	.0441638	.0000239	.09815	.0007743	.0008130
%RSD	16.31481	19.43518	.0746805	.9279578	.9833283	4.162526
#1	.0543245	.2652089	.0320027	10.67285	.0781338	.0200047
#2	.0517102	.2377289	.0320233	10.58208	.0796167	.0185933
#3	.0693849	.1787712	.0319757	10.47673	.0784884	.0199983

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.349000	.1054393	.1208793	9.414014	.0172038	F -.005717
Stddev	.087998	.0096133	.0003216	.163348	.0020280	.001419
%RSD	1.197410	9.117339	.2660604	1.735156	11.78835	24.81160
#1	7.444716	.1123293	.1205249	9.596910	.0167607	-.007027
#2	7.271605	.1095315	.1209605	9.362495	.0194167	-.004210
#3	7.330679	.0944570	.1211525	9.282637	.0154339	-.005915

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165326BS Acquired: 12/30/2024 22:32:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS326 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196597	.1843814	F .5037240	.0124246	.1978090	.2098771
Stddev	.0007285	.0037522	.0055492	.0012422	.0030285	.0013407
%RSD	3.705592	2.035038	1.101640	9.997677	1.531016	.6387958
#1	.0201213	.1882336	.5099466	.0120599	.1950485	.2113948
#2	.0188199	.1841726	.4992886	.0138083	.2010484	.2088539
#3	.0200380	.1807379	.5019367	.0114056	.1973300	.2093826

Elem	Li6707
Units	ppm
Avg	F .0071362
Stddev	.0017022
%RSD	23.85336
#1	.0054099
#2	.0088132
#3	.0071854

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1694.332	21251.32	2299.802	1419.981	1994.526
Stddev	2.533	81.86	25.323	3.383	1.158
%RSD	.1495166	.3851826	1.101116	.2382212	.0580387
#1	1692.211	21299.60	2271.132	1422.253	1995.230
#2	1697.137	21156.80	2309.152	1416.094	1995.158
#3	1693.648	21297.54	2319.120	1421.598	1993.190

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-10A Acquired: 12/30/2024 22:36:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1866791	.0264389	5.216219	.1217514	-.079311	74.62675
Stddev	.0082640	.0050524	.008408	.0019343	.005297	.36386
%RSD	4.426845	19.10971	.1611929	1.588735	6.678152	.4875730
#1	.1925779	.0309633	5.212396	.1236403	-.075109	74.47334
#2	.1772338	.0209870	5.225859	.1197747	-.077564	75.04219
#3	.1902257	.0273664	5.210401	.1218393	-.085261	74.36472

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.805254	.0073835	.0118945	174.8019	.1608553	.1167191
Stddev	.015712	.0001260	.0001001	.8473	.0002834	.0002164
%RSD	.5600760	1.706433	.8419606	.4847224	.1762020	.1853916
#1	2.801478	.0073585	.0119555	174.5499	.1607241	.1169404
#2	2.822510	.0072719	.0117789	175.7466	.1611806	.1167090
#3	2.791775	.0075202	.0119491	174.1091	.1606613	.1165080

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5773142	172.7262	8.124901	62.99952	.1814349	-.000359
Stddev	.0010451	1.2032	.037333	.43168	.0009515	.000166
%RSD	.1810299	.6965968	.4594839	.6852162	.5244078	46.29330
#1	.5784754	172.1644	8.106252	62.94859	.1804499	-.000194
#2	.5770185	174.1076	8.167883	63.45441	.1815060	-.000526
#3	.5764489	171.9067	8.100567	62.59557	.1823488	-.000357

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8965970	.2174821	2.880263	7.468761	F 13.65410	-.361341
Stddev	.0185992	.0117547	.012697	.086218	.01899	.004200
%RSD	2.074425	5.404916	.4408411	1.154383	.1390866	1.162446
#1	.8929476	.2135928	2.872508	7.434211	13.64545	-.365457
#2	.9167505	.2306885	2.873365	7.405177	13.67587	-.361503
#3	.8800930	.2081649	2.894916	7.566896	13.64096	-.357061

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5027-10A Acquired: 12/30/2024 22:36:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK22A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075655	3.206377	9.454857	F 10.54572	1.279501	.1256911
Stddev	.0003084	.003521	.070233	.01715	.011997	.0003368
%RSD	4.076599	.1098067	.7428222	.1626537	.9376296	.2679385
#1	.0074803	3.206578	9.493723	10.52921	1.273811	.1259980
#2	.0073087	3.209793	9.497065	10.56345	1.293284	.1253308
#3	.0079076	3.202760	9.373782	10.54451	1.271406	.1257443

Elem	Li6707
Units	ppm
Avg	.1090156
Stddev	.0031006
%RSD	2.844216
#1	.1084309
#2	.1062490
#3	.1123670

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1979.200	24805.50	2758.975	1634.550	1836.302
Stddev	8.565	50.07	21.479	1.428	8.155
%RSD	.4327573	.2018566	.7785120	.0873727	.4440850
#1	1973.430	24775.65	2745.897	1632.903	1834.765
#2	1975.128	24777.53	2747.264	1635.450	1829.024
#3	1989.041	24863.31	2783.764	1635.296	1845.115

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-04A Acquired: 12/30/2024 22:40:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8102030	.0092744	5.131152	.1008665	.0428315	90.53762	1.296467
Stddev	.0036451	.0026681	.014628	.0019599	.0028697	.04832	.002697
%RSD	.4498963	28.76864	.2850915	1.943045	6.699908	.0533669	.2079923
#1	.8115674	.0062019	5.140935	.1012092	.0403769	90.53550	1.293353
#2	.8129691	.0106146	5.114335	.1026325	.0421311	90.58697	1.298039
#3	.8060726	.0110068	5.138186	.0987579	.0459866	90.49040	1.298008

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088750	.0119970	88.10440	.1395805	.1622330	.5299936	225.2793
Stddev	.0000753	.0001419	.02297	.0003383	.0004675	.0038686	.1396
%RSD	.8489372	1.182374	.0260670	.2423431	.2881432	.7299400	.0619833
#1	.0087891	.0121177	88.07881	.1399583	.1625875	.5337402	225.4308
#2	.0089064	.0118407	88.11119	.1394775	.1617032	.5260135	225.1558
#3	.0089296	.0120325	88.12321	.1393058	.1624084	.5302271	225.2512

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.05148	33.43719	.2755356	-.004214	.4595282	.2280493	1.327120
Stddev	.01012	.21716	.0016416	.000591	.0336477	.0072126	.004563
%RSD	.0593260	.6494439	.5957874	14.03370	7.322236	3.162753	.3438406
#1	17.04787	33.52255	.2759970	-.004306	.4758196	.2197212	1.327301
#2	17.06290	33.59869	.2737127	-.004755	.4819294	.2322809	1.322469
#3	17.04366	33.19032	.2768972	-.003583	.4208356	.2321456	1.331590

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.394391	8.829562	-.495377	.0091072	3.362036	12.65022	.0958894
Stddev	.101513	.028736	.006246	.0000728	.002575	.03975	.0014024
%RSD	1.080570	.3254512	1.260953	.7991735	.0765986	.3142384	1.462524
#1	9.455183	8.856103	-.500802	.0090684	3.359094	12.66544	.0974754
#2	9.450789	8.799045	-.488548	.0091912	3.363130	12.60511	.0953794
#3	9.277201	8.833537	-.496782	.0090621	3.363883	12.68011	.0948133

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5030-04A Acquired: 12/30/2024 22:40:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK44A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8834891	-.022660	.0692534
Stddev	.0019197	.000357	.0010948
%RSD	.2172893	1.575649	1.580897
#1	.8812803	-.022826	.0700352
#2	.8844315	-.022903	.0680021
#3	.8847555	-.022250	.0697228

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2161.800	27121.87	2981.559	1797.822	1932.466
Stddev	5.849	143.50	2.015	5.349	6.693
%RSD	.2705560	.5290928	.0675927	.2975056	.3463529
#1	2162.596	27026.01	2979.761	1794.498	1929.682
#2	2167.209	27052.76	2983.737	1794.976	1940.102
#3	2155.593	27286.85	2981.179	1803.992	1927.614

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV051 Acquired: 12/30/2024 22:44:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV051 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.963584	4.808250	24.59269	4.877112	4.884009	403.3365
Stddev	.002968	.023034	.00928	.005381	.007553	3.1826
%RSD	.0597928	.4790453	.0377464	.1103286	.1546495	.7890643
#1	4.966914	4.825019	24.58204	4.871960	4.889856	399.7329
#2	4.961218	4.781987	24.59910	4.876681	4.875481	405.7620
#3	4.962619	4.817744	24.59693	4.882695	4.886690	404.5148

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.05596	.5035767	2.480096	408.7467	15.53174	2.470711
Stddev	.07387	.0084528	.001852	3.0474	.05621	.002399
%RSD	.7345445	1.678556	.0746610	.7455440	.3619110	.0971138
#1	9.97070	.4950859	2.480002	405.5172	15.49013	2.470243
#2	10.10086	.5119910	2.478293	411.5716	15.59569	2.468580
#3	10.09630	.5036533	2.481993	409.1514	15.50941	2.473310

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.02644	407.1909	15.00125	403.0701	2.502149	1.265768
Stddev	.14276	3.2687	.09726	3.4494	.001249	.005266
%RSD	.9500539	.8027476	.6483693	.8557763	.0499269	.4160299
#1	14.87406	403.5523	14.89015	399.0910	2.503535	1.260411
#2	15.15709	409.8791	15.07105	405.2119	2.501110	1.270938
#3	15.04819	408.1413	15.04254	404.9075	2.501802	1.265956

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	411.0752	2.466909	14.88631	152.5305	4.862851	F 4.309786
Stddev	7.3458	.006883	.08123	1.5327	.021167	.057171
%RSD	1.786968	.2790025	.5456741	1.004877	.4352796	1.326530
#1	402.8191	2.467721	14.81473	150.7616	4.877017	4.248537
#2	416.8881	2.459656	14.97459	153.3663	4.838518	4.361739
#3	413.5183	2.473349	14.86960	153.4638	4.873016	4.319082

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV051 Acquired: 12/30/2024 22:44:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV051 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.787030	4.958011	4.945617	5.006629	5.022815	4.773429
Stddev	.010836	.015097	.069964	.002613	.052163	.033468
%RSD	.2263549	.3045031	1.414674	.0521976	1.038527	.7011369
#1	4.790969	4.942260	4.876130	5.005311	4.963270	4.738885
#2	4.774775	4.959416	5.016049	5.004937	5.044726	4.805706
#3	4.795345	4.972356	4.944672	5.009639	5.060449	4.775697

Elem	Li6707
Units	ppm
Avg	5.070041
Stddev	.041486
%RSD	.8182532
#1	5.022163
#2	5.092640
#3	5.095321

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1439.603	18742.58	2191.641	1182.392	1614.944
Stddev	1.150	12.08	24.030	3.177	1.044
%RSD	.0798821	.0644367	1.096451	.2686602	.0646521
#1	1438.292	18738.72	2216.395	1184.966	1616.024
#2	1440.442	18732.91	2168.407	1178.842	1613.940
#3	1440.076	18756.12	2190.121	1183.368	1614.868

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB051 Acquired: 12/30/2024 22:48:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB051 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003973	-.000394	.0046388	-.002349	.0008410	-.009922	.0007284
Stddev	.002704	.004002	.0020895	.001064	.0032919	.026807	.0009245
%RSD	68.05094	1016.797	45.04310	45.30905	391.4435	270.1816	126.9326
#1	-.000973	-.000842	.0070513	-.001656	-.001330	.020834	.0015438
#2	-.006221	-.004152	.0034023	-.001816	-.000776	-.028332	-.000276
#3	-.004726	.003814	.0034629	-.003574	.004629	-.022267	.000917

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001749	.0003514	.0298803	.0019599	.0000307	.0025495	.0256376
Stddev	.0001202	.0000865	.0209884	.0002013	.0002449	.0023815	.0365193
%RSD	68.71728	24.61819	70.24159	10.27130	798.1942	93.41177	142.4444
#1	.0002821	.0002551	.0223559	.0021888	.0003125	.0006588	.0022789
#2	.0000450	.0004226	.0535937	.0018807	-.000130	.0017655	.0069124
#3	.0001977	.0003764	.0136913	.0018102	-.000090	.0052241	.0677214

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029602	.0434325	.0000199	.0009122	.0485208	-.006243	.0041225
Stddev	.0002381	.0071387	.0005241	.0014349	.0129373	.017392	.0001602
%RSD	8.045034	16.43640	2630.520	157.2977	26.66339	278.5759	3.886250
#1	.0029795	.0511006	.0006172	.0006998	.0556685	.013082	.0041435
#2	.0031881	.0422178	-.000363	.0024416	.0335867	-.011174	.0042712
#3	.0027130	.0369790	-.000194	-.000405	.0563073	-.020638	.0039528

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.278086	.0009659	.0100678	.0010046	.0015440	-.000123	-.005124
Stddev	.050492	.0028759	.0010910	.0000849	.0026273	.000950	.000823
%RSD	18.15698	297.7364	10.83601	8.452874	170.1594	769.7124	16.06499
#1	-.238724	.0024212	.0099970	.0010965	-.001313	.000468	-.004176
#2	-.335015	.0028233	.0090140	.0009291	.003856	.000381	-.005652
#3	-.260518	-.002347	.0111925	.0009882	.002090	-.001219	-.005545

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB051 Acquired: 12/30/2024 22:48:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB051 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001272	.0000973	.0026521
Stddev	.003603	.0001484	.0036077
%RSD	283.2239	152.4256	136.0324
#1	-.005427	.0002372	.0006676
#2	.000991	.0001132	.0004723
#3	.000619	-.000058	.0068164

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1656.804	20835.85	2254.904	1383.696	1951.205
Stddev	2.226	129.97	19.214	8.415	3.158
%RSD	.1343437	.6237947	.8521071	.6081732	.1618314
#1	1658.329	20985.90	2246.427	1393.117	1949.068
#2	1654.249	20763.27	2276.899	1381.048	1949.714
#3	1657.832	20758.37	2241.387	1376.924	1954.832

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-08A Acquired: 12/30/2024 22:52:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1145851	.0345286	.9417897	.2121926	.0307689	78.52486
Stddev	.0018020	.0017730	.0043232	.0072268	.0018609	1.62643
%RSD	1.572664	5.134819	.4590459	3.405782	6.048106	2.071235
#1	.1165472	.0327917	.9410158	.2184008	.0326140	78.92634
#2	.1130041	.0344586	.9379057	.2042593	.0288926	76.73529
#3	.1142040	.0363356	.9464477	.2139177	.0308000	79.91297

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.621961	.0070903	.0085797	156.2889	.1290690	.1349298
Stddev	.032992	.0000938	.0000469	3.4327	.0006802	.0002586
%RSD	2.034103	1.322416	.5467543	2.196411	.5269955	.1916226
#1	1.630412	.0070589	.0086336	157.7005	.1286321	.1352247
#2	1.585564	.0070163	.0085487	152.3754	.1287221	.1347421
#3	1.649905	.0071957	.0085567	158.7907	.1298527	.1348225

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5839051	177.3312	19.58724	27.30375	.1878804	-.002332
Stddev	.0097615	3.8381	.42131	.64678	.0012153	.000494
%RSD	1.671763	2.164374	2.150916	2.368836	.6468691	21.16427
#1	.5843862	178.7292	19.73383	27.58286	.1864788	-.002640
#2	.5739119	172.9901	19.11222	26.56427	.1886408	-.001763
#3	.5934171	180.2745	19.91566	27.76410	.1885217	-.002594

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9346997	.1738376	.7063889	9.466611	F 16.84963	-.391292
Stddev	.0097001	.0105249	.0050709	.274872	.07689	.002322
%RSD	1.037779	6.054457	.7178583	2.903592	.4563471	.5933455
#1	.9252777	.1839234	.7005489	9.560384	16.77057	-.388649
#2	.9446558	.1629226	.7096754	9.157123	16.85416	-.392230
#3	.9341656	.1746669	.7089424	9.682325	16.92415	-.392999

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5032-08A Acquired: 12/30/2024 22:52:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK72A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136278	2.979705	16.62229	.0382691	.7116149	.1428710
Stddev	.0005444	.002595	.21811	.0014120	.0192848	.0027382
%RSD	3.994473	.0870939	1.312162	3.689684	2.710006	1.916566
#1	.0130210	2.980248	16.50296	.0384974	.7176092	.1437664
#2	.0140732	2.981986	16.48989	.0367569	.6900448	.1397972
#3	.0137892	2.976881	16.87403	.0395531	.7271908	.1450495

Elem	Li6707
Units	ppm
Avg	.1101955
Stddev	.0030902
%RSD	2.804298
#1	.1120352
#2	.1066278
#3	.1119235

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2109.101	26508.72	2952.711	1752.531	1926.290
Stddev	7.383	118.56	48.914	13.040	5.808
%RSD	.3500584	.4472635	1.656570	.7440521	.3015324
#1	2112.752	26522.68	2940.594	1759.280	1927.150
#2	2113.946	26619.69	3006.545	1760.813	1931.621
#3	2100.603	26383.80	2910.995	1737.500	1920.100

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5036-07A Acquired: 12/30/2024 22:56:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF8A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0434940	.0491197	.3235062	.0105260	.0044181	45.88741	.4607862
Stddev	.0020293	.0067286	.0019659	.0005158	.0006404	.30158	.0030044
%RSD	4.665713	13.69828	.6076730	4.900123	14.49412	.6572087	.6520216
#1	.0412114	.0425552	.3239647	.0106582	.0043055	45.55641	.4575219
#2	.0441765	.0488028	.3252023	.0109628	.0051073	46.14661	.4634356
#3	.0450940	.0560012	.3213516	.0099570	.0038415	45.95919	.4614011

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036766	.0025958	712.2502	.0627242	.0949667	.1448725	122.2449
Stddev	.0000952	.0000360	6.1906	.0008189	.0005039	.0052936	.9471
%RSD	2.589287	1.386510	.8691624	1.305569	.5305757	3.654006	.7747285
#1	.0037706	.0026285	705.2330	.0617859	.0947169	.1501911	121.2479
#2	.0035803	.0025572	716.9388	.0632945	.0955467	.1448223	123.1326
#3	.0036790	.0026018	714.5790	.0630923	.0946367	.1396041	122.3541

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.801371	134.2673	.1245501	-.004586	1.669680	.1040244	.3355332
Stddev	.057866	1.4645	.0008849	.000415	.027968	.0103921	.0011465
%RSD	.7417383	1.090724	.7104636	9.060223	1.675076	9.990045	.3417012
#1	7.738936	132.6347	.1255713	-.004179	1.657926	.1025043	.3352528
#2	7.853201	135.4653	.1240694	-.004569	1.649507	.0944761	.3367939
#3	7.811975	134.7018	.1240096	-.005010	1.701607	.1150928	.3345528

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.717409	8.329772	-.242444	.0052257	.9036405	13.52633	.0207946
Stddev	.085567	.012931	.003318	.0009875	.0014093	.17054	.0009145
%RSD	1.496609	.1552335	1.368696	18.89709	.1559543	1.260775	4.397970
#1	5.627575	8.331200	-.239540	.0057734	.9026795	13.33537	.0214378
#2	5.797951	8.341928	-.241730	.0058180	.9052583	13.58015	.0197477
#3	5.726701	8.316186	-.246060	.0040857	.9029838	13.66345	.0211984

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5036-07A Acquired: 12/30/2024 22:56:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKF8A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8039530	.6589251	.0552854
Stddev	.0233943	.0070963	.0003159
%RSD	2.909914	1.076953	.5713629
#1	.8252268	.6510092	.0555486
#2	.8077336	.6610495	.0549351
#3	.7788986	.6647165	.0553724

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1839.097	23178.53	2637.072	1529.231	1762.929
Stddev	2.070	22.93	32.539	4.948	3.287
%RSD	.1125737	.0989403	1.233925	.3235883	.1864245
#1	1840.111	23162.89	2674.617	1530.733	1764.671
#2	1840.465	23167.84	2617.045	1523.706	1764.977
#3	1836.715	23204.85	2619.553	1533.255	1759.138

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-02A Acquired: 12/30/2024 22:59:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK84A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1543709	.0066598	.9413094	.0869258	.0372005	103.3579	.8200794
Stddev	.0011593	.0016769	.0043630	.0059501	.0009470	1.3397	.0102396
%RSD	.7509678	25.17907	.4635043	6.845073	2.545690	1.296188	1.248610
#1	.1556520	.0082673	.9454807	.0830744	.0381980	102.0851	.8106026
#2	.1540665	.0067910	.9416704	.0937789	.0363137	104.7558	.8309409
#3	.1533942	.0049212	.9367771	.0839242	.0370897	103.2327	.8186947

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083779	.0059210	87.25196	.1695598	.1162508	.2002047	207.6734
Stddev	.0001183	.0001619	1.09527	.0006526	.0001627	.0067736	2.7465
%RSD	1.412122	2.733907	1.255296	.3848768	.1399760	3.383346	1.322504
#1	.0084520	.0061034	86.34370	.1689941	.1161201	.2066909	205.0295
#2	.0084403	.0058649	88.46827	.1702738	.1161991	.1931762	210.5121
#3	.0082415	.0057946	86.94391	.1694116	.1164331	.2007469	207.4786

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.116253	54.67442	.2000329	-.005343	.8762094	.2362648	1.155850
Stddev	.090083	.52160	.0009786	.000385	.0323777	.0087720	.000580
%RSD	1.265872	.9540189	.4892179	7.211977	3.695202	3.712768	.0501489
#1	7.035133	54.14333	.2005563	-.005781	.8519344	.2271756	1.155328
#2	7.213200	55.18599	.1989039	-.005190	.9129712	.2369380	1.156474
#3	7.100425	54.69393	.2006384	-.005057	.8637224	.2446807	1.155747

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.758301	7.961643	-.469577	.0062821	3.629703	14.60344	.0707350
Stddev	.094014	.002541	.003602	.0004728	.008364	.14385	.0015536
%RSD	.9634214	.0319218	.7671717	7.526460	.2304216	.9850429	2.196396
#1	9.650356	7.959869	-.470685	.0064017	3.631104	14.58179	.0724249
#2	9.822244	7.960506	-.472495	.0057610	3.620728	14.75688	.0704116
#3	9.802303	7.964554	-.465551	.0066836	3.637278	14.47163	.0693686

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5038-02A Acquired: 12/30/2024 22:59:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHK84A Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.490729	-.026345	.0950052
Stddev	.014851	.000942	.0032154
%RSD	.9962559	3.577336	3.384457
#1	1.476027	-.025329	.0920898
#2	1.505726	-.026515	.0984539
#3	1.490433	-.027191	.0944721

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1841.225	23075.71	2531.529	1531.332	1891.277
Stddev	1.894	94.50	27.216	11.874	1.775
%RSD	.1028886	.4095351	1.075071	.7754178	.0938529
#1	1839.860	23183.44	2548.392	1544.149	1889.473
#2	1840.426	23006.81	2500.132	1520.705	1891.336
#3	1843.388	23036.87	2546.064	1529.144	1893.022

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-04 Acquired: 12/30/2024 23:03:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3051849	-.001628	.0906563	-.011866	.0124853	1.040903
Stddev	.0037398	.007045	.0048185	.013519	.0046061	.013805
%RSD	1.225414	432.8320	5.315076	113.9352	36.89254	1.326204
#1	.3030150	.006313	.0917749	.003577	.0122979	1.027227
#2	.3030365	-.007129	.0948170	-.021566	.0171822	1.054832
#3	.3095032	-.004066	.0853769	-.017608	.0079757	1.040649

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7143380	.0016490	.0003718	97.36260	.0008209	.0429435
Stddev	.0096016	.0000520	.0000679	1.08837	.0003061	.0003044
%RSD	1.344124	3.152502	18.25644	1.117854	37.28880	.7089205
#1	.7194314	.0015905	.0003305	97.91791	.0004676	.0432570
#2	.7203197	.0016898	.0003347	98.06130	.0010059	.0429242
#3	.7032629	.0016668	.0004501	96.10859	.0009892	.0426491

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0271887	80.69950	.4930596	86.85565	.0326272	-.002454
Stddev	.0032882	1.22005	.0053382	1.23945	.0012120	.000883
%RSD	12.09412	1.511843	1.082666	1.427022	3.714647	35.97363
#1	.0308959	81.18104	.4921560	87.26546	.0340263	-.001784
#2	.0260457	81.60530	.4987919	87.83830	.0319550	-.002123
#3	.0246245	79.31217	.4882308	85.46319	.0319002	-.003454

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1811.146	.0080795	1.755528	46.48429	6.392005	1.988629
Stddev	23.981	.0045284	.004307	.55418	.054872	.017764
%RSD	1.324062	56.04839	.2453601	1.192188	.8584493	.8932585
#1	1835.712	.0048671	1.760452	46.74060	6.442027	1.996994
#2	1809.929	.0061126	1.752459	46.86392	6.400673	2.000666
#3	1787.797	.0132588	1.753673	45.84835	6.333315	1.968227

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-04 Acquired: 12/30/2024 23:03:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036305	53.50766	6.142511	.0075557	.0122813	1.043683
Stddev	.0004073	.47467	.049471	.0010624	.0011348	.010220
%RSD	11.21987	.8870981	.8053799	14.06135	9.240017	.9792552
#1	.0032472	53.93425	6.179991	.0077756	.0133781	1.048606
#2	.0040583	53.59241	6.161105	.0084910	.0111120	1.050511
#3	.0035861	52.99633	6.086438	.0064005	.0123538	1.031933

Elem	Li6707
Units	ppm
Avg	-.001095
Stddev	.001484
%RSD	135.5324
#1	-.002495
#2	-.001252
#3	.000461

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.291	19761.06	2380.649	1349.022	1749.077
Stddev	12.040	45.63	13.145	1.174	12.963
%RSD	.7389815	.2308954	.5521546	.0870265	.7411225
#1	1620.670	19813.68	2372.466	1349.572	1738.540
#2	1624.156	19732.61	2373.670	1347.674	1745.140
#3	1643.047	19736.88	2395.812	1349.821	1763.552

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-05 Acquired: 12/30/2024 23:07:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3024077	-.000872	.0938446	.0018388	.0131303	1.044621
Stddev	.0019711	.002454	.0019445	.0054854	.0019766	.016705
%RSD	.6518120	281.3101	2.072031	298.3166	15.05357	1.599115
#1	.3046572	-.001071	.0918915	-.002666	.0153357	1.039417
#2	.3015829	-.003220	.0957804	.000236	.0125363	1.063308
#3	.3009829	.001675	.0938620	.007947	.0115188	1.031138

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7329642	.0016191	.0005242	99.76980	.0004116	.0433347
Stddev	.0036730	.0000316	.0000713	.17545	.0001686	.0003623
%RSD	.5011164	1.949195	13.59721	.1758577	40.95564	.8360467
#1	.7288782	.0016471	.0005669	99.56740	.0005792	.0437210
#2	.7359917	.0016252	.0004419	99.87864	.0002421	.0430025
#3	.7340229	.0015849	.0005638	99.86337	.0004133	.0432806

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0276246	82.77188	.5022232	89.16771	.0323742	-.003062
Stddev	.0029032	.47579	.0036674	.34393	.0009517	.001691
%RSD	10.50934	.5748205	.7302404	.3857078	2.939626	55.22650
#1	.0244102	82.24454	.4981852	88.97613	.0326827	-.003402
#2	.0300559	82.90209	.5053472	89.56476	.0331334	-.004558
#3	.0284077	83.16901	.5031372	88.96224	.0313066	-.001227

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1857.015	-.001005	1.745935	48.20853	6.441964	2.056849
Stddev	28.488	.002376	.006688	.37336	.006685	.007766
%RSD	1.534095	236.3691	.3830365	.7744642	.1037792	.3775510
#1	1888.571	.000235	1.747904	47.77766	6.436042	2.048160
#2	1833.191	-.003745	1.738485	48.41128	6.440637	2.059276
#3	1849.284	.000495	1.751418	48.43664	6.449214	2.063111

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-05 Acquired: 12/30/2024 23:07:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035094	53.77724	6.308888	.0073420	.0111073	1.067256
Stddev	.0005076	.03275	.020608	.0013390	.0011674	.004636
%RSD	14.46410	.0609043	.3266501	18.23699	10.50990	.4343543
#1	.0038204	53.76168	6.286564	.0058881	.0115659	1.062150
#2	.0037842	53.81487	6.327186	.0085244	.0119757	1.068416
#3	.0029236	53.75517	6.312915	.0076135	.0097803	1.071201

Elem	Li6707
Units	ppm
Avg	.0130822
Stddev	.0017335
%RSD	13.25119
#1	.0113085
#2	.0147726
#3	.0131656

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1621.161	19705.57	2310.016	1349.717	1740.855
Stddev	3.325	95.74	4.153	7.219	2.982
%RSD	.2051138	.4858568	.1798010	.5348564	.1712777
#1	1623.224	19596.93	2306.003	1342.399	1742.741
#2	1622.934	19742.16	2314.296	1356.833	1742.407
#3	1617.325	19777.62	2309.748	1349.920	1737.417

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-04LX5 Acquired: 12/30/2024 23:11:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0585054	.0041310	.0182636	-.007491	.0001390	.2066132	.1498844
Stddev	.0027912	.0004364	.0010773	.003820	.0007355	.0208184	.0032193
%RSD	4.770819	10.56460	5.898769	50.99292	529.0548	10.07601	2.147874
#1	.0611123	.0046238	.0180771	-.009165	.0002312	.2306216	.1461678
#2	.0555607	.0039757	.0194219	-.010189	-.000638	.1956585	.1518100
#3	.0588433	.0037934	.0172916	-.003120	.000824	.1935595	.1516753

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004043	.0002138	20.44474	.0002005	.0145544	.0135383	17.03167
Stddev	.0000369	.0000743	.20867	.0004993	.0004747	.0167117	.18022
%RSD	9.129191	34.75033	1.020663	249.0437	3.261405	123.4402	1.058170
#1	.0003684	.0002576	20.22964	.0005303	.0140136	.0125757	16.85860
#2	.0004025	.0001280	20.64633	-.000374	.0147476	.0307104	17.21828
#3	.0004421	.0002557	20.45825	.000445	.0149020	-.002671	17.01812

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1029890	18.23391	.0046948	-.000486	394.4598	-.000237	.3518892
Stddev	.0020246	.07676	.0002429	.000329	3.6538	.002071	.0024137
%RSD	1.965805	.4209536	5.174129	67.76958	.9262682	873.5212	.6859215
#1	.1021593	18.16157	.0049161	-.000438	391.7486	.001858	.3532557
#2	.1052966	18.31443	.0047333	-.000183	393.0158	-.002282	.3533097
#3	.1015111	18.22574	.0044349	-.000836	398.6148	-.000287	.3491023

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.58690	1.198734	.4407376	.0009759	10.11536	1.306480	.0011739
Stddev	.23826	.002762	.0047372	.0005082	.01080	.005309	.0022525
%RSD	1.892905	.2304335	1.074844	52.08027	.1068112	.4063274	191.8864
#1	12.76616	1.200925	.4399015	.0015348	10.12454	1.300862	-.000909
#2	12.67800	1.195631	.4458373	.0005414	10.10345	1.311412	.003564
#3	12.31653	1.199646	.4364741	.0008515	10.11809	1.307167	.000867

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-04LX5 Acquired: 12/30/2024 23:11:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0026106	.2172696	.2777503
Stddev	.0008590	.0022154	.0119021
%RSD	32.90295	1.019652	4.285166
#1	.0016443	.2153231	.2641706
#2	.0032876	.2196803	.2863714
#3	.0028999	.2168055	.2827089

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.784	20099.58	2250.824	1350.459	1847.702
Stddev	1.998	67.53	10.562	7.320	1.570
%RSD	.1226155	.3359849	.4692518	.5420068	.0849647
#1	1629.323	20030.78	2260.638	1345.193	1847.168
#2	1631.972	20102.19	2239.647	1347.367	1849.469
#3	1628.056	20165.77	2252.188	1358.817	1846.469

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-06 Acquired: 12/30/2024 23:15:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3940389	.0837163	.1319143	.1970480	.1990339	4.851100
Stddev	.0050744	.0067926	.0046070	.0026436	.0030220	.033945
%RSD	1.287794	8.113863	3.492383	1.341577	1.518319	.6997381
#1	.3933990	.0864633	.1287075	.1980453	.2025052	4.817944
#2	.3994029	.0887053	.1298420	.1940508	.1976055	4.849572
#3	.3893147	.0759804	.1371935	.1990478	.1969909	4.885783

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.706794	.1020940	.1049803	97.28129	.4294339	1.055502
Stddev	.021900	.0005407	.0001075	.42196	.0030501	.001672
%RSD	.4652939	.5296377	.1024088	.4337525	.7102523	.1584532
#1	4.684856	.1014824	.1049383	96.79907	.4271637	1.055383
#2	4.706867	.1025084	.1049002	97.46197	.4329008	1.053892
#3	4.728657	.1022913	.1051025	97.58282	.4282370	1.057231

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5057068	82.61588	1.508011	87.12340	1.073232	.0735012
Stddev	.0116081	.42164	.009909	.43362	.003652	.0007007
%RSD	2.295426	.5103612	.6570594	.4977046	.3403267	.9533845
#1	.5067829	82.16006	1.497281	86.71406	1.077067	.0728307
#2	.5167394	82.69562	1.509936	87.07835	1.069795	.0734441
#3	.4935981	82.99195	1.516816	87.57778	1.072833	.0742287

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1834.739	1.042998	2.724807	47.16955	6.282327	1.996366
Stddev	15.000	.012748	.022416	.22982	.019562	.012238
%RSD	.8175642	1.222262	.8226547	.4872273	.3113747	.6130187
#1	1850.297	1.036201	2.701348	46.93967	6.300119	1.982237
#2	1833.555	1.035089	2.746009	47.16967	6.261379	2.003205
#3	1820.367	1.057704	2.727065	47.39932	6.285484	2.003655

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5169-06 Acquired: 12/30/2024 23:15:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MJNLH4S Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036326	52.71249	6.143570	.0077604	.0093319	1.039264
Stddev	.0008486	.12873	.040772	.0008871	.0008266	.005829
%RSD	23.35979	.2442120	.6636583	11.43059	8.858384	.5609171
#1	.0026858	52.84018	6.096634	.0067369	.0086240	1.032540
#2	.0043245	52.58274	6.170218	.0082387	.0102404	1.042898
#3	.0038876	52.71453	6.163859	.0083057	.0091312	1.042354

Elem	Li6707
Units	ppm
Avg	.0148232
Stddev	.0040862
%RSD	27.56614
#1	.0102517
#2	.0181205
#3	.0160974

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1633.690	19986.04	2346.105	1356.600	1749.972
Stddev	3.662	84.78	11.735	6.847	4.371
%RSD	.2241359	.4242151	.5001886	.5047071	.2497675
#1	1636.767	20041.38	2357.982	1363.118	1753.697
#2	1634.664	19888.43	2334.517	1349.466	1751.058
#3	1629.640	20028.31	2345.816	1357.218	1745.160

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165673BL Acquired: 12/30/2024 23:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBW673 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003241	-.000607	-.003202	.0048662	.0010964	-.032008
Stddev	.000294	.002203	.002970	.0034212	.0036845	.013587
%RSD	9.076823	363.1031	92.76306	70.30460	336.0384	42.44837
#1	-.003387	.001466	.000102	.0045388	.0019633	-.033881
#2	-.002902	-.002920	-.005652	.0016205	.0042702	-.017581
#3	-.003434	-.000366	-.004056	.0084393	-.002944	-.044560

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000388	.0002364	.0000525	.0037829	.0006485	-.000269
Stddev	.000396	.0000902	.0000418	.0186595	.0004246	.000118
%RSD	102.0425	38.15483	79.60630	493.2624	65.46706	43.83075
#1	-.000458	.0002093	.0000142	-.012294	.0002578	-.000399
#2	.000038	.0001629	.0000970	.024244	.0005875	-.000169
#3	-.000745	.0003371	.0000462	-.000602	.0011003	-.000240

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008196	-.001710	.0005596	.0710457	-.000001	-.000026
Stddev	.0063316	.039258	.0009524	.0587038	.000306	.001206
%RSD	772.5551	2295.184	170.1810	82.62823	21575.22	4564.225
#1	-.006484	-.007922	-.000390	.0814206	-.000006	-.000841
#2	.004749	.040283	.001515	.1238704	.000307	.001359
#3	.004194	-.037493	.000554	.0078461	-.000305	-.000598

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1110842	-.001225	.0005047	1.328892	-.003259	.0026424
Stddev	.0198214	.017144	.0004779	.024941	.002383	.0014259
%RSD	17.84361	1399.974	94.70354	1.876845	73.13056	53.96243
#1	.1203388	.008100	.0010060	1.302678	-.005256	.0016713
#2	.1245856	.009237	.0004536	1.331668	-.003900	.0019764
#3	.0883281	-.021010	.0000543	1.352328	-.000621	.0042794

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165673BL Acquired: 12/30/2024 23:23:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBW673 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000033	.0197718	-.000111	-.002422	.0006955	-.000018
Stddev	.000552	.0069989	.000613	.001897	.0030767	.000222
%RSD	1675.257	35.39854	552.6960	78.30011	442.3531	1235.750
#1	-.000272	.0274954	-.000752	-.000264	.0027498	-.000267
#2	.000599	.0179702	-.000050	-.003822	-.002842	.000056
#3	-.000426	.0138498	.000469	-.003181	.002179	.000157

Elem	Li6707
Units	ppm
Avg	F .1346463
Stddev	.0032262
%RSD	2.396029
#1	.1313753
#2	.1378256
#3	.1347381

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1641.341	20580.82	2240.240	1367.190	1934.883
Stddev	9.135	146.97	21.753	5.586	10.287
%RSD	.5565833	.7141109	.9710134	.4085763	.5316859
#1	1630.846	20455.83	2228.587	1362.248	1923.339
#2	1645.671	20543.90	2265.337	1366.071	1938.229
#3	1647.507	20742.73	2226.796	1373.251	1943.081

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165673BS Acquired: 12/30/2024 23:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCW673 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0209854	.0516798	.0197321	.0579898	.1125101	.3777359
Stddev	.0031738	.0015152	.0023087	.0090697	.0016151	.0226072
%RSD	15.12391	2.931840	11.70018	15.64016	1.435538	5.984911
#1	.0193259	.0501425	.0223816	.0684253	.1139829	.3820779
#2	.0189854	.0517250	.0186630	.0520075	.1127646	.3978571
#3	.0246450	.0531718	.0181518	.0535367	.1107829	.3532727

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4168329	.0108701	.0101617	10.45235	.0221549	.1030788
Stddev	.0010940	.0001041	.0000552	.05845	.0000697	.0001610
%RSD	.2624467	.9578034	.5435252	.5592194	.3146605	.1561851
#1	.4161365	.0107646	.0102140	10.38638	.0221323	.1030806
#2	.4162684	.0109728	.0101673	10.49768	.0222331	.1032389
#3	.4180938	.0108728	.0101040	10.47299	.0220993	.1029169

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0611767	.2120462	.0326152	10.56608	.0796165	.0205751
Stddev	.0047578	.0495993	.0003949	.11715	.0004133	.0013823
%RSD	7.777096	23.39079	1.210744	1.108731	.5191780	6.718392
#1	.0556862	.1602918	.0325655	10.43120	.0800572	.0221618
#2	.0640876	.2166821	.0330326	10.64240	.0795550	.0199323
#3	.0637563	.2591648	.0322475	10.62464	.0792374	.0196313

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.584251	.1106327	.1233971	10.19138	.0158053	F -.000835
Stddev	.063838	.0115463	.0005826	.12566	.0031451	.000414
%RSD	.8417204	10.43657	.4720959	1.232969	19.89919	49.50632
#1	7.563298	.0976053	.1235367	10.07040	.0137577	-.001079
#2	7.655933	.1146906	.1227575	10.32124	.0142315	-.001070
#3	7.533523	.1196023	.1238972	10.18250	.0194266	-.000358

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: PB165673BS Acquired: 12/30/2024 23:27:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCW673 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201655	.1942854	F .5129710	.0127239	.2044183	.2104939
Stddev	.0005290	.0018414	.0028631	.0009429	.0044207	.0009201
%RSD	2.623141	.9477769	.5581447	7.410667	2.162565	.4371111
#1	.0199969	.1945891	.5096836	.0117685	.1994501	.2094535
#2	.0197413	.1923111	.5149181	.0127493	.2079172	.2108278
#3	.0207582	.1959561	.5143114	.0136539	.2058877	.2112004

Elem	Li6707
Units	ppm
Avg	F .0793479
Stddev	.0040507
%RSD	5.104936
#1	.0746818
#2	.0814010
#3	.0819610

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1659.322	20830.37	2243.886	1384.146	1950.724
Stddev	2.521	67.04	8.604	4.449	.284
%RSD	.1519535	.3218295	.3834226	.3214445	.0145426
#1	1661.075	20771.09	2248.599	1384.671	1950.570
#2	1656.432	20903.12	2233.956	1379.458	1950.551
#3	1660.459	20816.90	2249.103	1388.310	1951.052

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-05DLX2 Acquired: 12/30/2024 23:31:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050948	.0308477	.1527204	-.041366	-.013460	9.664943
Stddev	.0071991	.0024585	.0018704	.001373	.003514	.165315
%RSD	141.3035	7.969680	1.224688	3.318687	26.10348	1.710464
#1	-.003216	.0322375	.1506719	-.040726	-.017497	9.591371
#2	.009108	.0322965	.1531523	-.040430	-.011094	9.854273
#3	.009393	.0280091	.1543371	-.042942	-.011789	9.549186

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0722949	.0015675	.0012556	F 932.5405	.0245534	.0573927
Stddev	.0021020	.0002272	.0000919	16.6120	.0010176	.0001122
%RSD	2.907504	14.49568	7.318055	1.781372	4.144575	.1955395
#1	.0702315	.0013968	.0012328	926.7259	.0233909	.0574923
#2	.0744334	.0018254	.0013567	951.2782	.0249864	.0574147
#3	.0722199	.0014802	.0011772	919.6174	.0252829	.0572711

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0479136	35.04071	1.531824	144.9561	.0435330	-.001516
Stddev	.0045740	.64175	.025910	2.5606	.0011820	.000525
%RSD	9.546406	1.831438	1.691444	1.766433	2.715260	34.66452
#1	.0428207	34.69561	1.516603	143.6763	.0447446	-.002090
#2	.0516719	35.78117	1.561741	147.9042	.0434715	-.001060
#3	.0492483	34.64535	1.517128	143.2877	.0423830	-.001397

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9989621	.0253414	.1607024	2.735610	1.259537	-.047843
Stddev	.0339834	.0108300	.0008999	.082190	.004760	.002222
%RSD	3.401873	42.73655	.5599468	3.004433	.3779475	4.643745
#1	1.000258	.0289340	.1605055	2.790559	1.259249	-.046229
#2	1.032279	.0339186	.1599174	2.775147	1.264434	-.046924
#3	.964349	.0131716	.1616844	2.641124	1.254927	-.050377

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-05DLX2 Acquired: 12/30/2024 23:31:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023185	13.63524	3.215569	.0109122	.0774183	.5560715
Stddev	.0004197	.02854	.070280	.0014463	.0046733	.0092762
%RSD	18.10393	.2093062	2.185629	13.25449	6.036464	1.668161
#1	.0018667	13.61534	3.190786	.0105677	.0754529	.5534374
#2	.0023923	13.62245	3.294884	.0096692	.0827533	.5663799
#3	.0026964	13.66794	3.161038	.0124996	.0740486	.5483973

Elem	Li6707
Units	ppm
Avg	.0295773
Stddev	.0047698
%RSD	16.12663
#1	.0246708
#2	.0341976
#3	.0298636

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1656.087	20861.05	2337.570	1377.103	1716.751
Stddev	6.416	95.10	43.531	7.031	4.757
%RSD	.3873899	.4558727	1.862241	.5105648	.2770816
#1	1656.616	20779.42	2345.600	1376.470	1716.921
#2	1662.222	20965.48	2290.583	1384.429	1721.421
#3	1649.423	20838.26	2376.527	1370.410	1711.912

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-06DLX2 Acquired: 12/30/2024 23:35:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0503941	.0151082	.6743131	-.013652	-.001550	36.35822	.3318095
Stddev	.0033513	.0069537	.0023772	.007902	.002707	.08897	.0019289
%RSD	6.650294	46.02593	.3525386	57.87940	174.7175	.2446905	.5813162
#1	.0470208	.0230959	.6722308	-.015833	-.000151	36.45982	.3333247
#2	.0537230	.0118230	.6738053	-.004889	.000173	36.32056	.3324656
#3	.0504385	.0104058	.6769032	-.020234	-.004670	36.29427	.3296382

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033839	.0035698	455.6646	.0722797	.0742683	.1043523	81.73880
Stddev	.0001137	.0000708	1.3462	.0003983	.0004872	.0047502	.20416
%RSD	3.360609	1.982994	.2954284	.5511097	.6559744	4.552115	.2497728
#1	.0032619	.0034967	457.1787	.0724954	.0746967	.1090419	81.84892
#2	.0034870	.0035746	454.6030	.0718200	.0743699	.1044713	81.50322
#3	.0034026	.0036381	455.2119	.0725236	.0737383	.0995437	81.86425

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.437447	78.58507	.0910733	-.003031	1.357728	.0753641	.7108399
Stddev	.009689	.26336	.0006389	.000696	.009870	.0065481	.0039801
%RSD	.2818550	.3351261	.7015333	22.96369	.7269341	8.688573	.5599091
#1	3.448517	78.47720	.0918045	-.002839	1.359621	.0682499	.7062599
#2	3.430510	78.39277	.0907922	-.003803	1.366515	.0767035	.7128008
#3	3.433315	78.88524	.0906231	-.002451	1.347049	.0811389	.7134591

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.181461	3.802492	-.166033	.0039860	5.712557	6.792415	.0245059
Stddev	.187178	.018361	.002253	.0005833	.005834	.016037	.0022402
%RSD	3.612450	.4828789	1.356782	14.63397	.1021219	.2361070	9.141644
#1	5.333392	3.785106	-.168625	.0045428	5.709873	6.780053	.0267286
#2	5.238624	3.800677	-.164921	.0033794	5.708548	6.786654	.0222485
#3	4.972367	3.821694	-.164552	.0040357	5.719250	6.810537	.0245405

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-06DLX2 Acquired: 12/30/2024 23:35:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4145570	.2370298	.0436462
Stddev	.0031460	.0006181	.0040609
%RSD	.7588801	.2607641	9.304082
#1	.4134051	.2377123	.0401260
#2	.4121494	.2365077	.0427236
#3	.4181166	.2368693	.0480890

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1709.187	21659.57	2414.807	1439.484	1781.320
Stddev	3.600	72.63	10.394	4.249	3.559
%RSD	.2105999	.3353231	.4304408	.2951507	.1998055
#1	1713.198	21579.30	2418.942	1436.514	1784.852
#2	1706.239	21720.73	2422.498	1444.350	1781.375
#3	1708.122	21678.69	2402.982	1437.587	1777.734

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-07DLX2 Acquired: 12/30/2024 23:39:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0286795	.0209579	.5798032	-.036896	-.008997	20.39409	.1744662
Stddev	.0050068	.0018229	.0015819	.002278	.005282	.16196	.0024126
%RSD	17.45773	8.697870	.2728309	6.175155	58.71362	.7941281	1.382853
#1	.0233603	.0215329	.5779872	-.036437	-.014928	20.54366	.1768994
#2	.0333007	.0224239	.5808811	-.034882	-.004798	20.22209	.1744246
#3	.0293776	.0189168	.5805415	-.039369	-.007265	20.41651	.1720747

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023799	.0098917	697.2236	.0400159	.0660265	.0613529	60.46635
Stddev	.0002113	.0000998	5.0054	.0001443	.0005118	.0020091	.47620
%RSD	8.877047	1.008609	.7179116	.3607189	.7751032	3.274712	.7875529
#1	.0025620	.0097814	702.5883	.0401053	.0665190	.0597665	60.92955
#2	.0024293	.0099755	692.6785	.0400929	.0660629	.0606801	59.97813
#3	.0021483	.0099183	696.4040	.0398494	.0654974	.0636121	60.49136

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.522174	367.8158	.0557261	-.000553	1.193364	.0359594	2.019143
Stddev	.028278	2.0681	.0009576	.000640	.005561	.0085384	.007796
%RSD	.8028473	.5622605	1.718432	115.7528	.4660210	23.74444	.3861118
#1	3.541915	370.1483	.0566856	-.001288	1.186943	.0447872	2.027756
#2	3.489779	366.2060	.0557222	-.000116	1.196491	.0277434	2.012569
#3	3.534828	367.0932	.0547704	-.000255	1.196658	.0353476	2.017104

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.228683	2.115948	-.100543	.0029477	14.39321	5.289532	.0183252
Stddev	.209393	.007303	.000629	.0002254	.01914	.063811	.0027419
%RSD	4.951728	.3451236	.6260154	7.648238	.1329686	1.206355	14.96256
#1	4.374848	2.122991	-.101151	.0029548	14.41225	5.361955	.0152187
#2	3.988801	2.116444	-.099894	.0031694	14.37397	5.265066	.0193491
#3	4.322401	2.108411	-.100582	.0027187	14.39340	5.241575	.0204078

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-07DLX2 Acquired: 12/30/2024 23:39:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM8 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1880826	.2121973	.0331618
Stddev	.0036641	.0016986	.0023726
%RSD	1.948154	.8004916	7.154535
#1	.1923113	.2139392	.0306365
#2	.1860867	.2105455	.0335046
#3	.1858496	.2121072	.0353444

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1624.270	20583.39	2347.866	1349.170	1680.291
Stddev	3.915	46.68	20.731	3.873	1.406
%RSD	.2410476	.2267924	.8829620	.2870409	.0836536
#1	1619.832	20637.23	2324.106	1345.475	1678.976
#2	1627.236	20558.75	2357.229	1353.199	1681.772
#3	1625.741	20554.20	2362.264	1348.837	1680.124

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-20DLX2 Acquired: 12/30/2024 23:43:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKN9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0318094	.0288581	.3420769	-.022389	-.010055	26.31027
Stddev	.0027150	.0023035	.0023162	.002698	.001146	.13902
%RSD	8.535166	7.982159	.6770931	12.05061	11.39612	.5283979
#1	.0323176	.0272480	.3446122	-.019281	-.011258	26.41560
#2	.0342344	.0314967	.3415469	-.023757	-.009930	26.15269
#3	.0288762	.0278298	.3400717	-.024128	-.008977	26.36252

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8947483	.0029402	.0032537	F 1344.514	.0453239	.0826171
Stddev	.0032065	.0000692	.0001119	9.309	.0006375	.0004022
%RSD	.3583742	2.354133	3.440186	.6923766	1.406602	.4868035
#1	.8968290	.0028639	.0033822	1346.126	.0452963	.0825452
#2	.8910556	.0029575	.0032015	1334.504	.0459748	.0822558
#3	.8963603	.0029991	.0031775	1352.912	.0447007	.0830504

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1639982	70.50180	11.42428	35.26266	.0896135	-.000573
Stddev	.0096332	.19960	.05779	.23496	.0003643	.001149
%RSD	5.873982	.2831173	.5058429	.6663246	.4065449	200.3949
#1	.1746465	70.69608	11.42595	35.47798	.0897803	-.000102
#2	.1558885	70.29727	11.36567	35.01205	.0891956	.000265
#3	.1614595	70.51204	11.48121	35.29796	.0898645	-.001882

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8672036	.0457867	.2689064	2.753319	4.509461	-.142486
Stddev	.0292563	.0098143	.0010772	.115037	.010607	.002218
%RSD	3.373640	21.43494	.4005685	4.178110	.2352268	1.556570
#1	.8790749	.0552662	.2693848	2.759226	4.497273	-.140918
#2	.8338775	.0356687	.2676729	2.635442	4.516607	-.141517
#3	.8886584	.0464252	.2696615	2.865288	4.514503	-.145024

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-20DLX2 Acquired: 12/30/2024 23:43:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKN9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019665	2.207867	5.331254	.0403362	.1091121	1.096739
Stddev	.0001865	.002104	.030441	.0023456	.0063749	.003595
%RSD	9.485598	.0952930	.5709961	5.815205	5.842519	.3278108
#1	.0021344	2.208879	5.338539	.0411600	.1017965	1.097217
#2	.0019994	2.205448	5.297832	.0421588	.1120619	1.092929
#3	.0017657	2.209273	5.357392	.0376898	.1134779	1.100071

Elem	Li6707
Units	ppm
Avg	.0417385
Stddev	.0047268
%RSD	11.32489
#1	.0378177
#2	.0404105
#3	.0469873

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1768.080	22354.89	2539.065	1475.891	1664.672
Stddev	.088	30.14	17.146	.097	1.011
%RSD	.0049671	.1348264	.6752938	.0065622	.0607255
#1	1768.008	22354.55	2536.926	1475.937	1665.686
#2	1768.178	22324.92	2557.181	1475.957	1663.664
#3	1768.054	22385.20	2523.089	1475.780	1664.666

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-08A Acquired: 12/30/2024 23:47:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM9A Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1466402	.0404850	5.979401	.0439354	.0153262	87.71104
Stddev	.0051878	.0045092	.023252	.0093502	.0027273	.43159
%RSD	3.537788	11.13799	.3888728	21.28177	17.79486	.4920610
#1	.1436186	.0386138	6.006238	.0462545	.0134308	87.28526
#2	.1436714	.0372127	5.965293	.0336439	.0140959	87.69964
#3	.1526305	.0456286	5.966671	.0519079	.0184519	88.14821

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.189837	.0082451	.0138516	509.5114	.1467436	.1263089
Stddev	.005501	.0001361	.0001892	2.5867	.0008130	.0010865
%RSD	.4623723	1.650607	1.366214	.5076825	.5540598	.8601602
#1	1.183888	.0080900	.0139743	507.1649	.1459477	.1274507
#2	1.190880	.0083444	.0136337	509.0843	.1475728	.1261880
#3	1.194742	.0083010	.0139470	512.2851	.1467103	.1252878

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3947210	160.7659	11.22173	278.6203	.2114684	-.002198
Stddev	.0096614	.7450	.06520	1.2751	.0012938	.000650
%RSD	2.447660	.4633913	.5809738	.4576505	.6118104	29.54646
#1	.3993473	160.3151	11.17448	277.5945	.2129381	-.001616
#2	.3836163	160.3569	11.19461	278.2185	.2105015	-.002899
#3	.4011994	161.6258	11.29611	280.0479	.2109655	-.002081

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.17121	.1594665	2.778278	10.20734	F 11.22248	-.329498
Stddev	.03653	.0037991	.016364	.13372	.03072	.004068
%RSD	.2258930	2.382400	.5889890	1.310000	.2736942	1.234515
#1	16.21191	.1637283	2.793290	10.12246	11.25734	-.333944
#2	16.16047	.1582362	2.760835	10.13808	11.19939	-.328586
#3	16.14126	.1564350	2.780711	10.36148	11.21070	-.325964

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5035-08A Acquired: 12/30/2024 23:47:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MBHKM9A Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0108354	11.20768	12.16556	.1111522	.9107878	.2127500
Stddev	.0000994	.04368	.05725	.0027913	.0060827	.0021398
%RSD	.9172654	.3897214	.4706261	2.511258	.6678544	1.005768
#1	.0107242	11.25810	12.21470	.1128635	.9038919	.2102792
#2	.0109154	11.18139	12.17930	.1126620	.9130808	.2139774
#3	.0108668	11.18355	12.10269	.1079312	.9153908	.2139934

Elem	Li6707
Units	ppm
Avg	.0708489
Stddev	.0011158
%RSD	1.574947
#1	.0719591
#2	.0708602
#3	.0697275

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1900.186	23972.59	2731.553	1581.496	1705.934
Stddev	4.663	71.59	10.176	14.502	6.182
%RSD	.2453866	.2986411	.3725484	.9169505	.3623582
#1	1895.261	23970.26	2721.363	1569.929	1699.176
#2	1904.532	24045.32	2741.716	1597.765	1711.303
#3	1900.766	23902.19	2731.580	1576.794	1707.321

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5266-19 Acquired: 12/30/2024 23:51:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2098975	-.309449	6.056298	.6330484	.3179281	60.65539
Stddev	.0011144	.008095	.014031	.0074765	.0033354	.27976
%RSD	.5309194	2.616067	.2316693	1.181033	1.049094	.4612217
#1	.2107042	-.300168	6.062262	.6315358	.3170087	60.33413
#2	.2086259	-.315052	6.040271	.6411656	.3216267	60.84528
#3	.2103623	-.313128	6.066362	.6264439	.3151488	60.78677

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.036601	.0216710	.0350552	495.4199	2.313975	.1338901
Stddev	.001703	.0002245	.0002289	3.0857	.010200	.0006115
%RSD	.1643180	1.036073	.6529417	.6228505	.4408072	.4566846
#1	1.035685	.0218977	.0352216	492.1166	2.310189	.1332833
#2	1.038567	.0216666	.0347942	498.2283	2.306208	.1345061
#3	1.035552	.0214487	.0351498	495.9147	2.325526	.1338809

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4112730	F 1237.354	F 44.54715	96.28551	1.224036	-.021568
Stddev	.0098909	4.752	.16326	.59329	.001881	.002013
%RSD	2.404957	.3840796	.3664972	.6161816	.1536423	9.335048
#1	.4213843	1231.870	44.35871	95.63660	1.225518	-.023282
#2	.4016183	1240.264	44.63649	96.41973	1.221920	-.022071
#3	.4108164	1239.929	44.64625	96.80019	1.224669	-.019351

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.219511	.3026574	11.18022	8.763751	8.148163	F -2.84892
Stddev	.042182	.0036827	.03286	.060231	.023331	.02327
%RSD	1.900492	1.216772	.2939196	.6872762	.2863329	.8168827
#1	2.186445	.3006357	11.17957	8.769252	8.147273	-2.86030
#2	2.267016	.3069080	11.21339	8.700958	8.125290	-2.86431
#3	2.205072	.3004284	11.14768	8.821043	8.171926	-2.82215

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: P5266-19 Acquired: 12/30/2024 23:51:12 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ME28Y9D Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0847016	10.02059	11.88358	.1597996	2.183938	-.402144
Stddev	.0008777	.02101	.08397	.0036161	.002948	.001531
%RSD	1.036211	.2097123	.7065663	2.262908	.1349905	.3806325
#1	.0851336	10.04123	11.89204	.1573377	2.185082	-.402230
#2	.0836916	9.99922	11.96299	.1639513	2.186142	-.400572
#3	.0852795	10.02132	11.79570	.1581099	2.180589	-.403629

Elem	Li6707
Units	ppm
Avg	.0514722
Stddev	.0029667
%RSD	5.763612
#1	.0495819
#2	.0499433
#3	.0548914

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1651.424	21092.48	2380.599	1375.603	1853.669
Stddev	3.508	44.50	18.968	4.346	.937
%RSD	.2124367	.2109699	.7967589	.3159040	.0505688
#1	1654.563	21086.46	2377.347	1375.325	1854.751
#2	1652.073	21139.69	2363.468	1371.403	1853.143
#3	1647.637	21051.31	2400.983	1380.081	1853.112

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV052 Acquired: 12/30/2024 23:54:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV052 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.941300	4.851283	24.80236	4.920804	4.922363	407.0608
Stddev	.007227	.008546	.03778	.021022	.007186	2.0448
%RSD	.1462557	.1761539	.1523299	.4271997	.1459796	.5023429
#1	4.941773	4.852783	24.78266	4.897976	4.923816	405.1321
#2	4.933848	4.842086	24.77850	4.925070	4.914562	406.8457
#3	4.948279	4.858979	24.84592	4.939365	4.928712	409.2047

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.16725	.5054865	2.503364	412.1121	15.59951	2.487365
Stddev	.04727	.0041901	.001981	1.3715	.02380	.002630
%RSD	.4648984	.8289210	.0791280	.3328064	.1525455	.1057155
#1	10.11877	.5024076	2.503013	410.8714	15.61987	2.484806
#2	10.16978	.5037937	2.501582	411.8801	15.60531	2.487229
#3	10.21320	.5102581	2.505497	413.5848	15.57335	2.490059

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.06554	408.2555	15.10599	406.0134	2.525124	1.276271
Stddev	.04075	2.2151	.05812	1.6104	.001490	.002701
%RSD	.2704655	.5425781	.3847344	.3966327	.0590171	.2116322
#1	15.02617	405.9340	15.04441	404.7160	2.525778	1.279049
#2	15.06293	408.4864	15.11368	405.5086	2.523418	1.273654
#3	15.10754	410.3461	15.15988	407.8158	2.526175	1.276110

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	412.6407	2.490062	14.90969	153.5669	4.876631	F 4.325613
Stddev	4.5386	.031842	.06243	.4545	.015046	.032782
%RSD	1.099886	1.278770	.4187347	.2959908	.3085236	.7578672
#1	409.6093	2.457407	14.84426	153.0451	4.873993	4.309769
#2	410.4541	2.491755	14.96861	153.7784	4.863079	4.303763
#3	417.8586	2.521023	14.91621	153.8772	4.892821	4.363308

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCV052 Acquired: 12/30/2024 23:54:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV052 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.815836	4.989295	4.993329	5.059885	5.077884	4.802446
Stddev	.010041	.013589	.033979	.005631	.022589	.011751
%RSD	.2084923	.2723684	.6804777	.1112774	.4448446	.2446797
#1	4.815224	4.975937	4.976275	5.058708	5.058386	4.790958
#2	4.806115	4.988845	4.971257	5.054936	5.072627	4.801938
#3	4.826169	5.003104	5.032457	5.066011	5.102637	4.814442

Elem	Li6707
Units	ppm
Avg	5.156829
Stddev	.037950
%RSD	.7359121
#1	5.117940
#2	5.158782
#3	5.193764

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1426.177	18616.76	2170.827	1179.163	1598.701
Stddev	2.976	67.89	10.482	6.039	1.515
%RSD	.2086831	.3646904	.4828529	.5121707	.0947609
#1	1427.168	18595.85	2181.604	1182.729	1599.794
#2	1428.531	18561.79	2170.208	1172.190	1599.338
#3	1422.831	18692.65	2160.668	1182.569	1596.972

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB052 Acquired: 12/30/2024 23:58:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB052 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004393	.0004334	-.000810	.0020878	.0020123	.0040242
Stddev	.006577	.0001632	.000301	.0005186	.0004693	.0068670
%RSD	149.7115	37.63986	37.21945	24.84215	23.32231	170.6417
#1	-.004052	.0005480	-.000680	.0016144	.0016022	.0046639
#2	-.011135	.0002467	-.001154	.0026422	.0025242	.0105490
#3	.002007	.0005057	-.000595	.0020068	.0019106	-.003140

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.010183	.0000119	.0000054	-.040601	.0004254	.0001863
Stddev	.000479	.0000478	.0000159	.027179	.0000420	.0000376
%RSD	4.704774	402.1633	293.9769	66.94189	9.866132	20.19621
#1	-.010506	.0000383	.0000100	-.040921	.0004376	.0002281
#2	-.009633	.0000406	.0000185	-.013264	.0003787	.0001755
#3	-.010411	-.000043	-.000012	-.067619	.0004599	.0001552

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012727	.0078690	.0003304	.1302191	.0008284	-.000693
Stddev	.0010072	.0148402	.0007517	.0185831	.0000888	.000274
%RSD	79.13267	188.5895	227.4880	14.27066	10.71344	39.54446
#1	.0010008	.0076260	.0010650	.1512389	.0008303	-.000946
#2	.0004295	.0228292	.0003638	.1159729	.0009162	-.000730
#3	.0023879	-.006848	-.000437	.1234456	.0007388	-.000402

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.020624	-.002188	-.021378	-2.38514	.0018100	-.004603
Stddev	.003441	.001108	.000041	.04441	.0016146	.000379
%RSD	16.68454	50.62378	.1940401	1.861768	89.20108	8.231618
#1	-.016654	-.000938	-.021337	-2.35333	.0035675	-.004228
#2	-.022456	-.003046	-.021420	-2.36622	.0003926	-.004985
#3	-.022761	-.002579	-.021376	-2.43587	.0014700	-.004597

Reviewed By:mohan
On:1/2/2025 2:18:34 AM
Inst Id :P5

Sample Name: CCB052 Acquired: 12/30/2024 23:58:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v55) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB052 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002050	-.002041	-.005297	-.006503	-.000501	.0000088
Stddev	.0000564	.001236	.000368	.000344	.000988	.0001136
%RSD	27.48810	60.53376	6.943886	5.289563	197.3583	1289.927
#1	.0002701	-.002012	-.005552	-.006220	-.000038	-.000003
#2	.0001725	-.003291	-.004875	-.006403	-.001636	.000128
#3	.0001724	-.000821	-.005463	-.006886	.000172	-.000098

Elem	Li6707
Units	ppm
Avg	F -.039077
Stddev	.001159
%RSD	2.964682
#1	-.037801
#2	-.040063
#3	-.039367

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5910.122	78257.70	7348.516	5013.423	7433.077
Stddev	40.778	216.85	45.505	5.811	51.643
%RSD	.6899715	.2770995	.6192356	.1159169	.6947773
#1	5863.527	78019.31	7343.002	5018.856	7373.834
#2	5927.543	78310.56	7306.020	5014.117	7456.804
#3	5939.296	78443.23	7396.527	5007.296	7468.593

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Prep Standard - Chemical Standard Summary

Order ID : P5032

Test : Metals CLP Full

Prepbatch ID : PB165369,

Sequence ID/Qc Batch ID: LB134116,LB134132,

Standard ID :
MP83122,MP83134,MP83141,MP83147,MP83500,MP83501,MP83502,MP83503,MP83504,MP83505,MP83506,MP835
07,MP83508,MP83509,MP83510,MP83511,MP83513,MP83514,MP83726,MP83836,

Chemical ID :
M5130,M5218,M5223,M5289,M5295,M5296,M5390,M5393,M5429,M5473,M5476,M5496,M5497,M5498,M5513,M5515
,M5519,M5658,M5697,M5698,M5751,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5816,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,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP83122	11/07/2024	12/06/2024	Janvi Patel	None	None	Sarabjit Jaswal 11/07/2024

FROM 1000.00000ml of M6116 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP83134	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 125.00000ml of M6111 + 2350.00000ml of W3112 + 25.00000ml of M6117 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
994	ICPAES ISM01.2 S1 (CONC.)	MP83141	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 0.02000ml of M5815 + 0.03000ml of M5429 + 0.10000ml of M5798 + 0.10000ml of M6028 + 0.14000ml of M5799 + 0.20000ml of M5476 + 0.20000ml of M5515 + 0.20000ml of M5658 + 0.20000ml of M5801 + 0.20000ml of M5817 + 0.20000ml of M5976 + 0.20000ml of M6025 + 0.20000ml of M6030 + 0.30000ml of M5698 + 0.40000ml of M6033 + 0.50000ml of M5751 + 0.50000ml of M6023 + 0.70000ml of M5962 + 0.80000ml of M5960 + 1.00000ml of M5800 + 1.00000ml of M6021 + 1.20000ml of M5802 + 1.20000ml of M5819 + 10.00000ml of M5498 + 10.00000ml of M5519 + 10.00000ml of M5768 + 10.00000ml of M5806 + 10.00000ml of M5818 + 2.00000ml of M5978 + 4.00000ml of M5390 + 34.24000ml of MP83134 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
921	ICPAES SPIKE SOL#6	MP83147	10/30/2024	12/06/2024	Kareem Khairalla	None	None	Mohan Bera 11/08/2024

FROM 2.50000ml of M5962 + 50.00000ml of M5990 + 50.00000ml of M5999 + 147.50000ml of MP83134 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP83500	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2480	ICP AES STD 6 ISM01.3	MP83501	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 4.00000ml of M5289 + 4.00000ml of M5498 + 4.00000ml of M5515 + 4.00000ml of M5768 + 4.00000ml of M5806 + 30.00000ml of MP83500 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1004	ICPAES ISM01.2 (S5)	MP83502	12/06/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.25000ml of M5798 + 0.50000ml of M5429 + 0.50000ml of M5473 + 0.50000ml of M5815 + 0.50000ml of M5817 + 12.50000ml of M5519 + 12.50000ml of M5698 + 12.50000ml of M5806 + 12.50000ml of M5819 + 13.75000ml of M5697 + 14.50000ml of M5496 + 14.50000ml of M5515 + 14.50000ml of M5658 + 2.00000ml of M5513 + 22.50000ml of M5497 + 22.50000ml of M5768 + 5.00000ml of M5296 + 5.00000ml of M5393 + 5.00000ml of M5802 + 5.00000ml of M5818 + 5.00000ml of M5875 + 303.50000ml of MP83500 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1005	ICPAES ISM01.2(S4)	MP83503	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 250.00000ml of MP83500 + 250.00000ml of MP83502 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1007	ICPAES ISM01.2(S3)	MP83504	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 25.00000ml of MP83502 + 75.00000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1008	ICPAES ISM01.2(S2)	MP83505	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 12.50000ml of MP83502 + 87.50000ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
994	ICPAES ISM01.2 S1 (CONC.)	MP83506	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.02000ml of M5815 + 0.03000ml of M5429 + 0.10000ml of M5798 + 0.10000ml of M6028 + 0.14000ml of M5799 + 0.20000ml of M5473 + 0.20000ml of M5515 + 0.20000ml of M5658 + 0.20000ml of M5801 + 0.20000ml of M5817 + 0.20000ml of M5976 + 0.20000ml of M6025 + 0.20000ml of M6030 + 0.30000ml of M5698 + 0.40000ml of M5496 + 0.50000ml of M5697 + 0.50000ml of M6023 + 0.70000ml of M5962 + 0.80000ml of M5960 + 1.00000ml of M5800 + 1.00000ml of M6021 + 1.20000ml of M5802 + 1.20000ml of M5819 + 10.00000ml of M5498 + 10.00000ml of M5519 + 10.00000ml of M5769 + 10.00000ml of M5806 + 10.00000ml of M5818 + 2.00000ml of M5978 + 4.00000ml of M5390 + 34.24000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1003	ICPAES ISM01.2 S1	MP83507	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.50000ml of MP83506 + 99.50000ml of MP83500 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2054	ICV-ICPAES	MP83508	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.50000ml of M5218 + 0.50000ml of M5816 + 0.50000ml of M5820 + 0.50000ml of M5970 + 0.50000ml of M5982 + 10.00000ml of M5295 + 87.50000ml of MP83500 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP83509	12/09/2024	01/06/2025	Kareem Khairalla	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 12/09/2024

FROM 10.00000ml of M5130 + 90.00000ml of MP83500 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
905	ICP AES ICSAB SOLN	MP83510	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 10.00000ml of M5130 + 10.00000ml of M5223 + 80.00000ml of MP83500 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1119	ICPAES ISM01.2(CCV)	MP83511	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 0.75000ml of M5497 + 0.75000ml of M5769 + 1.22500ml of M5496 + 1.25000ml of M5515 + 1.25000ml of M5806 + 19.77500ml of MP83500 + 25.00000ml of MP83502 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP83513	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6126 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
513	RINSE SOLN	MP83514	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 200.00000ml of M6126 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3559	SE 100PPM	MP83726	12/18/2024	01/06/2025	Sarabjit Jaswal	None	None	Mohan Bera 12/20/2024

FROM 1.00000ml of M5962 + 9.00000ml of MP83500 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3816	TL-10PPM	MP83836	11/25/2024	01/06/2025	Sarabjit Jaswal	None	None	Mohan Bera 01/02/2025

FROM 0.10000ml of M6023 + 9.90000ml of MP83500 = Final Quantity: 10.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	12/28/2024	05/20/2024 /bin	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 /bin	04/20/2021 / bin	M5223

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Aluminum (Al) 10,000PPM	070622	07/06/2025	09/02/2022 / jaswal	07/12/2022 / jaswal	M5289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	04/20/2021 / bin	M5295

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	S2-MEB711673	11/02/2026	09/19/2022 / jaswal	08/20/2022 / jaswal	M5296

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB714159	01/13/2027	10/12/2022 / bin	09/19/2022 / bin	M5393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	03/16/2023 / jaswal	03/16/2023 / jaswal	M5473

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	07/29/2024 /jaswal	03/16/2023 / jaswal	M5476

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	102623	10/26/2026	04/18/2024 / jaswal	10/27/2023 / jaswal	M5698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

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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

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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

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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

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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

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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

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R: 02/22/24 M5986 M5987, M5988, M5989-M5990

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P: 800-669-6799/540-585-3030
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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) HNO_3
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

M6028

R 8/5/24

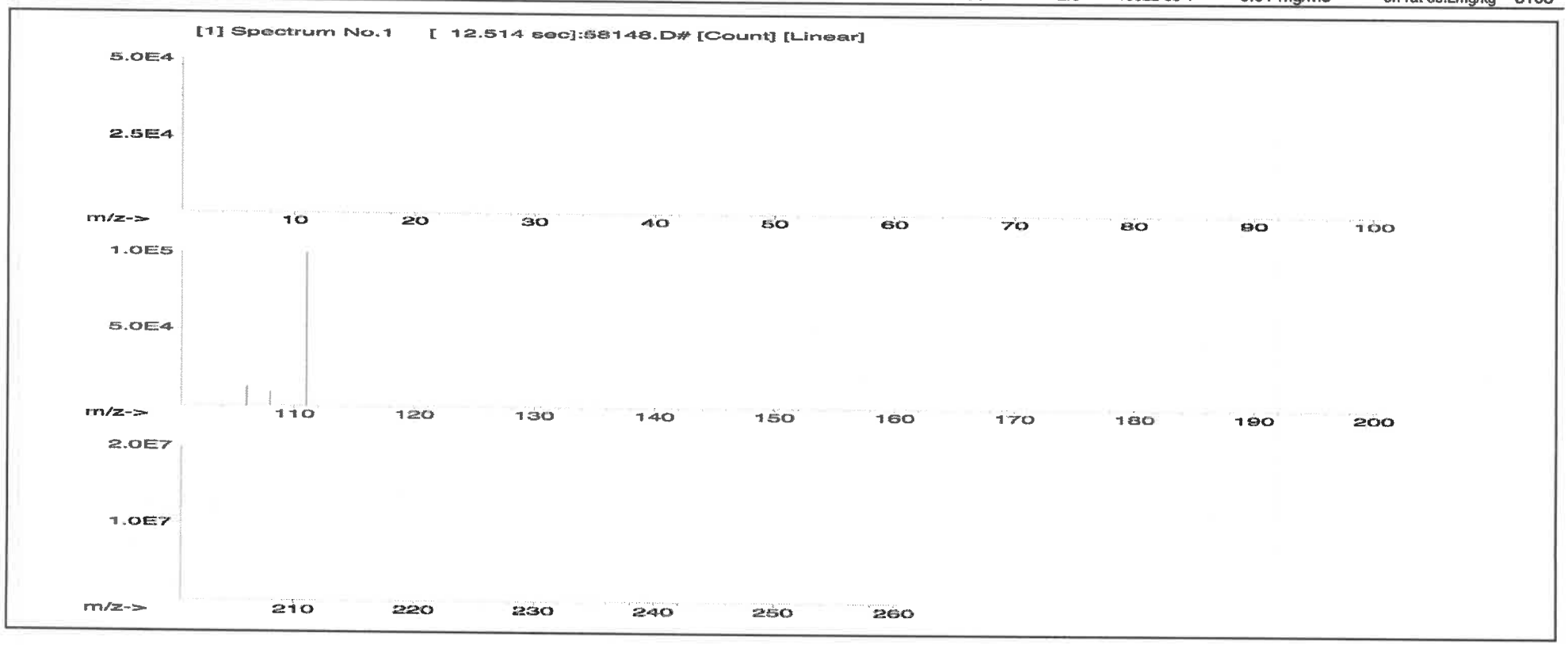
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady		
Formulated By:	Aleah O'Brady	070124
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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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.

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

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

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"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

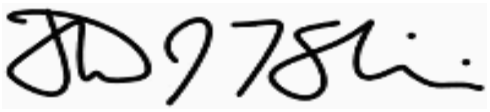
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB714159
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**1 000 ± 8 µg/mL**	**Cadmium, Cd**	**500.0 ± 2.1 µg/mL**
Lead, Pb	**1 000 ± 5 µg/mL**	**Selenium, Se**	**1 000 ± 8 µg/mL**
Thallium, Tl	**1 000 ± 7 µg/mL**		

Density: 1.043 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

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**

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

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- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

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

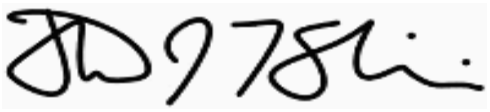
- Sealed TCT Bag Open Date: _____

- 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

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

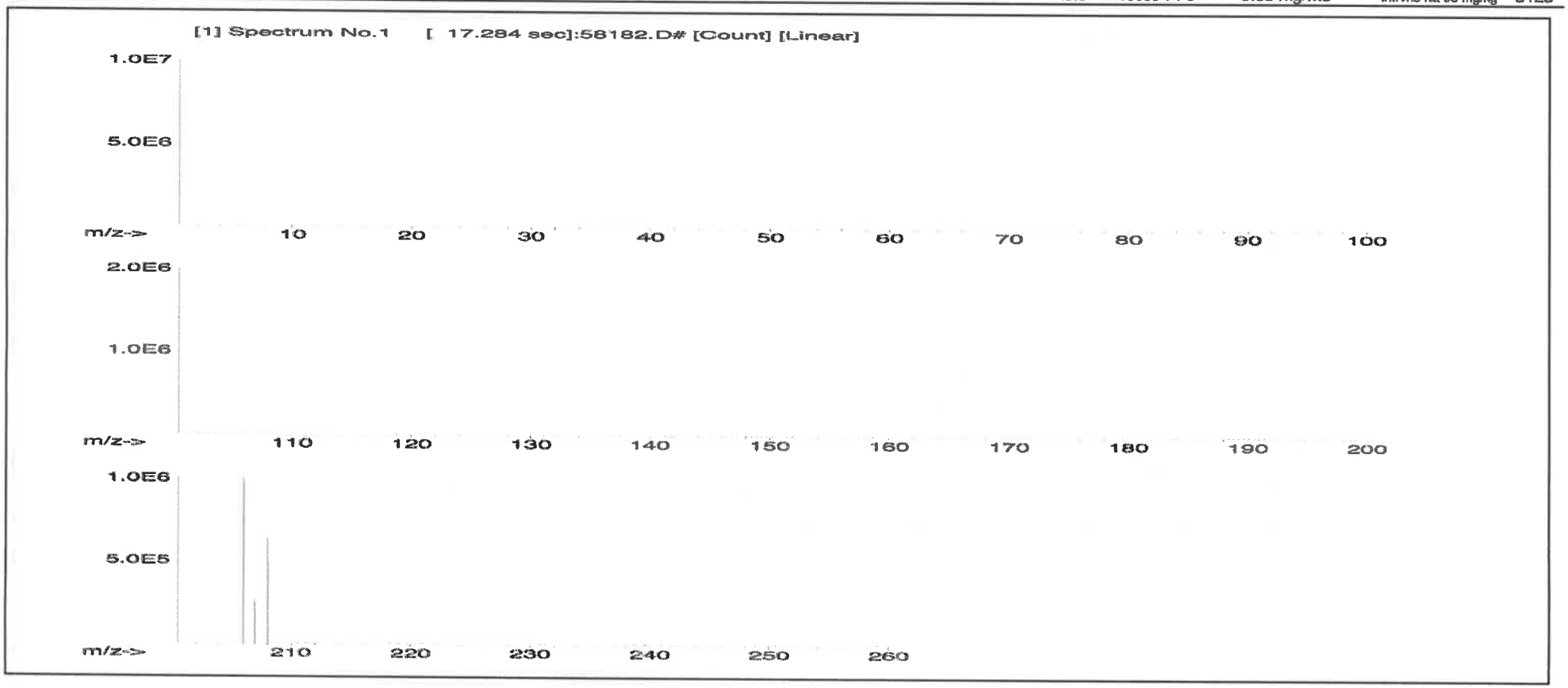
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

		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



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).

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5289 R: 07/12/22 BH

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

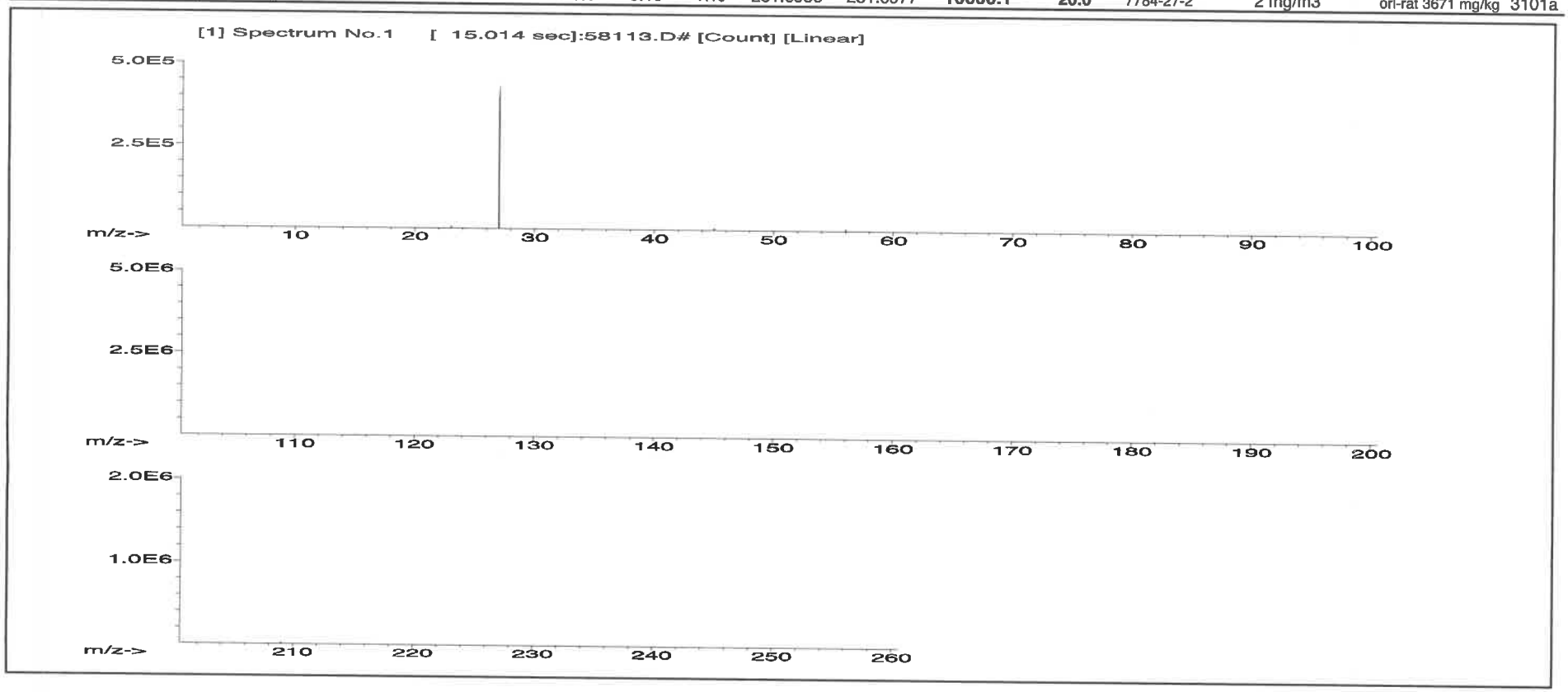
Part Number: 58113
Lot Number: 070622
Description: Aluminum (Al)

Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	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.

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

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R: 09/08/22 (BH)

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M5387 . M5389 . M5390 . M5391 . M5392

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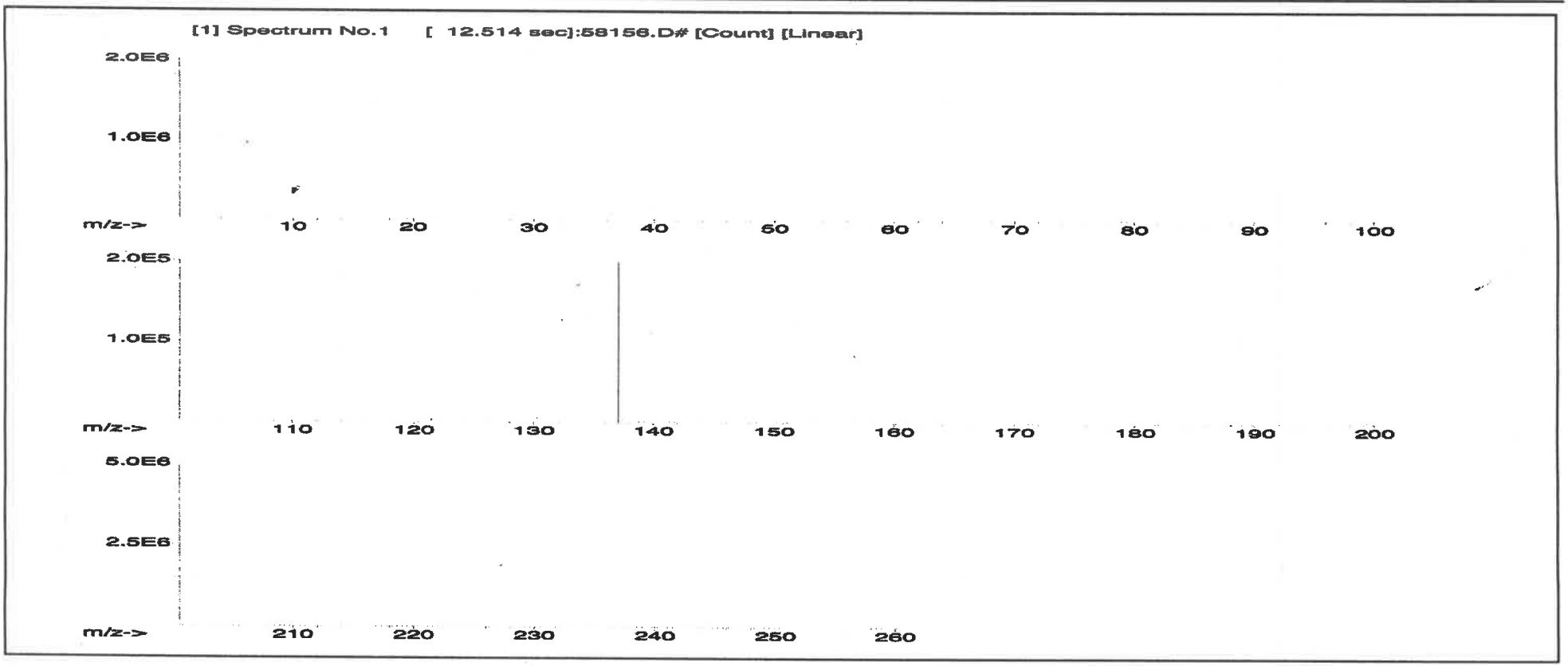
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	2.0	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12 | 0.058 Flask Uncertainty

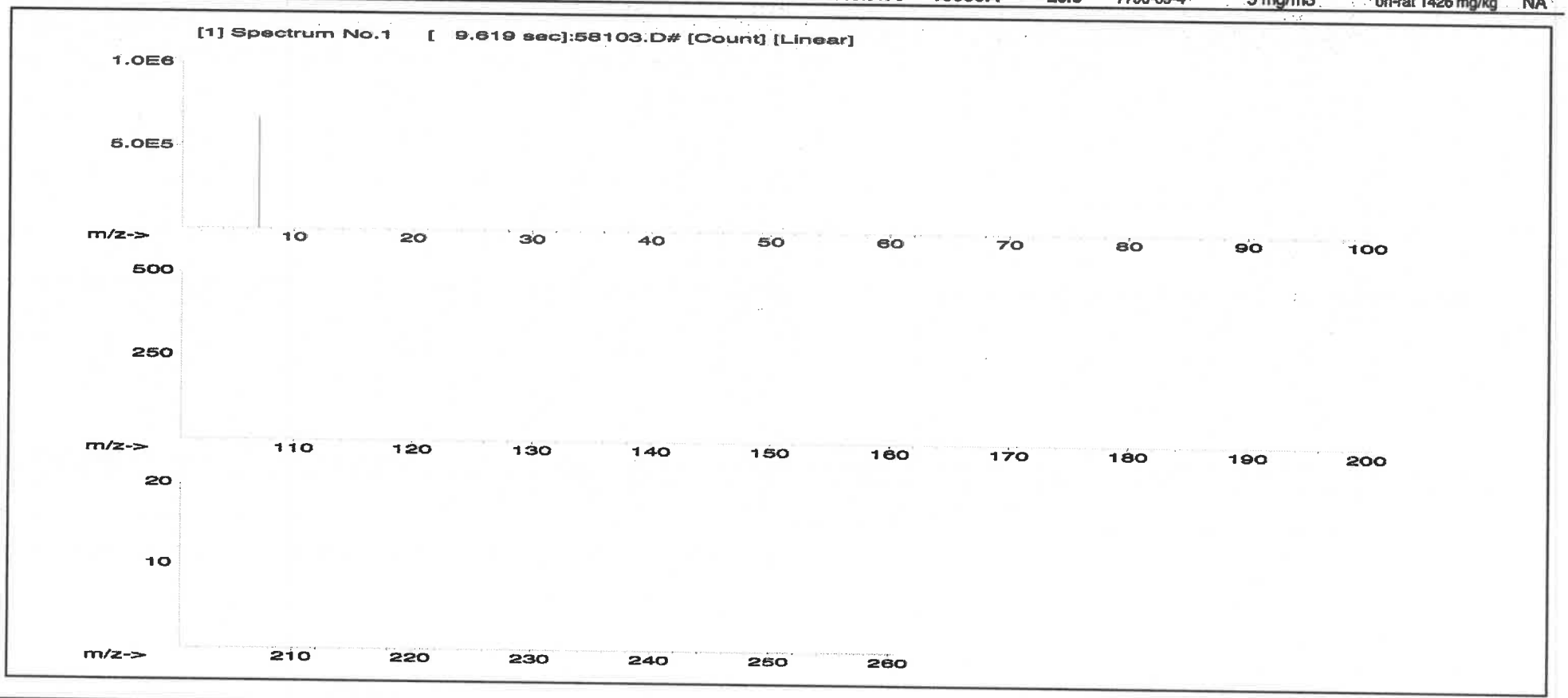
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 070622

Reviewed By: Pedro L. Rentas 070622

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	IN019	LIZ042018A1	10000	99.999	0.10	10.0	100.0134	100.0173	**10000.4**	**20.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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IN5497 - IN5498 R: 03/17/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

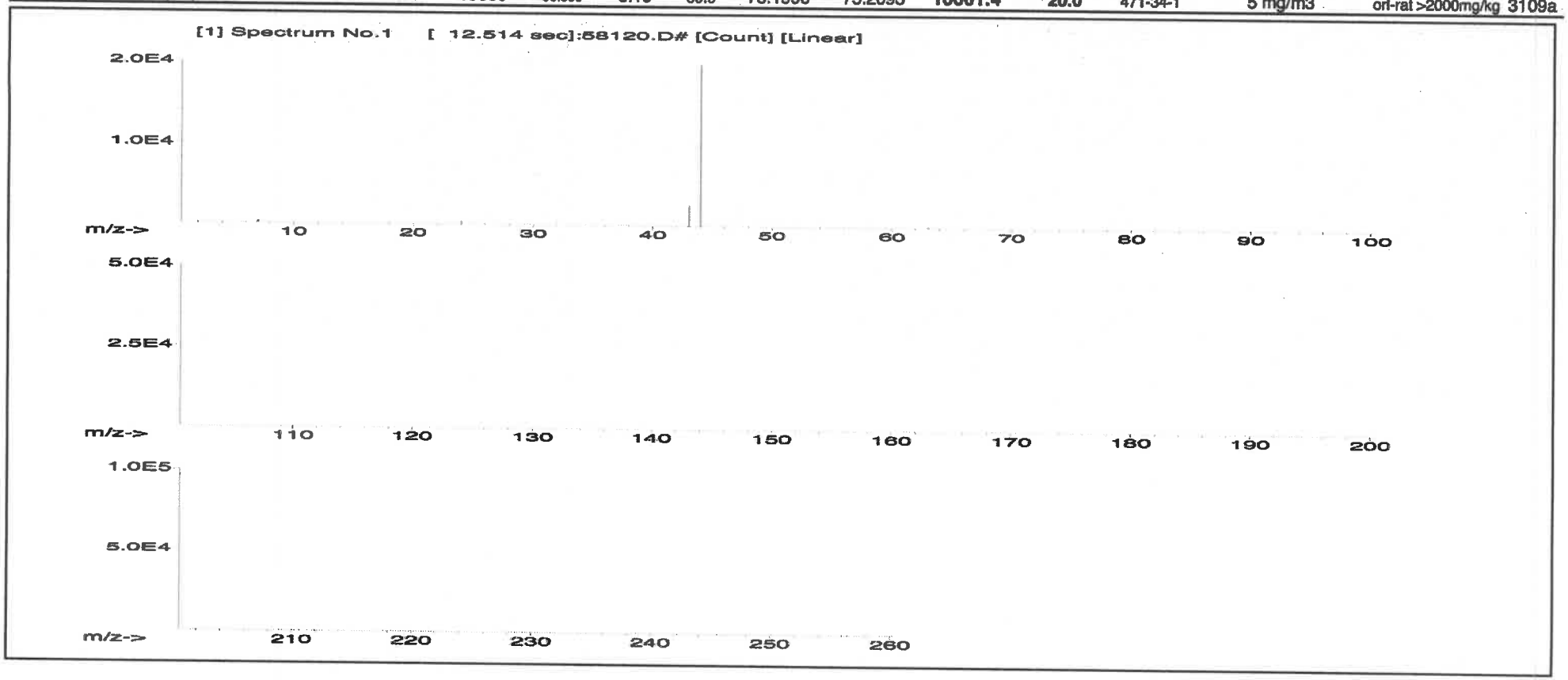
		Lot #	
Solvent:	21110221		Nitric Acid
	2%	60.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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IN5497 - IN5498 R: 03/17/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

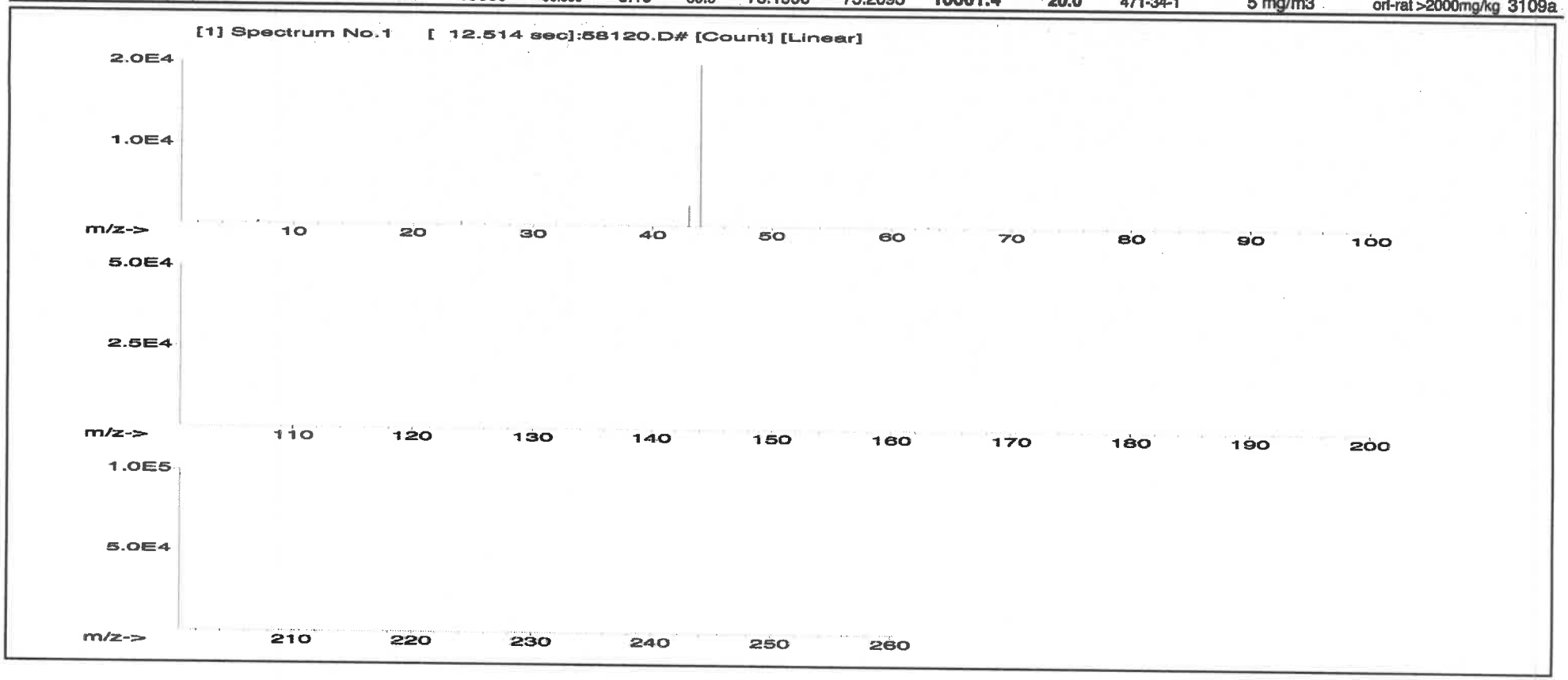
		Lot #	
Solvent:	21110221		Nitric Acid
	2%	60.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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M 5513 R: 03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

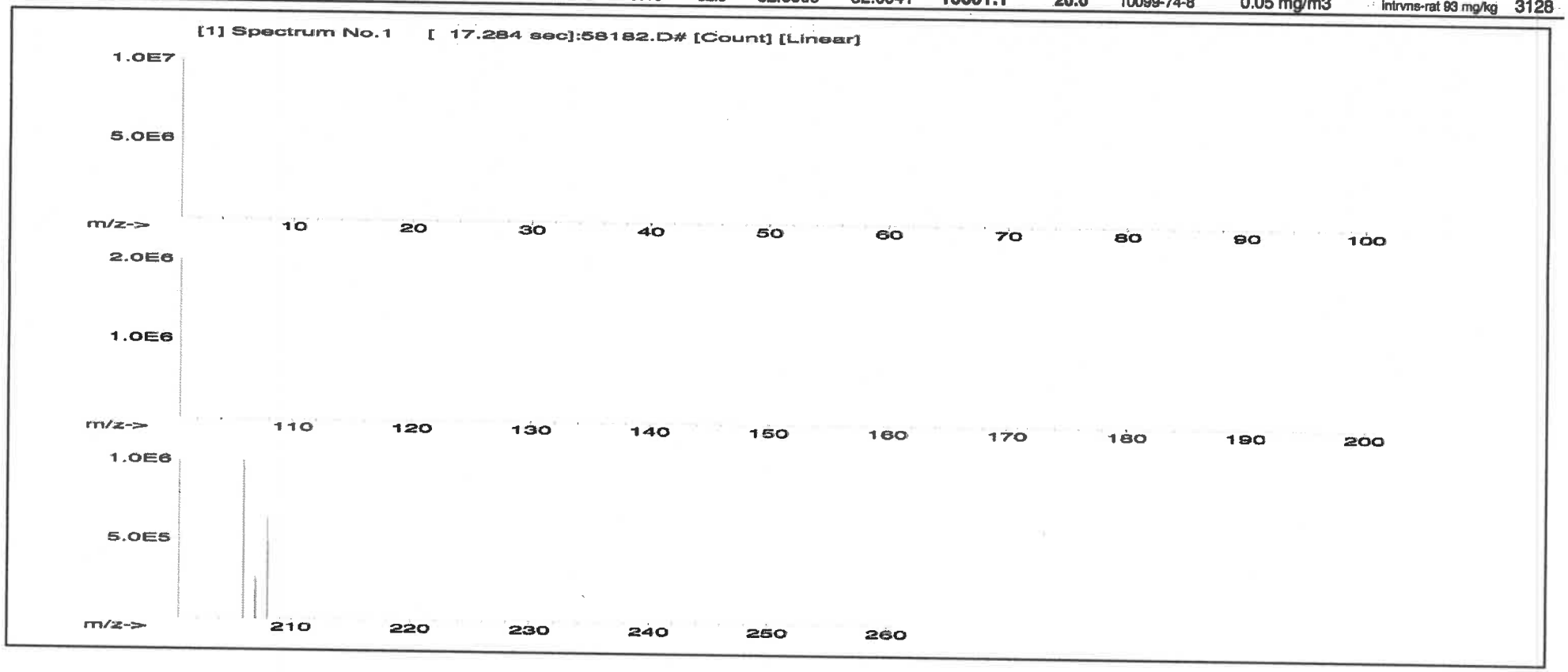
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M5514 , M5515 R: 03/17/23

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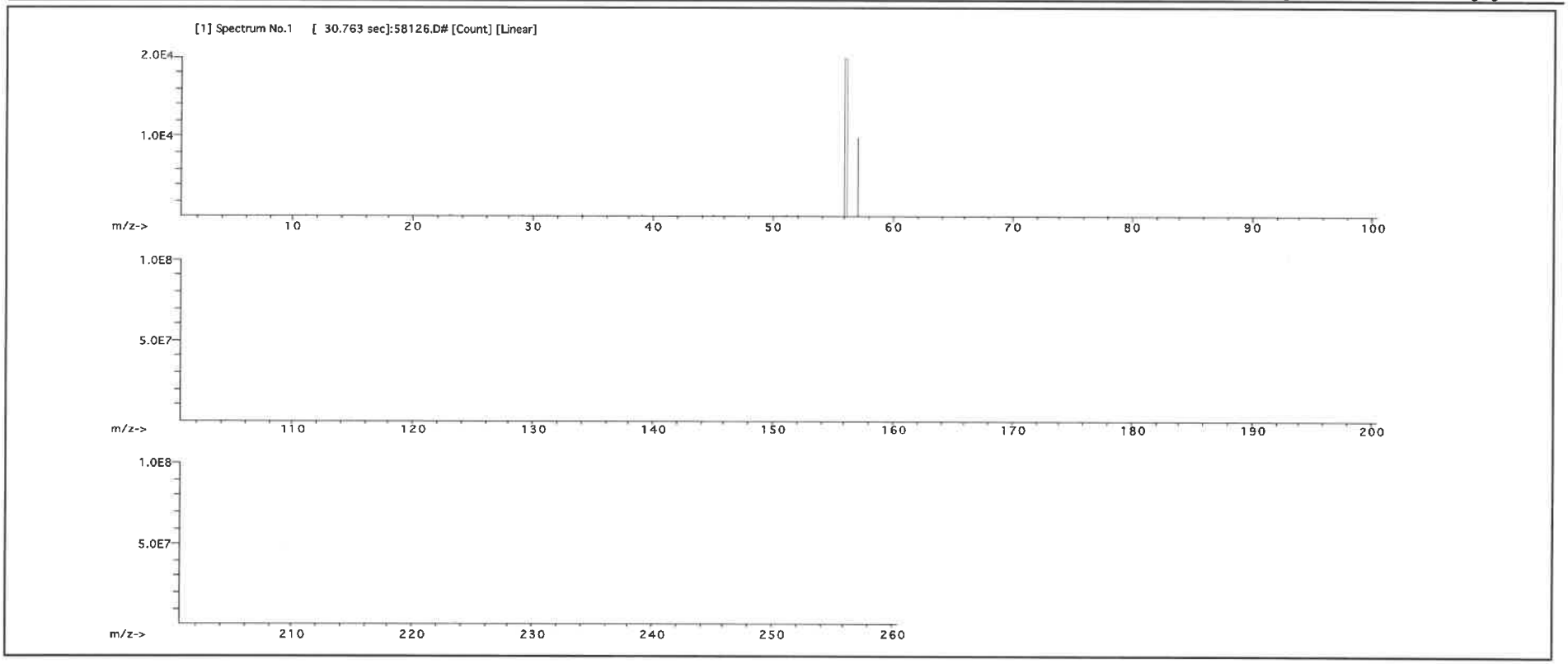
CERTIFIED WEIGHT REPORT:

Part Number:	**58126**		**Lot #**		
Lot Number:	**092122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Iron (Fe)**	7.0%	350.0 (mL)	Nitric Acid	
Expiration Date:	092125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	5000.1	0.12	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	092122
Reviewed By:	Pedro L. Rentas	092122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2224912-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.05
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5519. M5520 (BH) R:03/17/23

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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

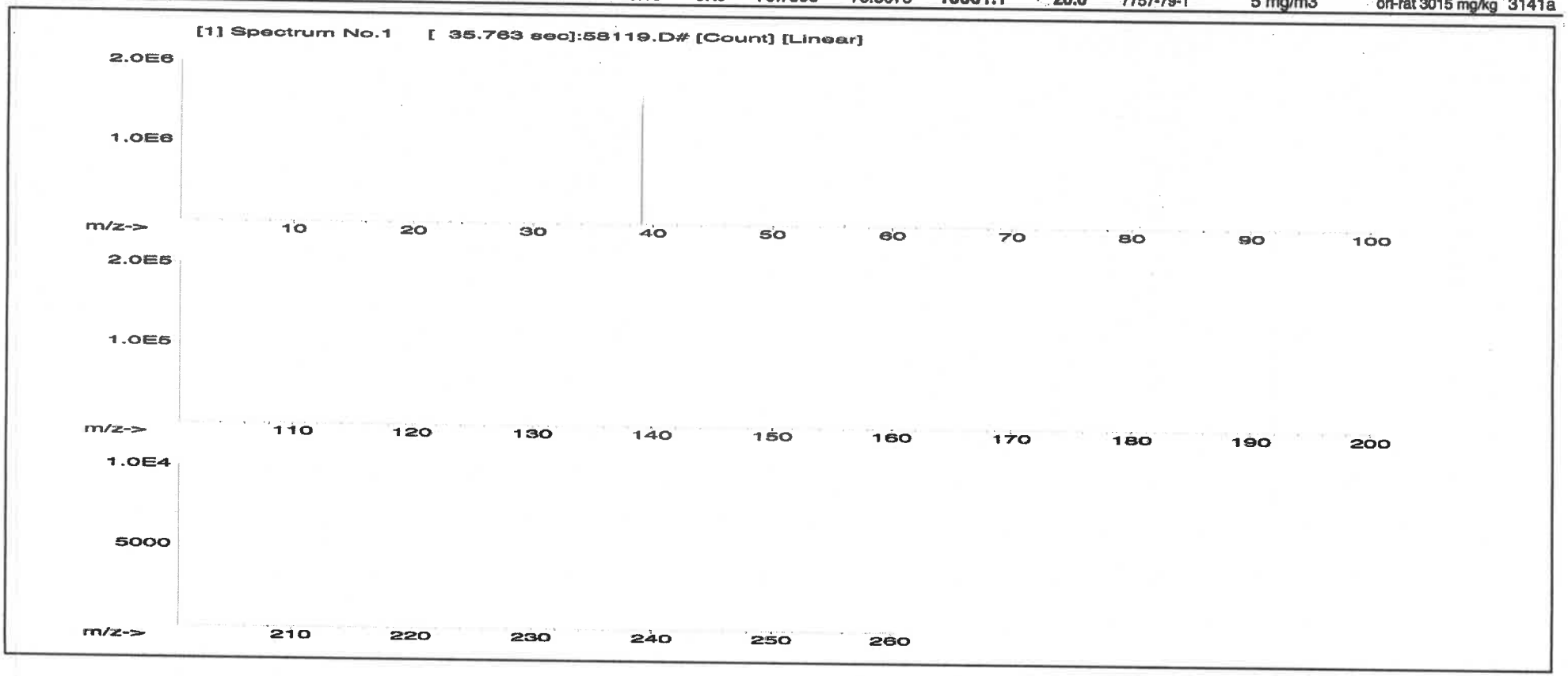
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

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



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.
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M5658 R! 8/25/23

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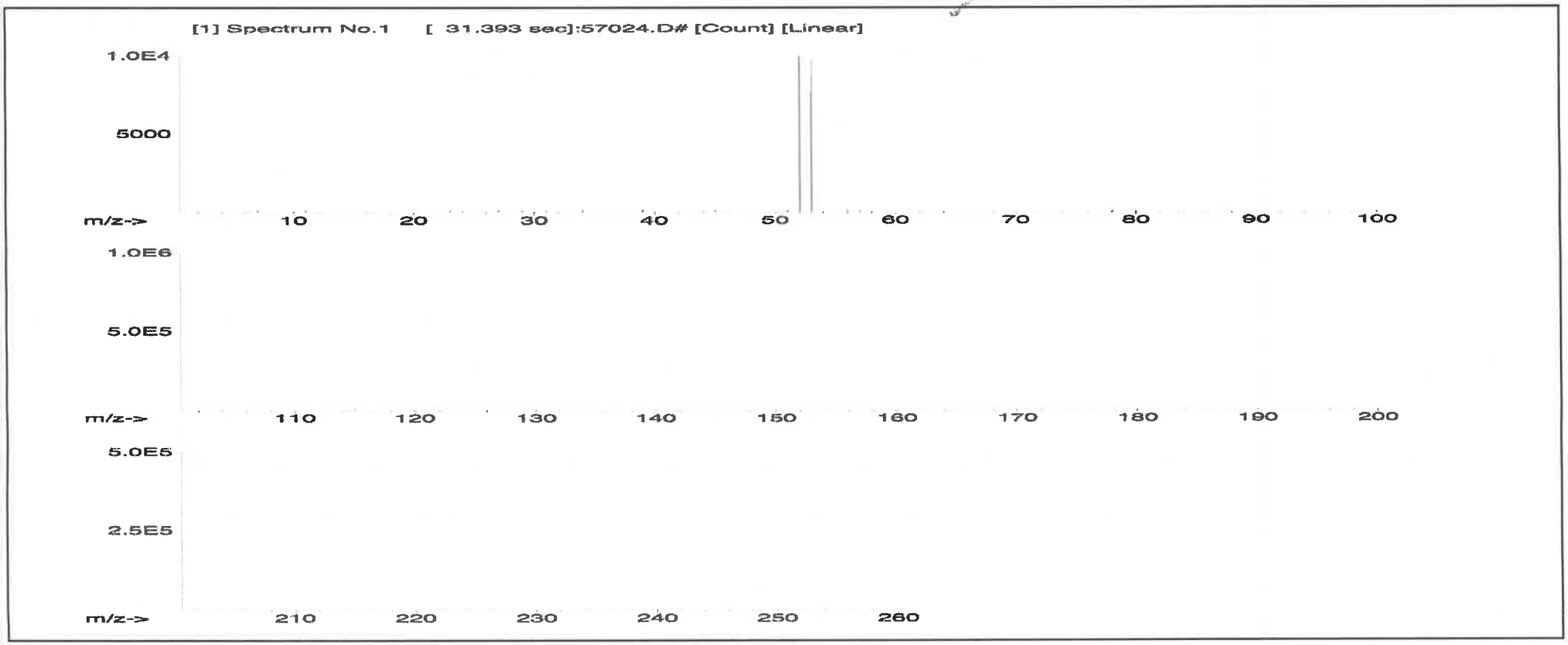
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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M5697 R: 10/27/23

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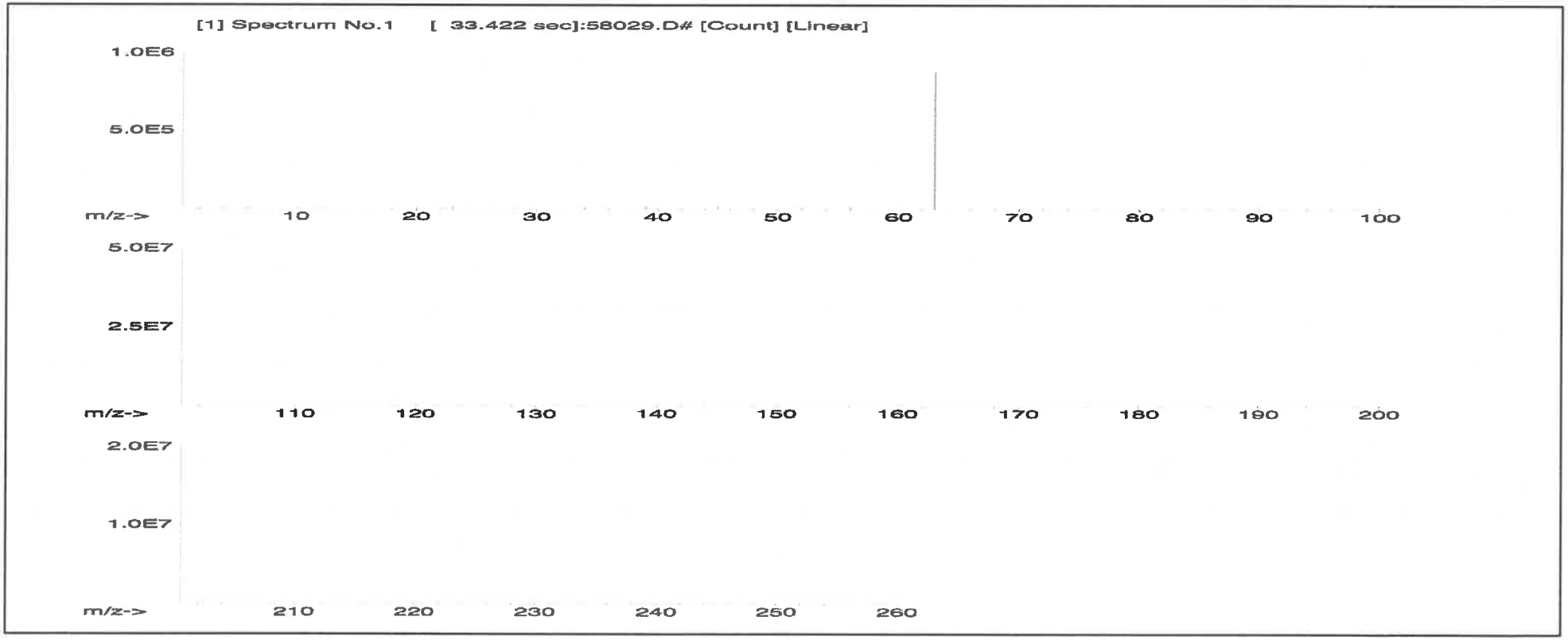
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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M5648 R: 10/27/23

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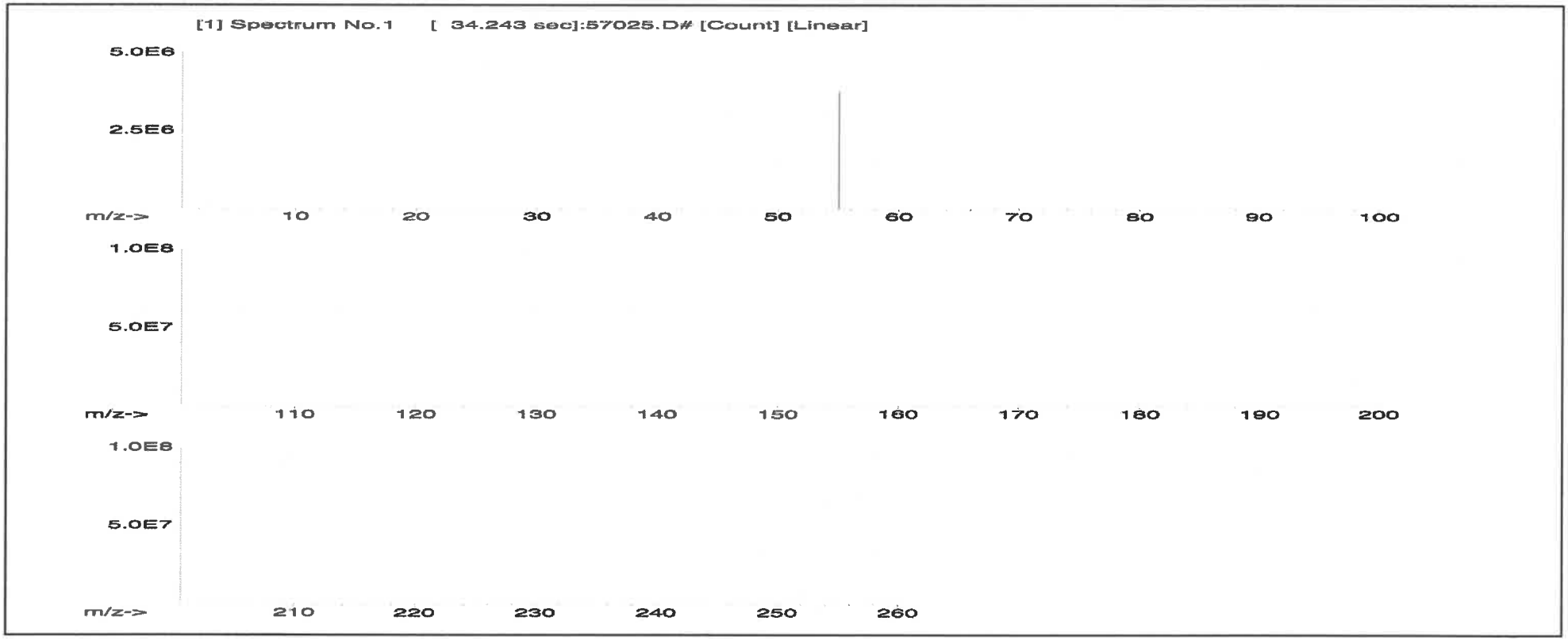
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	**1000.0**	**2.1**	20694-39-7	5 mg/m3	orl-rat >300mg/kg	3132



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 8/25/23 M5751

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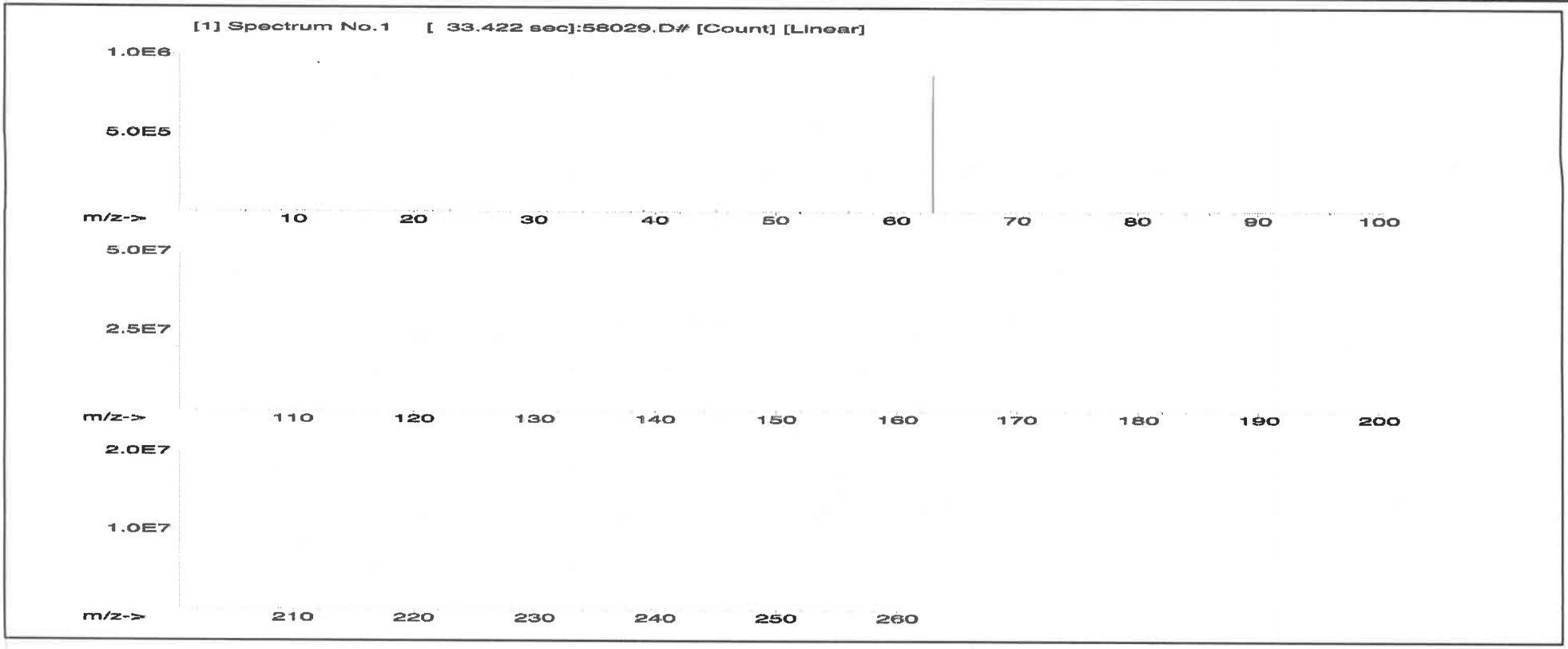
CERTIFIED WEIGHT REPORT:

		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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5768 M5769 (BP) R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

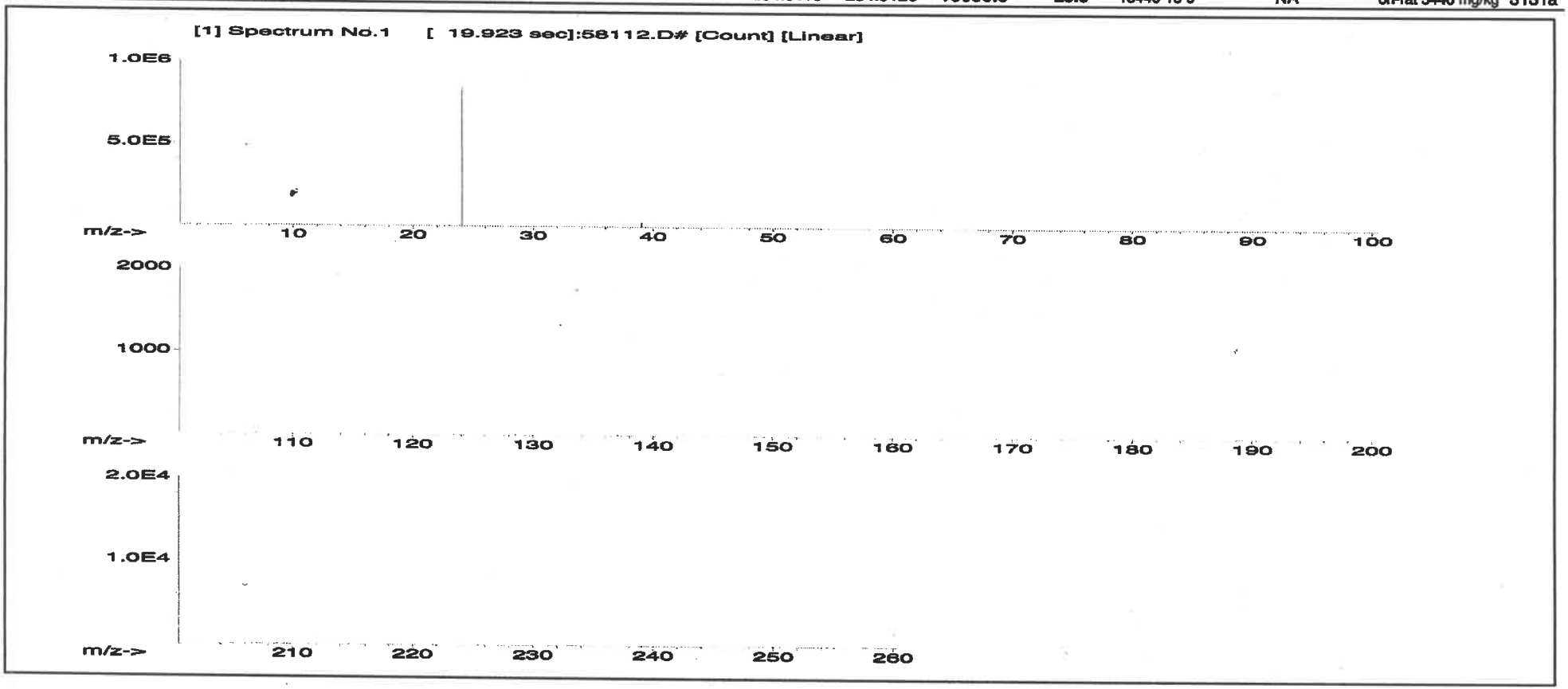
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

Formulated By:	Lawrence Barry	091823
Reviewed By:	Pedro L. Rentas	091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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M5768 M5769 (BP) R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

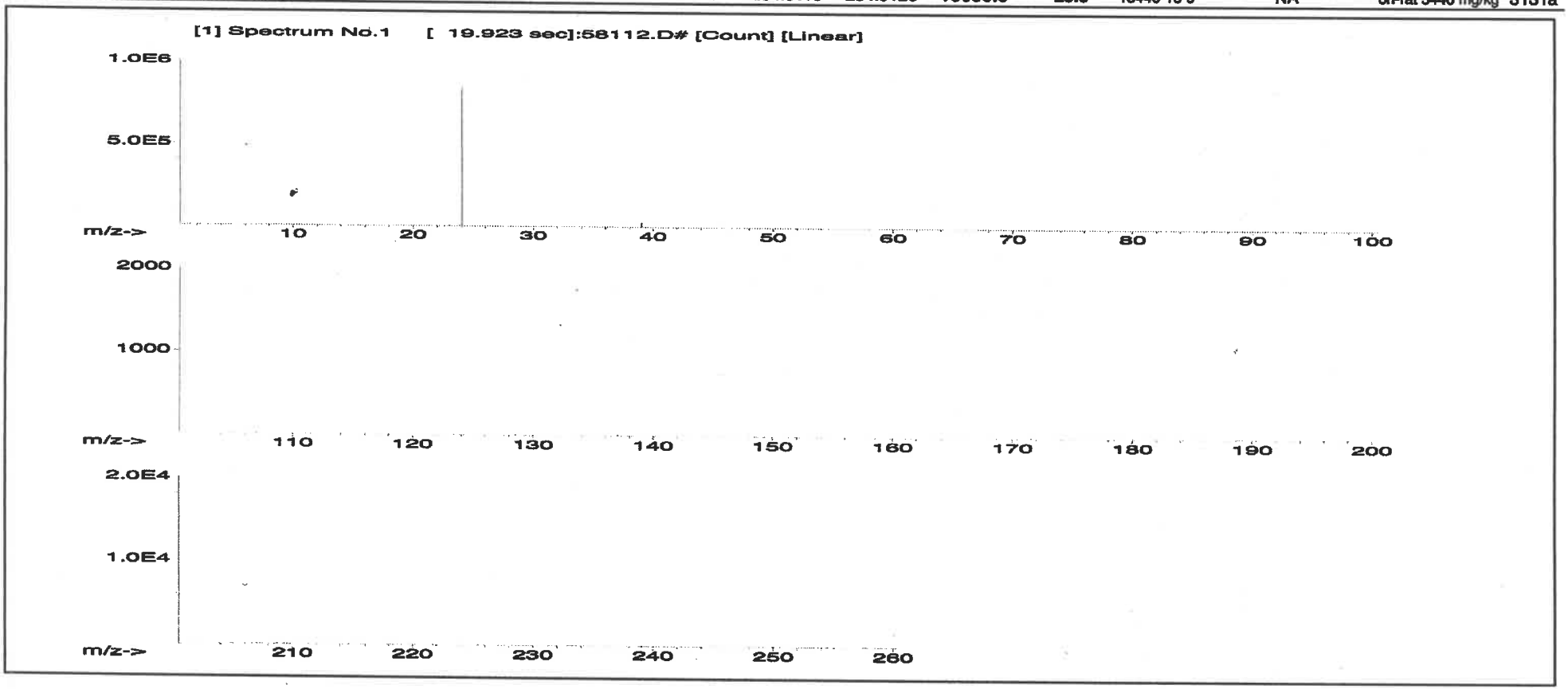
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

Formulated By:	Lawrence Barry	091823
Reviewed By:	Pedro L. Rentas	091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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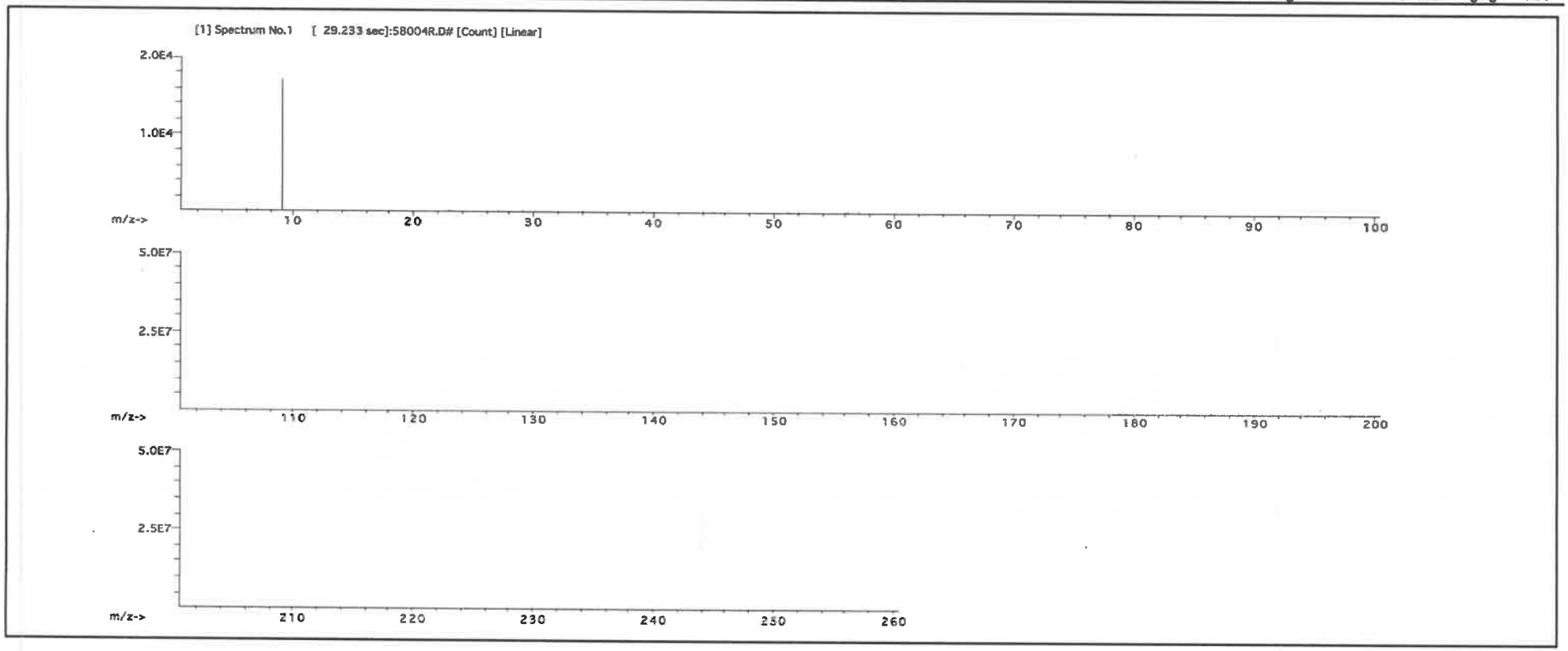
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

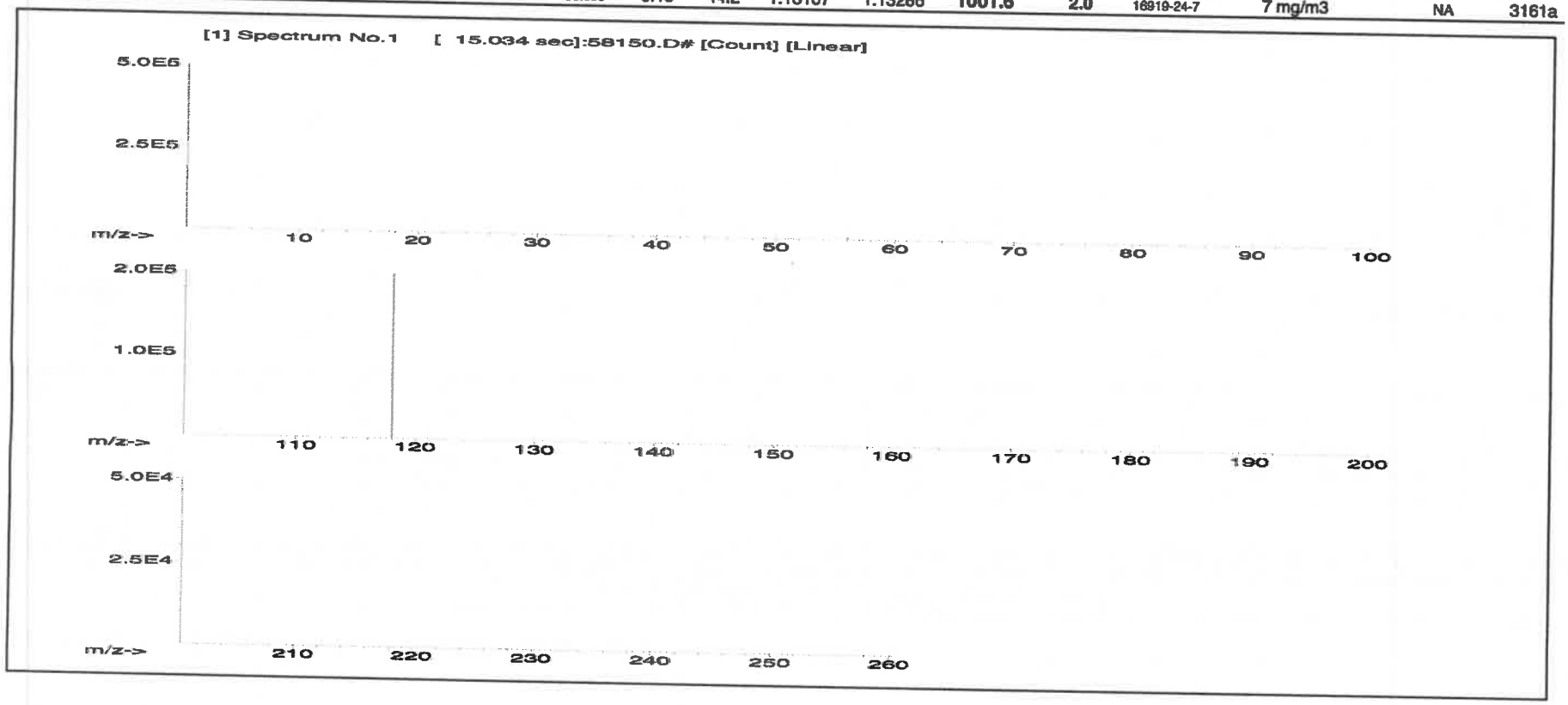
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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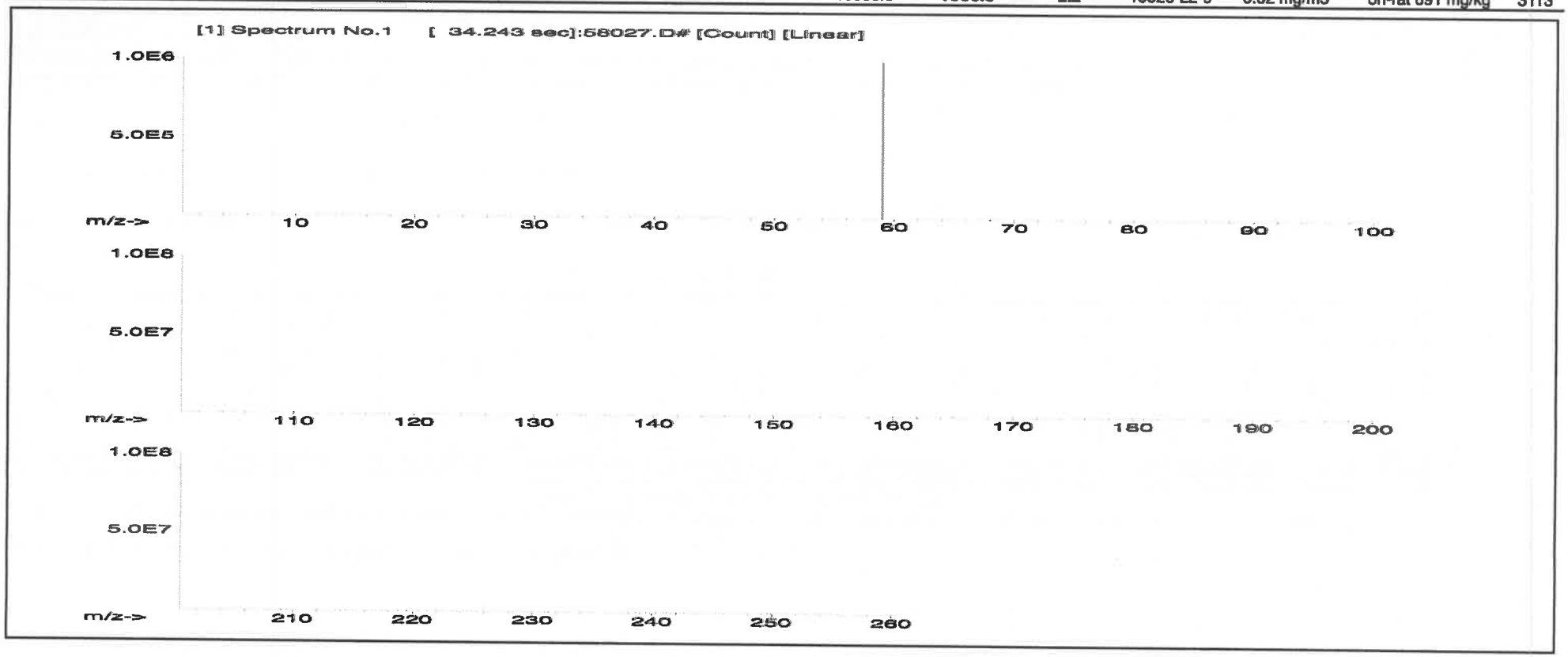
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**				
		2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	**2.2**	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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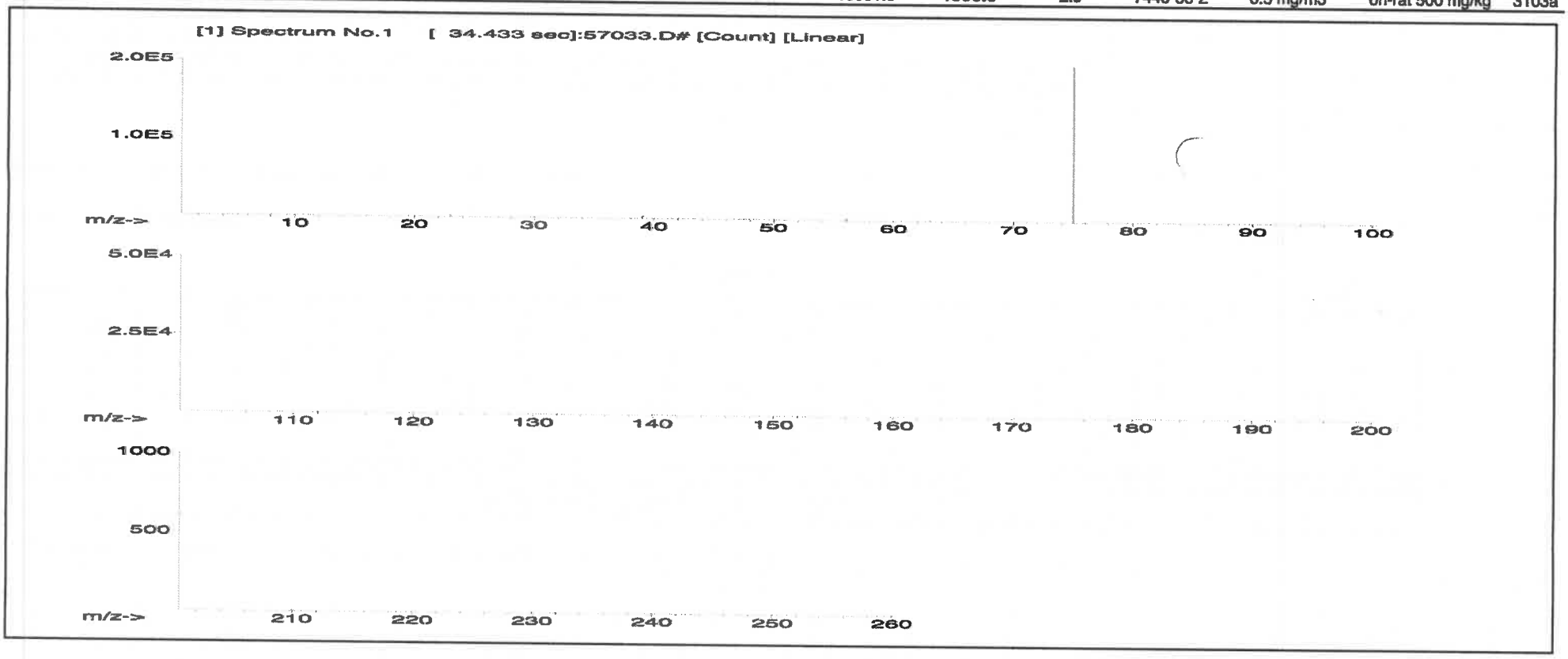
CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R1 02/09/24. M58165

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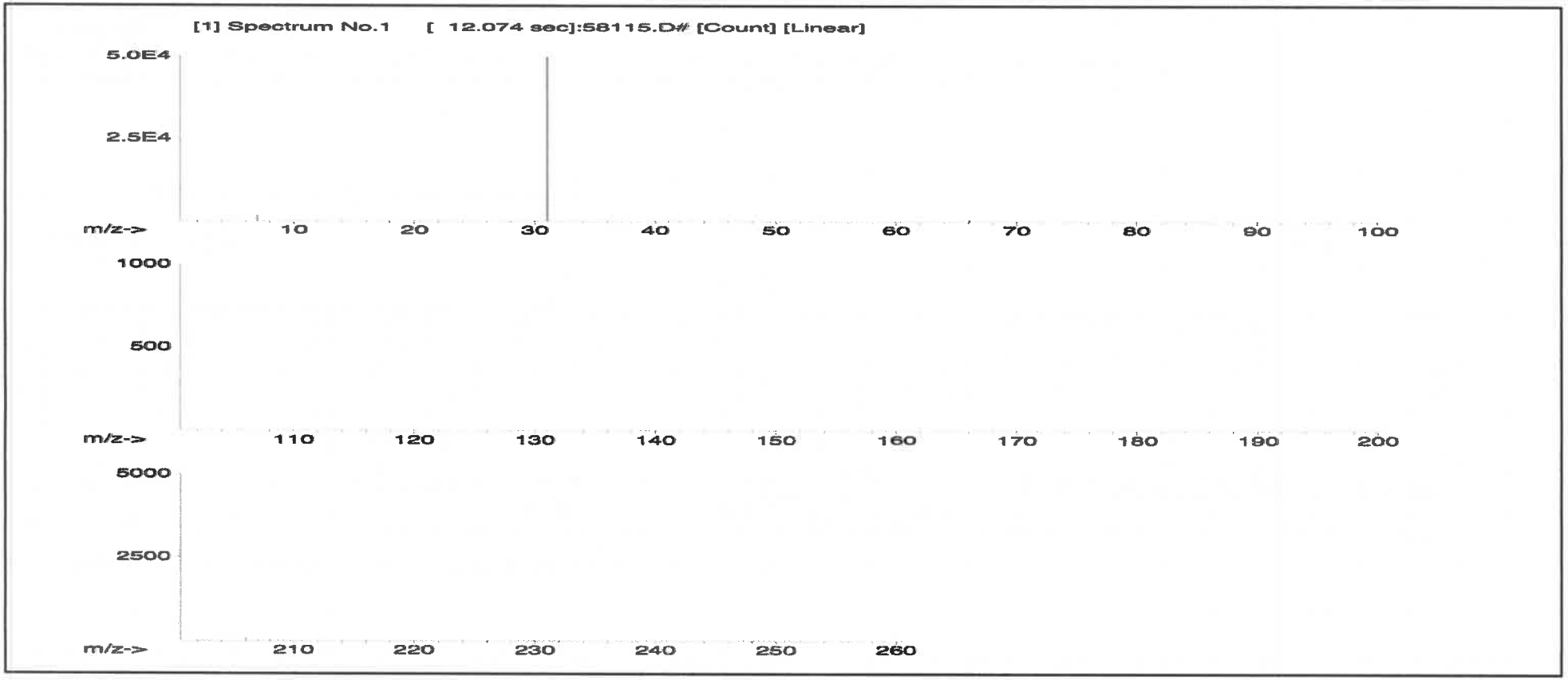
CERTIFIED WEIGHT REPORT:

			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.

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* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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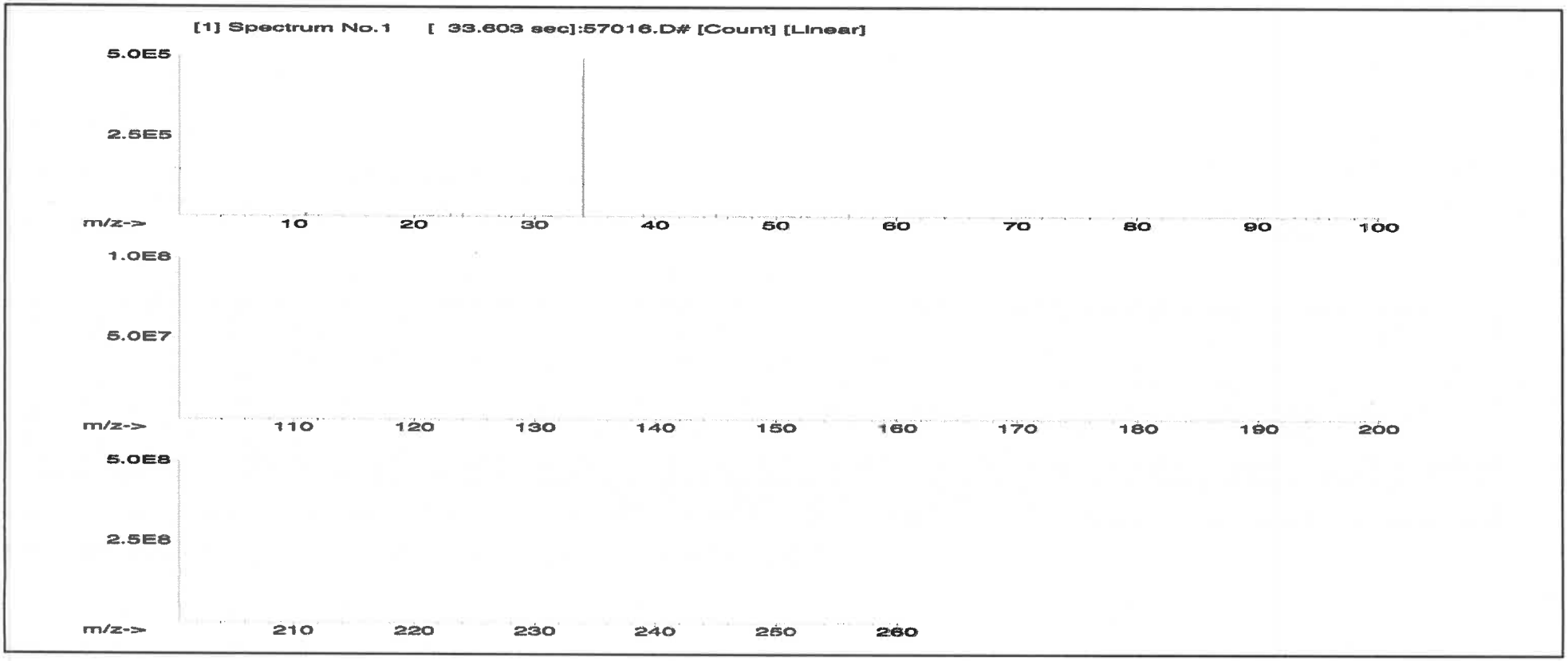
CERTIFIED WEIGHT REPORT:

Part Number:	**57016**	**Solvent:**	**Lot #** 122923	ASTM Type 1 Water
Lot Number:	**122923**			
Description:	**Sulfur (S)**			
Expiration Date:	122926			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty	

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

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



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.
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R: 02/09/24 M5817

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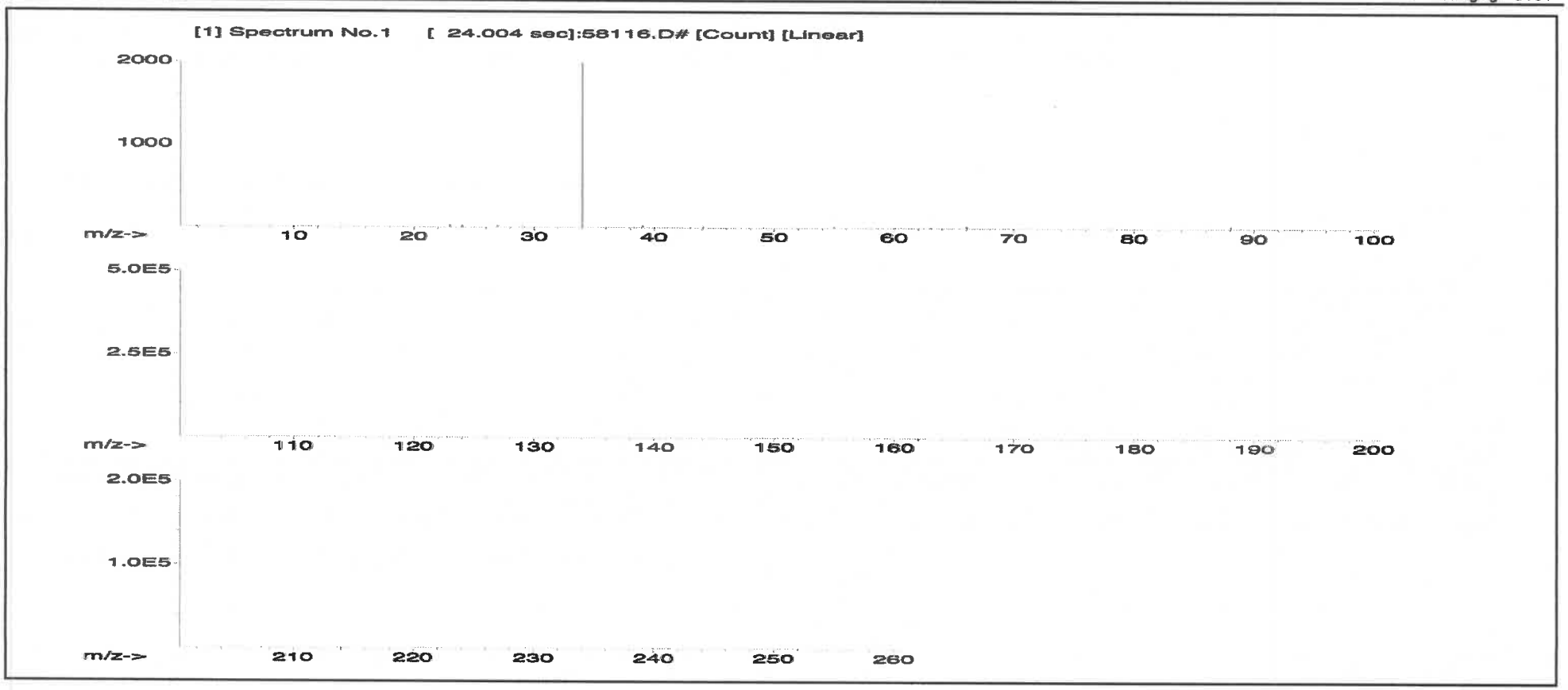
CERTIFIED WEIGHT REPORT:

Part Number:	**57116**			
Lot Number:	**071123**	**Solvent:**	071123	ASTM Type 1 Water
Description:	**Sulfur (S)**			
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	

Lot #

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/09/24 M.5818

Lot #

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CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 ± 0.058 Flask Uncertainty

Solvent: 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

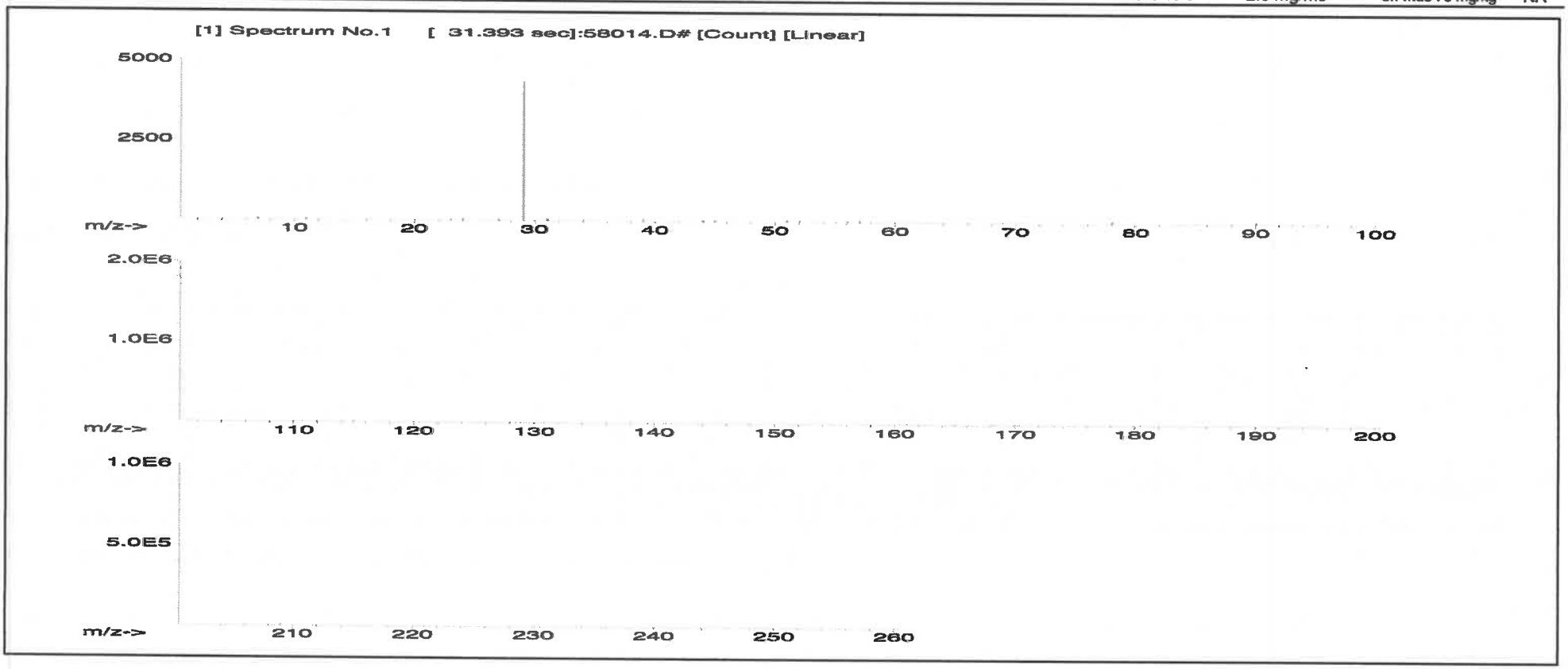
Aleah O'Brady

Formulated By: Aleah O'Brady 122023

Pedro Rentas

Reviewed By: Pedro L. Rentas 122023

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorosilicate (Si)	IN009	SID082022A1	1000	99.999	0.10	14.4	13.8854	13.8855	**1000.0**	**2.0**	16919-19-0	2.5 mg/m3	orl-mus 70 mg/kg	NA



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:

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R: 02/09/24 M5819

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CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

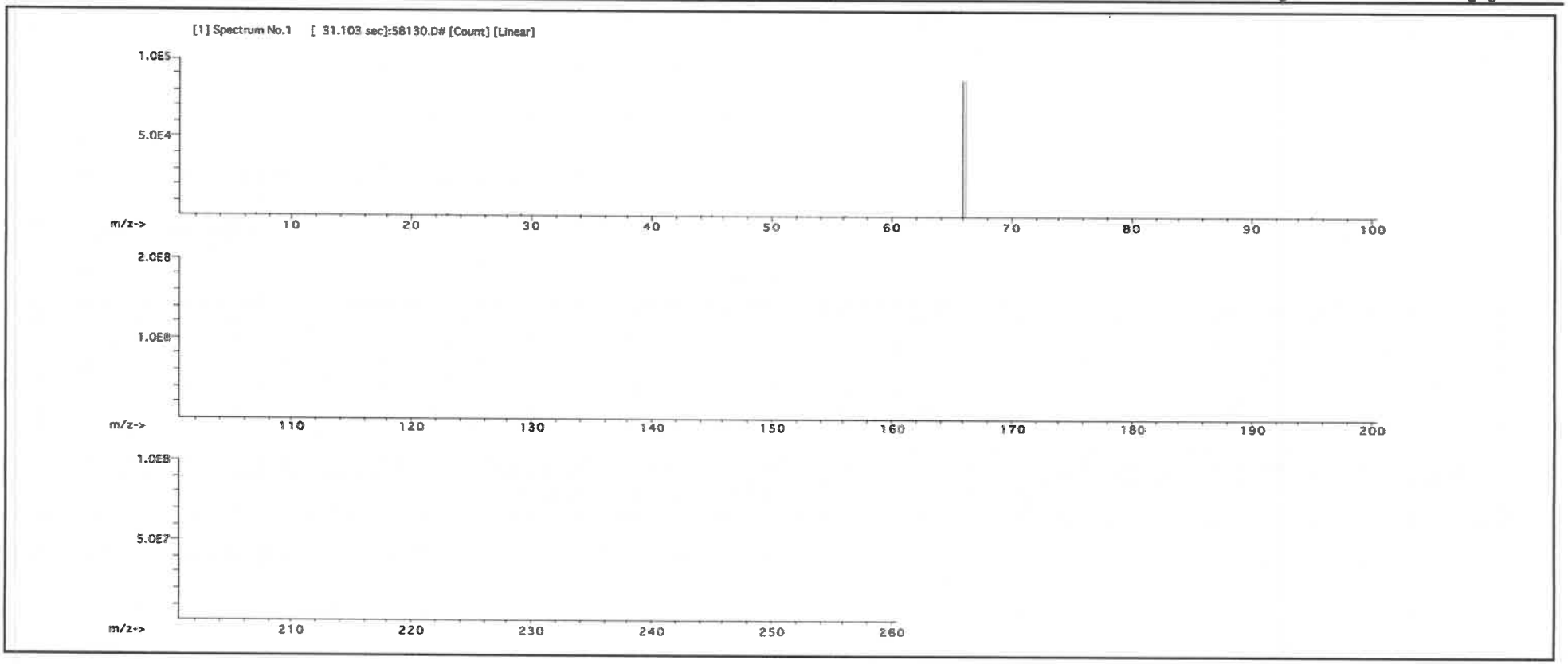
Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

		Lot #		
Solvent:	24002546	Nitric Acid		
2%	60.0 (mL)	Nitric Acid		
			5E-05	Balance Uncertainty

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5820

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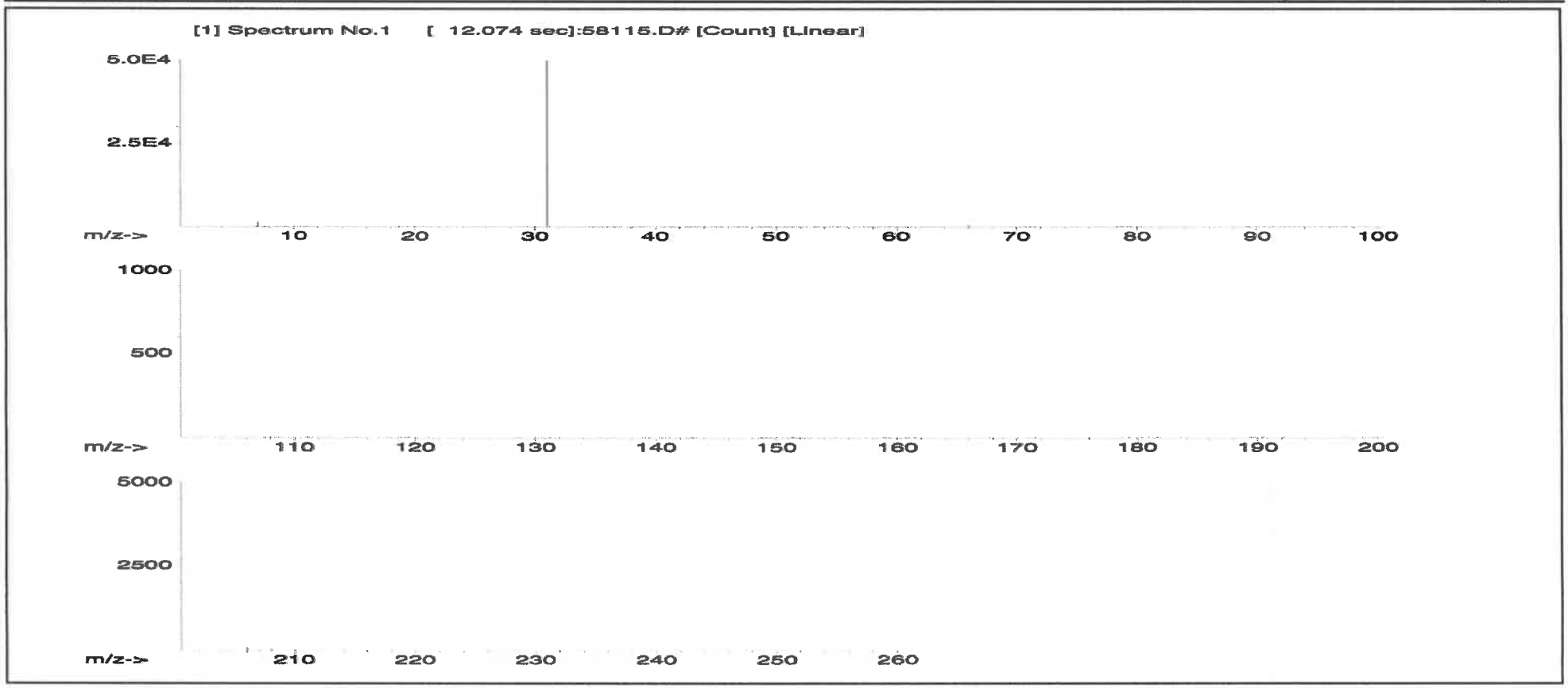
CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091123
Reviewed By:	Pedro L. Rentas	091123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certified Reference Material CRM

M5960 KK R. 6/11/24

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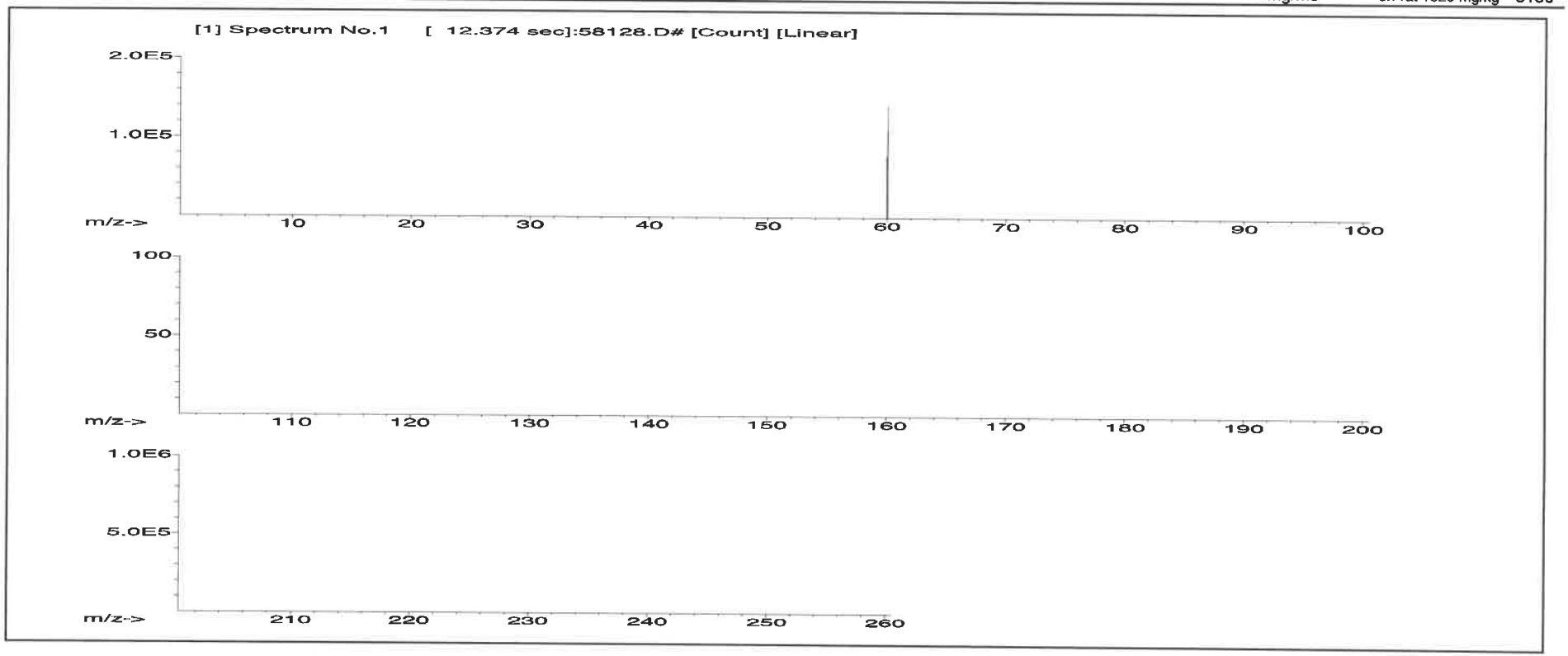
CERTIFIED WEIGHT REPORT:

Part Number:	**57028**		**Lot #**		
Lot Number:	**041124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**				
		2%	5.0 (mL)	Nitric Acid	
Expiration Date:	041127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	249.85	0.002	Flask Uncertainty		

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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).

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Certified Reference Material CRM

M5962 R! 06/14/24.

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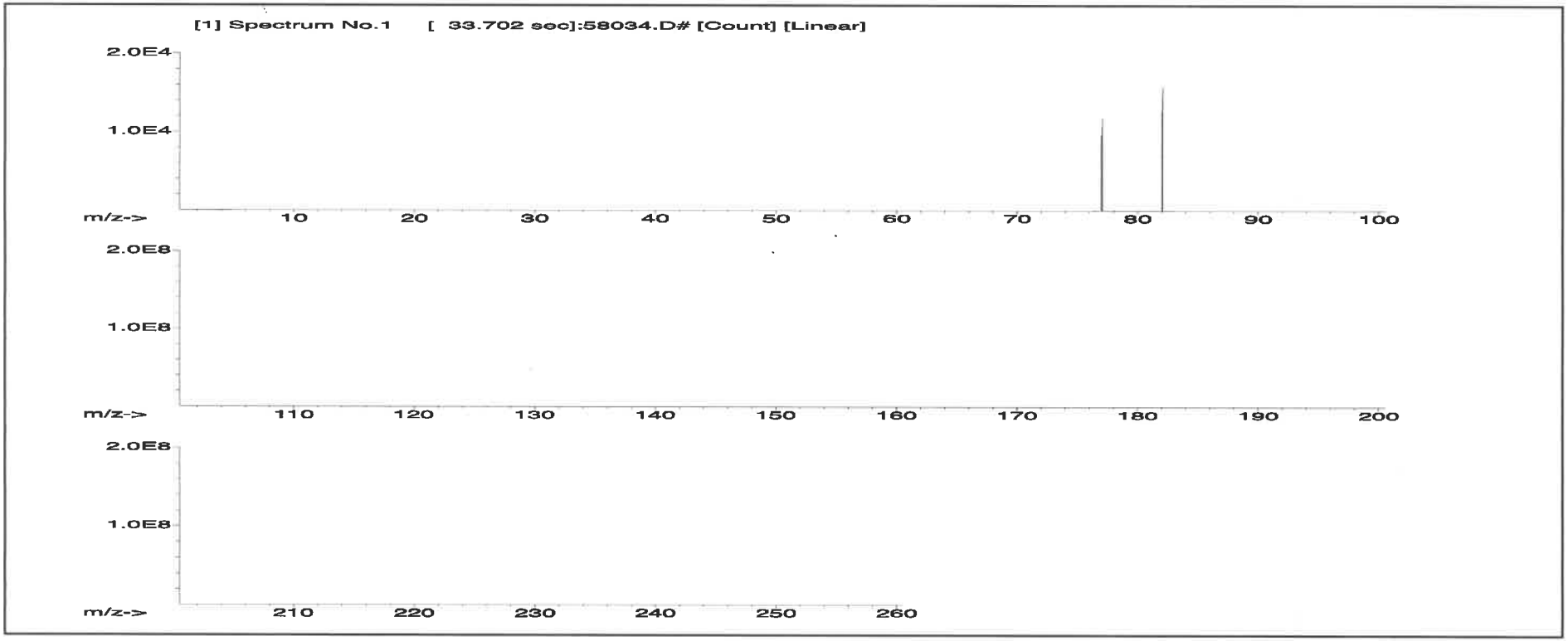
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

M5970, M5971 R: 7/01/24

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

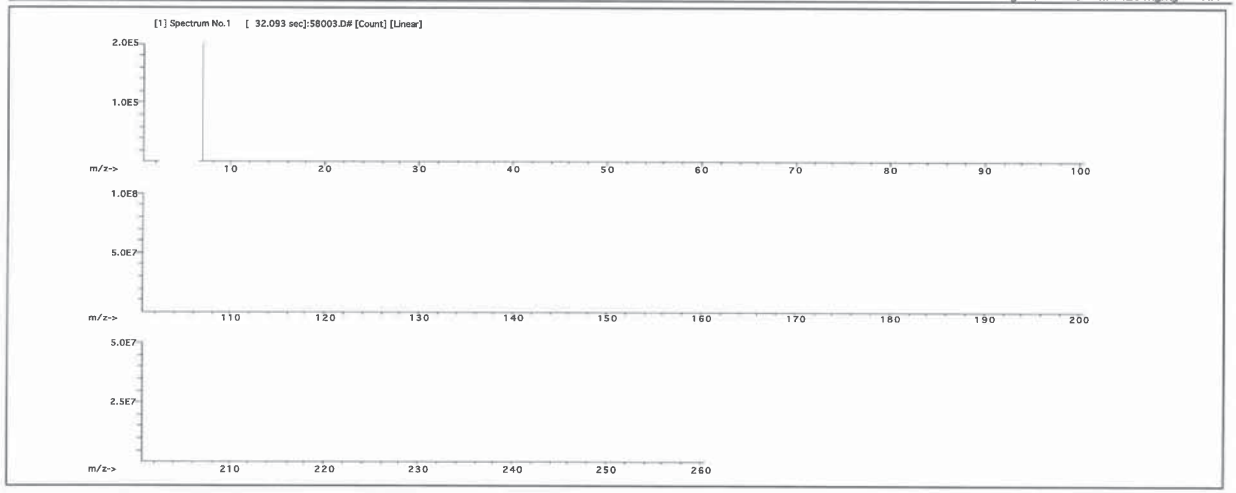
		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito

Formulated By: Giovanni Esposito 062124

Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	T	Ni	<0.02	Pr	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	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

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

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(\bar{x}_i)$

$\bar{x}_i$ = 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:

$X_{CRM/RM} = (\bar{x}_a)\ (u_{char\ a})$

$\bar{x}_a$ = 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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

45982 R: 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

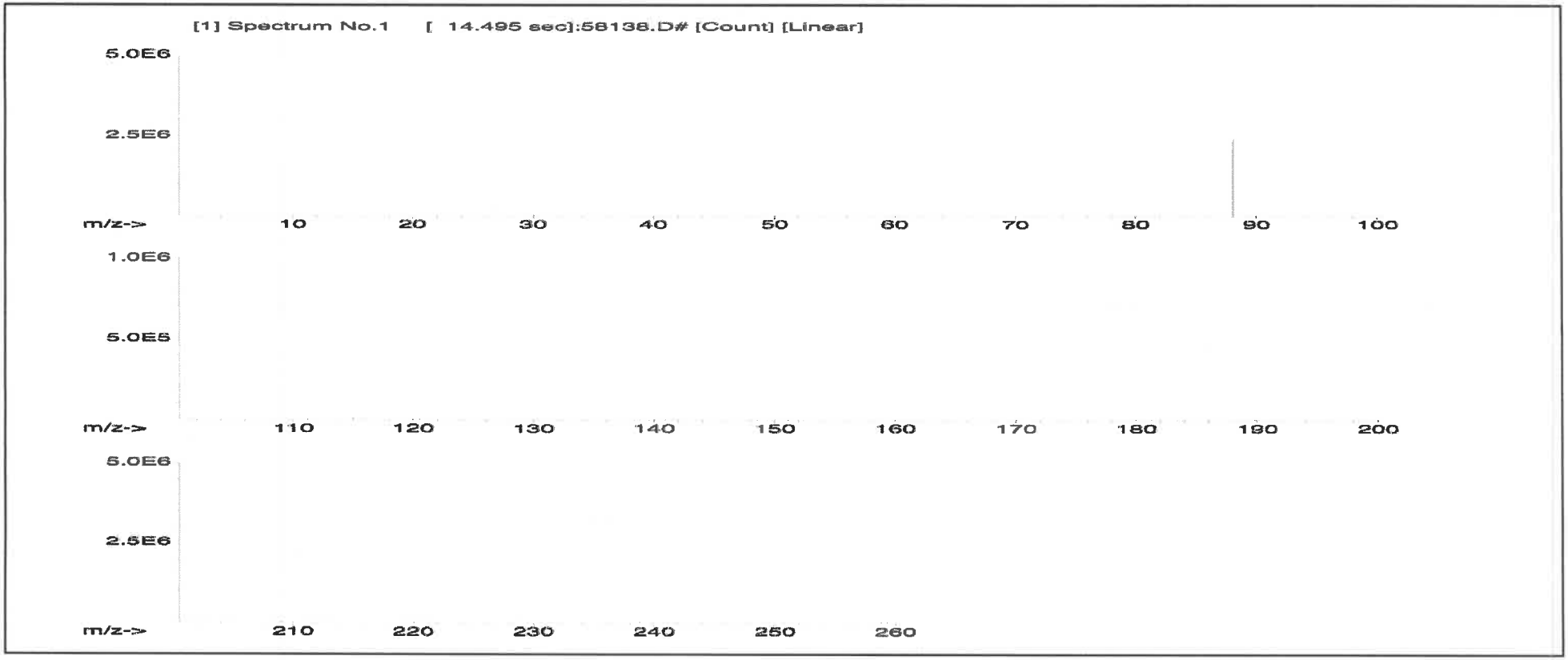
Part Number: 57038
Lot Number: 031524
Description: Strontium (Sr)

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



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).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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MS985
R: 6/14/24

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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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

CERTIFIED WEIGHT REPORT:

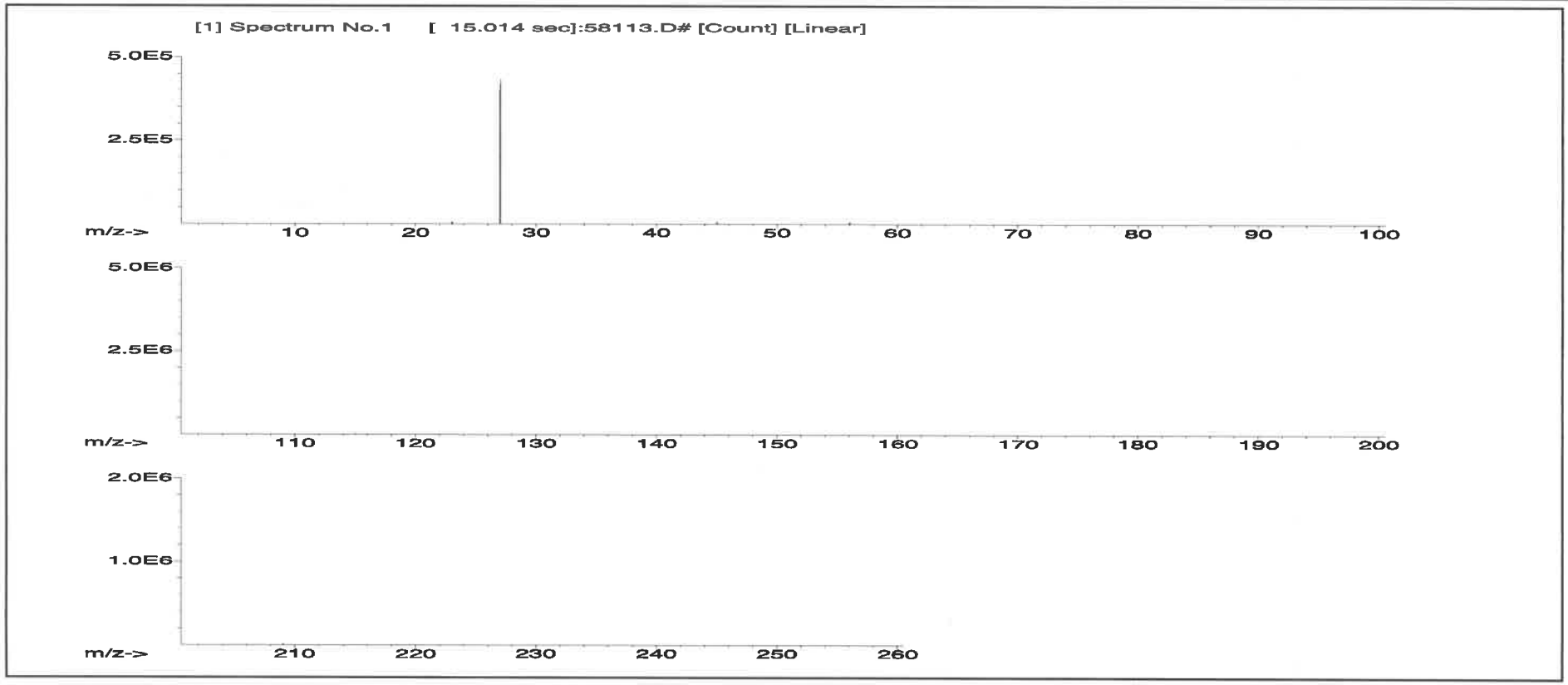
Part Number:	**58113**		**Solvent:**	20510011	Nitric Acid
Lot Number:	**011623**				
Description:	**Aluminum (Al)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05 Balance Uncertainty			
Weight shown below was diluted to (mL):	2000.02	0.058 Flask Uncertainty			

Lot #

Giovanni Esposito

Formulated By:	Giovanni Esposito	011623
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 >>>

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

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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

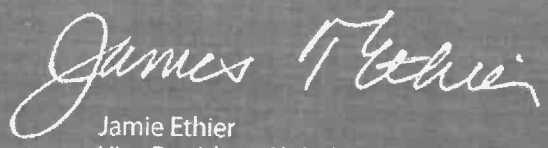
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

M6125 Receive -> 11/22/24

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

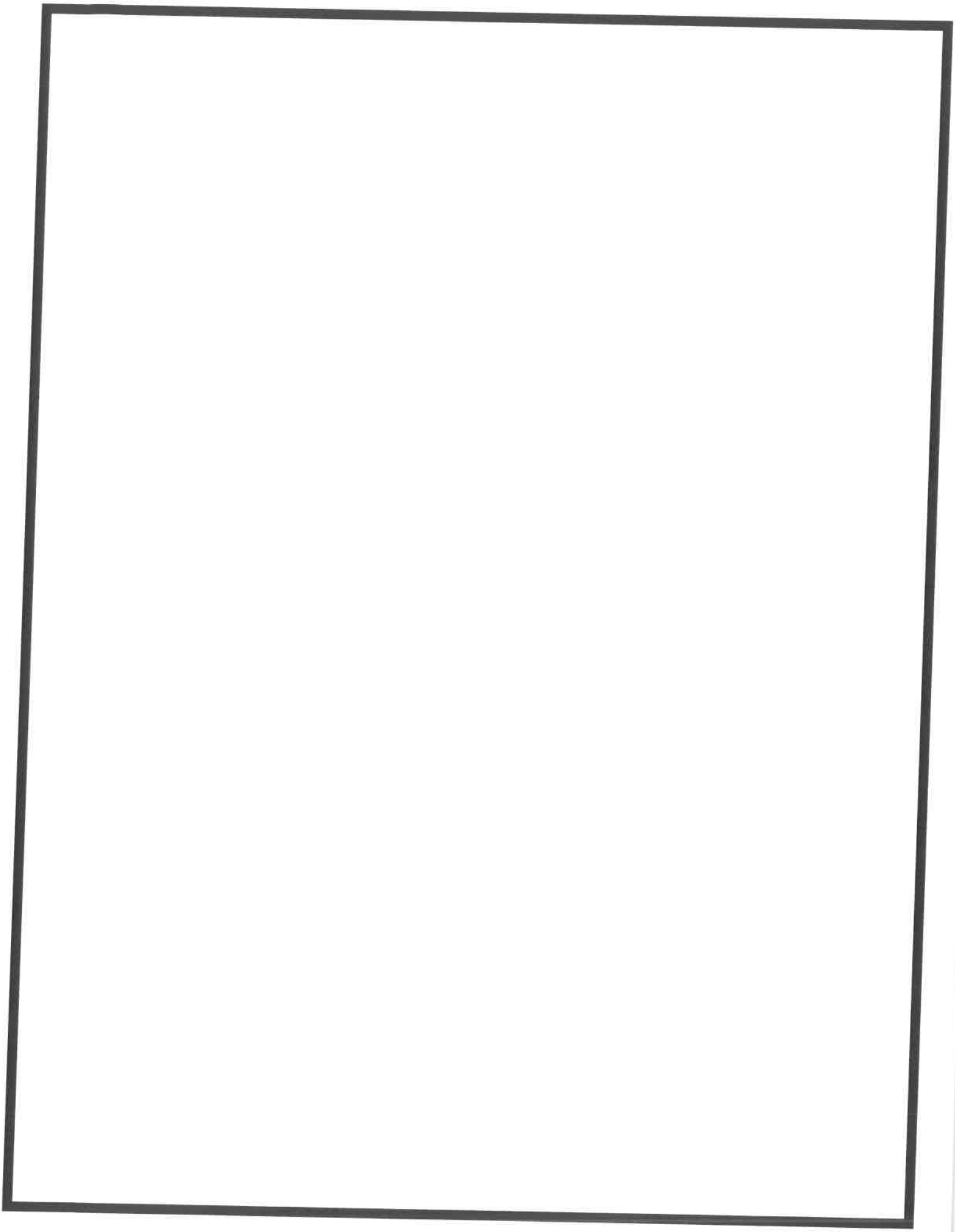
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

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

CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

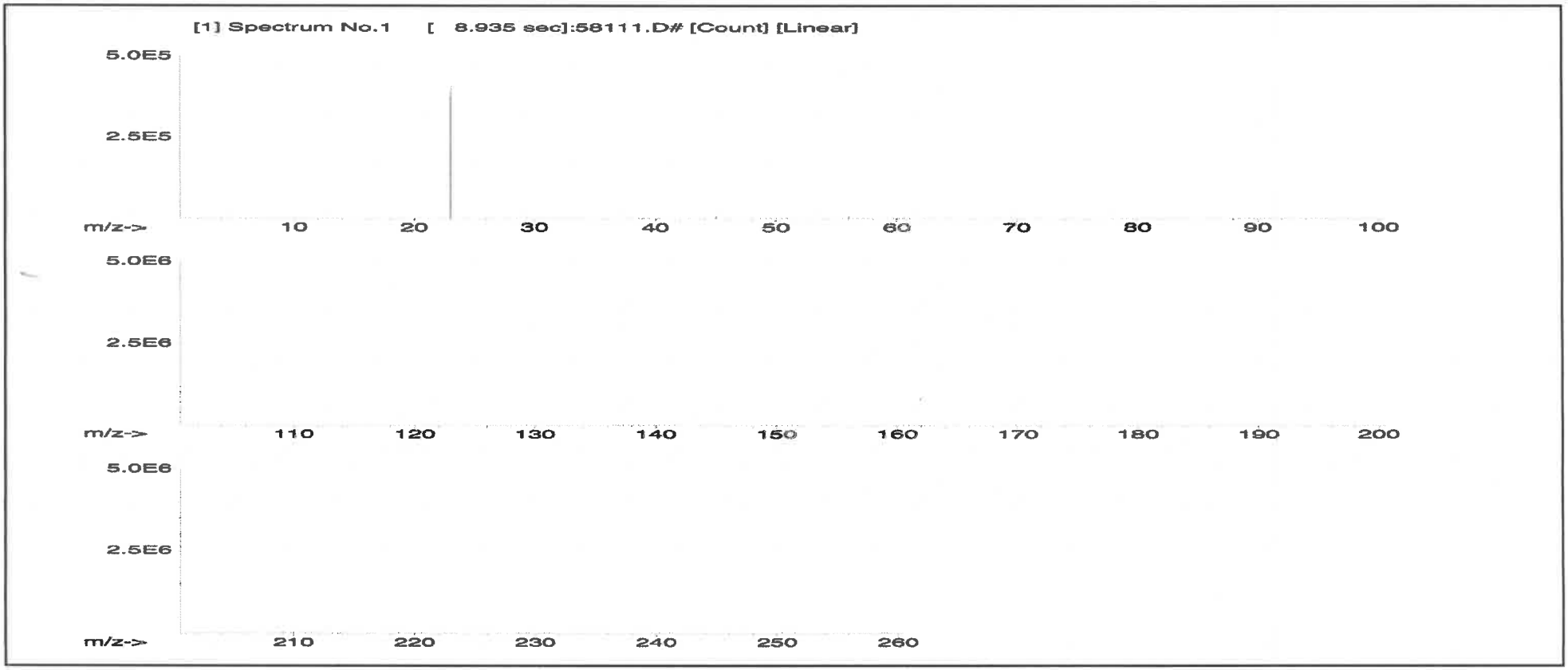
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	122223
Reviewed By:	Pedro L. Rentas	122223

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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).

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R: 01/03/24 M5802, M5803

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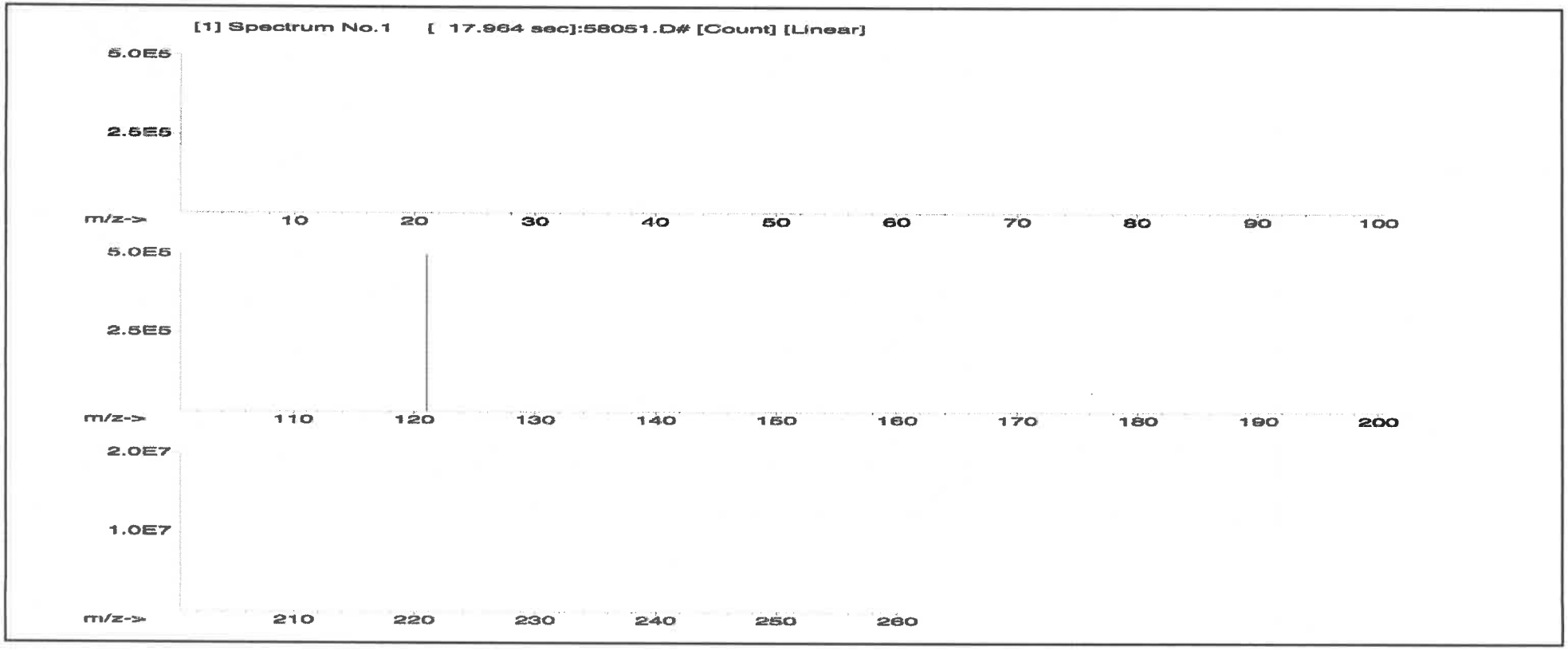
CERTIFIED WEIGHT REPORT:

		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



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.
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M6030

R: 8/5/24

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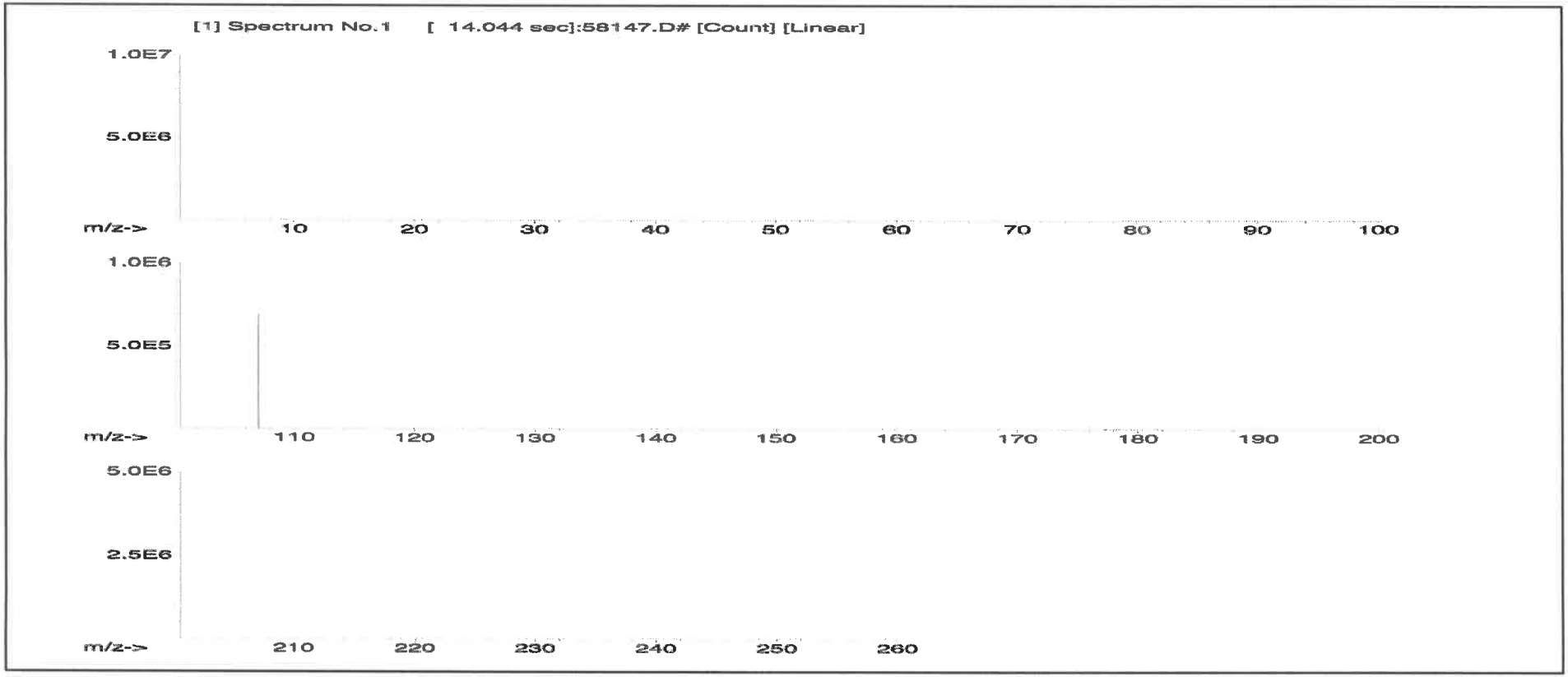
CERTIFIED WEIGHT REPORT:

Part Number:	**57047**			**Lot #**	
Lot Number:	**122823**	**Solvent:**	24002546	Nitric Acid	
Description:	**Silver (Ag)**				
		2%	80.0 (mL)	Nitric Acid	
Expiration Date:	122826				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.30	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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R: 03/16/23 M5473, M5474, M5475, M5476

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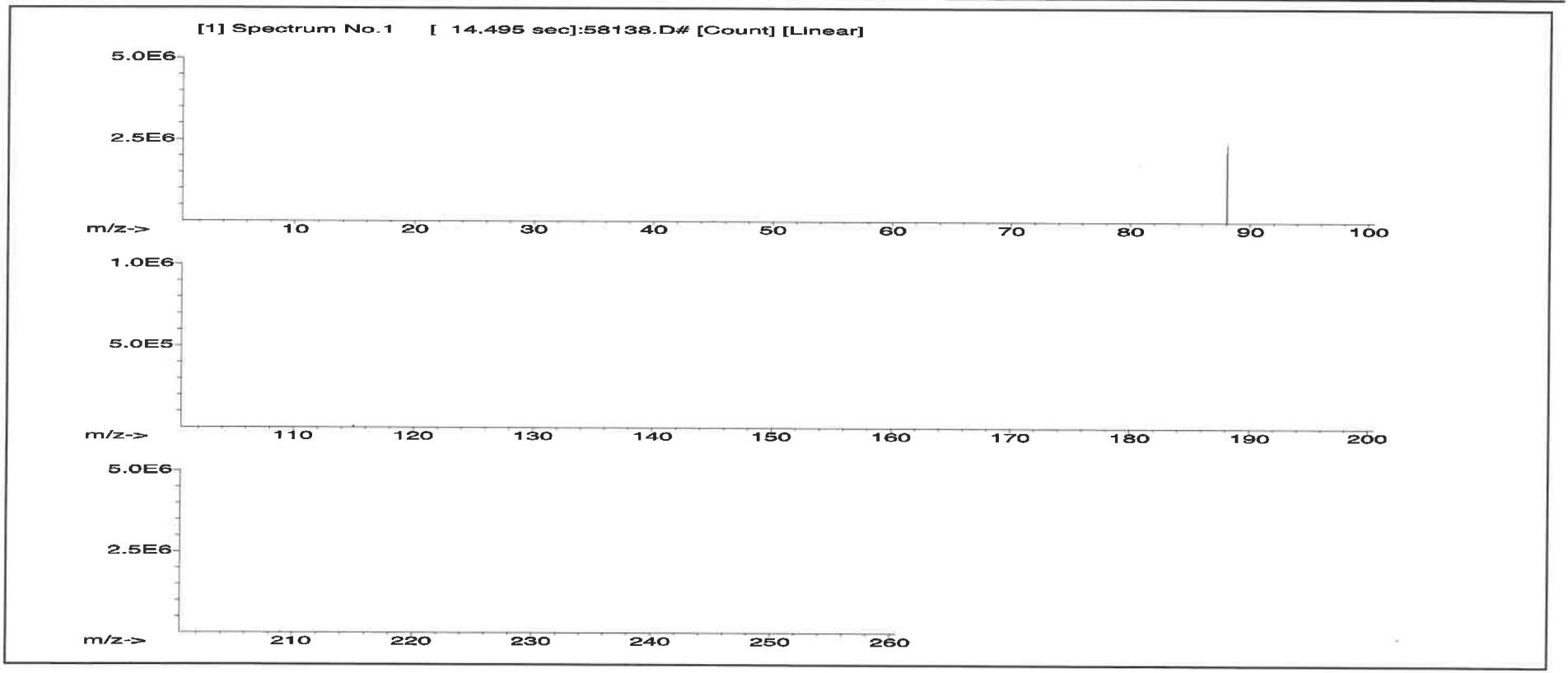
CERTIFIED WEIGHT REPORT:

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 03/16/23 M5473, M5474, M5475, M5476

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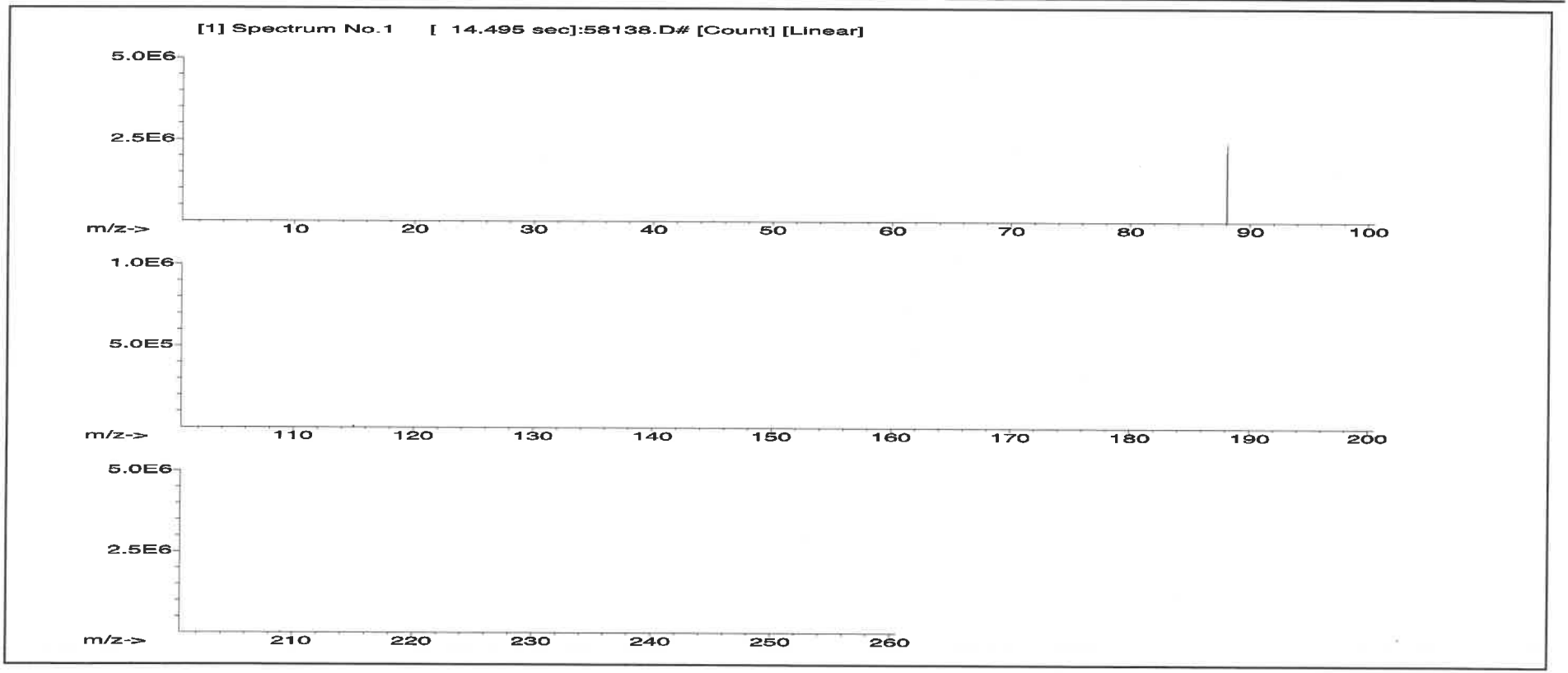
CERTIFIED WEIGHT REPORT:

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



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

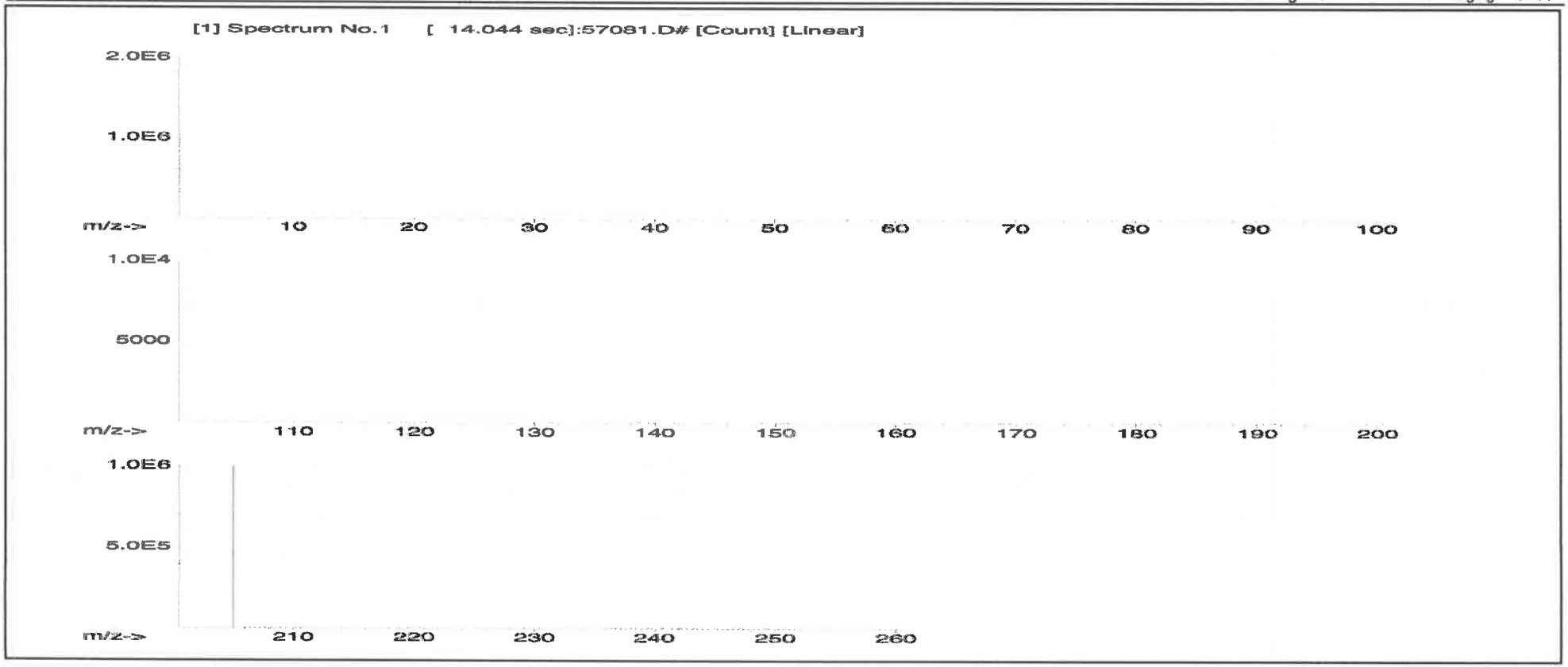
Aleah O'Brady

Formulated By:	Aleah O'Brady	062724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**			
Description:	**Vanadium (V)**	24002546	Nitric Acid	
		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	

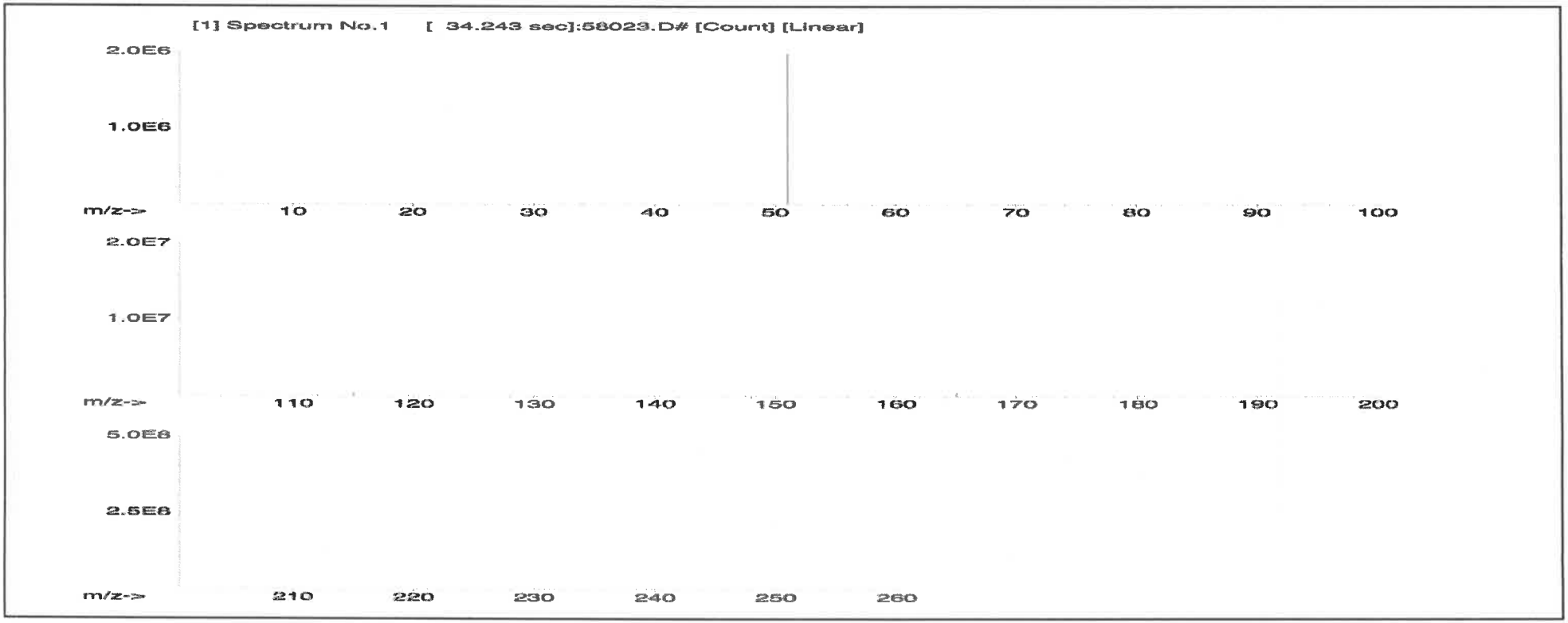
Aleah O'Brady

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



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

PB165369

SOP ID : M3050B-Digestion-20, MSFAM01.1-Trace Metals-2

SDG No : MBHK55

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 #2 2. N/A

Start Digest Date: 12/04/2024 **Time :** 11:20 **Temp :** 96 °C

End Digest Date: 12/04/2024 **Time :** 13:30 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. # 2

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 #2 CELL #34 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/4/24 14:00	jgp Met dig	Metals Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB165369

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P5032-01	MBHK55	N/A	1.15	100	Black	Yellow	Medium	N/A	N/A	1
P5032-02	MBHK56	N/A	1.12	100	Black	Yellow	Medium	N/A	N/A	2
P5032-03	MBHK57	N/A	1.23	100	Gray	Yellow	Medium	N/A	N/A	3
P5032-04	MBHK58	N/A	1.12	100	Brown	Yellow	Medium	N/A	N/A	4
P5032-05	MBHK59	N/A	1.11	100	Brown	Yellow	Medium	N/A	N/A	5
P5032-06	MBHK60	N/A	1.20	100	Brown	Yellow	Medium	N/A	N/A	6
P5032-07	MBHK61	N/A	1.15	100	Brown	Yellow	Medium	N/A	N/A	7
P5032-08	MBHK62	N/A	1.26	100	Black	Yellow	Medium	N/A	N/A	8
P5032-09	MBHK63	N/A	1.29	100	Black	Yellow	Medium	N/A	N/A	9
P5032-10	MBHK64	N/A	1.30	100	Brown	Yellow	Medium	N/A	N/A	10
P5032-11	MBHK65	N/A	1.13	100	Brown	Yellow	Medium	N/A	N/A	11
P5032-12	MBHK66	N/A	1.22	100	Brown	Yellow	Medium	N/A	N/A	12
P5032-13	MBHK67	N/A	1.35	100	Brown	Yellow	Medium	N/A	N/A	13
P5032-14	MBHK68	N/A	1.37	100	Brown	Yellow	Medium	N/A	N/A	14
P5032-15	MBHK69	N/A	1.19	100	Black	Yellow	Medium	N/A	N/A	15
P5032-16	MBHK70	N/A	1.23	100	Black	Yellow	Medium	N/A	N/A	16
P5032-17	MBHK71	N/A	1.10	100	Gray	Yellow	Medium	N/A	N/A	17
P5032-18	MBHK72	N/A	1.22	100	Brown	Yellow	Medium	N/A	N/A	18
P5032-19	MBHK72D	N/A	1.26	100	Brown	Yellow	Medium	N/A	N/A	19
P5032-20	MBHK72S	N/A	1.20	100	Brown	Yellow	Medium	N/A	MP83147	20
P5032-21	MBHK73	N/A	1.27	100	Brown	Yellow	Medium	N/A	N/A	21
P5032-22	MBHK74	N/A	1.12	100	Brown	Yellow	Medium	N/A	N/A	22
PB165369BL	PBS369	N/A	1.00	100	Colorless	Colorless	Fine	N/A	N/A	23
PB165369BS	LCS369	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 # LB134116

Review By	Kareem Khairalla	Review On	12/31/2024 7:49:56 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 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	MP83506
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/29/24 01:11		Kareem	OK
2	S1	S01	CAL2	12/29/24 01:16		Kareem	OK
3	S2	S02	CAL3	12/29/24 01:20		Kareem	OK
4	S3	S03	CAL4	12/29/24 01:23		Kareem	OK
5	S4	S04	CAL5	12/29/24 01:27		Kareem	OK
6	S5	S05	CAL6	12/29/24 01:31		Kareem	OK
7	S6	S06	CAL7	12/29/24 01:35		Kareem	OK
8	ICV004	ICV004	ICV	12/29/24 01:54	Inst. paused for calibration review	Kareem	OK
9	ICB004	ICB004	ICB	12/29/24 01:58		Kareem	OK
10	ICSA004	ICSA004	ICSA	12/29/24 02:02		Kareem	OK
11	ICSAB004	ICSAB004	ICSAB	12/29/24 02:06		Kareem	OK
12	CCV033	CCV033	CCV	12/29/24 02:10		Kareem	OK
13	CCB033	CCB033	CCB	12/29/24 02:14		Kareem	OK
14	PB165360BL	PBS360	MB	12/29/24 02:18		Kareem	OK
15	PB165360BS	LCS360	LCS	12/29/24 02:22		Kareem	OK
16	PB165369BL	PBS369	MB	12/29/24 02:26		Kareem	OK
17	PB165369BS	LCS369	LCS	12/29/24 02:30		Kareem	OK
18	PB165395BL	PBS395	MB	12/29/24 02:34		Kareem	OK

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 PM

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ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

19	PB165395BS	LCS395	LCS	12/29/24 02:38		Kareem	OK
20	PB165396BL	PBS396	MB	12/29/24 02:42		Kareem	OK
21	PB165396BS	LCS396	LCS	12/29/24 02:46		Kareem	OK
22	PB165434BL	PBS434	MB	12/29/24 02:51		Kareem	OK
23	PB165434BS	LCS434	LCS	12/29/24 02:55		Kareem	OK
24	PB165465BL	PBS465	MB	12/29/24 02:59		Kareem	OK
25	PB165465BS	LCS465	LCS	12/29/24 03:03		Kareem	OK
26	PB165488BL	PBS488	MB	12/29/24 03:07		Kareem	OK
27	PB165488BS	LCS488	LCS	12/29/24 03:11		Kareem	OK
28	P5030-01	MBHK41	SAM	12/29/24 03:15		Kareem	OK
29	P5030-02	MBHK42	SAM	12/29/24 03:19		Kareem	OK
30	P5030-03	MBHK43	SAM	12/29/24 03:23		Kareem	OK
31	P5030-04	MBHK44	SAM	12/29/24 03:27		Kareem	OK
32	P5030-05	MBHK44D	DUP	12/29/24 03:31		Kareem	OK
33	P5030-04L	MBHK44L	SD	12/29/24 03:35		Kareem	OK
34	CCV034	CCV034	CCV	12/29/24 03:39		Kareem	OK
35	CCB034	CCB034	CCB	12/29/24 03:42		Kareem	OK
36	P5030-06	MBHK44S	MS	12/29/24 03:46	MS fail for As (267.34 ppb) & Ag,Tl (Below RL)	Kareem	OK
37	P5030-07	MBHK45	SAM	12/29/24 03:50		Kareem	OK

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ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

38	P5030-08	MBHK46	SAM	12/29/24 03:54		Kareem	OK
39	P5030-09	MBHK47	SAM	12/29/24 03:58		Kareem	OK
40	P5030-10	MBHK48	SAM	12/29/24 04:02	Ca high	Kareem	Dilution
41	P5030-11	MBHK49	SAM	12/29/24 04:06	Ca,Mg high	Kareem	Dilution
42	P5030-12	MBHK50	SAM	12/29/24 04:10	Ca,Mg high	Kareem	Dilution
43	P5030-13	MBHKC4	SAM	12/29/24 04:14		Kareem	OK
44	P5030-14	MBHKC5	SAM	12/29/24 04:18		Kareem	OK
45	P5030-15	MBHKC6	SAM	12/29/24 04:22		Kareem	OK
46	P5030-16	MBHKC7	SAM	12/29/24 04:26		Kareem	OK
47	P5030-17	MBHKC8	SAM	12/29/24 04:30		Kareem	OK
48	P5030-18	MBHKC9	SAM	12/29/24 04:34		Kareem	OK
49	P5030-19	MBHKD0	SAM	12/29/24 04:38		Kareem	OK
50	P5030-20	MBHKD1	SAM	12/29/24 04:42		Kareem	OK
51	P5030-21	MBHKG4	SAM	12/29/24 04:45		Kareem	OK
52	P5030-22	MBHKG5	SAM	12/29/24 04:49		Kareem	OK
53	P5032-01	MBHK55	SAM	12/29/24 04:53		Kareem	OK
54	P5032-02	MBHK56	SAM	12/29/24 04:57		Kareem	OK
55	P5032-03	MBHK57	SAM	12/29/24 05:01		Kareem	OK
56	CCV035	CCV035	CCV	12/29/24 05:05		Kareem	OK
57	CCB035	CCB035	CCB	12/29/24 05:09		Kareem	OK

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 PM

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ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

58	P5032-04	MBHK58	SAM	12/29/24 05:13		Kareem	OK
59	P5032-05	MBHK59	SAM	12/29/24 05:17	Ca high	Kareem	Dilution
60	P5032-06	MBHK60	SAM	12/29/24 05:20	Ca,Mn high	Kareem	Dilution
61	P5032-07	MBHK61	SAM	12/29/24 05:24	Ca high	Kareem	Dilution
62	P5032-08	MBHK62	SAM	12/29/24 05:28		Kareem	OK
63	P5032-09	MBHK63	SAM	12/29/24 05:32		Kareem	OK
64	P5032-10	MBHK64	SAM	12/29/24 05:36		Kareem	OK
65	P5032-11	MBHK65	SAM	12/29/24 05:40		Kareem	OK
66	P5032-12	MBHK66	SAM	12/29/24 05:44		Kareem	OK
67	P5032-13	MBHK67	SAM	12/29/24 05:48		Kareem	OK
68	P5032-14	MBHK68	SAM	12/29/24 05:51		Kareem	OK
69	P5032-15	MBHK69	SAM	12/29/24 05:55		Kareem	OK
70	P5032-16	MBHK70	SAM	12/29/24 05:59		Kareem	OK
71	P5032-17	MBHK71	SAM	12/29/24 06:03		Kareem	OK
72	P5032-18	MBHK72	SAM	12/29/24 06:07		Kareem	OK
73	P5032-19	MBHK72D	DUP	12/29/24 06:11		Kareem	OK
74	P5032-18L	MBHK72L	SD	12/29/24 06:15		Kareem	OK
75	P5032-20	MBHK72S	MS	12/29/24 06:19	MS fail for Cu (193.67 ppb), Se (95.29 ppb) & Ag,Tl (Below RL)	Kareem	OK
76	P5032-21	MBHK73	SAM	12/29/24 06:22		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134116

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 PM

STD. NAME	STD REF.#
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ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

77	P5032-22	MBHK74	SAM	12/29/24 06:26		Kareem	OK
78	CCV036	CCV036	CCV	12/29/24 06:30		Kareem	OK
79	CCB036	CCB036	CCB	12/29/24 06:34		Kareem	OK
80	P5035-01	MBHKK8	SAM	12/29/24 06:38		Kareem	OK
81	P5035-02	MBHKK9	SAM	12/29/24 06:42		Kareem	OK
82	P5035-03	MBHKL0	SAM	12/29/24 06:46		Kareem	OK
83	P5035-04	MBHKL1	SAM	12/29/24 06:50		Kareem	OK
84	P5035-05	MBHKM6	SAM	12/29/24 06:53	Ca high	Kareem	Dilution
85	P5035-06	MBHKM7	SAM	12/29/24 06:57	Ca high	Kareem	Dilution
86	P5035-07	MBHKM8	SAM	12/29/24 07:01	Ca high	Kareem	Dilution
87	P5035-08	MBHKM9	SAM	12/29/24 07:05		Kareem	OK
88	P5035-09	MBHKM9D	DUP	12/29/24 07:09		Kareem	OK
89	P5035-08L	MBHKM9L	SD	12/29/24 07:13		Kareem	OK
90	P5035-10	MBHKM9S	MS	12/29/24 07:17	MS fail for Ag,Tl (Below RL)	Kareem	OK
91	P5035-11	MBHKN0	SAM	12/29/24 07:21		Kareem	OK
92	P5035-12	MBHKN1	SAM	12/29/24 07:24		Kareem	OK
93	P5035-13	MBHKN2	SAM	12/29/24 07:28		Kareem	OK
94	P5035-14	MBHKN3	SAM	12/29/24 07:32		Kareem	OK
95	P5035-15	MBHKN4	SAM	12/29/24 07:36		Kareem	OK
96	P5035-16	MBHKN5	SAM	12/29/24 07:40		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134116

Review By	Kareem Khairalla	Review On	12/31/2024 7:49:56 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 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	MP83506
Chk Standard	MP83513,MP83514

97	P5035-17	MBHKN6	SAM	12/29/24 07:44		Kareem	OK
98	P5035-18	MBHKN7	SAM	12/29/24 07:48		Kareem	OK
99	P5035-19	MBHKN8	SAM	12/29/24 07:51		Kareem	OK
100	CCV037	CCV037	CCV	12/29/24 07:55		Kareem	OK
101	CCB037	CCB037	CCB	12/29/24 07:59		Kareem	OK
102	P5035-20	MBHKN9	SAM	12/29/24 08:03	Ca high	Kareem	Dilution
103	P5035-21	MBHKQ0	SAM	12/29/24 08:07		Kareem	OK
104	P5035-22	MBHKQ1	SAM	12/29/24 08:11		Kareem	OK
105	P5036-01	MBHK33	SAM	12/29/24 08:15		Kareem	OK
106	P5036-02	MBHKF3	SAM	12/29/24 08:19		Kareem	OK
107	P5036-03	MBHKF4	SAM	12/29/24 08:22		Kareem	OK
108	P5036-04	MBHKF5	SAM	12/29/24 08:26		Kareem	OK
109	P5036-05	MBHKF6	SAM	12/29/24 08:30		Kareem	OK
110	P5036-06	MBHKF7	SAM	12/29/24 08:34		Kareem	OK
111	P5036-07	MBHKF8	SAM	12/29/24 08:38		Kareem	OK
112	P5036-08	MBHKF8D	DUP	12/29/24 08:42		Kareem	OK
113	P5036-07L	MBHKF8L	SD	12/29/24 08:46		Kareem	OK
114	P5036-09	MBHKF8S	MS	12/29/24 08:50	MS fail for Pb (115.58 ppb) & Ag,Tl (Below RL)	Kareem	OK
115	P5036-10	MBHKF9	SAM	12/29/24 08:54		Kareem	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134116

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 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	MP83506
Chk Standard	MP83513,MP83514

116	P5036-11	MBHKG0	SAM	12/29/24 08:57		Kareem	OK
117	P5036-12	MBHKG1	SAM	12/29/24 09:01		Kareem	OK
118	P5036-13	MBHKD5	SAM	12/29/24 09:05		Kareem	OK
119	P5036-14	MBHKD7	SAM	12/29/24 09:09		Kareem	OK
120	P5036-15	MBHKD8	SAM	12/29/24 09:13		Kareem	OK
121	P5036-16	MBHKD9	SAM	12/29/24 09:17		Kareem	OK
122	CCV038	CCV038	CCV	12/29/24 09:21		Kareem	OK
123	CCB038	CCB038	CCB	12/29/24 09:24		Kareem	OK
124	P5036-17	MBHKE0	SAM	12/29/24 09:29		Kareem	OK
125	P5036-18	MBHKE1	SAM	12/29/24 09:32		Kareem	OK
126	P5036-19	MBHKE2	SAM	12/29/24 09:36		Kareem	OK
127	P5036-20	MBHKE3	SAM	12/29/24 09:40		Kareem	OK
128	P5036-21	MBHKE4	SAM	12/29/24 09:44		Kareem	OK
129	P5036-22	MBHK51	SAM	12/29/24 09:48		Kareem	OK
130	P5038-01	MBHK83	SAM	12/29/24 09:52		Kareem	OK
131	P5038-02	MBHK84	SAM	12/29/24 09:56		Kareem	OK
132	P5038-03	MBHK84D	DUP	12/29/24 09:59		Kareem	OK
133	P5038-02L	MBHK84L	SD	12/29/24 10:03		Kareem	OK
134	P5038-04	MBHK84S	MS	12/29/24 10:07	MS fail for Ag,Tl (Below RL)	Kareem	OK
135	P5038-05	MBHK85	SAM	12/29/24 10:11		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 # LB134116

Review By	Kareem Khairalla	Review On	12/31/2024 7:49:56 PM
Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 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	MP83506
Chk Standard	MP83513,MP83514

136	P5038-06	MBHK86	SAM	12/29/24 10:15		Kareem	OK
137	P5038-07	MBHK87	SAM	12/29/24 10:19		Kareem	OK
138	P5038-08	MBHK88	SAM	12/29/24 10:23	Ca high	Kareem	Dilution
139	P5038-09	MBHK89	SAM	12/29/24 10:27		Kareem	OK
140	P5038-10	MBHK90	SAM	12/29/24 10:30		Kareem	OK
141	P5038-11	MBHK91	SAM	12/29/24 10:34		Kareem	OK
142	P5038-12	MBHK92	SAM	12/29/24 10:38		Kareem	OK
143	P5038-13	MBHKA4	SAM	12/29/24 10:42		Kareem	OK
144	CCV039	CCV039	CCV	12/29/24 10:46		Kareem	OK
145	CCB039	CCB039	CCB	12/29/24 10:50		Kareem	OK
146	P5038-14	MBHKA5	SAM	12/29/24 10:54		Kareem	OK
147	P5038-15	MBHKA6	SAM	12/29/24 10:58	Ca,Mg high	Kareem	Dilution
148	P5038-16	MBHKA7	SAM	12/29/24 11:02	Ca high	Kareem	Dilution
149	P5038-17	MBHKA8	SAM	12/29/24 11:05	Ca,Mg high	Kareem	Dilution
150	P5038-18	MBHKA9	SAM	12/29/24 11:09	Ca high	Kareem	Dilution
151	P5038-19	MBHKB1	SAM	12/29/24 11:13		Kareem	OK
152	P5038-20	MBHKB2	SAM	12/29/24 11:17		Kareem	OK
153	P5038-21	MBHKB3	SAM	12/29/24 11:21		Kareem	OK
154	P5054-01	MBHKR0	SAM	12/29/24 11:25		Kareem	OK
155	P5054-02	MBHKR1	SAM	12/29/24 11:29		Kareem	OK

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Supervise By	Mohan Bera	Supervise On	12/31/2024 11:25:59 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	MP83506
Chk Standard	MP83513,MP83514

156	P5054-03	MBHKR2	SAM	12/29/24 11:33		Kareem	OK
157	P5054-04	MBHKR2D	DUP	12/29/24 11:36		Kareem	OK
158	P5054-03L	MBHKR2L	SD	12/29/24 11:40		Kareem	OK
159	P5054-05	MBHKR2S	MS	12/29/24 11:44	MS fail for Cu (373.96 ppb), Zn (1590.07 ppb) & Ag,Tl (Below RL)	Kareem	OK
160	P5054-06	MBHKR3	SAM	12/29/24 11:48		Kareem	OK
161	P5054-07	MBHKR4	SAM	12/29/24 11:52		Kareem	OK
162	P5054-08	MBHKR5	SAM	12/29/24 11:56		Kareem	OK
163	P5054-09	MBHKR6	SAM	12/29/24 12:00		Kareem	OK
164	P5054-10	MBHKR7	SAM	12/29/24 12:04		Kareem	OK
165	P5054-11	MBHKR9	SAM	12/29/24 12:07		Kareem	OK
166	CCV040	CCV040	CCV	12/29/24 12:20		Kareem	OK
167	CCB040	CCB040	CCB	12/29/24 12:24		Kareem	OK
168	P5054-12	MBHKS0	SAM	12/29/24 12:28		Kareem	OK
169	P5054-13	MBHKS1	SAM	12/29/24 12:32		Kareem	OK
170	P5054-14	MBHKS2	SAM	12/29/24 12:36		Kareem	OK
171	P5054-15	MBHKS3	SAM	12/29/24 12:39		Kareem	OK
172	P5054-16	MBHKT8	SAM	12/29/24 12:43		Kareem	OK
173	P5054-17	MBHKT9	SAM	12/29/24 12:47		Kareem	OK
174	P5054-18	MBHKW0	SAM	12/29/24 12:51		Kareem	OK

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CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

175	P5054-19	MBHKW1	SAM	12/29/24 12:55		Kareem	OK
176	P5054-20	MBHKW2	SAM	12/29/24 12:58	Ca high	Kareem	Dilution
177	P5054-21	MBHKW3	SAM	12/29/24 13:02	Ca high	Kareem	Dilution
178	P5056-01	MBHKX9	SAM	12/29/24 13:06		Kareem	OK
179	P5056-02	MBHKY0	SAM	12/29/24 13:10		Kareem	OK
180	P5056-03	MBHKY1	SAM	12/29/24 13:14		Kareem	OK
181	P5056-04	MBHKY2	SAM	12/29/24 13:18		Kareem	OK
182	P5056-05	MBHKY3	SAM	12/29/24 13:22		Kareem	OK
183	P5056-06	MBHKY4	SAM	12/29/24 13:26		Kareem	OK
184	P5056-07	MBHKY5	SAM	12/29/24 13:29	Ca high	Kareem	Dilution
185	P5056-08	MBHL35	SAM	12/29/24 13:33		Kareem	OK
186	P5056-09	MBHL36	SAM	12/29/24 13:37		Kareem	OK
187	P5056-10	MBHL37	SAM	12/29/24 13:41		Kareem	OK
188	CCV041	CCV041	CCV	12/29/24 13:45		Kareem	OK
189	CCB041	CCB041	CCB	12/29/24 13:49		Kareem	OK
190	P5056-11	MBHL38	SAM	12/29/24 13:53		Kareem	OK
191	P5056-12	MBHL39	SAM	12/29/24 13:57	Ca high	Kareem	Dilution
192	P5056-13	MBHL40	SAM	12/29/24 14:01	Ca high	Kareem	Dilution
193	P5056-14	MBHL41	SAM	12/29/24 14:05	Ca high	Kareem	Dilution
194	P5056-15	MBHL42	SAM	12/29/24 14:08		Kareem	OK

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CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

195	P5056-16	MBHL43	SAM	12/29/24 14:12		Kareem	OK
196	P5056-17	MBHL44	SAM	12/29/24 14:16		Kareem	OK
197	P5056-18	MBHL45	SAM	12/29/24 14:20		Kareem	OK
198	P5056-19	MBHL46	SAM	12/29/24 14:24		Kareem	OK
199	P5056-20	MBHL47	SAM	12/29/24 14:28	DUP fail for many parameter	Kareem	Not Ok
200	P5056-21	MBHL47D	DUP	12/29/24 14:31	DUP fail for many parameter	Kareem	Not Ok
201	P5056-20L	MBHL47L	SD	12/29/24 14:35	DUP fail for many parameter	Kareem	Not Ok
202	P5056-22	MBHL47S	MS	12/29/24 14:39	DUP fail for many parameter	Kareem	Not Ok
203	P5090-12A	MBHM25A	PS	12/29/24 14:43		Kareem	OK
204	P5063-07A	MBHL34A	PS	12/29/24 14:47		Kareem	OK
205	P5084-13A	MBHLX7A	PS	12/29/24 14:51		Kareem	OK
206	P5091-07A	MBHLS0A	PS	12/29/24 14:55		Kareem	OK
207	P5086-07A	MBHLN2A	PS	12/29/24 14:58		Kareem	OK
208	P5089-01A	MBHLZ4A	PS	12/29/24 15:02		Kareem	OK
209	P5083-03A	MBHLK0A	PS	12/29/24 15:06		Kareem	OK
210	CCV042	CCV042	CCV	12/29/24 15:10		Kareem	OK
211	CCB042	CCB042	CCB	12/29/24 15:13		Kareem	OK
212	PB165759BL	PBS759	MB	12/29/24 15:18		Kareem	OK
213	PB165759BS	LCS759	LCS	12/29/24 15:22		Kareem	OK

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ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

214	PB165820BL	PBS820	MB	12/29/24 15:26		Kareem	OK
215	PB165820BS	LCS820	LCS	12/29/24 15:30		Kareem	OK
216	P5156-01	ME28Q6	SAM	12/29/24 15:34		Kareem	OK
217	P5156-02	ME28Q7	SAM	12/29/24 15:37	Ca high	Kareem	Dilution
218	P5156-03	ME28Q8	SAM	12/29/24 15:41	Ca high	Kareem	Dilution
219	P5156-04	ME28Q9	SAM	12/29/24 15:45		Kareem	OK
220	P5156-05	ME28R0	SAM	12/29/24 15:49		Kareem	OK
221	P5156-06	ME28R1	SAM	12/29/24 15:53		Kareem	OK
222	P5156-07	ME28R2	SAM	12/29/24 15:57		Kareem	OK
223	P5156-08	ME28T4	SAM	12/29/24 16:00	Ca high	Kareem	Dilution
224	P5156-09	ME28T5	SAM	12/29/24 16:04		Kareem	OK
225	P5156-10	ME28T6	SAM	12/29/24 16:08	Ca high	Kareem	Dilution
226	P5156-11	ME28T7	SAM	12/29/24 16:12	Ca high	Kareem	Dilution
227	P5156-12	ME28T8	SAM	12/29/24 16:16	Ca high	Kareem	Dilution
228	P5156-13	ME28T9	SAM	12/29/24 16:19	Ca,Fe high	Kareem	Dilution
229	P5156-14	ME28W0	SAM	12/29/24 16:23	Fe high	Kareem	Dilution
230	P5156-15	ME28W1	SAM	12/29/24 16:27	Fe high	Kareem	Dilution
231	P5156-16	ME28W2	SAM	12/29/24 16:31	Fe high	Kareem	Dilution
232	CCV043	CCV043	CCV	12/29/24 16:34		Kareem	OK
233	CCB043	CCB043	CCB	12/29/24 16:38		Kareem	OK

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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	MP83506
Chk Standard	MP83513,MP83514

234	P5156-17	ME28W2D	DUP	12/29/24 16:42	Fe high	Kareem	Dilution
235	P5156-16L	ME28W2L	SD	12/29/24 16:46	Fe high	Kareem	Dilution
236	P5156-18	ME28W2S	MS	12/29/24 16:50	Fe high	Kareem	Dilution
237	P5156-19	ME28W3	SAM	12/29/24 16:54		Kareem	OK
238	P5156-20	ME28W4	SAM	12/29/24 16:57		Kareem	OK
239	P5156-21	ME28W5	SAM	12/29/24 17:01	Fe high	Kareem	Dilution
240	P5156-22	ME28W6	SAM	12/29/24 17:05	Fe high	Kareem	Dilution
241	P5259-01	ME28W7	SAM	12/29/24 17:09		Kareem	OK
242	P5259-02	ME28W8	SAM	12/29/24 17:13		Kareem	OK
243	P5259-03	ME28W9	SAM	12/29/24 17:16		Kareem	OK
244	P5259-04	ME28X0	SAM	12/29/24 17:20		Kareem	OK
245	P5259-05	ME28X0D	DUP	12/29/24 17:24		Kareem	OK
246	P5259-04L	ME28X0L	SD	12/29/24 17:28		Kareem	OK
247	P5259-06	ME28X0S	MS	12/29/24 17:32		Kareem	OK
248	P5259-07	ME28X1	SAM	12/29/24 17:35		Kareem	OK
249	P5259-08	ME28X2	SAM	12/29/24 17:39		Kareem	OK
250	P5259-09	ME28X3	SAM	12/29/24 17:43		Kareem	OK
251	P5259-10	ME28X4	SAM	12/29/24 17:47		Kareem	OK
252	P5259-11	ME28X5	SAM	12/29/24 17:51		Kareem	OK
253	P5259-12	ME28X6	SAM	12/29/24 17:54	Ca high	Kareem	Dilution

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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	MP83506
Chk Standard	MP83513,MP83514

254	CCV044	CCV044	CCV	12/29/24 17:58		Kareem	OK
255	CCB044	CCB044	CCB	12/29/24 18:02		Kareem	OK
256	P5259-13	ME28X7	SAM	12/29/24 18:06		Kareem	OK
257	P5259-14	ME28X8	SAM	12/29/24 18:10	Ca high	Kareem	Dilution
258	P5259-15	ME28X9	SAM	12/29/24 18:14		Kareem	OK
259	P5259-16	ME28Y0	SAM	12/29/24 18:18		Kareem	OK
260	P5259-17	ME28Y1	SAM	12/29/24 18:21		Kareem	OK
261	P5259-18	ME28Y2	SAM	12/29/24 18:25		Kareem	OK
262	P5259-19	ME28Y3	SAM	12/29/24 18:29		Kareem	OK
263	P5259-20	ME28Y4	SAM	12/29/24 18:33	Ca high	Kareem	Dilution
264	P5259-21	ME28Y5	SAM	12/29/24 18:37	Ca high	Kareem	Dilution
265	PB165851BL	PBS851	MB	12/29/24 18:40		Kareem	OK
266	PB165851BS	LCS851	LCS	12/29/24 18:44		Kareem	OK
267	P5125-01	MBHM90	SAM	12/29/24 18:48		Kareem	OK
268	P5125-02	MBHM91	SAM	12/29/24 18:52		Kareem	OK
269	P5125-03	MBHM92	SAM	12/29/24 18:56		Kareem	OK
270	P5125-04	MBHM93	SAM	12/29/24 19:00		Kareem	OK
271	P5125-05	MBHM94	SAM	12/29/24 19:04		Kareem	OK
272	P5125-06	MBHM94D	DUP	12/29/24 19:07		Kareem	OK
273	P5125-05L	MBHM94L	SD	12/29/24 19:11		Kareem	OK

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ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

274	P5125-07	MBHM94S	MS	12/29/24 19:15	MS fail for Cu (596.26 ppb), Se (105.64 ppb), Zn (3225.59 ppb) & Ag,Tl (Below RL)	Kareem	OK
275	P5125-08	MBHM95	SAM	12/29/24 19:19		Kareem	OK
276	CCV045	CCV045	CCV	12/29/24 19:23		Kareem	OK
277	CCB045	CCB045	CCB	12/29/24 19:27		Kareem	OK
278	P5125-09	MBHM96	SAM	12/29/24 19:31		Kareem	OK
279	P5125-10	MBHM97	SAM	12/29/24 19:34		Kareem	OK
280	P5125-11	MBHMB2	SAM	12/29/24 19:38		Kareem	OK
281	P5125-12	MBHMB3	SAM	12/29/24 19:42		Kareem	OK
282	P5125-13	MBHMB4	SAM	12/29/24 19:46		Kareem	OK
283	P5125-14	MBHMB5	SAM	12/29/24 19:50		Kareem	OK
284	P5125-15	MBHMB6	SAM	12/29/24 19:54		Kareem	OK
285	P5125-16	MBHMB7	SAM	12/29/24 19:57		Kareem	OK
286	P5125-17	MBHMB8	SAM	12/29/24 20:01		Kareem	OK
287	P5125-18	MBHMD5	SAM	12/29/24 20:05		Kareem	OK
288	P5125-19	MBHMD6	SAM	12/29/24 20:09		Kareem	OK
289	PB165881BL	PBS881	MB	12/29/24 20:13		Kareem	OK
290	PB165881BS	LCS881	LCS	12/29/24 20:17		Kareem	OK
291	P5130-01	MBHMF4	SAM	12/29/24 20:21		Kareem	OK

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ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

292	P5130-02	MBHMF5	SAM	12/29/24 20:24		Kareem	OK
293	P5130-03	MBHMF6	SAM	12/29/24 20:28		Kareem	OK
294	P5130-04	MBHMF7	SAM	12/29/24 20:32		Kareem	OK
295	P5130-05	MBHMF8	SAM	12/29/24 20:36		Kareem	OK
296	P5130-06	MBHMF9	SAM	12/29/24 20:40		Kareem	OK
297	P5130-07	MBHMG3	SAM	12/29/24 20:44		Kareem	OK
298	CCV046	CCV046	CCV	12/29/24 20:47		Kareem	OK
299	CCB046	CCB046	CCB	12/29/24 20:51		Kareem	OK
300	P5130-08	MBHMG4	SAM	12/29/24 20:55		Kareem	OK
301	P5130-09	MBHMG5	SAM	12/29/24 20:59		Kareem	OK
302	P5130-10	MBHMG6	SAM	12/29/24 21:03		Kareem	OK
303	P5130-11	MBHMG7	SAM	12/29/24 21:07		Kareem	OK
304	P5130-12	MBHMH2	SAM	12/29/24 21:11		Kareem	OK
305	P5130-13	MBHMH3	SAM	12/29/24 21:14		Kareem	OK
306	P5130-14	MBHMH4	SAM	12/29/24 21:18		Kareem	OK
307	P5130-15	MBHMH5	SAM	12/29/24 21:22	MS,SD fail for many parameter	Kareem	Not Ok
308	P5130-16	MBHMH5D	DUP	12/29/24 21:26	MS,SD fail for many parameter	Kareem	Not Ok
309	P5130-15L	MBHMH5L	SD	12/29/24 21:30	MS,SD fail for many parameter	Kareem	Not Ok
310	P5130-17	MBHMH5S	MS	12/29/24 21:34	MS,SD fail for many parameter	Kareem	Not Ok

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CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

311	P5130-18	MBHML5	SAM	12/29/24 21:37		Kareem	OK
312	P5130-19	MBHML6	SAM	12/29/24 21:41		Kareem	OK
313	P5130-20	MBHML7	SAM	12/29/24 21:45		Kareem	OK
314	P5130-21	MBHML8	SAM	12/29/24 21:49		Kareem	OK
315	P5130-22	MBHML9	SAM	12/29/24 21:53		Kareem	OK
316	CCV047	CCV047	CCV	12/29/24 21:56		Kareem	OK
317	CCB047	CCB047	CCB	12/29/24 22:00		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Mohan Bera	Supervise On	1/2/2025 2:18:34 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	M5751,MP83836,MP83726
LCS Standard	
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/30/24 18:31		Kareem	OK
2	S1	S01	CAL2	12/30/24 18:36		Kareem	OK
3	S2	S02	CAL3	12/30/24 18:40		Kareem	OK
4	S3	S03	CAL4	12/30/24 18:44		Kareem	OK
5	S4	S04	CAL5	12/30/24 18:47		Kareem	OK
6	S5	S05	CAL6	12/30/24 18:51		Kareem	OK
7	S6	S06	CAL7	12/30/24 18:55		Kareem	OK
8	ICV005	ICV005	ICV	12/30/24 19:07	Inst. paused for calibration review	Kareem	OK
9	ICB005	ICB005	ICB	12/30/24 19:11		Kareem	OK
10	ICSA005	ICSA005	ICSA	12/30/24 19:15		Kareem	OK
11	ICSAB005	ICSAB005	ICSAB	12/30/24 19:50	Inst. paused for review	Kareem	OK
12	CCV049	CCV049	CCV	12/30/24 19:54		Kareem	OK
13	CCB049	CCB049	CCB	12/30/24 19:58		Kareem	OK
14	P5027-07DL	MBHK19	SAM	12/30/24 20:02	2x for Ca	Kareem	Confirms
15	P5027-13DL	MBHK23	SAM	12/30/24 20:06	2x for Ca	Kareem	Confirms
16	P5027-14DL	MBHK24	SAM	12/30/24 20:10	2x for Ca	Kareem	Confirms
17	P5027-15DL	MBHK25	SAM	12/30/24 20:14	2x for Ca	Kareem	Confirms
18	P5027-17DL	MBHK27	SAM	12/30/24 20:17	2x for Ca, Still Ca high	Kareem	Dilution

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Instrument ID: P5

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Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Mohan Bera	Supervise On	1/2/2025 2:18:34 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	M5751,MP83836,MP83726
LCS Standard	
Chk Standard	MP83513,MP83514

19	P5030-10DL	MBHK48	SAM	12/30/24 20:21	2x for Ca	Kareem	Confirms
20	P5030-11DL	MBHK49	SAM	12/30/24 20:25	2x for Ca,Mg, Still Ca high	Kareem	Dilution
21	P5030-12DL	MBHK50	SAM	12/30/24 20:29	2x for Ca,Mg, Still Ca high	Kareem	Dilution
22	P5032-05DL	MBHK59	SAM	12/30/24 20:33	2x for Ca	Kareem	Confirms
23	P5032-06DL	MBHK60	SAM	12/30/24 20:37	2x for Ca,Mn	Kareem	Confirms
24	P5032-07DL	MBHK61	SAM	12/30/24 20:41	2x for Ca	Kareem	Confirms
25	P5038-08DL	MBHK88	SAM	12/30/24 20:45	Not Use	Kareem	Not Ok
26	P5038-15DL	MBHKA6	SAM	12/30/24 20:49	2x for Ca,Mg, Still Ca high	Kareem	Dilution
27	P5038-16DL	MBHKA7	SAM	12/30/24 20:52	2x for Ca	Kareem	Confirms
28	P5038-17DL	MBHKA8	SAM	12/30/24 20:56	2x for Ca,Mg, Still Ca high	Kareem	Dilution
29	P5038-18DL	MBHKA9	SAM	12/30/24 21:00	2x for Ca	Kareem	Confirms
30	P5266-18DL	ME2903	SAM	12/30/24 21:04	2x for Fe	Kareem	Confirms
31	P5259-12DL	ME28X6	SAM	12/30/24 21:08	2x for Ca	Kareem	Confirms
32	P5259-14DL	ME28X8	SAM	12/30/24 21:12	2x for Ca	Kareem	Confirms
33	P5259-20DL	ME28Y4	SAM	12/30/24 21:16	2x for Ca	Kareem	Confirms
34	CCV050	CCV050	CCV	12/30/24 21:20		Kareem	OK
35	CCB050	CCB050	CCB	12/30/24 21:23		Kareem	OK
36	P5259-21DL	ME28Y5	SAM	12/30/24 21:27	2x for Ca	Kareem	Confirms
37	P5156-02DL	ME28Q7	SAM	12/30/24 21:31	2x for Ca	Kareem	Confirms
38	P5156-03DL	ME28Q8	SAM	12/30/24 21:35	2x for Ca	Kareem	Confirms

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Mohan Bera	Supervise On	1/2/2025 2:18:34 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	M5751,MP83836,MP83726
LCS Standard	
Chk Standard	MP83513,MP83514

39	P5156-08DL	ME28T4	SAM	12/30/24 21:39	2x for Ca	Kareem	Confirms
40	P5156-10DL	ME28T6	SAM	12/30/24 21:43	2x for Ca	Kareem	Confirms
41	P5156-11DL	ME28T7	SAM	12/30/24 21:47	2x for Ca	Kareem	Confirms
42	P5156-12DL	ME28T8	SAM	12/30/24 21:50	2x for Ca	Kareem	Confirms
43	P5156-13DL	ME28T9	SAM	12/30/24 21:54	2x for Ca,Fe	Kareem	Confirms
44	P5156-14DL	ME28W0	SAM	12/30/24 21:58	2x for Fe	Kareem	Confirms
45	P5156-15DL	ME28W1	SAM	12/30/24 22:02	2x for Fe	Kareem	Confirms
46	P5156-16DL	ME28W2	SAM	12/30/24 22:06	2x for Fe	Kareem	Confirms
47	P5156-17DL	ME28W2D	DUP	12/30/24 22:09	2x for Fe	Kareem	Confirms
48	P5156-16LDL	ME28W2L	SD	12/30/24 22:13	10x for Fe	Kareem	Confirms
49	P5156-18DL	ME28W2S	MS	12/30/24 22:17	2x for Fe	Kareem	Confirms
50	P5156-21DL	ME28W5	SAM	12/30/24 22:21	Not Use	Kareem	Not Ok
51	P5156-22DL	ME28W6	SAM	12/30/24 22:25	2x for Fe	Kareem	Confirms
52	PB165326BL	PBS326	MB	12/30/24 22:28	Not Use	Kareem	Not Ok
53	PB165326BS	LCS326	LCS	12/30/24 22:32	Not Use	Kareem	Not Ok
54	P5027-10A	MBHK22A	PS	12/30/24 22:36	PS for Se,Tl,Zn	Kareem	OK
55	P5030-04A	MBHK44A	PS	12/30/24 22:40	PS For As,Tl-(As-0.0054ml m5801,Tl-0.05 ml mp83836-10 ml Sample)-10ml Sample	Kareem	OK
56	CCV051	CCV051	CCV	12/30/24 22:44		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134132

Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Mohan Bera	Supervise On	1/2/2025 2:18:34 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	M5751,MP83836,MP83726
LCS Standard	
Chk Standard	MP83513,MP83514

57	CCB051	CCB051	CCB	12/30/24 22:48		Kareem	OK
58	P5032-18A	MBHK72A	PS	12/30/24 22:52	PS For Cu,Se,Tl - (0.0038ml m5751,0.019ml mp83726,0.05 ml mp83836 - 10ml Sample)	Kareem	OK
59	P5036-07A	MBHKF8A	PS	12/30/24 22:56	PS For Pb,Tl-(0.0023ml m6025,0.05ml mp83836-10 ml Sample)	Kareem	OK
60	P5038-02A	MBHK84A	PS	12/30/24 22:59	PS For Tl-0.05ml mp83836 - 10ml Sample	Kareem	OK
61	P5169-04	MJNLH4	SAM	12/30/24 23:03		Kareem	OK
62	P5169-05	MJNLH4D	DUP	12/30/24 23:07		Kareem	OK
63	P5169-04L	MJNLH4L	SD	12/30/24 23:11		Kareem	OK
64	P5169-06	MJNLH4S	MS	12/30/24 23:15	MS fail for Ba (714.33 ppb) & Ag,Se,Cd,Cr (Below RL)	Kareem	OK
65	PB165673BL	PBW673	MB	12/30/24 23:23		Kareem	OK
66	PB165673BS	LCS673	LCS	12/30/24 23:27		Kareem	OK
67	P5035-05DL	MBHKM6	SAM	12/30/24 23:31	Not Use	Kareem	Not Ok
68	P5035-06DL	MBHKM7	SAM	12/30/24 23:35	2X For Ca	Kareem	Confirms
69	P5035-07DL	MBHKM8	SAM	12/30/24 23:39	2X For Ca	Kareem	Confirms
70	P5035-20DL	MBHKN9	SAM	12/30/24 23:43	Not Use	Kareem	Not Ok
71	P5035-08A	MBHKM9A	PS	12/30/24 23:47	PS For Tl - 0.05ml mp83836-10ml Sample	Kareem	OK
72	P5266-19	ME28Y9D	DUP	12/30/24 23:51	NOT USE	Kareem	Not Ok
73	CCV052	CCV052	CCV	12/30/24 23:54		Kareem	OK

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Review By	Sarabjit Jaswal	Review On	1/2/2025 2:17:00 AM
Supervise By	Mohan Bera	Supervise On	1/2/2025 2:18:34 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	M5751,MP83836,MP83726
LCS Standard	
Chk Standard	MP83513,MP83514

74	CCB052	CCB052	CCB	12/30/24 23:58		Kareem	OK