EPA SAMPLE NO.

MYCYZ9

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-01

% Solids: 98 Date Received: 12/06/2024

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	13000	D	12/20/2024	0209
7440-36-0	Antimony	4.8	JD	12/20/2024	0209
7440-38-2	Arsenic	33	D	12/20/2024	0209
7440-39-3	Barium	110	D	12/20/2024	0209
7440-41-7	Beryllium	1.2	D	12/20/2024	0209
7440-43-9	Cadmium	0.31	JD	12/20/2024	0209
7440-70-2	Calcium	7500	D	12/20/2024	0209
7440-47-3	Chromium	14	D	12/20/2024	0209
7440-48-4	Cobalt	19	D	12/20/2024	0209
7440-50-8	Copper	31	D	12/20/2024	0209
7439-89-6	Iron	34000	D	12/20/2024	0209
7439-92-1	Lead	22	D	12/20/2024	0209
7439-95-4	Magnesium	6300	D	12/20/2024	0209
7439-96-5	Manganese	610	D	12/20/2024	0209
7440-02-0	Nickel	19	D	12/20/2024	0209
7440-09-7	Potassium	2300	D	12/20/2024	0209
7782-49-2	Selenium	16	D	12/20/2024	0209
7440-22-4	Silver	0.69	JD'	12/20/2024	0209
7440-23-5	Sodium	360	JD	12/20/2024	0209
7440-28-0	Thallium	3.8	UD	12/20/2024	0209
7440-62-2	Vanadium	58	D	12/20/2024	0209
7440-66-6	Zinc	63	D	12/20/2024	0209

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

Comments:

EPA SAMPLE NO.

MYCZ00

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-02

% Solids: 98.2 Date Received: 12/06/2024

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	13000	D	12/20/2024	0221
7440-36-0	Antimony	4.8	JD	12/20/2024	0221
7440-38-2	Arsenic	29	D	12/20/2024	0221
7440-39-3	Barium	120	D	12/20/2024	0221
7440-41-7	Beryllium	1.2	D	12/20/2024	0221
7440-43-9	Cadmium	0.27	JD	12/20/2024	0221
7440-70-2	Calcium	7400	D	12/20/2024	0221
7440-47-3	Chromium	14	D	12/20/2024	0221
7440-48-4	Cobalt	19	D	12/20/2024	0221
7440-50-8	Copper	27	D	12/20/2024	0221
7439-89-6	Iron	34000	D	12/20/2024	0221
7439-92-1	Lead	21	D	12/20/2024	0221
7439-95-4	Magnesium	6300	D	12/20/2024	0221
7439-96-5	Manganese	640	D	12/20/2024	0221
7440-02-0	Nickel	19	D	12/20/2024	0221
7440-09-7	Potassium	2400	D	12/20/2024	0221
7782-49-2	Selenium	16	D	12/20/2024	0221
7440-22-4	Silver	0.78	JD'	12/20/2024	0221
7440-23-5	Sodium	230	JD	12/20/2024	0221
7440-28-0	Thallium	3.6	UD	12/20/2024	0221
7440-62-2	Vanadium	54	D	12/20/2024	0221
7440-66-6	Zinc	59	D	12/20/2024	0221

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

Comments:

EPA SAMPLE NO.

MYCZ01

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-03

% Solids: 98.5 Date Received: 12/06/2024

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	12000	D	12/20/2024	0225
7440-36-0	Antimony	6.0	JD	12/20/2024	0225
7440-38-2	Arsenic	130	D	12/20/2024	0225
7440-39-3	Barium	100	D	12/20/2024	0225
7440-41-7	Beryllium	1.2	D	12/20/2024	0225
7440-43-9	Cadmium	1.4	D	12/20/2024	0225
7440-70-2	Calcium	6100	D	12/20/2024	0225
7440-47-3	Chromium	13	D	12/20/2024	0225
7440-48-4	Cobalt	19	D	12/20/2024	0225
7440-50-8	Copper	52	D	12/20/2024	0225
7439-89-6	Iron	36000	D	12/20/2024	0225
7439-92-1	Lead	100	D	12/20/2024	0225
7439-95-4	Magnesium	6400	D	12/20/2024	0225
7439-96-5	Manganese	590	D	12/20/2024	0225
7440-02-0	Nickel	19	D	12/20/2024	0225
7440-09-7	Potassium	2600	D	12/20/2024	0225
7782-49-2	Selenium	18	D	12/20/2024	0225
7440-22-4	Silver	1.2	JD'	12/20/2024	0225
7440-23-5	Sodium	410	JD	12/20/2024	0225
7440-28-0	Thallium	3.6	UD	12/20/2024	0225
7440-62-2	Vanadium	53	D	12/20/2024	0225
7440-66-6	Zinc	300	D	12/20/2024	0225

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

Comments:

EPA SAMPLE NO.

MYCZ02

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-04

% Solids: 98.4 Date Received: 12/06/2024

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	14000	D	12/20/2024	0229
7440-36-0	Antimony	5.7	JD	12/20/2024	0229
7440-38-2	Arsenic	59	D	12/20/2024	0229
7440-39-3	Barium	130	D	12/20/2024	0229
7440-41-7	Beryllium	1.3	D	12/20/2024	0229
7440-43-9	Cadmium	0.55	JD	12/20/2024	0229
7440-70-2	Calcium	6900	D	12/20/2024	0229
7440-47-3	Chromium	16	D	12/20/2024	0229
7440-48-4	Cobalt	19	D	12/20/2024	0229
7440-50-8	Copper	41	D	12/20/2024	0229
7439-89-6	Iron	37000	D	12/20/2024	0229
7439-92-1	Lead	35	D	12/20/2024	0229
7439-95-4	Magnesium	6700	D	12/20/2024	0229
7439-96-5	Manganese	700	D	12/20/2024	0229
7440-02-0	Nickel	20	D	12/20/2024	0229
7440-09-7	Potassium	2900	D	12/20/2024	0229
7782-49-2	Selenium	18	D	12/20/2024	0229
7440-22-4	Silver	1.0	JD'	12/20/2024	0229
7440-23-5	Sodium	470	JD	12/20/2024	0229
7440-28-0	Thallium	3.9	UD	12/20/2024	0229
7440-62-2	Vanadium	62	D	12/20/2024	0229
7440-66-6	Zinc	110	D	12/20/2024	0229

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

Comments:

EPA SAMPLE NO.

MYCZ03

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-05

% Solids: 98.7 Date Received: 12/06/2024

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	15000	D	12/20/2024	0232
7440-36-0	Antimony	6.2	JD	12/20/2024	0232
7440-38-2	Arsenic	46	D	12/20/2024	0232
7440-39-3	Barium	120	D	12/20/2024	0232
7440-41-7	Beryllium	1.3	D	12/20/2024	0232
7440-43-9	Cadmium	0.48	JD	12/20/2024	0232
7440-70-2	Calcium	7000	D	12/20/2024	0232
7440-47-3	Chromium	18	D	12/20/2024	0232
7440-48-4	Cobalt	20	D	12/20/2024	0232
7440-50-8	Copper	36	D	12/20/2024	0232
7439-89-6	Iron	38000	D	12/20/2024	0232
7439-92-1	Lead	32	D	12/20/2024	0232
7439-95-4	Magnesium	7200	D	12/20/2024	0232
7439-96-5	Manganese	670	D	12/20/2024	0232
7440-02-0	Nickel	21	D	12/20/2024	0232
7440-09-7	Potassium	2900	D	12/20/2024	0232
7782-49-2	Selenium	19	D	12/20/2024	0232
7440-22-4	Silver	1.0	JD'	12/20/2024	0232
7440-23-5	Sodium	320	JD	12/20/2024	0232
7440-28-0	Thallium	3.5	UD	12/20/2024	0232
7440-62-2	Vanadium	65	D	12/20/2024	0232
7440-66-6	Zinc	110	D	12/20/2024	0232

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

Comments:

EPA SAMPLE NO.

MYCZ04

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-06

% Solids: 98.8 Date Received: 12/06/2024

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	10000	D	12/20/2024	0236
7440-36-0	Antimony	3.6	JD	12/20/2024	0236
7440-38-2	Arsenic	23	D	12/20/2024	0236
7440-39-3	Barium	100	D	12/20/2024	0236
7440-41-7	Beryllium	1.0	D	12/20/2024	0236
7440-43-9	Cadmium	0.21	JD	12/20/2024	0236
7440-70-2	Calcium	16000	D	12/20/2024	0236
7440-47-3	Chromium	14	D	12/20/2024	0236
7440-48-4	Cobalt	18	D	12/20/2024	0236
7440-50-8	Copper	19	D	12/20/2024	0236
7439-89-6	Iron	28000	D	12/20/2024	0236
7439-92-1	Lead	18	D	12/20/2024	0236
7439-95-4	Magnesium	4800	D	12/20/2024	0236
7439-96-5	Manganese	520	D	12/20/2024	0236
7440-02-0	Nickel	16	D	12/20/2024	0236
7440-09-7	Potassium	1800	D	12/20/2024	0236
7782-49-2	Selenium	11	D	12/20/2024	0236
7440-22-4	Silver	0.44	JD'	12/20/2024	0236
7440-23-5	Sodium	450	JD	12/20/2024	0236
7440-28-0	Thallium	4.1	UD	12/20/2024	0236
7440-62-2	Vanadium	50	D	12/20/2024	0236
7440-66-6	Zinc	49	D	12/20/2024	0236

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

Comments:

EPA SAMPLE NO.

MYCZ05

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-07

% Solids: 98.2 Date Received: 12/06/2024

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	15000	D	12/20/2024	0240
7440-36-0	Antimony	5.4	JD	12/20/2024	0240
7440-38-2	Arsenic	66	D	12/20/2024	0240
7440-39-3	Barium	140	D	12/20/2024	0240
7440-41-7	Beryllium	1.3	D	12/20/2024	0240
7440-43-9	Cadmium	0.69	JD	12/20/2024	0240
7440-70-2	Calcium	8000	D	12/20/2024	0240
7440-47-3	Chromium	18	D	12/20/2024	0240
7440-48-4	Cobalt	22	D	12/20/2024	0240
7440-50-8	Copper	39	D	12/20/2024	0240
7439-89-6	Iron	36000	D	12/20/2024	0240
7439-92-1	Lead	46	D	12/20/2024	0240
7439-95-4	Magnesium	7300	D	12/20/2024	0240
7439-96-5	Manganese	700	D	12/20/2024	0240
7440-02-0	Nickel	22	D	12/20/2024	0240
7440-09-7	Potassium	2800	D	12/20/2024	0240
7782-49-2	Selenium	17	D	12/20/2024	0240
7440-22-4	Silver	0.73	JD'	12/20/2024	0240
7440-23-5	Sodium	400	JD	12/20/2024	0240
7440-28-0	Thallium	4.0	UD	12/20/2024	0240
7440-62-2	Vanadium	55	D	12/20/2024	0240
7440-66-6	Zinc	150	D	12/20/2024	0240

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

Comments:

EPA SAMPLE NO.

MYCZ06

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-08

% Solids: 99.4 Date Received: 12/06/2024

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	D	12/20/2024	0244
7440-36-0	Antimony	3.7	JD	12/20/2024	0244
7440-38-2	Arsenic	19	D	12/20/2024	0244
7440-39-3	Barium	79	D	12/20/2024	0244
7440-41-7	Beryllium	0.91	D	12/20/2024	0244
7440-43-9	Cadmium	0.14	JD	12/20/2024	0244
7440-70-2	Calcium	11000	D	12/20/2024	0244
7440-47-3	Chromium	10	D	12/20/2024	0244
7440-48-4	Cobalt	17	D	12/20/2024	0244
7440-50-8	Copper	17	D	12/20/2024	0244
7439-89-6	Iron	26000	D	12/20/2024	0244
7439-92-1	Lead	15	D	12/20/2024	0244
7439-95-4	Magnesium	4400	D	12/20/2024	0244
7439-96-5	Manganese	440	D	12/20/2024	0244
7440-02-0	Nickel	16	D	12/20/2024	0244
7440-09-7	Potassium	1100	D	12/20/2024	0244
7782-49-2	Selenium	11	D	12/20/2024	0244
7440-22-4	Silver	0.39	JD'	12/20/2024	0244
7440-23-5	Sodium	360	JD	12/20/2024	0244
7440-28-0	Thallium	3.8	UD	12/20/2024	0244
7440-62-2	Vanadium	43	D	12/20/2024	0244
7440-66-6	Zinc	34	D	12/20/2024	0244

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

Comments:

EPA SAMPLE NO.

MYCZ07

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-09

% Solids: 97 Date Received: 12/06/2024

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	17000	D	12/20/2024	0248
7440-36-0	Antimony	5.5	JD	12/20/2024	0248
7440-38-2	Arsenic	62	D	12/20/2024	0248
7440-39-3	Barium	160	D	12/20/2024	0248
7440-41-7	Beryllium	1.3	D	12/20/2024	0248
7440-43-9	Cadmium	0.74	JD	12/20/2024	0248
7440-70-2	Calcium	9800	D	12/20/2024	0248
7440-47-3	Chromium	18	D	12/20/2024	0248
7440-48-4	Cobalt	22	D	12/20/2024	0248
7440-50-8	Copper	41	D	12/20/2024	0248
7439-89-6	Iron	36000	D	12/20/2024	0248
7439-92-1	Lead	51	D	12/20/2024	0248
7439-95-4	Magnesium	7700	D	12/20/2024	0248
7439-96-5	Manganese	780	D	12/20/2024	0248
7440-02-0	Nickel	22	D	12/20/2024	0248
7440-09-7	Potassium	3200	D	12/20/2024	0248
7782-49-2	Selenium	16	D	12/20/2024	0248
7440-22-4	Silver	0.70	JD'	12/20/2024	0248
7440-23-5	Sodium	450	JD	12/20/2024	0248
7440-28-0	Thallium	4.3	UD	12/20/2024	0248
7440-62-2	Vanadium	55	D	12/20/2024	0248
7440-66-6	Zinc	160	D	12/20/2024	0248

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

Comments:

EPA SAMPLE NO.

MYCZ08

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-10

% Solids: 97.7 Date Received: 12/06/2024

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	15000	D	12/20/2024	0252
7440-36-0	Antimony	4.6	JD	12/20/2024	0252
7440-38-2	Arsenic	77	D	12/20/2024	0252
7440-39-3	Barium	140	D	12/20/2024	0252
7440-41-7	Beryllium	1.2	D	12/20/2024	0252
7440-43-9	Cadmium	1.1	D	12/20/2024	0252
7440-70-2	Calcium	8500	D	12/20/2024	0252
7440-47-3	Chromium	19	D	12/20/2024	0252
7440-48-4	Cobalt	21	D	12/20/2024	0252
7440-50-8	Copper	45	D	12/20/2024	0252
7439-89-6	Iron	33000	D	12/20/2024	0252
7439-92-1	Lead	66	D	12/20/2024	0252
7439-95-4	Magnesium	7000	D	12/20/2024	0252
7439-96-5	Manganese	790	D	12/20/2024	0252
7440-02-0	Nickel	21	D	12/20/2024	0252
7440-09-7	Potassium	3200	D	12/20/2024	0252
7782-49-2	Selenium	15	D	12/20/2024	0252
7440-22-4	Silver	0.66	JD'	12/20/2024	0252
7440-23-5	Sodium	400	JD	12/20/2024	0252
7440-28-0	Thallium	4.4	UD	12/20/2024	0252
7440-62-2	Vanadium	46	D	12/20/2024	0252
7440-66-6	Zinc	210	D	12/20/2024	0252

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

Comments:

EPA SAMPLE NO.

MYCZ09

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-11

% Solids: 98.5 Date Received: 12/06/2024

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	14000	D	12/20/2024	0256
7440-36-0	Antimony	6.7	JD	12/20/2024	0256
7440-38-2	Arsenic	76	D	12/20/2024	0256
7440-39-3	Barium	120	D	12/20/2024	0256
7440-41-7	Beryllium	1.4	D	12/20/2024	0256
7440-43-9	Cadmium	0.81	JD	12/20/2024	0256
7440-70-2	Calcium	6000	D	12/20/2024	0256
7440-47-3	Chromium	16	D	12/20/2024	0256
7440-48-4	Cobalt	26	D	12/20/2024	0256
7440-50-8	Copper	50	D	12/20/2024	0256
7439-89-6	Iron	42000	D	12/20/2024	0256
7439-92-1	Lead	48	D	12/20/2024	0256
7439-95-4	Magnesium	6100	D	12/20/2024	0256
7439-96-5	Manganese	750	D	12/20/2024	0256
7440-02-0	Nickel	20	D	12/20/2024	0256
7440-09-7	Potassium	2700	D	12/20/2024	0256
7782-49-2	Selenium	20	D	12/20/2024	0256
7440-22-4	Silver	0.89	JD'	12/20/2024	0256
7440-23-5	Sodium	490	JD	12/20/2024	0256
7440-28-0	Thallium	4.2	UD	12/20/2024	0256
7440-62-2	Vanadium	75	D	12/20/2024	0256
7440-66-6	Zinc	160	D	12/20/2024	0256

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

Comments:

EPA SAMPLE NO.

MYCZ10

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-12

% Solids: 97.1 Date Received: 12/06/2024

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	14000	D	12/20/2024	0259
7440-36-0	Antimony	5.1	JD	12/20/2024	0259
7440-38-2	Arsenic	26	D	12/20/2024	0259
7440-39-3	Barium	110	D	12/20/2024	0259
7440-41-7	Beryllium	1.2	D	12/20/2024	0259
7440-43-9	Cadmium	0.16	JD	12/20/2024	0259
7440-70-2	Calcium	7800	D	12/20/2024	0259
7440-47-3	Chromium	19	D	12/20/2024	0259
7440-48-4	Cobalt	22	D	12/20/2024	0259
7440-50-8	Copper	29	D	12/20/2024	0259
7439-89-6	Iron	37000	D	12/20/2024	0259
7439-92-1	Lead	13	D	12/20/2024	0259
7439-95-4	Magnesium	7400	D	12/20/2024	0259
7439-96-5	Manganese	620	D	12/20/2024	0259
7440-02-0	Nickel	21	D	12/20/2024	0259
7440-09-7	Potassium	640	JD	12/20/2024	0259
7782-49-2	Selenium	17	D	12/20/2024	0259
7440-22-4	Silver	0.55	JD'	12/20/2024	0259
7440-23-5	Sodium	410	JD	12/20/2024	0259
7440-28-0	Thallium	4.1	UD	12/20/2024	0259
7440-62-2	Vanadium	67	D	12/20/2024	0259
7440-66-6	Zinc	42	D	12/20/2024	0259

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

Comments:

EPA SAMPLE NO.

MYCZ11

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-13

% Solids: 98.6 Date Received: 12/06/2024

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	11000	D	12/20/2024	0303
7440-36-0	Antimony	5.0	JD	12/20/2024	0303
7440-38-2	Arsenic	26	D	12/20/2024	0303
7440-39-3	Barium	100	D	12/20/2024	0303
7440-41-7	Beryllium	1.1	D	12/20/2024	0303
7440-43-9	Cadmium	0.15	JD	12/20/2024	0303
7440-70-2	Calcium	9100	D	12/20/2024	0303
7440-47-3	Chromium	29	D	12/20/2024	0303
7440-48-4	Cobalt	22	D	12/20/2024	0303
7440-50-8	Copper	25	D	12/20/2024	0303
7439-89-6	Iron	33000	D	12/20/2024	0303
7439-92-1	Lead	13	D	12/20/2024	0303
7439-95-4	Magnesium	6900	D	12/20/2024	0303
7439-96-5	Manganese	550	D	12/20/2024	0303
7440-02-0	Nickel	25	D	12/20/2024	0303
7440-09-7	Potassium	570	JD	12/20/2024	0303
7782-49-2	Selenium	15	D	12/20/2024	0303
7440-22-4	Silver	0.62	JD'	12/20/2024	0303
7440-23-5	Sodium	380	JD	12/20/2024	0303
7440-28-0	Thallium	4.2	UD	12/20/2024	0303
7440-62-2	Vanadium	64	D	12/20/2024	0303
7440-66-6	Zinc	43	D	12/20/2024	0303

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

Comments:

EPA SAMPLE NO.

MYCZ12

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-14

% Solids: 97.3 Date Received: 12/06/2024

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	15000	D	12/20/2024	0307
7440-36-0	Antimony	4.8	JD	12/20/2024	0307
7440-38-2	Arsenic	26	D	12/20/2024	0307
7440-39-3	Barium	130	D	12/20/2024	0307
7440-41-7	Beryllium	1.2	D	12/20/2024	0307
7440-43-9	Cadmium	0.21	JD	12/20/2024	0307
7440-70-2	Calcium	7100	D	12/20/2024	0307
7440-47-3	Chromium	19	D	12/20/2024	0307
7440-48-4	Cobalt	20	D	12/20/2024	0307
7440-50-8	Copper	26	D	12/20/2024	0307
7439-89-6	Iron	33000	D	12/20/2024	0307
7439-92-1	Lead	14	D	12/20/2024	0307
7439-95-4	Magnesium	7500	D	12/20/2024	0307
7439-96-5	Manganese	680	D	12/20/2024	0307
7440-02-0	Nickel	22	D	12/20/2024	0307
7440-09-7	Potassium	1800	D	12/20/2024	0307
7782-49-2	Selenium	16	D	12/20/2024	0307
7440-22-4	Silver	0.51	JD'	12/20/2024	0307
7440-23-5	Sodium	440	JD	12/20/2024	0307
7440-28-0	Thallium	3.7	UD	12/20/2024	0307
7440-62-2	Vanadium	52	D	12/20/2024	0307
7440-66-6	Zinc	48	D	12/20/2024	0307

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

Comments:

EPA SAMPLE NO.

MYCZ13

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-15

% Solids: 99.9 Date Received: 12/06/2024

Analytical Method: ICP_AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8300	D	12/20/2024	0311
7440-36-0	Antimony	4.4	JD	12/20/2024	0311
7440-38-2	Arsenic	24	D	12/20/2024	0311
7440-39-3	Barium	57	D	12/20/2024	0311
7440-41-7	Beryllium	0.89	D	12/20/2024	0311
7440-43-9	Cadmium	0.097	JD	12/20/2024	0311
7440-70-2	Calcium	6300	D	12/20/2024	0311
7440-47-3	Chromium	22	D	12/20/2024	0311
7440-48-4	Cobalt	17	D	12/20/2024	0311
7440-50-8	Copper	25	D	12/20/2024	0311
7439-89-6	Iron	30000	D	12/20/2024	0311
7439-92-1	Lead	10	D	12/20/2024	0311
7439-95-4	Magnesium	5500	D	12/20/2024	0311
7439-96-5	Manganese	330	D	12/20/2024	0311
7440-02-0	Nickel	22	D	12/20/2024	0311
7440-09-7	Potassium	350	JD	12/20/2024	0311
7782-49-2	Selenium	13	D	12/20/2024	0311
7440-22-4	Silver	0.49	JD'	12/20/2024	0311
7440-23-5	Sodium	450	JD	12/20/2024	0311
7440-28-0	Thallium	3.9	UD	12/20/2024	0311
7440-62-2	Vanadium	61	D	12/20/2024	0311
7440-66-6	Zinc	29	D	12/20/2024	0311

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

Comments:

EPA SAMPLE NO.

MYCZ14

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-16

% Solids: 98.1 Date Received: 12/06/2024

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	15000	D	12/20/2024	0315
7440-36-0	Antimony	6.9	JD	12/20/2024	0315
7440-38-2	Arsenic	110	D	12/20/2024	0315
7440-39-3	Barium	130	D	12/20/2024	0315
7440-41-7	Beryllium	1.5	D	12/20/2024	0315
7440-43-9	Cadmium	1.3	D	12/20/2024	0315
7440-70-2	Calcium	7400	D	12/20/2024	0315
7440-47-3	Chromium	17	D	12/20/2024	0315
7440-48-4	Cobalt	23	D	12/20/2024	0315
7440-50-8	Copper	74	D	12/20/2024	0315
7439-89-6	Iron	44000	D	12/20/2024	0315
7439-92-1	Lead	74	D	12/20/2024	0315
7439-95-4	Magnesium	6900	D	12/20/2024	0315
7439-96-5	Manganese	760	D	12/20/2024	0315
7440-02-0	Nickel	21	D	12/20/2024	0315
7440-09-7	Potassium	2700	D	12/20/2024	0315
7782-49-2	Selenium	22	D	12/20/2024	0315
7440-22-4	Silver	1.1	JD'	12/20/2024	0315
7440-23-5	Sodium	410	JD	12/20/2024	0315
7440-28-0	Thallium	4.2	UD	12/20/2024	0315
7440-62-2	Vanadium	75	D	12/20/2024	0315
7440-66-6	Zinc	230	D	12/20/2024	0315

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

Comments:

EPA SAMPLE NO.

MYCZ15

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-17

% Solids: 98.5 Date Received: 12/06/2024

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	13000	D	12/20/2024	0319
7440-36-0	Antimony	6.1	JD	12/20/2024	0319
7440-38-2	Arsenic	120	D	12/20/2024	0319
7440-39-3	Barium	100	D	12/20/2024	0319
7440-41-7	Beryllium	1.2	D	12/20/2024	0319
7440-43-9	Cadmium	1.6	D	12/20/2024	0319
7440-70-2	Calcium	6300	D	12/20/2024	0319
7440-47-3	Chromium	14	D	12/20/2024	0319
7440-48-4	Cobalt	19	D	12/20/2024	0319
7440-50-8	Copper	53	D	12/20/2024	0319
7439-89-6	Iron	36000	D	12/20/2024	0319
7439-92-1	Lead	110	D	12/20/2024	0319
7439-95-4	Magnesium	6500	D	12/20/2024	0319
7439-96-5	Manganese	690	D	12/20/2024	0319
7440-02-0	Nickel	19	D	12/20/2024	0319
7440-09-7	Potassium	2800	D	12/20/2024	0319
7782-49-2	Selenium	18	D	12/20/2024	0319
7440-22-4	Silver	0.97	JD'	12/20/2024	0319
7440-23-5	Sodium	310	JD	12/20/2024	0319
7440-28-0	Thallium	4.3	UD	12/20/2024	0319
7440-62-2	Vanadium	51	D	12/20/2024	0319
7440-66-6	Zinc	330	D	12/20/2024	0319

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

Comments:

EPA SAMPLE NO.

MYCZ16

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-18

% Solids: 98.2 Date Received: 12/06/2024

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	14000	D	12/20/2024	0322
7440-36-0	Antimony	6.2	JD	12/20/2024	0322
7440-38-2	Arsenic	110	D	12/20/2024	0322
7440-39-3	Barium	130	D	12/20/2024	0322
7440-41-7	Beryllium	1.3	D	12/20/2024	0322
7440-43-9	Cadmium	1.1	D	12/20/2024	0322
7440-70-2	Calcium	6400	D	12/20/2024	0322
7440-47-3	Chromium	14	D	12/20/2024	0322
7440-48-4	Cobalt	20	D	12/20/2024	0322
7440-50-8	Copper	49	D	12/20/2024	0322
7439-89-6	Iron	39000	D	12/20/2024	0322
7439-92-1	Lead	78	D	12/20/2024	0322
7439-95-4	Magnesium	6300	D	12/20/2024	0322
7439-96-5	Manganese	670	D	12/20/2024	0322
7440-02-0	Nickel	19	D	12/20/2024	0322
7440-09-7	Potassium	2700	D	12/20/2024	0322
7782-49-2	Selenium	19	D	12/20/2024	0322
7440-22-4	Silver	1.0	JD'	12/20/2024	0322
7440-23-5	Sodium	410	JD	12/20/2024	0322
7440-28-0	Thallium	3.8	UD	12/20/2024	0322
7440-62-2	Vanadium	61	D	12/20/2024	0322
7440-66-6	Zinc	250	D	12/20/2024	0322

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

Comments:

EPA SAMPLE NO.

MYCZ17

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-19

% Solids: 97.3 Date Received: 12/06/2024

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	12000	D	12/20/2024	0326
7440-36-0	Antimony	5.1	JD	12/20/2024	0326
7440-38-2	Arsenic	27	D	12/20/2024	0326
7440-39-3	Barium	78	D	12/20/2024	0326
7440-41-7	Beryllium	1.0	D	12/20/2024	0326
7440-43-9	Cadmium	0.13	JD	12/20/2024	0326
7440-70-2	Calcium	11000	D	12/20/2024	0326
7440-47-3	Chromium	19	D	12/20/2024	0326
7440-48-4	Cobalt	20	D	12/20/2024	0326
7440-50-8	Copper	29	D	12/20/2024	0326
7439-89-6	Iron	33000	D	12/20/2024	0326
7439-92-1	Lead	13	D	12/20/2024	0326
7439-95-4	Magnesium	7000	D	12/20/2024	0326
7439-96-5	Manganese	550	D	12/20/2024	0326
7440-02-0	Nickel	21	D	12/20/2024	0326
7440-09-7	Potassium	650	JD	12/20/2024	0326
7782-49-2	Selenium	15	D	12/20/2024	0326
7440-22-4	Silver	0.70	JD'	12/20/2024	0326
7440-23-5	Sodium	530	JD	12/20/2024	0326
7440-28-0	Thallium	3.7	UD	12/20/2024	0326
7440-62-2	Vanadium	59	D	12/20/2024	0326
7440-66-6	Zinc	37	D	12/20/2024	0326

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

Comments:

EPA SAMPLE NO.

MYCZ18

FORM 1 - IN

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE Case No.: 51779 MA No. : 3226.1 SDG No.: MYCYZ9

Matrix: SOIL Lab Sample ID: P5182-20

% Solids: 98.4 Date Received: 12/06/2024

Analytical Method: ICP_AES

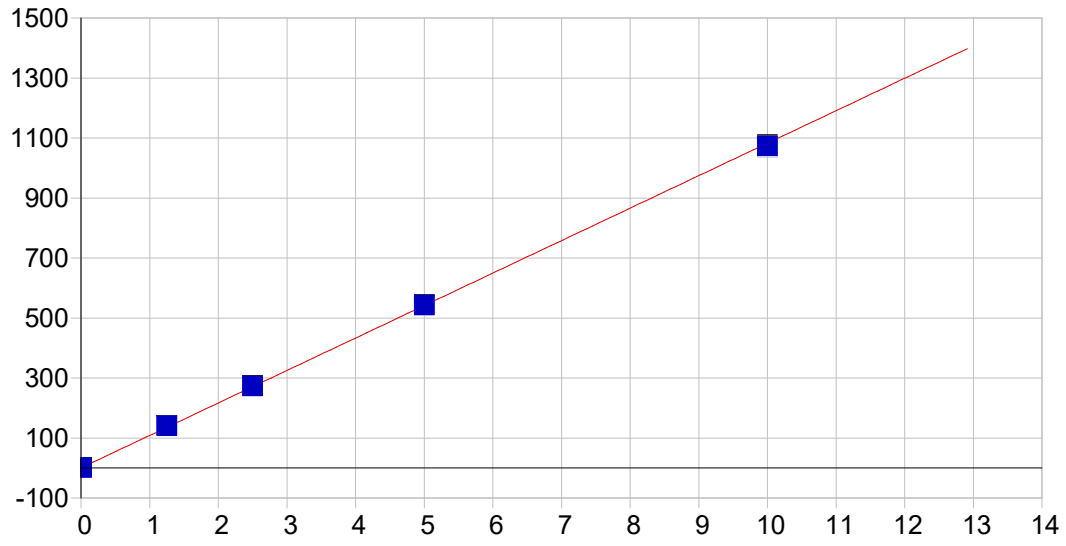
Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	13000	D	12/20/2024	0330
7440-36-0	Antimony	4.8	JD	12/20/2024	0330
7440-38-2	Arsenic	50	D	12/20/2024	0330
7440-39-3	Barium	120	D	12/20/2024	0330
7440-41-7	Beryllium	1.2	D	12/20/2024	0330
7440-43-9	Cadmium	0.47	JD	12/20/2024	0330
7440-70-2	Calcium	5800	D	12/20/2024	0330
7440-47-3	Chromium	13	D	12/20/2024	0330
7440-48-4	Cobalt	19	D	12/20/2024	0330
7440-50-8	Copper	53	D	12/20/2024	0330
7439-89-6	Iron	35000	D	12/20/2024	0330
7439-92-1	Lead	35	D	12/20/2024	0330
7439-95-4	Magnesium	5900	D	12/20/2024	0330
7439-96-5	Manganese	670	D	12/20/2024	0330
7440-02-0	Nickel	17	D	12/20/2024	0330
7440-09-7	Potassium	3000	D	12/20/2024	0330
7782-49-2	Selenium	17	D	12/20/2024	0330
7440-22-4	Silver	0.58	JD'	12/20/2024	0330
7440-23-5	Sodium	440	JD	12/20/2024	0330
7440-28-0	Thallium	3.9	UD	12/20/2024	0330
7440-62-2	Vanadium	57	D	12/20/2024	0330
7440-66-6	Zinc	110	D	12/20/2024	0330

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

Comments:

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



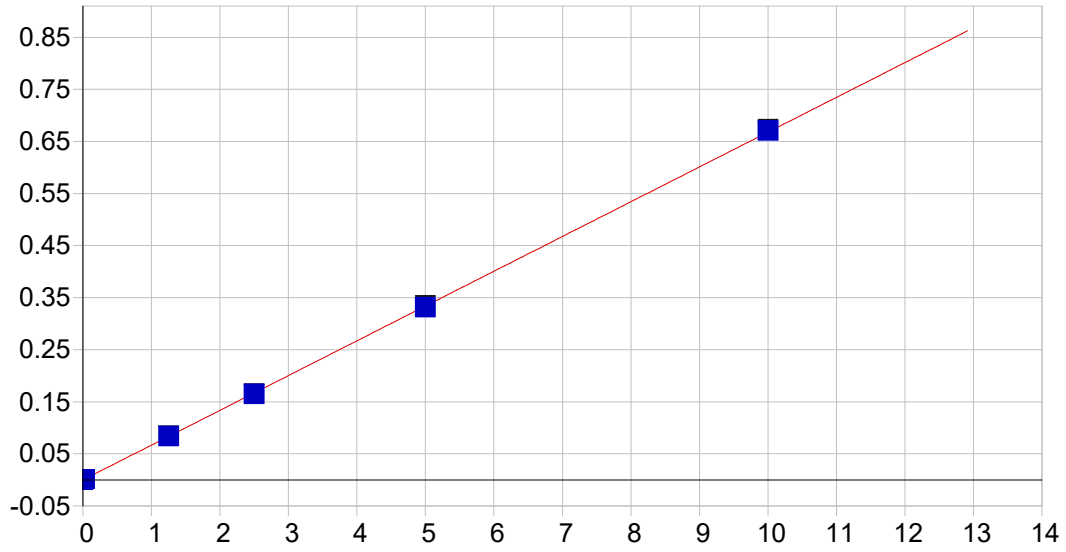
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Predicted MQL:	0.018736		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
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S1	.01000	.00948	-.001	-5.17	1.2616	.577	1
S2	1.2500	1.2966	.047	3.73	140.00	.606	1
S3	2.5000	2.5278	.028	1.11	272.69	.629	1
S4	5.0000	5.0162	.016	.324	540.88	.942	1
S5	10.000	9.9099	-.090	-.901	1068.3	4.96	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



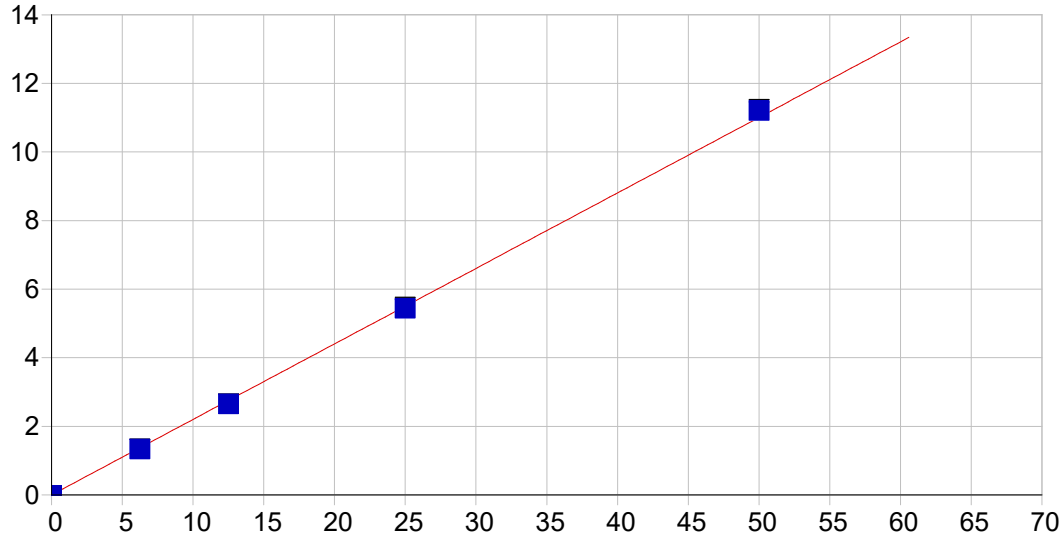
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A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
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Predicted MDL:	0.003824		
Predicted MQL:	0.012748		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00006	.000	1
S1	.02500	.02651	.002	6.04	.00165	.000	1
S2	1.2500	1.2619	.012	.949	.08400	.000	1
S3	2.5000	2.4703	-.030	-1.19	.16450	.000	1
S4	5.0000	4.9700	-.030	-.600	.33102	.003	1
S5	10.000	10.046	.046	.463	.66919	.002	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



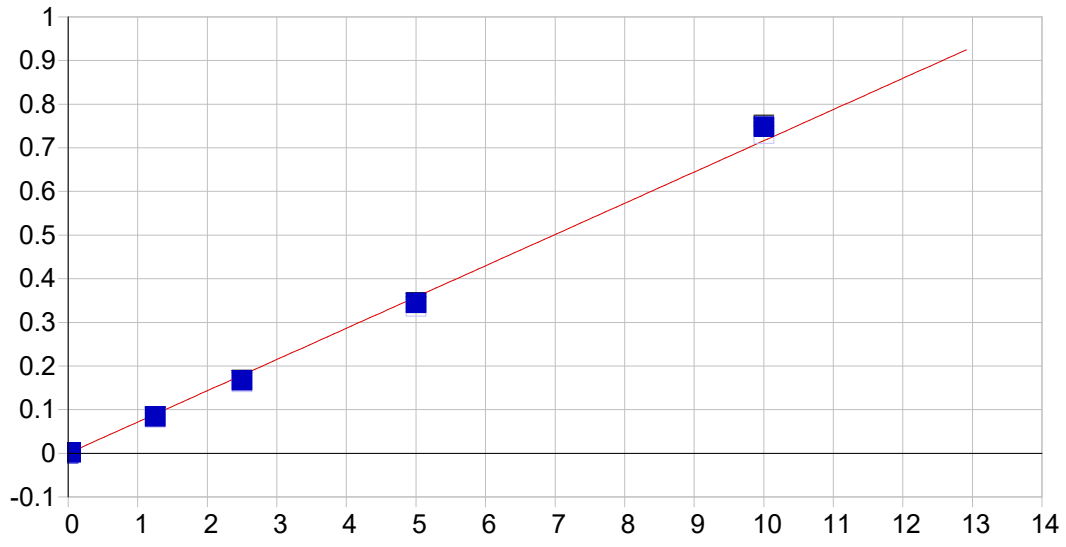
Pb 220.353 {453}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000593	Re-Slope:	1.000000
A1 (Gain):	0.220115	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999776	Status:	OK.
Std Error of Est:	0.000175		
Predicted MDL:	0.002731		
Predicted MQL:	0.009104		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00059	.000	1
S1	.01000	.00945	-.001	-5.51	.00266	.000	1
S2	6.2500	6.0606	-.189	-3.03	1.3331	.002	1
S3	12.500	12.049	-.451	-3.61	2.6498	.008	1
S4	25.000	24.723	-.277	-1.11	5.4365	.035	1
S5	50.000	50.918	.918	1.84	11.197	.033	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



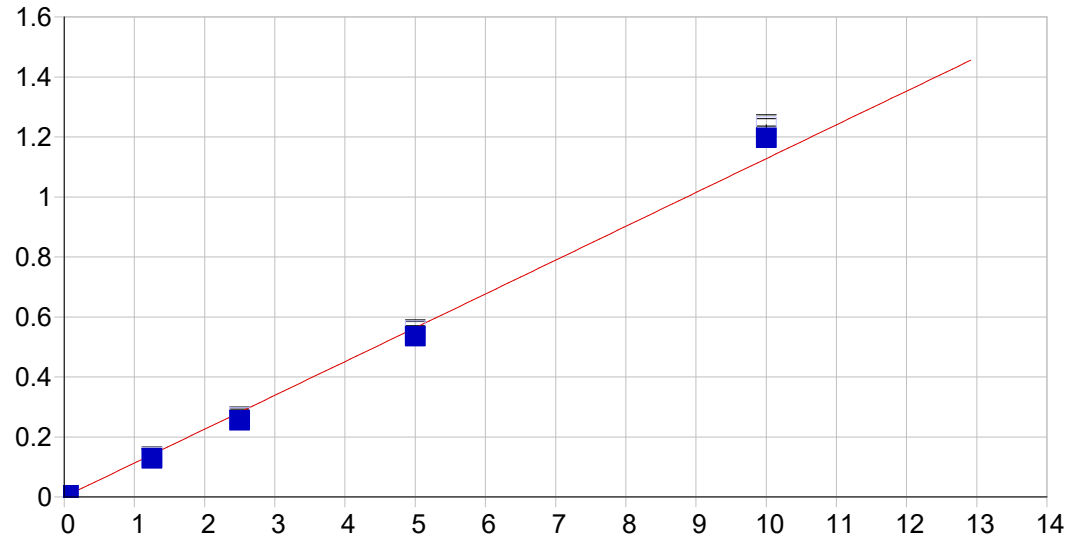
Se 196.090 {472}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000038	Re-Slope:	1.000000
A1 (Gain):	0.071602	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998717	Status:	OK.
Std Error of Est:	0.000111		
Predicted MDL:	0.004072		
Predicted MQL:	0.013575		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00004	.000	1
S1	.03500	.02618	-.009	-25.2	.00191	.000	1
S2	1.2500	1.1685	-.082	-6.52	.08169	.000	1
S3	2.5000	2.3317	-.168	-6.73	.16297	.001	1
S4	5.0000	4.8106	-.189	-3.79	.33643	.001	1
S5	10.000	10.448	.448	4.48	.73204	.004	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



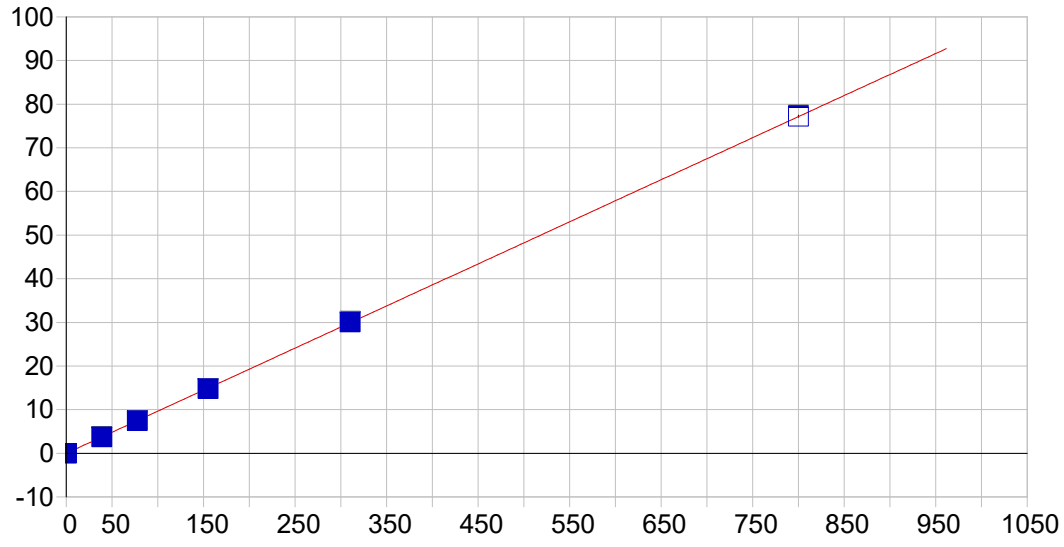
Sb 206.833 {463}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000246	Re-Slope:	1.000000
A1 (Gain):	0.112706	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.997891	Status:	OK.
Std Error of Est:	0.000312		
Predicted MDL:	0.003095		
Predicted MQL:	0.010317		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	.00025	.000	1
S1	.06000	.05403	-.006	-9.95	.00634	.001	1
S2	1.2500	1.1316	-.118	-9.47	.13250	.000	1
S3	2.5000	2.2640	-.236	-9.44	.26483	.001	1
S4	5.0000	4.7447	-.255	-5.11	.55384	.003	1
S5	10.000	10.615	.615	6.15	1.2343	.006	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



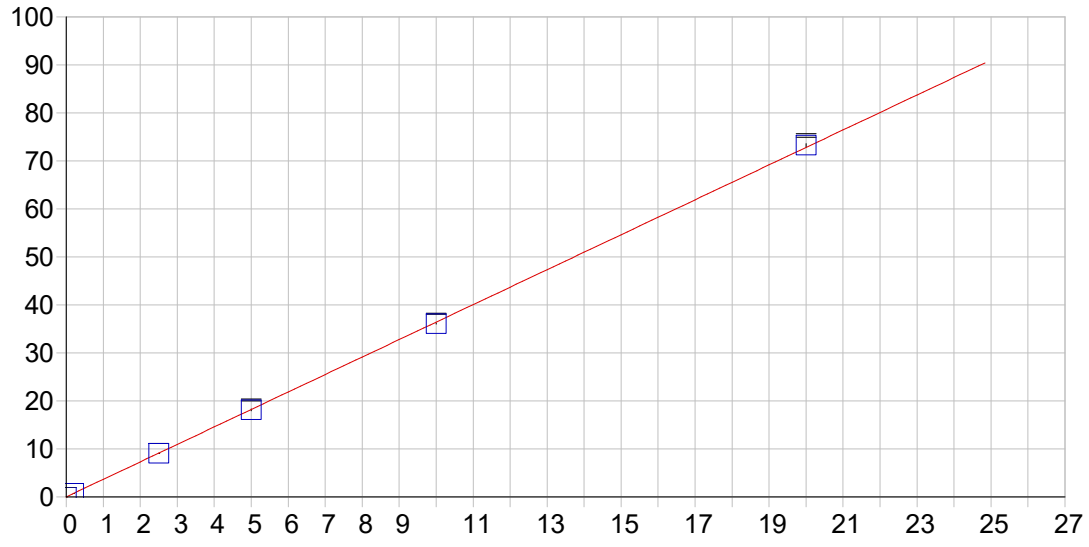
Al 396.152 { 85}

Date of Fit:	12/19/2024 17:44:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000666	Re-Slope:	1.000000
A1 (Gain):	0.096440	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.000303		
Predicted MDL:	0.025295		
Predicted MQL:	0.084317		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00066	.000	1
S1	.20000	.18720	-.013	-6.40	.01742	.003	1
S2	38.750	38.612	-.138	-.357	3.7271	.010	1
S3	77.500	77.052	-.448	-.578	7.4383	.092	1
S4	155.00	153.20	-1.80	-1.16	14.790	.041	1
S5	310.00	311.76	1.76	.567	30.098	.141	1
S6	800.00	800.64	.637	.080	77.212	.245	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



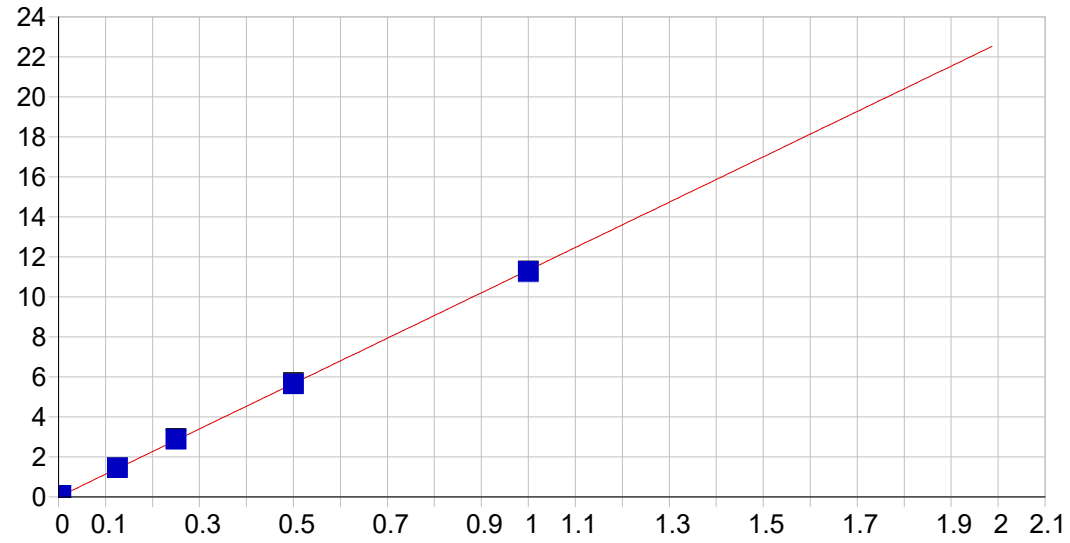
Ba 493.409 { 68}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.020714	Re-Slope:	1.000000
A1 (Gain):	3.639615	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999977	Status:	OK.
Std Error of Est:	0.002599		
Predicted MDL:	0.001342		
Predicted MQL:	0.004474		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.02071	.003	1
S1	.20000	.20302	.003	1.51	.75962	.005	1
S2	2.5000	2.4879	-.012	-.485	9.0757	.017	1
S3	5.0000	4.9766	-.023	-.467	18.134	.228	1
S4	10.000	9.9124	-.088	-.876	36.098	.111	1
S5	20.000	20.120	.120	.600	73.250	.367	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



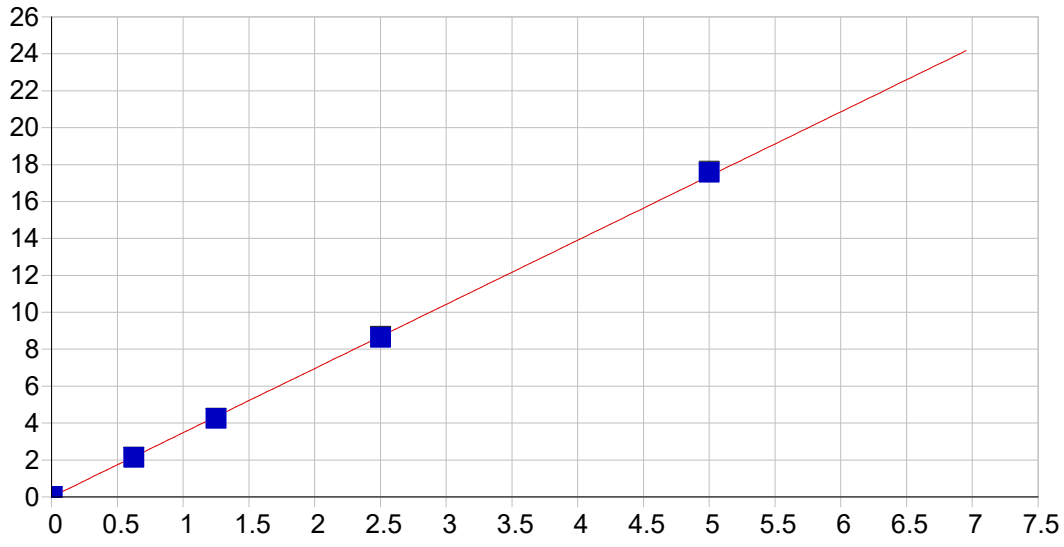
Be 234.861 {144}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000819	Re-Slope:	1.000000
A1 (Gain):	11.335668	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999944	Status:	OK.
Std Error of Est:	0.000447		
Predicted MDL:	0.000122		
Predicted MQL:	0.000407		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00081	.000	1
S1	.00500	.00526	.000	5.16	.06037	.001	1
S2	.12500	.12854	.004	2.83	1.4514	.004	1
S3	.25000	.25365	.004	1.46	2.8631	.033	1
S4	.50000	.49865	-.001	-.271	5.6273	.052	1
S5	1.0000	.99390	-.006	-.610	11.215	.023	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



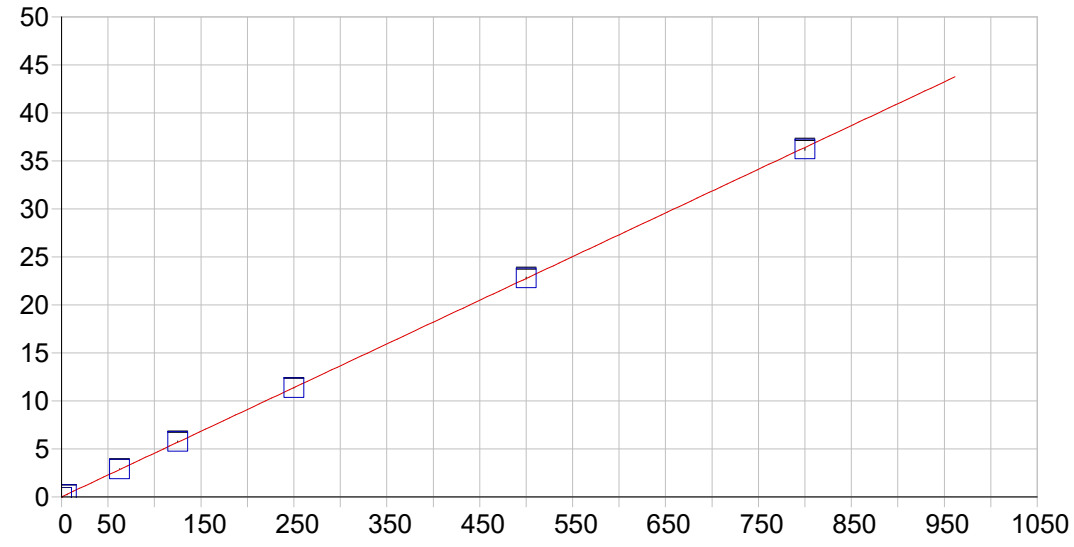
Cd 214.438 {457}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000502	Re-Slope:	1.000000
A1 (Gain):	3.476188	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999919	Status:	OK.
Std Error of Est:	0.000372		
Predicted MDL:	0.000117		
Predicted MQL:	0.000389		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00050	.000	1
S1	.00500	.00487	-.000	-2.64	.01749	.000	1
S2	.62500	.61505	-.010	-1.59	2.1419	.002	1
S3	1.2500	1.2207	-.029	-2.34	4.2505	.010	1
S4	2.5000	2.4850	-.015	-.598	8.6523	.049	1
S5	5.0000	5.0543	.054	1.09	17.597	.051	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



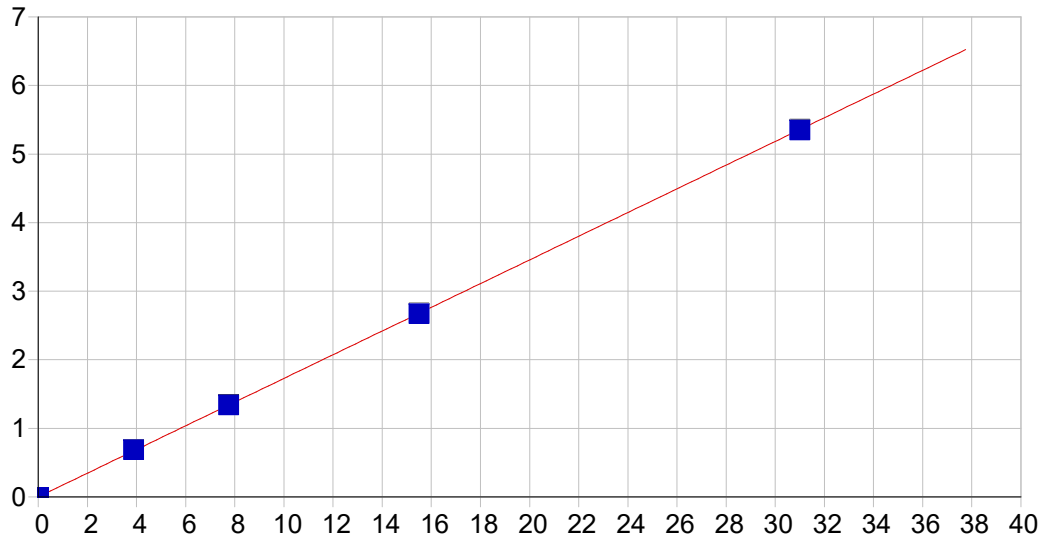
Ca 373.690 { 90}

Date of Fit:	12/19/2024 17:44:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007346	Re-Slope:	1.000000
A1 (Gain):	0.045497	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999979	Status:	OK.
Std Error of Est:	0.001022		
Predicted MDL:	0.043640		
Predicted MQL:	0.145466		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00020	-.000	.000	.00734	.002	1
S1	5.0000	5.0408	.041	.816	.23669	.002	1
S2	62.500	63.817	1.32	2.11	2.9108	.010	1
S3	125.00	126.64	1.64	1.31	5.7691	.072	1
S4	250.00	249.92	-.079	-.032	11.378	.036	1
S5	500.00	501.10	1.10	.219	22.806	.110	1
S6	800.00	795.99	-4.01	-.502	36.222	.125	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



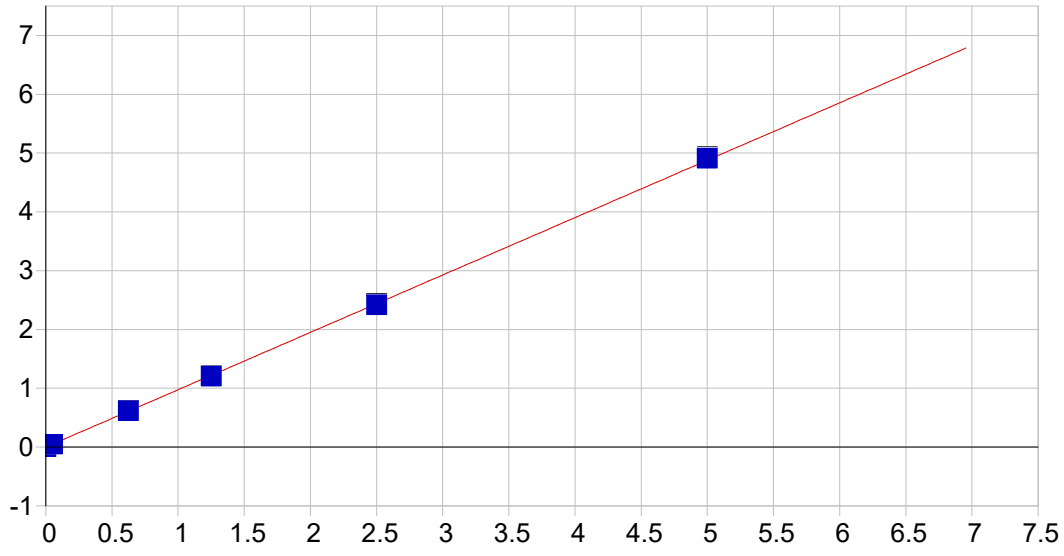
Cr 267.716 {126}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000115	Re-Slope:	1.000000
A1 (Gain):	0.172803	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999981	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.001012		
Predicted MQL:	0.003372		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00011	.000	1
S1	.01000	.01033	.000	3.27	.00190	.000	1
S2	3.8750	3.9632	.088	2.28	.68549	.000	1
S3	7.7500	7.7467	-.003	-.042	1.3398	.008	1
S4	15.500	15.458	-.042	-.269	2.6734	.007	1
S5	31.000	30.956	-.044	-.141	5.3536	.008	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



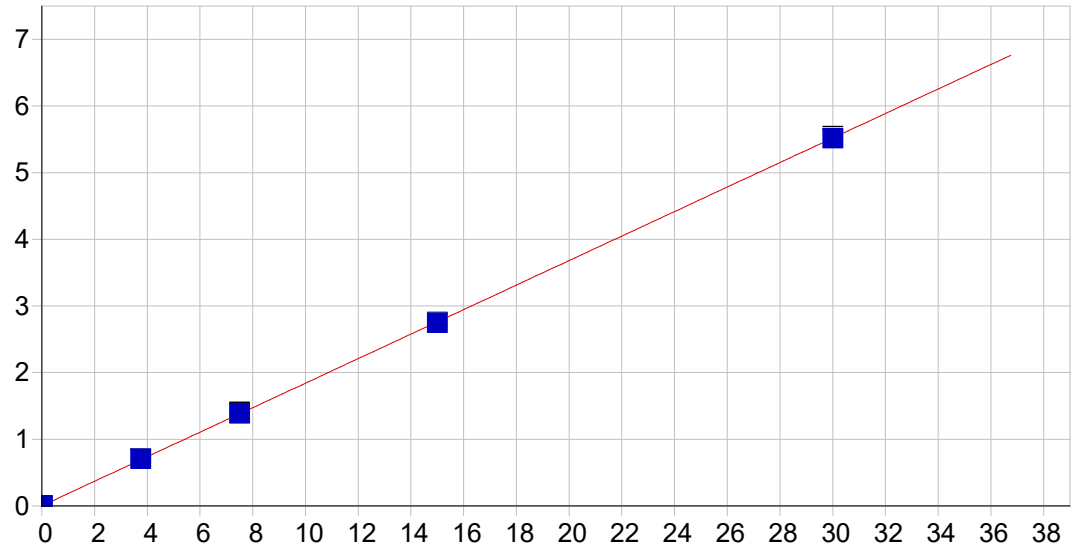
Co 228.616 {448}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000273	Re-Slope:	1.000000
A1 (Gain):	0.975747	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999967	Status:	OK.
Std Error of Est:	0.000213		
Predicted MDL:	0.000439		
Predicted MQL:	0.001464		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00027	.000	1
S1	.05000	.05112	.001	2.24	.04976	.000	1
S2	.62500	.62948	.004	.716	.61590	.001	1
S3	1.2500	1.2347	-.015	-1.22	1.2085	.003	1
S4	2.5000	2.4781	-.022	-.876	2.4256	.014	1
S5	5.0000	5.0316	.032	.631	4.9250	.012	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



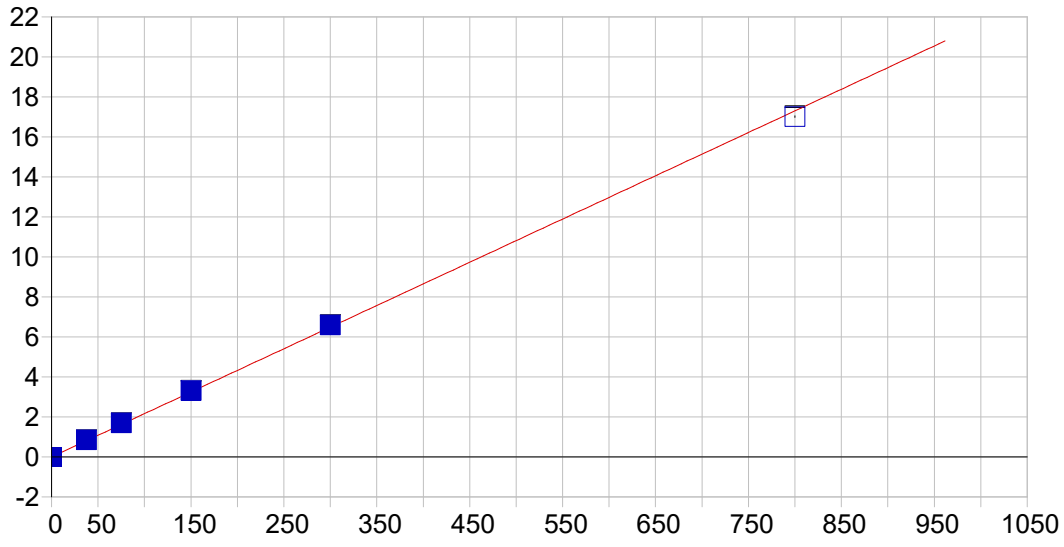
Cu 324.754 {104}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002590	Re-Slope:	1.000000
A1 (Gain):	0.183918	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999971	Status:	OK.
Std Error of Est:	0.000064		
Predicted MDL:	0.007065		
Predicted MQL:	0.023551		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00259	.001	1
S1	.02500	.01914	-.006	-23.4	.00610	.002	1
S2	3.7500	3.8213	.071	1.90	.70533	.002	1
S3	7.5000	7.5312	.031	.416	1.3876	.017	1
S4	15.000	14.925	-.075	-.502	2.7472	.007	1
S5	30.000	29.979	-.021	-.071	5.5156	.029	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



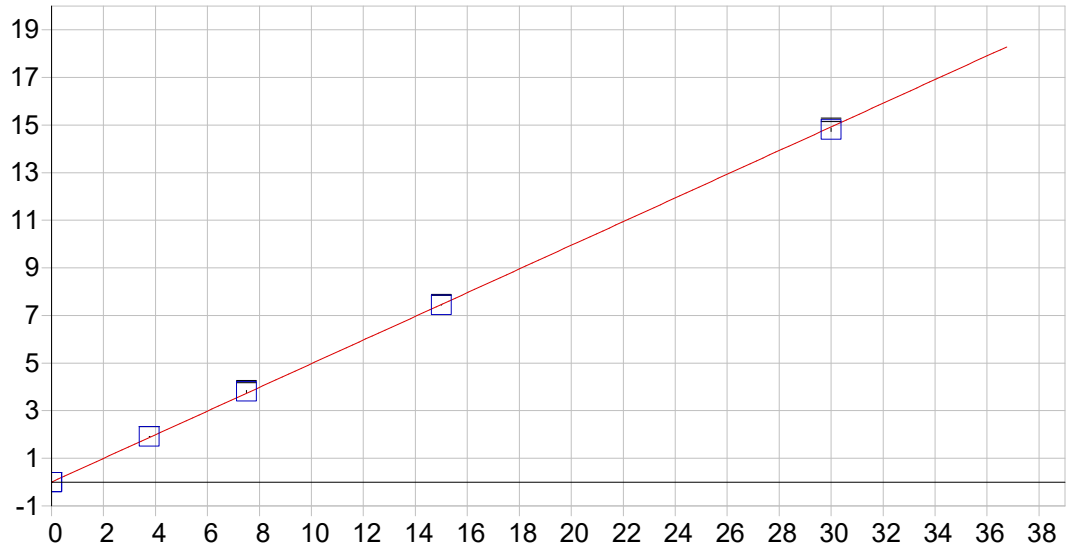
Fe 259.837 {130}

Date of Fit:	12/19/2024 17:44:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000156	Re-Slope:	1.000000
A1 (Gain):	0.021627	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999781	Status:	OK.
Std Error of Est:	0.000198		
Predicted MDL:	0.036119		
Predicted MQL:	0.120395		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00016	.001	1
S1	.10000	.08539	-.015	-14.6	.00169	.001	1
S2	37.500	39.350	1.85	4.93	.85104	.002	1
S3	75.000	78.109	3.11	4.15	1.6894	.020	1
S4	150.00	153.47	3.47	2.32	3.3197	.016	1
S5	300.00	304.78	4.78	1.59	6.5926	.038	1
S6	800.00	786.80	-13.2	-1.65	17.016	.043	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



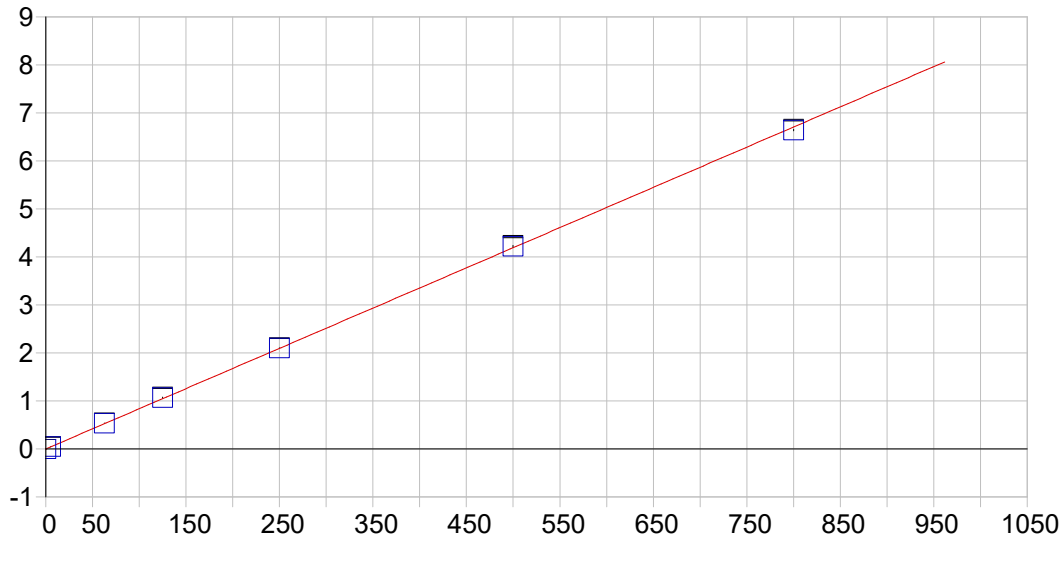
Mn 257.610 {131}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000149	Re-Slope:	1.000000
A1 (Gain):	0.497428	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999925	Status:	OK.
Std Error of Est:	0.000217		
Predicted MDL:	0.001386		
Predicted MQL:	0.004620		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00015	.001	1
S1	.01500	.01701	.002	13.4	.00861	.001	1
S2	3.7500	3.8538	.104	2.77	1.9171	.002	1
S3	7.5000	7.6588	.159	2.12	3.8098	.044	1
S4	15.000	14.975	-.025	-.168	7.4490	.026	1
S5	30.000	29.761	-.239	-.798	14.804	.073	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



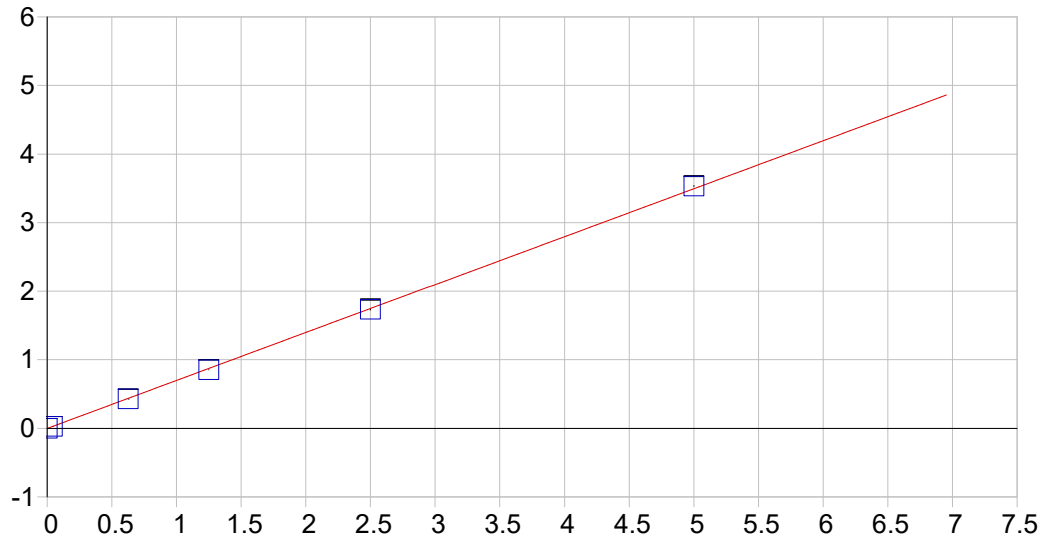
Mg 279.079 {121}

Date of Fit:	12/19/2024 17:44:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001181	Re-Slope:	1.000000
A1 (Gain):	0.008384	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000313		
Predicted MDL:	0.091470		
Predicted MQL:	0.304900		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00055	-.001	.000	-.00119	.000	1
S1	5.0000	5.3437	.344	6.87	.04362	.001	1
S2	62.500	64.138	1.64	2.62	.53657	.002	1
S3	125.00	127.20	2.20	1.76	1.0653	.013	1
S4	250.00	250.37	.373	.149	2.0980	.006	1
S5	500.00	503.15	3.15	.630	4.2174	.024	1
S6	800.00	792.30	-7.70	-.963	6.6417	.016	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



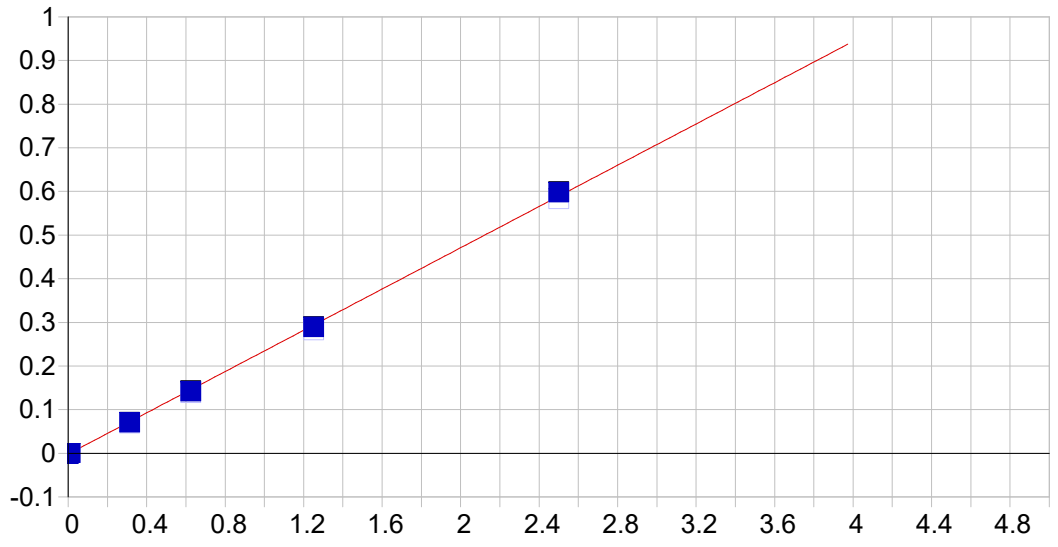
Ni 231.604 {446}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000385	Re-Slope:	1.000000
A1 (Gain):	0.698897	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999917	Status:	OK.
Std Error of Est:	0.000214		
Predicted MDL:	0.000685		
Predicted MQL:	0.002285		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00038	.001	1
S1	.04000	.03833	-.002	-4.17	.02641	.000	1
S2	.62500	.61495	-.010	-1.61	.42940	.001	1
S3	1.2500	1.2233	-.027	-2.13	.85461	.002	1
S4	2.5000	2.4821	-.018	-.716	1.7343	.010	1
S5	5.0000	5.0563	.056	1.13	3.5334	.008	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



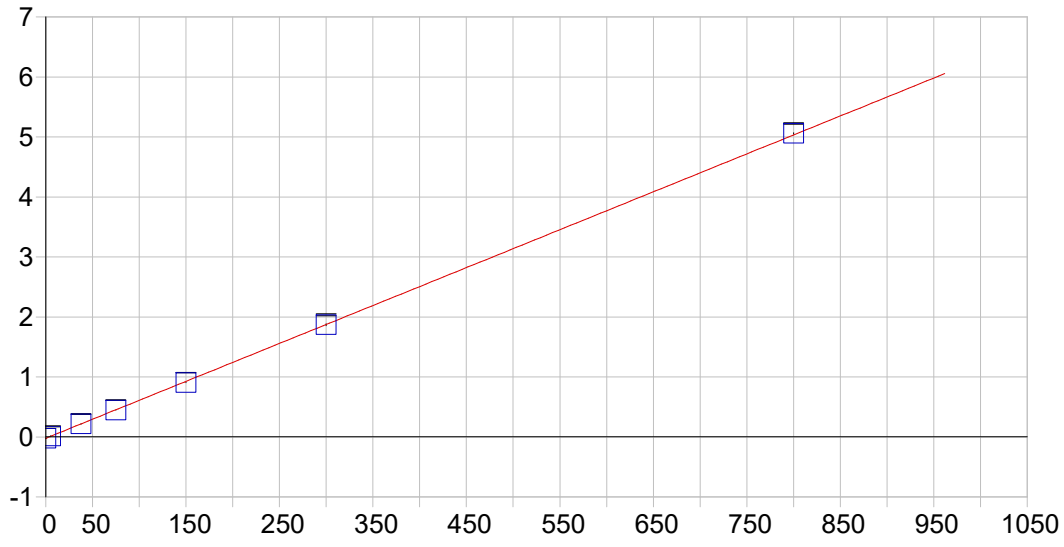
Ag 328.068 {103}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001877	Re-Slope:	1.000000
A1 (Gain):	0.236425	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999848	Status:	OK.
Std Error of Est:	0.000034		
Predicted MDL:	0.001165		
Predicted MQL:	0.003883		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00188	.000	1
S1	.01000	.00978	-.000	-2.23	.00043	.000	1
S2	.31250	.30643	-.006	-1.94	.06862	.000	1
S3	.62500	.60948	-.016	-2.48	.13832	.001	1
S4	1.2500	1.2328	-.017	-1.37	.28179	.001	1
S5	2.5000	2.5390	.039	1.56	.58280	.001	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



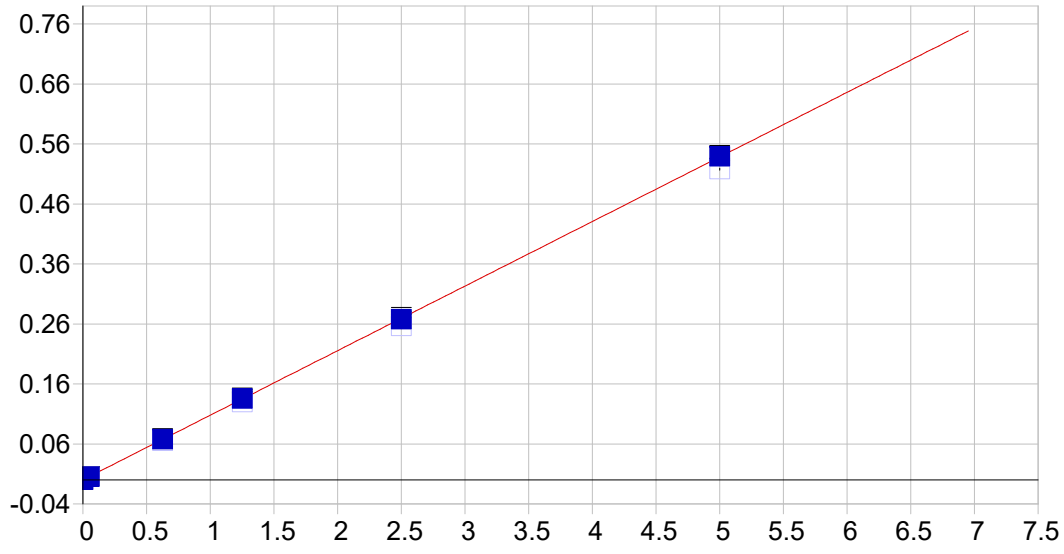
Na 818.326 { 41}

Date of Fit:	12/19/2024 17:44:17	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.021785	Re-Slope:	1.000000
A1 (Gain):	0.006318	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999953	Status:	OK.
Std Error of Est:	0.000190		
Predicted MDL:	0.871936		
Predicted MQL:	2.906454		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00031	-.000	.000	-.02179	.003	1
S1	5.0000	5.4177	.418	8.35	.01244	.008	1
S2	37.500	37.784	.284	.757	.21694	.006	1
S3	75.000	74.259	-.741	-.989	.44739	.005	1
S4	150.00	146.94	-3.06	-2.04	.90660	.005	1
S5	300.00	299.09	-.910	-.303	1.8679	.016	1
S6	800.00	804.01	4.01	.501	5.0581	.009	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



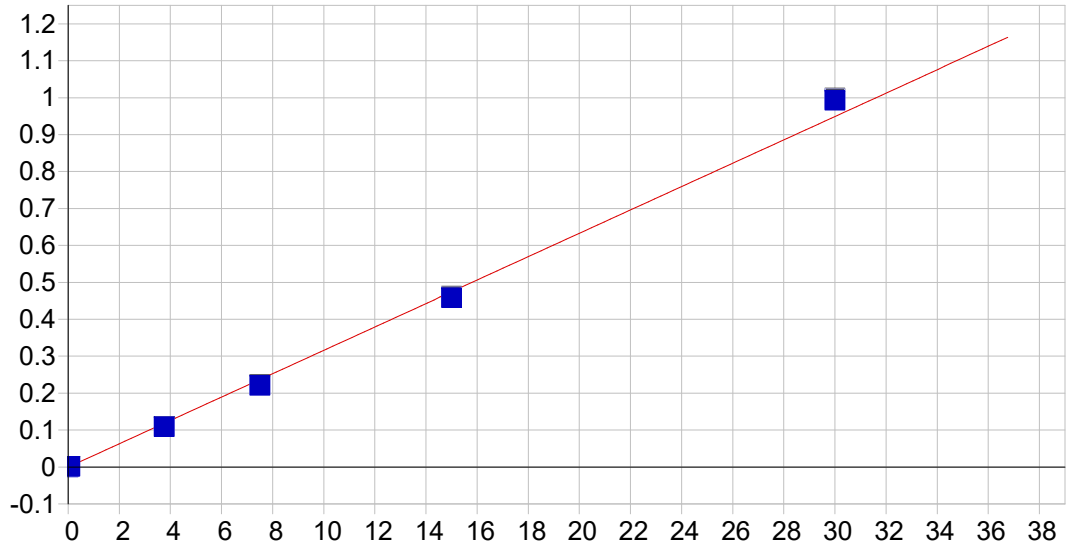
V 292.402 {115}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000223	Re-Slope:	1.000000
A1 (Gain):	0.107632	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000011		
Predicted MDL:	0.009062		
Predicted MQL:	0.030206		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00022	.000	1
S1	.05000	.04976	-.000	-.483	.00556	.000	1
S2	.62500	.62717	.002	.348	.06503	.001	1
S3	1.2500	1.2549	.005	.388	.12989	.001	1
S4	2.5000	2.4844	-.016	-.625	.25684	.003	1
S5	5.0000	5.0089	.009	.177	.51777	.002	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



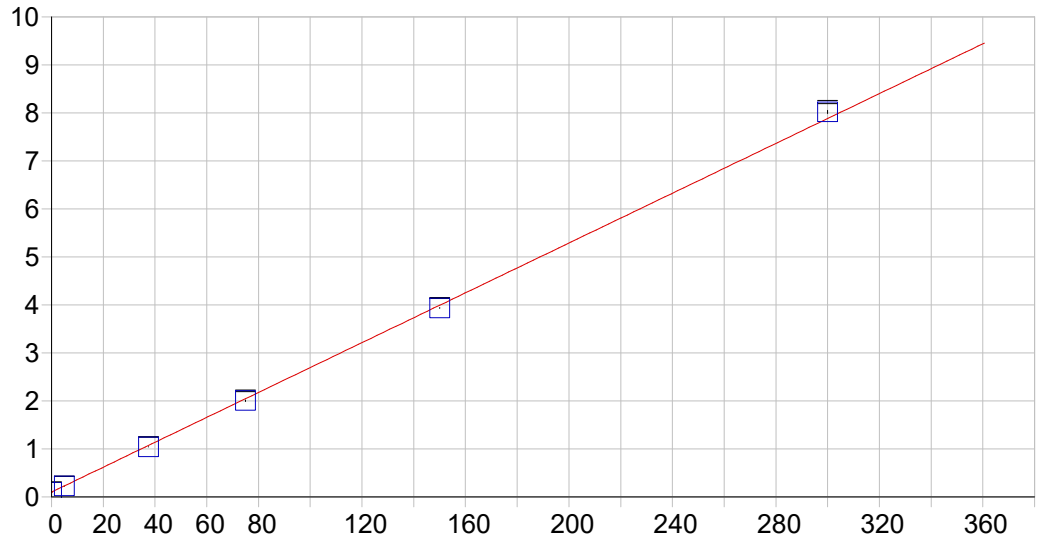
Zn 213.856 {158}

Date of Fit:	12/19/2024 17:40:15	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000558	Re-Slope:	1.000000
A1 (Gain):	0.031660	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998734	Status:	OK.
Std Error of Est:	0.000114		
Predicted MDL:	0.012225		
Predicted MQL:	0.040751		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00002	.000	.000	-.00056	.000	1
S1	.06000	.04757	-.012	-20.7	.00095	.000	1
S2	3.7500	3.4442	-.306	-8.16	.10906	.001	1
S3	7.5000	6.9745	-.525	-7.01	.22141	.001	1
S4	15.000	14.481	-.519	-3.46	.46023	.002	1
S5	30.000	31.363	1.36	4.54	.99702	.002	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



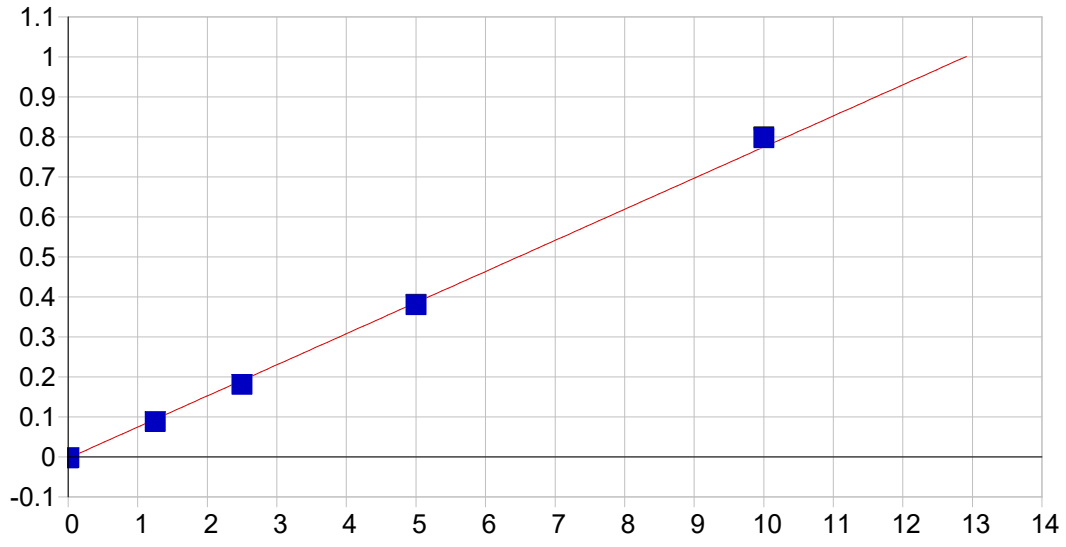
K 769.896 { 44}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.100824	Re-Slope:	1.000000
A1 (Gain):	0.025942	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999818	Status:	OK.
Std Error of Est:	0.001021		
Predicted MDL:	0.160139		
Predicted MQL:	0.533797		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00049	.000	.000	.10084	.004	1
S1	5.0000	4.7585	-.242	-4.83	.22427	.004	1
S2	37.500	36.313	-1.19	-3.17	1.0428	.005	1
S3	75.000	73.381	-1.62	-2.16	2.0044	.018	1
S4	150.00	147.82	-2.18	-1.45	3.9356	.012	1
S5	300.00	305.22	5.22	1.74	8.0188	.035	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



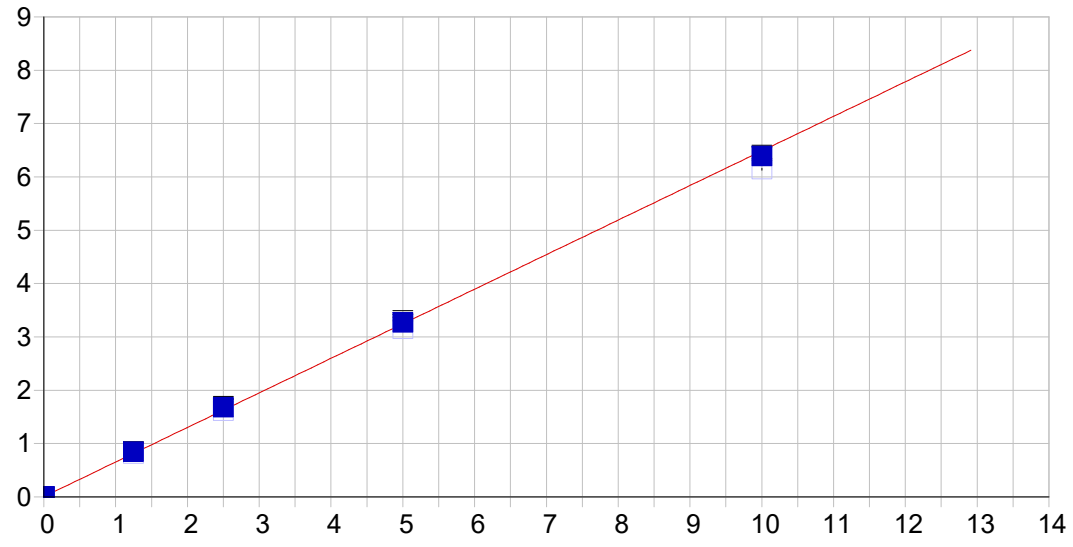
P 177.495 {490}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003054	Re-Slope:	1.000000
A1 (Gain):	0.077765	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999403	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.002545		
Predicted MQL:	0.008483		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	-.00305	.000	1
S1	.01000	.00989	-.000	-1.09	-.00228	.000	1
S2	1.2500	1.1680	-.082	-6.56	.08763	.000	1
S3	2.5000	2.3661	-.134	-5.36	.18067	.000	1
S4	5.0000	4.9227	-.077	-1.55	.37920	.002	1
S5	10.000	10.293	.293	2.93	.79627	.003	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



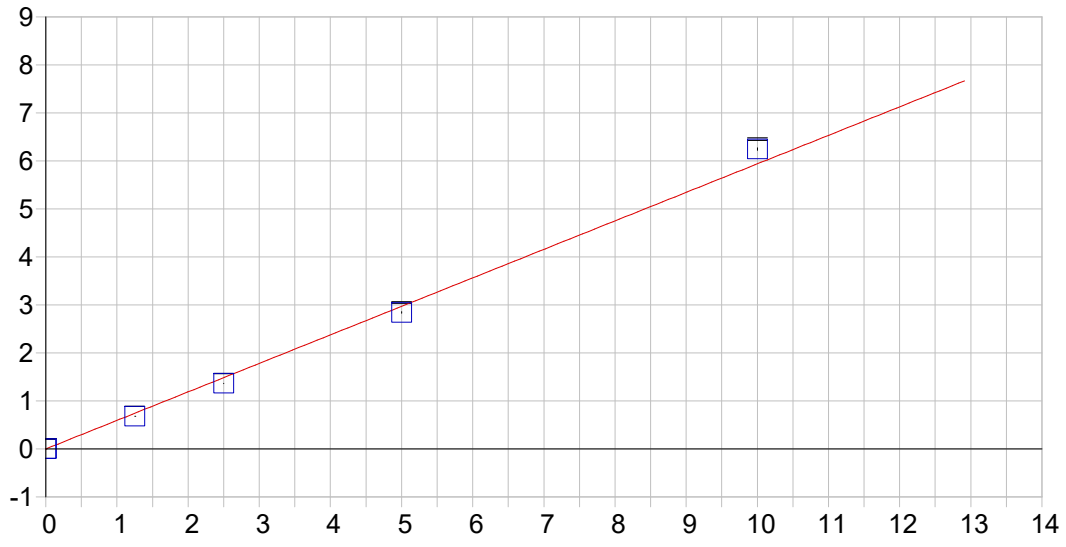
B 249.678 {135}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005538	Re-Slope:	1.000000
A1 (Gain):	0.648136	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999499	Status:	OK.
Std Error of Est:	0.000331		
Predicted MDL:	0.002517		
Predicted MQL:	0.008390		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00001	.000	.000	.00554	.001	1
S1	.01000	-.00039	-.010	-104.	.00525	.003	1
S2	1.2500	1.2925	.042	3.40	.81243	.003	1
S3	2.5000	2.5805	.081	3.22	1.6164	.022	1
S4	5.0000	5.0387	.039	.774	3.1481	.035	1
S5	10.000	9.8490	-.151	-1.51	6.1426	.018	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



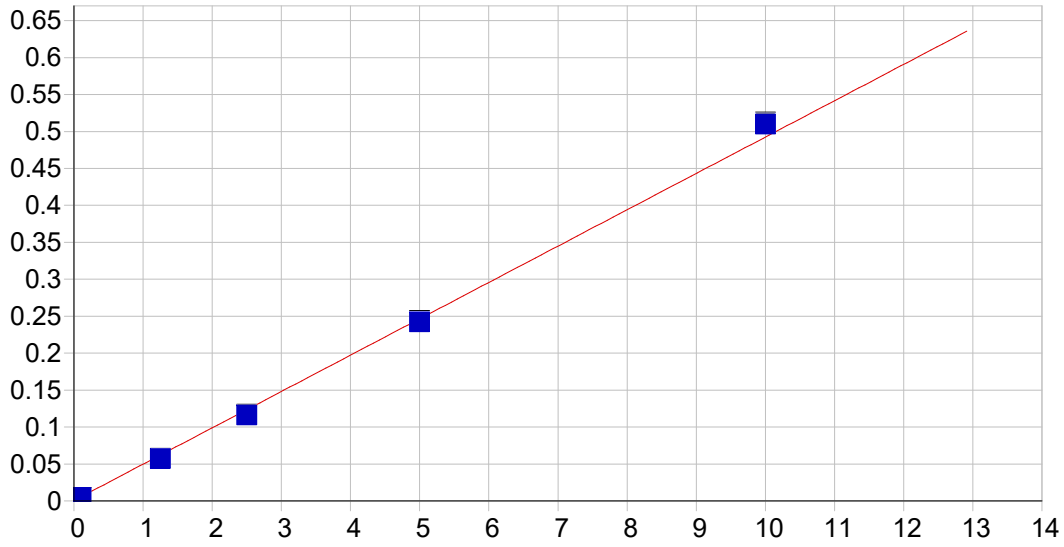
Mo 202.030 {467}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000083	Re-Slope:	1.000000
A1 (Gain):	0.593859	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.998395	Status:	OK.
Std Error of Est:	0.000565		
Predicted MDL:	0.000510		
Predicted MQL:	0.001700		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00008	.000	1
S1	.01000	.00943	-.001	-5.72	.00568	.000	1
S2	1.2500	1.1467	-.103	-8.27	.68103	.001	1
S3	2.5000	2.3001	-.200	-8.00	1.3660	.003	1
S4	5.0000	4.7869	-.213	-4.26	2.8428	.017	1
S5	10.000	10.517	.517	5.17	6.2457	.027	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



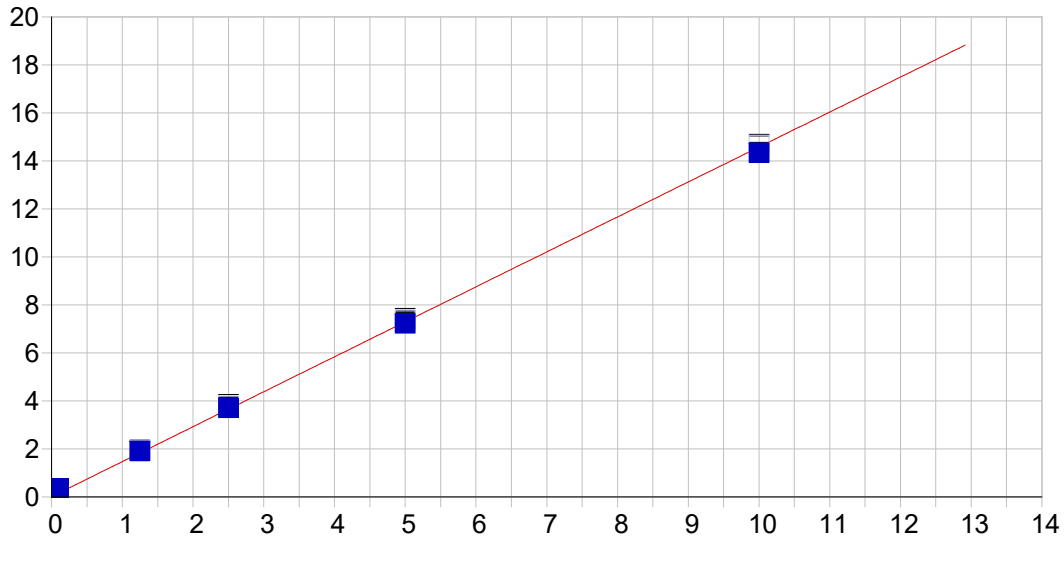
S 182.034 {485}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000541	Re-Slope:	1.000000
A1 (Gain):	0.049186	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999112	Status:	OK.
Std Error of Est:	0.000111		
Predicted MDL:	0.004660		
Predicted MQL:	0.015532		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00003	.000	.000	.00054	.000	1
S1	.10000	.08250	-.017	-17.5	.00460	.000	1
S2	1.2500	1.1530	-.097	-7.76	.05745	.000	1
S3	2.5000	2.3496	-.150	-6.02	.11650	.001	1
S4	5.0000	4.9112	-.089	-1.78	.24290	.001	1
S5	10.000	10.354	.354	3.54	.51138	.001	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



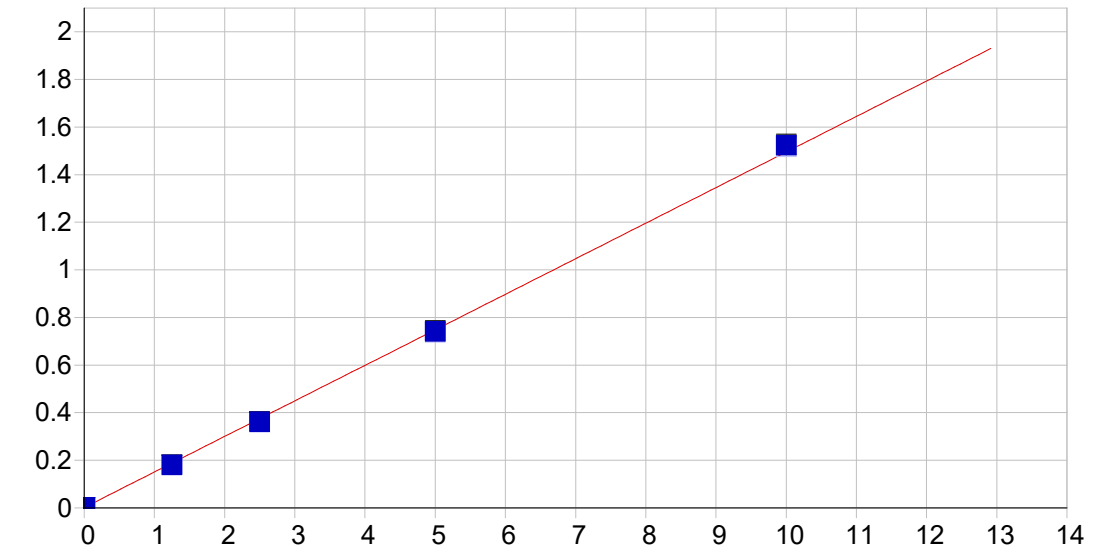
Si 251.611 {134}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.013213	Re-Slope:	1.000000
A1 (Gain):	1.456542	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.994523	Status:	OK.
Std Error of Est:	0.008319		
Predicted MDL:	0.001085		
Predicted MQL:	0.003617		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00015	-.000	.000	.01300	.002	1
S1	.10000	.24556	.146	146.	.37294	.000	1
S2	1.2500	1.2965	.047	3.72	1.9430	.003	1
S3	2.5000	2.5321	.032	1.29	3.7840	.063	1
S4	5.0000	4.9486	-.051	-1.03	7.3864	.048	1
S5	10.000	9.8283	-.172	-1.72	14.659	.028	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



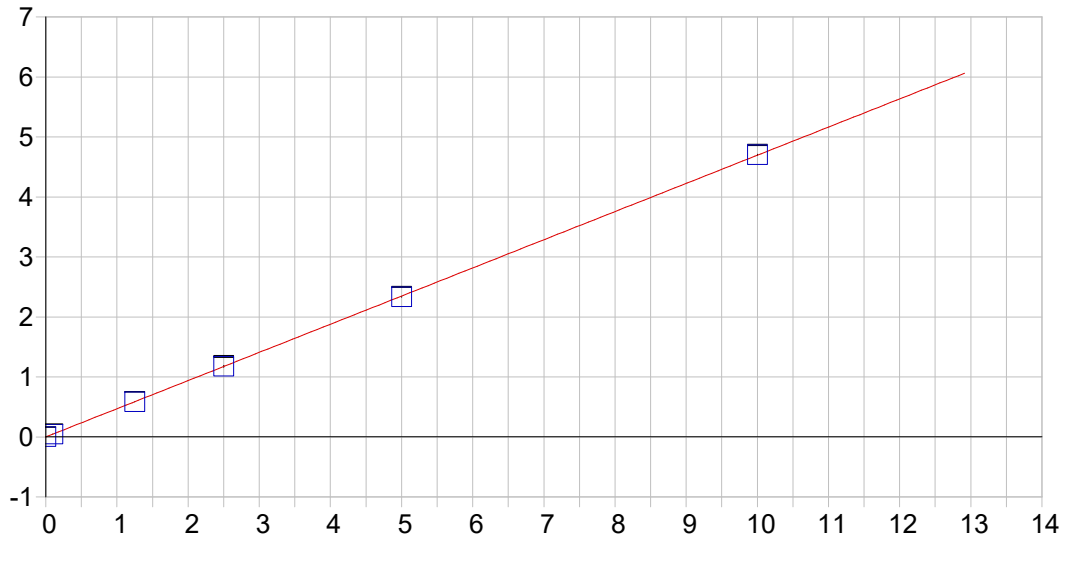
Sn 189.989 {478}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001499	Re-Slope:	1.000000
A1 (Gain):	0.149349	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999744	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.001399		
Predicted MQL:	0.004662		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00150	.000	1
S1	.00700	.00694	-.000	-.875	.00249	.000	1
S2	1.2500	1.1996	-.050	-4.03	.17973	.001	1
S3	2.5000	2.4090	-.091	-3.64	.35941	.000	1
S4	5.0000	4.9498	-.050	-1.00	.73700	.004	1
S5	10.000	10.192	.192	1.92	1.5161	.006	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



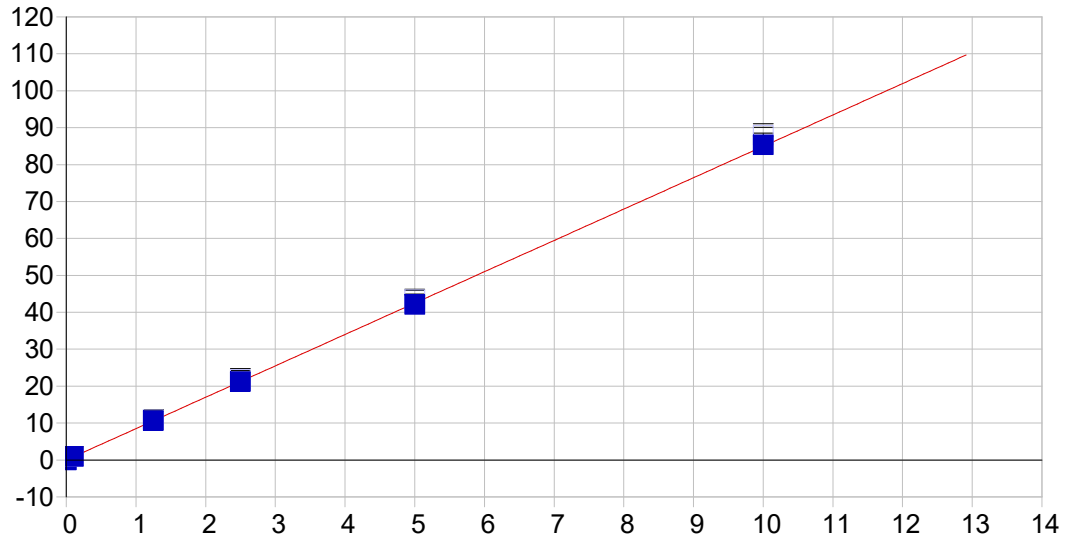
Ti 336.121 {100}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000144	Re-Slope:	1.000000
A1 (Gain):	0.469424	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000081		
Predicted MDL:	0.003267		
Predicted MQL:	0.010889		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	.00014	.002	1
S1	.10000	.10126	.001	1.26	.04768	.002	1
S2	1.2500	1.2468	-.003	-.254	.58544	.003	1
S3	2.5000	2.5072	.007	.289	1.1771	.015	1
S4	5.0000	4.9757	-.024	-.485	2.3359	.007	1
S5	10.000	10.019	.019	.189	4.7033	.011	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



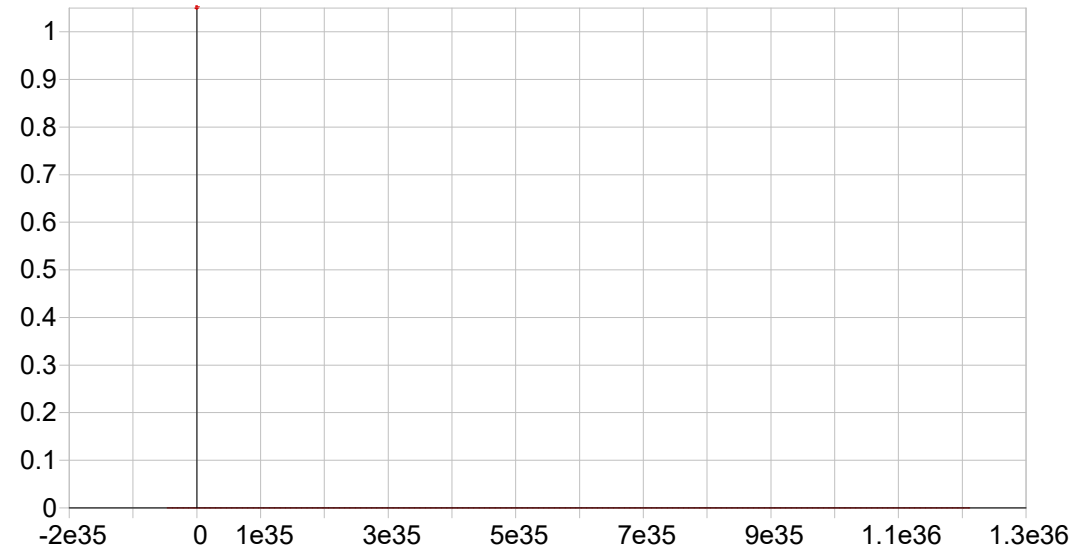
Sr 407.771 { 83}

Date of Fit:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.004889	Re-Slope:	1.000000
A1 (Gain):	8.495734	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999978	Status:	OK.
Std Error of Est:	0.003063		
Predicted MDL:	0.000268		
Predicted MQL:	0.000892		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	-.00000	-.000	.000	-.00492	.002	1
S1	.10000	.10466	.005	4.66	.88514	.005	1
S2	1.2500	1.2489	-.001	-.091	10.924	.027	1
S3	2.5000	2.4959	-.004	-.163	21.837	.255	1
S4	5.0000	4.9539	-.046	-.921	43.357	.168	1
S5	10.000	10.047	.047	.467	87.898	.473	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

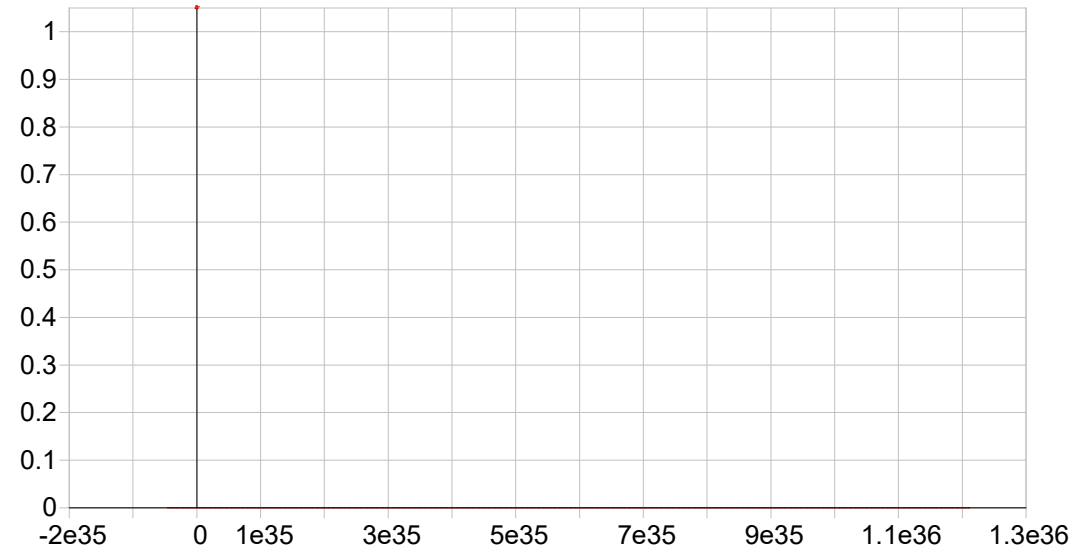


Y 224.306 {450}*

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

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

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



Y 360.073 { 94}*

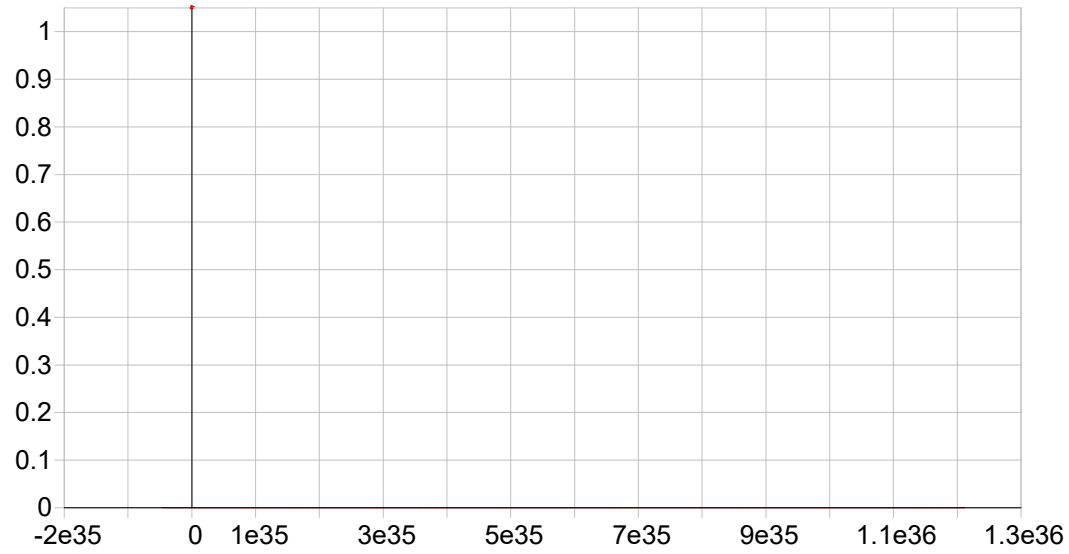
Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc

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

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

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

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



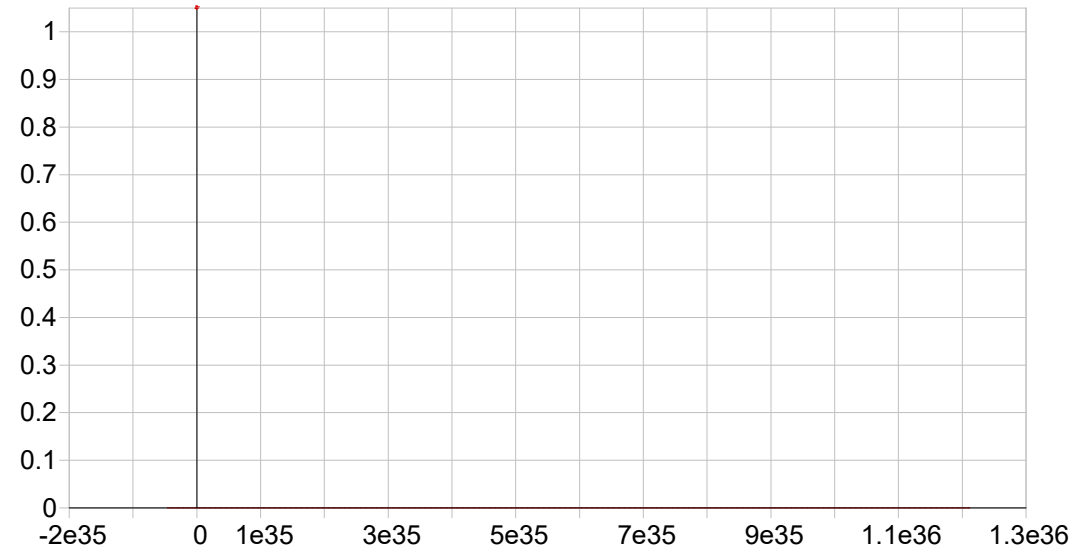
Y 371.030 { 91}*

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

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

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

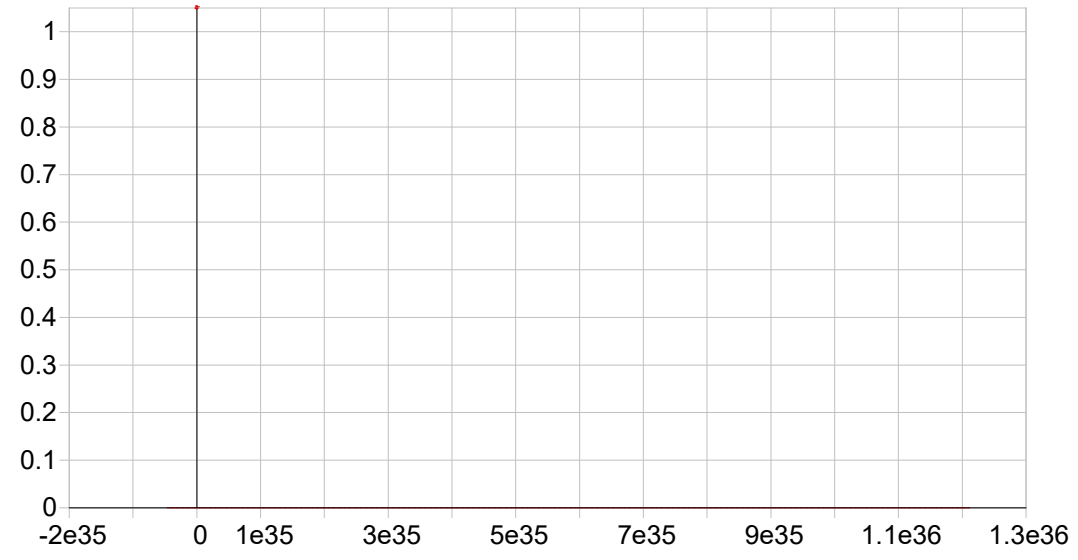
Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5



Y 224.306 {150}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.000000		Status:	Warning	Zero Gain
Std Error of Est:	0.000000				
Predicted MDL:	n/a				
Predicted MQL:	n/a				

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



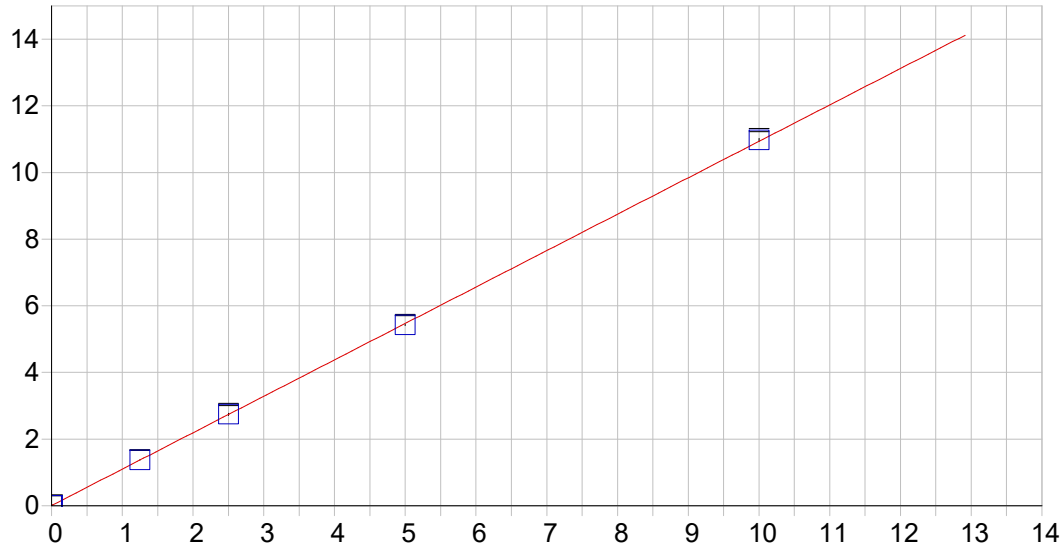
In 230.606 {446}*

Date of Fit:	<not fit>	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000000		Re-Slope:	1.000000	
A1 (Gain):	0.000000		Y-int:	0.000000	

Reviewed By:Mohan
On:12/21/2024 3:07:26 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:	12/19/2024 17:40:16	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005832	Re-Slope:	1.000000
A1 (Gain):	1.092978	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999985	Status:	OK.
Std Error of Est:	0.000124		
Predicted MDL:	0.004332		
Predicted MQL:	0.014439		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
S0	.00000	.00000	.000	.000	.00583	.002	1
S5	10.000	10.037	.037	.366	10.976	.051	1
S4	5.0000	4.9590	-.041	-.821	5.4259	.022	1
S3	2.5000	2.5043	.004	.171	2.7429	.032	1
S2	1.2500	1.2514	.001	.109	1.3735	.008	1
S1	.01500	.01379	-.001	-8.05	.02091	.007	1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/19/2024 17:17:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	.23682	-.00006	.00059	.00004	.00025	-.00066	.02071	.00081
Stddev	.45202	.00032	.00047	.00010	.00017	.00024	.00310	.00048
%RSD	190.88	545.15	79.594	260.32	67.421	35.777	14.952	58.572
#1	.67240	.00010	.00011	-.00006	.00006	-.00080	.02014	.00106
#2	.26809	.00015	.00063	.00003	.00038	-.00081	.02405	.00026
#3	-.23003	-.00043	.00105	.00015	.00030	-.00039	.01794	.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	.00050	.00734	.00011	-.00027	.00259	-.00016	.00015	-.00119
Stddev	.00018	.00199	.00010	.00040	.00120	.00074	.00073	.00043
%RSD	35.349	27.183	90.655	147.68	46.440	477.54	493.55	36.296
#1	.00036	.00555	.00009	-.00074	.00319	.00066	.00049	-.00129
#2	.00070	.00949	.00023	.00000	.00337	-.00032	.00064	-.00155
#3	.00045	.00697	.00003	-.00008	.00121	-.00081	-.00069	-.00071

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	-.00038	-.00188	-.02179	.00022	-.00056	.10084	-.00305	.00554
Stddev	.00055	.00019	.00264	.00027	.00017	.00375	.00033	.00141
%RSD	143.60	9.9542	12.112	120.63	31.183	3.7214	10.684	25.446
#1	-.00053	-.00167	-.01896	.00043	-.00056	.10500	-.00270	.00703
#2	.00023	-.00194	-.02418	.00032	-.00038	.09981	-.00335	.00539
#3	-.00084	-.00202	-.02222	-.00008	-.00073	.09771	-.00311	.00422

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	.00008	.00054	.01300	.00150	.00014	-.00492	.00583
Stddev	.00037	.00014	.00181	.00011	.00190	.00191	.00243
%RSD	436.65	25.060	13.916	7.4482	1317.2	38.883	41.631
#1	.00047	.00042	.01091	.00137	.00124	-.00344	.00498
#2	-.00026	.00069	.01399	.00156	.00123	-.00708	.00395
#3	.00004	.00051	.01409	.00157	-.00204	-.00424	.00857

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S0 Acquired: 12/19/2024 17:17:02 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	2397.4	29309.	1949.3	2031.0	2167.9
Stddev	11.0	50.	29.3	5.5	8.4
%RSD	.45683	.16969	1.5010	.27191	.38940
#1	2389.7	29348.	1946.5	2030.3	2160.3
#2	2409.9	29326.	1979.9	2036.9	2177.0
#3	2392.6	29253.	1921.5	2025.9	2166.5

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/19/2024 17:21:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	1.2616	.00165	.00266	.00191	.00634	.01742	.75962	.06037
Stddev	.5769	.00015	.00031	.00012	.00053	.00303	.00538	.00057
%RSD	45.722	9.1825	11.809	6.5241	8.3017	17.409	.70845	.94636
#1	1.0260	.00150	.00300	.00186	.00615	.01814	.75605	.05999
#2	1.9190	.00180	.00239	.00181	.00693	.02003	.76581	.06009
#3	.83989	.00166	.00259	.00205	.00593	.01409	.75700	.06103

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	.01749	.23669	.00190	.04976	.00610	.00169	.00861	.04362
Stddev	.00046	.00243	.00005	.00033	.00191	.00057	.00073	.00067
%RSD	2.6198	1.0280	2.4734	.65776	31.320	33.835	8.4196	1.5436
#1	.01744	.23928	.00191	.04951	.00641	.00107	.00945	.04305
#2	.01706	.23446	.00194	.04965	.00785	.00179	.00823	.04436
#3	.01797	.23632	.00185	.05013	.00406	.00221	.00815	.04346

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	.02641	.00043	.01244	.00556	.00095	.22427	-.00228	.00525
Stddev	.00010	.00010	.00754	.00047	.00033	.00380	.00009	.00254
%RSD	.39158	24.159	60.554	8.3975	34.301	1.6966	3.8689	48.321
#1	.02649	.00046	.00375	.00554	.00131	.22091	-.00218	.00807
#2	.02644	.00031	.01640	.00511	.00089	.22350	-.00234	.00454
#3	.02629	.00051	.01718	.00604	.00066	.22840	-.00232	.00315

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	.00568	.00460	.37294	.00249	.04768	.88514	.02091
Stddev	.00024	.00022	.00048	.00013	.00227	.00548	.00668
%RSD	4.3052	4.8691	.12993	5.2238	4.7513	.61931	31.963
#1	.00596	.00478	.37260	.00238	.04939	.88670	.01320
#2	.00550	.00435	.37350	.00263	.04854	.88967	.02507
#3	.00558	.00466	.37273	.00246	.04511	.87905	.02445

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S1 Acquired: 12/19/2024 17:21:09 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	2383.0	29255.	1938.9	2021.1	2171.7
Stddev	4.8	99.	9.8	1.5	4.5
%RSD	.20051	.33734	.50462	.07510	.20692
#1	2387.9	29301.	1930.8	2019.4	2176.4
#2	2382.7	29322.	1936.2	2022.1	2171.0
#3	2378.3	29142.	1949.8	2021.9	2167.5

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/19/2024 17:25:15 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	140.00	.08400	1.3331	.08169	.13250	3.7271	9.0757	1.4514
Stddev	.61	.00003	.0023	.00015	.00034	.0104	.0172	.0042
%RSD	.43290	.04028	.17474	.18522	.25871	.28047	.18943	.28686
#1	139.81	.08404	1.3349	.08184	.13227	3.7166	9.0561	1.4560
#2	139.51	.08400	1.3305	.08154	.13233	3.7376	9.0827	1.4478
#3	140.68	.08397	1.3340	.08169	.13289	3.7270	9.0882	1.4505

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	2.1419	2.9108	.68549	.61590	.70533	.85104	1.9171	.53657
Stddev	.0023	.0104	.00009	.00119	.00208	.00238	.0021	.00200
%RSD	.10813	.35865	.01245	.19298	.29514	.28006	.11107	.37284
#1	2.1445	2.8988	.68558	.61642	.70328	.84858	1.9149	.53432
#2	2.1408	2.9158	.68547	.61454	.70525	.85334	1.9173	.53816
#3	2.1403	2.9178	.68541	.61675	.70744	.85120	1.9191	.53722

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	.42940	.06862	.21694	.06503	.10906	1.0428	.08763	.81243
Stddev	.00086	.00006	.00600	.00114	.00072	.0054	.00017	.00263
%RSD	.19960	.09032	2.7654	1.7474	.65775	.51632	.19235	.32350
#1	.42918	.06856	.21195	.06373	.10905	1.0380	.08759	.81524
#2	.42867	.06861	.22360	.06582	.10835	1.0418	.08750	.81201
#3	.43035	.06869	.21527	.06555	.10979	1.0487	.08782	.81004

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	.68103	.05745	1.9430	.17973	.58544	10.924	1.3735
Stddev	.00120	.00027	.0026	.00093	.00297	.027	.0084
%RSD	.17552	.46594	.13585	.51878	.50795	.24652	.60870
#1	.68230	.05755	1.9458	.18051	.58215	10.893	1.3651
#2	.67992	.05766	1.9428	.17869	.58795	10.936	1.3819
#3	.68088	.05715	1.9405	.17998	.58621	10.943	1.3736

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S2 Acquired: 12/19/2024 17:25:15 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	2275.1	28644.	1914.8	1948.1	1987.5
Stddev	6.8	11.	.7	5.6	5.6
%RSD	.29764	.03679	.03813	.28606	.28083
#1	2267.8	28650.	1915.4	1943.4	1982.0
#2	2281.3	28632.	1914.9	1954.2	1993.2
#3	2276.1	28651.	1914.0	1946.6	1987.3

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/19/2024 17:29:05 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	272.69	.16450	2.6498	.16297	.26483	7.4383	18.134	2.8631
Stddev	.63	.00025	.0076	.00064	.00134	.0919	.228	.0332
%RSD	.23056	.15400	.28524	.39195	.50674	1.2349	1.2572	1.1603
#1	272.21	.16425	2.6499	.16223	.26542	7.5081	18.330	2.8764
#2	272.47	.16449	2.6422	.16334	.26329	7.4726	18.187	2.8877
#3	273.40	.16476	2.6573	.16334	.26578	7.3343	17.884	2.8253

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	4.2505	5.7691	1.3398	1.2085	1.3876	1.6894	3.8098	1.0653
Stddev	.0104	.0724	.0077	.0029	.0172	.0198	.0445	.0125
%RSD	.24475	1.2549	.57633	.23884	1.2418	1.1713	1.1679	1.1744
#1	4.2432	5.8347	1.3371	1.2066	1.4051	1.7055	3.8465	1.0763
#2	4.2460	5.7811	1.3485	1.2070	1.3869	1.6955	3.8228	1.0679
#3	4.2625	5.6914	1.3338	1.2118	1.3707	1.6673	3.7603	1.0517

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	.85461	.13832	.44739	.12989	.22141	2.0044	.18067	1.6164
Stddev	.00192	.00094	.00466	.00148	.00099	.0177	.00007	.0216
%RSD	.22510	.68286	1.0426	1.1416	.44715	.88328	.03742	1.3351
#1	.85390	.13843	.44937	.13107	.22056	2.0199	.18062	1.6257
#2	.85313	.13920	.45074	.13038	.22250	2.0084	.18064	1.6319
#3	.85678	.13732	.44206	.12823	.22119	1.9851	.18074	1.5918

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	1.3660	.11650	3.7840	.35941	1.1771	21.837	2.7429
Stddev	.0027	.00072	.0633	.00041	.0150	.255	.0320
%RSD	.20035	.62124	1.6728	.11319	1.2768	1.1690	1.1657
#1	1.3673	.11601	3.8254	.35967	1.1904	22.052	2.7697
#2	1.3629	.11616	3.8155	.35894	1.1801	21.904	2.7515
#3	1.3679	.11733	3.7112	.35961	1.1608	21.555	2.7075

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S3 Acquired: 12/19/2024 17:29:05 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	2197.0	28001.	1881.3	1885.4	1912.3
Stddev	5.2	55.	21.2	8.9	3.8
%RSD	.23826	.19547	1.1248	.47321	.20067
#1	2195.1	28033.	1865.4	1890.8	1913.2
#2	2203.0	27938.	1873.2	1875.1	1915.6
#3	2193.0	28033.	1905.3	1890.2	1908.1

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/19/2024 17:32:51 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	540.88	.33102	5.4365	.33643	.55384	14.790	36.098	5.6273
Stddev	.94	.00270	.0355	.00053	.00280	.041	.111	.0515
%RSD	.17412	.81716	.65281	.15670	.50472	.27405	.30778	.91555
#1	541.19	.32826	5.3985	.33622	.55095	14.831	36.201	5.6833
#2	539.82	.33112	5.4424	.33604	.55406	14.750	35.980	5.5819
#3	541.62	.33367	5.4688	.33703	.55653	14.791	36.113	5.6167

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	8.6523	11.378	2.6734	2.4256	2.7472	3.3197	7.4490	2.0980
Stddev	.0486	.036	.0065	.0137	.0068	.0162	.0260	.0061
%RSD	.56168	.32033	.24434	.56366	.24624	.48656	.34957	.28970
#1	8.6010	11.418	2.6695	2.4112	2.7549	3.3383	7.4791	2.1047
#2	8.6585	11.369	2.6810	2.4272	2.7423	3.3095	7.4327	2.0929
#3	8.6976	11.347	2.6698	2.4384	2.7444	3.3112	7.4354	2.0964

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	1.7343	.28179	.90660	.25684	.46023	3.9356	.37920	3.1481
Stddev	.0101	.00085	.00468	.00312	.00205	.0115	.00193	.0351
%RSD	.58519	.30170	.51591	1.2151	.44644	.29224	.50819	1.1150
#1	1.7235	.28111	.91116	.26028	.45796	3.9486	.37763	3.1867
#2	1.7359	.28274	.90681	.25420	.46198	3.9317	.37862	3.1182
#3	1.7436	.28153	.90182	.25603	.46074	3.9266	.38135	3.1393

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	2.8428	.24290	7.3864	.73700	2.3359	43.357	5.4259
Stddev	.0173	.00117	.0478	.00431	.0072	.168	.0223
%RSD	.61007	.48168	.64723	.58417	.30706	.38698	.41177
#1	2.8268	.24155	7.4363	.73292	2.3431	43.550	5.4479
#2	2.8404	.24343	7.3410	.73659	2.3287	43.271	5.4032
#3	2.8612	.24370	7.3819	.74150	2.3358	43.250	5.4265

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S4 Acquired: 12/19/2024 17:32:51 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	2060.3	27323.	1890.1	1787.4	1812.9
Stddev	9.0	55.	15.6	1.6	8.4
%RSD	.43878	.20220	.82383	.08885	.46161
#1	2068.1	27309.	1872.7	1787.8	1821.2
#2	2062.5	27277.	1902.7	1785.6	1813.0
#3	2050.4	27384.	1895.0	1788.7	1804.4

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/19/2024 17:36:36 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	1068.3	.66919	11.197	.73204	1.2343	30.098	73.250	11.215
Stddev	5.0	.00238	.033	.00403	.0064	.141	.367	.023
%RSD	.46420	.35564	.29754	.54989	.52000	.46694	.50058	.20429
#1	1062.5	.66696	11.173	.72997	1.2302	29.994	72.925	11.189
#2	1071.0	.66892	11.182	.72946	1.2311	30.258	73.648	11.232
#3	1071.3	.67170	11.235	.73668	1.2417	30.041	73.177	11.224

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	17.597	22.806	5.3536	4.9250	5.5156	6.5926	14.804	4.2174
Stddev	.051	.110	.0084	.0120	.0291	.0382	.073	.0237
%RSD	.28998	.48219	.15652	.24357	.52701	.57951	.49008	.56298
#1	17.557	22.733	5.3631	4.9174	5.4893	6.5669	14.751	4.1915
#2	17.580	22.932	5.3474	4.9187	5.5468	6.6365	14.887	4.2382
#3	17.654	22.752	5.3503	4.9388	5.5106	6.5744	14.774	4.2224

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	3.5334	.58280	1.8679	.51777	.99702	8.0188	.79627	6.1426
Stddev	.0078	.00085	.0158	.00163	.00207	.0352	.00261	.0183
%RSD	.22011	.14628	.84517	.31450	.20763	.43877	.32752	.29766
#1	3.5312	.58371	1.8546	.51604	.99479	7.9840	.79398	6.1215
#2	3.5270	.58266	1.8854	.51927	.99887	8.0543	.79572	6.1528
#3	3.5421	.58202	1.8638	.51801	.99740	8.0181	.79911	6.1535

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.2457	.51138	14.659	1.5161	4.7033	87.898	10.976
Stddev	.0271	.00141	.028	.0056	.0108	.473	.051
%RSD	.43458	.27496	.18760	.36783	.23009	.53861	.46250
#1	6.2277	.51151	14.637	1.5113	4.6966	87.433	10.937
#2	6.2324	.50991	14.651	1.5149	4.7158	88.379	11.033
#3	6.2769	.51271	14.690	1.5222	4.6975	87.883	10.957

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S5 Acquired: 12/19/2024 17:36:36 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	1819.3	26305.	1874.2	1617.3	1695.9
Stddev	7.4	140.	7.2	4.2	4.3
%RSD	.40623	.53271	.38431	.25918	.25633
#1	1818.2	26220.	1875.0	1614.6	1693.3
#2	1827.2	26228.	1866.6	1615.1	1700.9
#3	1812.6	26467.	1881.0	1622.1	1693.4

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: S6 Acquired: 12/19/2024 17:40:20 Type: Cal
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) 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	77.212	36.222	17.016	6.6417	5.0581
Stddev	.245	.125	.043	.0159	.0094
%RSD	.31752	.34507	.25334	.23995	.18486
#1	76.985	36.141	16.986	6.6291	5.0504
#2	77.180	36.160	16.996	6.6364	5.0553
#3	77.472	36.366	17.065	6.6596	5.0685

Int. Std.	Y_3710
Units	Cts/S
Avg	1830.1
Stddev	10.1
%RSD	.54987
#1	1836.8
#2	1835.0
#3	1818.5

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICV008 Acquired: 12/19/2024 18:53:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV008 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.087699	.9951158	.9450796	.9203882	.9134159	2.370055
Stddev	.005553	.0017228	.0047673	.0027264	.0003745	.023323
%RSD	.5104879	.1731310	.5044339	.2962220	.0409951	.9840627
#1	1.081874	.9970696	.9443509	.9180048	.9134580	2.380749
#2	1.092932	.9938145	.9407186	.9197987	.9130221	2.343303
#3	1.088290	.9944633	.9501693	.9233611	.9137674	2.386113

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5068877	.5151706	.4837669	9.942776	.5292529	.4884324
Stddev	.0015336	.0027045	.0007615	.022976	.0018483	.0002301
%RSD	.3025477	.5249780	.1574123	.2310821	.3492246	.0471058
#1	.5056084	.5141886	.4831536	9.939306	.5273155	.4886100
#2	.5085877	.5130943	.4835279	9.921732	.5309968	.4881725
#3	.5064669	.5182289	.4846193	9.967289	.5294463	.4885146

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4856416	10.27804	.5180644	6.115046	.4957735	.2347292
Stddev	.0069577	.10777	.0051742	.189303	.0006815	.0014841
%RSD	1.432684	1.048593	.9987633	3.095687	.1374712	.6322600
#1	.4875438	10.16447	.5121224	6.170085	.4951054	.2334155
#2	.4779307	10.29077	.5204946	6.270730	.4957474	.2363390
#3	.4914505	10.37890	.5215761	5.904323	.4964677	.2344329

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.08856	.4957861	.9129268	9.109625	F .0038868	F -.008342
Stddev	.27392	.0087650	.0069738	.276524	.0010216	.002438
%RSD	2.715173	1.767891	.7638977	3.035514	26.28436	29.22752
#1	9.85278	.4882864	.9182279	8.797886	.0037788	-.005529
#2	10.02386	.5054216	.9155258	9.205664	.0029234	-.009665
#3	10.38904	.4936504	.9050267	9.325325	.0049581	-.009833

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICV008 Acquired: 12/19/2024 18:53:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV008 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0001298	F .0024737	F -.001197	F -.008237	F -.002018	F -.009100
Stddev	.0002787	.0012894	.000948	.000878	.001032	.000182
%RSD	214.7931	52.12686	79.20034	10.65930	51.16504	2.000933
#1	.0001489	.0039259	-.002067	-.008140	-.001094	-.008903
#2	-.000158	.0020320	-.000187	-.009159	-.003132	-.009263
#3	.000398	.0014631	-.001337	-.007411	-.001828	-.009134

Elem	Li6707
Units	ppm
Avg	F -.007139
Stddev	.007463
%RSD	104.5490
#1	-.007015
#2	.000262
#3	-.014663

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2397.356	29836.48	1942.957	2050.665	2169.174
Stddev	8.733	76.74	6.825	3.844	7.648
%RSD	.3642650	.2571919	.3512875	.1874559	.3525944
#1	2388.680	29784.00	1939.873	2047.398	2161.171
#2	2406.144	29800.89	1950.780	2049.696	2176.409
#3	2397.242	29924.55	1938.218	2054.901	2169.943

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICB008 Acquired: 12/19/2024 18:57:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB008 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003785	-.002300	-.001502	-.002137	.0000806	.0145850
Stddev	.002131	.002953	.000717	.002035	.0021882	.0196612
%RSD	56.30764	128.3803	47.72730	95.26372	2716.217	134.8043
#1	-.005600	-.003217	-.002272	-.003811	-.002357	.0261221
#2	-.001438	.001002	-.000855	-.002728	.001876	-.008117
#3	-.004315	-.004686	-.001379	.000129	.000722	.025750

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001669	-.000060	-.000012	-.054770	-.000515	-.000334
Stddev	.001564	.000205	.000031	.038267	.000765	.000231
%RSD	93.72410	342.1832	247.4031	69.86830	148.5241	69.10851
#1	-.003061	-.000294	-.000022	-.053160	.000199	-.000601
#2	-.001970	.000087	.000022	-.017334	-.000422	-.000198
#3	.000024	.000027	-.000037	-.093817	-.001323	-.000204

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005468	.0322689	.0007451	.0651348	-.000795	.0005265
Stddev	.002070	.0143805	.0007558	.0532883	.000714	.0004487
%RSD	37.85119	44.56453	101.4348	81.81234	89.81696	85.21562
#1	-.006176	.0213816	.0013325	.0499012	-.000438	.0010406
#2	-.007090	.0268544	-.000108	.0211222	-.000330	.0002139
#3	-.003137	.0485707	.001010	.1243811	-.001616	.0003250

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3006254	-.003240	-.005762	.1247983	.0009566	-.005011
Stddev	.7743211	.006372	.006202	.0556468	.0013794	.002164
%RSD	257.5700	196.6831	107.6303	44.58936	144.2008	43.18721
#1	.8482449	-.000262	-.005891	.1873814	.0025476	-.006125
#2	-.585277	-.010555	.000503	.1061193	.0002270	-.002517
#3	.638909	.001098	-.011898	.0808942	.0000952	-.006390

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICB008 Acquired: 12/19/2024 18:57:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB008 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000968	-.005870	.0002988	F -.009922	.0018359	.0001116
Stddev	.0004726	.003096	.0010621	.001086	.0018791	.0004477
%RSD	488.3910	52.74730	355.4085	10.94321	102.3515	401.1463
#1	.0001282	-.006435	.0014373	-.008829	.0018595	-.000094
#2	.0005529	-.002530	.0001244	-.011000	-.000055	.000625
#3	-.000391	-.008644	-.000665	-.009937	.003703	-.000196

Elem	Li6707
Units	ppm
Avg	.0026587
Stddev	.0029991
%RSD	112.8035
#1	.0012757
#2	.0006006
#3	.0060997

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2355.888	29230.03	1886.010	2010.186	2141.853
Stddev	4.336	226.62	12.865	26.116	2.983
%RSD	.1840423	.7752973	.6821207	1.299183	.1392748
#1	2353.445	28969.98	1875.151	1984.554	2140.853
#2	2360.894	29334.77	1882.662	2009.245	2145.208
#3	2353.325	29385.33	1900.218	2036.760	2139.498

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICSA008 Acquired: 12/19/2024 19:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA008 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006866	-.001377	.0029522	.0185912	.0058549	244.4996
Stddev	.0045489	.002693	.0022717	.0030395	.0013049	.9340
%RSD	662.5277	195.5915	76.95071	16.34938	22.28727	.3820000
#1	.0045641	-.002262	.0045180	.0157258	.0058253	245.5763
#2	.0018165	.001647	.0039920	.0217792	.0071743	243.9085
#3	-.004321	-.003515	.0003467	.0182687	.0045650	244.0139

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043286	.0022801	.0004453	248.4220	.0517647	.0441827
Stddev	.0005218	.0001727	.0001078	1.3100	.0012020	.0003476
%RSD	12.05492	7.571842	24.21610	.5273154	2.322046	.7868203
#1	.0043700	.0020877	.0003349	249.9127	.0517284	.0437815
#2	.0048286	.0023312	.0005504	247.4547	.0505813	.0443711
#3	.0037874	.0024215	.0004506	247.8985	.0529845	.0443955

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.018579	103.1243	.0113695	262.4257	.0046495	.0028169
Stddev	.011947	.4511	.0016283	.6312	.0002334	.0006138
%RSD	64.29983	.4374028	14.32184	.2405118	5.019931	21.78933
#1	-.026353	103.5143	.0129736	263.1269	.0044845	.0023380
#2	-.024562	103.2282	.0114170	262.2473	.0045474	.0035088
#3	-.004824	102.6303	.0097180	261.9029	.0049166	.0026038

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.565279	.0035338	-.031582	-.528145	-.002309	F -.042238
Stddev	.508276	.0124820	.009781	.101413	.001347	.005628
%RSD	89.91598	353.2156	30.96887	19.20169	58.33235	13.32464
#1	-.093104	-.010283	-.024922	-.636572	-.003515	-.047295
#2	-.499484	.006889	-.027013	-.512234	-.000856	-.036175
#3	-1.10325	.013995	-.042811	-.435628	-.002556	-.043243

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICSA008 Acquired: 12/19/2024 19:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA008 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013103	.0158878	-.003516	.0040425	-.004498	.0040972
Stddev	.0004069	.0026349	.000488	.0014556	.004567	.0002372
%RSD	31.05441	16.58465	13.88658	36.00724	101.5424	5.788335
#1	.0017721	.0128453	-.002966	.0049291	-.007719	.0039554
#2	.0011548	.0173934	-.003899	.0048359	-.006505	.0039651
#3	.0010041	.0174246	-.003683	.0023626	.000729	.0043709

Elem	Li6707
Units	ppm
Avg	-.002025
Stddev	.007668
%RSD	378.7232
#1	.005559
#2	-.009774
#3	-.001860

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2257.607	27555.74	1889.580	1920.574	1894.327
Stddev	2.303	101.23	20.535	4.356	2.462
%RSD	.1020173	.3673548	1.086750	.2268245	.1299827
#1	2260.236	27448.73	1866.839	1915.618	1897.170
#2	2255.946	27568.52	1895.133	1922.305	1892.866
#3	2256.639	27649.97	1906.767	1923.798	1892.945

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICSAB008 Acquired: 12/19/2024 19:05:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB008 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1073643	.0992959	.0510373	.0678149	.5603482	246.5054
Stddev	.0051742	.0010838	.0024575	.0035961	.0017275	.5985
%RSD	4.819324	1.091481	4.815106	5.302778	.3082844	.2428029
#1	.1043424	.0986329	.0496540	.0716033	.5621157	246.3013
#2	.1133388	.0987082	.0538746	.0644484	.5586638	246.0355
#3	.1044116	.1005466	.0495831	.0673928	.5602651	247.1792

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5451915	.5423192	1.026095	251.9952	.5973732	.5407084
Stddev	.0024747	.0053700	.002767	.2931	.0018259	.0015585
%RSD	.4539080	.9901976	.2696547	.1163246	.3056613	.2882307
#1	.5436422	.5483168	1.022905	252.0109	.5963659	.5389717
#2	.5438868	.5379571	1.027525	251.6945	.5994810	.5411683
#3	.5480455	.5406836	1.027853	252.2801	.5962729	.5419852

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4786233	104.3337	.5389420	264.4629	1.017467	.1908344
Stddev	.0090502	.3496	.0056657	.8097	.001776	.0006200
%RSD	1.890873	.3351211	1.051261	.3061654	.1745783	.3248705
#1	.4763309	104.3522	.5396865	263.8040	1.015463	.1901187
#2	.4885992	103.9752	.5329409	264.2177	1.018847	.1911800
#3	.4709398	104.6737	.5441987	265.3668	1.018092	.1912046

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0937998	.5302161	.9222234	-.929576	-.000150	F -.045850
Stddev	.9315320	.0046110	.0125783	.122819	.002251	.000433
%RSD	993.1064	.8696532	1.363907	13.21236	1495.883	.9440061
#1	.7209939	.5261917	.9149600	-1.03438	-.002043	-.045699
#2	.5369871	.5292092	.9149626	-.79443	-.000747	-.045513
#3	-.976582	.5352473	.9367475	-.95991	.002339	-.046338

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: ICSAB008 Acquired: 12/19/2024 19:05:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB008 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018294	.0110231	-.002598	.0036308	-.003956	.0036806
Stddev	.0002328	.0033070	.000768	.0008936	.002610	.0003509
%RSD	12.72444	30.00027	29.56207	24.61126	65.96795	9.533686
#1	.0016213	.0133099	-.003465	.0028099	-.006009	.0040802
#2	.0017862	.0072313	-.002004	.0045827	-.004841	.0035388
#3	.0020808	.0125282	-.002326	.0034999	-.001019	.0034228

Elem	Li6707
Units	ppm
Avg	-.003871
Stddev	.003833
%RSD	99.02538
#1	.000497
#2	-.006675
#3	-.005436

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2282.938	27932.09	1894.468	1948.340	1918.898
Stddev	5.252	106.39	16.740	3.602	4.547
%RSD	.2300744	.3808948	.8836032	.1848783	.2369680
#1	2285.376	28022.38	1876.486	1950.171	1923.403
#2	2286.529	27814.80	1897.318	1944.191	1918.982
#3	2276.910	27959.08	1909.599	1950.659	1914.310

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV069 Acquired: 12/19/2024 19:09:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV069 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.383234	4.961132	25.32239	5.210779	5.238184	413.0415	10.32978
Stddev	.016433	.020989	.07141	.007679	.012381	1.8067	.03922
%RSD	.3052704	.4230756	.2819839	.1473714	.2363633	.4374075	.3796868
#1	5.364644	4.971919	25.36869	5.217982	5.249682	415.0965	10.37290
#2	5.389232	4.974533	25.35833	5.202699	5.225077	412.3254	10.32022
#3	5.395826	4.936942	25.24016	5.211656	5.239792	411.7027	10.29622

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5223561	2.540704	415.6184	15.86313	2.545619	15.36501	418.5182
Stddev	.0008620	.006457	1.6197	.05857	.006099	.01259	2.3299
%RSD	.1650250	.2541553	.3897067	.3692480	.2395829	.0819360	.5566981
#1	.5232213	2.545629	417.4772	15.92377	2.548459	15.36987	421.0388
#2	.5223499	2.543090	414.8681	15.80687	2.549780	15.37444	418.0722
#3	.5214973	2.533394	414.5100	15.85875	2.538618	15.35071	416.4435

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.52705	414.5344	2.543901	1.310920	415.5625	2.558733	15.05500
Stddev	.10640	2.6101	.006362	.002703	1.9661	.013058	.05354
%RSD	.6852700	.6296571	.2500941	.2062040	.4731104	.5103191	.3556010
#1	15.64845	417.5003	2.548678	1.313605	417.5080	2.547418	15.11316
#2	15.48271	413.5159	2.546345	1.308199	413.5764	2.573021	15.04404
#3	15.44999	412.5871	2.536679	1.310957	415.6029	2.555760	15.00779

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	155.4388	5.102691	4.949292	4.919117	5.221673	4.919391	5.149054
Stddev	.8475	.015845	.009951	.005365	.014959	.023430	.015174
%RSD	.5452048	.3105149	.2010586	.1090563	.2864793	.4762696	.2946994
#1	156.4075	5.119100	4.948581	4.916875	5.222727	4.946165	5.157863
#2	155.0747	5.101493	4.959579	4.915237	5.236077	4.909364	5.157766
#3	154.8343	5.087479	4.939715	4.925239	5.206215	4.902643	5.131532

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV069 Acquired: 12/19/2024 19:09:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV069 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.175887	4.907901	5.249437
Stddev	.028964	.030154	.014487
%RSD	.5595925	.6143879	.2759809
#1	5.207850	4.942019	5.264910
#2	5.168431	4.896855	5.247207
#3	5.151381	4.884827	5.236194

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2002.424	26297.50	1867.086	1732.755	1745.892
Stddev	4.872	125.61	9.086	3.572	6.680
%RSD	.2432812	.4776680	.4866507	.2061371	.3826183
#1	1997.406	26167.83	1856.762	1729.485	1739.090
#2	2007.134	26418.63	1873.869	1736.567	1746.143
#3	2002.730	26306.03	1870.626	1732.214	1752.443

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB069 Acquired: 12/19/2024 19:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB069 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000826	-.000280	.0030035	-.003390	-.001328	-.000758	-.001035
Stddev	.002486	.003170	.0021485	.002147	.001882	.035911	.001668
%RSD	300.8397	1131.439	71.53269	63.33507	141.6408	4736.677	161.1223
#1	.000501	.001783	.0017551	-.005790	-.001704	.038574	.000367
#2	.000714	.001307	.0017711	-.002723	.000713	-.031797	-.000593
#3	-.003694	-.003930	.0054843	-.001655	-.002994	-.009052	-.002880

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000389	.0000309	-.064173	.0008601	.0002315	-.004905	-.010761
Stddev	.0000920	.0000578	.050150	.0014416	.0003829	.003410	.006954
%RSD	236.7610	187.0624	78.14769	167.5999	165.3779	69.50980	64.62317
#1	-.000058	.0000887	-.022571	.0010978	.0005766	-.007559	-.018499
#2	.000049	.0000308	-.050090	-.000686	.0002985	-.001060	-.005032
#3	.000125	-.000027	-.119859	.002168	-.000180	-.006098	-.008754

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003110	.0557333	-.000768	.0001374	1.005786	-.009222	.0040280
Stddev	.0011009	.1102774	.000290	.0009412	.349332	.006817	.0068120
%RSD	354.0475	197.8663	37.80882	684.9707	34.73218	73.92175	169.1149
#1	.0000178	.1133894	-.000724	.0008263	1.407561	-.014599	.0088657
#2	-.000614	.1252309	-.001077	.0005209	.835973	-.001555	.0069805
#3	.001529	-.071420	-.000502	-.000935	.773825	-.011512	-.003762

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3202521	.0013009	.0099907	.0004619	-.003500	-.000008	-.006782
Stddev	.0261543	.0007950	.0031417	.0006475	.002352	.000866	.000480
%RSD	8.166789	61.11051	31.44607	140.1887	67.21082	11200.28	7.072553
#1	.2925511	.0018996	.0129009	.0011837	-.006118	-.000835	-.006245
#2	.3236844	.0016042	.0104112	.0002697	-.002817	.000892	-.007168
#3	.3445208	.0003989	.0066599	-.000068	-.001565	-.000081	-.006933

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB069 Acquired: 12/19/2024 19:13:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB069 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	-.001902	.0003130	.0072316
Stddev	.004804	.0003161	.0053763
%RSD	252.5826	100.9807	74.34433
#1	-.000736	-.000048	.0127175
#2	.002212	.000447	.0070051
#3	-.007182	.000540	.0019721

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2340.463	29078.69	1887.179	2004.558	2129.370
Stddev	6.137	85.59	3.073	4.492	6.766
%RSD	.2622234	.2943438	.1628264	.2241108	.3177350
#1	2347.501	29053.77	1888.840	2006.329	2135.819
#2	2337.662	29173.97	1889.064	1999.451	2129.965
#3	2336.226	29008.32	1883.633	2007.896	2122.326

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-16DLX2 Acquired: 12/19/2024 19:17:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ54 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3072987	-.101738	1.178410	.1092807	.0362501	89.40934
Stddev	.0018050	.006486	.007351	.0031301	.0019095	.10468
%RSD	.5873905	6.374960	.6238291	2.864322	5.267474	.1170809
#1	.3053560	-.102096	1.178878	.1073268	.0354414	89.30002
#2	.3076160	-.095080	1.170836	.1076242	.0384308	89.41932
#3	.3089240	-.108037	1.185516	.1128910	.0348780	89.50867

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9885718	.0079148	.0056846	60.96228	.1383581	.1339253
Stddev	.0038605	.0002896	.0000742	.02644	.0011140	.0000995
%RSD	.3905090	3.659250	1.305152	.0433658	.8051613	.0742982
#1	.9842360	.0080968	.0057064	60.99210	.1388067	.1338285
#2	.9916363	.0080668	.0056020	60.95305	.1391779	.1339200
#3	.9898430	.0075808	.0057455	60.94170	.1370897	.1340273

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3607569	242.6971	4.568743	44.82852	.1386720	.0064670
Stddev	.0065124	.7036	.023531	.40937	.0004385	.0010267
%RSD	1.805214	.2899233	.5150531	.9131972	.3162276	15.87647
#1	.3559282	241.9194	4.546695	44.47908	.1384534	.0074460
#2	.3581788	242.8822	4.566015	44.72755	.1383857	.0065566
#3	.3681637	243.2897	4.593520	45.27893	.1391768	.0053984

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.395661	.3862365	1.337152	28.50875	F 16.47631	-.055493
Stddev	.499319	.0135434	.013705	.16322	.06270	.004227
%RSD	20.84264	3.506512	1.024902	.5725120	.3805313	7.617172
#1	1.984734	.3751283	1.327651	28.39887	16.44920	-.059805
#2	2.250876	.3822574	1.352862	28.43107	16.43172	-.051357
#3	2.951373	.4013237	1.330943	28.69629	16.54800	-.055316

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-16DLX2 Acquired: 12/19/2024 19:17:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ54 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018043	3.430669	4.993049	.0212822	2.058223	.0358293
Stddev	.0006112	.013733	.013065	.0011767	.007209	.0003052
%RSD	33.87365	.4002972	.2616601	5.529015	.3502609	.8518451
#1	.0023502	3.419109	4.996130	.0213236	2.050015	.0355296
#2	.0019186	3.427049	4.978719	.0200853	2.063526	.0361398
#3	.0011440	3.445849	5.004298	.0224376	2.061129	.0358186

Elem	Li6707
Units	ppm
Avg	.0540845
Stddev	.0036294
%RSD	6.710603
#1	.0509952
#2	.0531766
#3	.0580816

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2591.071	31861.36	2105.369	2192.595	2069.874
Stddev	.688	184.71	3.166	18.044	3.156
%RSD	.0265653	.5797384	.1503969	.8229696	.1524682
#1	2591.461	32022.04	2101.717	2204.852	2073.380
#2	2590.276	31659.55	2107.044	2171.874	2068.979
#3	2591.475	31902.48	2107.347	2201.057	2067.262

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-17DLX2 Acquired: 12/19/2024 19:21:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ55 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2083257	-.080387	.2928203	.0848100	.0297168	72.49976	.7439000
Stddev	.0047625	.004292	.0010475	.0032316	.0037377	.25644	.0015988
%RSD	2.286084	5.339667	.3577279	3.810418	12.57788	.3537052	.2149216
#1	.2095908	-.075480	.2916966	.0810798	.0339207	72.49603	.7450729
#2	.2030584	-.082237	.2929946	.0865864	.0284612	72.24521	.7420789
#3	.2123279	-.083444	.2937698	.0867637	.0267686	72.75804	.7445483

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062262	.0035530	43.02635	.1190661	.1064073	.2627985	187.4217
Stddev	.0002672	.0000758	.14428	.0002082	.0006949	.0109021	.5741
%RSD	4.291953	2.133859	.3353407	.1748524	.6530390	4.148454	.3063255
#1	.0064844	.0036399	43.02386	.1188262	.1058602	.2708746	187.2278
#2	.0059508	.0035190	42.88332	.1191723	.1071891	.2671233	186.9697
#3	.0062435	.0035002	43.17186	.1191997	.1061725	.2503976	188.0677

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.703842	36.39482	.1111653	.0036512	1.482033	.3100789	1.032704
Stddev	.013505	.09004	.0009290	.0012410	1.245398	.0042112	.022960
%RSD	.3646303	.2474025	.8356825	33.98879	84.03312	1.358115	2.223258
#1	3.705821	36.42345	.1122095	.0030924	2.021436	.3076203	1.048632
#2	3.689457	36.29394	.1104304	.0027878	2.366800	.3076749	1.043094
#3	3.716249	36.46706	.1108560	.0050733	.057861	.3149415	1.006386

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.45968	8.411020	-.045744	.0013553	1.559339	5.072104	.0134910
Stddev	.12414	.025210	.000369	.0004600	.004095	.061285	.0008262
%RSD	.6379387	.2997264	.8062925	33.94290	.2625958	1.208277	6.123822
#1	19.42808	8.396456	-.045422	.0008401	1.555130	5.071205	.0137879
#2	19.59657	8.396474	-.046146	.0017249	1.559577	5.011274	.0141278
#3	19.35439	8.440130	-.045663	.0015009	1.563309	5.133834	.0125575

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-17DLX2 Acquired: 12/19/2024 19:21:02 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ55 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.842272	.0112471	.0433165
Stddev	.005841	.0005042	.0043137
%RSD	.3170744	4.482661	9.958486
#1	1.843457	.0118032	.0408852
#2	1.835929	.0108198	.0482971
#3	1.847430	.0111185	.0407674

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2555.656	31571.80	2072.256	2175.711	2090.294
Stddev	4.564	16.01	22.298	11.940	4.278
%RSD	.1785956	.0506996	1.076036	.5487896	.2046416
#1	2553.547	31554.21	2071.349	2162.181	2091.524
#2	2560.894	31585.50	2094.993	2180.183	2093.822
#3	2552.529	31575.69	2050.425	2184.770	2085.536

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-18DLX2 Acquired: 12/19/2024 19:24:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ56 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2178566	-.102985	.1742229	.1083793	.0376977	87.44000	.8052941
Stddev	.0026947	.002722	.0017569	.0035931	.0013543	.17779	.0002806
%RSD	1.236909	2.643309	1.008421	3.315305	3.592397	.2033312	.0348484
#1	.2149506	-.101617	.1724761	.1105160	.0380079	87.35467	.8050095
#2	.2183462	-.106120	.1759897	.1103910	.0388700	87.32096	.8053022
#3	.2202729	-.101219	.1742031	.1042310	.0362153	87.64437	.8055706

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076819	.0035576	49.67913	.1359036	.1670464	.2002560	232.8121
Stddev	.0002008	.0001597	.22710	.0009859	.0001980	.0041531	.4526
%RSD	2.613819	4.489548	.4571256	.7254100	.1185109	2.073894	.1944107
#1	.0077398	.0034497	49.58291	.1370415	.1669370	.2050509	232.3064
#2	.0074585	.0034820	49.51598	.1353079	.1672749	.1977892	232.9506
#3	.0078473	.0037411	49.93849	.1353612	.1669273	.1979279	233.1792

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.390717	44.39932	.1415052	.0041736	.6977526	.3901533	.4599429
Stddev	.009312	.07098	.0001885	.0004507	.3688757	.0049171	.0183706
%RSD	.2120733	.1598764	.1332145	10.79944	52.86626	1.260299	3.994115
#1	4.395989	44.48061	.1413082	.0041368	.3798790	.3850227	.4451072
#2	4.396197	44.34959	.1415234	.0037424	1.102223	.3906124	.4804911
#3	4.379966	44.36775	.1416839	.0046415	.611156	.3948247	.4542302

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.94405	7.262609	-.074465	.0015649	.8096814	5.270937	.0148543
Stddev	.14051	.020717	.005218	.0007288	.0055056	.036344	.0009320
%RSD	.6708776	.2852577	7.007363	46.56758	.6799755	.6895077	6.274174
#1	20.97911	7.239707	-.080345	.0022842	.8157141	5.291133	.0158897
#2	20.78933	7.268076	-.072664	.0015836	.8049281	5.228981	.0140825
#3	21.06371	7.280045	-.070386	.0008270	.8084021	5.292696	.0145909

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-18DLX2 Acquired: 12/19/2024 19:24:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ56 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.191362	-.027736	.0409390
Stddev	.002324	.000731	.0035134
%RSD	.1060696	2.634612	8.582107
#1	2.190993	-.027293	.0403157
#2	2.189244	-.027336	.0377789
#3	2.193849	-.028580	.0447223

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2606.798	32130.19	2136.338	2222.828	2079.954
Stddev	4.721	63.03	1.551	5.105	4.431
%RSD	.1811223	.1961576	.0726023	.2296526	.2130260
#1	2611.202	32152.24	2136.197	2228.244	2084.349
#2	2601.813	32059.10	2137.954	2222.134	2075.488
#3	2607.378	32179.22	2134.862	2218.106	2080.023

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-19DLX2 Acquired: 12/19/2024 19:28:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ57 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1835734	-.080983	.1492038	.0856618	.0282003	69.94415	.6763825
Stddev	.0022096	.001853	.0018399	.0033502	.0025841	.34628	.0029418
%RSD	1.203640	2.288682	1.233164	3.910935	9.163187	.4950769	.4349344
#1	.1834595	-.079776	.1496512	.0836720	.0302063	69.54605	.6731127
#2	.1858378	-.080055	.1507787	.0895297	.0291103	70.11088	.6772202
#3	.1814230	-.083117	.1471814	.0837837	.0252844	70.17551	.6788147

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061149	.0030850	39.24006	.1045907	.1070288	.1754971	186.6868
Stddev	.0002096	.0001980	.22078	.0008479	.0006819	.0067829	.7933
%RSD	3.427467	6.417457	.5626518	.8107118	.6371540	3.864986	.4249336
#1	.0060500	.0032630	38.98760	.1045766	.1062432	.1693034	185.7824
#2	.0063492	.0028718	39.39704	.1037500	.1074690	.1827457	187.0130
#3	.0059454	.0031204	39.33553	.1054457	.1073741	.1744424	187.2650

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.456021	34.86709	.1089347	.0037519	1.358641	.3144433	.3882512
Stddev	.017849	.25940	.0016490	.0004336	.605519	.0000138	.0143425
%RSD	.5164587	.7439633	1.513717	11.55609	44.56795	.0043843	3.694127
#1	3.436330	34.57138	.1074402	.0039347	.855522	.3144421	.4048021
#2	3.460597	35.05625	.1086602	.0032569	1.189719	.3144301	.3804839
#3	3.471137	34.97363	.1107037	.0040641	2.030684	.3144576	.3794675

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.53792	5.505241	-.063471	.0003181	.7690712	4.508995	.0124347
Stddev	.13054	.024833	.002854	.0004824	.0037266	.015639	.0015402
%RSD	.7893084	.4510717	4.496314	151.6329	.4845629	.3468414	12.38631
#1	16.59867	5.495155	-.060983	-.000238	.7704377	4.491309	.0136174
#2	16.38808	5.487038	-.066586	.000617	.7648542	4.514679	.0129937
#3	16.62701	5.533529	-.062843	.000575	.7719217	4.520997	.0106931

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5173-19DLX2 Acquired: 12/19/2024 19:28:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ57 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.924067	-.023048	.0339467
Stddev	.014515	.000653	.0012858
%RSD	.7543733	2.832054	3.787694
#1	1.910773	-.023459	.0332340
#2	1.921875	-.023390	.0331751
#3	1.939553	-.022296	.0354310

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.118	31701.92	2094.283	2197.304	2099.528
Stddev	2.072	148.47	13.556	9.219	3.154
%RSD	.0804453	.4683169	.6472996	.4195380	.1502448
#1	2573.271	31647.98	2099.630	2193.888	2095.925
#2	2574.724	31587.97	2078.868	2190.281	2100.867
#3	2577.358	31869.82	2104.350	2207.743	2101.792

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-01DLX2 Acquired: 12/19/2024 19:32:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ19 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2345639	-.095872	.1278597	.1001192	.0347240	85.19122	.7569448
Stddev	.0007873	.001809	.0046274	.0065373	.0023576	.27332	.0030627
%RSD	.3356391	1.886928	3.619153	6.529561	6.789643	.3208271	.4046130
#1	.2353247	-.096715	.1331266	.1072413	.0331986	85.50040	.7604704
#2	.2346145	-.093795	.1244467	.0943917	.0374395	85.09143	.7549414
#3	.2337526	-.097105	.1260057	.0987246	.0335340	84.98181	.7554226

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074996	.0021065	35.71746	.0871028	.1158457	.1548764	208.5489
Stddev	.0000621	.0001189	.10124	.0008816	.0011602	.0047286	.8266
%RSD	.8284617	5.644516	.2834472	1.012114	1.001493	3.053140	.3963791
#1	.0074629	.0020986	35.83430	.0868404	.1155925	.1507254	209.3877
#2	.0074646	.0019917	35.66250	.0880857	.1148331	.1600238	207.7350
#3	.0075714	.0022291	35.65560	.0863822	.1171116	.1538802	208.5239

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.337770	37.16814	.1130484	.0048776	1.249438	.3334051	.4317387
Stddev	.003008	.16821	.0008670	.0003976	.292793	.0053804	.0257129
%RSD	.0693455	.4525592	.7669341	8.152338	23.43397	1.613761	5.955655
#1	4.341069	37.35915	.1132317	.0046907	1.143350	.3393559	.4358321
#2	4.335180	37.10314	.1121044	.0046079	1.024477	.3319752	.4551593
#3	4.337062	37.04213	.1138091	.0053343	1.580487	.3288841	.4042247

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.81281	6.111728	-.080799	.0002221	.8155393	6.518886	.0099107
Stddev	.12648	.069722	.001334	.0002726	.0066795	.027698	.0026068
%RSD	.7522611	1.140786	1.650587	122.7656	.8190264	.4248949	26.30313
#1	16.74038	6.091172	-.079617	-.000016	.8231780	6.531677	.0069076
#2	16.73920	6.054596	-.082244	.000162	.8126441	6.537877	.0112336
#3	16.95885	6.189417	-.080535	.000520	.8107959	6.487103	.0115907

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-01DLX2 Acquired: 12/19/2024 19:32:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ19 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.608595	-.066881	.0502730
Stddev	.002871	.000438	.0022857
%RSD	.1784652	.6549802	4.546492
#1	1.611237	-.067331	.0477714
#2	1.605541	-.066856	.0507955
#3	1.609008	-.066456	.0522523

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2627.581	32585.54	2146.623	2265.763	2094.144
Stddev	22.503	219.45	11.884	15.516	18.641
%RSD	.8564337	.6734727	.5536361	.6848193	.8901418
#1	2639.827	32805.21	2138.880	2280.277	2104.624
#2	2641.306	32366.30	2140.683	2249.409	2105.186
#3	2601.610	32585.11	2160.306	2267.603	2072.622

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-02DLX2 Acquired: 12/19/2024 19:36:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2510667	-.095023	.1384198	.1016599	.0348856	83.41598	.7878755
Stddev	.0036108	.002559	.0025764	.0032579	.0005707	.06335	.0014633
%RSD	1.438191	2.693131	1.861289	3.204664	1.635841	.0759428	.1857289
#1	.2475804	-.096108	.1407895	.0981594	.0346439	83.34657	.7882200
#2	.2547903	-.092100	.1356774	.1046033	.0355373	83.47068	.7891358
#3	.2508295	-.096861	.1387925	.1022170	.0344755	83.43068	.7862707

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073506	.0021494	34.40791	.0925755	.1170787	.1503115	207.4702
Stddev	.0000845	.0001121	.08535	.0040140	.0002894	.0040076	.0923
%RSD	1.150249	5.215195	.2480610	4.335924	.2472180	2.666232	.0444727
#1	.0074306	.0022643	34.40041	.0879913	.1169846	.1545185	207.4108
#2	.0073590	.0020403	34.49676	.0954601	.1174035	.1465385	207.5765
#3	.0072621	.0021436	34.32655	.0942750	.1168480	.1498774	207.4233

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.352769	36.68530	.1133418	.0049791	.8407844	.3299143	.4826246
Stddev	.003645	.08279	.0010002	.0011650	.3160802	.0051581	.0230832
%RSD	.0837422	.2256838	.8824244	23.39802	37.59349	1.563464	4.782839
#1	4.356503	36.63630	.1135982	.0060985	.5633795	.3321571	.4618350
#2	4.352583	36.63871	.1141888	.0037733	.7740809	.3335713	.5074650
#3	4.349220	36.78089	.1122384	.0050655	1.184893	.3240145	.4785738

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.64924	5.895848	-.075692	.0004016	1.011800	6.443857	.0113954
Stddev	.08044	.009270	.002512	.0007028	.004007	.039128	.0008170
%RSD	.4831467	.1572226	3.318977	174.9857	.3960348	.6072078	7.169821
#1	16.56084	5.903666	-.074776	-.000410	1.012741	6.431006	.0110221
#2	16.66875	5.898270	-.073766	.000797	1.015252	6.412771	.0108318
#3	16.71813	5.885608	-.078533	.000817	1.007406	6.487794	.0123325

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-02DLX2 Acquired: 12/19/2024 19:36:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.598428	-.068986	.0481690
Stddev	.011610	.000132	.0021945
%RSD	.7263433	.1907325	4.555889
#1	1.591824	-.068834	.0462538
#2	1.611834	-.069069	.0505636
#3	1.591627	-.069055	.0476896

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2592.918	32226.31	2127.738	2232.871	2074.309
Stddev	5.321	786.04	16.605	55.050	1.265
%RSD	.2052047	2.439115	.7804102	2.465447	.0610004
#1	2594.092	33113.83	2117.408	2294.886	2072.848
#2	2597.553	31617.96	2146.892	2189.775	2075.051
#3	2587.108	31947.16	2118.914	2213.953	2075.028

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-03DLX2 Acquired: 12/19/2024 19:40:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ21 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5676267	-.129471	.4178186	.1314730	.0455043	82.96887	.7137981
Stddev	.0033896	.006871	.0062515	.0072711	.0009598	.25888	.0034065
%RSD	.5971461	5.306684	1.496215	5.530523	2.109329	.3120156	.4772392
#1	.5667053	-.122484	.4145365	.1382684	.0453234	83.25485	.7174236
#2	.5647931	-.129711	.4138917	.1323458	.0465418	82.90124	.7133069
#3	.5713817	-.136219	.4250275	.1238049	.0446479	82.75052	.7106639

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088059	.0059349	38.68791	.1003138	.1504214	.3741981	269.2049
Stddev	.0001332	.0002125	.18014	.0008387	.0033137	.0069660	.6533
%RSD	1.512581	3.580820	.4656268	.8360682	2.202939	1.861576	.2426745
#1	.0089549	.0058449	38.84385	.1004975	.1495699	.3803870	269.9592
#2	.0087645	.0057823	38.72914	.0993984	.1476165	.3666542	268.8191
#3	.0086984	.0061776	38.49072	.1010454	.1540777	.3755532	268.8365

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.188130	39.42370	.1308138	.0075919	1.316909	.5035089	1.191398
Stddev	.014600	.03797	.0023089	.0010768	.281534	.0131065	.005295
%RSD	.3486160	.0963169	1.765000	14.18315	21.37838	2.603024	.4444371
#1	4.201196	39.43630	.1307676	.0063568	1.209456	.5096354	1.187221
#2	4.190822	39.38103	.1285283	.0080854	1.104926	.5124302	1.197353
#3	4.172370	39.45377	.1331453	.0083335	1.636345	.4884612	1.189620

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.39532	7.522599	-.093679	.0009079	2.530412	5.784905	.0168446
Stddev	.12362	.160949	.003818	.0003428	.045141	.046648	.0002821
%RSD	.6720301	2.139540	4.075704	37.76202	1.783945	.8063672	1.674486
#1	18.53104	7.479691	-.097619	.0005595	2.521930	5.837503	.0170416
#2	18.36574	7.387453	-.093424	.0012449	2.490113	5.768660	.0169708
#3	18.28917	7.700654	-.089995	.0009192	2.579192	5.748552	.0165215

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-03DLX2 Acquired: 12/19/2024 19:40:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ21 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.891816	-.129885	.0463545
Stddev	.010546	.000595	.0028534
%RSD	.5574487	.4577537	6.155564
#1	1.903789	-.130507	.0491619
#2	1.883905	-.129322	.0434572
#3	1.887754	-.129826	.0464443

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2691.016	33617.54	2180.033	2316.871	2151.770
Stddev	52.763	193.97	6.977	15.789	41.225
%RSD	1.960708	.5769943	.3200431	.6814873	1.915862
#1	2707.844	33417.03	2172.023	2301.660	2163.753
#2	2733.312	33804.24	2184.784	2333.181	2185.677
#3	2631.891	33631.36	2183.293	2315.773	2105.882

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-04DLX2 Acquired: 12/19/2024 19:44:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ22 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5326774	-.087872	.2687907	.0851004	.0312577	67.00664	.6219781
Stddev	.0070921	.001962	.0010958	.0018733	.0025031	.50628	.0048801
%RSD	1.331412	2.233027	.4076912	2.201296	8.007853	.7555709	.7846163
#1	.5245671	-.087085	.2690325	.0868705	.0318109	67.39155	.6260013
#2	.5357494	-.086425	.2675942	.0831386	.0334378	67.19524	.6233834
#3	.5377156	-.090105	.2697455	.0852922	.0285243	66.43312	.6165495

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065810	.0031539	29.25662	.0765701	.0859735	.1494632	187.4837
Stddev	.0001862	.0001194	.16592	.0030177	.0010644	.0005343	1.1848
%RSD	2.829042	3.785055	.5671364	3.941100	1.238016	.3575072	.6319341
#1	.0066143	.0032794	29.29997	.0737341	.0855572	.1488462	188.1885
#2	.0067483	.0031404	29.39657	.0797415	.0871832	.1497704	188.1468
#3	.0063805	.0030418	29.07333	.0762347	.0851803	.1497730	186.1158

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.967583	32.93965	.0930991	.0049365	.8098571	.2692936	.8738041
Stddev	.027342	.33351	.0004799	.0018682	.2768669	.0134306	.0318599
%RSD	.9213711	1.012486	.5155276	37.84576	34.18713	4.987348	3.646117
#1	2.987803	33.05829	.0936485	.0068621	.7565526	.2843116	.8376776
#2	2.978471	33.19762	.0927612	.0031315	.5635181	.2584341	.8978849
#3	2.936473	32.56304	.0928877	.0048159	1.109501	.2651351	.8858498

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.71655	5.653178	-.065843	.0028772	1.175510	5.666966	.0089675
Stddev	.25779	.017980	.001337	.0004367	.005824	.046591	.0003688
%RSD	1.751704	.3180454	2.031111	15.17864	.4954834	.8221455	4.112551
#1	14.86464	5.632470	-.066445	.0029256	1.171633	5.699371	.0085851
#2	14.86613	5.662241	-.066773	.0032876	1.182208	5.687953	.0089962
#3	14.41888	5.664821	-.064310	.0024182	1.172689	5.613573	.0093210

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-04DLX2 Acquired: 12/19/2024 19:44:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ22 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.551867	-.074646	.0326008
Stddev	.015132	.000405	.0019475
%RSD	.9751027	.5419354	5.973841
#1	1.564443	-.074992	.0347177
#2	1.556086	-.074745	.0321992
#3	1.535073	-.074201	.0308853

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.913	31909.12	2109.701	2205.087	2145.209
Stddev	4.768	1061.13	23.347	66.197	2.253
%RSD	.1819891	3.325484	1.106626	3.002019	.1050295
#1	2616.670	32820.93	2089.781	2263.522	2145.954
#2	2617.681	30744.37	2103.931	2133.195	2142.678
#3	2625.388	32162.06	2135.392	2218.543	2146.996

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-05DLX2 Acquired: 12/19/2024 19:47:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ23 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5497644	-.093304	.3941263	.1059501	.0370243	73.61219	.6496501
Stddev	.0007073	.005513	.0038692	.0032118	.0023642	.05606	.0023821
%RSD	.1286624	5.909104	.9817221	3.031440	6.385402	.0761501	.3666738
#1	.5492014	-.087232	.3979849	.1046365	.0384000	73.62359	.6515690
#2	.5495334	-.097998	.3941474	.1036032	.0383783	73.55131	.6469839
#3	.5505583	-.094681	.3902466	.1096105	.0342944	73.66166	.6503973

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071401	.0059166	34.88844	.0817492	.1074476	.2453092	215.7248
Stddev	.0000639	.0001710	.20606	.0058333	.0006743	.0068894	.3595
%RSD	.8955717	2.889532	.5906218	7.135566	.6275523	2.808464	.1666507
#1	.0071134	.0061139	34.73986	.0771110	.1081391	.2528116	215.5051
#2	.0070938	.0058236	34.80178	.0882982	.1074117	.2438490	215.5297
#3	.0072131	.0058123	35.12367	.0798385	.1067920	.2392668	216.1397

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.774733	35.76748	.1045314	.0065783	1.511667	.3443099	1.302528
Stddev	.006730	.24910	.0013395	.0022576	.536426	.0101386	.065708
%RSD	.1782793	.6964318	1.281400	34.31897	35.48575	2.944604	5.044671
#1	3.777994	35.72742	.1049379	.0082801	.960378	.3338458	1.263949
#2	3.766994	35.54085	.1056205	.0040172	2.031880	.3540880	1.378398
#3	3.779211	36.03418	.1030358	.0074375	1.542743	.3449958	1.265238

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.77487	6.566491	-.077357	.0043799	3.566195	5.175778	.0123352
Stddev	.16385	.045604	.005638	.0004503	.033972	.021712	.0015147
%RSD	1.038696	.6944944	7.288083	10.28103	.9526116	.4194873	12.27904
#1	15.61727	6.616324	-.079893	.0048783	3.601045	5.155179	.0130914
#2	15.94433	6.556313	-.081281	.0042589	3.564365	5.198453	.0105914
#3	15.76302	6.526836	-.070897	.0040024	3.533174	5.173702	.0133229

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-05DLX2 Acquired: 12/19/2024 19:47:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ23 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.877828	-.094495	.0396359
Stddev	.002922	.000460	.0015006
%RSD	.1556245	.4868247	3.786028
#1	1.874638	-.094204	.0381235
#2	1.878470	-.094255	.0396597
#3	1.880376	-.095025	.0411245

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2649.537	32770.89	2113.037	2268.247	2148.766
Stddev	13.445	1373.26	7.477	100.763	16.440
%RSD	.5074530	4.190500	.3538331	4.442345	.7651081
#1	2634.290	33880.96	2113.248	2345.856	2130.074
#2	2654.626	31235.21	2120.405	2154.370	2155.241
#3	2659.694	33196.50	2105.456	2304.516	2160.984

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-06DLX2 Acquired: 12/19/2024 19:51:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ24 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4410440	-.109323	.3164503	.1163544	.0390096	71.08126	.5942785
Stddev	.0059385	.005110	.0014226	.0022566	.0018505	.20388	.0029291
%RSD	1.346474	4.674372	.4495535	1.939430	4.743755	.2868322	.4928841
#1	.4445473	-.108626	.3178175	.1164065	.0383303	70.93949	.5934583
#2	.4341873	-.114746	.3165553	.1140722	.0411037	71.31492	.5975302
#3	.4443974	-.104597	.3149781	.1185846	.0375947	70.98938	.5918468

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078567	.0051165	36.57858	.0825873	.1242928	.2931514	237.9760
Stddev	.0001565	.0002146	.19403	.0005736	.0005085	.0003124	.9337
%RSD	1.991622	4.193572	.5304450	.6944911	.4090720	.1065797	.3923432
#1	.0079446	.0051485	36.41988	.0829457	.1248188	.2934579	237.3782
#2	.0079495	.0048878	36.79489	.0828904	.1238039	.2931630	239.0520
#3	.0076760	.0053133	36.52096	.0819258	.1242558	.2928333	237.4980

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.491180	33.60027	.1026777	.0059894	1.244866	.4617828	.8588587
Stddev	.007113	.19139	.0004847	.0003223	.845401	.0045587	.0144713
%RSD	.2037480	.5696034	.4720985	5.380884	67.91102	.9871985	1.684944
#1	3.487296	33.49215	.1025731	.0059558	2.118309	.4575381	.8747182
#2	3.499389	33.82125	.1022537	.0063271	.430618	.4612090	.8463711
#3	3.486854	33.48742	.1032062	.0056851	1.185672	.4666012	.8554867

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.96960	6.132684	-.082528	.0039335	3.310012	5.996098	.0128880
Stddev	.01676	.008553	.001335	.0005124	.006013	.067563	.0009021
%RSD	.1199419	.1394611	1.617634	13.02568	.1816748	1.126789	6.999520
#1	13.96198	6.138481	-.084046	.0041320	3.312458	5.953909	.0125864
#2	13.98881	6.136710	-.081538	.0033516	3.314416	6.074024	.0139023
#3	13.95800	6.122861	-.082000	.0043170	3.303161	5.960360	.0121753

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-06DLX2 Acquired: 12/19/2024 19:51:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ24 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.712092	-.127601	.0381712
Stddev	.007160	.000552	.0018212
%RSD	.4181924	.4322521	4.771233
#1	1.706325	-.127489	.0367988
#2	1.720106	-.128200	.0402374
#3	1.709847	-.127115	.0374775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2659.309	32791.47	2169.064	2270.229	2162.426
Stddev	7.034	40.88	19.447	5.589	4.237
%RSD	.2644976	.1246614	.8965807	.2461709	.1959582
#1	2667.416	32811.89	2184.561	2274.475	2167.315
#2	2654.835	32818.12	2147.241	2263.898	2160.141
#3	2655.675	32744.41	2175.389	2272.314	2159.821

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-07DLX2 Acquired: 12/19/2024 19:55:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ25 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2623516	-.081184	.1826587	.0907329	.0318677	93.56916	1.054696
Stddev	.0042193	.002104	.0040763	.0045931	.0005214	.25611	.006028
%RSD	1.608264	2.591879	2.231643	5.062204	1.636239	.2737131	.5715536
#1	.2621308	-.083574	.1824692	.0926177	.0315337	93.76636	1.060214
#2	.2582470	-.080370	.1868264	.0940837	.0324685	93.27970	1.048263
#3	.2666770	-.079608	.1786804	.0854973	.0316007	93.66142	1.055611

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074972	.0024631	39.71042	.0963908	.0953729	.2042315	190.9147
Stddev	.0001651	.0001071	.13845	.0011033	.0005618	.0064394	.6307
%RSD	2.202178	4.349919	.3486431	1.144572	.5890239	3.152981	.3303477
#1	.0076840	.0023407	39.86783	.0953683	.0957968	.1999229	191.2390
#2	.0073708	.0025087	39.60751	.0962439	.0955860	.2011377	190.1879
#3	.0074369	.0025399	39.65592	.0975601	.0947357	.2116339	191.3173

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.316685	37.07596	.1029108	.0047025	1.062443	.3300050	.4815685
Stddev	.021825	.07638	.0012063	.0012508	1.078892	.0046519	.0014461
%RSD	.6580223	.2060158	1.172211	26.59876	101.5483	1.409641	.3002825
#1	3.339205	37.00525	.1017418	.0056040	1.646081	.3247906	.4832382
#2	3.295630	37.06566	.1028392	.0052292	1.723793	.3337290	.4807165
#3	3.315220	37.15697	.1041513	.0032745	-.182547	.3314954	.4807509

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.202060	3.609600	-.069618	.0005724	1.482527	7.106031	.0093164
Stddev	.029395	.012934	.003322	.0004599	.004381	.020618	.0012504
%RSD	.3583886	.3583194	4.771921	80.34118	.2955125	.2901455	13.42154
#1	8.201184	3.613300	-.069425	.0002564	1.486464	7.128749	.0105059
#2	8.231883	3.595219	-.073032	.0003609	1.477807	7.100835	.0080129
#3	8.173112	3.620281	-.066397	.0011001	1.483309	7.088508	.0094304

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-07DLX2 Acquired: 12/19/2024 19:55:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ25 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.106367	.0838340	.0488816
Stddev	.005230	.0009690	.0067875
%RSD	.4727329	1.155899	13.88556
#1	1.100407	.0849378	.0560209
#2	1.108505	.0831231	.0425114
#3	1.110190	.0834412	.0481127

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2658.243	32901.37	2174.139	2292.117	2127.889
Stddev	3.538	125.28	12.601	7.634	.820
%RSD	.1330794	.3807877	.5795636	.3330436	.0385359
#1	2660.740	33040.61	2162.662	2300.772	2127.020
#2	2654.195	32797.77	2172.132	2289.240	2128.649
#3	2659.794	32865.73	2187.622	2286.341	2127.997

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-08DLX2 Acquired: 12/19/2024 19:59:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ26 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9313857	-.117255	.6187587	.1255958	.0453704	94.72085	1.043045
Stddev	.0095648	.003317	.0063908	.0026176	.0048109	.31720	.003606
%RSD	1.026944	2.828759	1.032839	2.084138	10.60361	.3348834	.3457461
#1	.9366792	-.113529	.6258506	.1247337	.0495730	95.08585	1.046363
#2	.9371336	-.119887	.6169795	.1235179	.0401229	94.56484	1.043564
#3	.9203443	-.118347	.6134461	.1285357	.0464152	94.51186	1.039207

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091500	.0076885	36.06546	.4694572	.1190180	.4003258	253.4741
Stddev	.0000718	.0001308	.19820	.0021336	.0015232	.0038617	1.0046
%RSD	.7850561	1.700973	.5495573	.4544872	1.279816	.9646490	.3963269
#1	.0091855	.0078353	36.28724	.4669935	.1204918	.4038277	254.6029
#2	.0090673	.0076460	36.00350	.4706897	.1191124	.3961841	253.1413
#3	.0091972	.0075843	35.90564	.4706884	.1174498	.4009657	252.6782

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.340734	36.90477	.2594631	.0078422	1.535189	.4281048	1.934059
Stddev	.008880	.13995	.0039314	.0009796	.819934	.0106714	.032231
%RSD	.2658141	.3792240	1.515201	12.49078	53.40931	2.492701	1.666498
#1	3.349641	37.05337	.2632499	.0082514	.616643	.4262500	1.899423
#2	3.340679	36.77547	.2597378	.0085508	1.795727	.4395820	1.939583
#3	3.331881	36.88548	.2554015	.0067244	2.193199	.4184824	1.963171

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.48891	5.549790	-.091765	.0046466	5.423736	6.862997	.0183134
Stddev	.01777	.077564	.002158	.0002250	.072483	.072739	.0019044
%RSD	.1226270	1.397597	2.352165	4.842065	1.336407	1.059877	10.39889
#1	14.50929	5.621668	-.090703	.0048995	5.498844	6.940461	.0204305
#2	14.47667	5.560125	-.090344	.0045717	5.418167	6.796150	.0167400
#3	14.48078	5.467577	-.094249	.0044687	5.354199	6.852379	.0177698

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-08DLX2 Acquired: 12/19/2024 19:59:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ26 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.163648	-.050698	.0477144
Stddev	.009166	.000674	.0022563
%RSD	.4236388	1.328741	4.728872
#1	2.169110	-.051473	.0468069
#2	2.168769	-.050258	.0460531
#3	2.153066	-.050362	.0502832

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2629.320	32400.74	2143.916	2244.830	2117.170
Stddev	12.576	220.96	10.495	9.663	18.927
%RSD	.4783114	.6819732	.4895387	.4304434	.8939982
#1	2616.951	32626.58	2131.904	2255.914	2099.694
#2	2628.914	32185.00	2151.315	2238.180	2114.542
#3	2642.094	32390.63	2148.527	2240.397	2137.274

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-09DLX2 Acquired: 12/19/2024 20:03:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ27 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7945511	-.095784	.5602652	.1032610	.0350184	84.07798	.8675696
Stddev	.0018171	.005374	.0044662	.0038059	.0012974	.09760	.0042545
%RSD	.2286893	5.610226	.7971491	3.685743	3.704771	.1160797	.4903925
#1	.7964955	-.092697	.5601217	.1069416	.0365003	83.96616	.8626581
#2	.7942614	-.101989	.5558725	.0993411	.0344677	84.12167	.8701177
#3	.7928962	-.092666	.5648013	.1035004	.0340872	84.14609	.8699331

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078643	.0066753	30.76237	.0954177	.0972330	.2919560	212.6957
Stddev	.0000972	.0000311	.12287	.0004357	.0010474	.0070725	.1069
%RSD	1.235781	.4660944	.3994037	.4566356	1.077233	2.422456	.0502420
#1	.0079765	.0067012	30.89417	.0959067	.0966749	.2926243	212.8094
#2	.0078097	.0066408	30.65101	.0952757	.0965829	.2845730	212.5974
#3	.0078067	.0066839	30.74191	.0950707	.0984413	.2986706	212.6802

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.098310	31.69670	.0932467	.0063103	1.367174	.3643924	1.697139
Stddev	.001176	.08633	.0008817	.0013865	.808952	.0059145	.020961
%RSD	.0379685	.2723659	.9455479	21.97189	59.16961	1.623121	1.235063
#1	3.099001	31.75278	.0923578	.0056114	.445568	.3699270	1.706539
#2	3.098978	31.59729	.0932612	.0054124	1.959825	.3581599	1.711754
#3	3.096952	31.74004	.0941210	.0079072	1.696129	.3650902	1.673124

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.18396	4.544095	-.071923	.0005136	2.785715	6.265691	.0149359
Stddev	.05372	.039876	.002232	.0000656	.018883	.022761	.0021872
%RSD	.4803456	.8775438	3.103559	12.77611	.6778481	.3632654	14.64384
#1	11.12576	4.513748	-.072874	.0004960	2.769609	6.274177	.0124765
#2	11.19448	4.529278	-.069372	.0004586	2.781040	6.239906	.0166630
#3	11.23165	4.589259	-.073521	.0005862	2.806496	6.282989	.0156683

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-09DLX2 Acquired: 12/19/2024 20:03:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ27 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.578304	-.033715	.0444527
Stddev	.011298	.000418	.0068525
%RSD	.7158466	1.241276	15.41532
#1	1.565536	-.034184	.0514449
#2	1.582370	-.033381	.0377489
#3	1.587007	-.033581	.0441643

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2561.155	31638.60	2072.379	2185.550	2093.387
Stddev	23.468	152.45	5.489	17.431	17.284
%RSD	.9163217	.4818524	.2648794	.7975496	.8256398
#1	2567.114	31522.43	2066.060	2179.148	2098.494
#2	2581.070	31582.13	2075.973	2172.226	2107.542
#3	2535.282	31811.22	2075.102	2205.277	2074.125

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-10DLX2 Acquired: 12/19/2024 20:07:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ28 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2964180	-.085559	.1997407	.0915417	.0324322	100.2221	1.178891
Stddev	.0043727	.003822	.0041437	.0041553	.0002014	2.7356	.032015
%RSD	1.475171	4.467582	2.074523	4.539249	.6209943	2.729507	2.715671
#1	.2986923	-.088427	.2043809	.0941780	.0322259	102.9970	1.211796
#2	.2913768	-.087030	.1964098	.0936954	.0324424	100.1418	1.177030
#3	.2991847	-.081220	.1984315	.0867516	.0326283	97.5276	1.147848

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083800	.0023762	31.98691	.0949570	.0917419	.1882099	194.6441
Stddev	.0002503	.0001873	.88653	.0006695	.0005361	.0019152	5.1025
%RSD	2.986587	7.882649	2.771540	.7050396	.5843793	1.017581	2.621456
#1	.0085148	.0021752	32.90143	.0955155	.0912433	.1865500	199.9953
#2	.0085339	.0024074	31.92798	.0951405	.0916735	.1903054	194.1037
#3	.0080912	.0025459	31.13132	.0942149	.0923090	.1877742	189.8333

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.861229	30.26770	.0964877	.0048879	1.215917	.3514011	.5019004
Stddev	.077936	.85367	.0013695	.0014013	.847531	.0113535	.0273767
%RSD	2.723878	2.820402	1.419311	28.66779	69.70302	3.230923	5.454600
#1	2.942725	31.20384	.0979513	.0064855	.247491	.3624907	.5006543
#2	2.853539	30.06699	.0952374	.0038670	1.822283	.3519118	.4751681
#3	2.787422	29.53227	.0962745	.0043113	1.577977	.3398009	.5298788

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.033634	2.816428	-.069889	.0000298	1.202615	6.255978	.0093942
Stddev	.182926	.009708	.001949	.0002020	.011739	.156431	.0013277
%RSD	2.600727	.3446784	2.788450	677.1464	.9761585	2.500500	14.13289
#1	7.244728	2.824369	-.070941	-.000173	1.206105	6.413914	.0093489
#2	6.934498	2.805606	-.067640	.000031	1.189526	6.252922	.0107439
#3	6.921674	2.819310	-.071085	.000231	1.212213	6.101097	.0080897

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-10DLX2 Acquired: 12/19/2024 20:07:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ28 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.195240	.0101367	.0498555
Stddev	.029905	.0006625	.0020856
%RSD	2.502020	6.535889	4.183214
#1	1.224854	.0103686	.0498885
#2	1.195814	.0106521	.0477537
#3	1.165052	.0093894	.0519244

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2623.249	32650.26	2112.398	2262.877	2121.021
Stddev	5.980	128.67	59.072	7.633	6.098
%RSD	.2279708	.3940885	2.796464	.3373117	.2874928
#1	2625.431	32529.13	2050.284	2261.574	2120.794
#2	2627.832	32785.34	2119.041	2271.078	2127.229
#3	2616.484	32636.31	2167.868	2255.980	2115.040

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-11DLX2 Acquired: 12/19/2024 20:10:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ29 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6657198	-.085124	.5429797	.0950964	.0310173	74.50659	.7234252
Stddev	.0082835	.002089	.0051856	.0013660	.0017712	.45873	.0040498
%RSD	1.244294	2.453960	.9550325	1.436454	5.710391	.6156910	.5598119
#1	.6566665	-.086495	.5388250	.0939176	.0290861	73.99800	.7196103
#2	.6729194	-.082720	.5413228	.0965935	.0325660	74.88909	.7276748
#3	.6675735	-.086157	.5487913	.0947781	.0313998	74.63267	.7229906

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068007	.0064434	28.17640	.0870719	.0903145	.2919146	186.8293
Stddev	.0001516	.0000845	.27746	.0010525	.0004231	.0016244	1.0181
%RSD	2.229238	1.310638	.9847324	1.208768	.4685080	.5564528	.5449403
#1	.0066439	.0063588	27.90680	.0859764	.0905366	.2920223	185.8915
#2	.0069465	.0064437	28.46111	.0871642	.0898265	.2934825	187.9122
#3	.0068117	.0065277	28.16128	.0880753	.0905803	.2902391	186.6842

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.940497	30.20416	.0890218	.0059156	.9125114	.2813332	1.556353
Stddev	.010288	.31379	.0005006	.0005035	.3973114	.0104262	.013512
%RSD	.3498788	1.038905	.5623527	8.510806	43.54043	3.705987	.8681570
#1	2.929691	29.85970	.0887371	.0054881	.8991524	.2694057	1.545479
#2	2.950174	30.47375	.0895998	.0057881	1.316334	.2887135	1.552102
#3	2.941627	30.27901	.0887285	.0064706	.522048	.2858804	1.571479

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.45944	4.890975	-.069276	.0011009	2.321271	5.448586	.0098394
Stddev	.10485	.012448	.001094	.0000742	.011881	.029271	.0008525
%RSD	1.002406	.2545108	1.578809	6.738765	.5118195	.5372148	8.663990
#1	10.36561	4.879091	-.068014	.0010578	2.311462	5.415809	.0089906
#2	10.57261	4.889914	-.069945	.0010582	2.317870	5.472117	.0106955
#3	10.44010	4.903919	-.069869	.0011865	2.334481	5.457833	.0098321

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-11DLX2 Acquired: 12/19/2024 20:10:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ29 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.482222	-.026037	.0375514
Stddev	.015369	.000538	.0042947
%RSD	1.036861	2.066665	11.43687
#1	1.464843	-.025422	.0396618
#2	1.494022	-.026273	.0403826
#3	1.487800	-.026418	.0326098

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2571.430	31691.17	2069.740	2201.117	2104.497
Stddev	11.509	47.15	9.721	8.461	9.077
%RSD	.4475533	.1487785	.4696511	.3843774	.4312996
#1	2575.451	31710.13	2079.851	2202.474	2104.168
#2	2580.390	31725.89	2060.463	2208.818	2113.733
#3	2558.451	31637.49	2068.908	2192.060	2095.589

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-12DLX2 Acquired: 12/19/2024 20:14:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ30 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5947384	-.100687	.4315451	.1005837	.0327095	77.72890	.7566130
Stddev	.0056437	.002808	.0031703	.0016271	.0031400	.41530	.0048924
%RSD	.9489362	2.789104	.7346459	1.617624	9.599648	.5342930	.6466171
#1	.5895667	-.103042	.4306092	.1018855	.0358155	78.00537	.7586563
#2	.6007581	-.097579	.4289480	.1011059	.0327763	77.92999	.7601526
#3	.5938905	-.101440	.4350780	.0987596	.0295366	77.25133	.7510302

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071798	.0059994	29.66370	.0951993	.1038611	.2659159	203.6343
Stddev	.0000401	.0001682	.14852	.0006192	.0004215	.0053920	1.1427
%RSD	.5587607	2.803736	.5006806	.6504366	.4058814	2.027701	.5611477
#1	.0072210	.0059603	29.75899	.0958839	.1039224	.2600256	204.0492
#2	.0071408	.0058542	29.73954	.0950354	.1034123	.2671142	204.5115
#3	.0071775	.0061837	29.49257	.0946785	.1042487	.2706079	202.3421

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.295529	32.78472	.1006849	.0058136	.9310920	.3349544	1.464994
Stddev	.018170	.10124	.0005988	.0013374	.9575028	.0028266	.028148
%RSD	.5513558	.3088037	.5947649	23.00477	102.8365	.8438770	1.921383
#1	3.300857	32.82420	.1006553	.0056216	.4345720	.3319181	1.495374
#2	3.310439	32.86028	.1001014	.0072366	2.034871	.3375095	1.439797
#3	3.275290	32.66969	.1012979	.0045825	.323833	.3354356	1.459812

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.05586	4.680900	-.076679	.0007946	2.171905	6.252960	.0123604
Stddev	.04369	.023097	.003510	.0004148	.011939	.050716	.0013089
%RSD	.3952136	.4934304	4.576945	52.20707	.5496925	.8110660	10.58953
#1	11.06654	4.668949	-.080279	.0012126	2.166631	6.289387	.0138653
#2	11.00782	4.666228	-.076490	.0003830	2.163511	6.274458	.0117290
#3	11.09322	4.707524	-.073268	.0007881	2.185572	6.195037	.0114869

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-12DLX2 Acquired: 12/19/2024 20:14:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ30 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.728540	-.042975	.0413520
Stddev	.012063	.000545	.0005106
%RSD	.6978721	1.269197	1.234784
#1	1.733040	-.042347	.0419285
#2	1.737705	-.043250	.0409566
#3	1.714873	-.043329	.0411711

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.298	32450.01	2122.159	2251.359	2143.677
Stddev	4.078	263.07	22.719	24.853	3.463
%RSD	.1553430	.8107002	1.070579	1.103902	.1615342
#1	2629.170	32148.66	2105.141	2222.784	2144.271
#2	2625.683	32633.78	2113.377	2263.356	2146.805
#3	2621.041	32567.61	2147.959	2267.938	2139.956

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-13DLX2 Acquired: 12/19/2024 20:18:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ31 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5411323	-.114388	.3550734	.1151432	.0392550	108.5642	1.261468
Stddev	.0032091	.009645	.0009327	.0080704	.0026654	3.2170	.035815
%RSD	.5930248	8.431469	.2626893	7.008983	6.789938	2.963180	2.839133
#1	.5446954	-.103258	.3540545	.1059339	.0366991	104.8651	1.220286
#2	.5402318	-.119616	.3558852	.1209816	.0390479	110.7079	1.285334
#3	.5384697	-.120290	.3552805	.1185142	.0420178	110.1195	1.278784

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099378	.0054450	37.98947	.1142638	.1201556	.3098085	240.9187
Stddev	.0001805	.0001353	1.10188	.0008462	.0005171	.0169024	7.3427
%RSD	1.815865	2.485617	2.900486	.7405620	.4303280	5.455753	3.047793
#1	.0097307	.0055191	36.72472	.1148702	.1204598	.2902927	232.5119
#2	.0100612	.0052888	38.74206	.1132971	.1204483	.3197672	246.0756
#3	.0100216	.0055272	38.50162	.1146241	.1195585	.3193658	244.1686

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.902590	36.64741	.1283210	.0056742	1.060458	.4312470	1.052793
Stddev	.117227	1.10641	.0008300	.0026312	.572653	.0192867	.010443
%RSD	3.003826	3.019068	.6468483	46.37164	54.00051	4.472319	.9919304
#1	3.768050	35.41051	.1273637	.0026372	1.563522	.4100472	1.064200
#2	3.982763	37.54282	.1287593	.0071160	1.180580	.4477548	1.050478
#3	3.956957	36.98890	.1288401	.0072693	.437273	.4359389	1.043702

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.17746	4.185036	-.098095	.0001112	1.712666	7.732508	.0162707
Stddev	.33137	.010786	.005141	.0002101	.001481	.177627	.0008157
%RSD	2.721140	.2577204	5.240700	188.8313	.0864855	2.297150	5.013077
#1	11.79774	4.179582	-.101057	-.000073	1.713073	7.527506	.0160498
#2	12.40808	4.178067	-.092159	.000066	1.711024	7.829343	.0171741
#3	12.32657	4.197460	-.101070	.000340	1.713902	7.840675	.0155883

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-13DLX2 Acquired: 12/19/2024 20:18:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ31 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.568148	-.014765	.0559418
Stddev	.046689	.001326	.0038853
%RSD	2.977352	8.980724	6.945225
#1	1.516502	-.013265	.0537851
#2	1.607366	-.015779	.0604271
#3	1.580575	-.015252	.0536133

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2686.142	32940.32	2189.745	2293.010	2109.549
Stddev	13.502	42.84	50.816	5.374	8.930
%RSD	.5026468	.1300510	2.320633	.2343649	.4232949
#1	2701.708	32945.83	2248.393	2289.665	2119.859
#2	2679.113	32980.14	2158.812	2290.157	2104.540
#3	2677.605	32894.99	2162.030	2299.209	2104.248

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-14DLX2 Acquired: 12/19/2024 20:22:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ32 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8300066	-.108720	.5551772	.1103341	.0396770	86.07180	.9540055
Stddev	.0010111	.002356	.0083576	.0028793	.0011773	.13561	.0035761
%RSD	.1218141	2.167138	1.505392	2.609597	2.967234	.1575511	.3748491
#1	.8292387	-.110554	.5648187	.1070119	.0386748	85.96633	.9533078
#2	.8296291	-.109542	.5507167	.1118827	.0393826	86.02429	.9508297
#3	.8311522	-.106063	.5499961	.1121076	.0409735	86.22477	.9578790

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082740	.0066899	32.43886	.0959737	.0985417	.3127038	227.8921
Stddev	.0001831	.0001206	.11429	.0012730	.0008097	.0070460	.4738
%RSD	2.212426	1.802738	.3523174	1.326421	.8216413	2.253246	.2078901
#1	.0084278	.0067503	32.30692	.0971019	.0994119	.3099041	227.3996
#2	.0083228	.0067684	32.50252	.0962257	.0984025	.3074880	227.9319
#3	.0080715	.0065511	32.50714	.0945936	.0978106	.3207194	228.3447

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.779887	30.92563	.0942714	.0070379	1.332547	.3869506	1.650942
Stddev	.010185	.11147	.0008651	.0003005	.725510	.0108979	.031634
%RSD	.3663928	.3604534	.9177251	4.270352	54.44534	2.816352	1.916134
#1	2.771647	30.81345	.0952666	.0067494	.575125	.3813271	1.643928
#2	2.776740	30.92706	.0936994	.0070152	1.401259	.3995115	1.623404
#3	2.791275	31.03638	.0938481	.0073492	2.021256	.3800132	1.685495

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.09406	4.370388	-.091239	.0003254	4.355383	6.759474	.0184214
Stddev	.28826	.017805	.003378	.0004781	.022918	.062382	.0011326
%RSD	2.598372	.4074064	3.702643	146.9082	.5262022	.9228792	6.148283
#1	11.38663	4.388599	-.088244	-.000166	4.380228	6.769093	.0178565
#2	10.81030	4.369547	-.094901	.000789	4.350852	6.816488	.0176824
#3	11.08524	4.353018	-.090571	.000354	4.335069	6.692842	.0197254

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-14DLX2 Acquired: 12/19/2024 20:22:29 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ32 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.848215	-.044165	.0407767
Stddev	.001676	.000557	.0045736
%RSD	.0906657	1.261441	11.21608
#1	1.848244	-.043602	.0357044
#2	1.849877	-.044716	.0420395
#3	1.846526	-.044176	.0445862

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2592.340	31809.52	2112.349	2214.540	2103.909
Stddev	5.660	132.27	11.156	13.494	3.375
%RSD	.2183501	.4158036	.5281332	.6093546	.1604338
#1	2595.588	31917.23	2112.102	2228.297	2100.335
#2	2595.628	31849.44	2101.318	2214.000	2107.043
#3	2585.804	31661.89	2123.626	2201.324	2104.351

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-15DLX2 Acquired: 12/19/2024 20:26:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ33 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5142822	-.094809	.3679866	.0991051	.0339814	77.83644	.8395219
Stddev	.0034994	.002645	.0029581	.0072977	.0012270	1.73952	.0184012
%RSD	.6804508	2.789733	.8038488	7.363541	3.610928	2.234846	2.191866
#1	.5164656	-.094080	.3646866	.0942266	.0349605	76.96937	.8287935
#2	.5161351	-.097742	.3704000	.1074947	.0326049	79.83908	.8607694
#3	.5102459	-.092605	.3688731	.0955941	.0343787	76.70086	.8290028

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075182	.0041525	30.27262	.0849071	.0970111	.2317389	203.0223
Stddev	.0001957	.0000603	.65819	.0029164	.0006978	.0095072	5.0001
%RSD	2.602364	1.451369	2.174196	3.434825	.7193251	4.102554	2.462834
#1	.0074164	.0042085	30.03816	.0839216	.0969501	.2243149	200.6560
#2	.0077438	.0040887	31.01593	.0826112	.0977375	.2424544	208.7663
#3	.0073945	.0041604	29.76377	.0881886	.0963458	.2284472	199.6446

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.960688	29.67721	.0916415	.0069926	1.518727	.3580891	1.043298
Stddev	.065030	.67647	.0008239	.0021151	.514121	.0109995	.017090
%RSD	2.196432	2.279440	.8990535	30.24806	33.85212	3.071715	1.638093
#1	2.923295	29.26619	.0923616	.0053891	1.887068	.3519481	1.023660
#2	3.035778	30.45797	.0907430	.0093898	1.737750	.3707879	1.051425
#3	2.922992	29.30747	.0918199	.0061989	.931364	.3515312	1.054807

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.62215	3.856048	-.072600	.0008500	1.983648	6.047102	.0136232
Stddev	.54124	.016317	.001559	.0001420	.001970	.113474	.0006584
%RSD	4.656961	.4231529	2.147936	16.70827	.0993167	1.876501	4.832804
#1	11.32680	3.840512	-.072374	.0009327	1.985139	5.989368	.0136909
#2	12.24681	3.873047	-.074259	.0006860	1.984390	6.177834	.0142450
#3	11.29283	3.854585	-.071165	.0009312	1.981414	5.974104	.0129335

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-15DLX2 Acquired: 12/19/2024 20:26:18 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ33 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.619354	-.033062	.0376483
Stddev	.039613	.001519	.0047589
%RSD	2.446222	4.593262	12.64048
#1	1.599698	-.032697	.0407828
#2	1.664950	-.034730	.0321723
#3	1.593412	-.031759	.0399899

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2568.879	31870.96	2039.681	2194.606	2110.143
Stddev	14.143	255.35	34.197	18.573	13.309
%RSD	.5505486	.8011871	1.676604	.8462908	.6306939
#1	2583.207	32077.83	2055.477	2206.139	2121.689
#2	2554.929	31949.47	2000.441	2204.497	2095.588
#3	2568.501	31585.57	2063.125	2173.180	2113.152

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-16DLX2 Acquired: 12/19/2024 20:30:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ34 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7261170	-.110586	.4932681	.1188320	.0397762	91.25579	.8959041
Stddev	.0011307	.012426	.0040387	.0088319	.0041327	5.36951	.0535298
%RSD	.1557224	11.23654	.8187641	7.432281	10.38998	5.884019	5.974953
#1	.7248387	-.103459	.4934458	.1152525	.0396421	89.36592	.8750843
#2	.7265258	-.103364	.4891435	.1123517	.0357121	87.08674	.8559121
#3	.7269865	-.124934	.4972151	.1288918	.0439743	97.31472	.9567158

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085992	.0061734	34.71556	.0952281	.1076395	.2578571	235.4840
Stddev	.0003853	.0004256	2.09054	.0040615	.0006140	.0158626	14.4251
%RSD	4.480199	6.893502	6.021917	4.265000	.5704360	6.151713	6.125715
#1	.0085333	.0064061	34.03269	.0999157	.1075071	.2466361	230.5080
#2	.0082511	.0064318	33.05184	.0927586	.1083089	.2509301	224.2057
#3	.0090131	.0056822	37.06214	.0930101	.1071025	.2760051	251.7384

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.248069	35.49577	.1029192	.0107985	.8681338	.3982274	1.447494
Stddev	.189853	2.09919	.0003264	.0036963	.3024774	.0223896	.055872
%RSD	5.845112	5.913911	.3171142	34.22980	34.84226	5.622322	3.859932
#1	3.180592	34.91174	.1027175	.0084402	.5613714	.3898439	1.501502
#2	3.101172	33.75044	.1027442	.0088969	.8768942	.3812394	1.389928
#3	3.462444	37.82513	.1032957	.0150585	1.166136	.4235990	1.451052

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.19175	4.763335	-.077249	.0003959	3.867813	7.138151	.0254944
Stddev	1.10463	.012395	.005891	.0002981	.007653	.344143	.0018097
%RSD	8.373606	.2602262	7.625601	75.29272	.1978765	4.821172	7.098538
#1	12.85572	4.749110	-.083781	.0002182	3.859001	7.064348	.0239317
#2	12.29417	4.771817	-.072342	.0002294	3.871642	6.836898	.0250744
#3	14.42537	4.769078	-.075623	.0007400	3.872797	7.513208	.0274773

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-16DLX2 Acquired: 12/19/2024 20:30:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ34 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.900914	-.047376	.0464846
Stddev	.114951	.003303	.0032240
%RSD	6.047118	6.971252	6.935651
#1	1.861022	-.046905	.0459808
#2	1.811223	-.044334	.0435422
#3	2.030496	-.050889	.0499309

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2582.972	33409.12	2022.577	2305.638	2094.653
Stddev	5.192	1188.09	94.747	86.959	6.012
%RSD	.2010135	3.556182	4.684454	3.771592	.2870336
#1	2588.868	32118.51	2050.001	2210.960	2100.877
#2	2580.965	34457.28	2100.587	2381.943	2088.878
#3	2579.083	33651.57	1917.143	2324.010	2094.203

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV070 Acquired: 12/19/2024 20:33:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV070 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.369275	4.896389	25.25608	5.217519	5.278499	412.8064	10.30927
Stddev	.010026	.022350	.09610	.034064	.022155	1.5486	.02291
%RSD	.1867331	.4564631	.3804902	.6528847	.4197137	.3751357	.2222031
#1	5.359705	4.890624	25.17641	5.181440	5.256261	411.2094	10.28416
#2	5.379702	4.877487	25.22902	5.221991	5.278665	412.9084	10.31459
#3	5.368418	4.921057	25.36280	5.249127	5.300570	414.3015	10.32904

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5221840	2.537055	412.6849	15.59045	2.543276	15.30958	416.9612
Stddev	.0030873	.008433	1.8319	.07599	.012256	.05071	.4777
%RSD	.5912311	.3324113	.4438933	.4874330	.4818915	.3312361	.1145555
#1	.5186342	2.531266	410.7979	15.62198	2.535535	15.26807	416.5281
#2	.5242430	2.533168	412.8008	15.64560	2.536887	15.29456	417.4735
#3	.5236748	2.546731	414.4561	15.50377	2.557406	15.36610	416.8818

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.58237	414.3354	2.547841	1.296825	412.9068	2.555632	14.96075
Stddev	.01413	.3862	.010747	.008009	.3719	.029472	.12838
%RSD	.0906799	.0931990	.4217976	.6176154	.0900796	1.153230	.8581110
#1	15.56609	413.9393	2.540256	1.298324	412.8859	2.521600	15.06533
#2	15.59142	414.7108	2.543127	1.303978	413.2888	2.572585	14.99945
#3	15.58961	414.3560	2.560138	1.288171	412.5458	2.572710	14.81747

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	154.6996	5.067986	4.971497	4.930962	5.188213	4.911839	5.111920
Stddev	.5770	.021163	.037387	.022920	.020799	.025981	.019032
%RSD	.3729659	.4175854	.7520212	.4648233	.4008838	.5289554	.3722998
#1	154.0829	5.047706	4.928833	4.907757	5.180464	4.882666	5.095826
#2	154.7895	5.066319	4.998542	4.931543	5.172402	4.932488	5.107009
#3	155.2263	5.089933	4.987115	4.953587	5.211774	4.920362	5.132926

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV070 Acquired: 12/19/2024 20:33:57 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV070 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.166381	4.904794	5.239631
Stddev	.001285	.013410	.024673
%RSD	.0248803	.2734068	.4708992
#1	5.167847	4.889978	5.216901
#2	5.165848	4.908303	5.236121
#3	5.165447	4.916100	5.265872

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1998.535	26558.41	1860.263	1745.843	1747.855
Stddev	6.425	129.43	6.160	12.642	5.084
%RSD	.3214998	.4873417	.3311253	.7240939	.2908500
#1	2004.003	26410.27	1863.033	1736.195	1749.784
#2	2000.143	26615.36	1864.551	1741.179	1751.693
#3	1991.458	26649.61	1853.204	1760.153	1742.090

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB070 Acquired: 12/19/2024 20:37:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB070 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001531	.0004931	.0020976	-.001966	.0018058	.0100011
Stddev	.003451	.0003233	.0018692	.000837	.0018559	.0236916
%RSD	225.4117	65.55593	89.11190	42.55213	102.7728	236.8892
#1	.002357	.0004316	.0008713	-.001662	-.000212	.0267031
#2	-.002717	.0002050	.0011726	-.002912	.003440	-.017114
#3	-.004232	.0008427	.0042489	-.001324	.002189	.020414

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000728	-.000084	.0000307	-.022263	.0003387	-.000083
Stddev	.000131	.000072	.0001031	.007660	.0002843	.000317
%RSD	18.00501	86.15843	335.6515	34.40847	83.93872	381.5165
#1	-.000847	-.000094	.0001431	-.029022	.0004415	.000055
#2	-.000588	-.000007	-.000060	-.023825	.0000173	.000142
#3	-.000749	-.000150	.000009	-.013942	.0005572	-.000446

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005876	.0111599	.0020545	.0638623	-.000869	.0018011
Stddev	.008961	.0443429	.0008000	.0801067	.000954	.0008121
%RSD	152.4965	397.3415	38.94171	125.4365	109.7852	45.08932
#1	-.015641	-.028136	.0012870	.1468295	-.000199	.0008684
#2	-.003960	.059236	.0028836	.0577963	-.000447	.0021837
#3	.001972	.002380	.0019929	-.013039	-.001962	.0023512

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6367999	-.009249	-.005763	-.071170	-.000729	.0116269
Stddev	.3673033	.004627	.002387	.232208	.002093	.0015621
%RSD	57.67955	50.02619	41.42468	326.2741	286.9667	13.43539
#1	.7366976	-.004856	-.005983	-.211051	.000702	.0134273
#2	.9438204	-.008813	-.003273	.196876	-.003131	.0106304
#3	.2298818	-.014079	-.008033	-.199334	.000241	.0108231

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB070 Acquired: 12/19/2024 20:37:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB070 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002929	-.006992	-.001142	F -.009090	-.002544	.0003047
Stddev	.0003057	.001070	.001678	.001525	.002207	.0001614
%RSD	104.3977	15.30170	146.9835	16.77879	86.76762	52.97628
#1	.0005761	-.007068	-.002276	-.008325	-.004953	.0003073
#2	-.000031	-.008021	.000786	-.010847	-.002057	.0004648
#3	.000334	-.005886	-.001936	-.008099	-.000620	.0001420

Elem	Li6707
Units	ppm
Avg	.0045867
Stddev	.0066334
%RSD	144.6221
#1	.0122373
#2	.0010821
#3	.0004407

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2396.538	29490.29	1901.211	2035.436	2175.097
Stddev	3.486	117.88	15.330	16.565	2.804
%RSD	.1454510	.3997321	.8063318	.8138198	.1289279
#1	2392.573	29362.52	1897.243	2020.990	2172.288
#2	2399.120	29513.51	1888.255	2031.801	2175.108
#3	2397.920	29594.83	1918.135	2053.516	2177.897

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-17DLX2 Acquired: 12/19/2024 20:41:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ35 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8554110	-.103085	.5585175	.1107345	.0360033	79.50164	.8068875
Stddev	.0046637	.001075	.0018638	.0046139	.0019683	.14753	.0023981
%RSD	.5451990	1.042610	.3337035	4.166597	5.467152	.1855720	.2972071
#1	.8511460	-.102163	.5585765	.1111793	.0337453	79.44702	.8090773
#2	.8546962	-.104265	.5566250	.1059144	.0373576	79.38921	.8043248
#3	.8603908	-.102826	.5603512	.1151099	.0369069	79.66869	.8072603

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081395	.0070728	31.79015	.0957514	.1087159	.2646498	217.7865
Stddev	.0001072	.0002749	.11367	.0012020	.0010212	.0090499	1.0931
%RSD	1.316760	3.886711	.3575590	1.255368	.9393131	3.419568	.5019010
#1	.0082581	.0067729	31.83363	.0944023	.1075653	.2683740	217.8428
#2	.0080496	.0071326	31.66116	.0967084	.1090677	.2543321	216.6663
#3	.0081108	.0073128	31.87566	.0961436	.1095146	.2712434	218.8503

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.697792	31.58763	.0986054	.0064466	2.127792	.3823107	1.589058
Stddev	.010794	.17452	.0010888	.0010344	1.123378	.0047280	.016332
%RSD	.4001093	.5525101	1.104174	16.04540	52.79550	1.236695	1.027757
#1	2.700967	31.70545	.0990135	.0054202	.925065	.3866745	1.585852
#2	2.685766	31.38713	.0994312	.0074887	3.149947	.3829700	1.574566
#3	2.706642	31.67029	.0973715	.0064308	2.308364	.3772876	1.606754

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.81173	4.870949	-.085203	.0009323	3.614554	6.164115	.0147978
Stddev	.11285	.028299	.002488	.0003326	.030660	.028624	.0010613
%RSD	.9554008	.5809824	2.919740	35.67651	.8482289	.4643625	7.171884
#1	11.81509	4.838428	-.088048	.0009164	3.579274	6.193122	.0136033
#2	11.69725	4.889971	-.084122	.0006079	3.634750	6.163332	.0156323
#3	11.92287	4.884449	-.083438	.0012725	3.629637	6.135890	.0151577

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-17DLX2 Acquired: 12/19/2024 20:41:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ35 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.771726	-.046456	.0406478
Stddev	.011716	.000788	.0020160
%RSD	.6612745	1.696357	4.959646
#1	1.766424	-.046499	.0385992
#2	1.763598	-.045647	.0426295
#3	1.785156	-.047221	.0407148

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2607.673	32076.23	2098.626	2234.418	2131.244
Stddev	11.618	45.58	5.321	4.386	10.789
%RSD	.4455263	.1420860	.2535346	.1962891	.5062202
#1	2620.576	32082.91	2095.347	2233.848	2143.354
#2	2598.042	32027.69	2095.765	2239.061	2122.657
#3	2604.401	32118.10	2104.765	2230.345	2127.720

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-18DLX2 Acquired: 12/19/2024 20:45:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ36 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4667819	-.085009	.3171078	.0893781	.0319762	74.35284	1.113121
Stddev	.0014422	.004243	.0018085	.0028762	.0026926	.40442	.007108
%RSD	.3089605	4.990847	.5703267	3.217985	8.420720	.5439251	.6385327
#1	.4651886	-.085962	.3189579	.0872002	.0302592	73.90357	1.105195
#2	.4671593	-.088694	.3170216	.0926384	.0350795	74.46712	1.118928
#3	.4679979	-.080371	.3153439	.0882956	.0305899	74.68782	1.115241

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070221	.0041386	29.99333	.0933456	.0925542	.2256975	188.6584
Stddev	.0000157	.0000472	.17913	.0008060	.0002602	.0015278	1.4761
%RSD	.2237959	1.141002	.5972438	.8634693	.2811280	.6769244	.7824293
#1	.0070278	.0040907	29.78910	.0939595	.0923568	.2262989	187.1378
#2	.0070043	.0041851	30.06703	.0936445	.0924568	.2239605	190.0856
#3	.0070341	.0041401	30.12385	.0924329	.0928491	.2268331	188.7518

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.141157	28.98703	.0959216	.0048702	1.646776	.3284985	.9807931
Stddev	.028037	.12453	.0010881	.0006607	.643611	.0096325	.0071396
%RSD	.6770415	.4295950	1.134373	13.56667	39.08312	2.932295	.7279412
#1	4.108795	28.84422	.0964313	.0048890	2.388505	.3326627	.9843894
#2	4.156535	29.07301	.0966614	.0042003	1.316087	.3174844	.9854195
#3	4.158140	29.04385	.0946722	.0055213	1.235735	.3353484	.9725705

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.43471	3.943712	-.072718	.0018690	2.602214	6.420903	.0119084
Stddev	.17990	.009541	.002192	.0005460	.005259	.063031	.0008571
%RSD	1.573291	.2419413	3.014463	29.21135	.2020926	.9816572	7.197173
#1	11.23287	3.949337	-.072110	.0020193	2.607856	6.348127	.0119004
#2	11.57815	3.932696	-.075150	.0023240	2.597448	6.456460	.0110554
#3	11.49312	3.949105	-.070894	.0012636	2.601338	6.458121	.0127695

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-18DLX2 Acquired: 12/19/2024 20:45:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ36 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.785471	-.027068	.0393629
Stddev	.018708	.000364	.0014181
%RSD	1.047776	1.345552	3.602740
#1	1.767060	-.026712	.0384332
#2	1.804462	-.027440	.0409952
#3	1.784890	-.027053	.0386602

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2608.871	32038.18	2123.906	2229.934	2125.659
Stddev	4.688	143.45	23.819	15.061	5.464
%RSD	.1796900	.4477458	1.121488	.6754089	.2570472
#1	2610.253	32124.66	2151.410	2237.307	2127.039
#2	2612.714	31872.60	2110.158	2212.606	2130.301
#3	2603.648	32117.30	2110.149	2239.888	2119.638

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-19DLX2 Acquired: 12/19/2024 20:49:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ37 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2188916	-.059315	.3583431	.0749764	.0250541	73.02525	.8466705
Stddev	.0009433	.002255	.0024973	.0037970	.0030738	.40228	.0031913
%RSD	.4309555	3.801569	.6968985	5.064278	12.26883	.5508812	.3769258
#1	.2188485	-.057595	.3611481	.0752146	.0215406	72.76955	.8437789
#2	.2198557	-.061868	.3563615	.0710658	.0272466	72.81725	.8461380
#3	.2179706	-.058484	.3575195	.0786486	.0263752	73.48894	.8500946

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065929	.0045103	61.13492	.1094833	.1067045	.4121520	171.5013
Stddev	.0001798	.0000982	.24625	.0003531	.0006284	.0057489	.7157
%RSD	2.727599	2.176309	.4028033	.3225316	.5889085	1.394853	.4173103
#1	.0067201	.0046235	60.95963	.1098178	.1069753	.4186828	170.9976
#2	.0066715	.0044591	61.02867	.1091141	.1059861	.4078562	171.1858
#3	.0063872	.0044484	61.41646	.1095178	.1071521	.4099171	172.3205

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.527468	38.62416	.1194121	.0058515	.4982432	.2721661	.7869509
Stddev	.019581	.04396	.0010843	.0005366	1.431303	.0053320	.0076292
%RSD	.5551103	.1138050	.9080326	9.169689	287.2701	1.959096	.9694630
#1	3.520302	38.58767	.1182513	.0052840	.534961	.2661534	.7781512
#2	3.512480	38.61184	.1195863	.0059199	1.910835	.2740254	.7909912
#3	3.549624	38.67295	.1203988	.0063505	-.951066	.2763195	.7917102

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.46591	6.096767	-.052700	.0006913	2.498355	6.584693	.0118000
Stddev	.20036	.015730	.002513	.0001001	.010397	.024741	.0003604
%RSD	1.295508	.2580015	4.769148	14.47492	.4161657	.3757322	3.053796
#1	15.23525	6.095592	-.054755	.0007162	2.486484	6.559877	.0116482
#2	15.56564	6.081658	-.049898	.0007766	2.502740	6.584844	.0115404
#3	15.59683	6.113051	-.053446	.0005812	2.505842	6.609358	.0122114

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5172-19DLX2 Acquired: 12/19/2024 20:49:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ37 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.225344	.0669400	.0542308
Stddev	.007273	.0002712	.0024714
%RSD	.5935650	.4051883	4.557113
#1	1.218512	.0670281	.0516049
#2	1.224530	.0666356	.0545762
#3	1.232990	.0671562	.0565113

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.253	32162.87	2102.204	2225.506	2084.675
Stddev	9.707	118.04	14.356	2.707	6.698
%RSD	.3747544	.3670098	.6829083	.1216245	.3213106
#1	2589.631	32061.23	2108.670	2222.395	2084.364
#2	2600.256	32292.34	2112.191	2227.322	2091.524
#3	2580.872	32135.05	2085.752	2226.800	2078.138

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-01DLX2 Acquired: 12/19/2024 20:53:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ89 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6222503	-.094808	.5338519	.0943569	.0321412	78.05448	.7824189
Stddev	.0093080	.003701	.0032598	.0012689	.0014075	.45089	.0050628
%RSD	1.495860	3.903547	.6106168	1.344800	4.379051	.5776670	.6470770
#1	.6201830	-.096282	.5312201	.0954267	.0322462	77.83576	.7796494
#2	.6141498	-.090598	.5328372	.0946892	.0306841	78.57301	.7882623
#3	.6324181	-.097546	.5374984	.0929550	.0334932	77.75465	.7793450

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075649	.0051083	28.18383	.0891141	.0982174	.2882770	200.4688
Stddev	.0001508	.0000363	.21257	.0002874	.0005150	.0092968	.7590
%RSD	1.993133	.7098743	.7542181	.3225112	.5243789	3.224952	.3785923
#1	.0076355	.0050946	28.21242	.0893278	.0984318	.2989994	199.9419
#2	.0076674	.0050809	28.38066	.0887874	.0976298	.2824643	201.3388
#3	.0073917	.0051494	27.95841	.0892270	.0985906	.2833674	200.1258

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.998885	30.39666	.0924576	.0059830	1.197625	.3293820	1.273220
Stddev	.019344	.17355	.0005978	.0010339	.198643	.0116554	.028942
%RSD	.6450415	.5709528	.6465286	17.27992	16.58640	3.538581	2.273134
#1	2.992362	30.38004	.0926246	.0047980	.970055	.3406746	1.241824
#2	3.020647	30.57792	.0929540	.0067009	1.336268	.3173948	1.279001
#3	2.983645	30.23202	.0917940	.0064501	1.286552	.3300767	1.298836

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.84705	4.618752	-.073332	-.000176	2.327982	4.329290	.0109951
Stddev	.15601	.020363	.004592	.000479	.008085	.037689	.0017178
%RSD	1.050793	.4408828	6.262437	271.3059	.3472850	.8705673	15.62292
#1	14.74357	4.603591	-.069364	.000038	2.321018	4.345941	.0125740
#2	15.02650	4.610768	-.078363	-.000725	2.326080	4.355787	.0112454
#3	14.77108	4.641897	-.072271	.000158	2.336848	4.286143	.0091659

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-01DLX2 Acquired: 12/19/2024 20:53:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ89 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.695508	-.049684	.0420433
Stddev	.009903	.000451	.0038936
%RSD	.5840627	.9071704	9.260915
#1	1.696477	-.050199	.0398672
#2	1.704891	-.049486	.0465385
#3	1.685156	-.049366	.0397242

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2585.554	31882.51	2085.835	2199.412	2100.774
Stddev	4.419	97.67	21.734	5.051	6.106
%RSD	.1708980	.3063388	1.041986	.2296391	.2906344
#1	2585.517	31793.01	2073.719	2194.004	2103.915
#2	2589.990	31986.69	2072.859	2204.006	2104.670
#3	2581.153	31867.83	2110.926	2200.225	2093.738

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-02DLX2 Acquired: 12/19/2024 20:56:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ90 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.063009	-.100254	1.197984	.1090155	.0347684	80.39837	.9958524
Stddev	.005442	.000268	.006977	.0013860	.0030656	.25166	.0048417
%RSD	.5119531	.2675703	.5823805	1.271403	8.817101	.3130213	.4861865
#1	1.068515	-.100252	1.191600	.1091949	.0325245	80.16416	.9931165
#2	1.057633	-.099986	1.196922	.1075485	.0382613	80.36650	.9929979
#3	1.062877	-.100523	1.205431	.1103031	.0335194	80.66445	1.001443

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080596	.0097491	29.86232	.0919284	.1025697	.3862539	218.7293
Stddev	.0000562	.0000696	.14442	.0009567	.0008545	.0085234	.7998
%RSD	.6971394	.7138446	.4836238	1.040694	.8331152	2.206679	.3656526
#1	.0079996	.0096702	29.73528	.0913163	.1032721	.3765113	218.1051
#2	.0080682	.0097755	29.83229	.0914381	.1028186	.3899169	218.4521
#3	.0081110	.0098017	30.01940	.0930309	.1016183	.3923334	219.6309

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.184666	32.33333	.0945156	.0089512	.6090791	.3127768	2.357738
Stddev	.018150	.18479	.0014562	.0004497	.9643996	.0088519	.025081
%RSD	.5699110	.5715285	1.540710	5.023953	158.3373	2.830087	1.063759
#1	3.169807	32.14144	.0961971	.0087551	1.563331	.3226159	2.366826
#2	3.179295	32.34844	.0936786	.0086329	.629064	.3054593	2.329380
#3	3.204895	32.51010	.0936711	.0094657	-.365157	.3102553	2.377008

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.23665	6.987406	-.083505	.0007958	5.186266	4.611835	.0127701
Stddev	.07196	.008600	.002697	.0004017	.008650	.013370	.0011696
%RSD	.3946095	.1230795	3.229162	50.48105	.1667898	.2899170	9.158675
#1	18.19132	6.982013	-.085627	.0004245	5.181432	4.596468	.0122823
#2	18.31963	6.982880	-.084417	.0012223	5.181114	4.620805	.0141046
#3	18.19901	6.997324	-.080471	.0007407	5.196253	4.618233	.0119234

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-02DLX2 Acquired: 12/19/2024 20:56:59 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ90 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.626685	-.053397	.0444131
Stddev	.013238	.000440	.0029504
%RSD	.8137746	.8245341	6.643098
#1	1.612543	-.053064	.0463922
#2	1.628731	-.053897	.0410221
#3	1.638780	-.053231	.0458252

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2608.162	32192.63	2102.062	2232.011	2114.890
Stddev	2.722	151.34	7.037	6.363	3.470
%RSD	.1043606	.4701073	.3347550	.2850991	.1640868
#1	2611.110	32286.80	2110.034	2234.624	2118.870
#2	2605.744	32273.02	2096.716	2236.652	2113.304
#3	2607.633	32018.06	2099.437	2224.757	2112.496

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-03DLX2 Acquired: 12/19/2024 21:00:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ91 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7413293	-.102814	.5330677	.1103456	.0354322	88.01701	.9718940
Stddev	.0010966	.001962	.0023028	.0066346	.0009375	.08727	.0011363
%RSD	.1479224	1.907874	.4319994	6.012534	2.645825	.0991555	.1169153
#1	.7401734	-.100859	.5306091	.1106027	.0343699	88.10086	.9728254
#2	.7414597	-.104782	.5351742	.1168479	.0361434	88.02350	.9722286
#3	.7423549	-.102802	.5334197	.1035862	.0357834	87.92668	.9706280

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085414	.0058403	32.46972	.0948924	.1103089	.2767168	223.4884
Stddev	.0002551	.0000612	.11078	.0013760	.0005294	.0016300	.5716
%RSD	2.986407	1.048588	.3411853	1.450073	.4799296	.5890622	.2557683
#1	.0087867	.0059060	32.59716	.0942959	.1109201	.2772979	223.4688
#2	.0085599	.0058302	32.39639	.0939153	.1099962	.2779766	224.0695
#3	.0082776	.0057848	32.41561	.0964660	.1100103	.2748758	222.9268

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.123642	33.19885	.1011494	.0058436	1.005802	.3905098	1.461856
Stddev	.009160	.32451	.0004806	.0008893	.525830	.0058001	.021356
%RSD	.2932365	.9774800	.4751734	15.21826	52.27968	1.485255	1.460883
#1	3.134162	33.54801	.1016857	.0052049	.399146	.3945061	1.467974
#2	3.117434	33.14207	.1010051	.0068593	1.330887	.3838573	1.438108
#3	3.119330	32.90648	.1007575	.0054666	1.287375	.3931659	1.479484

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.23968	4.627830	-.089780	-.000070	5.494753	5.839882	.0118056
Stddev	.16907	.007100	.003307	.000309	.004680	.031098	.0012689
%RSD	1.276998	.1534099	3.683265	440.1235	.0851712	.5325134	10.74792
#1	13.27308	4.619679	-.087719	.000286	5.495539	5.859182	.0106512
#2	13.38955	4.631152	-.088027	-.000268	5.498990	5.804007	.0116013
#3	13.05640	4.632660	-.093594	-.000229	5.489730	5.856456	.0131642

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-03DLX2 Acquired: 12/19/2024 21:00:48 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ91 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.873299	-.061229	.0452310
Stddev	.005377	.000679	.0007121
%RSD	.2870369	1.109162	1.574309
#1	1.867621	-.061174	.0457958
#2	1.873962	-.061934	.0444311
#3	1.878314	-.060579	.0454661

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2628.089	32452.11	2138.801	2258.782	2106.922
Stddev	1.866	250.11	6.478	26.248	.724
%RSD	.0710059	.7707109	.3029018	1.162027	.0343428
#1	2630.206	32442.13	2136.699	2252.492	2106.210
#2	2626.683	32707.07	2133.635	2287.603	2107.657
#3	2627.377	32207.14	2146.070	2236.251	2106.897

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-04DLX2 Acquired: 12/19/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ92 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9665442	-.095850	1.066830	.1000569	.0365375	73.07299	.9289652
Stddev	.0048119	.005165	.001594	.0022963	.0015614	.49410	.0050739
%RSD	.4978439	5.389054	.1494255	2.294954	4.273455	.6761723	.5461859
#1	.9613938	-.094379	1.064992	.0978726	.0378021	72.88242	.9247938
#2	.9673138	-.091580	1.067668	.1024507	.0370182	73.63400	.9346137
#3	.9709248	-.101592	1.067831	.0998474	.0347923	72.70256	.9274880

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074950	.0089392	28.36804	.0791112	.0996806	.3481034	206.0470
Stddev	.0001107	.0001751	.07138	.0003762	.0001546	.0086568	1.5592
%RSD	1.476779	1.958509	.2516162	.4755612	.1551155	2.486844	.7567427
#1	.0073956	.0087955	28.41724	.0792356	.0995051	.3382090	205.6666
#2	.0076143	.0088880	28.40071	.0786886	.0997403	.3518197	207.7613
#3	.0074752	.0091342	28.28618	.0794095	.0997965	.3542815	204.7132

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.325938	30.35446	.0876101	.0074854	1.259511	.3068425	2.092768
Stddev	.030464	.31057	.0006132	.0004959	.158351	.0039492	.022963
%RSD	.9159452	1.023132	.6999524	6.624179	12.57241	1.287043	1.097255
#1	3.316257	30.32981	.0871532	.0074229	1.254089	.3023643	2.066311
#2	3.360066	30.67661	.0883071	.0070238	1.420504	.3098267	2.107513
#3	3.301492	30.05694	.0873701	.0080096	1.103941	.3083366	2.104482

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.97442	6.318838	-.079935	.0011669	4.593434	4.398369	.0136019
Stddev	.25275	.012567	.003797	.0002225	.017746	.027730	.0020713
%RSD	1.488985	.1988749	4.750280	19.07086	.3863349	.6304636	15.22805
#1	16.90080	6.310245	-.084165	.0012306	4.590727	4.408075	.0116515
#2	17.25580	6.313008	-.076820	.0009195	4.577197	4.419941	.0157759
#3	16.76665	6.333261	-.078821	.0013506	4.612378	4.367090	.0133782

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-04DLX2 Acquired: 12/19/2024 21:04:38 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ92 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.504847	-.055500	.0409090
Stddev	.011524	.000384	.0055280
%RSD	.7657653	.6917697	13.51281
#1	1.505428	-.055747	.0355571
#2	1.516069	-.055696	.0405724
#3	1.493044	-.055058	.0465976

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.282	31775.43	2100.717	2214.081	2112.334
Stddev	2.062	191.98	12.601	22.058	2.881
%RSD	.0796091	.6041682	.5998281	.9962520	.1363691
#1	2592.124	31992.61	2100.427	2237.856	2115.591
#2	2588.054	31628.39	2088.264	2210.107	2111.290
#3	2590.668	31705.27	2113.460	2194.281	2110.122

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-05DLX2 Acquired: 12/19/2024 21:08:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ93 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6486668	-.097759	.5683457	.1030756	.0359614	76.35926	.7526300
Stddev	.0031709	.005476	.0013342	.0029022	.0029419	.25862	.0023296
%RSD	.4888364	5.601508	.2347444	2.815603	8.180656	.3386890	.3095236
#1	.6486015	-.094331	.5693219	.1060996	.0392832	76.23564	.7509379
#2	.6518699	-.094872	.5668255	.1003128	.0336848	76.18565	.7516651
#3	.6455291	-.104074	.5688898	.1028145	.0349163	76.65650	.7552870

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076521	.0060997	32.20700	.0917675	.1136846	.2350393	207.8858
Stddev	.0001774	.0000365	.11731	.0006093	.0005055	.0035167	.2204
%RSD	2.318154	.5983380	.3642261	.6640086	.4446766	1.496201	.1059972
#1	.0076463	.0060778	32.20406	.0910836	.1139680	.2361762	207.7335
#2	.0078324	.0061418	32.09120	.0922526	.1131010	.2310948	207.7855
#3	.0074778	.0060794	32.32575	.0919664	.1139848	.2378469	208.1385

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.157932	32.54530	.1027310	.0069208	1.928211	.3407136	1.479682
Stddev	.003208	.26218	.0002732	.0003333	.432976	.0109868	.025382
%RSD	.1015778	.8055926	.2659311	4.815748	22.45480	3.224653	1.715363
#1	3.159873	32.82697	.1030288	.0070171	1.700799	.3522251	1.454843
#2	3.154229	32.50058	.1026720	.0065499	2.427509	.3395759	1.478630
#3	3.159693	32.30835	.1024921	.0071953	1.656326	.3303400	1.505574

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.41301	5.194167	-.082747	.0000134	3.589195	4.798158	.0111568
Stddev	.04678	.017114	.001890	.0000997	.012337	.011360	.0010685
%RSD	.3035134	.3294876	2.284295	742.1036	.3437251	.2367559	9.576874
#1	15.36280	5.196058	-.080708	-.000099	3.597847	4.809212	.0099338
#2	15.42087	5.176186	-.084441	.000049	3.575068	4.786515	.0116276
#3	15.45536	5.210258	-.083092	.000091	3.594671	4.798746	.0119091

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-05DLX2 Acquired: 12/19/2024 21:08:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ93 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.887817	-.062702	.0392190
Stddev	.003578	.000457	.0041669
%RSD	.1895305	.7281198	10.62460
#1	1.886696	-.062533	.0345043
#2	1.884934	-.062354	.0407450
#3	1.891821	-.063219	.0424078

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2593.682	31908.54	2101.225	2220.026	2113.979
Stddev	4.257	54.40	10.246	9.870	4.401
%RSD	.1641320	.1704779	.4876435	.4445972	.2081905
#1	2593.155	31968.45	2089.452	2225.847	2111.064
#2	2598.178	31894.93	2108.133	2225.601	2119.042
#3	2589.713	31862.24	2106.089	2208.630	2111.833

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-06DLX2 Acquired: 12/19/2024 21:12:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ94 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.334894	-.109670	1.080923	.1180271	.0434036	83.48982	.8155953
Stddev	.005454	.001252	.000931	.0034877	.0038467	.09292	.0022311
%RSD	.4085970	1.141409	.0860873	2.955026	8.862631	.1112929	.2735483
#1	1.331422	-.109164	1.080906	.1167955	.0410530	83.43118	.8148279
#2	1.332079	-.111095	1.080002	.1219635	.0413151	83.59695	.8181087
#3	1.341181	-.108750	1.081863	.1153222	.0478429	83.44133	.8138491

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082766	.0103639	33.81525	.0984059	.1040663	.3463059	235.3751
Stddev	.0002000	.0001311	.06893	.0024650	.0004364	.0111654	.5581
%RSD	2.415962	1.264646	.2038525	2.504943	.4193770	3.224153	.2370991
#1	.0080941	.0104208	33.78649	.1008057	.1044026	.3372821	234.8276
#2	.0082453	.0102140	33.89391	.0985313	.1042231	.3428432	235.9432
#3	.0084903	.0104568	33.76536	.0958805	.1035731	.3587925	235.3546

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.017930	35.15990	.1030380	.0087176	1.657768	.3664549	2.537458
Stddev	.005246	.04622	.0007830	.0009511	.970059	.0029395	.041319
%RSD	.1738331	.1314507	.7599541	10.91013	58.51595	.8021420	1.628355
#1	3.019366	35.20530	.1025085	.0077028	.560062	.3647065	2.562858
#2	3.022308	35.16148	.1039375	.0095885	2.399740	.3648096	2.559735
#3	3.012115	35.11291	.1026681	.0088616	2.013502	.3698486	2.489781

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.99772	6.782500	-.098375	.0009528	5.065174	5.296488	.0140935
Stddev	.12945	.007598	.002366	.0001795	.012797	.004865	.0004124
%RSD	.7615586	.1120193	2.405450	18.84188	.2526536	.0918566	2.925867
#1	16.90720	6.787724	-.098611	.0008514	5.079652	5.291482	.0141165
#2	17.14599	6.773784	-.100615	.0008470	5.060497	5.301199	.0136702
#3	16.93998	6.785993	-.095900	.0011601	5.055374	5.296782	.0144939

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-06DLX2 Acquired: 12/19/2024 21:12:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ94 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.934733	-.045211	.0471990
Stddev	.004403	.000326	.0018373
%RSD	.2275706	.7200092	3.892575
#1	1.931643	-.044860	.0492855
#2	1.939774	-.045271	.0464878
#3	1.932781	-.045502	.0458236

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2610.036	32199.49	2105.898	2239.951	2118.727
Stddev	13.014	129.48	5.141	9.090	6.490
%RSD	.4985991	.4021081	.2441346	.4058280	.3063372
#1	2595.684	32059.07	2105.191	2230.309	2111.544
#2	2621.067	32314.14	2111.356	2248.365	2124.171
#3	2613.356	32225.26	2101.147	2241.180	2120.465

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-07DLX2 Acquired: 12/19/2024 21:16:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ95 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6732172	-.084674	.5558932	.0930455	.0310949	73.60891	.6931305
Stddev	.0023335	.001631	.0019787	.0023980	.0025118	.22155	.0024457
%RSD	.3466225	1.926498	.3559538	2.577222	8.077790	.3009788	.3528407
#1	.6732035	-.085899	.5564900	.0941578	.0281952	73.52569	.6923815
#2	.6708905	-.085302	.5575049	.0946854	.0324918	73.44103	.6911470
#3	.6755575	-.082823	.5536848	.0902934	.0325977	73.86002	.6958631

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069243	.0063251	28.34192	.0868921	.0936455	.2404941	192.8783
Stddev	.0001722	.0000937	.13779	.0013425	.0000256	.0042450	.6494
%RSD	2.487180	1.482044	.4861778	1.545047	.0273491	1.765124	.3366691
#1	.0071226	.0064326	28.44222	.0869674	.0936213	.2357030	192.8414
#2	.0068122	.0062824	28.18480	.0881955	.0936427	.2437862	192.2481
#3	.0068381	.0062603	28.39873	.0855136	.0936723	.2419932	193.5453

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.087792	31.15882	.0901012	.0059513	1.699690	.3071659	1.565499
Stddev	.010886	.09723	.0007178	.0002753	.896580	.0141478	.024371
%RSD	.3525585	.3120566	.7966496	4.626397	52.74962	4.605903	1.556774
#1	3.080853	31.11520	.0909005	.0056664	2.357478	.3178217	1.575297
#2	3.082184	31.09103	.0895115	.0062159	2.063143	.2911142	1.537754
#3	3.100339	31.27022	.0898918	.0059715	.678451	.3125619	1.583447

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.84076	5.169470	-.075076	.0006459	2.056847	4.322057	.0094106
Stddev	.05003	.011680	.002157	.0002540	.004569	.023629	.0010883
%RSD	.3614987	.2259380	2.873014	39.32540	.2221445	.5467019	11.56465
#1	13.87286	5.177875	-.077491	.0005720	2.060725	4.349336	.0095383
#2	13.86632	5.156133	-.073342	.0004371	2.051810	4.307960	.0082641
#3	13.78311	5.174401	-.074394	.0009287	2.058005	4.308875	.0104294

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-07DLX2 Acquired: 12/19/2024 21:16:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ95 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.580445	-.050093	.0366456
Stddev	.001972	.000255	.0069411
%RSD	.1247886	.5085951	18.94126
#1	1.579633	-.050227	.0368283
#2	1.582694	-.049799	.0296149
#3	1.579009	-.050252	.0434936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2532.593	31203.76	2032.541	2167.368	2083.641
Stddev	4.815	94.72	.506	1.228	1.551
%RSD	.1901143	.3035593	.0248708	.0566499	.0744257
#1	2532.545	31263.75	2031.960	2167.060	2082.354
#2	2527.803	31094.56	2032.787	2166.323	2083.208
#3	2537.432	31252.96	2032.877	2168.720	2085.363

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-08DLX2 Acquired: 12/19/2024 21:19:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ96 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3620280	-.086820	.4726027	.0973978	.0308625	81.32684	.8503244
Stddev	.0023576	.003395	.0027495	.0020012	.0017822	1.13462	.0141964
%RSD	.6512176	3.910082	.5817789	2.054634	5.774602	1.395138	1.669529
#1	.3616539	-.090442	.4732879	.0976208	.0311205	82.62894	.8667137
#2	.3645503	-.086308	.4695754	.0992780	.0289654	80.55021	.8418461
#3	.3598798	-.083711	.4749448	.0952944	.0325017	80.80138	.8424134

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075013	.0051122	32.68668	.0838370	.1178812	.2275440	203.2862
Stddev	.0002507	.0001669	.54347	.0008930	.0009524	.0044700	2.7242
%RSD	3.342266	3.265030	1.662668	1.065136	.8079087	1.964436	1.340081
#1	.0077794	.0049195	33.31262	.0828692	.1169763	.2265110	206.3731
#2	.0074320	.0052052	32.33489	.0840127	.1177925	.2324401	201.2188
#3	.0072926	.0052120	32.41252	.0846290	.1188749	.2236810	202.2667

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.719886	37.46368	.1019836	.0060009	.8729874	.3255421	1.253735
Stddev	.061423	.62414	.0009063	.0014132	.7890771	.0069689	.027141
%RSD	1.301363	1.665999	.8886445	23.54914	90.38814	2.140715	2.164820
#1	4.790786	38.16124	.1014985	.0070655	.0375596	.3321585	1.238534
#2	4.686072	36.95801	.1030292	.0043976	1.605642	.3182674	1.285071
#3	4.682801	37.27180	.1014232	.0065396	.975760	.3262006	1.237602

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.64483	4.845472	-.072321	-.000294	2.363056	4.654484	.0092141
Stddev	.35802	.015404	.005207	.000278	.004028	.060815	.0010139
%RSD	1.920232	.3179017	7.199432	94.50045	.1704497	1.306587	11.00427
#1	19.04115	4.834056	-.067839	-.000220	2.358405	4.724048	.0101987
#2	18.34479	4.839369	-.071091	-.000061	2.365340	4.611387	.0081732
#3	18.54855	4.862993	-.078032	-.000601	2.365422	4.628018	.0092704

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-08DLX2 Acquired: 12/19/2024 21:19:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ96 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.028924	-.046272	.0506077
Stddev	.032112	.000609	.0019661
%RSD	1.582720	1.316057	3.884914
#1	2.065693	-.046970	.0506893
#2	2.006385	-.045849	.0486020
#3	2.014695	-.045997	.0525316

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2573.273	31672.64	2049.173	2192.014	2088.565
Stddev	7.240	31.91	27.567	7.427	2.875
%RSD	.2813726	.1007470	1.345274	.3388136	.1376313
#1	2574.376	31638.56	2017.749	2195.758	2087.891
#2	2579.898	31677.55	2069.283	2183.460	2091.717
#3	2565.544	31701.81	2060.486	2196.824	2086.087

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-09DLX2 Acquired: 12/19/2024 21:23:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ97 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2062623	-.093800	.1443279	.1047432	.0332858	86.65280	.5950081
Stddev	.0013687	.003530	.0034796	.0003581	.0002879	.14686	.0038230
%RSD	.6635828	3.763446	2.410890	.3418369	.8649127	.1694803	.6425128
#1	.2057303	-.096960	.1470152	.1045245	.0333842	86.82228	.5988267
#2	.2052394	-.094450	.1403974	.1045488	.0329617	86.56302	.5950171
#3	.2078171	-.089990	.1455710	.1051564	.0335117	86.57311	.5911807

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065975	.0020704	71.26690	.1550627	.1539054	.3837217	230.1494
Stddev	.0000539	.0000719	.10990	.0009327	.0005401	.0035442	.7695
%RSD	.8169101	3.470866	.1542110	.6014781	.3509473	.9236265	.3343543
#1	.0066357	.0021273	71.24826	.1540549	.1540006	.3798166	230.9297
#2	.0066210	.0019896	71.38493	.1552375	.1533239	.3846142	230.1273
#3	.0065359	.0020943	71.16751	.1558955	.1543915	.3867343	229.3911

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.465529	56.13373	.1616660	.0048160	1.800561	.4334634	.4298167
Stddev	.009717	.34718	.0005394	.0004054	.210453	.0035610	.0090903
%RSD	.2175989	.6184893	.3336710	8.417771	11.68820	.8215287	2.114917
#1	4.476092	56.18895	.1614736	.0050215	1.571811	.4313656	.4311749
#2	4.463524	55.76226	.1622753	.0050775	1.843904	.4375751	.4381514
#3	4.456971	56.45000	.1612492	.0043490	1.985968	.4314496	.4201237

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.432454	4.623789	-.091418	.0013383	.5713236	3.610998	.0127871
Stddev	.067535	.001941	.005060	.0004638	.0013609	.019407	.0014982
%RSD	.7159896	.0419873	5.535076	34.65144	.2382051	.5374402	11.71679
#1	9.462815	4.624087	-.087186	.0012723	.5725364	3.589453	.0110597
#2	9.479480	4.621716	-.097023	.0018315	.5715827	3.627108	.0135682
#3	9.355066	4.625565	-.090045	.0009111	.5698518	3.616434	.0137334

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-09DLX2 Acquired: 12/19/2024 21:23:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ97 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.611044	.0266019	.0626700
Stddev	.004251	.0003630	.0008235
%RSD	.2638660	1.364535	1.314076
#1	1.615932	.0265501	.0618944
#2	1.608997	.0269880	.0635343
#3	1.608204	.0262676	.0625812

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2489.124	30758.75	2013.499	2129.322	2066.774
Stddev	4.332	31.48	14.015	6.233	4.913
%RSD	.1740344	.1023362	.6960328	.2927029	.2377197
#1	2492.629	30792.01	2027.838	2124.842	2066.886
#2	2490.462	30729.42	1999.834	2126.685	2071.630
#3	2484.281	30754.84	2012.824	2136.440	2061.806

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-10DLX2 Acquired: 12/19/2024 21:27:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ98 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3158089	-.100400	.2268463	.1187870	.0380200	121.5261	1.282723
Stddev	.0010657	.006603	.0004910	.0040857	.0026667	.1689	.002165
%RSD	.3374339	6.576288	.2164326	3.439537	7.013984	.1390197	.1687705
#1	.3147445	-.098663	.2263245	.1147810	.0358673	121.3724	1.283444
#2	.3168758	-.094840	.2269153	.1186321	.0371896	121.4989	1.284435
#3	.3158063	-.107698	.2272991	.1229480	.0410031	121.7070	1.280289

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082310	.0052385	72.04652	.4276122	.3074366	.6679281	256.0034
Stddev	.0001196	.0001235	.13758	.0003855	.0004966	.0080820	.2773
%RSD	1.452409	2.358506	.1909626	.0901459	.1615296	1.210012	.1083124
#1	.0082698	.0051435	71.89046	.4272687	.3072672	.6603905	255.6854
#2	.0080969	.0053782	72.15028	.4275389	.3070468	.6764621	256.1304
#3	.0083264	.0051939	72.09882	.4280291	.3079957	.6669317	256.1944

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.448138	74.48551	.4309257	.0071285	2.602750	.5045239	1.015855
Stddev	.011070	.20292	.0015774	.0006052	.879685	.0062549	.011332
%RSD	.1486248	.2724297	.3660594	8.489400	33.79829	1.239766	1.115492
#1	7.445063	74.27160	.4292544	.0075796	1.627696	.5111276	1.027180
#2	7.438931	74.67528	.4311342	.0073652	3.336849	.5037554	1.015869
#3	7.460420	74.50965	.4323886	.0064408	2.843704	.4986887	1.004516

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.09157	9.581092	-.085097	.0000770	1.750507	5.063918	.0159101
Stddev	.07827	.031106	.003586	.0004442	.005638	.036765	.0008188
%RSD	.3895717	.3246618	4.213856	576.6140	.3221010	.7260242	5.146470
#1	20.00716	9.562667	-.084114	-.000275	1.749235	5.038815	.0151903
#2	20.10581	9.563603	-.082105	-.000070	1.745612	5.046821	.0168009
#3	20.16175	9.617007	-.089072	.000576	1.756672	5.106119	.0157392

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-10DLX2 Acquired: 12/19/2024 21:27:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ98 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8239987	.2339676	.0806889
Stddev	.0034273	.0008222	.0038594
%RSD	.4159402	.3514271	4.783128
#1	.8278791	.2344659	.0821603
#2	.8227318	.2330185	.0835962
#3	.8213851	.2344183	.0763102

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2587.500	31695.88	2130.003	2204.281	2039.167
Stddev	2.421	135.48	3.142	15.382	1.962
%RSD	.0935509	.4274381	.1475261	.6978234	.0962324
#1	2588.174	31568.70	2130.398	2191.494	2041.433
#2	2589.513	31680.57	2132.928	2199.999	2038.055
#3	2584.814	31838.36	2126.681	2221.350	2038.014

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-11DLX2 Acquired: 12/19/2024 21:31:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ99 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3828241	-.136523	.1547515	.1531994	.0539761	142.0913	.8587582
Stddev	.0027851	.000111	.0027137	.0040354	.0009547	.6758	.0040075
%RSD	.7275234	.0816398	1.753558	2.634078	1.768811	.4756274	.4666588
#1	.3824742	-.136440	.1558759	.1525470	.0528737	141.4522	.8541565
#2	.3857678	-.136650	.1516564	.1495299	.0545271	142.0229	.8606376
#3	.3802306	-.136478	.1567223	.1575212	.0545275	142.7987	.8614807

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085030	.0039969	66.71707	.5377399	.3521471	.7680622	317.4821
Stddev	.0001815	.0000666	.18994	.0010626	.0008339	.0022299	1.4746
%RSD	2.134681	1.666742	.2846883	.1976073	.2367892	.2903288	.4644526
#1	.0087022	.0040669	66.50100	.5369674	.3517455	.7675177	315.9458
#2	.0084595	.0039343	66.85765	.5373005	.3515902	.7661549	317.6144
#3	.0083471	.0039896	66.79257	.5389517	.3531058	.7705139	318.8860

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.866724	106.7644	.5120621	.0063761	1.902064	.7011006	.8368675
Stddev	.048910	.7299	.0013090	.0007126	.135110	.0072984	.0122770
%RSD	.6217360	.6836292	.2556252	11.17615	7.103334	1.040992	1.467022
#1	7.812588	106.2002	.5129968	.0059876	1.807514	.7013566	.8398077
#2	7.879857	106.5043	.5105661	.0059422	1.841868	.6936775	.8474075
#3	7.907727	107.5887	.5126234	.0071986	2.056809	.7082675	.8233874

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.86862	5.831981	-.120356	-.000484	1.099094	5.635246	.0209191
Stddev	.20252	.010277	.001504	.000416	.005156	.008777	.0009403
%RSD	1.133392	.1762117	1.249862	85.96276	.4690979	.1557586	4.495001
#1	17.67048	5.831128	-.118787	-.000957	1.094962	5.625113	.0217203
#2	17.86013	5.822158	-.121786	-.000174	1.097448	5.640127	.0211531
#3	18.07526	5.842658	-.120494	-.000321	1.104872	5.640498	.0198839

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-11DLX2 Acquired: 12/19/2024 21:31:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ99 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.536185	-.007373	.0949340
Stddev	.011447	.000530	.0023518
%RSD	.7451521	7.185168	2.477256
#1	1.523036	-.007946	.0935025
#2	1.541591	-.006901	.0976483
#3	1.543927	-.007271	.0936513

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2565.565	31577.02	2101.716	2194.252	2059.466
Stddev	4.635	96.17	10.481	10.076	2.790
%RSD	.1806513	.3045519	.4986655	.4592057	.1354888
#1	2567.588	31563.78	2106.232	2187.881	2060.151
#2	2568.844	31679.12	2109.182	2205.869	2061.850
#3	2560.263	31488.16	2089.735	2189.005	2056.396

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-12DLX2 Acquired: 12/19/2024 21:35:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1725550	-.066563	.3279329	.0793106	.0228245	81.24406	1.352774
Stddev	.0030992	.002181	.0024355	.0019447	.0022412	.07904	.001591
%RSD	1.796038	3.275891	.7426968	2.451947	9.819159	.0972834	.1175956
#1	.1709202	-.064918	.3266929	.0798756	.0234372	81.19263	1.350937
#2	.1761292	-.065736	.3263669	.0809103	.0203407	81.20449	1.353673
#3	.1706154	-.069037	.3307389	.0771461	.0246956	81.33507	1.353712

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073343	.0038582	70.39719	.1592350	.1228073	.4076703	185.5261
Stddev	.0001383	.0000631	.09273	.0002270	.0006772	.0024166	.2385
%RSD	1.886220	1.635658	.1317196	.1425328	.5514298	.5927823	.1285446
#1	.0071823	.0038124	70.39364	.1592560	.1221232	.4104381	185.8010
#2	.0073676	.0038320	70.30629	.1594508	.1228214	.4065936	185.4036
#3	.0074529	.0039302	70.49164	.1589983	.1234773	.4059791	185.3738

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.979078	41.95039	.2095541	.0051818	1.323644	.3246494	.5128526
Stddev	.010862	.07300	.0011656	.0005267	.651954	.0094159	.0073969
%RSD	.2181459	.1740055	.5562468	10.16443	49.25448	2.900328	1.442312
#1	4.979560	41.86719	.2093107	.0057807	.588949	.3238872	.5118413
#2	4.967983	41.98028	.2085294	.0047908	1.548824	.3156377	.5207031
#3	4.989690	42.00370	.2108222	.0049738	1.833159	.3344232	.5060133

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.598394	6.973207	-.071216	.0008287	.9263846	3.771009	.0123223
Stddev	.166749	.025803	.002979	.0001431	.0033814	.027515	.0007526
%RSD	1.939304	.3700237	4.183411	17.27337	.3650107	.7296539	6.107920
#1	8.576158	6.957237	-.068122	.0009838	.9251452	3.795387	.0123710
#2	8.775146	6.959409	-.071460	.0008006	.9237978	3.741174	.0130494
#3	8.443879	7.002975	-.074065	.0007016	.9302109	3.776466	.0115465

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-12DLX2 Acquired: 12/19/2024 21:35:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA0 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8583559	.2242122	.0645621
Stddev	.0021707	.0012887	.0031406
%RSD	.2528880	.5747601	4.864506
#1	.8603015	.2231500	.0612615
#2	.8560146	.2238408	.0675136
#3	.8587516	.2256458	.0649111

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2620.082	32143.15	2114.809	2234.585	2074.336
Stddev	2.568	9.99	12.597	1.894	1.719
%RSD	.0980242	.0310806	.5956482	.0847586	.0828624
#1	2617.478	32154.26	2102.415	2234.968	2072.859
#2	2620.155	32140.28	2127.599	2236.259	2076.223
#3	2622.613	32134.91	2114.412	2232.529	2073.927

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-13DLX2 Acquired: 12/19/2024 21:39:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1709394	-.083714	.1358815	.0945644	.0313867	80.51550	.4602712
Stddev	.0036183	.001467	.0022540	.0017304	.0014748	1.21901	.0084689
%RSD	2.116700	1.752320	1.658796	1.829922	4.698748	1.514001	1.839974
#1	.1714786	-.085403	.1335833	.0964882	.0316696	80.29605	.4585082
#2	.1742579	-.082969	.1380885	.0940699	.0326995	81.82932	.4694827
#3	.1670819	-.082768	.1359726	.0931350	.0297909	79.42113	.4528225

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058471	.0017845	68.97456	.1626760	.1576829	.3641022	209.8616
Stddev	.0001070	.0001110	.90475	.0010860	.0005016	.0065445	3.4978
%RSD	1.829182	6.222534	1.311712	.6675871	.3181004	1.797435	1.666709
#1	.0057259	.0017135	68.66175	.1621780	.1572461	.3582954	209.3828
#2	.0059283	.0019125	69.99421	.1619284	.1582307	.3628173	213.5742
#3	.0058870	.0017276	68.26774	.1639217	.1575719	.3711938	206.6279

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.970841	53.64054	.1688653	.0056169	1.674765	.4082602	.4063932
Stddev	.069667	1.00295	.0003249	.0006024	1.274797	.0086895	.0106856
%RSD	1.754468	1.869758	.1923992	10.72448	76.11796	2.128422	2.629367
#1	3.958809	53.41472	.1692081	.0061625	.232193	.3984962	.4010616
#2	4.045740	54.73715	.1685618	.0057178	2.649718	.4111412	.3994225
#3	3.907973	52.76975	.1688260	.0049705	2.142383	.4151434	.4186955

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.269137	4.221038	-.090974	.0006935	.3922967	3.975868	.0114638
Stddev	.086783	.010920	.001873	.0001906	.0038125	.068938	.0020980
%RSD	1.049477	.2587041	2.059190	27.48728	.9718517	1.733911	18.30141
#1	8.228292	4.226954	-.091557	.0005744	.3882314	3.972133	.0090601
#2	8.368806	4.227722	-.092487	.0005928	.3928662	4.046598	.0129271
#3	8.210313	4.208436	-.088878	.0009134	.3957924	3.908874	.0124043

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-13DLX2 Acquired: 12/19/2024 21:39:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA1 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.516582	-.028122	.0660612
Stddev	.030295	.000740	.0054497
%RSD	1.997588	2.631787	8.249545
#1	1.513880	-.028206	.0601860
#2	1.548138	-.028817	.0709511
#3	1.487729	-.027344	.0670463

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2479.707	30529.99	1993.045	2121.279	2066.728
Stddev	6.410	70.79	28.466	11.026	3.255
%RSD	.2585112	.2318746	1.428256	.5197915	.1575068
#1	2484.745	30538.25	1992.649	2109.911	2068.721
#2	2481.885	30596.29	1964.780	2131.928	2068.492
#3	2472.492	30455.43	2021.707	2121.997	2062.972

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-14DLX2 Acquired: 12/19/2024 21:42:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2736452	-.269309	.0927148	.2708062	.0928474	221.2261	.3143651
Stddev	.0044332	.000849	.0025708	.0023349	.0030627	.1195	.0007522
%RSD	1.620053	.3151383	2.772804	.8622110	3.298581	.0540383	.2392662
#1	.2729552	-.268333	.0952351	.2722432	.0963805	221.3580	.3152249
#2	.2695975	-.269873	.0928131	.2681120	.0909489	221.1250	.3138290
#3	.2783830	-.269721	.0900963	.2720632	.0912127	221.1952	.3140414

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0115919	.0024481	58.90826	.5384343	.5185552	1.204135	542.6439
Stddev	.0003640	.0002701	.11747	.0011931	.0004748	.004487	.0273
%RSD	3.140271	11.03393	.1994070	.2215830	.0915553	.3726023	.0050253
#1	.0115564	.0023748	59.03583	.5371986	.5191030	1.204411	542.6451
#2	.0112469	.0022222	58.88440	.5385248	.5182635	1.199516	542.6160
#3	.0119724	.0027473	58.80456	.5395796	.5182990	1.208477	542.6705

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.02949	162.4508	.5369292	.0102131	1.936955	1.368910	.3806413
Stddev	.01560	.4103	.0028150	.0022508	1.264239	.011606	.0054840
%RSD	.0973276	.2525895	.5242740	22.03855	65.26938	.8477934	1.440722
#1	16.04750	162.4008	.5386205	.0076244	3.058720	1.365626	.3839647
#2	16.02027	162.0678	.5336797	.0117080	2.185105	1.381804	.3836476
#3	16.02069	162.8839	.5384876	.0113069	.567041	1.359300	.3743116

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.859871	2.248796	-.210564	-.002306	.1342598	3.794710	.0456974
Stddev	.082379	.010886	.004834	.000148	.0037948	.013135	.0016219
%RSD	4.429275	.4840889	2.295696	6.434930	2.826491	.3461310	3.549171
#1	1.907587	2.249572	-.211585	-.002321	.1299936	3.786415	.0472575
#2	1.764748	2.237543	-.205301	-.002446	.1355267	3.787861	.0458146
#3	1.907278	2.259274	-.214805	-.002150	.1372592	3.809854	.0440201

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-14DLX2 Acquired: 12/19/2024 21:42:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA2 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	6.851181	-.298539	.0895241
Stddev	.010330	.000558	.0029276
%RSD	.1507760	.1867849	3.270181
#1	6.863097	-.299095	.0929038
#2	6.844771	-.298542	.0878964
#3	6.845674	-.297980	.0877720

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2491.685	30433.46	2037.012	2112.985	2009.421
Stddev	8.118	115.92	10.069	12.592	5.160
%RSD	.3258192	.3808837	.4942971	.5959336	.2567795
#1	2500.810	30354.19	2028.673	2104.381	2014.017
#2	2488.981	30566.50	2048.198	2127.437	2010.405
#3	2485.263	30379.69	2034.166	2107.136	2003.840

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-15DLX2 Acquired: 12/19/2024 21:46:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1815571	-.099730	.1730195	.1138804	.0334378	97.32755	.7148060
Stddev	.0061316	.001924	.0005572	.0031713	.0019789	.14299	.0011575
%RSD	3.377241	1.928978	.3220691	2.784742	5.918027	.1469135	.1619334
#1	.1826757	-.101696	.1724739	.1102646	.0350321	97.23442	.7140668
#2	.1749432	-.097851	.1729968	.1161899	.0340581	97.25605	.7142112
#3	.1870524	-.099643	.1735877	.1151867	.0312231	97.49219	.7161399

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0071282	.0038377	56.28146	.2248340	.1670268	.5440360	233.5204
Stddev	.0000995	.0001919	.07116	.0013890	.0010274	.0104303	.3759
%RSD	1.396169	4.999735	.1264420	.6177727	.6151105	1.917200	.1609881
#1	.0070673	.0036226	56.30036	.2237509	.1680046	.5403807	233.3251
#2	.0070743	.0039912	56.20275	.2263999	.1659561	.5359253	233.2823
#3	.0072430	.0038993	56.34126	.2243511	.1671197	.5558019	233.9538

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.025857	60.42851	.1973965	.0059511	1.872853	.4815467	.4301256
Stddev	.010788	.31072	.0014353	.0009391	.434847	.0048086	.0134426
%RSD	.2146537	.5142016	.7271091	15.77966	23.21842	.9985707	3.125279
#1	5.028023	60.66141	.1967267	.0048918	2.285052	.4761024	.4444374
#2	5.014150	60.07570	.1964185	.0062803	1.418438	.4833245	.4281738
#3	5.035397	60.54843	.1990442	.0066813	1.915069	.4852133	.4177656

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.79793	6.873858	-.077259	.0000066	.7040382	4.031112	.0134322
Stddev	.10181	.021948	.001929	.0003603	.0080801	.013237	.0008346
%RSD	.4670662	.3192937	2.496368	5461.526	1.147686	.3283809	6.213289
#1	21.84133	6.878049	-.075426	-.000395	.7082582	4.022890	.0138421
#2	21.87085	6.850118	-.077079	.000113	.6947218	4.046382	.0124719
#3	21.68161	6.893409	-.079271	.000302	.7091347	4.024064	.0139825

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-15DLX2 Acquired: 12/19/2024 21:46:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.067997	-.045072	.0572737
Stddev	.008776	.000235	.0003428
%RSD	.4243579	.5222185	.5985440
#1	2.076290	-.045021	.0568908
#2	2.058808	-.044866	.0573783
#3	2.068892	-.045329	.0575521

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2559.483	31664.33	2081.528	2182.461	2049.814
Stddev	5.905	102.91	5.548	7.832	3.603
%RSD	.2307240	.3250149	.2665263	.3588628	.1757672
#1	2560.600	31563.50	2076.891	2175.319	2050.613
#2	2553.099	31769.21	2080.020	2181.227	2045.878
#3	2564.750	31660.27	2087.674	2190.836	2052.949

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-16DLX2 Acquired: 12/19/2024 21:50:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2689970	-.103654	.2507272	.1119471	.0362274	98.60274	.7142861
Stddev	.0058329	.002868	.0035260	.0023947	.0022146	.62787	.0033477
%RSD	2.168393	2.766935	1.406319	2.139096	6.112920	.6367717	.4686817
#1	.2641010	-.101634	.2466928	.1092195	.0364813	97.90543	.7104709
#2	.2754506	-.106937	.2532199	.1129176	.0338968	99.12327	.7167327
#3	.2674394	-.102391	.2522688	.1137041	.0383041	98.77952	.7156547

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072539	.0060596	61.89766	.2291912	.1703293	.9635097	237.2147
Stddev	.0000567	.0001667	.27582	.0006470	.0004008	.0089080	1.8699
%RSD	.7809719	2.750716	.4456129	.2822856	.2352856	.9245334	.7882632
#1	.0073184	.0059430	61.58628	.2299301	.1705823	.9532439	235.0675
#2	.0072311	.0059853	62.11131	.2287261	.1698673	.9680849	238.4849
#3	.0072123	.0062505	61.99538	.2289176	.1705385	.9692003	238.0915

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.037566	59.86915	.2001066	.0072026	.9377282	.4909791	.5453295
Stddev	.034006	.44148	.0004828	.0012240	.7172162	.0109846	.0170391
%RSD	.6750519	.7374148	.2412790	16.99342	76.48444	2.237290	3.124551
#1	4.999793	59.37981	.1997852	.0060109	.8986643	.4898783	.5257222
#2	5.047159	60.23759	.2006618	.0071405	1.673678	.4805864	.5565453
#3	5.065745	59.99004	.1998728	.0084565	.240842	.5024727	.5537211

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.66452	5.929040	-.098465	-.000077	.6864400	4.230136	.0155675
Stddev	.07768	.019591	.005815	.000506	.0029457	.025915	.0010745
%RSD	.4161802	.3304189	5.905343	657.3304	.4291333	.6126175	6.902380
#1	18.57484	5.914157	-.104171	-.000567	.6893228	4.210726	.0148276
#2	18.70819	5.921727	-.098677	-.000109	.6865620	4.259564	.0168000
#3	18.71054	5.951235	-.092547	.000445	.6834351	4.220117	.0150749

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-16DLX2 Acquired: 12/19/2024 21:50:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.250222	-.030472	.0563200
Stddev	.017410	.000231	.0020657
%RSD	.7737076	.7575793	3.667717
#1	2.230444	-.030209	.0547520
#2	2.263229	-.030641	.0555473
#3	2.256994	-.030567	.0586606

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2587.292	31936.05	2104.815	2213.029	2072.296
Stddev	7.195	113.48	5.937	5.353	5.117
%RSD	.2780872	.3553266	.2820865	.2418689	.2469374
#1	2587.298	31824.28	2110.353	2207.453	2070.273
#2	2594.484	32051.16	2098.546	2218.126	2078.115
#3	2580.094	31932.71	2105.546	2213.508	2068.499

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-17DLX2 Acquired: 12/19/2024 21:54:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1847589	-.108876	.1318502	.1147388	.0420703	104.8801	.5242706
Stddev	.0047552	.002468	.0036650	.0012838	.0038609	.6690	.0034268
%RSD	2.573755	2.266947	2.779655	1.118852	9.177167	.6378695	.6536283
#1	.1815187	-.110130	.1276229	.1132614	.0386923	104.1102	.5205118
#2	.1902181	-.106032	.1337923	.1153726	.0412398	105.3198	.5272206
#3	.1825400	-.110465	.1341354	.1155824	.0462789	105.2103	.5250795

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069031	.0029071	55.70923	.2796320	.1853368	.5571332	249.7625
Stddev	.0001281	.0000786	.32136	.0008817	.0009358	.0036986	1.3487
%RSD	1.855926	2.702947	.5768461	.3153139	.5049176	.6638690	.5400070
#1	.0069098	.0028385	55.41295	.2786162	.1843183	.5603370	248.2087
#2	.0067718	.0028900	56.05085	.2800813	.1855333	.5579770	250.6305
#3	.0070277	.0029928	55.66389	.2801987	.1861587	.5530856	250.4484

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.205865	71.32687	.2226419	.0068745	1.613969	.5464451	.3619961
Stddev	.030199	.65177	.0004486	.0003321	1.051297	.0103796	.0133541
%RSD	.5800958	.9137817	.2014780	4.830222	65.13738	1.899480	3.689031
#1	5.171347	70.58024	.2227570	.0071051	2.741907	.5351796	.3691503
#2	5.227410	71.78208	.2221470	.0070246	.661359	.5556208	.3465891
#3	5.218838	71.61830	.2230218	.0064939	1.438641	.5485348	.3702488

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.72348	4.877573	-.103392	-.000255	.3969846	2.858715	.0179176
Stddev	.10625	.014735	.001768	.000331	.0035913	.025276	.0004202
%RSD	.8350386	.3020951	1.709692	130.0348	.9046444	.8841728	2.345220
#1	12.60898	4.869598	-.103911	-.000421	.4004331	2.830667	.0183127
#2	12.81888	4.868544	-.104841	-.000470	.3932658	2.879730	.0179640
#3	12.74258	4.894577	-.101422	.000127	.3972548	2.865746	.0174761

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-17DLX2 Acquired: 12/19/2024 21:54:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.342264	-.087052	.0544859
Stddev	.013316	.000479	.0015394
%RSD	.5685236	.5498304	2.825272
#1	2.327825	-.086587	.0562587
#2	2.354061	-.087543	.0534876
#3	2.344907	-.087025	.0537115

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2572.828	31698.62	2117.001	2202.078	2082.583
Stddev	14.921	63.25	14.496	5.087	9.106
%RSD	.5799320	.1995252	.6847340	.2310217	.4372634
#1	2586.106	31764.37	2133.501	2200.683	2088.878
#2	2575.696	31638.22	2106.318	2207.718	2086.729
#3	2556.681	31693.25	2111.182	2197.834	2072.141

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV071 Acquired: 12/19/2024 21:58:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV071 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.366447	5.043330	25.43048	5.197253	5.251281	413.4302	10.30470
Stddev	.021714	.034587	.10454	.024800	.022252	1.4247	.04276
%RSD	.4046283	.6857981	.4110801	.4771686	.4237437	.3446160	.4149323
#1	5.345160	5.014361	25.36640	5.184576	5.246368	411.8053	10.25762
#2	5.365618	5.034005	25.37392	5.181354	5.231895	414.0199	10.31535
#3	5.388565	5.081623	25.55111	5.225829	5.275578	414.4655	10.34112

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5253214	2.555807	419.7761	15.83016	2.558228	15.53034	418.8064
Stddev	.0023843	.011287	1.3236	.11505	.010970	.05210	1.0703
%RSD	.4538656	.4416207	.3153112	.7267769	.4288241	.3354858	.2555493
#1	.5271649	2.549983	418.4150	15.69745	2.552830	15.47394	417.6064
#2	.5261705	2.548622	419.8547	15.89139	2.551002	15.57667	419.1507
#3	.5226289	2.568817	421.0587	15.90165	2.570851	15.54042	419.6622

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.57810	416.2600	2.557638	1.309626	414.5252	2.565316	14.89140
Stddev	.05649	.6793	.012364	.007689	2.6566	.013353	.14512
%RSD	.3626461	.1631869	.4834216	.5871460	.6408669	.5205241	.9744931
#1	15.51306	415.5206	2.551812	1.300777	412.3827	2.552153	14.72401
#2	15.60625	416.4033	2.549263	1.313419	413.6952	2.564944	14.96855
#3	15.61498	416.8563	2.571839	1.314681	417.4976	2.578851	14.98165

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	155.4394	5.100352	4.959031	4.961607	5.193644	4.979339	5.155717
Stddev	.6088	.018839	.030523	.021085	.029020	.011175	.019582
%RSD	.3916327	.3693635	.6154981	.4249659	.5587636	.2244367	.3798162
#1	154.7419	5.090240	4.963920	4.945225	5.169760	4.987997	5.145889
#2	155.7120	5.088727	4.986815	4.954200	5.185231	4.983296	5.142995
#3	155.8641	5.122087	4.926359	4.985396	5.225942	4.966723	5.178267

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV071 Acquired: 12/19/2024 21:58:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV071 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.183369	4.910176	5.244729
Stddev	.024856	.019989	.019895
%RSD	.4795255	.4070986	.3793239
#1	5.161385	4.887797	5.224674
#2	5.178383	4.916467	5.245054
#3	5.210340	4.926262	5.264459

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1993.184	26344.15	1852.591	1739.583	1743.701
Stddev	2.777	176.40	4.726	12.665	4.004
%RSD	.1393126	.6696098	.2550915	.7280517	.2296395
#1	1992.042	26541.33	1848.147	1753.539	1742.094
#2	1996.349	26289.78	1852.072	1736.390	1748.259
#3	1991.160	26201.32	1857.555	1728.820	1740.750

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB071 Acquired: 12/19/2024 22:01:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB071 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007206	-.000807	.0003192	-.000376	.0003331	-.008701
Stddev	.002446	.002372	.0025238	.002310	.0023865	.028568
%RSD	33.94185	294.1279	790.7315	614.6713	716.4396	328.3423
#1	-.008019	.001159	.0030391	-.002419	-.001127	.018384
#2	-.004457	-.003442	-.000135	-.000840	-.000961	-.005936
#3	-.009142	-.000137	-.001947	.002131	.003087	-.038550

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000044	-.000071	.0000998	-.121082	-.000378	-.000383
Stddev	.002209	.000199	.0000730	.008967	.000788	.000183
%RSD	4990.238	279.0945	73.13631	7.406096	208.3226	47.63083
#1	-.000276	-.000150	.0001817	-.131433	-.000437	-.000574
#2	.002272	.000155	.0000757	-.116163	-.001136	-.000210
#3	-.002128	-.000219	.0000419	-.115651	.000437	-.000366

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003953	-.000877	.0009280	.1341635	.0000277	.0004349
Stddev	.003647	.059112	.0012172	.0374084	.0005969	.0009261
%RSD	92.26905	6741.049	131.1720	27.88272	2153.445	212.9460
#1	-.003049	.051091	.0006225	.0971487	-.000458	.0013179
#2	-.007967	.011463	.0022689	.1719535	-.000153	-.000529
#3	-.000843	-.065185	-.000107	.1333883	.000694	.000516

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.112090	.0043242	-.018299	.2745876	-.000233	.0102006
Stddev	.162263	.0071974	.010023	.0369867	.000342	.0013175
%RSD	14.59079	166.4465	54.77045	13.46990	146.7259	12.91547
#1	.925478	.0111320	-.022427	.2879002	-.000544	.0091268
#2	1.190868	.0050485	-.025599	.3030752	.000134	.0116707
#3	1.219924	-.003208	-.006872	.2327874	-.000290	.0098042

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB071 Acquired: 12/19/2024 22:01:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB071 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002596	-.007563	-.001169	F -.009336	-.000728	.0001575
Stddev	.0000780	.004386	.001016	.001616	.001868	.0001564
%RSD	30.04295	57.99915	86.87415	17.30658	256.5900	99.26568
#1	.0002372	-.009822	-.001030	-.008241	.001242	.0001178
#2	.0003463	-.010359	-.002248	-.008575	-.000951	.0003300
#3	.0001952	-.002507	-.000231	-.011192	-.002475	.0000248

Elem	Li6707
Units	ppm
Avg	.0143469
Stddev	.0051827
%RSD	36.12457
#1	.0088480
#2	.0150512
#3	.0191414

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2388.236	29458.83	1903.772	2041.581	2173.375
Stddev	11.971	94.58	10.852	1.377	10.248
%RSD	.5012499	.3210537	.5700147	.0674711	.4715339
#1	2390.210	29544.63	1896.485	2042.401	2174.154
#2	2399.098	29474.43	1898.587	2039.990	2183.211
#3	2375.401	29357.42	1916.243	2042.350	2162.759

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BL Acquired: 12/19/2024 22:05:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS619 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.005495	-.000519	-.001047	-.001700	.0021429	-.018472
Stddev	.003808	.003090	.000611	.003304	.0041359	.026012
%RSD	69.30064	594.8938	58.31354	194.3735	193.0074	140.8174
#1	-.001904	-.004088	-.001728	-.005125	-.002626	-.044836
#2	-.009488	.001291	-.000866	-.001440	.004308	-.017754
#3	-.005092	.001239	-.000548	.001466	.004747	.007173

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000960	.0000973	.0000361	-.064214	-.000142	.0002314
Stddev	.000423	.0000392	.0000171	.018849	.000563	.0007239
%RSD	44.11541	40.32858	47.24545	29.35303	396.6525	312.8894
#1	-.000801	.0000982	.0000509	-.044322	.000506	.0007395
#2	-.001440	.0000575	.0000175	-.066512	-.000414	.0005521
#3	-.000639	.0001360	.0000399	-.081808	-.000518	-.000597

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.007067	.0024597	.0003672	-.013946	-.000052	.0008173
Stddev	.012991	.0486215	.0011414	.047752	.000204	.0007863
%RSD	183.8233	1976.710	310.8553	342.4183	390.7447	96.21248
#1	-.019330	-.053061	.0006107	-.068450	-.000241	.0007809
#2	.006546	.023000	-.000876	.020532	-.000080	.0000498
#3	-.008417	.037440	.001367	.006082	.000164	.0016212

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8934886	-.003277	-.003895	.2035573	-.002243	.0009875
Stddev	1.158730	.011623	.007354	.1218347	.002018	.0009949
%RSD	129.6860	354.6646	188.8099	59.85278	89.96263	100.7521
#1	-.315190	-.006349	.003476	.0911216	-.000779	.0010943
#2	1.000860	.009573	-.003929	.3330032	-.004544	.0019247
#3	1.994795	-.013056	-.011232	.1865470	-.001406	-.000056

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BL Acquired: 12/19/2024 22:05:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS619 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002658	-.005838	-.001222	F -.009355	-.002248	.0002114
Stddev	.0000311	.000974	.001394	.001564	.005491	.0002205
%RSD	11.71778	16.68538	114.0197	16.71946	244.2287	104.3041
#1	.0002469	-.006475	.000295	-.008205	-.008529	-.000024
#2	.0003017	-.006322	-.001518	-.008723	.001645	.000245
#3	.0002488	-.004717	-.002445	-.011136	.000139	.000413

Elem	Li6707
Units	ppm
Avg	.0086599
Stddev	.0027323
%RSD	31.55076
#1	.0113059
#2	.0058488
#3	.0088251

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2385.872	29364.04	1904.543	2039.120	2169.526
Stddev	7.851	80.35	6.379	1.454	6.540
%RSD	.3290732	.2736230	.3349203	.0713190	.3014428
#1	2388.778	29454.50	1898.967	2037.447	2174.047
#2	2391.857	29300.97	1903.163	2039.832	2172.504
#3	2376.983	29336.66	1911.498	2040.081	2162.027

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BS Acquired: 12/19/2024 22:09:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS619 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0221316	.0513398	.0168835	.0569838	.1071930	.4047779
Stddev	.0024512	.0010914	.0014000	.0030931	.0017985	.0256334
%RSD	11.07578	2.125757	8.292210	5.427962	1.677809	6.332711
#1	.0214526	.0517640	.0171729	.0595057	.1086537	.4245102
#2	.0200915	.0501000	.0153614	.0535327	.1051842	.4140180
#3	.0248508	.0521553	.0181163	.0579131	.1077411	.3758055

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4115111	.0106054	.0097111	10.21566	.0212738	.1021494
Stddev	.0008915	.0001054	.0000700	.06325	.0002878	.0001115
%RSD	.2166417	.9938634	.7212743	.6191564	1.352656	.1091543
#1	.4110594	.0106121	.0096895	10.19997	.0211660	.1020259
#2	.4125380	.0104968	.0096544	10.28528	.0215999	.1022427
#3	.4109359	.0107072	.0097894	10.16173	.0210555	.1021796

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0475073	.2254566	.0328669	10.56013	.0769411	.0210307
Stddev	.0006621	.0031007	.0005795	.07817	.0002439	.0005952
%RSD	1.393713	1.375286	1.763057	.7402519	.3170568	2.830364
#1	.0470687	.2220359	.0332806	10.47054	.0766611	.0211994
#2	.0482690	.2262514	.0331154	10.59533	.0771080	.0215233
#3	.0471843	.2280824	.0322046	10.61451	.0770542	.0203693

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.63663	.1029088	.1093000	10.12473	.0169101	F .0016419
Stddev	.33559	.0041653	.0068845	.13263	.0005078	.0023604
%RSD	2.883950	4.047586	6.298741	1.309928	3.002712	143.7618
#1	11.95756	.1022300	.1067890	10.17278	.0168992	.0002955
#2	11.28808	.1073718	.1040235	10.22664	.0164078	.0043674
#3	11.66424	.0991246	.1170876	9.97478	.0174232	.0002628

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BS Acquired: 12/19/2024 22:09:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS619 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0194735	.1724580	F .5000067	F .0036211	.2068583	.2126524
Stddev	.0001784	.0057288	.0052447	.0006176	.0024282	.0006773
%RSD	.9162714	3.321855	1.048922	17.05494	1.173858	.3184755
#1	.0196643	.1659240	.5036424	.0042683	.2080847	.2128634
#2	.0194455	.1748313	.4939944	.0030381	.2040614	.2131990
#3	.0193108	.1766188	.5023831	.0035571	.2084287	.2118947

Elem	Li6707
Units	ppm
Avg	.0386652
Stddev	.0021769
%RSD	5.630109
#1	.0361531
#2	.0398442
#3	.0399983

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2378.650	29399.64	1895.559	2033.069	2157.234
Stddev	3.172	58.59	13.265	5.841	1.022
%RSD	.1333362	.1993031	.6998022	.2873131	.0473599
#1	2381.760	29463.37	1893.429	2038.144	2157.950
#2	2375.421	29348.09	1909.761	2034.380	2157.688
#3	2378.770	29387.46	1883.488	2026.684	2156.064

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BSD Acquired: 12/19/2024 22:13:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD619 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046400	.0284843	.0066906	.0320368	.0539628	.1637007	.2023631
Stddev	.0012651	.0026566	.0015633	.0004741	.0028313	.0225339	.0013736
%RSD	27.26535	9.326546	23.36526	1.479851	5.246810	13.76532	.6787641
#1	.0041705	.0261321	.0072457	.0315339	.0561342	.1392756	.2011196
#2	.0060728	.0313657	.0049256	.0321007	.0549936	.1836810	.2038375
#3	.0036768	.0279553	.0079007	.0324756	.0507604	.1681456	.2021323

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054335	.0048240	5.024236	.0101239	.0511315	.0189476	.1035124
Stddev	.0000761	.0000398	.057214	.0006822	.0000778	.0039855	.0048591
%RSD	1.400962	.8255764	1.138756	6.738400	.1521190	21.03420	4.694172
#1	.0055065	.0048501	5.024144	.0102720	.0511200	.0220171	.0981168
#2	.0054394	.0047782	5.081496	.0093798	.0510602	.0203824	.1048774
#3	.0053546	.0048438	4.967069	.0107199	.0512145	.0144434	.1075429

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0171300	5.378207	.0382226	.0107043	5.908413	.0541236	.0468515
Stddev	.0016830	.069160	.0002596	.0013100	1.101744	.0160601	.0025579
%RSD	9.824905	1.285934	.6791159	12.23805	18.64705	29.67311	5.459678
#1	.0158968	5.408479	.0384722	.0097730	6.563106	.0399987	.0450684
#2	.0164458	5.299072	.0379541	.0101377	4.636411	.0507796	.0497823
#3	.0190473	5.427070	.0382417	.0122022	6.525722	.0715925	.0457039

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.108178	.0084147	-.003883	.0093367	.0787031	.2455151	-.003411
Stddev	.074159	.0018432	.000248	.0006968	.0008009	.0010123	.000362
%RSD	1.451775	21.90439	6.383154	7.463264	1.017576	.4123122	10.61853
#1	5.052899	.0080389	-.004049	.0100824	.0779708	.2456334	-.003822
#2	5.192455	.0067883	-.004001	.0092256	.0795583	.2464631	-.003274
#3	5.079181	.0104168	-.003598	.0087022	.0785802	.2444489	-.003137

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165619BSD Acquired: 12/19/2024 22:13:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD619 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1016206	.1053829	.0216648
Stddev	.0029285	.0003933	.0018475
%RSD	2.881754	.3732393	8.527825
#1	.1035704	.1053820	.0229221
#2	.0982531	.1057766	.0225288
#3	.1030384	.1049900	.0195436

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2367.358	29509.71	1887.482	2030.608	2164.416
Stddev	3.170	11.49	10.978	2.420	3.410
%RSD	.1339067	.0389495	.5816266	.1191966	.1575308
#1	2370.674	29513.17	1881.166	2032.245	2165.664
#2	2367.043	29519.07	1881.122	2031.752	2167.026
#3	2364.357	29496.88	1900.158	2027.828	2160.558

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BL Acquired: 12/19/2024 22:17:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS604 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001702	-.002323	-.004997	-.003107	.0004887	.1123053
Stddev	.000790	.004176	.002601	.002928	.0006200	.0228649
%RSD	46.41450	179.7859	52.06007	94.22303	126.8781	20.35959
#1	-.002163	.000190	-.006550	-.000408	.0001850	.0909380
#2	-.002154	-.000015	-.001994	-.002693	.0012020	.1364196
#3	-.000790	-.007143	-.006448	-.006219	.0000790	.1095581

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001646	-.000081	.0000443	-.009854	-.000463	.0002822
Stddev	.001498	.000093	.0000898	.027984	.000419	.0000768
%RSD	91.04176	114.1067	202.6443	283.9932	90.53506	27.20642
#1	-.000802	.000004	.0000805	.007910	-.000898	.0002166
#2	-.003376	-.000180	.0001105	.004640	-.000062	.0003667
#3	-.000760	-.000068	-.000058	-.042112	-.000429	.0002634

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001530	.0498668	.0138556	.0384303	-.000313	-.000025
Stddev	.005049	.0171425	.0021086	.0922669	.000279	.000716
%RSD	330.0470	34.37656	15.21844	240.0886	89.31555	2917.942
#1	.001454	.0497507	.0118225	-.012875	-.000550	.000327
#2	-.007360	.0327826	.0160324	.144947	-.000382	.000448
#3	.001317	.0670670	.0137118	-.016781	-.000005	-.000848

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.241169	-.002986	-.006822	.0348922	.0023140	-.003750
Stddev	.544606	.004804	.009084	.1035153	.0023343	.002939
%RSD	43.87847	160.8606	133.1539	296.6718	100.8781	78.38642
#1	1.607736	-.002496	-.009350	.1395377	.0040784	-.006114
#2	.615373	.001553	.003258	.0325935	-.000333	-.004676
#3	1.500399	-.008016	-.014375	-.067455	.003197	-.000459

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BL Acquired: 12/19/2024 22:17:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS604 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000197	.0125185	.0003214	F -.009666	-.002291	-.000034
Stddev	.000291	.0037389	.0011322	.000466	.003185	.000256
%RSD	147.7536	29.86677	352.2898	4.817990	139.0468	764.1324
#1	-.000517	.0118657	-.000831	-.009628	-.003029	.000258
#2	-.000123	.0091489	.000363	-.009221	-.005042	-.000134
#3	.000050	.0165407	.001432	-.010150	.001199	-.000224

Elem	Li6707
Units	ppm
Avg	.0060530
Stddev	.0049380
%RSD	81.57903
#1	.0004309
#2	.0096871
#3	.0080412

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2374.915	29386.83	1895.969	2025.254	2163.460
Stddev	3.257	56.08	4.645	3.811	1.666
%RSD	.1371626	.1908461	.2450077	.1881647	.0769912
#1	2378.637	29322.12	1900.785	2022.061	2165.237
#2	2373.521	29421.36	1895.605	2024.229	2161.934
#3	2372.586	29417.01	1891.516	2029.473	2163.210

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BS Acquired: 12/19/2024 22:21:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS604 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226592	.0545318	.0164037	.0590517	.1087292	.4445028
Stddev	.0013669	.0032903	.0023412	.0017385	.0010911	.0247043
%RSD	6.032364	6.033785	14.27264	2.944051	1.003522	5.557735
#1	.0227972	.0577125	.0170554	.0570896	.1076585	.4699121
#2	.0212285	.0547410	.0138056	.0604003	.1098396	.4430263
#3	.0239518	.0511419	.0183500	.0596652	.1086893	.4205698

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4114218	.0106908	.0099340	10.27435	.0209235	.1038064
Stddev	.0077479	.0001951	.0000635	.17314	.0002806	.0004679
%RSD	1.883209	1.825244	.6391778	1.685153	1.341280	.4507776
#1	.4144747	.0106282	.0099598	10.34290	.0206003	.1035707
#2	.4026125	.0105346	.0099805	10.07743	.0210636	.1035031
#3	.4171782	.0109095	.0098617	10.40272	.0211064	.1043453

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0411977	.2347580	.0341202	10.71741	.0786699	.0207627
Stddev	.0062418	.0373605	.0013643	.13937	.0002691	.0006685
%RSD	15.15096	15.91448	3.998365	1.300370	.3420805	3.219722
#1	.0463315	.2768937	.0332566	10.80332	.0789794	.0200736
#2	.0430117	.2217051	.0356930	10.55661	.0785389	.0208059
#3	.0342497	.2056751	.0334111	10.79230	.0784913	.0214085

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.65427	.1034001	.1054684	10.01462	.0203299	F -.004043
Stddev	1.34524	.0011263	.0145685	.33923	.0031271	.000204
%RSD	11.54288	1.089266	13.81318	3.387300	15.38184	5.047760
#1	12.84605	.1034072	.1154822	10.24664	.0205453	-.003826
#2	10.19559	.1045229	.1121677	9.62530	.0233438	-.004071
#3	11.92118	.1022703	.0887553	10.17193	.0171007	-.004231

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BS Acquired: 12/19/2024 22:21:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS604 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196415	.1759796	F .5021209	F .0034047	.2029920	.2123172
Stddev	.0002464	.0026036	.0081723	.0005490	.0042051	.0035479
%RSD	1.254345	1.479501	1.627559	16.12495	2.071541	1.671038
#1	.0193897	.1762325	.5080841	.0036667	.2075747	.2137703
#2	.0196528	.1784476	.4928055	.0037735	.1993108	.2082734
#3	.0198821	.1732588	.5054731	.0027737	.2020906	.2149078

Elem	Li6707
Units	ppm
Avg	.0370098
Stddev	.0034901
%RSD	9.430090
#1	.0380011
#2	.0331313
#3	.0398969

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2384.547	29285.26	1922.489	2028.344	2158.637
Stddev	7.540	338.24	33.311	23.965	6.687
%RSD	.3162053	1.154974	1.732713	1.181504	.3097609
#1	2381.167	29419.47	1902.626	2036.263	2158.628
#2	2393.186	28900.51	1960.947	2001.422	2165.329
#3	2379.289	29535.79	1903.895	2047.348	2151.955

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BSD Acquired: 12/19/2024 22:25:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD604 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067780	.0279240	.0060829	.0288315	.0510559	.1862080	.2058572
Stddev	.0039521	.0040789	.0018507	.0013410	.0007896	.0323698	.0018996
%RSD	58.30775	14.60711	30.42444	4.651211	1.546470	17.38368	.9227568
#1	.0034907	.0238573	.0061765	.0303525	.0519092	.2233991	.2042014
#2	.0111629	.0320150	.0078850	.0283222	.0509072	.1708410	.2079310
#3	.0056804	.0278996	.0041872	.0278198	.0503512	.1643840	.2054393

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054130	.0048878	5.106953	.0098793	.0514467	.0179661	.1084719
Stddev	.0001475	.0001128	.035199	.0004751	.0004502	.0024826	.0079728
%RSD	2.724601	2.306967	.6892390	4.808984	.8750865	13.81847	7.350063
#1	.0055321	.0049977	5.110710	.0094073	.0509685	.0151581	.1060767
#2	.0052480	.0048934	5.070027	.0103574	.0518624	.0198702	.1019714
#3	.0054588	.0047723	5.140124	.0098733	.0515093	.0188699	.1173677

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0170774	5.355070	.0384648	.0107938	6.274681	.0404869	.0605521
Stddev	.0001998	.125892	.0009539	.0011581	1.008710	.0072746	.0198545
%RSD	1.170072	2.350891	2.479836	10.72967	16.07587	17.96777	32.78916
#1	.0168560	5.298262	.0384759	.0099122	5.335674	.0387764	.0408745
#2	.0171316	5.499355	.0375054	.0121054	6.147366	.0342199	.0805789
#3	.0172445	5.267594	.0394130	.0103636	7.341005	.0484643	.0602029

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.953123	.0089910	-.003812	.0099446	.0857437	.2483217	-.002783
Stddev	.056405	.0014880	.002678	.0002402	.0040524	.0018493	.000915
%RSD	1.138787	16.54993	70.26249	2.415113	4.726132	.7446983	32.86424
#1	4.896308	.0074302	-.005711	.0101271	.0810649	.2464624	-.003158
#2	5.009110	.0091492	-.004976	.0096725	.0880215	.2483419	-.003450
#3	4.953950	.0103936	-.000748	.0100341	.0881446	.2501607	-.001740

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165604BSD Acquired: 12/19/2024 22:25:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD604 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0978237	.1056627	.0210523
Stddev	.0026308	.0007232	.0007484
%RSD	2.689360	.6844782	3.554777
#1	.0960631	.1048284	.0206474
#2	.0965600	.1060474	.0219159
#3	.1008479	.1061122	.0205936

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2395.387	29529.13	1924.305	2050.391	2184.914
Stddev	4.534	90.27	8.649	15.439	1.766
%RSD	.1892871	.3056863	.4494385	.7529790	.0808477
#1	2395.566	29560.59	1928.421	2056.760	2184.385
#2	2399.829	29427.34	1914.367	2032.786	2186.884
#3	2390.766	29599.45	1930.128	2061.626	2183.472

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BL Acquired: 12/19/2024 22:29:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS656 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002075	.0002590	-.004717	.0004355	.0010617	-.004305
Stddev	.004084	.0035015	.001083	.0002266	.0029880	.028404
%RSD	196.7695	1352.134	22.96770	52.02660	281.4470	659.7878
#1	-.003721	-.001663	-.005736	.0001763	-.002055	-.015110
#2	-.005080	.004300	-.004837	.0005961	.001339	.027916
#3	.002574	-.001861	-.003579	.0005342	.003901	-.025720

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000346	.0000672	-.000079	-.020588	-.000031	.0002196
Stddev	.000983	.0001165	.000073	.006744	.000970	.0001556
%RSD	284.0402	173.4545	92.94202	32.75611	3162.603	70.83541
#1	.000559	-.000063	-.000037	-.015103	.000229	.0000635
#2	-.000206	.000103	-.000037	-.018544	.000783	.0002207
#3	-.001392	.000162	-.000163	-.028117	-.001104	.0003746

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004550	.0153023	.0015425	-.028504	-.000609	.0009490
Stddev	.006741	.0360027	.0003467	.043512	.000588	.0003568
%RSD	148.1569	235.2772	22.47944	152.6507	96.54573	37.60095
#1	.001877	.0429529	.0015171	-.078584	-.000218	.0013510
#2	-.011567	.0283614	.0019012	.000041	-.000324	.0008268
#3	-.003960	-.025408	.0012091	-.006969	-.001286	.0006694

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0934063	-.003383	.0001197	.3129813	-.000086	-.006081
Stddev	.5597076	.004616	.0087662	.0647478	.001940	.002333
%RSD	599.2180	136.4480	7322.961	20.68742	2247.277	38.36204
#1	.7288049	-.001290	-.001743	.3344916	-.001735	-.007458
#2	-.326636	-.008675	.009667	.3642363	-.000575	-.007397
#3	-.121950	-.000185	-.007566	.2402161	.002051	-.003387

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BL Acquired: 12/19/2024 22:29:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS656 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000962	-.005085	-.000954	F -.009198	.0001114	.0001081
Stddev	.0002578	.002152	.000688	.000163	.0024782	.0001419
%RSD	267.8996	42.31447	72.08268	1.767775	2224.117	131.2886
#1	.0002278	-.007070	-.001615	-.009024	.0005671	.0001500
#2	.0002616	-.005389	-.001004	-.009346	.0023301	-.000050
#3	-.000201	-.002798	-.000243	-.009224	-.002563	.000224

Elem	Li6707
Units	ppm
Avg	.0029773
Stddev	.0052174
%RSD	175.2398
#1	.0007839
#2	.0089333
#3	-.000785

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2394.079	29546.73	1911.339	2039.633	2174.141
Stddev	3.097	79.62	3.289	3.681	5.254
%RSD	.1293452	.2694834	.1720620	.1804942	.2416708
#1	2396.521	29504.19	1907.743	2037.958	2175.167
#2	2390.596	29638.59	1912.078	2043.854	2168.450
#3	2395.120	29497.41	1914.195	2037.086	2178.807

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BS Acquired: 12/19/2024 22:33:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS656 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214295	.0559595	.0167312	.0573935	.1048227	.4121603
Stddev	.0010261	.0045626	.0030495	.0030907	.0019450	.0139956
%RSD	4.788193	8.153359	18.22608	5.385161	1.855472	3.395678
#1	.0217941	.0511098	.0136526	.0545426	.1026066	.4191484
#2	.0202709	.0566020	.0197506	.0569597	.1056147	.3960467
#3	.0222234	.0601668	.0167905	.0606782	.1062466	.4212857

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4133084	.0106468	.0098611	10.27186	.0206485	.1032595
Stddev	.0002914	.0000495	.0000960	.13265	.0004532	.0005593
%RSD	.0705140	.4648215	.9732097	1.291353	2.194699	.5416805
#1	.4134098	.0107035	.0099343	10.19786	.0209350	.1039011
#2	.4135357	.0106123	.0097524	10.42499	.0208845	.1028746
#3	.4129799	.0106246	.0098964	10.19272	.0201261	.1030028

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492663	.1852591	.0339015	10.60266	.0775179	.0218091
Stddev	.0066872	.0095101	.0021085	.12658	.0005695	.0003842
%RSD	13.57365	5.133429	6.219604	1.193885	.7346363	1.761540
#1	.0475848	.1823100	.0315143	10.52384	.0781487	.0221728
#2	.0435803	.1958944	.0346807	10.74868	.0773632	.0218471
#3	.0566338	.1775728	.0355096	10.53548	.0770417	.0214073

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.46652	.1066260	.1008218	9.982608	.0157000	F -.006447
Stddev	.72795	.0057456	.0035946	.138001	.0004727	.002620
%RSD	6.348511	5.388530	3.565251	1.382410	3.010991	40.63693
#1	12.12165	.1040809	.0997951	9.829826	.0155005	-.003577
#2	11.59505	.1132046	.1048180	10.01979	.0162398	-.007053
#3	10.68287	.1025926	.0978523	10.09821	.0153597	-.008710

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BS Acquired: 12/19/2024 22:33:52 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS656 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193590	.1754747	F .4985926	F .0057697	.2029823	.2130988
Stddev	.0003116	.0055644	.0026355	.0014418	.0024830	.0007097
%RSD	1.609475	3.171053	.5285940	24.98843	1.223242	.3330420
#1	.0190287	.1690645	.5008595	.0073862	.2012471	.2124473
#2	.0196476	.1782994	.4992174	.0046165	.2018733	.2138551
#3	.0194007	.1790602	.4957008	.0053065	.2058265	.2129939

Elem	Li6707
Units	ppm
Avg	.0321038
Stddev	.0038051
%RSD	11.85235
#1	.0342670
#2	.0277103
#3	.0343342

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2388.726	29496.81	1912.310	2038.302	2159.496
Stddev	8.905	122.06	1.547	11.606	8.840
%RSD	.3727880	.4138203	.0808894	.5694004	.4093365
#1	2384.327	29614.91	1913.721	2043.850	2154.377
#2	2398.974	29504.39	1910.656	2046.093	2169.703
#3	2382.876	29371.13	1912.552	2024.963	2154.408

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BSD Acquired: 12/19/2024 22:37:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD656 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083120	.0235917	.0053764	.0236318	.0489820	.1598098	.1853373
Stddev	.0018485	.0028163	.0018202	.0042717	.0013798	.0268372	.0021506
%RSD	22.23939	11.93770	33.85525	18.07594	2.816925	16.79323	1.160372
#1	.0104250	.0204429	.0054256	.0195120	.0503133	.1289474	.1837402
#2	.0069939	.0244624	.0071716	.0233427	.0490744	.1776642	.1844892
#3	.0075171	.0258698	.0035322	.0280407	.0475583	.1728178	.1877827

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048789	.0045034	4.617489	.0088988	.0465557	.0133890	.1345480
Stddev	.0001560	.0000367	.044589	.0007011	.0001152	.0075977	.0149048
%RSD	3.197483	.8137842	.9656611	7.879149	.2474908	56.74595	11.07771
#1	.0047448	.0044615	4.621398	.0080975	.0464547	.0117896	.1265475
#2	.0050501	.0045192	4.571073	.0091996	.0466812	.0067183	.1253517
#3	.0048418	.0045295	4.659995	.0093994	.0465311	.0216591	.1517448

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0153124	4.842061	.0343396	.0100077	5.387420	.0433253	.0289042
Stddev	.0009694	.106832	.0005170	.0003335	.793461	.0122514	.0033616
%RSD	6.331040	2.206332	1.505545	3.332584	14.72804	28.27769	11.63018
#1	.0163045	4.719880	.0349282	.0096233	4.675904	.0500532	.0261405
#2	.0152655	4.888426	.0339589	.0102205	5.243289	.0291842	.0279255
#3	.0143673	4.917878	.0341317	.0101792	6.243068	.0507387	.0326465

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.791569	.0070499	-.005948	.0085209	.0697265	.2258760	-.003821
Stddev	.076690	.0013408	.002725	.0007554	.0019556	.0013606	.001473
%RSD	1.600516	19.01902	45.81821	8.865405	2.804617	.6023739	38.53934
#1	4.802614	.0085980	-.008026	.0078929	.0688066	.2243542	-.005132
#2	4.862138	.0062625	-.002862	.0083107	.0719724	.2262984	-.002228
#3	4.709956	.0062891	-.006954	.0093592	.0684004	.2269752	-.004103

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165656BSD Acquired: 12/19/2024 22:37:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD656 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0911119	.0963145	.0219225
Stddev	.0021699	.0007880	.0015129
%RSD	2.381532	.8181657	6.900885
#1	.0911476	.0954561	.0216117
#2	.0889243	.0964823	.0235667
#3	.0932636	.0970051	.0205893

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2374.897	29460.56	1897.429	2033.509	2169.660
Stddev	6.495	64.64	10.292	9.259	4.999
%RSD	.2734759	.2194000	.5424043	.4552988	.2303938
#1	2380.236	29408.20	1907.624	2034.787	2174.629
#2	2376.788	29532.80	1897.619	2042.062	2169.719
#3	2367.666	29440.69	1887.043	2023.677	2164.632

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BL Acquired: 12/19/2024 22:41:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS690 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002053	-.002805	-.006586	-.001890	.0023568	-.001860
Stddev	.003053	.003441	.002744	.001803	.0008482	.019037
%RSD	148.7471	122.6593	41.66551	95.42394	35.98802	1023.450
#1	-.003069	-.006764	-.008679	-.003353	.0015503	.003298
#2	-.004468	-.001111	-.003479	-.002441	.0022789	-.022945
#3	.001379	-.000540	-.007599	.000125	.0032413	.014066

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000030	.0000358	-.000031	-.083651	-.000722	-.000134
Stddev	.000577	.0001163	.000094	.043610	.000409	.000453
%RSD	1898.355	325.0847	304.6339	52.13302	56.73275	339.2488
#1	.000430	.0001314	-.000103	-.050161	-.000538	.000343
#2	-.000678	-.000094	.000076	-.132963	-.001191	-.000184
#3	.000156	.000069	-.000066	-.067828	-.000437	-.000560

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.009671	.0226924	.0018346	.0549151	-.000803	.0004270
Stddev	.000302	.0858136	.0005316	.1205381	.000609	.0003964
%RSD	3.121211	378.1602	28.97420	219.4993	75.83193	92.81928
#1	-.009655	.1038436	.0014779	.0786977	-.000989	-.000030
#2	-.009378	.0313593	.0024455	.1617891	-.000123	.000645
#3	-.009981	-.067126	.0015804	-.075742	-.001297	.000667

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6463731	.0016982	-.005647	.2231610	.0013457	-.005999
Stddev	.9663643	.0028722	.007936	.0156868	.0007162	.001372
%RSD	149.5057	169.1327	140.5311	7.029378	53.21925	22.86507
#1	1.022109	.0046731	-.013916	.2316187	.0013399	-.006926
#2	-.451427	.0014805	-.004933	.2050603	.0006325	-.004423
#3	1.368437	-.001059	.001908	.2328040	.0020649	-.006648

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BL Acquired: 12/19/2024 22:41:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS690 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000041	-.008461	-.000738	F -.009954	-.001523	.0000300
Stddev	.000283	.003850	.001710	.000763	.003717	.0000357
%RSD	688.6270	45.49802	231.5675	7.667306	244.0320	119.0027
#1	.000012	-.004025	.001225	-.010828	-.001890	.0000395
#2	-.000347	-.010434	-.001542	-.009611	.002364	.0000600
#3	.000212	-.010924	-.001899	-.009421	-.005044	-.000009

Elem	Li6707
Units	ppm
Avg	.0095058
Stddev	.0039269
%RSD	41.31107
#1	.0138014
#2	.0061004
#3	.0086155

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2363.459	29353.01	1871.320	2016.953	2156.271
Stddev	7.264	74.33	9.116	11.343	4.306
%RSD	.3073360	.2532245	.4871437	.5623776	.1997001
#1	2371.258	29324.12	1866.007	2005.405	2160.880
#2	2362.235	29437.45	1866.107	2017.377	2155.583
#3	2356.886	29297.47	1881.846	2028.078	2152.351

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BS Acquired: 12/19/2024 22:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS690 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0235478	.0545504	.0161090	.0557772	.1071097	.4055718
Stddev	.0060322	.0039218	.0019570	.0020535	.0012271	.0137588
%RSD	25.61662	7.189288	12.14864	3.681594	1.145674	3.392455
#1	.0190905	.0569232	.0139796	.0581066	.1057308	.3973152
#2	.0211412	.0500236	.0178289	.0542287	.1080817	.3979453
#3	.0304118	.0567042	.0165184	.0549963	.1075167	.4214550

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4115059	.0105341	.0098333	10.16041	.0206468	.1027803
Stddev	.0053142	.0002227	.0000771	.17116	.0011861	.0007632
%RSD	1.291412	2.114492	.7837589	1.684534	5.744784	.7425395
#1	.4092153	.0106644	.0097546	10.09160	.0199263	.1019237
#2	.4077212	.0102769	.0098367	10.03437	.0199984	.1030296
#3	.4175813	.0106610	.0099087	10.35526	.0220158	.1033877

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0417315	.2313792	.0326141	10.58597	.0778724	.0206704
Stddev	.0006525	.0586345	.0006339	.23969	.0003109	.0008920
%RSD	1.563659	25.34128	1.943673	2.264230	.3992979	4.315299
#1	.0415645	.2909505	.0319409	10.42975	.0778229	.0216903
#2	.0424513	.1737288	.0327020	10.46622	.0782051	.0200360
#3	.0411788	.2294584	.0331995	10.86194	.0775891	.0202849

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.27321	.0932708	.1047950	9.977391	.0179469	F -.006336
Stddev	.52636	.0068658	.0169576	.346719	.0008509	.001917
%RSD	4.669143	7.361125	16.18170	3.475045	4.740921	30.25709
#1	10.70832	.0910896	.0873417	9.963270	.0185003	-.005407
#2	11.36143	.0877607	.1212091	9.637948	.0169672	-.005061
#3	11.74989	.1009623	.1058343	10.33095	.0183733	-.008541

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BS Acquired: 12/19/2024 22:45:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS690 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0192800	.1773480	F .4921859	F .0039616	.2029170	.2128990
Stddev	.0004694	.0042574	.0065431	.0008733	.0036758	.0031435
%RSD	2.434778	2.400603	1.329392	22.04420	1.811476	1.476532
#1	.0196204	.1811907	.4926156	.0032247	.2003667	.2104627
#2	.0187445	.1780820	.4854386	.0037338	.2012538	.2117869
#3	.0194752	.1727713	.4985035	.0049262	.2071304	.2164474

Elem	Li6707
Units	ppm
Avg	.0309563
Stddev	.0016943
%RSD	5.473324
#1	.0308465
#2	.0327028
#3	.0293195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2377.423	29515.50	1909.285	2029.234	2156.093
Stddev	1.648	192.68	19.032	18.419	1.845
%RSD	.0693079	.6528248	.9968054	.9076697	.0855509
#1	2378.709	29737.68	1918.383	2050.298	2154.783
#2	2375.566	29394.26	1922.060	2016.157	2155.294
#3	2377.996	29414.55	1887.412	2021.248	2158.202

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BSD Acquired: 12/19/2024 22:49:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD690 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008757	.0254170	.0075005	.0264406	.0537280	.2070944	.2049115
Stddev	.0020787	.0042952	.0010895	.0025418	.0039839	.0469752	.0016952
%RSD	237.3713	16.89890	14.52565	9.613137	7.414907	22.68297	.8272754
#1	.0003524	.0204574	.0063066	.0279067	.0512673	.1529796	.2047739
#2	-.000891	.0278673	.0077540	.0279095	.0515924	.2309337	.2032893
#3	.003166	.0279262	.0084408	.0235056	.0583244	.2373698	.2066713

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053318	.0048048	5.049491	.0103755	.0517415	.0200878	.1009189
Stddev	.0001549	.0001396	.037662	.0009393	.0002053	.0062573	.0296425
%RSD	2.905982	2.905479	.7458517	9.052993	.3967293	31.14956	29.37262
#1	.0054473	.0049659	5.007020	.0108747	.0517659	.0273018	.1328318
#2	.0053923	.0047296	5.078823	.0109599	.0515251	.0168300	.0956794
#3	.0051557	.0047189	5.062631	.0092920	.0519334	.0161317	.0742455

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0170916	5.333429	.0384124	.0103200	5.928616	.0539262	.0497777
Stddev	.0005178	.042755	.0004807	.0013708	1.122261	.0095017	.0012804
%RSD	3.029711	.8016330	1.251333	13.28329	18.92956	17.61990	2.572209
#1	.0176340	5.380901	.0388847	.0118813	6.479955	.0444039	.0485278
#2	.0170383	5.297955	.0384289	.0093138	6.668568	.0539675	.0497187
#3	.0166025	5.321432	.0379237	.0097649	4.637324	.0634073	.0510865

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.219696	.0105031	-.007259	.0093904	.0839107	.2468086	-.003115
Stddev	.180806	.0017945	.000634	.0005635	.0064006	.0013629	.000325
%RSD	3.463918	17.08527	8.732212	6.000380	7.627929	.5522192	10.44556
#1	5.087778	.0094642	-.007424	.0098813	.0783063	.2462659	-.003344
#2	5.145515	.0094700	-.007794	.0087752	.0825404	.2483593	-.002743
#3	5.425794	.0125752	-.006559	.0095147	.0908856	.2458007	-.003259

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165690BSD Acquired: 12/19/2024 22:49:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD690 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0994829	.1060775	.0198458
Stddev	.0053414	.0006359	.0024613
%RSD	5.369152	.5995055	12.40188
#1	.1032854	.1058150	.0176568
#2	.0933761	.1056149	.0193706
#3	.1017870	.1068027	.0225101

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2387.681	29430.14	1901.839	2042.895	2175.520
Stddev	5.331	193.90	14.248	12.774	3.967
%RSD	.2232790	.6588435	.7491866	.6252669	.1823481
#1	2386.215	29226.15	1885.774	2028.553	2175.301
#2	2393.591	29452.18	1906.796	2047.082	2179.592
#3	2383.235	29612.07	1912.947	2053.050	2171.667

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BL Acquired: 12/19/2024 22:53:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS571 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004418	-.002592	-.004077	-.004619	-.001505	.1203544
Stddev	.004316	.003497	.003956	.000431	.001936	.0168026
%RSD	97.68705	134.8926	97.03809	9.330896	128.6214	13.96090
#1	.000550	-.003139	-.007506	-.004133	-.003690	.1055666
#2	-.006565	-.005784	.000252	-.004957	-.000827	.1168710
#3	-.007240	.001146	-.004976	-.004765	.000000	.1386257

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000524	-.000038	.0000503	-.056387	-.000754	.0001365
Stddev	.0009155	.000051	.0000378	.024748	.000952	.0006391
%RSD	1747.399	134.2790	75.27352	43.88946	126.3748	468.0891
#1	.0003512	-.000069	.0000880	-.052183	-.001633	-.000164
#2	.0007811	.000021	.0000505	-.034010	-.000886	-.000297
#3	-.000975	-.000065	.0000123	-.082967	.000258	.000871

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008596	.0080298	.0005859	.0363903	-.000342	.0005542
Stddev	.002828	.0049447	.0006921	.0887584	.000574	.0007083
%RSD	32.90027	61.57940	118.1327	243.9069	167.7404	127.8130
#1	-.009050	.0102498	.0010327	.0418466	.000320	.0011612
#2	-.011170	.0114753	-.000211	.1222946	-.000704	-.000224
#3	-.005569	.0023641	.000936	-.054970	-.000642	.000725

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.258940	-.007529	.0026007	-.042116	-.000603	-.007915
Stddev	1.277180	.004123	.0103560	.150609	.001145	.000240
%RSD	101.4489	54.75819	398.1945	357.6030	189.9183	3.035271
#1	.148619	-.003695	.0032187	-.214669	.000575	-.008187
#2	2.654683	-.007001	-.008050	.062922	-.000673	-.007732
#3	.973516	-.011890	.012634	.025399	-.001712	-.007826

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BL Acquired: 12/19/2024 22:53:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: PBS571 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000015	-.008448	-.001416	F -.010812	-.002986	.0002486
Stddev	.000233	.004080	.000518	.000829	.002009	.0001835
%RSD	1532.853	48.29925	36.57420	7.666992	67.27708	73.81401
#1	-.000224	-.006813	-.001888	-.009860	-.000911	.0003000
#2	-.000057	-.013093	-.000862	-.011198	-.003126	.0004010
#3	.000236	-.005439	-.001497	-.011377	-.004922	.0000449

Elem	Li6707
Units	ppm
Avg	.0041844
Stddev	.0030875
%RSD	73.78548
#1	.0013216
#2	.0074559
#3	.0037758

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2376.605	29243.98	1901.212	2024.215	2155.916
Stddev	5.715	55.80	8.453	.379	6.616
%RSD	.2404624	.1907969	.4446261	.0187310	.3068590
#1	2378.144	29210.25	1897.276	2023.963	2154.629
#2	2381.392	29308.38	1895.445	2024.651	2163.080
#3	2370.278	29213.30	1910.916	2024.030	2150.038

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BS Acquired: 12/19/2024 22:57:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS571 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0191542	.0558961	.0153576	.0528856	.1040125	.4110617
Stddev	.0026365	.0022308	.0016422	.0003448	.0026186	.0140936
%RSD	13.76478	3.990911	10.69309	.6518926	2.517621	3.428586
#1	.0162260	.0570790	.0146566	.0526504	.1009961	.4195761
#2	.0213398	.0533231	.0141823	.0532813	.1053380	.4188153
#3	.0198969	.0572863	.0172340	.0527250	.1057033	.3947938

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4076064	.0105356	.0096929	10.12044	.0201267	.1011417
Stddev	.0059503	.0001688	.0001834	.12616	.0009557	.0003747
%RSD	1.459807	1.602145	1.891752	1.246634	4.748534	.3704557
#1	.4134887	.0106667	.0096698	10.19251	.0210611	.1014662
#2	.4077402	.0105950	.0095222	10.19405	.0191510	.1007316
#3	.4015904	.0103451	.0098867	9.97476	.0201679	.1012272

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0435722	.2396777	.0325901	10.40637	.0759723	.0201829
Stddev	.0082232	.0117634	.0013538	.13457	.0009012	.0003927
%RSD	18.87247	4.907997	4.154152	1.293109	1.186276	1.945608
#1	.0475032	.2263105	.0341531	10.54328	.0753644	.0205353
#2	.0341214	.2484504	.0318354	10.40154	.0755448	.0202539
#3	.0490921	.2442724	.0317818	10.27428	.0770078	.0197596

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.51418	.1097054	.0990923	9.729074	.0160468	F -.006548
Stddev	.96682	.0043840	.0038117	.166006	.0036930	.000259
%RSD	8.396743	3.996195	3.846581	1.706283	23.01397	3.959317
#1	10.49816	.1095612	.1026203	9.822771	.0175425	-.006272
#2	12.42282	.1053952	.0950493	9.827048	.0187574	-.006586
#3	11.62157	.1141597	.0996072	9.537404	.0118406	-.006787

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BS Acquired: 12/19/2024 22:57:47 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCS571 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0187416	.1740046	F .4922288	F .0040958	.2026049	.2100649
Stddev	.0003671	.0029325	.0069047	.0006047	.0039797	.0016432
%RSD	1.958964	1.685292	1.402747	14.76380	1.964282	.7822336
#1	.0183224	.1708625	.4976505	.0035552	.2021016	.2116485
#2	.0190057	.1766687	.4945804	.0039835	.2068124	.2101781
#3	.0188968	.1744825	.4844554	.0047488	.1989008	.2083680

Elem	Li6707
Units	ppm
Avg	.0336564
Stddev	.0059819
%RSD	17.77349
#1	.0376696
#2	.0267811
#3	.0365184

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2400.453	29540.08	1926.416	2050.004	2170.476
Stddev	1.169	116.75	30.852	7.193	2.659
%RSD	.0487046	.3952260	1.601502	.3508613	.1224986
#1	2399.971	29449.70	1898.678	2043.653	2168.775
#2	2401.787	29498.63	1920.925	2048.545	2173.539
#3	2399.603	29671.89	1959.644	2057.815	2169.113

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BSD Acquired: 12/19/2024 23:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD571 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090171	.0296754	.0060498	.0293732	.0570245	.1851287	.2121903
Stddev	.0062179	.0049744	.0032838	.0033509	.0042578	.0161187	.0013706
%RSD	68.95659	16.76287	54.27836	11.40798	7.466575	8.706762	.6459273
#1	.0084496	.0266501	.0023027	.0293369	.0560946	.1672249	.2107480
#2	.0031024	.0354166	.0074211	.0327421	.0533085	.1896756	.2123472
#3	.0154993	.0269594	.0084257	.0260406	.0616704	.1984856	.2134756

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0053951	.0049499	5.205544	.0097485	.0526891	.0245313	.1373309
Stddev	.0000656	.0000787	.011909	.0008041	.0004637	.0062576	.0430345
%RSD	1.215601	1.589541	.2287821	8.248663	.8800629	25.50861	31.33640
#1	.0054708	.0049906	5.204621	.0106041	.0530342	.0261418	.0937443
#2	.0053582	.0048593	5.217888	.0096332	.0521620	.0298262	.1797913
#3	.0053562	.0050000	5.194123	.0090083	.0528710	.0176258	.1384570

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0163082	5.437273	.0383756	.0109866	7.010688	.0508642	.0567232
Stddev	.0005532	.075713	.0002454	.0006315	.370421	.0078418	.0155077
%RSD	3.392437	1.392490	.6393692	5.748201	5.283659	15.41708	27.33931
#1	.0160753	5.421690	.0386520	.0114188	6.797422	.0424615	.0520108
#2	.0159094	5.370563	.0381834	.0112792	6.796230	.0579878	.0441183
#3	.0169398	5.519566	.0382915	.0102618	7.438413	.0521432	.0740405

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.239891	.0096239	-.005415	.0099293	.0861486	.2527628	-.002892
Stddev	.071078	.0025086	.000476	.0001897	.0023231	.0032488	.001442
%RSD	1.356484	26.06625	8.784706	1.910078	2.696591	1.285329	49.86344
#1	5.212957	.0068174	-.005053	.0098909	.0835070	.2560485	-.003263
#2	5.186216	.0104060	-.005238	.0097617	.0870656	.2495522	-.001301
#3	5.320500	.0116482	-.005954	.0101351	.0878732	.2526878	-.004112

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: PB165716BSD Acquired: 12/19/2024 23:01:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LCSD571 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.1021878	.1089222	.0196953
Stddev	.0014477	.0000902	.0022492
%RSD	1.416677	.0827854	11.42006
#1	.1021499	.1088230	.0205095
#2	.1036540	.1089991	.0171524
#3	.1007594	.1089445	.0214241

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2370.913	29182.58	1902.150	2027.312	2160.855
Stddev	5.862	47.80	6.252	7.771	3.941
%RSD	.2472339	.1637966	.3286576	.3833054	.1823854
#1	2374.985	29146.47	1896.053	2018.386	2163.453
#2	2373.559	29164.48	1908.545	2030.985	2162.792
#3	2364.195	29236.78	1901.853	2032.566	2156.320

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-18DLX2 Acquired: 12/19/2024 23:05:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2314821	-.128688	.1798644	.1392435	.0430152	124.6423	.6632062
Stddev	.0056402	.001674	.0016426	.0019077	.0014046	.5894	.0034834
%RSD	2.436550	1.301172	.9132342	1.370024	3.265268	.4728429	.5252336
#1	.2378263	-.130525	.1812542	.1383768	.0440721	124.0793	.6592318
#2	.2295846	-.127247	.1802872	.1379231	.0435521	125.2549	.6646574
#3	.2270353	-.128293	.1780517	.1414306	.0414214	124.5927	.6657293

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084774	.0038975	71.38881	.3135840	.2353972	.7752849	294.2019
Stddev	.0002861	.0001152	.08567	.0012334	.0005010	.0039059	1.2845
%RSD	3.375365	2.955202	.1200076	.3933202	.2128135	.5038006	.4366013
#1	.0082558	.0040113	71.30590	.3121737	.2354947	.7732115	293.0363
#2	.0088004	.0037810	71.47700	.3141172	.2348547	.7728529	295.5791
#3	.0083759	.0039001	71.38353	.3144611	.2358423	.7797903	293.9905

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.765338	84.10836	.2641341	.0076178	2.245453	.6455512	.4473101
Stddev	.030882	.49119	.0016433	.0013529	.359351	.0132448	.0182128
%RSD	.4564782	.5839989	.6221537	17.76020	16.00349	2.051704	4.071620
#1	6.732773	83.59881	.2637448	.0081906	2.599646	.6542020	.4607493
#2	6.794205	84.57886	.2627203	.0085901	1.881158	.6521481	.4545993
#3	6.769037	84.14743	.2659371	.0060727	2.255555	.6303034	.4265817

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.74936	5.559348	-.123675	-.000508	.5294692	2.715484	.0214242
Stddev	.11164	.018571	.003602	.000715	.0107953	.015436	.0006674
%RSD	.6665287	.3340454	2.912600	140.6233	2.038899	.5684395	3.114919
#1	16.67996	5.566038	-.122222	-.001264	.5222027	2.697661	.0211547
#2	16.87814	5.538359	-.121026	-.000418	.5243311	2.724297	.0209337
#3	16.68997	5.573646	-.127776	.000157	.5418739	2.724495	.0221841

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-18DLX2 Acquired: 12/19/2024 23:05:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.684421	-.092154	.0775732
Stddev	.015489	.000544	.0019881
%RSD	.5769803	.5905527	2.562906
#1	2.667685	-.092370	.0758151
#2	2.698251	-.092557	.0797307
#3	2.687327	-.091535	.0771738

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2545.182	31611.71	2073.561	2187.569	2025.151
Stddev	6.845	155.36	8.148	10.273	4.109
%RSD	.2689548	.4914514	.3929671	.4696155	.2029044
#1	2553.042	31766.48	2082.904	2198.115	2029.727
#2	2541.979	31612.87	2067.923	2186.998	2023.951
#3	2540.526	31455.77	2069.857	2177.593	2021.776

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-19DLX2 Acquired: 12/19/2024 23:09:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2840283	-.185497	.1614379	.1959675	.0646534	173.5881	.4463252
Stddev	.0050157	.002357	.0022466	.0030534	.0021014	.6103	.0022719
%RSD	1.765929	1.270663	1.391596	1.558115	3.250309	.3515508	.5090312
#1	.2893087	-.186569	.1627759	.1992931	.0662516	173.0177	.4440188
#2	.2793276	-.187127	.1626936	.1932906	.0622730	173.5149	.4463955
#3	.2834486	-.182794	.1588442	.1953186	.0654355	174.2316	.4485611

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0097359	.0032959	108.2622	.4965407	.3407530	1.003616	409.5568
Stddev	.0002519	.0000995	.3123	.0020657	.0000281	.003538	1.3265
%RSD	2.587583	3.017757	.2884807	.4160290	.0082497	.3525561	.3238914
#1	.0095269	.0031838	107.9649	.4986192	.3407470	1.002515	408.5616
#2	.0100156	.0033303	108.2341	.4965152	.3407284	1.007574	409.0459
#3	.0096651	.0033736	108.5877	.4944879	.3407837	1.000759	411.0628

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.639722	133.4092	.4083456	.0090110	2.254531	.9889422	.4507768
Stddev	.020273	.6383	.0023405	.0014947	.174417	.0095519	.0027062
%RSD	.2103096	.4784593	.5731613	16.58782	7.736302	.9658664	.6003511
#1	9.619019	133.0077	.4065893	.0091027	2.077122	.9842817	.4481906
#2	9.640611	133.0746	.4074448	.0074725	2.260677	.9999297	.4535889
#3	9.659536	134.1452	.4110026	.0104577	2.425794	.9826152	.4505510

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.483535	4.514823	-.154242	-.001332	.4817233	4.002188	.0318784
Stddev	.031356	.022262	.003961	.000403	.0110899	.014352	.0021816
%RSD	.3306402	.4930957	2.567901	30.23417	2.302133	.3586161	6.843445
#1	9.519680	4.501096	-.151302	-.001560	.4720014	3.991465	.0299908
#2	9.467299	4.502864	-.152677	-.001569	.4938023	4.018493	.0313776
#3	9.463626	4.540509	-.158746	-.000867	.4793663	3.996606	.0342668

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5179-19DLX2 Acquired: 12/19/2024 23:09:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZA7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.230726	-.215529	.0836742
Stddev	.018670	.000971	.0037662
%RSD	.4412925	.4506995	4.501024
#1	4.220586	-.214663	.0799453
#2	4.219321	-.215345	.0836007
#3	4.252272	-.216579	.0874767

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2508.237	31058.31	2053.487	2145.412	2003.135
Stddev	7.553	168.27	7.106	15.807	6.158
%RSD	.3011364	.5417928	.3460417	.7368019	.3073992
#1	2511.890	31003.69	2055.998	2132.916	2007.365
#2	2513.269	30924.14	2045.466	2140.137	2005.969
#3	2499.551	31247.11	2058.996	2163.182	1996.071

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-01DLX2 Acquired: 12/19/2024 23:13:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ59 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3587388	-.119755	.3932887	.1288521	.0418608	90.51558	.8115946
Stddev	.0021925	.006530	.0018835	.0020919	.0012991	.59606	.0051943
%RSD	.6111598	5.453046	.4788970	1.623524	3.103320	.6585209	.6400140
#1	.3572528	-.127189	.3953640	.1308222	.0423118	89.92065	.8056239
#2	.3612568	-.114946	.3928144	.1266566	.0403963	90.51333	.8140860
#3	.3577067	-.117131	.3916877	.1290774	.0428742	91.11277	.8150739

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084385	.0054532	41.32479	.1530311	.1420594	.3944462	264.1166
Stddev	.0001399	.0001023	.24127	.0010985	.0017104	.0028974	1.7378
%RSD	1.658210	1.875208	.5838369	.7178182	1.204013	.7345400	.6579746
#1	.0084876	.0054991	41.09067	.1529648	.1438944	.3941927	262.2808
#2	.0085472	.0055245	41.31108	.1541613	.1405094	.3916839	264.3326
#3	.0082806	.0053360	41.57262	.1519673	.1417743	.3974620	265.7363

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.671170	42.54171	.1441211	.0065257	2.036027	.4474071	1.068229
Stddev	.031020	.18920	.0003780	.0006659	.731914	.0114972	.006341
%RSD	.6640833	.4447466	.2622594	10.20453	35.94816	2.569734	.5936086
#1	4.635516	42.33750	.1445287	.0060155	1.759450	.4436603	1.066963
#2	4.686015	42.71105	.1437822	.0062826	2.865928	.4382507	1.075107
#3	4.691979	42.57659	.1440524	.0072790	1.482703	.4603103	1.062616

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.06741	9.575417	-.106832	.0011612	2.069600	4.373253	.0182261
Stddev	.14264	.041847	.006359	.0001636	.020657	.040260	.0011930
%RSD	.5926869	.4370231	5.952219	14.09241	.9981129	.9206004	6.545627
#1	23.90401	9.623713	-.100108	.0010236	2.093322	4.338222	.0168563
#2	24.13118	9.549944	-.107638	.0013421	2.055584	4.364302	.0190371
#3	24.16705	9.552594	-.112749	.0011178	2.059893	4.417235	.0187850

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-01DLX2 Acquired: 12/19/2024 23:13:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ59 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.760243	-.080654	.0526203
Stddev	.029557	.001250	.0056270
%RSD	1.070808	1.549709	10.69357
#1	2.726446	-.079524	.0559576
#2	2.773021	-.080441	.0557796
#3	2.781260	-.081997	.0461236

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2580.522	31870.33	2094.684	2204.604	2060.842
Stddev	10.346	227.86	12.147	15.376	7.275
%RSD	.4009329	.7149461	.5799204	.6974394	.3530205
#1	2572.653	31612.78	2094.914	2189.182	2053.709
#2	2576.671	32045.70	2106.714	2219.934	2060.565
#3	2592.241	31952.50	2082.422	2204.694	2068.252

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-02DLX2 Acquired: 12/19/2024 23:17:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ60 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3458084	-.099791	.5646760	.1152492	.0367814	119.0443	1.405461
Stddev	.0031010	.004602	.0014206	.0029447	.0022583	.1950	.003253
%RSD	.8967466	4.611768	.2515805	2.555036	6.139878	.1638097	.2314540
#1	.3463930	-.097285	.5637135	.1185243	.0388925	119.2294	1.409085
#2	.3424566	-.105102	.5663076	.1144028	.0370515	118.8407	1.404505
#3	.3485755	-.096985	.5640070	.1128204	.0344001	119.0627	1.402793

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089726	.0081076	62.37051	.1722349	.1430837	.3881867	241.0105
Stddev	.0001795	.0001817	.34362	.0008822	.0001528	.0044720	.7041
%RSD	2.000503	2.240806	.5509346	.5121988	.1067794	1.152014	.2921582
#1	.0088856	.0079186	62.70231	.1726768	.1430815	.3899111	241.7797
#2	.0091790	.0082810	62.01617	.1728088	.1429320	.3831092	240.3978
#3	.0088532	.0081232	62.39306	.1712191	.1432375	.3915397	240.8540

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.118873	54.60915	.1771471	.0078162	2.421229	.3647141	1.557936
Stddev	.010361	.32621	.0012318	.0016557	1.222063	.0036318	.012854
%RSD	.2024120	.5973469	.6953342	21.18297	50.47281	.9958075	.8250464
#1	5.130807	54.92792	.1785666	.0092883	1.099253	.3642684	1.557061
#2	5.113637	54.62354	.1765145	.0081366	2.654760	.3613256	1.545542
#3	5.112175	54.27599	.1763602	.0060237	3.509676	.3685482	1.571204

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.45329	8.959773	-.080574	.0010323	4.297180	6.397291	.0156224
Stddev	.01650	.006679	.000299	.0006138	.008861	.038763	.0016583
%RSD	.0600925	.0745454	.3715200	59.46262	.2062166	.6059230	10.61502
#1	27.43758	8.957925	-.080611	.0013943	4.295704	6.385816	.0175370
#2	27.45181	8.967182	-.080853	.0003235	4.289149	6.440496	.0146374
#3	27.47047	8.954213	-.080258	.0013789	4.306687	6.365562	.0146928

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-02DLX2 Acquired: 12/19/2024 23:17:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ60 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.482492	.2281694	.0781616
Stddev	.008743	.0012979	.0037655
%RSD	.5897284	.5688290	4.817573
#1	1.492224	.2296371	.0750588
#2	1.475302	.2276985	.0823509
#3	1.479951	.2271728	.0770751

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2649.406	32405.83	2161.749	2256.050	2061.386
Stddev	12.811	39.99	11.826	9.131	6.582
%RSD	.4835299	.1233896	.5470356	.4047471	.3192986
#1	2660.554	32424.05	2157.975	2248.341	2068.122
#2	2635.411	32433.46	2152.271	2266.134	2054.969
#3	2652.253	32359.98	2175.001	2253.675	2061.066

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-03DLX2 Acquired: 12/19/2024 23:21:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ61 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2822127	-.105027	.2982475	.1060232	.0345088	76.68080	.8041565
Stddev	.0054909	.003780	.0048196	.0004856	.0009775	.68326	.0088628
%RSD	1.945655	3.599474	1.615979	.4580548	2.832511	.8910466	1.102129
#1	.2874484	-.108196	.2994909	.1058471	.0339170	76.77693	.8082363
#2	.2764980	-.100843	.2929280	.1056502	.0339723	75.95456	.7939885
#3	.2826916	-.106042	.3023236	.1065723	.0356370	77.31090	.8102447

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072273	.0037119	42.69145	.1191060	.1281841	.2795122	226.9030
Stddev	.0000806	.0000993	.47883	.0020599	.0006728	.0046591	2.0537
%RSD	1.115569	2.674773	1.121606	1.729499	.5248827	1.666874	.9051173
#1	.0072143	.0037589	42.77998	.1214383	.1289569	.2757151	227.8027
#2	.0073137	.0035979	42.17453	.1183445	.1277288	.2781101	224.5529
#3	.0071541	.0037790	43.11984	.1175353	.1278667	.2847113	228.3533

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.734585	38.17056	.1189805	.0063812	2.175824	.3732377	.7087721
Stddev	.042355	.36736	.0005359	.0005479	.758002	.0083608	.0047393
%RSD	.8945885	.9624082	.4504532	8.586346	34.83749	2.240065	.6686639
#1	4.742527	38.33756	.1191621	.0059908	1.573761	.3796806	.7129404
#2	4.688821	37.74938	.1194021	.0061452	1.926666	.3637898	.7036172
#3	4.772407	38.42476	.1183774	.0070076	3.027044	.3762429	.7097588

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.02282	7.484541	-.085003	.0007014	2.600248	4.225227	.0152253
Stddev	.19448	.025678	.000772	.0003381	.010385	.016053	.0024578
%RSD	.9251036	.3430775	.9080707	48.20370	.3994014	.3799313	16.14259
#1	21.08280	7.510704	-.085309	.0003809	2.608111	4.224932	.0135708
#2	20.80541	7.459377	-.085576	.0010547	2.588475	4.209323	.0140556
#3	21.18024	7.483542	-.084126	.0006686	2.604157	4.241425	.0180494

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-03DLX2 Acquired: 12/19/2024 23:21:03 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ61 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.124226	-.012070	.0493594
Stddev	.016179	.000556	.0012038
%RSD	.7616356	4.608228	2.438765
#1	2.135731	-.012655	.0496870
#2	2.105726	-.011548	.0480258
#3	2.131220	-.012008	.0503654

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2629.564	32358.33	2134.085	2243.829	2129.715
Stddev	14.650	358.67	7.216	20.348	10.933
%RSD	.5571263	1.108420	.3381159	.9068231	.5133390
#1	2612.648	31949.01	2129.326	2223.873	2117.095
#2	2637.896	32508.38	2142.387	2243.067	2136.292
#3	2638.148	32617.61	2130.541	2264.547	2135.758

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV072 Acquired: 12/19/2024 23:24:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV072 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.343833	5.044324	25.62538	5.220873	5.267633	422.4259	10.49797
Stddev	.013426	.014364	.06543	.010647	.009448	2.9825	.05440
%RSD	.2512477	.2847546	.2553478	.2039243	.1793668	.7060506	.5182286
#1	5.348419	5.030081	25.61011	5.226856	5.261327	425.3431	10.55063
#2	5.328715	5.058805	25.56892	5.208581	5.263075	422.5525	10.50130
#3	5.354366	5.044086	25.69709	5.227183	5.278496	419.3821	10.44198

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5360159	2.578238	425.8722	16.00479	2.579218	15.73422	428.4463
Stddev	.0055161	.005695	3.2425	.02682	.006425	.15433	3.3608
%RSD	1.029101	.2209041	.7613822	.1675675	.2491147	.9808840	.7844094
#1	.5385223	2.578623	428.8879	15.97393	2.579204	15.88943	431.5889
#2	.5398339	2.572360	426.2861	16.01804	2.572800	15.73246	428.8468
#3	.5296916	2.583731	422.4426	16.02241	2.585650	15.58078	424.9032

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.81494	424.5656	2.576294	1.323513	426.1522	2.620934	15.26292
Stddev	.12632	3.7859	.004136	.002399	2.3251	.009193	.09009
%RSD	.7987253	.8917105	.1605213	.1812607	.5456060	.3507590	.5902563
#1	15.92536	427.4609	2.575808	1.324341	428.7044	2.628232	15.22567
#2	15.84226	425.9545	2.572423	1.325388	425.5980	2.623961	15.19744
#3	15.67720	420.2814	2.580651	1.320809	424.1543	2.610609	15.36567

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	157.5467	5.138566	5.059667	5.003943	5.243603	5.073202	5.190156
Stddev	.8206	.019222	.042572	.008184	.009122	.058462	.007403
%RSD	.5208826	.3740734	.8414001	.1635569	.1739614	1.152377	.1426437
#1	158.0929	5.140488	5.073829	5.001463	5.244355	5.103499	5.194927
#2	157.9442	5.118455	5.093352	4.997286	5.234129	5.110298	5.181627
#3	156.6030	5.156754	5.011818	5.013081	5.252326	5.005810	5.193913

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV072 Acquired: 12/19/2024 23:24:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV072 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.295282	4.998748	5.314685
Stddev	.041824	.033357	.032596
%RSD	.7898274	.6673098	.6133112
#1	5.333822	5.028656	5.351321
#2	5.301216	5.004815	5.303840
#3	5.250808	4.962774	5.288895

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1973.963	26029.97	1813.673	1718.316	1728.355
Stddev	3.401	77.86	18.194	5.693	3.158
%RSD	.1723159	.2991156	1.003157	.3313237	.1826916
#1	1976.977	25972.48	1798.970	1712.978	1729.262
#2	1974.637	26118.58	1808.029	1724.308	1730.959
#3	1970.275	25998.86	1834.020	1717.663	1724.843

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB072 Acquired: 12/19/2024 23:28:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB072 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001829	-.001175	.0032831	-.002473	-.000309	.0054148
Stddev	.000748	.003121	.0003570	.000755	.001322	.0239038
%RSD	40.91633	265.6878	10.87551	30.54859	427.8229	441.4499
#1	-.001241	.001710	.0029754	-.001837	-.001811	-.021658
#2	-.002671	-.000746	.0036746	-.003308	.000676	.014296
#3	-.001574	-.004488	.0031991	-.002273	.000208	.023607

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001786	.0000067	-.000046	-.011089	.0004993	-.000275
Stddev	.001142	.0001656	.000090	.035318	.0007116	.000287
%RSD	63.93738	2461.859	197.5926	318.4838	142.5130	104.4285
#1	-.001311	-.000043	-.000126	.017002	.0007332	-.000040
#2	-.003088	-.000128	-.000062	.000467	.0010645	-.000189
#3	-.000958	.000192	.000052	-.050738	-.000300	-.000596

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.008800	.0178580	.0017128	-.003073	-.000413	.0010210
Stddev	.010265	.0581612	.0006443	.046915	.000339	.0005757
%RSD	116.6390	325.6875	37.61808	1526.912	81.94016	56.39342
#1	.001637	-.033448	.0024417	-.053502	-.000670	.0005481
#2	-.018883	.005980	.0014774	.005006	-.000540	.0008526
#3	-.009155	.081041	.0012193	.039279	-.000030	.0016621

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.003873	-.005920	.0007093	.3046607	-.000777	.0097994
Stddev	.403379	.004705	.0057875	.0760334	.000774	.0013376
%RSD	40.18225	79.48376	815.9607	24.95673	99.69319	13.64997
#1	.656938	-.008019	-.000688	.3801337	-.000566	.0112966
#2	1.446490	-.009210	.007067	.2280791	-.001634	.0093794
#3	.908190	-.000530	-.004252	.3057694	-.000129	.0087222

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB072 Acquired: 12/19/2024 23:28:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB072 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000783	-.005564	-.000133	F -.009500	.0003808	.0002486
Stddev	.0002843	.003509	.000720	.001765	.0036516	.0002515
%RSD	362.8928	63.05998	543.1815	18.57456	959.0591	101.1455
#1	-.000054	-.001535	-.000911	-.007470	-.003041	.0005378
#2	.000405	-.007208	.000002	-.010664	-.000042	.0001262
#3	-.000116	-.007950	.000511	-.010368	.004225	.0000818

Elem	Li6707
Units	ppm
Avg	.0133215
Stddev	.0043465
%RSD	32.62774
#1	.0163924
#2	.0152240
#3	.0083481

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2382.292	29347.46	1907.672	2034.786	2162.789
Stddev	5.340	5.67	16.949	1.848	3.166
%RSD	.2241365	.0193191	.8884913	.0908187	.1463918
#1	2388.428	29347.38	1905.405	2033.239	2166.053
#2	2378.702	29353.17	1891.970	2034.287	2162.582
#3	2379.747	29341.83	1925.641	2036.833	2159.731

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-04DLX2 Acquired: 12/19/2024 23:32:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ62 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4041224	-.084153	.4913438	.0984833	.0341569	94.72285
Stddev	.0050435	.001817	.0012448	.0010327	.0030990	1.04039
%RSD	1.248013	2.159419	.2533438	1.048634	9.072682	1.098354
#1	.4076961	-.085905	.4910715	.0978952	.0341817	93.59749
#2	.4063177	-.084278	.4927022	.0996757	.0372434	95.64967
#3	.3983533	-.082277	.4902577	.0978789	.0310456	94.92137

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.065830	.0074220	.0059889	75.74651	.1351615	.1259349
Stddev	.012627	.0000301	.0001219	.87590	.0014744	.0013036
%RSD	1.184738	.4061071	2.035901	1.156354	1.090815	1.035095
#1	1.051722	.0074070	.0058509	74.80616	.1350177	.1261913
#2	1.076073	.0074024	.0060820	76.53918	.1337643	.1270912
#3	1.069694	.0074567	.0060338	75.89420	.1367024	.1245222

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3027224	210.9637	4.489484	48.01340	.1476771	.0093673
Stddev	.0009727	2.4755	.053392	.51824	.0011612	.0003859
%RSD	.3213029	1.173406	1.189271	1.079368	.7862814	4.119376
#1	.3018893	208.1844	4.434527	47.44935	.1476941	.0098054
#2	.3024867	212.9317	4.541160	48.46850	.1488296	.0092186
#3	.3037913	211.7750	4.492764	48.12236	.1465075	.0090779

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.501952	.3271501	1.387926	26.41323	F 10.46765	-.058780
Stddev	.479223	.0034522	.027847	.25913	.04741	.006007
%RSD	19.15396	1.055241	2.006378	.9810615	.4529066	10.21957
#1	2.217702	.3231861	1.364492	26.11922	10.48595	-.064483
#2	3.055242	.3294968	1.418711	26.60838	10.50317	-.052509
#3	2.232913	.3287674	1.380575	26.51209	10.41381	-.059350

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-04DLX2 Acquired: 12/19/2024 23:32:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ62 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020726	5.582231	5.522960	.0148568	1.706916	.2033512
Stddev	.0005651	.029888	.019906	.0010168	.015901	.0029979
%RSD	27.26304	.5354057	.3604235	6.844250	.9315715	1.474255
#1	.0026728	5.593103	5.501482	.0155677	1.691063	.2006937
#2	.0019942	5.605161	5.526609	.0153107	1.722865	.2066011
#3	.0015509	5.548429	5.540790	.0136921	1.706820	.2027587

Elem	Li6707
Units	ppm
Avg	.0690727
Stddev	.0050813
%RSD	7.356469
#1	.0677658
#2	.0746798
#3	.0647725

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2620.511	32229.72	2123.446	2240.816	2089.250
Stddev	2.717	174.51	14.930	12.141	2.218
%RSD	.1036959	.5414537	.7030798	.5417938	.1061466
#1	2623.577	32431.22	2139.924	2254.178	2088.529
#2	2618.400	32129.29	2110.819	2230.463	2087.482
#3	2619.556	32128.64	2119.595	2237.809	2091.738

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-05DLX2 Acquired: 12/19/2024 23:36:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ63 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.008741	-.083517	1.157104	.1004728	.0337040	101.9205	1.248600
Stddev	.003822	.002355	.008783	.0029168	.0042017	.4332	.006705
%RSD	.3788619	2.819746	.7590845	2.903117	12.46636	.4250778	.5369705
#1	1.012478	-.082212	1.165421	.0974694	.0290003	102.4138	1.256063
#2	1.008905	-.082103	1.147918	.1032946	.0370856	101.6016	1.243086
#3	1.004839	-.086235	1.157972	.1006544	.0350262	101.7462	1.246650

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078516	.0085110	101.5288	.1219117	.1249225	.3067360	218.7225
Stddev	.0000786	.0001733	.6051	.0010616	.0013190	.0031378	.7369
%RSD	1.000519	2.036430	.5959592	.8707591	1.055839	1.022975	.3369214
#1	.0077917	.0087089	102.2272	.1227869	.1255836	.3070170	219.1566
#2	.0079406	.0084378	101.1966	.1207308	.1234037	.3097239	217.8716
#3	.0078227	.0083863	101.1627	.1222173	.1257802	.3034671	219.1393

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.130628	50.92592	.1315985	.0106844	3.097816	.3345124	2.142293
Stddev	.009150	.18556	.0003675	.0005493	.833719	.0107150	.025123
%RSD	.2215230	.3643638	.2792655	5.141004	26.91313	3.203160	1.172730
#1	4.140907	51.13025	.1315579	.0102838	3.764638	.3275619	2.118910
#2	4.127610	50.76792	.1312530	.0104587	2.163074	.3291231	2.139115
#3	4.123369	50.87959	.1319846	.0113105	3.365737	.3468520	2.168855

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.70214	8.932471	-.021320	.0023728	6.697759	6.701669	.0152473
Stddev	.04446	.053520	.001664	.0002806	.036399	.005178	.0010323
%RSD	.1799729	.5991586	7.804784	11.82396	.5434468	.0772621	6.770241
#1	24.75087	8.975640	-.023163	.0022833	6.723930	6.696307	.0140566
#2	24.69178	8.872589	-.020869	.0021479	6.656192	6.702060	.0157948
#3	24.66378	8.949183	-.019927	.0026872	6.713154	6.706640	.0158905

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-05DLX2 Acquired: 12/19/2024 23:36:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ63 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.203404	.3294726	.0751850
Stddev	.002716	.0002288	.0028392
%RSD	.2257025	.0694578	3.776293
#1	1.206534	.3295542	.0719297
#2	1.201659	.3296494	.0771494
#3	1.202020	.3292141	.0764759

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2587.403	31813.91	2109.306	2213.770	2073.501
Stddev	5.912	60.16	2.831	.847	9.499
%RSD	.2284998	.1890998	.1342242	.0382795	.4581256
#1	2581.982	31819.60	2106.146	2214.686	2065.470
#2	2593.707	31871.02	2110.164	2213.610	2083.987
#3	2586.519	31751.10	2111.610	2213.014	2071.046

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-06DLX2 Acquired: 12/19/2024 23:40:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ64 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2581837	-.079928	.3781870	.0887489	.0290408	85.41117
Stddev	.0021742	.003373	.0057569	.0047678	.0023084	2.47380
%RSD	.8420995	4.219856	1.522232	5.372206	7.948762	2.896346
#1	.2586982	-.076288	.3731708	.0869231	.0267427	83.96959
#2	.2557984	-.080549	.3769177	.0851638	.0290202	83.99630
#3	.2600544	-.082947	.3844727	.0941597	.0313594	88.26763

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8319838	.0069880	.0041095	79.64058	.1447320	.1257482
Stddev	.0235185	.0001120	.0000086	2.21532	.0011692	.0015139
%RSD	2.826803	1.602973	.2097398	2.781645	.8078362	1.203873
#1	.8191366	.0068843	.0041181	78.28391	.1455102	.1249056
#2	.8176870	.0069729	.0041094	78.44082	.1452983	.1248430
#3	.8591278	.0071068	.0041009	82.19700	.1433875	.1274958

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3171198	207.6847	4.168530	42.85812	.1373338	.0055388
Stddev	.0182913	6.2523	.126565	1.15619	.0020792	.0007784
%RSD	5.767941	3.010479	3.036203	2.697704	1.513972	14.05313
#1	.3114298	204.3068	4.095898	42.24502	.1362988	.0048576
#2	.3023497	203.8479	4.095017	42.13761	.1359753	.0053716
#3	.3375798	214.8994	4.314674	44.19172	.1397274	.0063872

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.832937	.3226535	.9968842	28.49100	F 14.89181	-.053255
Stddev	1.366088	.0143688	.0233861	.75432	.17496	.002566
%RSD	35.64077	4.453313	2.345919	2.647556	1.174881	4.818524
#1	3.209242	.3124694	.9812658	27.95820	14.79709	-.056173
#2	2.890013	.3164020	.9856158	28.16067	14.78463	-.052241
#3	5.399555	.3390890	1.023771	29.35413	15.09371	-.051351

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-06DLX2 Acquired: 12/19/2024 23:40:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ64 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019694	3.279931	4.486356	.0137601	1.987926	.0770087
Stddev	.0003077	.033277	.061492	.0021219	.055892	.0012828
%RSD	15.62391	1.014552	1.370645	15.42096	2.811564	1.665782
#1	.0022604	3.262658	4.452425	.0120852	1.963205	.0765244
#2	.0020005	3.258842	4.449306	.0130488	1.948657	.0760386
#3	.0016473	3.318292	4.557338	.0161463	2.051915	.0784632

Elem	Li6707
Units	ppm
Avg	.0531738
Stddev	.0035210
%RSD	6.621756
#1	.0491621
#2	.0546077
#3	.0557516

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2562.734	31625.78	2114.000	2192.216	2067.010
Stddev	29.114	102.10	34.859	10.352	25.892
%RSD	1.136055	.3228380	1.648972	.4722384	1.252641
#1	2573.714	31717.52	2130.590	2188.695	2077.126
#2	2584.762	31644.06	2137.466	2203.869	2086.318
#3	2529.727	31515.78	2073.944	2184.083	2037.587

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-07DLX2 Acquired: 12/19/2024 23:44:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ65 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2409404	-.083493	.2422797	.0963976	.0287876	87.53633	.9076994
Stddev	.0042121	.010569	.0043054	.0055449	.0022319	1.91680	.0204619
%RSD	1.748203	12.65798	1.777018	5.752097	7.753162	2.189719	2.254262
#1	.2406226	-.074356	.2451480	.0986375	.0312730	88.58603	.9201543
#2	.2368961	-.081057	.2373290	.0900831	.0281354	85.32397	.8840839
#3	.2453023	-.095067	.2443620	.1004721	.0269544	88.69901	.9188601

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0073025	.0034054	67.21267	.1291026	.1271331	.2624795	212.6136
Stddev	.0001612	.0000654	1.45271	.0006488	.0002731	.0138508	4.9523
%RSD	2.207111	1.919923	2.161359	.5025387	.2148403	5.276906	2.329249
#1	.0074130	.0033905	68.14790	.1298284	.1269113	.2761910	215.7540
#2	.0071176	.0034769	65.53908	.1285789	.1270498	.2484935	206.9047
#3	.0073769	.0033487	67.95102	.1289005	.1274382	.2627541	215.1821

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.155521	44.59597	.1305591	.0059888	1.900647	.3400277	.8109258
Stddev	.083341	.79820	.0005229	.0006296	.461914	.0161676	.0096133
%RSD	2.005552	1.789838	.4004955	10.51326	24.30298	4.754784	1.185469
#1	4.205266	44.99139	.1299767	.0057785	1.628791	.3505453	.8211827
#2	4.059306	43.67726	.1307123	.0054912	2.433985	.3214113	.8021215
#3	4.201992	45.11927	.1309882	.0066966	1.639163	.3481266	.8094733

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.23311	9.985383	-.056892	.0013047	2.779441	5.698899	.0270644
Stddev	.58636	.025449	.001733	.0004003	.004983	.083468	.0008077
%RSD	2.323774	.2548635	3.045412	30.68209	.1792903	1.464631	2.984516
#1	25.75788	9.986175	-.055352	.0008743	2.785165	5.756830	.0278278
#2	24.60021	9.959547	-.056555	.0016659	2.777088	5.603226	.0271469
#3	25.34126	10.01043	-.058768	.0013740	2.776070	5.736640	.0262186

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-07DLX2 Acquired: 12/19/2024 23:44:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ65 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.962936	.1527883	.0602129
Stddev	.041722	.0042105	.0022150
%RSD	2.125511	2.755770	3.678664
#1	1.980484	.1550547	.0588988
#2	1.915306	.1479301	.0589696
#3	1.993018	.1553803	.0627703

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2614.976	31980.63	2131.901	2217.211	2104.335
Stddev	7.515	104.60	33.938	3.341	5.351
%RSD	.2873982	.3270837	1.591933	.1507030	.2542748
#1	2609.263	31860.75	2101.291	2214.099	2098.934
#2	2623.489	32027.78	2168.398	2220.742	2109.634
#3	2612.175	32053.36	2126.014	2216.792	2104.438

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-08DLX2 Acquired: 12/19/2024 23:47:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ66 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2377569	-.091538	.2643459	.1025478	.0353825	94.96842
Stddev	.0084355	.004426	.0057698	.0042029	.0030576	.19909
%RSD	3.547933	4.835600	2.182687	4.098440	8.641430	.2096371
#1	.2380744	-.092641	.2599973	.1022449	.0358568	95.09553
#2	.2460292	-.086664	.2708915	.0985045	.0381751	95.07075
#3	.2291672	-.095308	.2621489	.1068939	.0321154	94.73898

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9824137	.0078444	.0036284	75.75138	.1359462	.1334597
Stddev	.0019123	.0000993	.0001471	.17013	.0011362	.0003746
%RSD	.1946481	1.265285	4.055298	.2245870	.8357412	.2806585
#1	.9838227	.0078331	.0037314	75.93888	.1364331	.1334074
#2	.9831814	.0077512	.0034599	75.70839	.1367578	.1338576
#3	.9802369	.0079488	.0036939	75.60688	.1346478	.1331140

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2755081	228.2012	4.472079	48.05901	.1390090	.0065176
Stddev	.0013693	.2529	.019895	.20070	.0011542	.0008397
%RSD	.4970050	.1108293	.4448770	.4176203	.8303214	12.88426
#1	.2742109	228.4915	4.491865	48.06299	.1388491	.0074411
#2	.2753739	228.0844	4.472293	48.25769	.1402348	.0057998
#3	.2769396	228.0279	4.452077	47.85634	.1379430	.0063118

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.249326	.3689413	.8641391	27.49471	F 10.71419	-.059633
Stddev	.785365	.0067603	.0179065	.13775	.00663	.001860
%RSD	34.91559	1.832350	2.072175	.5009958	.0618810	3.119086
#1	1.587496	.3704824	.8460208	27.65003	10.71067	-.060638
#2	2.043319	.3615435	.8818259	27.44673	10.72183	-.060774
#3	3.117163	.3747980	.8645707	27.38736	10.71005	-.057486

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-08DLX2 Acquired: 12/19/2024 23:47:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ66 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016115	3.103626	5.555162	.0146868	1.977809	.1706533
Stddev	.0002166	.004805	.030178	.0009179	.012339	.0010924
%RSD	13.43971	.1548260	.5432353	6.250113	.6238734	.6401202
#1	.0014030	3.103377	5.589623	.0157195	1.986877	.1703751
#2	.0015960	3.108551	5.542411	.0139637	1.982792	.1718579
#3	.0018353	3.098950	5.533453	.0143772	1.963758	.1697269

Elem	Li6707
Units	ppm
Avg	.0672945
Stddev	.0015977
%RSD	2.374247
#1	.0689000
#2	.0672790
#3	.0657046

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2598.741	31832.65	2121.740	2206.889	2072.997
Stddev	4.180	124.02	16.734	13.206	5.856
%RSD	.1608350	.3896059	.7886971	.5984188	.2825033
#1	2599.829	31927.77	2105.592	2221.577	2069.923
#2	2594.125	31692.38	2120.622	2203.094	2069.318
#3	2602.269	31877.81	2139.004	2195.995	2079.751

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-09DLX2 Acquired: 12/19/2024 23:51:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ67 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3321924	-.122350	.2719490	.1321818	.0426430	107.0330
Stddev	.0032142	.010556	.0026434	.0011614	.0023542	.4955
%RSD	.9675721	8.627988	.9720373	.8786225	5.520603	.4629034
#1	.3324012	-.126521	.2723146	.1315238	.0407060	107.2309
#2	.3352972	-.110346	.2743906	.1335228	.0452632	106.4692
#3	.3288789	-.130184	.2691418	.1314989	.0419597	107.3989

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9917283	.0092585	.0038846	65.81089	.1634976	.1613476
Stddev	.0064792	.0002558	.0000752	.36607	.0006875	.0005967
%RSD	.6533186	2.763175	1.936083	.5562489	.4205206	.3697955
#1	.9960481	.0089641	.0038546	65.85965	.1629385	.1606830
#2	.9842784	.0094269	.0038290	65.42289	.1642653	.1615225
#3	.9948584	.0093844	.0039701	66.15015	.1632890	.1618372

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2906486	280.5909	5.026980	53.79620	.1681491	.0061632
Stddev	.0084757	1.1543	.024321	.20259	.0011072	.0002432
%RSD	2.916120	.4113652	.4837999	.3765828	.6584393	3.945437
#1	.2809521	280.8995	5.040287	53.90736	.1678308	.0059192
#2	.2966464	279.3137	4.998910	53.56237	.1672360	.0061649
#3	.2943471	281.5594	5.041743	53.91888	.1693806	.0064055

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.661928	.4663194	.8406241	31.36362	F 11.80578	-.098476
Stddev	.384104	.0030326	.0041637	.24340	.03538	.006030
%RSD	14.42954	.6503331	.4953054	.7760645	.2996463	6.123443
#1	2.220492	.4671705	.8440417	31.41198	11.76838	-.092264
#2	2.845410	.4629522	.8359868	31.09968	11.81027	-.098859
#3	2.919881	.4688356	.8418437	31.57922	11.83871	-.104306

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-09DLX2 Acquired: 12/19/2024 23:51:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ67 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008853	2.490204	5.793227	.0209688	2.488331	.0306959
Stddev	.0011643	.002730	.012384	.0027019	.008712	.0006973
%RSD	131.5066	.1096198	.2137595	12.88519	.3501335	2.271507
#1	.0021788	2.489921	5.793845	.0239803	2.490422	.0312504
#2	-.000079	2.487627	5.780546	.0201693	2.478764	.0299131
#3	.000556	2.493065	5.805290	.0187570	2.495808	.0309241

Elem	Li6707
Units	ppm
Avg	.0689407
Stddev	.0028104
%RSD	4.076479
#1	.0660138
#2	.0691907
#3	.0716178

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2659.837	32508.15	2180.011	2258.178	2076.141
Stddev	5.450	41.97	8.704	3.994	4.142
%RSD	.2048843	.1291087	.3992618	.1768539	.1994934
#1	2663.965	32463.38	2170.538	2259.981	2080.596
#2	2661.886	32546.61	2187.655	2253.601	2075.420
#3	2653.660	32514.46	2181.842	2260.952	2072.407

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-10DLX2 Acquired: 12/19/2024 23:55:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ68 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2881203	-.101592	.3118229	.1082226	.0370236	89.71826
Stddev	.0041082	.000966	.0034666	.0045445	.0019970	.89914
%RSD	1.425880	.9512834	1.111730	4.199197	5.393851	1.002179
#1	.2841542	-.100612	.3080079	.1096305	.0352441	88.69744
#2	.2923573	-.102544	.3126808	.1031407	.0391834	90.06472
#3	.2878494	-.101620	.3147801	.1118964	.0366432	90.39263

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8664273	.0075584	.0044858	57.35451	.1304537	.1306227
Stddev	.0099825	.0002613	.0002266	.41062	.0007084	.0006714
%RSD	1.152142	3.457516	5.051396	.7159347	.5430071	.5139987
#1	.8557247	.0074531	.0043979	56.88042	.1305060	.1300372
#2	.8680717	.0078559	.0043164	57.58557	.1297206	.1313555
#3	.8754855	.0073661	.0047432	57.59755	.1311344	.1304755

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3325370	233.2751	4.286717	45.21134	.1380078	.0065643
Stddev	.0124544	2.2602	.050519	.35136	.0005458	.0000649
%RSD	3.745276	.9688845	1.178504	.7771397	.3954612	.9887295
#1	.3198277	230.8150	4.228910	44.84102	.1386351	.0065994
#2	.3330635	233.7505	4.308840	45.25299	.1377470	.0066042
#3	.3447198	235.2597	4.322401	45.54002	.1376415	.0064894

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.070022	.3788098	.9927622	29.14250	F 10.16513	-.090294
Stddev	.425745	.0124080	.0186925	.59448	.00760	.001566
%RSD	13.86780	3.275518	1.882875	2.039921	.0747678	1.734215
#1	3.268969	.3696003	1.014330	28.46441	10.15775	-.089074
#2	2.581225	.3739095	.982701	29.38908	10.16470	-.089748
#3	3.359874	.3929196	.981255	29.57402	10.17293	-.092060

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-10DLX2 Acquired: 12/19/2024 23:55:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ68 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012072	2.425086	4.895705	.0167402	2.388400	.0125722
Stddev	.0004403	.003258	.056260	.0019640	.025720	.0007364
%RSD	36.47273	.1343269	1.149180	11.73228	1.076878	5.857211
#1	.0012702	2.422446	4.831239	.0187947	2.358876	.0118091
#2	.0016127	2.428726	4.934888	.0148813	2.400373	.0126289
#3	.0007388	2.424084	4.920988	.0165447	2.405950	.0132786

Elem	Li6707
Units	ppm
Avg	.0607176
Stddev	.0037540
%RSD	6.182711
#1	.0616662
#2	.0565803
#3	.0639063

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2604.733	32110.36	2119.297	2229.635	2080.375
Stddev	5.762	79.91	18.790	11.775	4.952
%RSD	.2212134	.2488665	.8866152	.5280909	.2380314
#1	2611.128	32064.40	2140.936	2218.834	2085.913
#2	2599.946	32202.63	2109.842	2242.187	2076.374
#3	2603.126	32064.03	2107.112	2227.885	2078.838

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-11DLX2 Acquired: 12/19/2024 23:59:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD12 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6736371	-.089001	.4741887	.1079253	.0322070	92.37040	.8542921
Stddev	.0028944	.003098	.0076843	.0043761	.0032605	1.00827	.0093225
%RSD	.4296611	3.480474	1.620511	4.054738	10.12349	1.091548	1.091257
#1	.6714636	-.091873	.4699562	.1098855	.0315122	93.11275	.8569551
#2	.6769226	-.089411	.4695513	.1109787	.0357589	92.77595	.8619934
#3	.6725253	-.085719	.4830587	.1029118	.0293500	91.22251	.8439279

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077368	.0081849	104.2487	.1020146	.1384621	.5494992	233.1063
Stddev	.0001053	.0002749	1.2678	.0012768	.0023526	.0100332	2.4798
%RSD	1.360749	3.358354	1.216136	1.251573	1.699086	1.825886	1.063789
#1	.0077861	.0078917	105.4363	.1014098	.1374099	.5593080	234.4324
#2	.0078084	.0082261	104.3962	.1011525	.1368192	.5499341	234.6410
#3	.0076159	.0084368	102.9136	.1034814	.1411571	.5392556	230.2454

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.027272	53.88668	.1460212	.0077528	2.159953	.3683284	1.362909
Stddev	.047134	.48403	.0026770	.0003479	.913386	.0189207	.017822
%RSD	.9375592	.8982279	1.833331	4.487145	42.28731	5.136911	1.307629
#1	5.052224	54.26244	.1460066	.0073973	3.123525	.3842218	1.378733
#2	5.056684	54.05711	.1433515	.0080925	1.306790	.3733642	1.343604
#3	4.972907	53.34049	.1487055	.0077685	2.049545	.3473993	1.366391

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.96092	9.089836	-.095879	.0008925	11.68491	5.991515	.0128131
Stddev	.29830	.174957	.004116	.0005540	.23175	.057750	.0004789
%RSD	1.660832	1.924751	4.293352	62.07378	1.983324	.9638562	3.737899
#1	18.19803	8.982658	-.100150	.0013883	11.56049	6.051125	.0128157
#2	18.05873	8.995119	-.095550	.0002945	11.54194	5.987594	.0132908
#3	17.62599	9.291730	-.091937	.0009949	11.95230	5.935826	.0123329

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-11DLX2 Acquired: 12/19/2024 23:59:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD12 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.279835	-.070974	.0695261
Stddev	.016986	.001106	.0022390
%RSD	1.327189	1.558529	3.220362
#1	1.291042	-.071487	.0671009
#2	1.288171	-.071731	.0699629
#3	1.260291	-.069705	.0715145

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2592.355	31961.88	2153.283	2220.271	2045.346
Stddev	42.132	68.25	22.735	4.780	37.628
%RSD	1.625226	.2135213	1.055813	.2152917	1.839672
#1	2617.900	32040.24	2146.113	2225.290	2068.787
#2	2615.440	31929.86	2134.998	2219.751	2065.307
#3	2543.727	31915.52	2178.739	2215.772	2001.944

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-12DLX2 Acquired: 12/20/2024 0:03:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD13 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2671870	-.084846	.2139445	.0948070	.0292162	84.92502	.6699185
Stddev	.0024573	.006604	.0037069	.0009682	.0010218	2.84097	.0229347
%RSD	.9197025	7.784074	1.732627	1.021210	3.497457	3.345265	3.423506
#1	.2654005	-.077247	.2171307	.0946897	.0281409	81.65504	.6439398
#2	.2661712	-.089207	.2148267	.0958285	.0293331	86.33298	.6784543
#3	.2699894	-.088084	.2098762	.0939028	.0301745	86.78703	.6873612

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068514	.0037539	47.75244	.0810181	.1140359	.2378727	203.1148
Stddev	.0002188	.0001845	1.56492	.0010531	.0005033	.0050832	7.0154
%RSD	3.193377	4.914373	3.277141	1.299801	.4413324	2.136960	3.453932
#1	.0066422	.0039334	45.94721	.0820138	.1134718	.2341428	195.0930
#2	.0068332	.0035648	48.58559	.0811248	.1141971	.2436626	206.1490
#3	.0070786	.0037636	48.72452	.0799158	.1144389	.2358126	208.1026

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.196038	42.54370	.1153459	.0052994	1.302506	.2873483	.6757312
Stddev	.139330	1.49395	.0005759	.0012262	.179772	.0084272	.0100811
%RSD	3.320505	3.511563	.4992491	23.13881	13.80201	2.932756	1.491883
#1	4.037102	40.82233	.1148592	.0038927	1.098843	.2781826	.6771001
#2	4.253890	43.30664	.1151969	.0058628	1.439107	.2947615	.6850579
#3	4.297123	43.50213	.1159817	.0061425	1.369569	.2891007	.6650356

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.47386	6.728308	-.093236	.0000940	2.224698	5.321453	.0112744
Stddev	.96387	.009283	.001498	.0004818	.011653	.163961	.0008333
%RSD	4.949557	.1379666	1.606956	512.3907	.5238017	3.081137	7.391407
#1	18.37672	6.725771	-.093309	-.000441	2.211382	5.132242	.0103996
#2	19.86036	6.720558	-.094696	.000494	2.229678	5.410332	.0113645
#3	20.18449	6.738595	-.091702	.000229	2.233033	5.421784	.0120590

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-12DLX2 Acquired: 12/20/2024 0:03:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD13 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.315304	-.069308	.0597309
Stddev	.045933	.002540	.0019703
%RSD	3.492207	3.664968	3.298576
#1	1.262406	-.066434	.0579205
#2	1.338403	-.070235	.0594430
#3	1.345102	-.071254	.0618293

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2601.583	32061.64	2150.232	2233.566	2083.889
Stddev	10.211	216.05	61.882	6.225	8.190
%RSD	.3924760	.6738538	2.877910	.2787218	.3930015
#1	2612.598	31978.20	2221.287	2230.424	2092.175
#2	2599.717	31899.76	2108.161	2229.538	2083.691
#3	2592.434	32306.97	2121.249	2240.736	2075.799

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-13DLX2 Acquired: 12/20/2024 0:06:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD14 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2230316	-.095008	.1735232	.1047805	.0334190	101.9588	.7859337
Stddev	.0067084	.002786	.0024984	.0025009	.0006501	.4736	.0050578
%RSD	3.007835	2.932883	1.439784	2.386816	1.945321	.4645241	.6435409
#1	.2287156	-.093035	.1711911	.1023294	.0341547	102.3436	.7917617
#2	.2156320	-.093794	.1761599	.1073284	.0329217	102.1029	.7826922
#3	.2247472	-.098196	.1732186	.1046837	.0331808	101.4298	.7833472

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080978	.0024904	46.42722	.1048168	.1241581	.2299629	220.7694
Stddev	.0001923	.0000641	.31593	.0013164	.0011790	.0046542	1.2765
%RSD	2.374851	2.573398	.6804873	1.255916	.9495581	2.023894	.5781896
#1	.0081160	.0024395	46.62929	.1047090	.1228332	.2334375	222.1908
#2	.0078970	.0025624	46.58921	.1035577	.1245495	.2246750	220.3964
#3	.0082803	.0024694	46.06315	.1061838	.1250915	.2317762	219.7209

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.688181	46.95378	.1340149	.0060877	2.047841	.3293399	.5481866
Stddev	.019770	.28396	.0005395	.0010828	1.241167	.0049764	.0042954
%RSD	.4216883	.6047605	.4025358	17.78693	60.60856	1.511015	.7835588
#1	4.709941	47.27161	.1334263	.0070925	.685440	.3319205	.5432650
#2	4.683277	46.72506	.1341324	.0062298	3.114258	.3324959	.5511803
#3	4.671325	46.86468	.1344859	.0049409	2.343824	.3236033	.5501143

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.54581	6.573359	-.088700	-.000501	1.227088	6.387493	.0119271
Stddev	.15713	.030319	.002579	.000230	.005739	.060146	.0012686
%RSD	.7292733	.4612338	2.907405	45.95925	.4676984	.9416252	10.63629
#1	21.55534	6.558649	-.090964	-.000639	1.221870	6.456026	.0133570
#2	21.69795	6.553201	-.085893	-.000629	1.226160	6.362967	.0114876
#3	21.38413	6.608226	-.089245	-.000235	1.233235	6.343484	.0109367

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-13DLX2 Acquired: 12/20/2024 0:06:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD14 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.494436	-.054392	.0731346
Stddev	.010303	.000134	.0050185
%RSD	.6894291	.2467610	6.861998
#1	1.502181	-.054239	.0735666
#2	1.498384	-.054489	.0679141
#3	1.482742	-.054449	.0779231

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2620.580	32353.65	2101.301	2239.681	2084.487
Stddev	2.552	102.91	14.342	6.763	5.865
%RSD	.0973821	.3180880	.6825395	.3019535	.2813572
#1	2623.029	32370.15	2088.649	2247.488	2090.402
#2	2620.775	32243.49	2098.373	2235.599	2084.388
#3	2617.936	32447.32	2116.881	2235.957	2078.673

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-14DLX2 Acquired: 12/20/2024 0:10:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD15 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3158656	-.098168	.2043810	.1076932	.0351113	98.00386	.7015621
Stddev	.0018674	.003371	.0006686	.0034167	.0020646	.33471	.0045206
%RSD	.5912097	3.433986	.3271224	3.172646	5.880083	.3415234	.6443665
#1	.3140737	-.102061	.2043573	.1092529	.0374422	97.61751	.6964039
#2	.3157227	-.096191	.2050611	.1037750	.0335126	98.20591	.7034475
#3	.3178004	-.096253	.2037246	.1100518	.0343791	98.18817	.7048347

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084656	.0029384	94.03852	.1027141	.1518519	.2539543	242.9590
Stddev	.0001954	.0000788	.39960	.0009400	.0009891	.0032391	1.4163
%RSD	2.307790	2.683075	.4249327	.9151353	.6513344	1.275483	.5829443
#1	.0086089	.0028895	93.58076	.1031521	.1507285	.2574464	241.3284
#2	.0082431	.0030294	94.31762	.1016350	.1522356	.2510482	243.8828
#3	.0085448	.0028965	94.21718	.1033551	.1525916	.2533682	243.6659

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.588274	49.88469	.1460810	.0068068	1.434947	.3911978	.5995895
Stddev	.026099	.27504	.0017670	.0009117	.140284	.0028599	.0126423
%RSD	.5688131	.5513567	1.209598	13.39346	9.776281	.7310711	2.108487
#1	4.559061	49.57270	.1441394	.0069653	1.442408	.3879590	.5874871
#2	4.609290	49.98926	.1465090	.0076289	1.291081	.3922588	.6127101
#3	4.596472	50.09211	.1475948	.0058263	1.571352	.3933756	.5985714

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.57708	7.945872	-.090883	.0003176	1.368675	5.647309	.0152467
Stddev	.15826	.083786	.006025	.0007370	.011350	.029777	.0009157
%RSD	.8519359	1.054461	6.629508	232.0890	.8292592	.5272699	6.005929
#1	18.41073	7.861071	-.096956	.0011375	1.359568	5.639936	.0150728
#2	18.72577	7.947938	-.090787	.0001049	1.365066	5.621911	.0162369
#3	18.59473	8.028605	-.084907	-.000290	1.381390	5.680079	.0144304

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-14DLX2 Acquired: 12/20/2024 0:10:49 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD15 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.503093	-.060970	.0700052
Stddev	.009890	.000372	.0047808
%RSD	.6580053	.6093476	6.829262
#1	1.491932	-.060615	.0645551
#2	1.510769	-.060940	.0719692
#3	1.506578	-.061356	.0734912

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2617.118	32570.31	2123.323	2243.895	2056.185
Stddev	12.348	116.49	10.550	15.832	14.859
%RSD	.4718078	.3576530	.4968840	.7055589	.7226501
#1	2629.748	32687.51	2126.811	2260.709	2072.779
#2	2616.532	32568.85	2131.688	2241.702	2051.665
#3	2605.073	32454.55	2111.471	2229.274	2044.111

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-15DLX2 Acquired: 12/20/2024 0:14:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD16 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2646470	-.088580	.1774827	.1038668	.0318665	97.09315	.7062184
Stddev	.0019794	.002820	.0020104	.0035744	.0041396	.27736	.0028162
%RSD	.7479474	3.183442	1.132743	3.441359	12.99040	.2856592	.3987706
#1	.2652997	-.090242	.1787964	.1055861	.0360875	96.98629	.7068353
#2	.2662176	-.090175	.1751683	.1062567	.0316985	97.40804	.7086750
#3	.2624236	-.085324	.1784834	.0997576	.0278134	96.88511	.7031449

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077230	.0028097	80.38361	.1052513	.1330596	.2142685	226.4759
Stddev	.0001141	.0000676	.35153	.0005773	.0005163	.0017998	.8691
%RSD	1.477704	2.406771	.4373096	.5485088	.3880326	.8399936	.3837682
#1	.0076854	.0028605	79.99806	.1055399	.1330541	.2122129	226.5451
#2	.0078511	.0027330	80.68630	.1056275	.1325461	.2150310	227.3085
#3	.0076324	.0028356	80.46649	.1045867	.1335787	.2155616	225.5743

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.412714	50.19105	.1345658	.0063792	1.765674	.3521712	.5924019
Stddev	.022118	.18907	.0004738	.0010201	.284103	.0139075	.0078748
%RSD	.5012379	.3767071	.3521246	15.99126	16.09035	3.949088	1.329302
#1	4.415188	50.30428	.1350009	.0068837	2.030650	.3485292	.5834400
#2	4.433491	50.29609	.1346355	.0070487	1.800684	.3404470	.5982154
#3	4.389463	49.97278	.1340609	.0052051	1.465689	.3675374	.5955502

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.97690	7.298507	-.089331	.0002629	1.299662	6.044981	.0125312
Stddev	.31912	.016964	.002398	.0006170	.002502	.057198	.0017898
%RSD	1.775168	.2324361	2.684504	234.7093	.1924939	.9461984	14.28244
#1	18.13793	7.287739	-.089478	-.000121	1.302464	6.060233	.0106840
#2	18.18343	7.289720	-.091653	.000975	1.297654	6.093007	.0142573
#3	17.60935	7.318063	-.086863	-.000065	1.298868	5.981704	.0126524

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-15DLX2 Acquired: 12/20/2024 0:14:39 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD16 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.267320	-.057703	.0651297
Stddev	.005845	.000390	.0021557
%RSD	.4612190	.6758744	3.309867
#1	1.264523	-.057254	.0626834
#2	1.274038	-.057957	.0659542
#3	1.263399	-.057898	.0667514

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2610.797	32266.89	2115.078	2230.206	2065.454
Stddev	12.820	101.21	23.031	13.088	6.818
%RSD	.4910245	.3136626	1.088908	.5868596	.3300838
#1	2596.370	32354.03	2108.926	2242.561	2059.171
#2	2620.880	32155.88	2095.748	2216.491	2072.703
#3	2615.142	32290.75	2140.561	2231.564	2064.490

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-16DLX2 Acquired: 12/20/2024 0:18:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD17 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2258851	-.076024	.1661387	.0843615	.0266695	65.88451	.4838867
Stddev	.0041152	.001644	.0007491	.0031895	.0021310	.23336	.0018987
%RSD	1.821798	2.162393	.4508946	3.780745	7.990590	.3542020	.3923803
#1	.2216640	-.077598	.1668788	.0842539	.0253248	65.70435	.4835225
#2	.2298855	-.074318	.1661563	.0876035	.0291265	65.80103	.4821965
#3	.2261057	-.076157	.1653809	.0812272	.0255570	66.14813	.4859411

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061236	.0025999	62.88659	.0887314	.1066832	.1892264	189.0949
Stddev	.0000414	.0001000	.35572	.0004101	.0004435	.0045612	.7705
%RSD	.6760965	3.846659	.5656509	.4621356	.4157030	2.410443	.4074913
#1	.0061548	.0027005	62.64198	.0888021	.1068291	.1842757	188.3252
#2	.0061394	.0025005	62.72313	.0891014	.1061851	.1932582	189.0933
#3	.0060766	.0025988	63.29466	.0882905	.1070353	.1901452	189.8662

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.295552	36.50840	.0984082	.0046339	2.451639	.3266853	.5342250
Stddev	.019753	.10660	.0000470	.0007633	.970052	.0116791	.0082417
%RSD	.5993929	.2919930	.0477083	16.47329	39.56749	3.575030	1.542739
#1	3.281443	36.43596	.0984409	.0054490	3.425103	.3133336	.5384772
#2	3.287087	36.45844	.0984293	.0045167	2.444778	.3317178	.5247257
#3	3.318128	36.63081	.0983544	.0039359	1.485035	.3350044	.5394723

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.40174	6.398700	-.068061	.0005655	1.566855	4.612870	.0099590
Stddev	.04276	.013597	.002924	.0001532	.002973	.027024	.0007273
%RSD	.2607282	.2124902	4.296450	27.08407	.1897618	.5858397	7.303449
#1	16.35368	6.405221	-.070831	.0003964	1.564496	4.585612	.0106176
#2	16.41596	6.383071	-.068349	.0006949	1.565873	4.613344	.0091783
#3	16.43558	6.407807	-.065004	.0006052	1.570194	4.639654	.0100810

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-16DLX2 Acquired: 12/20/2024 0:18:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD17 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.605470	-.017530	.0478578
Stddev	.011943	.000722	.0032576
%RSD	.7439185	4.120861	6.806815
#1	1.591872	-.016887	.0442928
#2	1.610279	-.018312	.0506796
#3	1.614260	-.017390	.0486009

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2559.393	31514.33	2059.950	2181.144	2087.918
Stddev	2.011	41.60	11.559	9.961	4.249
%RSD	.0785840	.1320122	.5611183	.4566939	.2034960
#1	2558.020	31555.75	2073.043	2192.646	2084.581
#2	2561.702	31514.68	2055.647	2175.412	2092.701
#3	2558.458	31472.54	2051.159	2175.374	2086.472

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-17DLX2 Acquired: 12/20/2024 0:22:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD18 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3177398	-.076951	.2221646	.0908414	.0288796	86.44775	.6499854
Stddev	.0006334	.004705	.0015814	.0016475	.0021742	.05997	.0013497
%RSD	.1993441	6.113958	.7118009	1.813637	7.528304	.0693673	.2076456
#1	.3181392	-.071570	.2229209	.0915404	.0308695	86.45326	.6485492
#2	.3180708	-.078996	.2232259	.0920243	.0265591	86.38522	.6512275
#3	.3170095	-.080288	.2203471	.0889597	.0292103	86.50477	.6501796

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070501	.0035801	128.6911	.1085202	.1280147	.2164940	211.9851
Stddev	.0000246	.0001170	.0972	.0001455	.0001797	.0032974	.4539
%RSD	.3494322	3.267107	.0755087	.1340723	.1403590	1.523077	.2141370
#1	.0070301	.0034892	128.5827	.1083693	.1281895	.2129047	211.8209
#2	.0070427	.0035391	128.7703	.1085318	.1278305	.2171886	211.6360
#3	.0070777	.0037121	128.7203	.1086596	.1280241	.2193887	212.4982

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.445488	45.00673	.1304745	.0057940	1.168003	.3422292	.7083549
Stddev	.010440	.18882	.0002685	.0015880	.118750	.0068636	.0044813
%RSD	.2348409	.4195349	.2057698	27.40712	10.16694	2.005569	.6326337
#1	4.435433	44.91623	.1302297	.0064481	1.057663	.3449489	.7112978
#2	4.444757	44.88020	.1304322	.0069505	1.293674	.3344224	.7105695
#3	4.456274	45.22377	.1307616	.0039835	1.152670	.3473161	.7031975

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.64800	7.718139	-.081951	.0007879	2.239169	5.869788	.0127152
Stddev	.10553	.012813	.004344	.0001646	.006652	.004896	.0010696
%RSD	.4874855	.1660167	5.300879	20.89007	.2970686	.0834066	8.412067
#1	21.67932	7.704099	-.083229	.0007823	2.232036	5.872455	.0117425
#2	21.53035	7.729203	-.085512	.0009552	2.245203	5.872770	.0125424
#3	21.73432	7.721115	-.077111	.0006261	2.240269	5.864137	.0138606

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-17DLX2 Acquired: 12/20/2024 0:22:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD18 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.511555	-.037622	.0636940
Stddev	.008075	.000487	.0013277
%RSD	.5342303	1.293110	2.084463
#1	1.509966	-.038181	.0621680
#2	1.520307	-.037396	.0645842
#3	1.504393	-.037290	.0643299

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2585.406	31780.25	2100.679	2206.466	2048.966
Stddev	7.694	110.54	7.439	12.348	4.792
%RSD	.2976076	.3478160	.3541076	.5596151	.2338553
#1	2578.148	31762.46	2092.390	2196.986	2043.480
#2	2593.473	31898.60	2106.775	2220.429	2052.329
#3	2584.596	31679.69	2102.871	2201.982	2051.090

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-18DLX2 Acquired: 12/20/2024 0:26:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD19 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2955428	-.129595	.1747672	.1416340	.0470289	101.4264	.8642735
Stddev	.0039645	.004411	.0047375	.0026803	.0044012	.5669	.0042865
%RSD	1.341417	3.403519	2.710730	1.892401	9.358487	.5589115	.4959698
#1	.2943967	-.129306	.1781930	.1402833	.0486767	102.0803	.8688916
#2	.2922776	-.125336	.1767477	.1447209	.0503684	101.1260	.8604220
#3	.2999540	-.134144	.1693608	.1398978	.0420416	101.0729	.8635068

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0096273	.0028631	84.54407	.1219016	.1733009	.2799926	298.8129
Stddev	.0001897	.0000562	.53924	.0010921	.0003541	.0034862	.9399
%RSD	1.970011	1.961500	.6378222	.8959035	.2043027	1.245107	.3145595
#1	.0095842	.0028725	85.15270	.1206423	.1730069	.2807680	299.8954
#2	.0098347	.0029139	84.35363	.1224729	.1732019	.2761840	298.3390
#3	.0094629	.0028028	84.12590	.1225896	.1736939	.2830259	298.2041

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.268139	52.45979	.1640149	.0085864	1.801503	.5769335	.4830153
Stddev	.022427	.20895	.0006701	.0000980	.286036	.0035690	.0116135
%RSD	.4257009	.3983016	.4085581	1.141936	15.87765	.6186130	2.404366
#1	5.293886	52.69572	.1632461	.0085652	1.903388	.5742269	.4852710
#2	5.252864	52.29810	.1643235	.0086933	1.478474	.5755953	.4704394
#3	5.257668	52.38556	.1644751	.0085007	2.022648	.5809781	.4933354

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.97145	8.519210	-.129480	.0006274	1.277935	6.007884	.0186945
Stddev	.08434	.024479	.004333	.0006424	.009745	.008573	.0005705
%RSD	.4969631	.2873430	3.346672	102.3831	.7625426	.1426938	3.051596
#1	16.97077	8.498967	-.125439	.0011332	1.267764	5.998042	.0192205
#2	17.05613	8.512246	-.128945	.0008444	1.278853	6.013725	.0187748
#3	16.88745	8.546417	-.134056	-.000095	1.287188	6.011885	.0180881

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-18DLX2 Acquired: 12/20/2024 0:26:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD19 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.625672	-.114991	.0695739
Stddev	.009681	.000589	.0018320
%RSD	.5954977	.5124449	2.633143
#1	1.635290	-.115479	.0710741
#2	1.615930	-.115159	.0701154
#3	1.625797	-.114336	.0675322

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.296	32295.14	2128.508	2243.005	2056.552
Stddev	4.041	137.85	7.290	12.924	.687
%RSD	.1539217	.4268479	.3424702	.5761726	.0334114
#1	2621.029	32137.14	2120.349	2228.369	2057.072
#2	2629.065	32390.85	2134.378	2247.801	2055.773
#3	2625.792	32357.44	2130.799	2252.845	2056.811

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-19DLX2 Acquired: 12/20/2024 0:30:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD20 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4223613	-.096481	.2677908	.1127869	.0359857	114.1145	1.012434
Stddev	.0076557	.008142	.0025462	.0027855	.0012743	.6315	.005681
%RSD	1.812588	8.438519	.9508008	2.469656	3.541097	.5533755	.5611463
#1	.4158694	-.089964	.2660323	.1124745	.0345612	114.0570	1.010095
#2	.4308034	-.093871	.2666296	.1101708	.0363787	113.5137	1.008295
#3	.4204110	-.105607	.2707106	.1157153	.0370172	114.7727	1.018911

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091088	.0044846	120.4307	.1153969	.1639458	.3106383	259.7860
Stddev	.0002371	.0001348	.5689	.0009799	.0002897	.0141533	1.3689
%RSD	2.603394	3.006737	.4723854	.8491613	.1767206	4.556213	.5269278
#1	.0089169	.0044401	120.1565	.1149854	.1638651	.3040273	259.7352
#2	.0090355	.0046361	120.0509	.1146898	.1637049	.3010001	258.4432
#3	.0093739	.0043777	121.0848	.1165154	.1642673	.3268874	261.1796

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.791118	58.62155	.1639114	.0079950	2.090174	.4103785	.7756591
Stddev	.039728	.33626	.0009459	.0009956	1.694117	.0052423	.0086222
%RSD	.6860159	.5736074	.5770577	12.45272	81.05149	1.277424	1.111603
#1	5.788552	58.62191	.1645224	.0071579	3.570477	.4103402	.7804848
#2	5.752736	58.28511	.1628219	.0090959	.242521	.4051555	.7807880
#3	5.832067	58.95762	.1643899	.0077312	2.457526	.4156399	.7657045

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.52534	8.798864	-.104404	.0010566	5.480011	6.567559	.0160803
Stddev	.16155	.004097	.001475	.0003817	.009111	.075963	.0010309
%RSD	.8720752	.0465665	1.412617	36.12083	.1662562	1.156637	6.410867
#1	18.37629	8.802780	-.104109	.0006314	5.489457	6.550618	.0149873
#2	18.50272	8.794607	-.106005	.0011690	5.471277	6.501497	.0162186
#3	18.69702	8.799205	-.103100	.0013695	5.479299	6.650562	.0170351

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5177-19DLX2 Acquired: 12/20/2024 0:30:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCD20 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.079962	-.072339	.0822851
Stddev	.009013	.000061	.0036231
%RSD	.8345945	.0839356	4.403137
#1	1.072491	-.072330	.0864427
#2	1.077422	-.072283	.0798030
#3	1.089973	-.072404	.0806095

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2680.305	33033.45	2195.986	2296.431	2052.897
Stddev	5.219	42.16	12.147	1.407	4.112
%RSD	.1947265	.1276257	.5531332	.0612682	.2002943
#1	2686.225	33039.72	2195.665	2296.497	2057.610
#2	2678.323	33072.12	2208.290	2297.804	2051.046
#3	2676.366	32988.50	2184.003	2294.992	2050.037

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-01DLX2 Acquired: 12/20/2024 0:33:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ69 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2080311	-.065754	.2208375	.0743005	.0227363	64.42272
Stddev	.0032676	.007524	.0020323	.0037694	.0034446	.50961
%RSD	1.570715	11.44218	.9202840	5.073218	15.15030	.7910425
#1	.2106774	-.057538	.2219041	.0766832	.0266588	64.99865
#2	.2043788	-.067415	.2184939	.0762636	.0202045	64.03021
#3	.2090371	-.072307	.2221146	.0699547	.0213455	64.23929

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6562457	.0056742	.0031801	51.10146	.0985890	.1001951
Stddev	.0040686	.0002305	.0002074	.33507	.0013865	.0007524
%RSD	.6199825	4.062901	6.522508	.6557027	1.406379	.7509488
#1	.6599287	.0058653	.0030439	51.48793	.0986539	.1007265
#2	.6518783	.0054182	.0034189	50.92418	.0999419	.1005246
#3	.6569300	.0057391	.0030776	50.89227	.0971711	.0993341

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2262251	165.1352	3.507337	34.43707	.1016958	.0060908
Stddev	.0060301	1.0736	.029157	.12729	.0009189	.0013852
%RSD	2.665511	.6501162	.8313077	.3696238	.9035284	22.74195
#1	.2320329	166.2700	3.539463	34.57089	.1013955	.0062158
#2	.2266475	164.1358	3.482553	34.42281	.1027272	.0046474
#3	.2199950	164.9997	3.499994	34.31752	.1009646	.0074093

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.610468	.2516352	.8635669	21.50360	F 10.99769	-.067233
Stddev	1.068104	.0038667	.0208625	.18818	.04500	.003061
%RSD	40.91620	1.536614	2.415856	.8750868	.4092140	4.553424
#1	3.030973	.2486362	.8491081	21.49906	11.03337	-.070192
#2	3.404322	.2559993	.8541093	21.69401	11.01257	-.067429
#3	1.396110	.2502702	.8874832	21.31774	10.94713	-.064079

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-01DLX2 Acquired: 12/20/2024 0:33:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ69 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012947	2.245322	4.331721	.0073712	1.482539	.0219360
Stddev	.0006977	.010055	.049636	.0009991	.010438	.0006357
%RSD	53.89365	.4478084	1.145881	13.55354	.7040719	2.898121
#1	.0014343	2.246693	4.388852	.0072537	1.490115	.0223990
#2	.0005377	2.254622	4.307137	.0084238	1.470633	.0221979
#3	.0019120	2.234653	4.299175	.0064360	1.486869	.0212112

Elem	Li6707
Units	ppm
Avg	.0464403
Stddev	.0004561
%RSD	.9821071
#1	.0466717
#2	.0459149
#3	.0467342

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2556.617	31385.02	2065.282	2180.196	2100.548
Stddev	7.999	8.58	22.503	9.228	8.074
%RSD	.3128822	.0273361	1.089595	.4232862	.3843542
#1	2565.407	31384.50	2039.776	2181.935	2105.515
#2	2549.766	31376.71	2082.335	2188.431	2091.233
#3	2554.676	31393.84	2073.734	2170.221	2104.897

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-02DLX2 Acquired: 12/20/2024 0:37:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ70 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2382314	-.079136	.2587925	.0886652	.0294170	66.17575	.6663898
Stddev	.0068899	.005726	.0054187	.0017796	.0021174	.13538	.0030773
%RSD	2.892101	7.235217	2.093843	2.007048	7.197804	.2045839	.4617925
#1	.2439178	-.085147	.2566481	.0905585	.0272310	66.10312	.6642118
#2	.2305696	-.078515	.2649552	.0884101	.0295616	66.33195	.6699103
#3	.2402068	-.073746	.2547742	.0870269	.0314583	66.09218	.6650473

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060133	.0039377	32.64673	.1093856	.1071111	.2752900	183.2942
Stddev	.0001788	.0001405	.11281	.0023636	.0002527	.0010838	.3525
%RSD	2.973117	3.567900	.3455330	2.160799	.2358958	.3936817	.1922901
#1	.0058253	.0040941	32.52352	.1068481	.1071597	.2741530	182.9294
#2	.0061811	.0038220	32.74493	.1115246	.1073360	.2763112	183.3201
#3	.0060337	.0038972	32.67174	.1097842	.1068377	.2754059	183.6329

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.655954	35.44224	.1084441	.0051704	2.361508	.2951409	.8344236
Stddev	.005711	.17184	.0008112	.0010122	.390991	.0049960	.0202308
%RSD	.1562206	.4848493	.7480100	19.57773	16.55686	1.692765	2.424526
#1	3.651324	35.26984	.1080094	.0056099	1.928408	.2893923	.8113729
#2	3.654203	35.61352	.1093799	.0040127	2.467636	.2975960	.8492326
#3	3.662336	35.44336	.1079428	.0058886	2.688479	.2984344	.8426655

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.73220	7.654671	-.071799	.0010689	1.800765	3.995360	.0101514
Stddev	.25553	.016793	.001898	.0004050	.005987	.030660	.0019956
%RSD	1.124093	.2193792	2.643601	37.88685	.3324651	.7673854	19.65890
#1	22.54441	7.643417	-.070211	.0012716	1.793893	3.984599	.0124059
#2	23.02319	7.673973	-.071285	.0006026	1.804849	4.029949	.0086112
#3	22.62900	7.646624	-.073901	.0013326	1.803554	3.971531	.0094370

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-02DLX2 Acquired: 12/20/2024 0:37:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ70 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.780460	-.039692	.0448420
Stddev	.005826	.000301	.0069175
%RSD	.3272247	.7573935	15.42631
#1	1.781289	-.039574	.0472567
#2	1.774264	-.039469	.0370409
#3	1.785828	-.040034	.0502285

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2562.053	31677.65	2069.946	2193.019	2099.393
Stddev	4.070	554.79	13.195	35.800	6.517
%RSD	.1588710	1.751366	.6374468	1.632431	.3104330
#1	2562.422	32283.68	2080.478	2230.015	2100.420
#2	2557.810	31194.81	2055.146	2158.550	2092.423
#3	2565.926	31554.44	2074.215	2190.493	2105.336

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-03DLX2 Acquired: 12/20/2024 0:41:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ71 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1638057	-.054229	.2251637	.0657116	.0222842	63.20189
Stddev	.0044793	.005872	.0020124	.0028001	.0038855	.09745
%RSD	2.734539	10.82900	.8937445	4.261162	17.43620	.1541881
#1	.1659451	-.055066	.2251482	.0675715	.0227243	63.13867
#2	.1586578	-.059637	.2231592	.0624912	.0181974	63.31412
#3	.1668143	-.047982	.2271838	.0670721	.0259310	63.15289

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7484321	.0057165	.0033887	54.45056	.1243636	.1007656
Stddev	.0020168	.0001163	.0001256	.14032	.0014285	.0010583
%RSD	.2694730	2.034328	3.706425	.2576963	1.148617	1.050235
#1	.7498886	.0055992	.0033937	54.29112	.1233829	.0995558
#2	.7461302	.0058318	.0032607	54.55525	.1237054	.1015196
#3	.7492776	.0057184	.0035117	54.50530	.1260025	.1012213

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6008200	151.9160	3.471426	35.46115	.1256175	.0047270
Stddev	.0063587	.3052	.002773	.18882	.0003588	.0009317
%RSD	1.058333	.2008817	.0798804	.5324801	.2856011	19.70942
#1	.5934905	152.1973	3.474173	35.61251	.1252467	.0054675
#2	.6041087	151.5915	3.471478	35.52139	.1259629	.0036809
#3	.6048608	151.9592	3.468628	35.24956	.1256430	.0050324

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.484890	.2474676	.7633515	23.87536	F 10.54583	-.033558
Stddev	.923665	.0086020	.0267345	.08667	.07194	.003446
%RSD	37.17126	3.476003	3.502255	.3630024	.6821962	10.26726
#1	3.259995	.2438259	.7906755	23.91361	10.46289	-.030180
#2	1.462857	.2412854	.7372483	23.77615	10.58327	-.033428
#3	2.731817	.2572914	.7621306	23.93632	10.59133	-.037067

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-03DLX2 Acquired: 12/20/2024 0:41:32 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ71 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014393	2.697608	4.783273	.0069012	1.393078	.0935803
Stddev	.0005749	.023277	.036743	.0011151	.005700	.0004584
%RSD	39.94510	.8628789	.7681547	16.15799	.4091365	.4898656
#1	.0020604	2.671173	4.769394	.0069165	1.399543	.0933796
#2	.0009257	2.706614	4.824934	.0080086	1.390909	.0941049
#3	.0013319	2.715036	4.755492	.0057786	1.388781	.0932565

Elem	Li6707
Units	ppm
Avg	.0434265
Stddev	.0056575
%RSD	13.02774
#1	.0477830
#2	.0370325
#3	.0454639

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.218	31535.43	2057.962	2171.906	2096.276
Stddev	13.226	222.66	8.899	13.820	10.871
%RSD	.5204578	.7060757	.4324358	.6363108	.5185690
#1	2552.802	31383.75	2062.628	2165.408	2106.752
#2	2544.045	31791.06	2047.700	2187.777	2097.026
#3	2526.807	31431.47	2063.559	2162.532	2085.050

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-04DLX2 Acquired: 12/20/2024 0:45:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ72 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2143235	-.064040	.3439001	.0832716	.0245329	73.28412
Stddev	.0039246	.003194	.0031859	.0014003	.0020360	.15464
%RSD	1.831177	4.988009	.9264128	1.681602	8.299044	.2110208
#1	.2187435	-.067036	.3403864	.0825074	.0238068	73.44034
#2	.2112473	-.064404	.3447132	.0824196	.0229595	73.13110
#3	.2129798	-.060679	.3466007	.0848877	.0268324	73.28094

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7967099	.0061837	.0043493	64.55143	.1155434	.1117680
Stddev	.0015771	.0002565	.0002012	.18445	.0018744	.0011171
%RSD	.1979451	4.148803	4.625430	.2857340	1.622234	.9995214
#1	.7948905	.0064565	.0041773	64.70499	.1142288	.1110456
#2	.7976870	.0059473	.0043000	64.60246	.1147116	.1112038
#3	.7975520	.0061474	.0045705	64.34685	.1176897	.1130548

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2813214	180.0145	4.020615	40.07069	.1213739	.0060819
Stddev	.0108679	.5776	.006732	.20819	.0012054	.0006070
%RSD	3.863150	.3208560	.1674344	.5195460	.9931261	9.979827
#1	.2689565	180.0750	4.023166	39.83307	.1202830	.0054874
#2	.2856489	179.4091	4.012980	40.15801	.1211708	.0067006
#3	.2893590	180.5595	4.025698	40.22100	.1226680	.0060577

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.853709	.2727336	1.013310	25.91363	F 11.81759	-.046894
Stddev	.531307	.0070074	.023877	.11590	.10707	.001009
%RSD	18.61811	2.569336	2.356359	.4472510	.9060509	2.151017
#1	2.733954	.2784856	.985769	25.88651	11.74450	-.047335
#2	2.392500	.2649292	1.028202	25.81370	11.76778	-.045740
#3	3.434672	.2747862	1.025958	26.04069	11.94049	-.047607

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-04DLX2 Acquired: 12/20/2024 0:45:23 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ72 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009627	2.941424	5.171030	.0114444	1.671424	.1020331
Stddev	.0006547	.027171	.012021	.0012973	.005268	.0009081
%RSD	67.99932	.9237361	.2324623	11.33518	.3152079	.8900332
#1	.0014921	2.927668	5.178053	.0120300	1.670469	.1029334
#2	.0011653	2.923882	5.177888	.0099576	1.666698	.1011173
#3	.0002307	2.972722	5.157150	.0123456	1.677104	.1020485

Elem	Li6707
Units	ppm
Avg	.0525671
Stddev	.0002545
%RSD	.4841509
#1	.0523205
#2	.0528288
#3	.0525521

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2560.169	31491.52	2079.606	2179.874	2079.785
Stddev	12.745	137.15	5.778	10.874	12.845
%RSD	.4978216	.4355057	.2778184	.4988378	.6176088
#1	2563.419	31582.88	2073.198	2185.669	2086.356
#2	2570.974	31557.86	2084.416	2186.624	2088.016
#3	2546.113	31333.81	2081.206	2167.330	2064.984

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV073 Acquired: 12/20/2024 0:49:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV073 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.918952	4.869038	24.79699	4.910977	4.960184	411.4802	10.20944
Stddev	.006161	.018607	.03909	.013378	.005285	1.6963	.05006
%RSD	.1252589	.3821400	.1576534	.2724080	.1065448	.4122493	.4903596
#1	4.917913	4.847749	24.75419	4.923841	4.964760	409.7654	10.17399
#2	4.913376	4.877174	24.83082	4.911953	4.961391	411.5178	10.18763
#3	4.925567	4.882191	24.80596	4.897139	4.954400	413.1574	10.26671

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5161822	2.501721	413.9707	15.52318	2.516074	15.21778	415.6153
Stddev	.0022391	.002041	1.4990	.03633	.004395	.06426	1.3254
%RSD	.4337760	.0816014	.3621099	.2340549	.1746663	.4222996	.3189112
#1	.5140029	2.499366	412.2740	15.48691	2.511042	15.15573	414.2817
#2	.5184766	2.502987	414.5224	15.52307	2.518027	15.21355	415.6319
#3	.5160672	2.502811	415.1157	15.55957	2.519154	15.28405	416.9324

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.18083	411.1888	2.517607	1.281076	412.4244	2.542744	14.66767
Stddev	.06882	2.5391	.001873	.000651	1.4438	.006057	.07505
%RSD	.4533415	.6175038	.0744014	.0507980	.3500794	.2381938	.5116385
#1	15.11345	409.1864	2.516852	1.280396	410.7676	2.537706	14.72790
#2	15.17803	410.3353	2.516229	1.281138	413.4136	2.541062	14.58360
#3	15.25100	414.0447	2.519739	1.281693	413.0921	2.549464	14.69152

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	153.3299	4.968439	4.922133	4.839203	4.997264	5.029894	5.010585
Stddev	.5893	.013166	.020687	.001183	.009983	.026550	.009496
%RSD	.3843548	.2649929	.4202902	.0244500	.1997682	.5278506	.1895116
#1	152.6524	4.954953	4.914352	4.839470	5.004747	5.000454	4.999890
#2	153.6142	4.969104	4.945582	4.840230	5.001116	5.052023	5.013840
#3	153.7233	4.981260	4.906463	4.837909	4.985929	5.037204	5.018025

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV073 Acquired: 12/20/2024 0:49:13 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV073 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.109266	4.861494	5.064385
Stddev	.024955	.018284	.024618
%RSD	.4884170	.3761068	.4861034
#1	5.101296	4.842972	5.037571
#2	5.089270	4.861980	5.069618
#3	5.137232	4.879531	5.085966

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1975.062	26152.78	1835.757	1726.699	1729.126
Stddev	.997	38.01	5.370	1.605	2.662
%RSD	.0504762	.1453357	.2925252	.0929441	.1539358
#1	1974.986	26165.60	1839.985	1724.854	1730.698
#2	1974.106	26182.71	1829.715	1727.774	1726.053
#3	1976.095	26110.01	1837.572	1727.469	1730.627

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB073 Acquired: 12/20/2024 0:52:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB073 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003191	.0022039	.0030423	-.001149	.0011142	-.008993
Stddev	.001809	.0024412	.0023816	.003654	.0013713	.015060
%RSD	56.67202	110.7682	78.28148	318.1056	123.0737	167.4551
#1	-.002374	.0006116	.0057399	.000851	.0010806	-.003846
#2	-.005264	.0050145	.0021563	.001069	.0025020	.002818
#3	-.001936	.0009856	.0012308	-.005366	-.000240	-.025952

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001058	-.000006	-.000014	-.071179	.0001362	-.000020
Stddev	.000887	.000100	.000047	.036120	.0008240	.000132
%RSD	83.77954	1629.953	336.9895	50.74442	605.2066	667.1178
#1	-.000224	-.000120	.000004	-.062979	-.000227	.000082
#2	-.000961	.000069	-.000067	-.039865	.001079	-.000168
#3	-.001989	.000033	.000021	-.110694	-.000444	.000027

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003368	.0537456	.0009882	.0414291	-.000025	.0009792
Stddev	.000256	.0240426	.0007967	.0422266	.000729	.0007696
%RSD	7.606363	44.73401	80.61700	101.9249	2887.231	78.60071
#1	-.003080	.0814714	.0013565	-.001158	-.000014	.0013200
#2	-.003569	.0386552	.0015341	.083286	-.000759	.0000980
#3	-.003455	.0411103	.0000740	.042159	.000698	.0015195

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8689838	.0059974	-.005932	.3199025	.0000718	.0106872
Stddev	1.070470	.0039780	.007967	.0909719	.0005469	.0017391
%RSD	123.1864	66.32843	134.3152	28.43739	761.7400	16.27288
#1	2.103335	.0028916	-.014945	.2643148	-.000353	.0108206
#2	.195334	.0104811	-.003020	.2705056	-.000120	.0088852
#3	.308282	.0046195	.000170	.4248870	.000689	.0123557

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB073 Acquired: 12/20/2024 0:52:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB073 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004911	-.003193	.0000648	F -.009178	.0003804	.0002049
Stddev	.0002718	.004180	.0005965	.000778	.0022170	.0003905
%RSD	55.34303	130.8800	920.9624	8.479797	582.8530	190.5971
#1	.0005992	-.005690	-.000569	-.009419	-.000045	-.000173
#2	.0006922	-.005522	.000616	-.009807	.002779	.000181
#3	.0001819	.001632	.000147	-.008308	-.001593	.000607

Elem	Li6707
Units	ppm
Avg	F .0180581
Stddev	.0046754
%RSD	25.89083
#1	.0153862
#2	.0153314
#3	.0234566

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2374.155	29456.87	1901.270	2032.748	2160.579
Stddev	6.310	153.54	15.548	10.077	4.450
%RSD	.2657760	.5212336	.8177865	.4957414	.2059762
#1	2372.471	29589.80	1883.347	2044.188	2160.468
#2	2381.136	29288.81	1911.143	2025.186	2165.084
#3	2368.858	29492.00	1909.320	2028.870	2156.185

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-05DLX2 Acquired: 12/20/2024 0:56:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ73 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4449113	-.084990	.5949983	.0961118	.0327002	73.27735	.8395310
Stddev	.0021128	.002793	.0023290	.0024813	.0006320	.25706	.0032202
%RSD	.4748823	3.286724	.3914249	2.581733	1.932774	.3508016	.3835710
#1	.4459211	-.081920	.5976558	.0956123	.0327425	73.47633	.8431485
#2	.4424831	-.087382	.5933125	.0939181	.0333101	73.36860	.8384675
#3	.4463298	-.085667	.5940267	.0988049	.0320481	72.98712	.8369772

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068744	.0069093	47.55409	.1222533	.1243176	.3315945	204.5935
Stddev	.0000751	.0000847	.18108	.0005250	.0005531	.0086191	.7355
%RSD	1.092507	1.226506	.3807878	.4294196	.4449228	2.599284	.3594984
#1	.0067899	.0068957	47.57639	.1228046	.1245001	.3240870	205.0721
#2	.0069335	.0068321	47.72299	.1217594	.1247564	.3410066	204.9618
#3	.0068999	.0070000	47.36290	.1221959	.1236963	.3296898	203.7466

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.135240	39.23015	.1209657	.0066512	2.118528	.3117326	1.523488
Stddev	.011231	.32603	.0010313	.0010151	.548609	.0065688	.012746
%RSD	.2715883	.8310812	.8525163	15.26226	25.89574	2.107184	.8366147
#1	4.136884	39.52054	.1198182	.0058745	2.304375	.3192238	1.532854
#2	4.145558	39.29245	.1212641	.0077998	1.501136	.3090162	1.508974
#3	4.123277	38.87746	.1218149	.0062792	2.550074	.3069577	1.528637

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.02520	9.502097	-.067937	.0022180	4.501074	4.411091	.0180237
Stddev	.15199	.006971	.001469	.0003877	.012597	.047452	.0013455
%RSD	.6073375	.0733657	2.162165	17.47929	.2798646	1.075737	7.465333
#1	25.15008	9.496918	-.066597	.0026316	4.495484	4.416833	.0192830
#2	25.06955	9.499349	-.069508	.0018629	4.492240	4.455410	.0181823
#3	24.85597	9.510024	-.067706	.0021595	4.515499	4.361029	.0166059

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-05DLX2 Acquired: 12/20/2024 0:56:51 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ73 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.723121	.0249194	.0553618
Stddev	.013450	.0001763	.0021350
%RSD	.7805728	.7074566	3.856479
#1	1.728666	.0249389	.0547781
#2	1.732913	.0247342	.0577280
#3	1.707785	.0250852	.0535793

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2594.158	32012.84	2098.422	2212.598	2093.245
Stddev	4.007	36.01	16.618	11.268	2.295
%RSD	.1544486	.1124771	.7919109	.5092488	.1096182
#1	2589.662	32010.22	2103.483	2225.515	2090.617
#2	2597.351	32050.09	2079.863	2207.483	2094.270
#3	2595.461	31978.22	2111.921	2204.795	2094.848

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-06DLX2 Acquired: 12/20/2024 1:00:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ74 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2767661	-.089577	.4017081	.1042248	.0349003	83.32853
Stddev	.0039548	.002004	.0029144	.0061566	.0017945	.67792
%RSD	1.428946	2.237324	.7255043	5.907079	5.141754	.8135465
#1	.2738868	-.088322	.4031489	.1084715	.0365210	84.08570
#2	.2751361	-.088521	.4036214	.1070390	.0352080	83.12194
#3	.2812754	-.091888	.3983539	.0971640	.0329719	82.77794

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9211648	.0072423	.0048315	53.16510	.1383485	.1328602
Stddev	.0068184	.0001570	.0000556	.28307	.0003623	.0011091
%RSD	.7401957	2.168337	1.151484	.5324344	.2618868	.8347929
#1	.9284162	.0074125	.0048792	53.47999	.1387546	.1318733
#2	.9201950	.0072112	.0048449	53.08356	.1380584	.1326469
#3	.9148832	.0071031	.0047704	52.93174	.1382325	.1340605

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2652364	219.2814	4.734646	44.59243	.1380009	.0069361
Stddev	.0100014	1.5439	.036667	.28629	.0004067	.0008194
%RSD	3.770750	.7040863	.7744394	.6420188	.2947450	11.81291
#1	.2724709	221.0221	4.775470	44.92292	.1384004	.0074239
#2	.2538234	218.7445	4.723956	44.42041	.1380150	.0073942
#3	.2694149	218.0776	4.704512	44.43396	.1375873	.0059901

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.641627	.3068331	1.204208	29.00755	F 10.60286	-.074413
Stddev	.745524	.0079447	.012102	.20882	.02537	.004576
%RSD	28.22215	2.589247	1.004969	.7198755	.2392551	6.149578
#1	1.802369	.3100989	1.199804	29.19408	10.57733	-.079229
#2	2.895304	.3126243	1.194925	28.78195	10.60318	-.070122
#3	3.227208	.2977760	1.217895	29.04660	10.62807	-.073888

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-06DLX2 Acquired: 12/20/2024 1:00:41 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ74 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013662	3.573017	3.963953	.0149539	1.963093	.0384686
Stddev	.0002193	.009377	.029247	.0006658	.019907	.0003673
%RSD	16.04922	.2624498	.7378129	4.452284	1.014084	.9548596
#1	.0011649	3.562618	3.994031	.0150608	1.982625	.0383553
#2	.0015999	3.575600	3.962213	.0142412	1.963825	.0388792
#3	.0013338	3.580831	3.935616	.0155598	1.942831	.0381712

Elem	Li6707
Units	ppm
Avg	.0589696
Stddev	.0019054
%RSD	3.231187
#1	.0579636
#2	.0577780
#3	.0611672

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2612.550	32182.09	2127.369	2241.204	2071.465
Stddev	4.115	94.07	16.103	8.299	5.811
%RSD	.1575230	.2922962	.7569641	.3702821	.2805156
#1	2615.384	32124.43	2110.368	2233.832	2075.982
#2	2614.435	32131.21	2129.348	2239.587	2073.502
#3	2607.829	32290.64	2142.392	2250.192	2064.909

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-07DLX2 Acquired: 12/20/2024 1:04:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ75 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1797992	-.061122	.1182800	.0787135	.0238294	98.50057	1.030969
Stddev	.0056839	.005067	.0007052	.0028406	.0031631	.13349	.000395
%RSD	3.161229	8.290244	.5961906	3.608834	13.27373	.1355222	.0382702
#1	.1842041	-.055707	.1175371	.0814905	.0262409	98.65469	1.031241
#2	.1733832	-.061910	.1183626	.0788368	.0249993	98.42151	1.030517
#3	.1818103	-.065749	.1189402	.0758133	.0202481	98.42551	1.031150

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0069074	.0017202	123.8465	.1080126	.1371223	.1566879	189.2574
Stddev	.0002570	.0000407	.3133	.0005888	.0005127	.0042895	.2877
%RSD	3.721037	2.363792	.2529508	.5451508	.3738884	2.737637	.1520009
#1	.0072022	.0017664	124.1396	.1074444	.1375148	.1598405	189.5173
#2	.0067302	.0017045	123.8835	.1086201	.1365422	.1518031	188.9483
#3	.0067898	.0016897	123.5164	.1079731	.1373098	.1584201	189.3065

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.894087	55.19439	.1321333	.0051128	2.071618	.3011184	.4046555
Stddev	.003996	.06326	.0005240	.0004716	.433188	.0118613	.0034515
%RSD	.0816396	.1146101	.3965925	9.224302	20.91061	3.939072	.8529497
#1	4.898620	55.26647	.1315501	.0056038	1.976155	.3089911	.4074890
#2	4.892561	55.16861	.1322851	.0050710	2.544575	.2874761	.4008116
#3	4.891079	55.14810	.1325647	.0046634	1.694123	.3068880	.4056660

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.37291	5.812804	-.080405	.0000149	.9885834	5.283643	.0108676
Stddev	.03998	.011885	.004076	.0002781	.0080803	.036576	.0004341
%RSD	.3854188	.2044653	5.068909	1867.445	.8173592	.6922580	3.994791
#1	10.41350	5.816255	-.083201	-.000124	.9793544	5.325608	.0107946
#2	10.33357	5.799575	-.082286	.000335	.9943857	5.258531	.0113336
#3	10.37165	5.822581	-.075729	-.000167	.9920100	5.266791	.0104745

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-07DLX2 Acquired: 12/20/2024 1:04:30 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ75 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7514690	.1990977	.0793997
Stddev	.0024002	.0005879	.0008046
%RSD	.3194014	.2952816	1.013359
#1	.7542257	.1997258	.0793328
#2	.7503387	.1985607	.0802356
#3	.7498426	.1990066	.0786305

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2613.289	32136.15	2139.753	2230.904	2053.389
Stddev	10.939	75.24	12.677	12.246	7.331
%RSD	.4185829	.2341438	.5924717	.5489166	.3570334
#1	2608.245	32169.55	2126.122	2240.188	2049.522
#2	2625.839	32188.91	2151.191	2235.500	2061.844
#3	2605.782	32049.99	2141.944	2217.026	2048.800

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-08DLX2 Acquired: 12/20/2024 1:08:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ76 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5489789	-.082386	1.875639	.0905870	.0274298	66.81440	.6881264
Stddev	.0055140	.006215	.004877	.0016758	.0045709	1.28859	.0149571
%RSD	1.004406	7.543366	.2600417	1.849927	16.66394	1.928606	2.173602
#1	.5436223	-.078535	1.879872	.0901719	.0227451	65.78656	.6781952
#2	.5486767	-.089555	1.870305	.0924313	.0318777	68.26004	.7053290
#3	.5546378	-.079067	1.876740	.0891577	.0276666	66.39658	.6808551

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066236	.0145387	25.02629	.0788295	.0916225	.3477881	181.4581
Stddev	.0000552	.0000448	.41867	.0005244	.0006056	.0164438	3.5885
%RSD	.8332840	.3083595	1.672940	.6651812	.6609462	4.728113	1.977614
#1	.0066523	.0145756	24.72083	.0790259	.0909391	.3321195	178.9550
#2	.0066585	.0145518	25.50354	.0782352	.0918356	.3649106	185.5695
#3	.0065600	.0144888	24.85452	.0792272	.0920927	.3463342	179.8499

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.326411	28.59162	.0915285	.0121063	3.232392	.2714287	2.924326
Stddev	.060777	.45035	.0007813	.0015013	.706685	.0024820	.020348
%RSD	1.827112	1.575116	.8536199	12.40062	21.86260	.9144298	.6958086
#1	3.274081	28.17684	.0911479	.0136124	3.350807	.2714894	2.931296
#2	3.393074	29.07064	.0924271	.0120966	2.473981	.2738798	2.940273
#3	3.312079	28.52737	.0910104	.0106099	3.872390	.2689169	2.901410

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.49827	4.259182	-.079032	.0006578	5.876469	4.056656	.0104458
Stddev	.33302	.003094	.001635	.0008246	.016341	.069800	.0002521
%RSD	2.467149	.0726528	2.068842	125.3468	.2780812	1.720640	2.413218
#1	13.18376	4.259298	-.079385	.0014658	5.857601	3.987623	.0104197
#2	13.84714	4.256031	-.080462	.0006901	5.885717	4.127199	.0102078
#3	13.46390	4.262217	-.077249	-.000182	5.886089	4.055145	.0107099

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-08DLX2 Acquired: 12/20/2024 1:08:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ76 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.859160	-.061098	.0508084
Stddev	.033739	.001275	.0038042
%RSD	1.814768	2.086520	7.487330
#1	1.836224	-.060930	.0531513
#2	1.897901	-.062448	.0464190
#3	1.843356	-.059915	.0528548

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2547.258	31382.97	2037.561	2179.407	2095.752
Stddev	7.443	23.92	38.731	4.644	6.332
%RSD	.2922047	.0762192	1.900875	.2130777	.3021418
#1	2549.320	31357.29	2072.641	2183.736	2098.041
#2	2539.001	31404.63	1995.996	2174.502	2088.594
#3	2553.453	31386.97	2044.044	2179.984	2100.622

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-09DLX2 Acquired: 12/20/2024 1:12:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ77 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4706785	-.047813	.3505936	.0666584	.0202043	82.76209	.9516835
Stddev	.0029363	.003438	.0034675	.0015142	.0027372	.50962	.0057226
%RSD	.6238454	7.190752	.9890252	2.271591	13.54756	.6157674	.6013170
#1	.4679542	-.048948	.3500946	.0674663	.0230423	82.39338	.9456764
#2	.4737886	-.043950	.3474027	.0675974	.0199900	82.54926	.9523028
#3	.4702926	-.050539	.3542835	.0649116	.0175805	83.34363	.9570713

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059992	.0042054	126.1495	.0858749	.1213184	.1545916	168.2506
Stddev	.0000375	.0001890	.5390	.0020270	.0009200	.0044672	.8041
%RSD	.6252662	4.495556	.4272322	2.360362	.7583721	2.889715	.4778908
#1	.0060420	.0042242	125.8039	.0872199	.1219675	.1523097	167.7159
#2	.0059833	.0040076	125.8741	.0835435	.1202655	.1597389	167.8607
#3	.0059722	.0043843	126.7705	.0868612	.1217221	.1517260	169.1753

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.675401	45.70012	.1033447	.0049308	2.627490	.2511961	1.033969
Stddev	.030129	.04700	.0005937	.0006496	.473480	.0017700	.007473
%RSD	.6444189	.1028381	.5744679	13.17417	18.02024	.7046450	.7227012
#1	4.659381	45.65364	.1026615	.0044185	3.132269	.2512199	1.035532
#2	4.656665	45.74761	.1037345	.0056614	2.556985	.2494142	1.040537
#3	4.710155	45.69911	.1036382	.0047124	2.193216	.2529541	1.025839

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.34618	6.772383	-.058414	.0017352	9.120382	5.457710	.0086719
Stddev	.07348	.039279	.000687	.0004693	.034673	.014687	.0021992
%RSD	.4495104	.5799918	1.175954	27.04629	.3801751	.2691109	25.35986
#1	16.38281	6.813827	-.057845	.0022465	9.159323	5.472918	.0111661
#2	16.26159	6.767618	-.059177	.0013241	9.092853	5.443606	.0070114
#3	16.39415	6.735703	-.058221	.0016351	9.108969	5.456605	.0078384

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-09DLX2 Acquired: 12/20/2024 1:12:11 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ77 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6742844	.2214950	.0706416
Stddev	.0029436	.0016054	.0017666
%RSD	.4365454	.7248075	2.500856
#1	.6756572	.2198409	.0687527
#2	.6709052	.2215974	.0709189
#3	.6762908	.2230468	.0722532

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.234	31359.51	2081.460	2172.876	2042.668
Stddev	3.248	66.74	2.222	2.343	5.565
%RSD	.1278031	.2128163	.1067655	.1078319	.2724222
#1	2539.924	31405.42	2079.407	2174.335	2037.469
#2	2538.846	31282.95	2083.820	2170.173	2041.998
#3	2544.932	31390.16	2081.152	2174.119	2048.537

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-10DLX2 Acquired: 12/20/2024 1:16:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ78 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7261892	-.080392	2.369089	.0933043	.0314706	58.40955	.9130990
Stddev	.0038765	.001165	.031085	.0037347	.0016794	.12229	.0029544
%RSD	.5338097	1.449628	1.312094	4.002688	5.336528	.2093682	.3235593
#1	.7297949	-.080337	2.345810	.0889976	.0314677	58.48569	.9163263
#2	.7266833	-.081584	2.357067	.0956506	.0297927	58.47447	.9124428
#3	.7220893	-.079255	2.404389	.0952648	.0331516	58.26849	.9105278

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0060602	.0166750	22.93292	.0967640	.0870897	.4053949	176.3995
Stddev	.0000906	.0003938	.07431	.0008760	.0010368	.0058555	.5055
%RSD	1.494182	2.361484	.3240461	.9053445	1.190460	1.444394	.2865783
#1	.0061632	.0163861	23.00139	.0974886	.0863557	.4056571	176.3294
#2	.0059929	.0165154	22.94346	.0957904	.0866375	.3994128	176.9365
#3	.0060247	.0171236	22.85389	.0970130	.0882757	.4111150	175.9327

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.347034	26.33325	.1029753	.0131086	2.708476	.2592683	3.791690
Stddev	.007602	.15013	.0022957	.0007106	.988574	.0018287	.043809
%RSD	.2271378	.5701001	2.229347	5.421232	36.49928	.7053323	1.155400
#1	3.355343	26.49695	.1006009	.0128793	1.575505	.2609262	3.765232
#2	3.345332	26.30080	.1031419	.0139056	3.395632	.2595719	3.767580
#3	3.340426	26.20201	.1051832	.0125409	3.154293	.2573068	3.842258

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.63087	4.189709	-.058444	.0042830	8.823726	3.515102	.0109181
Stddev	.14117	.067119	.001156	.0002695	.145659	.033412	.0008004
%RSD	1.035667	1.602001	1.978553	6.293016	1.650768	.9505319	7.330494
#1	13.71603	4.127102	-.057291	.0044556	8.696936	3.533964	.0108805
#2	13.70866	4.181450	-.059604	.0044210	8.791414	3.534818	.0117365
#3	13.46791	4.260576	-.058436	.0039724	8.982828	3.476524	.0101372

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-10DLX2 Acquired: 12/20/2024 1:16:01 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ78 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.429238	-.063004	.0452483
Stddev	.014959	.001017	.0010497
%RSD	.6157696	1.614370	2.319954
#1	2.446264	-.062017	.0440452
#2	2.423242	-.064049	.0457224
#3	2.418207	-.062947	.0459775

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2568.806	31588.53	2049.991	2173.817	2125.255
Stddev	26.123	138.38	19.154	11.374	27.188
%RSD	1.016948	.4380730	.9343511	.5232407	1.279290
#1	2592.787	31498.36	2038.976	2166.565	2149.239
#2	2572.662	31747.86	2038.889	2186.927	2130.806
#3	2540.969	31519.37	2072.108	2167.960	2095.719

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-11DLX2 Acquired: 12/20/2024 1:19:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ79 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3787937	-.050388	.2850167	.0695724	.0176626	84.70441	.8519750
Stddev	.0021648	.001935	.0028179	.0027808	.0021344	.77654	.0065086
%RSD	.5715007	3.840947	.9886714	3.996930	12.08397	.9167701	.7639425
#1	.3799044	-.048813	.2882680	.0665331	.0152005	83.94647	.8469823
#2	.3762990	-.052549	.2832812	.0719891	.0187997	84.66844	.8496066
#3	.3801778	-.049802	.2835008	.0701949	.0189877	85.49831	.8593362

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059377	.0034411	131.6692	.0879827	.1234922	.1575410	171.0528
Stddev	.0001005	.0002095	1.2605	.0012770	.0007407	.0064423	1.5310
%RSD	1.692040	6.089234	.9573564	1.451451	.5998185	4.089273	.8950280
#1	.0060316	.0034853	130.3511	.0879503	.1242742	.1604107	169.6244
#2	.0058317	.0036250	131.7937	.0867221	.1228011	.1501626	170.8650
#3	.0059498	.0032130	132.8629	.0892756	.1234013	.1620498	172.6690

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.437125	48.25059	.1052401	.0055792	1.276423	.2506864	.9083670
Stddev	.027060	.27977	.0019728	.0008809	.227996	.0058490	.0149006
%RSD	.6098530	.5798237	1.874598	15.78958	17.86214	2.333191	1.640375
#1	4.407443	47.92874	.1075147	.0046656	1.468347	.2573380	.9132501
#2	4.443512	48.38748	.1039934	.0064234	1.336525	.2463465	.8916376
#3	4.460420	48.43556	.1042124	.0056485	1.024396	.2483747	.9202135

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.41142	5.586336	-.057952	.0007612	6.672506	4.218893	.0094640
Stddev	.10875	.042012	.004487	.0003524	.040445	.021154	.0007663
%RSD	.8109079	.7520530	7.741724	46.29891	.6061381	.5014205	8.097271
#1	13.29251	5.612791	-.063126	.0007102	6.693388	4.197080	.0085805
#2	13.50585	5.537893	-.055135	.0004371	6.625888	4.220277	.0099484
#3	13.43590	5.608324	-.055596	.0011364	6.698241	4.239321	.0098631

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-11DLX2 Acquired: 12/20/2024 1:19:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ79 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8538769	.1495379	.0732805
Stddev	.0084626	.0009538	.0070295
%RSD	.9910836	.6378124	9.592666
#1	.8445994	.1487937	.0704275
#2	.8558581	.1492071	.0812880
#3	.8611732	.1506131	.0681260

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2550.417	31507.60	2078.547	2178.762	2043.973
Stddev	7.775	165.80	9.868	9.131	9.033
%RSD	.3048607	.5262316	.4747692	.4190733	.4419569
#1	2556.058	31436.42	2089.917	2174.374	2047.050
#2	2553.644	31697.11	2073.509	2189.258	2051.066
#3	2541.547	31389.27	2072.215	2172.653	2033.803

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-12DLX2 Acquired: 12/20/2024 1:23:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ80 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5564461	-.100685	1.622038	.1056446	.0319949	73.14787	.7069672
Stddev	.0028220	.002809	.005460	.0015088	.0019142	.09240	.0018634
%RSD	.5071389	2.790326	.3366075	1.428214	5.982731	.1263263	.2635782
#1	.5583048	-.098281	1.618596	.1047393	.0304402	73.16172	.7054243
#2	.5531989	-.100000	1.619185	.1048081	.0314117	73.23256	.7090375
#3	.5578346	-.103773	1.628334	.1073864	.0341329	73.04931	.7064399

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075020	.0175442	31.54407	.1052592	.1085234	.4485137	217.6924
Stddev	.0001041	.0000721	.12269	.0014174	.0007176	.0059273	.4658
%RSD	1.387688	.4109555	.3889515	1.346590	.6612406	1.321547	.2139673
#1	.0074839	.0175064	31.61118	.1065583	.1077057	.4545070	217.7474
#2	.0074081	.0176273	31.61857	.1037475	.1088158	.4483794	218.1282
#3	.0076140	.0174988	31.40246	.1054717	.1090486	.4426546	217.2015

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.703794	32.09887	.1151094	.0083750	2.232573	.2862539	4.672229
Stddev	.014953	.16681	.0005208	.0002946	.755387	.0098788	.013973
%RSD	.4037114	.5196692	.4523974	3.517093	33.83480	3.451067	.2990617
#1	3.697128	32.03733	.1146129	.0087122	1.374226	.2829581	4.667573
#2	3.720920	32.28771	.1156514	.0082447	2.527436	.2973593	4.687936
#3	3.693333	31.97158	.1150640	.0081681	2.796057	.2784443	4.661179

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.96084	5.037195	-.078079	.0010044	10.15309	2.714400	.0182268
Stddev	.06432	.009656	.003685	.0001609	.02285	.008162	.0006513
%RSD	.4029832	.1916962	4.719929	16.01915	.2250405	.3007016	3.573262
#1	16.02939	5.033760	-.082177	.0011217	10.12672	2.714410	.0189765
#2	15.90181	5.029725	-.077019	.0008210	10.16711	2.706233	.0179036
#3	15.95131	5.048099	-.075039	.0010705	10.16542	2.722557	.0178004

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-12DLX2 Acquired: 12/20/2024 1:23:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ80 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.980963	-.086668	.0510263
Stddev	.006210	.000372	.0042274
%RSD	.3134711	.4293582	8.284793
#1	1.984509	-.087082	.0552650
#2	1.984587	-.086561	.0468102
#3	1.973792	-.086361	.0510038

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2607.307	32218.73	2125.838	2232.701	2117.470
Stddev	4.606	9.51	1.521	2.359	5.616
%RSD	.1766528	.0295087	.0715607	.1056691	.2652001
#1	2612.163	32225.50	2124.335	2230.655	2122.940
#2	2606.758	32222.83	2127.377	2235.282	2117.752
#3	2603.000	32207.86	2125.802	2232.167	2111.719

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-13DLX2 Acquired: 12/20/2024 1:27:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ81 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2103451	-.071908	.1469058	.0854139	.0273405	106.4131	1.172570
Stddev	.0041024	.003459	.0022313	.0028316	.0011085	.1410	.000885
%RSD	1.950304	4.810177	1.518850	3.315142	4.054253	.1324662	.0754808
#1	.2077398	-.074159	.1443629	.0829827	.0286179	106.2676	1.173445
#2	.2082215	-.073639	.1478184	.0847362	.0266329	106.5491	1.171675
#3	.2150739	-.067925	.1485362	.0885229	.0267706	106.4226	1.172591

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076048	.0020430	119.9879	.1130435	.1476101	.1703082	206.7934
Stddev	.0001056	.0000212	.2312	.0004801	.0011946	.0100441	.5428
%RSD	1.388022	1.035777	.1926646	.4247428	.8092917	5.897615	.2625048
#1	.0076343	.0020407	119.7239	.1129389	.1462890	.1594166	206.6793
#2	.0074877	.0020231	120.1543	.1126242	.1479268	.1792057	206.3166
#3	.0076925	.0020652	120.0854	.1135673	.1486144	.1723023	207.3842

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.735219	57.60267	.1384565	.0053147	1.893522	.3191391	.4878555
Stddev	.006230	.33972	.0005573	.0005635	.795916	.0063583	.0020240
%RSD	.1086207	.5897627	.4025477	10.60295	42.03366	1.992339	.4148698
#1	5.730590	57.35508	.1390551	.0052838	1.055679	.3226222	.4869949
#2	5.732764	57.46295	.1383622	.0058930	2.639549	.3118003	.4901675
#3	5.742302	57.98996	.1379524	.0047672	1.985337	.3229949	.4864040

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.64230	6.875165	-.078666	-.000113	1.700684	4.469213	.0125073
Stddev	.27486	.006733	.001821	.000428	.006172	.010784	.0022255
%RSD	2.174167	.0979257	2.314739	380.2187	.3629416	.2412976	17.79381
#1	12.32700	6.874379	-.076788	.000380	1.704870	4.478436	.0121307
#2	12.76855	6.868860	-.080424	-.000390	1.693595	4.471847	.0104941
#3	12.83137	6.882256	-.078785	-.000328	1.703588	4.457356	.0148971

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-13DLX2 Acquired: 12/20/2024 1:27:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ81 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8871356	.2087229	.0847790
Stddev	.0065491	.0005391	.0040031
%RSD	.7382336	.2582873	4.721827
#1	.8848970	.2083327	.0810680
#2	.8819993	.2084979	.0842479
#3	.8945105	.2093381	.0890212

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2643.950	32592.21	2177.970	2255.750	2057.251
Stddev	8.130	82.77	8.198	5.957	3.651
%RSD	.3074862	.2539638	.3764037	.2640861	.1774746
#1	2646.254	32545.16	2172.338	2254.481	2057.849
#2	2650.680	32543.70	2174.197	2250.529	2060.565
#3	2634.917	32687.79	2187.375	2262.239	2053.337

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-14DLX2 Acquired: 12/20/2024 1:31:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ82 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1607952	-.085732	.1582738	.0938172	.0301941	90.50605	.9082028
Stddev	.0056173	.001803	.0010064	.0053864	.0030325	.13736	.0036328
%RSD	3.493446	2.102529	.6358484	5.741358	10.04329	.1517692	.3999959
#1	.1550510	-.086685	.1583834	.0892662	.0322183	90.41471	.9075690
#2	.1662763	-.086858	.1592209	.0997642	.0267076	90.43941	.9049286
#3	.1610581	-.083653	.1572171	.0924213	.0316565	90.66401	.9121108

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074463	.0020224	34.32496	.0829455	.1199195	.1692199	198.2330
Stddev	.0001975	.0000138	.04222	.0009788	.0009406	.0019454	.5435
%RSD	2.652038	.6798241	.1230028	1.180003	.7843845	1.149638	.2741730
#1	.0073497	.0020378	34.30998	.0835919	.1208404	.1675593	198.3158
#2	.0076735	.0020182	34.37263	.0834252	.1199578	.1687402	197.6529
#3	.0073157	.0020113	34.29227	.0818194	.1189603	.1713603	198.7304

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.901808	38.27250	.1079752	.0053975	1.660738	.3165985	.4738943
Stddev	.011326	.10518	.0002412	.0005677	.341437	.0063341	.0195795
%RSD	.2310508	.2748071	.2233871	10.51840	20.55938	2.000685	4.131618
#1	4.895785	38.34980	.1077040	.0052407	1.425182	.3209787	.4940026
#2	4.894767	38.15273	.1080560	.0049247	2.052312	.3194810	.4727900
#3	4.914873	38.31496	.1081657	.0060272	1.504719	.3093358	.4548904

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.90021	3.784476	-.079819	-.000397	.7383326	4.089132	.0110634
Stddev	.04814	.007259	.001708	.000636	.0017202	.032888	.0010546
%RSD	.3027888	.1918021	2.140475	160.0733	.2329824	.8042771	9.532176
#1	15.85302	3.776636	-.081713	.000107	.7380821	4.120640	.0098802
#2	15.89835	3.790963	-.078393	-.000187	.7401643	4.055019	.0114059
#3	15.94926	3.785830	-.079351	-.001112	.7367514	4.091737	.0119042

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-14DLX2 Acquired: 12/20/2024 1:31:19 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ82 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	2.057031	-.020738	.0636691
Stddev	.007687	.000802	.0046568
%RSD	.3736701	3.868125	7.314147
#1	2.051059	-.020711	.0635778
#2	2.054330	-.019950	.0590586
#3	2.065703	-.021554	.0683709

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2614.364	31950.02	2129.786	2217.375	2093.495
Stddev	4.679	133.93	3.909	12.730	2.586
%RSD	.1789657	.4191758	.1835205	.5741013	.1235077
#1	2613.936	31940.93	2125.320	2216.772	2092.200
#2	2619.242	31820.86	2131.456	2204.957	2096.472
#3	2609.914	32088.25	2132.583	2230.395	2091.813

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-15DLX2 Acquired: 12/20/2024 1:35:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ83 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1692894	-.051964	.1166500	.0679710	.0217045	86.21201	.9870362
Stddev	.0017742	.005699	.0011029	.0027729	.0008718	.33642	.0026955
%RSD	1.048012	10.96732	.9454787	4.079504	4.016518	.3902288	.2730914
#1	.1672408	-.046386	.1164559	.0701747	.0208652	85.95382	.9862646
#2	.1703151	-.057777	.1178370	.0648575	.0216427	86.08974	.9848106
#3	.1703124	-.051727	.1156570	.0688807	.0226055	86.59247	.9900334

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063255	.0015218	108.5198	.0811285	.1265285	.1318226	170.2200
Stddev	.0000556	.0000190	.0631	.0005523	.0004129	.0080349	.7293
%RSD	.8788703	1.248165	.0581691	.6807632	.3263443	6.095270	.4284421
#1	.0063663	.0015291	108.4551	.0816014	.1261199	.1250806	169.5468
#2	.0062622	.0015360	108.5229	.0812625	.1265201	.1296738	170.1185
#3	.0063480	.0015002	108.5813	.0805215	.1269456	.1407135	170.9948

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.764232	47.07751	.1105605	.0049451	1.451903	.2675859	.3538816
Stddev	.013365	.13007	.0003588	.0007549	.422446	.0052918	.0128559
%RSD	.2805253	.2762942	.3244971	15.26612	29.09603	1.977614	3.632827
#1	4.758319	46.95170	.1102904	.0041630	1.360634	.2709793	.3653434
#2	4.754843	47.06937	.1109676	.0050026	1.912524	.2614884	.3399809
#3	4.779533	47.21146	.1104236	.0056695	1.082552	.2702901	.3563205

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.11636	5.829910	-.072285	-.000010	1.210913	5.143328	.0081029
Stddev	.21791	.019137	.002200	.001258	.013905	.011608	.0024777
%RSD	2.154067	.3282479	3.043898	12993.24	1.148325	.2256928	30.57805
#1	9.90113	5.842095	-.074723	-.000648	1.208669	5.146260	.0054678
#2	10.33686	5.807854	-.071686	-.000820	1.198267	5.130535	.0084555
#3	10.11110	5.839782	-.070447	.001439	1.225804	5.153189	.0103854

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-15DLX2 Acquired: 12/20/2024 1:35:09 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ83 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8260617	.1913257	.0656184
Stddev	.0020491	.0006637	.0018172
%RSD	.2480589	.3469179	2.769369
#1	.8282057	.1908578	.0673793
#2	.8241229	.1910340	.0657263
#3	.8258567	.1920854	.0637496

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2622.847	32258.81	2141.398	2242.218	2075.922
Stddev	.735	96.94	.528	4.413	2.443
%RSD	.0280300	.3005060	.0246588	.1967932	.1176838
#1	2623.633	32260.92	2140.815	2240.361	2078.681
#2	2622.734	32160.84	2141.536	2247.255	2075.053
#3	2622.176	32354.68	2141.843	2239.037	2074.033

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-16DLX2 Acquired: 12/20/2024 1:39:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ84 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6502340	-.070209	.7712563	.0809489	.0266781	75.43830	.7659590
Stddev	.0070443	.001573	.0024369	.0009218	.0046589	.38122	.0045234
%RSD	1.083346	2.240714	.3159678	1.138777	17.46346	.5053343	.5905521
#1	.6421004	-.070688	.7686608	.0799714	.0253638	75.04400	.7621867
#2	.6542245	-.068452	.7734954	.0810726	.0228175	75.80492	.7709738
#3	.6543770	-.071487	.7716126	.0818025	.0318530	75.46599	.7647166

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0063432	.0092522	63.13362	.0818746	.1169470	.2088850	183.3986
Stddev	.0000492	.0000803	.41993	.0006162	.0006841	.0073425	.9369
%RSD	.7763440	.8678944	.6651446	.7526322	.5849993	3.515091	.5108391
#1	.0062888	.0092507	62.70086	.0817911	.1164719	.2019590	182.3684
#2	.0063846	.0091726	63.53942	.0825283	.1166380	.2165830	184.1997
#3	.0063564	.0093332	63.16058	.0813044	.1177312	.2081129	183.6277

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.858483	38.29368	.0974721	.0078111	2.654257	.2823740	2.105250
Stddev	.021557	.07335	.0011064	.0006581	.568274	.0060106	.018686
%RSD	.5586975	.1915506	1.135049	8.424900	21.40990	2.128596	.8875758
#1	3.834275	38.21007	.0971417	.0083798	2.010077	.2812051	2.124754
#2	3.875606	38.34723	.0965686	.0079632	3.084555	.2888832	2.103487
#3	3.865569	38.32373	.0987060	.0070903	2.868139	.2770337	2.087508

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.57010	5.405611	-.074672	.0003462	6.821566	3.755056	.0086042
Stddev	.26304	.011645	.003209	.0004242	.023093	.031865	.0009866
%RSD	2.092590	.2154183	4.298088	122.5395	.3385349	.8485854	11.46687
#1	12.68443	5.394864	-.071246	.0004401	6.806224	3.727843	.0090205
#2	12.26924	5.403988	-.077608	-.000117	6.810348	3.790109	.0074777
#3	12.75662	5.417983	-.075161	.000716	6.848125	3.747215	.0093145

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-16DLX2 Acquired: 12/20/2024 1:39:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ84 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.391579	.0268840	.0602043
Stddev	.008095	.0001910	.0011345
%RSD	.5816847	.7103767	1.884331
#1	1.383509	.0270600	.0604096
#2	1.399698	.0269109	.0612221
#3	1.391529	.0266809	.0589812

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2617.784	32293.10	2125.541	2239.990	2123.112
Stddev	7.131	138.75	18.775	14.228	7.719
%RSD	.2724141	.4296721	.8833065	.6351610	.3635575
#1	2625.070	32209.48	2140.100	2233.895	2128.592
#2	2617.464	32216.55	2104.350	2229.825	2126.460
#3	2610.818	32453.27	2132.174	2256.250	2114.285

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-17DLX2 Acquired: 12/20/2024 1:42:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ85 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3132313	-.076096	.3301806	.0924184	.0256881	79.58548	.7564733
Stddev	.0013085	.001374	.0018282	.0018035	.0022428	.25023	.0030765
%RSD	.4177316	1.805475	.5536826	1.951487	8.731005	.3144143	.4066857
#1	.3146526	-.075019	.3280865	.0908513	.0264267	79.59691	.7557462
#2	.3120768	-.075626	.3314586	.0920141	.0231691	79.82980	.7598482
#3	.3129645	-.077643	.3309967	.0943897	.0274684	79.32974	.7538255

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068438	.0037666	41.42036	.0806330	.1145445	.2007129	189.1847
Stddev	.0000342	.0001585	.18635	.0011034	.0003935	.0101304	.6763
%RSD	.4994677	4.208250	.4498921	1.368441	.3435337	5.047184	.3574837
#1	.0068758	.0037070	41.34087	.0793978	.1143190	.1902519	189.1013
#2	.0068078	.0036466	41.63327	.0809800	.1143158	.2014103	189.8989
#3	.0068477	.0039463	41.28695	.0815212	.1149989	.2104765	188.5540

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.354390	39.48784	.0979291	.0066199	1.906157	.3023905	.9136957
Stddev	.019867	.09691	.0001386	.0002337	.841406	.0119820	.0049326
%RSD	.4562449	.2454162	.1415036	3.529653	44.14150	3.962413	.5398510
#1	4.352377	39.42998	.0977880	.0068660	1.002128	.3028244	.9157008
#2	4.375187	39.59972	.0979344	.0065924	2.049930	.2901975	.9080763
#3	4.335607	39.43382	.0980650	.0064011	2.666413	.3141497	.9173100

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.22904	4.754930	-.086986	-.000138	1.955880	4.681179	.0088982
Stddev	.08741	.007502	.000770	.000105	.003676	.039789	.0004741
%RSD	.4795249	.1577802	.8856118	76.00857	.1879647	.8499787	5.327779
#1	18.13259	4.754386	-.087860	-.000045	1.952670	4.718933	.0086766
#2	18.25148	4.747715	-.086691	-.000117	1.959891	4.684977	.0085754
#3	18.30304	4.762690	-.086407	-.000251	1.955080	4.639627	.0094424

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-17DLX2 Acquired: 12/20/2024 1:42:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ85 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.562265	-.018730	.0616776
Stddev	.006816	.000462	.0031418
%RSD	.4363018	2.466504	5.093924
#1	1.555511	-.018519	.0592006
#2	1.569142	-.019260	.0652116
#3	1.562143	-.018411	.0606205

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2596.269	32075.56	2089.306	2225.036	2112.917
Stddev	3.209	100.22	10.843	5.662	3.882
%RSD	.1235859	.3124616	.5189737	.2544462	.1837106
#1	2598.704	32155.22	2080.859	2231.558	2117.380
#2	2597.470	31963.03	2085.527	2222.165	2110.325
#3	2592.633	32108.43	2101.533	2221.385	2111.046

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-18DLX2 Acquired: 12/20/2024 1:46:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ86 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1453713	-.042516	.0953296	.0569556	.0171242	82.22169	.8833844
Stddev	.0043746	.005232	.0039173	.0027287	.0020806	.31745	.0040939
%RSD	3.009233	12.30695	4.109255	4.790980	12.14983	.3860905	.4634392
#1	.1405685	-.037436	.0921731	.0541215	.0162382	81.87807	.8793182
#2	.1491280	-.047889	.0941018	.0595651	.0195011	82.50404	.8875056
#3	.1464175	-.042224	.0997137	.0571801	.0156333	82.28296	.8833293

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0055797	.0013249	139.9727	.0671510	.1189041	.1103057	156.5186
Stddev	.0000578	.0001518	.5860	.0010496	.0003451	.0019554	.8108
%RSD	1.035556	11.45501	.4186487	1.563100	.2902369	1.772671	.5180254
#1	.0055700	.0014353	139.4423	.0675905	.1190716	.1125487	155.6676
#2	.0056417	.0013876	140.6018	.0679094	.1185072	.1094076	157.2822
#3	.0055273	.0011518	139.8741	.0659530	.1191335	.1089607	156.6058

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.331917	45.10016	.0911216	.0044940	2.008249	.2590114	.3126178
Stddev	.019660	.13515	.0010449	.0004119	.136324	.0098994	.0023046
%RSD	.4538447	.2996770	1.146671	9.166357	6.788206	3.822011	.7371997
#1	4.309376	44.94413	.0915830	.0044493	2.164800	.2596094	.3113925
#2	4.345524	45.17537	.0918563	.0049264	1.915718	.2488265	.3152762
#3	4.340849	45.18098	.0899255	.0041062	1.944231	.2685982	.3111847

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.838040	4.750846	-.064235	.0007984	1.007851	3.991086	.0084043
Stddev	.133191	.013644	.000572	.0000041	.009494	.039910	.0019305
%RSD	1.353838	.2871913	.8899261	.5089252	.9419854	.9999856	22.97052
#1	9.685495	4.766556	-.063881	.0008000	1.003273	3.945446	.0072140
#2	9.931264	4.741962	-.063931	.0008015	1.001515	4.019435	.0073672
#3	9.897360	4.744021	-.064895	.0007938	1.018767	4.008377	.0106317

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-18DLX2 Acquired: 12/20/2024 1:46:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ86 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7955278	.1941757	.0731523
Stddev	.0040868	.0007856	.0037049
%RSD	.5137150	.4045739	5.064633
#1	.7908683	.1933045	.0743027
#2	.7985041	.1943921	.0761455
#3	.7972111	.1948303	.0690087

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2518.570	31393.72	2085.868	2173.461	2030.035
Stddev	11.743	17.50	16.630	3.920	7.111
%RSD	.4662407	.0557347	.7972828	.1803554	.3502785
#1	2522.412	31391.86	2104.195	2174.255	2033.106
#2	2527.910	31412.08	2081.671	2176.923	2035.094
#3	2505.387	31377.23	2071.739	2169.204	2021.905

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-19DLX2 Acquired: 12/20/2024 1:50:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ87 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2885813	-.075355	.2884960	.0803813	.0285254	80.10695	.7656841
Stddev	.0068320	.001348	.0036161	.0028186	.0016602	.19170	.0000240
%RSD	2.367434	1.788251	1.253446	3.506553	5.820096	.2393033	.0031295
#1	.2808263	-.074063	.2925278	.0836313	.0286412	79.88590	.7656564
#2	.2912059	-.076752	.2874209	.0786065	.0268103	80.22756	.7656972
#3	.2937118	-.075250	.2855394	.0789060	.0301246	80.20739	.7656986

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065779	.0031128	47.19228	.0765124	.1130407	.1665419	185.8223
Stddev	.0002667	.0001561	.11171	.0011540	.0006296	.0052237	1.4648
%RSD	4.054473	5.015484	.2367099	1.508274	.5569409	3.136580	.7882623
#1	.0068531	.0031421	47.09297	.0778300	.1136068	.1672204	184.1328
#2	.0065601	.0029442	47.17064	.0756814	.1131527	.1713932	186.7353
#3	.0063206	.0032522	47.31322	.0760257	.1123627	.1610120	186.5988

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.252188	39.40863	.0970383	.0054970	2.790159	.2979960	.8056993
Stddev	.011374	.13970	.0002814	.0002028	.935021	.0090872	.0127950
%RSD	.2674848	.3544884	.2900360	3.689225	33.51138	3.049422	1.588063
#1	4.239084	39.27929	.0967338	.0056339	3.389191	.2949814	.8195163
#2	4.259501	39.55678	.0972890	.0055930	3.268547	.2907992	.7942598
#3	4.257980	39.38983	.0970921	.0052640	1.712739	.3082073	.8033216

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.83089	5.298960	-.071723	-.000075	1.879476	3.316504	.0092213
Stddev	.34130	.015216	.002033	.000352	.008079	.012893	.0007133
%RSD	2.155897	.2871454	2.834388	468.8170	.4298789	.3887640	7.735072
#1	15.56211	5.286276	-.073650	-.000467	1.880056	3.302545	.0084375
#2	16.21488	5.294774	-.071922	.000214	1.871123	3.319002	.0098322
#3	15.71567	5.315831	-.069598	.000028	1.887250	3.327966	.0093943

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-19DLX2 Acquired: 12/20/2024 1:50:31 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ87 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.364337	-.002184	.0616891
Stddev	.003309	.000205	.0047273
%RSD	.2425617	9.362408	7.663082
#1	1.360881	-.002019	.0591609
#2	1.367478	-.002413	.0671429
#3	1.364651	-.002121	.0587635

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2573.311	31586.14	2072.014	2180.172	2089.460
Stddev	2.429	33.08	8.676	2.123	4.645
%RSD	.0944098	.1047366	.4187276	.0973998	.2222842
#1	2572.155	31566.47	2081.877	2178.576	2090.669
#2	2571.676	31567.61	2068.604	2179.357	2084.331
#3	2576.103	31624.33	2065.561	2182.582	2093.381

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20DLX2 Acquired: 12/20/2024 1:54:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0909680	-.036550	.0788097	.0544022	.0170352	73.96350	.8830749
Stddev	.0011138	.002432	.0044224	.0019607	.0027933	.27871	.0056172
%RSD	1.224339	6.653151	5.611543	3.604047	16.39692	.3768258	.6360972
#1	.0898752	-.033869	.0791694	.0562358	.0201332	73.64209	.8766643
#2	.0909273	-.037166	.0830412	.0523354	.0147089	74.13846	.8854252
#3	.0921016	-.038614	.0742184	.0546355	.0162635	74.10995	.8871352

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057826	.0009620	77.58184	.1098034	.1087203	.1170255	140.4634
Stddev	.0000887	.0000381	.26735	.0007264	.0007632	.0017376	.6692
%RSD	1.533787	3.962504	.3446053	.6615753	.7020004	1.484797	.4764123
#1	.0057193	.0009624	77.27330	.1096144	.1078390	.1151515	139.6959
#2	.0057446	.0009237	77.74509	.1106056	.1091631	.1173418	140.9246
#3	.0058840	.0010000	77.72712	.1091901	.1091588	.1185833	140.7696

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.885923	42.62633	.1186326	.0035540	2.443885	.2307159	.2713874
Stddev	.021010	.35035	.0002540	.0008246	.738153	.0039448	.0114629
%RSD	.5406568	.8219000	.2141169	23.20235	30.20407	1.709806	4.223808
#1	3.864618	42.29419	.1185766	.0040355	2.724672	.2329944	.2732255
#2	3.906624	42.99241	.1184112	.0040247	3.000441	.2329924	.2591166
#3	3.886527	42.59237	.1189099	.0026019	1.606542	.2261608	.2818202

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.166204	5.040513	-.050400	-.000531	.1655880	8.119950	.0038877
Stddev	.168021	.011734	.004212	.000602	.0051508	.045562	.0004705
%RSD	2.344625	.2328007	8.356554	113.4275	3.110636	.5611087	12.10171
#1	6.984894	5.042032	-.054893	-.001201	.1712924	8.172023	.0042080
#2	7.197061	5.028093	-.046541	-.000037	.1641938	8.100407	.0033475
#3	7.316658	5.051414	-.049767	-.000354	.1612778	8.087420	.0041075

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20DLX2 Acquired: 12/20/2024 1:54:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4509593	.2553947	.0695008
Stddev	.0050533	.0024651	.0029059
%RSD	1.120559	.9652071	4.181091
#1	.4469148	.2526313	.0709081
#2	.4493391	.2573675	.0714351
#3	.4566239	.2561852	.0661592

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2543.828	31622.29	2073.237	2181.090	2059.664
Stddev	1.239	55.48	8.823	5.671	.852
%RSD	.0487076	.1754551	.4255833	.2600055	.0413583
#1	2543.363	31628.80	2063.788	2187.458	2060.041
#2	2545.233	31563.84	2081.262	2176.582	2060.262
#3	2542.889	31674.23	2074.659	2179.232	2058.689

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-21DLX2 Acquired: 12/20/2024 1:58:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0944910	-.038329	.0829273	.0558976	.0158064	74.90011	.8925418
Stddev	.0022984	.005181	.0036902	.0017131	.0029747	.44864	.0032505
%RSD	2.432382	13.51634	4.449968	3.064713	18.81949	.5989835	.3641800
#1	.0926844	-.032365	.0836235	.0577148	.0192348	74.55420	.8895067
#2	.0937107	-.040910	.0789386	.0543122	.0139089	74.73910	.8921470
#3	.0970779	-.041712	.0862199	.0556658	.0142757	75.40704	.8959716

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058717	.0010475	78.48762	.1125245	.1099018	.1218068	142.3522
Stddev	.0001126	.0001410	.57247	.0007883	.0004115	.0035486	.7652
%RSD	1.916853	13.45664	.7293783	.7005533	.3744647	2.913286	.5375370
#1	.0057473	.0011256	78.23906	.1116314	.1099628	.1178009	141.8612
#2	.0059011	.0011322	78.08144	.1131232	.1102795	.1245560	141.9616
#3	.0059666	.0008848	79.14236	.1128189	.1094632	.1230636	143.2339

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.928599	43.19960	.1198688	.0037550	2.352684	.2295010	.2904522
Stddev	.011282	.15066	.0008574	.0006157	.382589	.0083363	.0123942
%RSD	.2871827	.3487570	.7152472	16.39749	16.26183	3.632359	4.267218
#1	3.931959	43.05379	.1203693	.0042784	1.947210	.2210872	.3040285
#2	3.916018	43.19031	.1188788	.0030766	2.707302	.2296583	.2797424
#3	3.937819	43.35468	.1203581	.0039100	2.403538	.2377576	.2875858

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.235535	5.129933	-.053574	-.000330	.1678562	8.428950	.0044241
Stddev	.216212	.016626	.002250	.000449	.0015792	.053774	.0001943
%RSD	2.988198	.3240882	4.198906	135.7541	.9408061	.6379626	4.392209
#1	7.010129	5.120612	-.050992	-.000310	.1660470	8.384700	.0044380
#2	7.255275	5.120059	-.055108	.000107	.1685637	8.413350	.0042232
#3	7.441200	5.149128	-.054622	-.000789	.1689579	8.488798	.0046110

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-21DLX2 Acquired: 12/20/2024 1:58:14 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4589266	.2584638	.0663665
Stddev	.0043995	.0008555	.0027690
%RSD	.9586531	.3309844	4.172350
#1	.4548450	.2577684	.0631939
#2	.4635868	.2582041	.0676085
#3	.4583481	.2594191	.0682971

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2555.691	31709.36	2098.052	2190.483	2063.277
Stddev	9.294	91.20	.382	6.077	4.426
%RSD	.3636427	.2876050	.0181945	.2774345	.2144955
#1	2562.057	31692.46	2098.246	2184.678	2066.209
#2	2559.989	31627.79	2098.298	2189.970	2065.436
#3	2545.026	31807.83	2097.612	2196.800	2058.187

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20LDLX10 Acquired: 12/20/2024 2:02:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156919	-.006854	.0162283	.0049348	.0011926	15.35337	.1837015
Stddev	.0017878	.005269	.0046070	.0020025	.0018765	.02982	.0012956
%RSD	11.39345	76.87795	28.38897	40.57895	157.3397	.1941938	.7052842
#1	.0155381	-.006039	.0117957	.0028643	.0033186	15.31895	.1834524
#2	.0175516	-.002040	.0158974	.0068615	.0004921	15.37073	.1825484
#3	.0139859	-.012483	.0209919	.0050785	-.000233	15.37044	.1851035

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012338	.0002106	16.18424	.0230535	.0276256	.0202856	29.38042
Stddev	.0002120	.0000976	.11276	.0008601	.0000410	.0015787	.04754
%RSD	17.17844	46.35210	.6967508	3.730815	.1484854	7.782344	.1618209
#1	.0009929	.0000979	16.16668	.0221046	.0276710	.0203351	29.36975
#2	.0013917	.0002693	16.30475	.0232740	.0276146	.0218389	29.33911
#3	.0013169	.0002646	16.08128	.0237818	.0275913	.0186827	29.43239

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8133240	8.851083	.0221036	.0002788	2.292900	.0457165	.0554441
Stddev	.0019627	.013735	.0003148	.0009631	.494968	.0091446	.0068822
%RSD	.2413199	.1551784	1.424444	345.4187	21.58698	20.00284	12.41277
#1	.8126032	8.849146	.0224098	-.000404	2.308278	.0398404	.0505420
#2	.8155452	8.865684	.0221204	-.000140	2.780000	.0562524	.0524785
#3	.8118236	8.838419	.0217808	.001380	1.790423	.0410568	.0633119

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.599046	.9676046	-.015972	-.000293	.0318035	1.744579	-.005987
Stddev	.120983	.0020885	.000536	.000391	.0007593	.012513	.001104
%RSD	7.565923	.2158458	3.353249	133.0677	2.387392	.7172224	18.44277
#1	1.516630	.9661728	-.016343	.000154	.0314913	1.753789	-.005659
#2	1.737940	.9666399	-.016215	-.000564	.0326692	1.730334	-.005084
#3	1.542569	.9700011	-.015358	-.000471	.0312502	1.749616	-.007218

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20LDLX10 Acquired: 12/20/2024 2:02:07 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.0948951	.0531133	.0193107
Stddev	.0026772	.0001985	.0019386
%RSD	2.821191	.3737206	10.03906
#1	.0919926	.0528851	.0172157
#2	.0972677	.0532087	.0210411
#3	.0954251	.0532461	.0196752

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2480.843	30567.89	1999.734	2105.394	2188.136
Stddev	3.773	63.08	12.834	11.883	3.713
%RSD	.1520863	.2063652	.6417909	.5644065	.1696927
#1	2476.867	30498.85	1989.403	2092.745	2186.137
#2	2481.288	30622.52	2014.101	2116.324	2185.850
#3	2484.373	30582.30	1995.697	2107.112	2192.420

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20DLX2 Acquired: 12/20/2024 2:06:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1804596	.0549868	.1211895	.2190377	.1818307	77.20697	4.647486
Stddev	.0022964	.0041224	.0042864	.0059638	.0012868	.23786	.017255
%RSD	1.272518	7.497118	3.536909	2.722708	.7076948	.3080828	.3712685
#1	.1786052	.0553510	.1163100	.2169188	.1832251	77.31901	4.647442
#2	.1830282	.0506944	.1229110	.2144228	.1806890	76.93377	4.630253
#3	.1797454	.0589151	.1243475	.2257716	.1815780	77.36812	4.664763

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1006455	.0986847	77.18569	.5061602	1.074349	.5724512	141.5157
Stddev	.0010849	.0013896	.22545	.0018411	.016373	.0090040	.7185
%RSD	1.077936	1.408118	.2920891	.3637445	1.524018	1.572891	.5076932
#1	.1011388	.0971488	76.95276	.5076794	1.055830	.5731162	141.3947
#2	.0994017	.0990503	77.20148	.5041126	1.080310	.5631332	140.8654
#3	.1013962	.0998549	77.40283	.5066884	1.086906	.5811044	142.2869

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.809015	42.28097	1.107614	.0786182	1.985896	1.175930	1.139788
Stddev	.027500	.26995	.016711	.0011640	.677398	.027196	.006974
%RSD	.5718453	.6384635	1.508780	1.480601	34.11044	2.312714	.6118308
#1	4.806795	42.45085	1.088617	.0799282	2.206680	1.181743	1.140417
#2	4.782693	41.96970	1.114177	.0777026	2.525357	1.146297	1.146426
#3	4.837559	42.42237	1.120048	.0782238	1.225651	1.199749	1.132522

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.200543	4.989066	-.051424	.0001800	.1691843	8.215860	.0043682
Stddev	.087617	.066461	.003307	.0001576	.0004215	.110735	.0017142
%RSD	1.216811	1.332129	6.430147	87.58153	.2491463	1.347825	39.24345
#1	7.153169	4.914224	-.052193	.0002974	.1689822	8.283599	.0030730
#2	7.146814	5.011788	-.054278	.0002416	.1689019	8.088071	.0063121
#3	7.301648	5.041186	-.047801	.0000008	.1696688	8.275911	.0037195

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5178-20DLX2 Acquired: 12/20/2024 2:06:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ88S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.4507408	.2506914	.0696906
Stddev	.0057018	.0013433	.0007293
%RSD	1.264984	.5358265	1.046533
#1	.4466653	.2493464	.0689025
#2	.4483005	.2506949	.0698274
#3	.4572566	.2520329	.0703418

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2591.349	31956.22	2138.003	2207.737	2100.223
Stddev	26.490	88.44	29.513	8.552	22.581
%RSD	1.022237	.2767480	1.380407	.3873646	1.075188
#1	2620.177	31909.54	2127.487	2204.599	2125.626
#2	2585.788	32058.22	2171.334	2217.415	2092.614
#3	2568.081	31900.91	2115.188	2201.198	2082.430

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-01DLX2 Acquired: 12/20/2024 2:09:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2134302	-.091248	.1407089	.1024906	.0313157	84.54144	.7149774
Stddev	.0027326	.002424	.0022720	.0003643	.0031401	.25960	.0021609
%RSD	1.280329	2.657036	1.614715	.3554391	10.02719	.3070664	.3022320
#1	.2114895	-.088653	.1433223	.1029105	.0295600	84.84085	.7174673
#2	.2165552	-.091633	.1392025	.1023018	.0349410	84.37918	.7135930
#3	.2122460	-.093456	.1396018	.1022594	.0294462	84.40430	.7138718

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079353	.0020382	48.96723	.0894896	.1234918	.1992365	222.8623
Stddev	.0001767	.0000787	.25186	.0007331	.0007769	.0113487	.6214
%RSD	2.226358	3.858811	.5143519	.8191641	.6291454	5.696113	.2788329
#1	.0080805	.0019766	49.25249	.0887515	.1226126	.2108464	223.4940
#2	.0079868	.0020112	48.77556	.0902176	.1237767	.1986946	222.2517
#3	.0077386	.0021268	48.87365	.0894995	.1240860	.1881684	222.8413

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.984925	40.75164	.1214924	.0045064	2.313403	.3769069	.4098325
Stddev	.002655	.22974	.0006634	.0005431	.729481	.0107461	.0133551
%RSD	.0666285	.5637657	.5460397	12.05297	31.53281	2.851126	3.258673
#1	3.987446	40.99579	.1219722	.0048868	2.039025	.3687769	.3944623
#2	3.985175	40.71944	.1207354	.0047479	3.140288	.3890901	.4186019
#3	3.982154	40.53970	.1217696	.0038843	1.760897	.3728537	.4164333

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.22114	6.580391	-.085944	.0004923	.8136336	3.278543	.0112727
Stddev	.22213	.019629	.006416	.0003788	.0063596	.029392	.0007495
%RSD	1.459341	.2982970	7.465817	76.95934	.7816323	.8965108	6.648664
#1	15.47148	6.562590	-.090773	.0000590	.8121957	3.304191	.0119000
#2	15.14432	6.577139	-.078663	.0006569	.8081160	3.246470	.0104427
#3	15.04761	6.601443	-.088395	.0007610	.8205890	3.284969	.0114754

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-01DLX2 Acquired: 12/20/2024 2:09:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.300721	-.073983	.0595241
Stddev	.004440	.000664	.0056027
%RSD	.3413487	.8978530	9.412477
#1	1.305751	-.074105	.0542057
#2	1.299069	-.073266	.0653733
#3	1.297344	-.074577	.0589934

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2616.640	32302.53	2133.973	2239.860	2079.859
Stddev	11.201	208.84	12.358	19.929	12.996
%RSD	.4280610	.6465269	.5790883	.8897639	.6248505
#1	2627.991	32518.11	2120.716	2262.170	2094.251
#2	2616.331	32101.14	2145.173	2223.816	2076.343
#3	2605.596	32288.32	2136.030	2233.595	2068.983

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV074 Acquired: 12/20/2024 2:13:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV074 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.051690	4.821983	24.80857	4.867104	4.928392	410.7545	10.25603
Stddev	.005149	.005834	.11843	.008779	.013500	2.6791	.06940
%RSD	.1019219	.1209858	.4773638	.1803661	.2739227	.6522430	.6766566
#1	5.047560	4.819622	24.71155	4.864708	4.927729	409.6773	10.22909
#2	5.050052	4.828628	24.77361	4.859772	4.915236	408.7817	10.20414
#3	5.057459	4.817700	24.94054	4.876832	4.942211	413.8046	10.33486

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5160751	2.497000	412.4671	15.52223	2.508272	15.17375	414.6594
Stddev	.0066396	.010073	2.5330	.21970	.009797	.11177	2.8155
%RSD	1.286565	.4034035	.6141005	1.415399	.3905968	.7366225	.6789963
#1	.5115779	2.488477	411.1085	15.49513	2.499278	15.10398	413.0990
#2	.5129463	2.494409	410.9033	15.31734	2.506827	15.11460	412.9696
#3	.5237011	2.508116	415.3895	15.75423	2.518711	15.30267	417.9096

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.24298	411.9537	2.511157	1.281209	413.4179	2.544122	14.84051
Stddev	.10363	4.0085	.009189	.014629	1.6744	.016122	.11515
%RSD	.6798510	.9730583	.3659420	1.141781	.4050210	.6337095	.7758957
#1	15.20953	410.5819	2.504312	1.277266	412.0833	2.531417	14.96412
#2	15.16021	408.8112	2.507557	1.268957	412.8738	2.538689	14.73629
#3	15.35920	416.4681	2.521601	1.297405	415.2968	2.562258	14.82112

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.2165	4.977990	4.938045	4.834838	5.058268	4.909000	5.003452
Stddev	1.3813	.026048	.064558	.016777	.027924	.064318	.019561
%RSD	.9074795	.5232560	1.307369	.3470034	.5520419	1.310211	.3909457
#1	151.4325	4.954332	4.892582	4.832037	5.052869	4.868695	4.983862
#2	151.4056	4.973736	4.909615	4.819638	5.033439	4.875131	5.003509
#3	153.8115	5.005903	5.011940	4.852840	5.088498	4.983176	5.022984

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV074 Acquired: 12/20/2024 2:13:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV074 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.171745	4.911978	5.072822
Stddev	.042235	.039370	.025670
%RSD	.8166482	.8015064	.5060297
#1	5.157013	4.898618	5.059091
#2	5.138849	4.881026	5.056938
#3	5.219373	4.956289	5.102437

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2006.756	26302.39	1859.944	1732.086	1750.737
Stddev	1.499	322.40	20.672	19.951	4.262
%RSD	.0746987	1.225762	1.111442	1.151834	.2434439
#1	2006.887	26208.09	1865.427	1718.494	1755.370
#2	2008.186	26661.43	1877.321	1754.990	1749.857
#3	2005.196	26037.65	1837.083	1722.774	1746.984

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB074 Acquired: 12/20/2024 2:17:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB074 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.004916	-.001196	.0009596	-.001896	.0004527	-.016442
Stddev	.001497	.002743	.0014844	.002950	.0036167	.009144
%RSD	30.45479	229.3508	154.6901	155.5430	798.8145	55.60996
#1	-.006601	-.000895	.0017316	.001447	-.003684	-.020302
#2	-.004412	-.004077	.0018989	-.003006	.003014	-.006002
#3	-.003736	.001384	-.000752	-.004130	.002029	-.023023

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000437	-.000087	-.000017	-.068887	.0000950	-.000078
Stddev	.0015553	.000053	.000143	.048455	.0011680	.000435
%RSD	3561.093	60.94014	824.0339	70.33957	1230.224	556.2741
#1	.0018390	-.000027	-.000121	-.039203	.0007891	.000408
#2	-.000894	-.000127	.000146	-.042656	.0007493	-.000211
#3	-.000814	-.000107	-.000077	-.124803	-.001254	-.000431

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006470	.0436517	.0013575	.0317513	-.000518	.0015013
Stddev	.002984	.0268476	.0014559	.1803567	.000849	.0005383
%RSD	46.11153	61.50397	107.2422	568.0285	163.9746	35.85245
#1	-.009819	.0745317	.0024342	-.169898	-.000571	.0021224
#2	-.005500	.0305809	-.000299	.177651	-.001340	.0011694
#3	-.004093	.0258426	.001937	.087500	.000356	.0012123

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.797741	-.005262	-.002444	.3684995	.0030721	.0097412
Stddev	.086881	.003943	.004192	.1266819	.0014036	.0026384
%RSD	4.832803	74.93748	171.5073	34.37776	45.68830	27.08485
#1	1.867581	-.003187	-.000155	.2787164	.0039148	.0123777
#2	1.825193	-.002789	-.007283	.5134038	.0014518	.0097452
#3	1.700450	-.009810	.000105	.3133783	.0038497	.0071009

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB074 Acquired: 12/20/2024 2:17:22 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB074 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.000134	-.012869	-.001544	F -.010273	-.001457	.0002149
Stddev	.000430	.004260	.002653	.001281	.000863	.0000818
%RSD	321.0961	33.10202	171.8153	12.46577	59.25352	38.07212
#1	-.000583	-.016838	-.000987	-.011019	-.001749	.0001704
#2	.000275	-.013400	-.004432	-.011005	-.002137	.0001650
#3	-.000095	-.008368	.000786	-.008794	-.000486	.0003093

Elem	Li6707
Units	ppm
Avg	F .0178609
Stddev	.0013069
%RSD	7.317191
#1	.0170728
#2	.0193695
#3	.0171405

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2384.962	29574.38	1924.664	2036.869	2168.443
Stddev	13.302	203.47	3.532	13.983	8.137
%RSD	.5577614	.6879830	.1834997	.6864870	.3752584
#1	2398.683	29347.47	1922.878	2023.409	2175.896
#2	2384.082	29740.59	1928.732	2051.322	2169.671
#3	2372.122	29635.09	1922.382	2035.876	2159.761

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-02DLX2 Acquired: 12/20/2024 2:21:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ00 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2011296	-.100431	.1422815	.1124448	.0334422	91.45876	.8030684
Stddev	.0083038	.001937	.0027010	.0044439	.0020552	.11640	.0025974
%RSD	4.128585	1.928693	1.898327	3.952029	6.145430	.1272675	.3234306
#1	.2107180	-.100160	.1409762	.1152052	.0338428	91.34420	.8021602
#2	.1963028	-.102489	.1453871	.1148107	.0352676	91.57691	.8059980
#3	.1963681	-.098644	.1404811	.1073186	.0312162	91.45516	.8010472

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083030	.0018493	51.12671	.0998135	.1346153	.1840289	236.9005
Stddev	.0002531	.0000346	.13479	.0006976	.0002208	.0034096	.1539
%RSD	3.048220	1.873148	.2636456	.6989324	.1640278	1.852759	.0649638
#1	.0084031	.0018825	50.98465	.0998543	.1347275	.1848403	237.0019
#2	.0080152	.0018134	51.25282	.1004898	.1347575	.1869596	236.9762
#3	.0084908	.0018522	51.14265	.0990963	.1343609	.1802868	236.7234

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.461372	43.91141	.1303911	.0054068	1.577604	.3722120	.4112158
Stddev	.012544	.08811	.0007089	.0001961	.603606	.0167372	.0134082
%RSD	.2811596	.2006616	.5436727	3.626765	38.26095	4.496678	3.260624
#1	4.447440	43.81095	.1311501	.0054630	.890571	.3676834	.3978448
#2	4.471769	43.94770	.1302772	.0051887	2.022756	.3582052	.4111416
#3	4.464905	43.97558	.1297461	.0055687	1.819484	.3907476	.4246609

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.72476	7.141885	-.092637	.0002451	.7445629	3.139758	.0128111
Stddev	.00666	.020495	.002143	.0006444	.0041107	.012801	.0003598
%RSD	.0398387	.2869733	2.313438	262.9490	.5520919	.4077001	2.808193
#1	16.72258	7.122574	-.093019	.0009862	.7471527	3.125749	.0127555
#2	16.71946	7.139694	-.090329	-.000182	.7467128	3.142682	.0124824
#3	16.73224	7.163388	-.094563	-.000069	.7398231	3.150845	.0131955

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-02DLX2 Acquired: 12/20/2024 2:21:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ00 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.275765	-.076724	.0679485
Stddev	.006034	.000267	.0043697
%RSD	.4729506	.3475545	6.430877
#1	1.269111	-.076988	.0728502
#2	1.280881	-.076455	.0665340
#3	1.277303	-.076729	.0644613

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2653.941	32688.01	2154.197	2266.409	2092.062
Stddev	10.724	99.27	6.136	9.320	6.990
%RSD	.4040814	.3036784	.2848623	.4112383	.3341183
#1	2664.817	32774.21	2159.751	2277.157	2099.635
#2	2643.375	32579.48	2147.609	2261.529	2085.857
#3	2653.631	32710.34	2155.231	2260.543	2090.693

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-03DLX2 Acquired: 12/20/2024 2:25:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ01 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8844797	-.109857	.7030256	.1232741	.0413318	84.11942	.7035987
Stddev	.0028730	.003694	.0059244	.0074253	.0004218	.39702	.0055600
%RSD	.3248281	3.362867	.8426996	6.023364	1.020647	.4719731	.7902179
#1	.8832507	-.110132	.6961947	.1284700	.0413247	84.57540	.7100079
#2	.8824255	-.113407	.7061210	.1265825	.0417572	83.93253	.7000696
#3	.8877628	-.106033	.7067611	.1147697	.0409136	83.85033	.7007186

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082545	.0095986	42.00141	.0902492	.1322163	.3555485	250.8568
Stddev	.0000261	.0002079	.14479	.0013256	.0010864	.0114749	1.6545
%RSD	.3158815	2.165652	.3447159	1.468824	.8217176	3.227380	.6595569
#1	.0082767	.0094839	42.16838	.0891021	.1310640	.3440184	252.6409
#2	.0082611	.0098385	41.91051	.0917004	.1332220	.3669674	249.3729
#3	.0082258	.0094733	41.92536	.0899451	.1323627	.3556596	250.5565

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.078336	43.80361	.1283912	.0081987	2.830921	.3660840	2.079633
Stddev	.015958	.31947	.0003441	.0010662	1.131066	.0098636	.023739
%RSD	.3912812	.7293239	.2679961	13.00434	39.95398	2.694353	1.141522
#1	4.096668	44.15142	.1282521	.0079487	2.669271	.3569529	2.063417
#2	4.067562	43.52325	.1281384	.0072797	1.789377	.3647539	2.068600
#3	4.070777	43.73616	.1287831	.0093676	4.034115	.3765452	2.106881

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.69554	9.028973	-.097862	.0006592	3.484911	3.108804	.0136509
Stddev	.12678	.045628	.002462	.0000589	.022734	.021559	.0013178
%RSD	.7164746	.5053485	2.515352	8.939488	.6523491	.6934873	9.653719
#1	17.81143	8.977478	-.096855	.0006680	3.461285	3.130498	.0122351
#2	17.56013	9.045069	-.100667	.0007132	3.486813	3.108533	.0138759
#3	17.71506	9.064370	-.096063	.0005963	3.506633	3.087382	.0148417

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-03DLX2 Acquired: 12/20/2024 2:25:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ01 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.127313	-.117496	.0625433
Stddev	.003328	.000750	.0032252
%RSD	.2952433	.6380970	5.156774
#1	1.130975	-.118251	.0631117
#2	1.126492	-.116752	.0590716
#3	1.124472	-.117484	.0654464

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2670.960	33037.37	2193.460	2290.438	2127.651
Stddev	9.710	57.18	17.964	7.758	10.188
%RSD	.3635347	.1730632	.8189818	.3387313	.4788579
#1	2681.704	33063.03	2175.161	2298.996	2139.295
#2	2662.811	32971.86	2194.151	2283.864	2120.376
#3	2668.366	33077.22	2211.070	2288.454	2123.281

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-04DLX2 Acquired: 12/20/2024 2:29:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ02 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3803517	-.103127	.2261477	.1181680	.0372125	89.34419	.8378358
Stddev	.0037687	.004764	.0006061	.0060900	.0016844	.26030	.0032030
%RSD	.9908437	4.619630	.2680149	5.153702	4.526409	.2913399	.3822945
#1	.3766608	-.105676	.2266548	.1198370	.0370373	89.05798	.8395205
#2	.3802007	-.097631	.2254764	.1114175	.0389777	89.56677	.8398448
#3	.3841937	-.106074	.2263117	.1232495	.0356226	89.40783	.8341420

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082709	.0035613	44.89807	.1017129	.1251262	.2684206	239.5242
Stddev	.0001009	.0001047	.09380	.0014676	.0002214	.0087661	.3125
%RSD	1.219620	2.939819	.2089115	1.442857	.1769579	3.265818	.1304578
#1	.0082677	.0036814	44.79626	.1028602	.1248776	.2591669	239.5187
#2	.0081717	.0035130	44.98097	.1022192	.1251990	.2766002	239.8394
#3	.0083733	.0034894	44.91699	.1000592	.1253021	.2694947	239.2145

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.518305	43.37874	.1300719	.0067456	3.073700	.4040256	.7298181
Stddev	.019515	.20651	.0015998	.0006513	.560907	.0015482	.0114940
%RSD	.4319115	.4760623	1.229904	9.655800	18.24861	.3831958	1.574918
#1	4.512612	43.27580	.1314546	.0062404	3.261936	.4039471	.7363074
#2	4.540034	43.61648	.1283198	.0065157	3.516277	.4056115	.7165470
#3	4.502270	43.24393	.1304414	.0074807	2.442886	.4025181	.7365998

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.89038	7.633286	-.093805	.0008071	2.635516	4.268141	.0131221
Stddev	.12613	.037749	.002104	.0009644	.013829	.023455	.0024419
%RSD	.6676761	.4945345	2.242963	119.4962	.5247317	.5495451	18.60876
#1	18.74620	7.675665	-.092444	.0018989	2.649790	4.255366	.0119683
#2	18.98027	7.603263	-.096228	.0000712	2.622179	4.295211	.0114709
#3	18.94467	7.620930	-.092742	.0004511	2.634579	4.253846	.0159270

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-04DLX2 Acquired: 12/20/2024 2:29:05 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ02 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.360855	-.099287	.0649082
Stddev	.002870	.000536	.0029026
%RSD	.2108846	.5400059	4.471848
#1	1.358317	-.099696	.0630231
#2	1.360280	-.099485	.0682507
#3	1.363969	-.098680	.0634507

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2636.821	32668.98	2147.152	2268.031	2089.380
Stddev	1.310	219.90	7.308	13.470	3.356
%RSD	.0496823	.6731140	.3403699	.5938936	.1606343
#1	2635.779	32469.38	2147.945	2252.561	2085.785
#2	2638.292	32632.85	2139.480	2277.163	2089.926
#3	2636.393	32904.71	2154.032	2274.369	2092.430

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-05DLX2 Acquired: 12/20/2024 2:32:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ03 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3315886	-.123007	.2321505	.1337789	.0445282	105.0334	.8641239
Stddev	.0064287	.001844	.0062329	.0049355	.0025785	.2525	.0027230
%RSD	1.938744	1.499017	2.684868	3.689257	5.790794	.2404327	.3151149
#1	.3332119	-.122478	.2259132	.1367473	.0420338	105.1738	.8646087
#2	.3370501	-.125058	.2321593	.1280816	.0471834	105.1845	.8665720
#3	.3245039	-.121486	.2383790	.1365077	.0443675	104.7419	.8611911

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0092084	.0034233	50.66058	.1270994	.1448873	.2578378	276.5981
Stddev	.0001902	.0002368	.15298	.0057359	.0038605	.0068666	.2381
%RSD	2.065590	6.918214	.3019738	4.512949	2.664521	2.663157	.0860797
#1	.0090228	.0031505	50.81893	.1206592	.1405022	.2592622	276.3874
#2	.0094029	.0035755	50.64920	.1316588	.1463854	.2638806	276.8564
#3	.0091994	.0035440	50.51361	.1289802	.1477743	.2503707	276.5504

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.840573	51.96268	.1515581	.0072039	2.306305	.4654288	.7768414
Stddev	.001960	.12260	.0038019	.0019133	.403964	.0098784	.0340655
%RSD	.0404840	.2359466	2.508540	26.55893	17.51563	2.122435	4.385125
#1	4.838650	51.82388	.1471705	.0092756	2.614288	.4540396	.7379094
#2	4.840502	52.05623	.1538805	.0055034	2.455707	.4716697	.8011738
#3	4.842567	52.00792	.1536232	.0068327	1.848922	.4705770	.7914410

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.10316	8.570930	-.098216	.0006680	2.132078	2.776859	.0175572
Stddev	.03618	.206402	.001919	.0000280	.052897	.009576	.0021063
%RSD	.1714544	2.408169	1.953611	4.195506	2.480998	.3448647	11.99669
#1	21.13120	8.332927	-.096053	.0006358	2.071784	2.766432	.0154101
#2	21.11596	8.679086	-.098882	.0006820	2.153763	2.778884	.0196202
#3	21.06232	8.700779	-.099713	.0006863	2.170686	2.785261	.0176413

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-05DLX2 Acquired: 12/20/2024 2:32:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ03 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.587518	-.110227	.0786704
Stddev	.006256	.000692	.0059603
%RSD	.3940623	.6279983	7.576277
#1	1.580932	-.110634	.0840278
#2	1.593380	-.110619	.0797330
#3	1.588243	-.109427	.0722502

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2650.788	32298.11	2147.861	2234.083	2082.428
Stddev	44.558	669.39	11.212	46.207	42.780
%RSD	1.680936	2.072531	.5220247	2.068284	2.054331
#1	2702.120	32976.13	2136.789	2280.842	2131.819
#2	2622.092	31637.70	2159.209	2188.449	2057.036
#3	2628.151	32280.50	2147.584	2232.958	2058.427

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-06DLX2 Acquired: 12/20/2024 2:36:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ04 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1424120	-.059176	.1135385	.0671913	.0221392	62.03289	.6150713
Stddev	.0058103	.001798	.0020789	.0021020	.0022213	.25350	.0028075
%RSD	4.079898	3.038466	1.830996	3.128368	10.03332	.4086546	.4564593
#1	.1464243	-.057115	.1111812	.0683100	.0244618	62.15288	.6168286
#2	.1357491	-.059992	.1151099	.0684973	.0219206	62.20411	.6165520
#3	.1450625	-.060422	.1143243	.0647665	.0200353	61.74167	.6118334

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0064302	.0012911	101.4335	.0882888	.1079308	.1167080	174.2314
Stddev	.0000698	.0001537	.4157	.0006902	.0005908	.0074399	.6210
%RSD	1.084957	11.90297	.4098513	.7817409	.5473432	6.374779	.3564013
#1	.0063686	.0012300	101.5555	.0874921	.1085241	.1198697	174.8912
#2	.0065059	.0011774	101.7746	.0886689	.1079258	.1082094	174.1447
#3	.0064161	.0014659	100.9704	.0887054	.1073426	.1220447	173.6584

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.210020	29.49711	.1014220	.0027431	2.762054	.3083734	.2996474
Stddev	.015986	.31110	.0006828	.0004910	.634495	.0083205	.0017237
%RSD	.4980165	1.054677	.6732372	17.89978	22.97187	2.698206	.5752377
#1	3.225261	29.82959	.1015187	.0024881	3.417429	.3178346	.2977852
#2	3.211420	29.44866	.1020514	.0033092	2.150734	.3050904	.3011871
#3	3.193380	29.21307	.1006961	.0024321	2.717999	.3021952	.2999697

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.36627	5.110800	-.055855	.0005826	.4801456	1.884021	.0083387
Stddev	.19240	.005972	.002711	.0003908	.0018162	.018047	.0008307
%RSD	1.692684	.1168540	4.854448	67.08486	.3782634	.9578844	9.961961
#1	11.28137	5.117568	-.058975	.0010324	.4815528	1.902550	.0092964
#2	11.23092	5.106270	-.054527	.0003896	.4807887	1.883015	.0079064
#3	11.58651	5.108562	-.054064	.0003257	.4780954	1.866499	.0078133

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-06DLX2 Acquired: 12/20/2024 2:36:45 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ04 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.105366	-.034130	.0485585
Stddev	.006102	.000204	.0065071
%RSD	.5520301	.5975701	13.40062
#1	1.108986	-.034075	.0446860
#2	1.108791	-.033959	.0560710
#3	1.098321	-.034355	.0449183

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2543.330	31399.34	2083.284	2157.631	2072.769
Stddev	3.232	296.48	21.044	22.061	3.397
%RSD	.1270855	.9442329	1.010142	1.022484	.1638996
#1	2544.304	31393.10	2065.538	2156.169	2074.823
#2	2539.723	31106.03	2077.781	2136.337	2068.848
#3	2545.964	31698.89	2106.533	2180.387	2074.638

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-07DLX2 Acquired: 12/20/2024 2:40:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ05 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4063776	-.094780	.2857987	.1025908	.0332797	95.48129	.8493434
Stddev	.0036147	.005184	.0042203	.0054743	.0041913	2.64926	.0261523
%RSD	.8894955	5.469441	1.476681	5.336068	12.59408	2.774638	3.079116
#1	.4023392	-.089406	.2844468	.0999816	.0286988	92.63126	.8214829
#2	.4093105	-.099751	.2905294	.1088816	.0369223	97.86889	.8733625
#3	.4074830	-.095184	.2824200	.0989092	.0342180	95.94371	.8531846

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0081015	.0042744	49.28689	.1082293	.1333575	.2385775	223.5484
Stddev	.0000778	.0001491	1.39257	.0014781	.0006839	.0050028	6.3036
%RSD	.9599952	3.488788	2.825447	1.365678	.5128564	2.096940	2.819790
#1	.0081343	.0044143	47.77156	.1098475	.1329052	.2329268	216.8433
#2	.0081575	.0042915	50.51049	.1078901	.1341443	.2403634	229.3538
#3	.0080127	.0041175	49.57863	.1069503	.1330230	.2424423	224.4481

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.301857	45.38149	.1358184	.0045366	2.460026	.3402992	.9152881
Stddev	.138234	1.34252	.0013610	.0010840	.496215	.0106010	.0115582
%RSD	3.213353	2.958297	1.002066	23.89476	20.17112	3.115195	1.262795
#1	4.154453	43.92083	.1366493	.0032925	2.818031	.3280701	.9127719
#2	4.428593	46.56150	.1365581	.0052776	2.668456	.3459464	.9278971
#3	4.322525	45.66213	.1342477	.0050398	1.893592	.3468810	.9051953

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.27011	7.131771	-.071449	.0003897	4.228969	2.976812	.0112066
Stddev	.53968	.041051	.000865	.0005022	.020334	.067371	.0008810
%RSD	3.124953	.5756132	1.210313	128.8689	.4808161	2.263196	7.861606
#1	16.67647	7.085689	-.071775	.0009013	4.206174	2.908398	.0121970
#2	17.73108	7.164432	-.070468	.0003705	4.245238	3.043089	.0109124
#3	17.40279	7.145192	-.072103	-.000103	4.235497	2.978947	.0105103

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-07DLX2 Acquired: 12/20/2024 2:40:37 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ05 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.8994438	-.071097	.0663326
Stddev	.0276517	.002074	.0021399
%RSD	3.074305	2.917774	3.226011
#1	.8702517	-.068721	.0688015
#2	.9252416	-.072546	.0650098
#3	.9028380	-.072025	.0651867

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2644.588	32712.64	2183.818	2259.203	2095.873
Stddev	17.743	25.78	45.760	5.789	15.470
%RSD	.6709005	.0788169	2.095408	.2562216	.7381250
#1	2654.912	32683.60	2231.294	2265.502	2106.916
#2	2624.101	32721.50	2139.992	2254.118	2078.192
#3	2654.751	32732.83	2180.168	2257.989	2102.512

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-08DLX2 Acquired: 12/20/2024 2:44:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ06 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1225567	-.058692	.0962142	.0696252	.0239144	49.23119	.5189612
Stddev	.0052041	.001588	.0027865	.0046487	.0040006	.17457	.0009876
%RSD	4.246294	2.704835	2.896106	6.676759	16.72875	.3545825	.1902940
#1	.1175176	-.057036	.0991102	.0739110	.0282423	49.21477	.5186646
#2	.1279115	-.058840	.0935520	.0702815	.0203516	49.41338	.5200631
#3	.1222411	-.060201	.0959804	.0646833	.0231494	49.06542	.5181559

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059812	.0009214	74.03159	.0673058	.1092067	.1141680	168.5627
Stddev	.0001848	.0001152	.25744	.0007147	.0000876	.0028904	.2434
%RSD	3.090310	12.49987	.3477376	1.061921	.0801754	2.531736	.1443865
#1	.0060369	.0008168	74.12646	.0664849	.1092279	.1173286	168.6151
#2	.0061319	.0010448	74.22814	.0677898	.1091105	.1116589	168.7757
#3	.0057750	.0009026	73.74019	.0676428	.1092817	.1135166	168.2974

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.895522	28.53868	.1046054	.0025795	2.341388	.2814707	.2249598
Stddev	.003316	.15039	.0006255	.0003354	.757761	.0066836	.0136128
%RSD	.1145179	.5269818	.5979851	13.00366	32.36377	2.374539	6.051230
#1	2.897996	28.42036	.1048014	.0029552	3.153998	.2879958	.2224185
#2	2.896815	28.70792	.1051094	.0024734	2.216063	.2817773	.2127966
#3	2.891754	28.48774	.1039053	.0023100	1.654102	.2746391	.2396641

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.250478	4.507522	-.057951	.0012642	.1072950	1.800420	.0077959
Stddev	.176104	.006690	.001338	.0003638	.0040270	.021515	.0012379
%RSD	2.428866	.1484129	2.308294	28.77422	3.753194	1.194990	15.87887
#1	7.063233	4.514097	-.059394	.0016763	.1027099	1.784704	.0074317
#2	7.275420	4.500723	-.057708	.0011285	.1102578	1.824941	.0091750
#3	7.412782	4.507745	-.056752	.0009878	.1089172	1.791616	.0067809

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-08DLX2 Acquired: 12/20/2024 2:44:27 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ06 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9617056	-.060556	.0413918
Stddev	.0022094	.000413	.0016257
%RSD	.2297337	.6827879	3.927496
#1	.9600124	-.061022	.0399348
#2	.9608997	-.060415	.0410953
#3	.9642048	-.060232	.0431453

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2542.592	31694.34	2091.788	2188.501	2092.801
Stddev	9.663	150.86	15.335	10.167	9.317
%RSD	.3800367	.4759708	.7331092	.4645683	.4451916
#1	2534.616	31543.51	2096.919	2181.673	2084.262
#2	2539.825	31845.22	2074.545	2200.186	2091.403
#3	2553.337	31694.29	2103.899	2183.645	2102.738

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-09DLX2 Acquired: 12/20/2024 2:48:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ07 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3633885	-.085924	.3019273	.0957184	.0322146	97.12909	.9227632
Stddev	.0062747	.001727	.0053890	.0027720	.0032340	.20268	.0027996
%RSD	1.726733	2.010229	1.784858	2.896007	10.03895	.2086716	.3033951
#1	.3651035	-.085381	.3057223	.0977546	.0343714	97.02885	.9232954
#2	.3564345	-.087857	.2957590	.0925615	.0337762	97.36236	.9252585
#3	.3686274	-.084533	.3043006	.0968392	.0284961	96.99606	.9197356

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076178	.0043484	57.59378	.1036127	.1259097	.2383479	213.4483
Stddev	.0001225	.0001364	.23946	.0004029	.0002508	.0022406	.5433
%RSD	1.607647	3.136623	.4157776	.3888373	.1992230	.9400596	.2545546
#1	.0075728	.0044565	57.38169	.1037107	.1261226	.2358228	213.1038
#2	.0077565	.0041951	57.85347	.1039575	.1256332	.2391224	214.0747
#3	.0075243	.0043934	57.54619	.1031698	.1259733	.2400985	213.1665

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.594174	44.99845	.1271894	.0040979	2.654065	.3245741	.9127199
Stddev	.013027	.16568	.0005656	.0005404	.545488	.0061005	.0131916
%RSD	.2835565	.3681976	.4447253	13.18654	20.55293	1.879548	1.445313
#1	4.592598	45.07558	.1274685	.0046006	3.266072	.3193844	.9042241
#2	4.607918	45.11151	.1265384	.0041666	2.219052	.3312941	.9060185
#3	4.582007	44.80826	.1275612	.0035264	2.477072	.3230438	.9279170

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.81051	7.575433	-.061590	.0001126	4.043145	3.178836	.0101884
Stddev	.09755	.007589	.003367	.0005875	.017197	.029469	.0009313
%RSD	.5186135	.1001740	5.467075	521.8884	.4253288	.9270240	9.140578
#1	18.79432	7.578850	-.057704	.0007759	4.054372	3.160807	.0096200
#2	18.91515	7.566737	-.063621	-.000096	4.051716	3.212843	.0112632
#3	18.72207	7.580712	-.063447	-.000342	4.023347	3.162859	.0096821

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-09DLX2 Acquired: 12/20/2024 2:48:20 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ07 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6837012	-.026509	.0709680
Stddev	.0015883	.000504	.0006461
%RSD	.2323149	1.901626	.9104801
#1	.6854277	-.026306	.0703286
#2	.6833739	-.026138	.0716207
#3	.6823020	-.027083	.0709546

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2617.501	32026.00	2169.156	2223.407	2073.528
Stddev	15.432	175.67	5.346	17.433	9.685
%RSD	.5895599	.5485133	.2464764	.7840559	.4670870
#1	2602.558	31884.36	2174.601	2214.489	2064.132
#2	2633.379	32222.57	2163.914	2243.495	2083.478
#3	2616.566	31971.07	2168.953	2212.238	2072.973

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-10DLX2 Acquired: 12/20/2024 2:52:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ08 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4381346	-.070711	.3744116	.0843903	.0264186	88.15921	.8151730
Stddev	.0051621	.003092	.0038071	.0021443	.0030198	.72455	.0094695
%RSD	1.178200	4.372852	1.016830	2.540910	11.43074	.8218598	1.161660
#1	.4337345	-.068447	.3735638	.0857342	.0237510	87.39257	.8054602
#2	.4438170	-.069451	.3710998	.0855193	.0258076	88.25242	.8156799
#3	.4368521	-.074234	.3785711	.0819174	.0296972	88.83264	.8243790

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068625	.0063123	48.64701	.1099767	.1186539	.2570584	189.2482
Stddev	.0000799	.0001523	.37791	.0012367	.0015210	.0084397	1.5056
%RSD	1.163673	2.412517	.7768312	1.124495	1.281904	3.283180	.7955851
#1	.0068727	.0064240	48.23383	.1085637	.1201878	.2486408	187.6016
#2	.0069368	.0061388	48.73207	.1108622	.1171461	.2655200	189.5885
#3	.0067781	.0063739	48.97514	.1105041	.1186279	.2570145	190.5546

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.492497	40.17433	.1213978	.0037912	2.292129	.2648280	1.190414
Stddev	.037256	.34725	.0023450	.0005029	1.020172	.0033888	.009486
%RSD	.8293020	.8643506	1.931700	13.26364	44.50765	1.279620	.7968966
#1	4.450151	39.86687	.1223621	.0037597	1.198443	.2638868	1.183942
#2	4.507100	40.10517	.1187243	.0033049	3.217971	.2620093	1.185997
#3	4.520240	40.55095	.1231069	.0043091	2.459972	.2685880	1.201304

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.51897	6.435504	-.055766	.0006048	4.805973	2.578149	.0092877
Stddev	.16783	.094277	.001105	.0004059	.057425	.016134	.0014495
%RSD	.9062768	1.464952	1.980711	67.12089	1.194878	.6258057	15.60685
#1	18.54767	6.498592	-.057015	.0009950	4.845101	2.574023	.0101382
#2	18.33864	6.327129	-.055367	.0006346	4.740047	2.564479	.0076140
#3	18.67060	6.480792	-.054917	.0001848	4.832772	2.595946	.0101109

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-10DLX2 Acquired: 12/20/2024 2:52:10 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ08 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5298120	-.029738	.0601613
Stddev	.0066682	.000366	.0044409
%RSD	1.258597	1.229107	7.381612
#1	.5275519	-.029347	.0555171
#2	.5245676	-.030071	.0643662
#3	.5373165	-.029795	.0606006

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2659.366	32584.85	2198.970	2255.203	2093.588
Stddev	29.157	479.15	18.293	37.026	24.502
%RSD	1.096393	1.470482	.8319003	1.641825	1.170322
#1	2634.427	33136.08	2216.721	2297.718	2074.156
#2	2691.423	32268.01	2200.010	2230.031	2121.112
#3	2652.249	32350.46	2180.179	2237.860	2085.497

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-11DLX2 Acquired: 12/20/2024 2:56:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ09 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4510024	-.112646	.2841790	.1177518	.0397811	79.65676	.6779670
Stddev	.0058455	.004487	.0017550	.0008847	.0020538	.08182	.0008096
%RSD	1.296123	3.983245	.6175662	.7512896	5.162892	.1027134	.1194192
#1	.4451026	-.117606	.2826156	.1184585	.0402217	79.69898	.6788846
#2	.4511124	-.111466	.2860773	.1167597	.0415789	79.56246	.6776633
#3	.4567922	-.108868	.2838440	.1180372	.0375427	79.70884	.6773531

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079957	.0047893	35.26504	.0938691	.1519428	.2935238	247.1816
Stddev	.0002356	.0000639	.11988	.0007810	.0004311	.0030809	.0889
%RSD	2.946505	1.334213	.3399408	.8319834	.2837040	1.049625	.0359599
#1	.0079377	.0048610	35.39732	.0939267	.1524349	.2965831	247.0823
#2	.0077944	.0047383	35.23423	.0946197	.1517620	.2935664	247.2536
#3	.0082548	.0047686	35.16358	.0930609	.1516317	.2904218	247.2089

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.443339	36.17232	.1177877	.0052423	2.922264	.4456310	.9561058
Stddev	.015580	.09965	.0008197	.0002871	1.137806	.0051523	.0184089
%RSD	.3506458	.2754983	.6959247	5.476319	38.93576	1.156187	1.925404
#1	4.447299	36.16436	.1176104	.0049127	1.609028	.4475714	.9772009
#2	4.426161	36.07688	.1186815	.0053760	3.612948	.4495313	.9432922
#3	4.456558	36.27571	.1170711	.0054381	3.544815	.4397902	.9478243

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.83804	6.452027	-.085647	.0010398	1.566248	2.333825	.0132243
Stddev	.11830	.010033	.003951	.0004124	.002775	.014242	.0012074
%RSD	.7469282	.1554972	4.612982	39.66111	.1771917	.6102281	9.130023
#1	15.77774	6.456370	-.081086	.0011894	1.565321	2.318414	.0131105
#2	15.76204	6.440554	-.088022	.0013565	1.569368	2.336560	.0144845
#3	15.97434	6.459155	-.087833	.0005735	1.564054	2.346501	.0120778

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-11DLX2 Acquired: 12/20/2024 2:56:00 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ09 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.541626	-.108215	.0531873
Stddev	.001388	.000174	.0038437
%RSD	.0900342	.1606525	7.226639
#1	1.542883	-.108137	.0567014
#2	1.540137	-.108415	.0537781
#3	1.541859	-.108095	.0490825

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2606.244	32210.23	2132.400	2232.139	2086.181
Stddev	2.087	36.85	11.804	4.389	3.773
%RSD	.0800795	.1144122	.5535442	.1966254	.1808769
#1	2604.436	32252.64	2144.836	2235.812	2082.914
#2	2608.528	32191.97	2131.014	2233.326	2090.311
#3	2605.768	32186.07	2121.351	2227.278	2085.317

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-12DLX2 Acquired: 12/20/2024 2:59:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ10 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1600972	-.101637	.0804147	.1015847	.0310551	87.46570	.6579265
Stddev	.0045258	.001103	.0066700	.0028947	.0010346	.37542	.0047274
%RSD	2.826922	1.084987	8.294468	2.849536	3.331445	.4292208	.7185325
#1	.1641102	-.102078	.0729264	.1045562	.0313780	87.03627	.6529850
#2	.1551916	-.102450	.0825991	.0987734	.0318897	87.62910	.6583886
#3	.1609899	-.100381	.0857185	.1014245	.0298976	87.73172	.6624059

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0072556	.0009418	47.34786	.1172431	.1309393	.1752740	222.9002
Stddev	.0001776	.0000558	.15582	.0004966	.0006424	.0043838	.9065
%RSD	2.448052	5.920369	.3291012	.4235505	.4905890	2.501094	.4066983
#1	.0072085	.0010058	47.19129	.1166977	.1315023	.1796103	221.9392
#2	.0071062	.0009163	47.34937	.1173626	.1302395	.1708442	223.0215
#3	.0074519	.0009034	47.50292	.1176690	.1310760	.1753673	223.7400

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.757919	44.62840	.1275225	.0033117	2.455302	.4045066	.2528520
Stddev	.010728	.18615	.0011196	.0007758	.520087	.0117102	.0141276
%RSD	.2854858	.4171076	.8779295	23.42619	21.18218	2.894941	5.587292
#1	3.745535	44.41377	.1281432	.0040164	2.032934	.4057845	.2672983
#2	3.763842	44.74574	.1262301	.0034384	3.036208	.3922098	.2390663
#3	3.764381	44.72570	.1281943	.0024804	2.296765	.4155254	.2521914

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.907772	5.233989	-.078709	.0004871	.2199326	3.594167	.0120924
Stddev	.179491	.012785	.003807	.0005524	.0012169	.026446	.0008358
%RSD	4.593179	.2442674	4.836790	113.4126	.5533026	.7357912	6.911893
#1	3.701161	5.237495	-.076923	.0001416	.2207954	3.570835	.0114585
#2	3.996903	5.219817	-.076124	.0001955	.2204616	3.588772	.0117791
#3	4.025251	5.244655	-.083081	.0011242	.2185407	3.622894	.0130396

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-12DLX2 Acquired: 12/20/2024 2:59:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ10 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.450742	-.049752	.0597122
Stddev	.010419	.000920	.0043263
%RSD	.7182043	1.849954	7.245287
#1	1.438810	-.050211	.0642094
#2	1.458044	-.048692	.0555799
#3	1.455372	-.050352	.0593472

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.518	32231.44	2137.789	2226.728	2114.272
Stddev	7.921	307.80	9.552	18.322	8.009
%RSD	.3017091	.9549668	.4468258	.8228423	.3788083
#1	2616.704	32112.16	2148.442	2213.396	2105.027
#2	2627.808	32001.14	2129.985	2219.167	2118.673
#3	2632.042	32581.03	2134.941	2247.621	2119.115

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-13DLX2 Acquired: 12/20/2024 3:03:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ11 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1579093	-.086170	.0798521	.0879836	.0299516	68.72911	.6246453
Stddev	.0049765	.006023	.0015417	.0027917	.0016930	.45912	.0042380
%RSD	3.151520	6.989860	1.930669	3.172941	5.652365	.6680210	.6784638
#1	.1631623	-.079248	.0786157	.0861795	.0318989	68.22760	.6198200
#2	.1573004	-.090216	.0815794	.0865721	.0288294	69.12873	.6263523
#3	.1532652	-.089047	.0793611	.0911991	.0291264	68.83100	.6277637

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0064146	.0009229	54.47627	.1755855	.1296171	.1515553	199.9990
Stddev	.0000787	.0000370	.25686	.0015390	.0006246	.0036434	2.0922
%RSD	1.226393	4.013081	.4715043	.8765014	.4819042	2.404031	1.046121
#1	.0063629	.0009641	54.21789	.1768184	.1294826	.1473511	197.6031
#2	.0063757	.0008923	54.73158	.1760775	.1290707	.1535232	201.4657
#3	.0065051	.0009121	54.47934	.1738607	.1302980	.1537917	200.9281

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.319808	41.62200	.1486859	.0037423	2.295654	.3843447	.2560157
Stddev	.025469	.49018	.0012022	.0009379	.931008	.0087556	.0045908
%RSD	.7671939	1.177690	.8085701	25.06198	40.55521	2.278055	1.793154
#1	3.290492	41.05732	.1473879	.0028505	1.871833	.3787763	.2537216
#2	3.336494	41.87084	.1489086	.0036561	3.363168	.3798209	.2530243
#3	3.332439	41.93784	.1497613	.0047203	1.651962	.3944367	.2613014

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.409311	4.629772	-.071470	.0003574	.5675645	2.213697	.0115223
Stddev	.140111	.025143	.001578	.0000846	.0061432	.013065	.0009201
%RSD	4.109645	.5430663	2.207667	23.68394	1.082379	.5901743	7.985659
#1	3.279438	4.624244	-.069893	.0003634	.5647272	2.198612	.0111526
#2	3.390697	4.607852	-.073048	.0002700	.5633528	2.221259	.0108445
#3	3.557798	4.657218	-.071469	.0004390	.5746136	2.221222	.0125698

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-13DLX2 Acquired: 12/20/2024 3:03:42 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ11 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.053616	-.045134	.0426453
Stddev	.007147	.000590	.0064003
%RSD	.6783183	1.306834	15.00822
#1	1.046137	-.044598	.0357847
#2	1.060377	-.045766	.0484553
#3	1.054334	-.045038	.0436959

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2571.796	31875.33	2105.093	2199.502	2102.344
Stddev	13.250	267.84	12.035	15.959	12.071
%RSD	.5152170	.8402649	.5717113	.7255515	.5741486
#1	2574.308	31700.80	2118.798	2198.189	2101.876
#2	2583.611	31741.48	2096.247	2184.240	2114.642
#3	2557.470	32183.71	2100.235	2216.076	2090.514

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-14DLX2 Acquired: 12/20/2024 3:07:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ12 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1747081	-.087986	.0946124	.1046888	.0322280	98.33414	.8835328
Stddev	.0062929	.002260	.0018014	.0048938	.0015390	.51870	.0055502
%RSD	3.601935	2.568711	1.903926	4.674657	4.775305	.5274915	.6281841
#1	.1721251	-.090138	.0932629	.1065464	.0304511	98.92576	.8890776
#2	.1701177	-.088188	.0939164	.1083819	.0331391	98.11917	.8779772
#3	.1818815	-.085631	.0966579	.0991381	.0330938	97.95747	.8835436

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079526	.0014219	47.76164	.1305343	.1314908	.1759759	221.5845
Stddev	.0000529	.0001094	.17701	.0017990	.0007099	.0023694	1.4641
%RSD	.6656559	7.692577	.3706050	1.378201	.5398746	1.346435	.6607635
#1	.0080068	.0013018	47.96530	.1326115	.1307031	.1774048	223.2723
#2	.0079010	.0015158	47.64480	.1295115	.1320813	.1772820	220.8256
#3	.0079500	.0014480	47.67484	.1294798	.1316879	.1732409	220.6556

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.532386	50.29691	.1443591	.0033879	2.917821	.3508133	.3216176
Stddev	.026727	.27950	.0002429	.0007653	.556778	.0100677	.0162929
%RSD	.5896896	.5557065	.1682309	22.59050	19.08198	2.869815	5.065927
#1	4.563123	50.61661	.1445525	.0032555	2.499851	.3398425	.3050377
#2	4.519416	50.17539	.1444382	.0026974	2.703748	.3596288	.3222075
#3	4.514619	50.09874	.1440865	.0042108	3.549864	.3529687	.3376075

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.95708	6.070770	-.082517	.0005439	.6415780	2.384930	.0107281
Stddev	.06607	.024843	.001065	.0002904	.0049030	.018425	.0001131
%RSD	.5525245	.4092274	1.290158	53.39614	.7642044	.7725739	1.054129
#1	12.03217	6.043743	-.083513	.0008531	.6407383	2.406205	.0106490
#2	11.90787	6.092610	-.082644	.0005017	.6468465	2.374291	.0106777
#3	11.93121	6.075957	-.081395	.0002769	.6371491	2.374293	.0108577

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-14DLX2 Acquired: 12/20/2024 3:07:33 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ12 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.5487733	-.000539	.0650746
Stddev	.0029371	.000264	.0011977
%RSD	.5352174	49.01089	1.840543
#1	.5504450	-.000663	.0642762
#2	.5453819	-.000236	.0644958
#3	.5504931	-.000718	.0664518

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2754.335	33713.56	2234.404	2341.962	2131.177
Stddev	8.354	115.78	13.319	4.280	11.802
%RSD	.3032912	.3434216	.5960828	.1827714	.5537735
#1	2763.473	33580.99	2219.560	2338.601	2144.476
#2	2752.440	33764.93	2238.346	2346.781	2127.105
#3	2747.091	33794.77	2245.307	2340.506	2121.951

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-15DLX2 Acquired: 12/20/2024 3:11:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ13 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1509380	-.084313	.0638397	.0840346	.0280832	53.10222	.3615201
Stddev	.0017130	.002108	.0004475	.0022558	.0026434	.09593	.0025441
%RSD	1.134920	2.500106	.7008993	2.684394	9.412719	.1806607	.7037258
#1	.1489772	-.084389	.0637042	.0830676	.0251977	52.99166	.3599300
#2	.1516928	-.082168	.0634757	.0824234	.0303879	53.15140	.3644544
#3	.1521440	-.086382	.0643393	.0866127	.0286641	53.16359	.3601760

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056821	.0006206	40.17823	.1420118	.1051802	.1597467	189.7912
Stddev	.0001703	.0000941	.13939	.0002822	.0002842	.0054432	.6709
%RSD	2.996405	15.15888	.3469209	.1987071	.2701621	3.407399	.3534733
#1	.0058350	.0007273	40.01855	.1421614	.1054993	.1534900	189.0628
#2	.0057126	.0005497	40.27550	.1421877	.1049544	.1623562	190.3837
#3	.0054986	.0005849	40.24065	.1416863	.1050870	.1633938	189.9270

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.110258	35.22817	.1387854	.0031452	2.861020	.3879923	.1853993
Stddev	.010123	.14318	.0003280	.0011136	.194214	.0078043	.0080173
%RSD	.4797083	.4064391	.2363394	35.40597	6.788265	2.011470	4.324364
#1	2.101981	35.06284	.1384733	.0029412	2.713139	.3969357	.1769681
#2	2.121545	35.31154	.1391273	.0021477	2.788957	.3825614	.1863037
#3	2.107249	35.31014	.1387556	.0043467	3.080965	.3844799	.1929261

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.207745	3.973052	-.075990	.0011611	.5513164	2.127444	.0093108
Stddev	.076654	.003599	.003031	.0004422	.0009593	.020601	.0007723
%RSD	3.472039	.0905783	3.988813	38.08662	.1739976	.9683277	8.294441
#1	2.272834	3.972101	-.077585	.0013971	.5523001	2.135462	.0102014
#2	2.123255	3.970024	-.077891	.0006509	.5512656	2.142829	.0088267
#3	2.227146	3.977031	-.072495	.0014352	.5503836	2.104039	.0089042

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-15DLX2 Acquired: 12/20/2024 3:11:24 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ13 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.994733	-.066749	.0424602
Stddev	.007219	.000780	.0060906
%RSD	.3618969	1.168056	14.34416
#1	1.988229	-.065849	.0373711
#2	2.002500	-.067187	.0492084
#3	1.993469	-.067211	.0408012

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2551.690	31450.94	2090.450	2181.009	2130.487
Stddev	4.323	92.82	3.731	8.367	2.001
%RSD	.1694018	.2951123	.1784605	.3836120	.0939234
#1	2548.026	31501.03	2089.677	2190.150	2129.336
#2	2556.458	31507.96	2087.166	2179.148	2132.798
#3	2550.588	31343.84	2094.506	2173.731	2129.327

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-16DLX2 Acquired: 12/20/2024 3:15:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ14 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6207624	-.119148	.4367058	.1275890	.0408007	88.38431	.7604908
Stddev	.0040540	.004881	.0055515	.0010708	.0029022	.33846	.0048707
%RSD	.6530636	4.096685	1.271234	.8392246	7.113029	.3829447	.6404638
#1	.6166152	-.118717	.4314611	.1264074	.0419951	88.02427	.7550288
#2	.6247162	-.114497	.4361360	.1278645	.0374920	88.69599	.7643831
#3	.6209558	-.124230	.4425203	.1284951	.0429151	88.43267	.7620606

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089014	.0075261	43.99445	.1027191	.1358845	.4386845	258.7060
Stddev	.0002892	.0001351	.25460	.0018718	.0003685	.0081755	1.5684
%RSD	3.249268	1.795228	.5787033	1.822209	.2712258	1.863648	.6062483
#1	.0085857	.0075893	43.73133	.1024415	.1362810	.4292531	256.9732
#2	.0091536	.0076179	44.23956	.1047142	.1358204	.4437556	260.0283
#3	.0089649	.0073709	44.01247	.1010018	.1355523	.4430447	259.1165

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.503267	40.70345	.1250745	.0066144	2.418272	.4461296	1.342438
Stddev	.025895	.19402	.0003650	.0003700	.430138	.0030088	.018791
%RSD	.5750356	.4766550	.2918281	5.593374	17.78700	.6744124	1.399773
#1	4.474703	40.53048	.1252660	.0065942	2.772249	.4448738	1.322352
#2	4.525207	40.91323	.1246536	.0069941	1.939549	.4495629	1.345372
#3	4.509891	40.66664	.1253039	.0062550	2.543018	.4439522	1.359589

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.25698	7.271400	-.097722	.0003142	6.913087	2.717835	.0171500
Stddev	.07238	.005217	.001090	.0002157	.010216	.011614	.0014594
%RSD	.4452464	.0717447	1.115633	68.63063	.1477723	.4273320	8.509554
#1	16.18476	7.267812	-.098846	.0001313	6.922953	2.704494	.0184513
#2	16.32953	7.269004	-.096669	.0002594	6.913753	2.723324	.0174266
#3	16.25666	7.277384	-.097650	.0005520	6.902554	2.725688	.0155721

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-16DLX2 Acquired: 12/20/2024 3:15:15 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ14 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.268329	-.125013	.0625906
Stddev	.003507	.000826	.0025109
%RSD	.2765335	.6608011	4.011555
#1	1.264983	-.124117	.0633853
#2	1.271978	-.125743	.0597786
#3	1.268025	-.125179	.0646080

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2615.312	32073.20	2139.132	2224.260	2085.002
Stddev	2.742	21.45	11.307	10.259	.666
%RSD	.1048499	.0668720	.5285804	.4612486	.0319540
#1	2612.208	32070.97	2150.230	2231.491	2085.017
#2	2617.405	32052.95	2127.627	2212.518	2085.661
#3	2616.323	32095.67	2139.538	2228.772	2084.329

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-17DLX2 Acquired: 12/20/2024 3:19:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ15 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7054344	-.090129	.6305991	.1033237	.0355494	76.11901	.6015295
Stddev	.0096872	.002241	.0011898	.0054088	.0016631	.49898	.0028780
%RSD	1.373230	2.486812	.1886737	5.234791	4.678382	.6555307	.4784520
#1	.7041733	-.088389	.6295869	.1075819	.0369530	76.06683	.6022071
#2	.6964395	-.092658	.6319097	.0972379	.0359826	75.64816	.5983732
#3	.7156904	-.089339	.6303008	.1051514	.0337125	76.64203	.6040083

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070495	.0094507	37.05150	.0837992	.1104149	.3096926	213.0546
Stddev	.0000374	.0000763	.17739	.0002309	.0004129	.0044927	1.1369
%RSD	.5301028	.8073767	.4787678	.2754848	.3739594	1.450706	.5335978
#1	.0070066	.0093626	36.91850	.0837802	.1101484	.3127946	213.0634
#2	.0070673	.0094932	36.98309	.0835785	.1102059	.3117428	211.9133
#3	.0070747	.0094963	37.25291	.0840390	.1108906	.3045406	214.1870

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.043517	38.21259	.1084851	.0056814	1.792142	.2975014	1.955285
Stddev	.016929	.15261	.0005617	.0004801	.614957	.0046050	.024087
%RSD	.4186756	.3993822	.5177669	8.451364	34.31410	1.547888	1.231898
#1	4.037613	38.29203	.1079107	.0051270	1.150364	.2952634	1.961488
#2	4.030330	38.03664	.1085113	.0059626	2.376210	.3027976	1.928703
#3	4.062608	38.30910	.1090332	.0059545	1.849851	.2944431	1.975664

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.58689	7.393204	-.084497	.0016439	3.609754	1.626237	.0096662
Stddev	.25173	.018504	.001776	.0003532	.009564	.005134	.0007505
%RSD	1.517669	.2502828	2.101609	21.48473	.2649519	.3157237	7.764076
#1	16.38972	7.383262	-.084953	.0016068	3.608283	1.622866	.0104995
#2	16.50052	7.381797	-.086000	.0013107	3.601010	1.623699	.0090434
#3	16.87045	7.414554	-.082538	.0020142	3.619968	1.632146	.0094558

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-17DLX2 Acquired: 12/20/2024 3:19:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ15 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9412735	-.086222	.0547417
Stddev	.0037023	.000764	.0070698
%RSD	.3933260	.8858507	12.91475
#1	.9419279	-.086827	.0472241
#2	.9372877	-.085364	.0612565
#3	.9446050	-.086476	.0557446

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2596.683	31888.75	2117.557	2210.863	2093.715
Stddev	9.071	280.72	16.973	17.325	6.450
%RSD	.3493448	.8803180	.8015594	.7836328	.3080620
#1	2606.566	31744.14	2111.876	2198.032	2101.008
#2	2588.735	32212.30	2136.643	2230.571	2088.761
#3	2594.749	31709.82	2104.153	2203.986	2091.375

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-18DLX2 Acquired: 12/20/2024 3:22:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ16 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7235010	-.112644	.5097603	.1239298	.0408476	91.80640	.8775028
Stddev	.0003988	.003823	.0019342	.0062771	.0028403	.14018	.0009465
%RSD	.0551197	3.393854	.3794268	5.065043	6.953501	.1526891	.1078641
#1	.7230723	-.108984	.5107071	.1167158	.0439371	91.82532	.8771961
#2	.7235698	-.116611	.5110386	.1281453	.0402562	91.93617	.8785646
#3	.7238609	-.112336	.5075351	.1269284	.0383495	91.65773	.8767476

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087676	.0072302	42.15575	.0947937	.1291555	.3223431	254.9455
Stddev	.0000518	.0001654	.18999	.0004566	.0004569	.0151212	.6392
%RSD	.5906598	2.287896	.4506822	.4816659	.3537592	4.691038	.2507060
#1	.0087680	.0073467	42.37469	.0942874	.1286799	.3156532	255.2159
#2	.0088192	.0070409	42.05822	.0951741	.1295911	.3117207	255.4050
#3	.0087156	.0073030	42.03433	.0949198	.1291953	.3396553	254.2155

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.394381	41.19234	.1249103	.0068457	2.707209	.4034685	1.625582
Stddev	.017882	.09868	.0007463	.0014410	.702424	.0045762	.003581
%RSD	.4069244	.2395619	.5974376	21.04973	25.94643	1.134209	.2203020
#1	4.411396	41.21526	.1252328	.0084827	1.953677	.3982792	1.628350
#2	4.396003	41.27755	.1254411	.0057688	2.824087	.4069263	1.626858
#3	4.375743	41.08422	.1240570	.0062857	3.343863	.4051999	1.621537

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.54407	7.430115	-.099034	.0010141	3.670938	2.598966	.0141524
Stddev	.05186	.023111	.006162	.0002933	.012508	.002135	.0005616
%RSD	.2955901	.3110449	6.221700	28.92337	.3407294	.0821326	3.968475
#1	17.48465	7.451957	-.092057	.0007627	3.681379	2.598097	.0145481
#2	17.58015	7.432473	-.101317	.0013363	3.674360	2.597403	.0143996
#3	17.56743	7.405916	-.103729	.0009431	3.657075	2.601398	.0135096

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-18DLX2 Acquired: 12/20/2024 3:22:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ16 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.286038	-.102660	.0646531
Stddev	.005925	.000471	.0031917
%RSD	.4606838	.4592355	4.936721
#1	1.292336	-.102941	.0674300
#2	1.285202	-.102924	.0611661
#3	1.280576	-.102116	.0653631

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2658.285	32625.89	2160.903	2252.829	2105.757
Stddev	2.015	148.92	5.145	6.842	1.709
%RSD	.0758071	.4564459	.2381043	.3037091	.0811591
#1	2658.961	32587.38	2160.450	2253.706	2103.831
#2	2659.876	32500.01	2156.000	2245.590	2106.344
#3	2656.019	32790.28	2166.260	2259.190	2107.094

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-19DLX2 Acquired: 12/20/2024 3:26:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ17 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1815601	-.092522	.0879884	.1029703	.0344547	82.30146	.5285677
Stddev	.0043042	.003532	.0022099	.0049263	.0018235	.44809	.0031700
%RSD	2.370659	3.817601	2.511533	4.784218	5.292487	.5444510	.5997370
#1	.1863962	-.095645	.0900126	.1004885	.0344668	82.76434	.5315381
#2	.1781495	-.093230	.0856308	.0997784	.0326252	82.27025	.5289350
#3	.1801346	-.088689	.0883217	.1086439	.0362721	81.86979	.5252301

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0070475	.0008602	75.01886	.1264540	.1329422	.1989605	225.3513
Stddev	.0000932	.0001171	.55189	.0015957	.0006432	.0054662	.8025
%RSD	1.322961	13.61574	.7356651	1.261872	.4837860	2.747401	.3560907
#1	.0070751	.0007858	75.45251	.1266780	.1322772	.1970218	225.9387
#2	.0069435	.0009952	75.20644	.1247582	.1329884	.2051318	225.6782
#3	.0071238	.0007995	74.39763	.1279259	.1335610	.1947277	224.4370

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.733172	47.40923	.1413223	.0047483	3.582049	.3998013	.2476072
Stddev	.028051	.22529	.0000471	.0007094	.674224	.0054757	.0042921
%RSD	.7514109	.4752017	.0333264	14.94049	18.82229	1.369612	1.733433
#1	3.753840	47.51856	.1413721	.0039408	2.939546	.4033648	.2427357
#2	3.744437	47.55899	.1413163	.0052714	3.522550	.3934963	.2492533
#3	3.701239	47.15014	.1412785	.0050327	4.284049	.4025428	.2508326

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.369364	5.962083	-.080196	.0008295	.1639041	2.659855	.0140125
Stddev	.056468	.022898	.004375	.0003571	.0007274	.021341	.0027485
%RSD	1.292367	.3840637	5.454825	43.05272	.4437875	.8023411	19.61447
#1	4.397122	5.936658	-.076982	.0006373	.1632967	2.683709	.0161242
#2	4.406582	5.968509	-.078428	.0012416	.1637053	2.642572	.0150084
#3	4.304390	5.981081	-.085178	.0006096	.1647102	2.653284	.0109049

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-19DLX2 Acquired: 12/20/2024 3:26:43 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ17 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.340573	-.053354	.0599342
Stddev	.007178	.000323	.0012938
%RSD	.5354648	.6058303	2.158717
#1	1.346623	-.053099	.0610118
#2	1.342455	-.053247	.0584993
#3	1.332642	-.053718	.0602915

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2549.236	31781.89	2064.097	2187.535	2053.402
Stddev	8.867	228.54	2.577	20.938	8.652
%RSD	.3478274	.7190866	.1248567	.9571578	.4213483
#1	2559.255	31825.22	2065.680	2200.932	2063.390
#2	2542.400	31985.67	2065.488	2198.265	2048.205
#3	2546.052	31534.79	2061.123	2163.406	2048.612

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-20DLX2 Acquired: 12/20/2024 3:30:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3238801	-.098082	.2221844	.1066037	.0308300	84.11129	.7518828
Stddev	.0034160	.008342	.0015709	.0042468	.0032681	.29732	.0031153
%RSD	1.054709	8.505635	.7070142	3.983775	10.60041	.3534813	.4143298
#1	.3276730	-.106793	.2216389	.1026449	.0270680	83.88026	.7498124
#2	.3210458	-.090165	.2239553	.1060767	.0324541	84.44673	.7554655
#3	.3229216	-.097287	.2209590	.1110895	.0329678	84.00688	.7503703

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078197	.0030336	37.66418	.0843295	.1235092	.3388245	224.2249
Stddev	.0000640	.0000969	.09366	.0005076	.0007945	.0069659	.5703
%RSD	.8191166	3.195610	.2486832	.6019736	.6432924	2.055908	.2543319
#1	.0078003	.0030405	37.67217	.0842028	.1226123	.3452960	224.0070
#2	.0077677	.0031269	37.75360	.0848885	.1237904	.3314518	224.8720
#3	.0078912	.0029334	37.56678	.0838972	.1241249	.3397257	223.7958

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.319191	38.06341	.1113278	.0037197	2.831705	.3644439	.7061094
Stddev	.010805	.01839	.0000020	.0003822	.389900	.0025182	.0155923
%RSD	.2501636	.0483179	.0018119	10.27455	13.76909	.6909686	2.208197
#1	4.314448	38.06115	.1113288	.0032803	2.916684	.3616126	.6881170
#2	4.331556	38.04626	.1113292	.0039748	3.172107	.3664331	.7156754
#3	4.311568	38.08283	.1113255	.0039040	2.406324	.3652860	.7145358

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.22243	6.596593	-.066469	.0001522	1.559464	2.973214	.0123997
Stddev	.07629	.014173	.003626	.0004260	.002184	.015909	.0023110
%RSD	.3968861	.2148500	5.454789	279.9480	.1400734	.5350787	18.63724
#1	19.15404	6.586202	-.069856	.0002644	1.558818	2.957610	.0114002
#2	19.30471	6.590840	-.066907	.0005109	1.557675	2.989411	.0150422
#3	19.20853	6.612738	-.062644	-.000319	1.561898	2.972619	.0107567

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-20DLX2 Acquired: 12/20/2024 3:30:35 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.469300	-.072934	.0604581
Stddev	.004872	.000193	.0037531
%RSD	.3315836	.2648383	6.207790
#1	1.473590	-.073127	.0637601
#2	1.470305	-.072934	.0563764
#3	1.464003	-.072740	.0612379

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2611.630	32236.02	2113.789	2220.938	2089.321
Stddev	4.056	157.20	5.538	5.835	5.948
%RSD	.1552971	.4876500	.2620013	.2627062	.2846864
#1	2607.147	32095.86	2113.930	2215.147	2085.263
#2	2615.044	32405.99	2108.182	2226.815	2096.148
#3	2612.699	32206.21	2119.255	2220.851	2086.550

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-21DLX2 Acquired: 12/20/2024 3:34:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18D Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3205859	-.097112	.2146927	.1007801	.0360601	81.98580	.7316812
Stddev	.0008529	.000324	.0014758	.0020212	.0029914	.34473	.0023361
%RSD	.2660525	.3333330	.6873816	2.005514	8.295570	.4204759	.3192856
#1	.3207097	-.097483	.2130019	.0984574	.0329931	82.01657	.7317382
#2	.3213701	-.096962	.2157217	.1021389	.0389697	81.62672	.7293170
#3	.3196778	-.096890	.2153545	.1017439	.0362176	82.31412	.7339883

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0076426	.0030719	36.98547	.0830368	.1207283	.3339075	218.2624
Stddev	.0002517	.0000514	.14845	.0006955	.0003308	.0037680	1.2623
%RSD	3.292925	1.672610	.4013852	.8376331	.2740111	1.128465	.5783564
#1	.0076629	.0031297	36.94200	.0835879	.1209091	.3371888	218.2804
#2	.0073814	.0030314	36.86360	.0822553	.1209292	.3297924	216.9911
#3	.0078835	.0030547	37.15080	.0832673	.1203465	.3347412	219.5156

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.196892	36.98217	.1082597	.0040006	1.388846	.3654618	.6735123
Stddev	.034701	.37118	.0005247	.0001210	.519300	.0058023	.0165184
%RSD	.8268363	1.003667	.4846582	3.024918	37.39075	1.587662	2.452573
#1	4.193418	36.77277	.1078165	.0041395	1.197234	.3668524	.6710344
#2	4.164057	36.76301	.1081235	.0039182	1.976726	.3590906	.6911297
#3	4.233199	37.41073	.1088390	.0039441	.992579	.3704425	.6583729

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.58402	6.463899	-.063825	.0006473	1.518273	2.749827	.0121659
Stddev	.22052	.011695	.001906	.0002138	.003596	.026114	.0003084
%RSD	1.186591	.1809322	2.986049	33.03213	.2368531	.9496464	2.534882
#1	18.71381	6.450781	-.062035	.0008118	1.514563	2.751433	.0120880
#2	18.32940	6.473237	-.065829	.0007246	1.518515	2.722947	.0125057
#3	18.70883	6.467678	-.063611	.0004056	1.521743	2.775100	.0119039

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-21DLX2 Acquired: 12/20/2024 3:34:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18D Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.409996	-.071872	.0578675
Stddev	.007463	.000089	.0028442
%RSD	.5292877	.1232322	4.914933
#1	1.410392	-.071966	.0567745
#2	1.402344	-.071790	.0557321
#3	1.417254	-.071860	.0610961

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2658.470	32661.37	2158.303	2256.313	2129.052
Stddev	2.919	172.97	11.640	15.391	2.882
%RSD	.1097825	.5295845	.5393232	.6821330	.1353857
#1	2655.116	32628.67	2154.133	2255.974	2126.844
#2	2660.428	32507.09	2171.454	2241.093	2128.001
#3	2659.866	32848.36	2149.322	2271.870	2132.313

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV075 Acquired: 12/20/2024 3:38:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV075 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.852242	4.572017	24.10582	4.742299	4.768972	399.7881	9.920100
Stddev	.020439	.030729	.07126	.017573	.018932	4.6585	.113087
%RSD	.4212355	.6721176	.2956228	.3705495	.3969915	1.165244	1.139980
#1	4.845931	4.568078	24.13186	4.753514	4.788191	398.4534	9.907101
#2	4.835703	4.543448	24.02520	4.722047	4.750340	404.9683	10.03913
#3	4.875093	4.604527	24.16040	4.751336	4.768384	395.9426	9.81407

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5004566	2.431453	402.2823	15.13021	2.453107	14.76885	403.3506
Stddev	.0050906	.003821	4.8299	.03190	.004408	.17349	5.2730
%RSD	1.017186	.1571601	1.200624	.2108057	.1797105	1.174682	1.307291
#1	.5002768	2.433228	400.7920	15.13286	2.453501	14.68451	402.3382
#2	.5056348	2.427067	407.6817	15.09708	2.448515	14.96838	409.0564
#3	.4954584	2.434064	398.3731	15.16070	2.457305	14.65366	398.6572

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.72208	399.5785	2.460990	1.245102	399.0442	2.483900	14.41582
Stddev	.19804	5.0022	.006699	.001237	3.9040	.030929	.07009
%RSD	1.345190	1.251859	.2722242	.0993234	.9783428	1.245181	.4861778
#1	14.69063	398.5413	2.464327	1.244352	400.1147	2.493783	14.41964
#2	14.93396	405.0180	2.453277	1.244426	402.3013	2.508680	14.34391
#3	14.54165	395.1764	2.465365	1.246530	394.7166	2.449237	14.48392

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	147.8629	4.848415	4.814495	4.695192	4.901997	4.856233	4.856065
Stddev	1.5363	.008499	.064063	.017191	.006381	.056265	.010435
%RSD	1.038997	.1752895	1.330626	.3661338	.1301764	1.158615	.2148878
#1	147.5024	4.855632	4.808603	4.699662	4.901872	4.861688	4.860097
#2	149.5474	4.839048	4.881300	4.676207	4.895679	4.909572	4.844216
#3	146.5389	4.850565	4.753581	4.709706	4.908440	4.797439	4.863883

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV075 Acquired: 12/20/2024 3:38:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV075 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	4.978540	4.739296	4.899195
Stddev	.061290	.057763	.055240
%RSD	1.231081	1.218808	1.127530
#1	4.979685	4.731601	4.877032
#2	5.039249	4.800520	4.962074
#3	4.916685	4.685766	4.858478

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2018.584	26549.04	1879.137	1736.802	1760.471
Stddev	1.767	54.56	22.416	5.845	3.016
%RSD	.0875289	.2055001	1.192914	.3365639	.1713413
#1	2016.646	26522.32	1877.984	1735.356	1758.813
#2	2018.999	26611.80	1857.319	1743.234	1758.648
#3	2020.106	26512.98	1902.107	1731.814	1763.953

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB075 Acquired: 12/20/2024 3:41:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB075 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001270	-.000953	.0027400	-.000556	.0016088	.0557619
Stddev	.003706	.002865	.0024086	.002897	.0041866	.0051939
%RSD	291.8546	300.5886	87.90632	520.7952	260.2349	9.314434
#1	-.001353	-.001687	.0035099	.000648	.0040858	.0593499
#2	.002477	.002207	.0046696	.001544	-.003225	.0498060
#3	-.004934	-.003380	.0000406	-.003861	.003966	.0581299

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007597	-.000091	.0001632	-.028096	.0007697	.0001629
Stddev	.0012993	.000134	.0000478	.011616	.0002444	.0003676
%RSD	171.0229	146.1943	29.30450	41.34299	31.75189	225.6158
#1	-.000391	.000049	.0001863	-.036778	.0006227	.0001151
#2	.000501	-.000217	.0001950	-.032610	.0006346	-.000178
#3	.002169	-.000107	.0001082	-.014901	.0010518	.000552

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.006397	.0464791	.0004401	.0074598	-.000519	.0000858
Stddev	.003721	.0180456	.0003078	.1529491	.000234	.0007069
%RSD	58.17653	38.82512	69.93724	2050.300	45.11342	823.7271
#1	-.007853	.0633260	.0000872	-.070489	-.000515	-.000031
#2	-.009170	.0486753	.0006533	-.090811	-.000755	.000844
#3	-.002168	.0274359	.0005799	.183680	-.000287	-.000555

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.060641	-.003905	-.003753	.4091442	.0013108	.0106135
Stddev	1.177984	.014757	.012524	.0688876	.0004981	.0022293
%RSD	57.16591	377.8631	333.7475	16.83701	38.00283	21.00455
#1	3.338765	.012964	.009636	.4758331	.0016805	.0102422
#2	1.018533	-.010255	-.015182	.3382504	.0015075	.0130051
#3	1.824625	-.014425	-.005712	.4133491	.0007443	.0085931

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB075 Acquired: 12/20/2024 3:41:54 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB075 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005766	-.004713	-.000484	F -.009450	-.000464	.0002759
Stddev	.0000686	.003718	.001934	.000461	.002328	.0005145
%RSD	11.89959	78.88247	399.2427	4.874704	501.4830	186.4664
#1	.0006036	-.000422	.001686	-.009305	-.002828	.0008700
#2	.0004986	-.006742	-.001113	-.009078	-.000392	-.000016
#3	.0006277	-.006976	-.002026	-.009965	.001827	-.000026

Elem	Li6707
Units	ppm
Avg	F .0233332
Stddev	.0029451
%RSD	12.62179
#1	.0201626
#2	.0238537
#3	.0259834

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2376.007	29548.50	1950.241	2036.996	2157.222
Stddev	5.689	108.62	7.123	2.289	4.507
%RSD	.2394208	.3676103	.3652588	.1123921	.2089447
#1	2382.536	29533.04	1956.830	2039.428	2161.669
#2	2373.362	29664.02	1951.211	2036.677	2152.657
#3	2372.122	29448.43	1942.683	2034.882	2157.341

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-20LDLX10 Acquired: 12/20/2024 3:45:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18L Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0684450	-.021448	.0446292	.0204346	.0067854	18.23130	.1640116
Stddev	.0033682	.001330	.0040013	.0025832	.0027721	.02545	.0018429
%RSD	4.920986	6.201619	8.965649	12.64134	40.85337	.1395696	1.123622
#1	.0645603	-.022620	.0492144	.0182033	.0056273	18.20238	.1635604
#2	.0702239	-.021722	.0428288	.0198361	.0047802	18.24127	.1660381
#3	.0705507	-.020002	.0418444	.0232646	.0099487	18.25025	.1624362

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017852	.0006225	8.203791	.0187597	.0276523	.0691127	48.95740
Stddev	.0002063	.0000557	.025183	.0004961	.0004665	.0068273	.05899
%RSD	11.55546	8.942559	.3069652	2.644347	1.687059	9.878529	.1204825
#1	.0015974	.0006217	8.175092	.0185847	.0277889	.0704656	48.88979
#2	.0017520	.0005672	8.214079	.0193196	.0271328	.0751623	48.98400
#3	.0020060	.0006785	8.222200	.0183749	.0280354	.0617102	48.99840

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9408748	8.212730	.0219291	.0006056	2.237871	.0775268	.1540585
Stddev	.0036241	.119468	.0002242	.0012570	.617994	.0033791	.0140378
%RSD	.3851818	1.454674	1.022464	207.5798	27.61528	4.358627	9.112004
#1	.9381164	8.095003	.0218066	-.000834	1.667267	.0790306	.1682105
#2	.9395286	8.333866	.0221879	.001161	2.152060	.0798930	.1401378
#3	.9449793	8.209323	.0217928	.001489	2.894287	.0736569	.1538272

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.421652	1.328448	-.013150	.0001150	.3022555	.6683246	-.004716
Stddev	.099348	.003575	.001035	.0001458	.0014272	.0028005	.001197
%RSD	2.246856	.2690883	7.873167	126.7505	.4721693	.4190329	25.37545
#1	4.341523	1.326209	-.013725	.0002579	.3013914	.6706844	-.003358
#2	4.390619	1.326564	-.013769	.0001208	.3014725	.6652299	-.005618
#3	4.532812	1.332571	-.011954	-.000034	.3039028	.6690594	-.005172

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-20LDLX10 Acquired: 12/20/2024 3:45:55 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18L Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.3179716	-.016113	.0298300
Stddev	.0032823	.000205	.0022158
%RSD	1.032250	1.270198	7.428095
#1	.3210652	-.016349	.0274551
#2	.3145286	-.015991	.0318419
#3	.3183212	-.015999	.0301931

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2456.968	30119.81	2007.098	2080.276	2157.980
Stddev	3.374	106.13	7.780	9.342	2.540
%RSD	.1373397	.3523610	.3876037	.4490883	.1176963
#1	2455.213	30059.93	1999.884	2070.008	2155.209
#2	2454.832	30057.16	2006.068	2082.546	2158.533
#3	2460.858	30242.35	2015.341	2088.275	2160.198

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-22DLX2 Acquired: 12/20/2024 3:49:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18S Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4170141	-.010577	.2657838	.2770560	.1977457	87.46471	4.499445
Stddev	.0041561	.005917	.0034619	.0041228	.0043274	.46805	.026939
%RSD	.9966293	55.93816	1.302514	1.488080	2.188380	.5351245	.5987264
#1	.4129789	-.003890	.2628590	.2786390	.2019798	86.94032	4.468377
#2	.4167819	-.012709	.2648864	.2723762	.1979267	87.61367	4.516318
#3	.4212814	-.015132	.2696060	.2801526	.1933307	87.84015	4.513641

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1021552	.1024516	38.11050	.4768987	1.116910	.7892820	226.1301
Stddev	.0008753	.0005188	.12056	.0008837	.007344	.0063604	1.4088
%RSD	.8567841	.5063649	.3163553	.1853101	.6575303	.8058440	.6230182
#1	.1014562	.1019682	37.97587	.4759013	1.113522	.7881530	224.5621
#2	.1031368	.1023871	38.20851	.4775843	1.111871	.7961313	226.5391
#3	.1018725	.1029997	38.14710	.4772106	1.125336	.7835617	227.2892

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.253256	37.84486	1.119535	.0778626	3.810447	1.313972	1.552024
Stddev	.024012	.28989	.005439	.0005583	.744879	.004283	.008637
%RSD	.4570898	.7660010	.4858128	.7170461	19.54833	.3259892	.5564817
#1	5.228716	37.54412	1.117612	.0774589	3.664912	1.314583	1.547202
#2	5.254350	37.86792	1.115320	.0776291	3.149075	1.309415	1.546876
#3	5.276702	38.12253	1.125675	.0784997	4.617352	1.317916	1.561995

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.99554	6.710061	-.068195	.0005478	1.581384	2.686110	.0135155
Stddev	.09295	.048996	.001658	.0003613	.008717	.021839	.0012407
%RSD	.4893423	.7301827	2.431257	65.94645	.5512128	.8130231	9.179458
#1	19.09796	6.681931	-.066377	.0009372	1.576247	2.664149	.0123986
#2	18.91652	6.681617	-.069625	.0002234	1.576457	2.707824	.0132970
#3	18.97215	6.766636	-.068583	.0004829	1.591449	2.686356	.0148509

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5182-22DLX2 Acquired: 12/20/2024 3:49:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCZ18S Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.432719	-.075317	.0612140
Stddev	.009968	.000615	.0018992
%RSD	.6957363	.8164022	3.102560
#1	1.421871	-.074621	.0612859
#2	1.434810	-.075786	.0630763
#3	1.441475	-.075544	.0592799

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2634.344	32482.95	2158.885	2253.509	2095.787
Stddev	6.867	95.72	8.484	13.822	5.682
%RSD	.2606893	.2946638	.3930031	.6133578	.2711211
#1	2632.482	32386.87	2165.573	2237.666	2095.451
#2	2641.951	32483.67	2149.341	2263.099	2101.630
#3	2628.600	32578.30	2161.740	2259.764	2090.280

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-01DLX2 Acquired: 12/20/2024 3:53:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6057529	-.173253	.3302280	.2252523	.0721591	111.7909	1.464457
Stddev	.0045573	.003050	.0014601	.0017325	.0016860	.2679	.002159
%RSD	.7523305	1.760414	.4421399	.7691485	2.336526	.2396245	.1474065
#1	.6049807	-.175708	.3318983	.2239676	.0704976	111.4816	1.463168
#2	.6106469	-.169839	.3291942	.2272228	.0738686	111.9480	1.463254
#3	.6016310	-.174212	.3295915	.2245667	.0721112	111.9430	1.466949

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099622	.0070974	26.71402	.3431745	.2519170	.8485541	417.9985
Stddev	.0002017	.0000862	.10615	.0010031	.0006903	.0125472	1.3309
%RSD	2.024309	1.214467	.3973593	.2923000	.2740310	1.478650	.3184100
#1	.0098050	.0071967	26.72084	.3439697	.2511838	.8365712	416.5888
#2	.0101896	.0070425	26.81659	.3420475	.2520128	.8615981	418.1733
#3	.0098920	.0070529	26.60462	.3435061	.2525544	.8474932	419.2334

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.07997	76.34058	.2871417	.0116891	3.017653	.8042330	.6462397
Stddev	.07515	.41218	.0008371	.0003063	.562213	.0101987	.0250730
%RSD	.2881653	.5399174	.2915202	2.620703	18.63082	1.268133	3.879825
#1	26.00435	75.93443	.2875404	.0115391	3.093144	.7924876	.6710537
#2	26.08091	76.32877	.2861798	.0114867	2.421508	.8108461	.6209155
#3	26.15465	76.75853	.2877049	.0120416	3.538306	.8093654	.6467499

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.11288	3.022726	-.138850	-.002125	.3148400	4.427199	.0250806
Stddev	.05609	.008589	.003913	.000500	.0041137	.007520	.0009753
%RSD	.5546376	.2841461	2.817845	23.54395	1.306587	.1698677	3.888817
#1	10.07445	3.016744	-.137732	-.001908	.3185050	4.418515	.0261996
#2	10.08695	3.018867	-.143200	-.002697	.3103907	4.431444	.0244108
#3	10.17724	3.032568	-.135619	-.001770	.3156245	4.431636	.0246314

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-01DLX2 Acquired: 12/20/2024 3:53:40 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYX9 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.280048	-.227490	.1103516
Stddev	.003534	.000523	.0010081
%RSD	.2760621	.2299361	.9135473
#1	1.276779	-.227035	.1114348
#2	1.283797	-.227373	.1101792
#3	1.279568	-.228061	.1094408

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2518.468	31001.54	2057.585	2145.396	2091.097
Stddev	5.771	57.76	2.541	11.833	6.750
%RSD	.2291436	.1863058	.1234843	.5515477	.3227944
#1	2520.808	30948.46	2059.406	2132.180	2093.750
#2	2522.701	31063.05	2058.666	2155.008	2096.117
#3	2511.894	30993.11	2054.682	2148.999	2083.423

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-02DLX2 Acquired: 12/20/2024 3:57:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3074619	-.147318	.3759862	.2257954	.0737296	62.94253
Stddev	.0068346	.004560	.0005419	.0017143	.0049360	.22133
%RSD	2.222908	3.095209	.1441165	.7592320	6.694732	.3516361
#1	.2997372	-.142262	.3756140	.2268246	.0727141	63.13819
#2	.3127236	-.148571	.3766078	.2238164	.0790943	62.70231
#3	.3099249	-.151120	.3757367	.2267451	.0693803	62.98709

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.661550	.0068737	.0059856	24.09459	.1223244	.1932610
Stddev	.004868	.0001290	.0000881	.02643	.0004046	.0000449
%RSD	.2930003	1.876056	1.471617	.1097082	.3307661	.0232313
#1	1.667108	.0067255	.0059413	24.11958	.1219624	.1932439
#2	1.659499	.0069359	.0059283	24.09728	.1222495	.1933119
#3	1.658043	.0069598	.0060870	24.06691	.1227612	.1932271

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7194188	409.5147	F 35.51003	41.07721	.1638661	.0145077
Stddev	.0075834	.3040	.03751	.02617	.0004953	.0022199
%RSD	1.054105	.0742453	.1056309	.0637034	.3022527	15.30121
#1	.7223062	409.8542	35.54379	41.04701	.1632947	.0122458
#2	.7108158	409.2677	35.46965	41.09315	.1641730	.0145944
#3	.7251345	409.4221	35.51666	41.09148	.1641305	.0166830

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.568952	.3028955	.8630534	14.49295	3.601998	-.136351
Stddev	.651359	.0058254	.0045439	.13403	.006587	.002016
%RSD	25.35504	1.923246	.5264920	.9248041	.1828597	1.478810
#1	2.056705	.3044774	.8639467	14.60892	3.595993	-.136096
#2	3.302014	.3077665	.8581291	14.52372	3.600957	-.134474
#3	2.348136	.2964424	.8670843	14.34621	3.609043	-.138483

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-02DLX2 Acquired: 12/20/2024 3:57:28 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001687	.4402727	3.901868	.0227635	.8725794	-.186271
Stddev	.000529	.0066270	.013092	.0024803	.0073434	.000118
%RSD	31.37535	1.505192	.3355198	10.89598	.8415734	.0634374
#1	-.002165	.4421382	3.904865	.0227938	.8790790	-.186324
#2	-.001118	.4329129	3.913201	.0202682	.8646135	-.186352
#3	-.001778	.4457669	3.887538	.0252285	.8740457	-.186135

Elem	Li6707
Units	ppm
Avg	.1039811
Stddev	.0035552
%RSD	3.419054
#1	.1065548
#2	.0999245
#3	.1054638

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2479.843	30402.74	2028.223	2110.573	2113.158
Stddev	12.618	66.07	6.301	4.859	9.015
%RSD	.5088424	.2173297	.3106734	.2302364	.4266258
#1	2482.061	30473.65	2020.958	2115.861	2116.439
#2	2491.205	30342.91	2032.210	2109.556	2120.073
#3	2466.262	30391.65	2031.499	2106.303	2102.962

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-03DLX2 Acquired: 12/20/2024 4:01:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4738610	-.172882	.4141989	.2634951	.0832226	98.52777
Stddev	.0072407	.003066	.0041023	.0070518	.0012827	.59091
%RSD	1.528029	1.773273	.9904111	2.676244	1.541237	.5997367
#1	.4805368	-.170021	.4185434	.2555818	.0846354	97.88961
#2	.4661638	-.172505	.4103919	.2657896	.0829014	98.63774
#3	.4748823	-.176118	.4136612	.2691138	.0821312	99.05597

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.233993	.0088894	.0073863	32.93865	.2479533	.2359269
Stddev	.015181	.0001753	.0000257	.18224	.0016278	.0018573
%RSD	.6795509	1.972277	.3476535	.5532635	.6564851	.7872122
#1	2.217366	.0090734	.0073935	32.73700	.2495385	.2338532
#2	2.237496	.0088704	.0073578	32.98736	.2462861	.2374374
#3	2.247116	.0087243	.0074077	33.09158	.2480353	.2364900

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.042110	483.2118	F 42.43225	62.31225	.2546683	.0167072
Stddev	.008166	3.1413	.25910	.55417	.0008733	.0012963
%RSD	.7835818	.6500813	.6106311	.8893494	.3428989	7.758693
#1	1.036095	479.7081	42.15109	61.69819	.2538293	.0154405
#2	1.051406	484.1509	42.48426	62.46336	.2555722	.0166501
#3	1.038829	485.7764	42.66141	62.77519	.2546035	.0180311

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.723114	.5838350	.9551172	17.41481	4.235530	-.175662
Stddev	.534480	.0119164	.0158881	.15675	.014254	.007506
%RSD	14.35572	2.041059	1.663468	.9000895	.3365340	4.272779
#1	3.453714	.5746575	.9659923	17.31632	4.229180	-.176973
#2	3.376944	.5795451	.9368840	17.33254	4.225555	-.182426
#3	4.338685	.5973024	.9624753	17.59556	4.251856	-.167587

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-03DLX2 Acquired: 12/20/2024 4:01:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001464	.5721915	4.510028	.0301202	1.382769	-.229972
Stddev	.000547	.0045076	.009690	.0010857	.011993	.000974
%RSD	37.35014	.7877736	.2148569	3.604537	.8673394	.4237223
#1	-.001761	.5684786	4.507866	.0293750	1.369707	-.228854
#2	-.000833	.5772069	4.520616	.0313659	1.385313	-.230644
#3	-.001799	.5708890	4.501601	.0296198	1.393286	-.230417

Elem	Li6707
Units	ppm
Avg	.1171599
Stddev	.0016131
%RSD	1.376870
#1	.1153067
#2	.1179238
#3	.1182493

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2513.025	30995.64	2053.494	2143.404	2087.931
Stddev	5.705	164.86	5.947	14.050	3.541
%RSD	.2270185	.5318842	.2896244	.6555154	.1695857
#1	2514.700	30993.49	2057.518	2140.101	2090.962
#2	2517.706	31161.56	2056.303	2158.811	2088.792
#3	2506.670	30831.86	2046.663	2131.299	2084.039

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-04DLX2 Acquired: 12/20/2024 4:05:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2442958	-.136330	.4029143	.2496635	.0753431	61.20922
Stddev	.0019663	.000848	.0010638	.0053803	.0033225	.50060
%RSD	.8048711	.6223806	.2640299	2.155037	4.409858	.8178435
#1	.2465209	-.136261	.4017608	.2487530	.0719912	60.65697
#2	.2435741	-.137210	.4038567	.2554410	.0786355	61.63319
#3	.2427923	-.135518	.4031256	.2447965	.0754027	61.33749

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.127498	.0059755	.0048851	25.71368	.1010649	.1965094
Stddev	.017558	.0000649	.0001792	.19961	.0006307	.0006464
%RSD	.8252792	1.085580	3.669100	.7762656	.6240674	.3289547
#1	2.107965	.0060350	.0050662	25.48576	.1013857	.1965228
#2	2.141968	.0059851	.0047078	25.79795	.1003383	.1958564
#3	2.132561	.0059064	.0048813	25.85734	.1014707	.1971490

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6172595	447.4921	F 50.91517	35.91309	.1496025	.0173780
Stddev	.0055107	3.9130	.41063	.22289	.0005923	.0003568
%RSD	.8927646	.8744187	.8064886	.6206287	.3958937	2.053441
#1	.6132317	443.7630	50.49459	35.68475	.1502754	.0170035
#2	.6150073	451.5661	51.31506	36.13009	.1493721	.0177141
#3	.6235396	447.1472	50.93587	35.92443	.1491601	.0174165

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.618437	.1835230	.8573400	12.64278	3.674423	-.160772
Stddev	.639116	.0063136	.0064043	.18613	.001765	.002456
%RSD	24.40829	3.440220	.7469983	1.472204	.0480407	1.527822
#1	2.067442	.1895998	.8512191	12.46167	3.675634	-.163269
#2	3.319108	.1769966	.8568065	12.63313	3.672397	-.158359
#3	2.468761	.1839725	.8639943	12.83355	3.675236	-.160688

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-04DLX2 Acquired: 12/20/2024 4:05:04 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003690	.4589655	3.274835	.0258568	.4806454	-.182549
Stddev	.000848	.0061493	.020543	.0008865	.0020717	.001401
%RSD	22.98604	1.339812	.6273046	3.428681	.4310219	.7672138
#1	-.004661	.4596126	3.252757	.0248344	.4782574	-.181667
#2	-.003094	.4647657	3.278361	.0263223	.4817168	-.184164
#3	-.003315	.4525183	3.293387	.0264135	.4819620	-.181816

Elem	Li6707
Units	ppm
Avg	.1113562
Stddev	.0019473
%RSD	1.748681
#1	.1133729
#2	.1112089
#3	.1094868

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2435.760	30200.41	1995.337	2086.296	2090.989
Stddev	3.890	88.91	11.201	14.856	4.777
%RSD	.1596838	.2943934	.5613569	.7120911	.2284469
#1	2436.007	30303.06	2008.071	2103.431	2089.497
#2	2431.753	30148.04	1990.928	2078.424	2087.136
#3	2439.520	30150.12	1987.011	2077.031	2096.333

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-05DLX2 Acquired: 12/20/2024 4:08:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3527796	-.120027	.2396416	.1821988	.0586858	82.06912
Stddev	.0035864	.009949	.0043856	.0036380	.0013917	.94649
%RSD	1.016602	8.289185	1.830070	1.996720	2.371414	1.153286
#1	.3538268	-.129753	.2447037	.1781141	.0593680	81.28416
#2	.3557257	-.109869	.2372324	.1850904	.0596049	81.80302
#3	.3487861	-.120458	.2369887	.1833921	.0570847	83.12018

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.467158	.0063733	.0032675	23.19606	.2412135	.2117338
Stddev	.016366	.0001704	.0001523	.32359	.0033879	.0008144
%RSD	1.115516	2.673737	4.660819	1.395002	1.404514	.3846464
#1	1.455567	.0063638	.0034293	22.90864	.2448124	.2115840
#2	1.460026	.0062079	.0032464	23.13302	.2407423	.2110046
#3	1.485880	.0065483	.0031269	23.54653	.2380860	.2126127

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5923724	338.3586	F 30.01136	53.56847	.2263072	.0105966
Stddev	.0155037	3.9571	.38153	.75495	.0005696	.0007607
%RSD	2.617215	1.169492	1.271282	1.409317	.2516776	7.178284
#1	.5757740	335.8620	29.72840	52.87890	.2269371	.0097747
#2	.5948634	336.2927	29.86042	53.45140	.2261559	.0112757
#3	.6064797	342.9211	30.44527	54.37512	.2258286	.0107395

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.326374	.4234275	.6277174	10.98686	2.955294	-.105265
Stddev	.131796	.0099544	.0283805	.11281	.010881	.004049
%RSD	3.962162	2.350912	4.521222	1.026740	.3681707	3.846088
#1	3.246754	.4161620	.6015302	10.94706	2.942767	-.101217
#2	3.253864	.4193466	.6578734	10.89935	2.962393	-.105263
#3	3.478504	.4347739	.6237486	11.11417	2.960722	-.109314

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-05DLX2 Acquired: 12/20/2024 4:08:53 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY3 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001458	.2316299	3.650561	.0194629	1.846324	-.159708
Stddev	.000646	.0053343	.069354	.0001618	.023135	.001867
%RSD	44.28492	2.302946	1.899817	.8313503	1.253022	1.168736
#1	-.001850	.2321499	3.606796	.0196125	1.832937	-.158343
#2	-.001812	.2260546	3.614362	.0192912	1.832997	-.158947
#3	-.000713	.2366852	3.730525	.0194851	1.873038	-.161835

Elem	Li6707
Units	ppm
Avg	.0900581
Stddev	.0048330
%RSD	5.366536
#1	.0846758
#2	.0940264
#3	.0914721

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2440.357	30235.34	1980.006	2078.780	2079.065
Stddev	3.483	71.26	32.808	9.709	5.454
%RSD	.1427195	.2356759	1.656982	.4670487	.2623323
#1	2443.134	30160.65	2001.133	2069.321	2085.030
#2	2441.487	30242.81	1996.675	2078.297	2077.831
#3	2436.449	30302.57	1942.210	2088.721	2074.334

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-06DLX2 Acquired: 12/20/2024 4:12:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2693067	-.154110	.2886415	.2199409	.0690933	77.45557	1.204111
Stddev	.0036721	.002904	.0039112	.0020013	.0016516	.24932	.003295
%RSD	1.363554	1.884283	1.355046	.9099182	2.390338	.3218873	.2736546
#1	.2682888	-.153268	.2865080	.2177743	.0703888	77.18212	1.201883
#2	.2662508	-.157342	.2862609	.2203283	.0672335	77.51435	1.202553
#3	.2733804	-.151720	.2931555	.2217202	.0696576	77.67026	1.207896

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082134	.0029857	29.46629	.1364543	.1912603	.4860054	416.8545
Stddev	.0000773	.0000143	.06274	.0006732	.0005171	.0066090	1.9415
%RSD	.9417950	.4779012	.2129055	.4933547	.2703504	1.359860	.4657504
#1	.0082466	.0029697	29.44519	.1368131	.1910712	.4906918	415.1562
#2	.0082686	.0029904	29.41683	.1356777	.1908644	.4784461	416.4362
#3	.0081250	.0029971	29.53685	.1368721	.1918453	.4888782	418.9710

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.97897	48.41623	.1581386	.0097696	3.398617	.3275989	.6936830
Stddev	.10038	.17067	.0001777	.0001707	.444811	.0135817	.0036724
%RSD	.3464024	.3525011	.1123481	1.747354	13.08800	4.145836	.5294068
#1	28.88969	48.28967	.1580626	.0097657	3.888008	.3180277	.6901698
#2	28.95959	48.34870	.1580116	.0099423	3.288937	.3216255	.6933832
#3	29.08763	48.61033	.1583416	.0096009	3.018906	.3431436	.6974962

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.28344	4.722724	-.118578	-.002232	.6083687	3.809425	.0243461
Stddev	.08490	.026118	.002981	.000301	.0076722	.020074	.0017911
%RSD	.4643585	.5530250	2.513808	13.49432	1.261108	.5269669	7.356854
#1	18.18779	4.727733	-.121598	-.002233	.6090018	3.822450	.0263155
#2	18.31264	4.694465	-.118499	-.002532	.6003996	3.819518	.0228144
#3	18.34989	4.745976	-.115638	-.001930	.6157047	3.786307	.0239084

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-06DLX2 Acquired: 12/20/2024 4:12:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7522743	-.177844	.1089775
Stddev	.0063805	.001211	.0029821
%RSD	.8481656	.6808440	2.736397
#1	.7461889	-.177008	.1099609
#2	.7517201	-.177292	.1056280
#3	.7589138	-.179233	.1113437

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2463.396	30364.72	2032.025	2091.043	2087.827
Stddev	13.329	119.42	6.961	10.637	10.144
%RSD	.5410766	.3932819	.3425446	.5086706	.4858748
#1	2469.416	30423.31	2024.056	2084.976	2088.763
#2	2472.654	30443.52	2035.098	2103.324	2097.471
#3	2448.120	30227.32	2036.920	2084.828	2077.247

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-07DLX2 Acquired: 12/20/2024 4:16:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1874884	-.110134	.1984112	.1795398	.0549514	62.04067
Stddev	.0013620	.003115	.0011276	.0050512	.0018386	.36451
%RSD	.7264286	2.828002	.5683204	2.813429	3.345886	.5875415
#1	.1884535	-.110710	.1973197	.1832762	.0553377	61.63494
#2	.1859305	-.106771	.1983423	.1815503	.0565662	62.14657
#3	.1880813	-.112920	.1995717	.1737929	.0529504	62.34052

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.506315	.0059025	.0011783	20.41643	.1059505	.1598150
Stddev	.009609	.0000340	.0001608	.20255	.0017767	.0005416
%RSD	.6379453	.5757273	13.64787	.9920865	1.676938	.3388813
#1	1.495234	.0058638	.0012566	20.20192	.1045829	.1593806
#2	1.511364	.0059277	.0012850	20.44296	.1053099	.1596426
#3	1.512348	.0059159	.0009933	20.60440	.1079587	.1604218

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2104715	328.9858	F 32.12910	34.59536	.1319542	.0103453
Stddev	.0104720	1.8568	.16589	.25379	.0006034	.0001637
%RSD	4.975508	.5644111	.5163377	.7335854	.4572472	1.582757
#1	.2080746	326.8887	31.93788	34.30365	.1325048	.0101562
#2	.2014057	329.6474	32.21482	34.76539	.1313092	.0104418
#3	.2219342	330.4211	32.23460	34.71705	.1320485	.0104379

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.138675	.2423873	.5148860	5.666494	2.045047	-.100720
Stddev	.122691	.0080437	.0013866	.052640	.006838	.004270
%RSD	5.736797	3.318529	.2692977	.9289764	.3343657	4.239020
#1	2.048517	.2457168	.5163840	5.715899	2.037179	-.102583
#2	2.278394	.2332134	.5136476	5.611127	2.048405	-.103742
#3	2.089113	.2482317	.5146262	5.672457	2.049556	-.095835

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-07DLX2 Acquired: 12/20/2024 4:16:34 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY5 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001837	.1552706	3.758362	.0165706	.7468676	-.131803
Stddev	.000420	.0080200	.016152	.0005251	.0065726	.001160
%RSD	22.88768	5.165189	.4297508	3.168977	.8800177	.8801923
#1	-.002282	.1645298	3.739837	.0170847	.7401466	-.130667
#2	-.001447	.1505000	3.769492	.0160351	.7471751	-.131757
#3	-.001782	.1507819	3.765756	.0165920	.7532810	-.132986

Elem	Li6707
Units	ppm
Avg	.0855448
Stddev	.0047592
%RSD	5.563365
#1	.0898245
#2	.0863903
#3	.0804195

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2481.083	30599.62	2019.925	2108.795	2121.571
Stddev	4.185	81.77	1.823	4.317	1.187
%RSD	.1686638	.2672140	.0902616	.2047207	.0559566
#1	2476.396	30509.32	2020.420	2104.001	2121.176
#2	2484.445	30668.65	2017.905	2112.376	2122.905
#3	2482.409	30620.89	2021.449	2110.007	2120.632

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-08DLX2 Acquired: 12/20/2024 4:20:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2555205	-.112367	.2334278	.1740014	.0534898	57.82961
Stddev	.0044435	.001600	.0048264	.0084391	.0035032	.08757
%RSD	1.738998	1.423914	2.067624	4.850011	6.549194	.1514305
#1	.2516630	-.112739	.2279950	.1663394	.0573787	57.87011
#2	.2603792	-.113749	.2372203	.1726181	.0505813	57.88960
#3	.2545194	-.110614	.2350680	.1830467	.0525094	57.72912

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.204796	.0058766	.0021678	26.02463	.1091224	.1450288
Stddev	.002876	.0000893	.0000102	.01738	.0007551	.0010987
%RSD	.2387089	1.520003	.4705025	.0667912	.6919691	.7575843
#1	1.201493	.0058931	.0021793	26.03508	.1086524	.1462373
#2	1.206748	.0057802	.0021600	26.00457	.1087214	.1447586
#3	1.206147	.0059566	.0021640	26.03425	.1099934	.1440903

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2993962	321.3094	F 30.27317	33.40126	.1313185	.0087099
Stddev	.0011200	.7350	.05790	.14230	.0007797	.0005599
%RSD	.3740905	.2287414	.1912561	.4260364	.5937432	6.428447
#1	.2990946	321.9315	30.32708	33.44851	.1319925	.0080759
#2	.3006361	321.4983	30.28045	33.51392	.1304645	.0089172
#3	.2984578	320.4984	30.21198	33.24134	.1314984	.0091365

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.900670	.2625621	.5918930	14.95064	3.718770	-.085510
Stddev	.282972	.0095140	.0053049	.04909	.012675	.001590
%RSD	9.755397	3.623504	.8962596	.3283560	.3408333	1.859759
#1	3.136761	.2715114	.5927062	14.97865	3.732825	-.083816
#2	2.587000	.2636055	.5862284	14.89395	3.708208	-.086971
#3	2.978250	.2525695	.5967443	14.97931	3.715276	-.085744

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-08DLX2 Acquired: 12/20/2024 4:20:25 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY6 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001320	.9617373	3.410867	.0155063	.8215871	-.114229
Stddev	.000570	.0100721	.028333	.0019219	.0049482	.000628
%RSD	43.13728	1.047285	.8306756	12.39441	.6022682	.5499628
#1	-.001734	.9703650	3.438936	.0162902	.8194092	-.114396
#2	-.001556	.9506692	3.411389	.0169124	.8272506	-.114757
#3	-.000671	.9641777	3.382276	.0133163	.8181014	-.113534

Elem	Li6707
Units	ppm
Avg	.0803886
Stddev	.0029176
%RSD	3.629383
#1	.0793291
#2	.0781488
#3	.0836880

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2476.414	30657.10	2039.025	2119.832	2112.048
Stddev	8.223	209.17	19.389	12.511	5.906
%RSD	.3320537	.6822966	.9509111	.5902015	.2796254
#1	2482.660	30516.86	2017.650	2111.305	2112.610
#2	2467.097	30897.52	2043.944	2134.195	2105.881
#3	2479.483	30556.92	2055.481	2113.996	2117.653

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-09DLX2 Acquired: 12/20/2024 4:24:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY7 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4955231	-.142381	.3216664	.2026766	.0644475	106.9079	1.326166
Stddev	.0085614	.006562	.0028591	.0036807	.0016418	.2118	.003984
%RSD	1.727753	4.608771	.8888435	1.816037	2.547449	.1981447	.3004206
#1	.4925211	-.137812	.3197269	.2015101	.0632692	107.0993	1.327882
#2	.4888670	-.139430	.3249499	.1997205	.0637505	106.6803	1.321612
#3	.5051813	-.149900	.3203224	.2067991	.0663227	106.9443	1.329006

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077909	.0046318	41.97347	.2839757	.2202080	.6322154	390.0132
Stddev	.0001511	.0000866	.12063	.0017221	.0011424	.0160941	1.6548
%RSD	1.940118	1.869867	.2874006	.6064296	.5187823	2.545664	.4243042
#1	.0078380	.0046210	42.02841	.2847926	.2192292	.6244273	391.8403
#2	.0076219	.0047233	41.83515	.2819972	.2199315	.6214969	388.6151
#3	.0079130	.0045511	42.05685	.2851374	.2214632	.6507221	389.5843

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.71735	66.79860	.2476496	.0102781	2.791206	.6598979	.7417628
Stddev	.08742	.20887	.0009259	.0004636	.472510	.0097894	.0075106
%RSD	.3044160	.3126924	.3738815	4.510248	16.92851	1.483466	1.012531
#1	28.79660	66.99787	.2465913	.0098699	3.235452	.6682784	.7453230
#2	28.62358	66.81665	.2483101	.0101822	2.294767	.6491382	.7331342
#3	28.73187	66.58129	.2480475	.0107821	2.843400	.6622769	.7468312

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.64524	5.511880	-.100767	-.000527	1.720270	4.346320	.0252122
Stddev	.27935	.025264	.005266	.000093	.006709	.038865	.0005304
%RSD	1.048404	.4583565	5.226342	17.70068	.3900174	.8941936	2.103699
#1	26.96761	5.491526	-.094749	-.000424	1.715616	4.390458	.0250130
#2	26.49370	5.503958	-.104529	-.000550	1.717232	4.317226	.0248103
#3	26.47441	5.540155	-.103025	-.000607	1.727961	4.331277	.0258134

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-09DLX2 Acquired: 12/20/2024 4:24:17 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY7 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	1.621036	-.160273	.1059522
Stddev	.001401	.001432	.0046142
%RSD	.0864522	.8936798	4.354995
#1	1.621851	-.161878	.1007195
#2	1.621838	-.159124	.1076998
#3	1.619417	-.159818	.1094374

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2505.248	30874.95	2059.149	2142.331	2076.259
Stddev	2.766	45.33	10.844	7.535	2.774
%RSD	.1104079	.1468143	.5266040	.3516975	.1335906
#1	2508.257	30823.89	2047.800	2134.329	2078.431
#2	2504.673	30890.48	2060.243	2149.289	2077.212
#3	2502.816	30910.47	2069.404	2143.375	2073.135

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-10DLX2 Acquired: 12/20/2024 4:28:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY8 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1620693	-.152811	.2350344	.2211496	.0682765	69.13100
Stddev	.0015860	.001184	.0008974	.0075871	.0029512	.11103
%RSD	.9786080	.7747362	.3817974	3.430751	4.322355	.1606075
#1	.1622013	-.151837	.2355819	.2250656	.0659382	69.13864
#2	.1635852	-.154128	.2355225	.2124047	.0715924	69.23801
#3	.1604214	-.152467	.2339988	.2259786	.0672990	69.01634

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.297249	.0075784	.0015925	26.58395	.1044478	.1835356
Stddev	.001944	.0000912	.0000421	.20469	.0024339	.0005755
%RSD	.1498525	1.203994	2.645548	.7699645	2.330295	.3135378
#1	1.295437	.0076834	.0015726	26.60249	.1026790	.1829357
#2	1.299303	.0075180	.0016409	26.77874	.1072237	.1835881
#3	1.297008	.0075339	.0015640	26.37063	.1034408	.1840830

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2621445	415.0904	F 33.65828	40.88201	.1438585	.0101639
Stddev	.0138081	.3394	.03145	.11345	.0006147	.0012933
%RSD	5.267341	.0817723	.0934274	.2775097	.4273306	12.72445
#1	.2500455	415.2705	33.63945	40.85681	.1440654	.0100013
#2	.2771870	415.3018	33.69458	40.78327	.1431670	.0115308
#3	.2592012	414.6988	33.64081	41.00594	.1443431	.0089596

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.694704	.2204895	.6804330	12.06432	3.428820	-.110626
Stddev	.825259	.0059127	.0215159	.17895	.004448	.003893
%RSD	22.33627	2.681620	3.162090	1.483294	.1297275	3.519125
#1	3.631739	.2257416	.6586361	11.92425	3.428975	-.112760
#2	2.902731	.2216413	.7016564	12.26591	3.424297	-.106132
#3	4.549643	.2140857	.6810066	12.00279	3.433189	-.112984

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-10DLX2 Acquired: 12/20/2024 4:28:06 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY8 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002268	.3095915	3.947761	.0235875	.8715157	-.172104
Stddev	.000518	.0041381	.006818	.0016868	.0026095	.000614
%RSD	22.83394	1.336641	.1727165	7.151009	.2994163	.3569215
#1	-.001946	.3087651	3.948745	.0255315	.8688449	-.172718
#2	-.002866	.3059289	3.954034	.0225109	.8740592	-.172107
#3	-.001994	.3140804	3.940504	.0227203	.8716428	-.171489

Elem	Li6707
Units	ppm
Avg	.1100279
Stddev	.0031093
%RSD	2.825947
#1	.1064514
#2	.1115435
#3	.1120888

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2470.630	30400.55	2041.816	2106.525	2104.909
Stddev	2.524	110.40	3.282	6.024	4.539
%RSD	.1021720	.3631558	.1607175	.2859900	.2156491
#1	2467.717	30432.60	2041.289	2099.621	2103.053
#2	2472.160	30277.67	2045.329	2109.233	2110.082
#3	2472.014	30491.38	2038.829	2110.720	2101.592

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-11DLX2 Acquired: 12/20/2024 4:31:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY9 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2968733	-.126147	.3044066	.2140738	.0684279	64.48989
Stddev	.0050974	.002938	.0041434	.0010386	.0009955	.68797
%RSD	1.717044	2.329295	1.361144	.4851356	1.454812	1.066782
#1	.3027455	-.124501	.2996267	.2152672	.0677086	63.71822
#2	.2935887	-.129540	.3066182	.2135795	.0695641	64.71237
#3	.2942856	-.124401	.3069751	.2133748	.0680110	65.03909

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.072023	.0065762	.0039924	20.97307	.1286383	.1689993
Stddev	.020517	.0001331	.0001780	.19659	.0015637	.0000634
%RSD	.9902081	2.023135	4.457351	.9373451	1.215579	.0374966
#1	2.049720	.0064521	.0041976	20.74887	.1298565	.1689626
#2	2.076253	.0065600	.0038794	21.05434	.1268750	.1690725
#3	2.090096	.0067167	.0039003	21.11599	.1291834	.1689629

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4644450	389.4513	F 39.47711	35.86665	.1563499	.0116795
Stddev	.0079705	3.6675	.42977	.25825	.0009827	.0007082
%RSD	1.716124	.9417215	1.088653	.7200343	.6285564	6.063776
#1	.4578380	385.4103	38.98493	35.57388	.1552744	.0115676
#2	.4732973	390.3744	39.66821	36.06209	.1572012	.0124370
#3	.4621998	392.5690	39.77819	35.96399	.1565739	.0110339

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.616870	.3241928	.6778675	13.29067	3.384841	-.123021
Stddev	.106777	.0178847	.0085406	.11545	.013862	.004365
%RSD	4.080324	5.516699	1.259920	.8686565	.4095360	3.548235
#1	2.627476	.3165259	.6831716	13.28010	3.369134	-.119341
#2	2.505186	.3446328	.6680154	13.41105	3.390023	-.127844
#3	2.717947	.3114196	.6824156	13.18088	3.395366	-.121878

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-11DLX2 Acquired: 12/20/2024 4:31:56 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYY9 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002254	.4086071	3.553062	.0219460	.8685247	-.170193
Stddev	.000199	.0097319	.030109	.0003642	.0106841	.001106
%RSD	8.847532	2.381731	.8474006	1.659472	1.230148	.6497150
#1	-.002482	.4057536	3.518538	.0217357	.8563857	-.169040
#2	-.002169	.4006209	3.566771	.0223665	.8726882	-.170295
#3	-.002111	.4194468	3.573876	.0217357	.8765004	-.171245

Elem	Li6707
Units	ppm
Avg	.0860852
Stddev	.0053953
%RSD	6.267408
#1	.0830316
#2	.0923148
#3	.0829093

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2476.796	30577.48	2039.751	2116.055	2104.840
Stddev	13.862	92.27	14.659	14.259	10.456
%RSD	.5596858	.3017427	.7186431	.6738430	.4967551
#1	2488.249	30537.02	2055.146	2101.075	2115.818
#2	2461.385	30512.36	2025.960	2117.630	2094.999
#3	2480.753	30683.06	2038.148	2129.462	2103.704

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-12DLX2 Acquired: 12/20/2024 4:35:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ0 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2386929	-.131229	.3566444	.2386857	.0730734	47.76916
Stddev	.0038239	.005862	.0021017	.0011841	.0058081	.33007
%RSD	1.602026	4.467244	.5892920	.4960840	7.948232	.6909623
#1	.2362573	-.124468	.3547377	.2373437	.0678634	47.41493
#2	.2367211	-.134909	.3588979	.2391299	.0720213	47.82448
#3	.2431002	-.134309	.3562977	.2395834	.0793356	48.06807

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.482264	.0059708	.0047093	17.73780	.0915969	.1625484
Stddev	.017209	.0001522	.0000643	.19477	.0013309	.0002168
%RSD	.6932893	2.550000	1.366143	1.098077	1.452938	.1334005
#1	2.462704	.0057978	.0047072	17.53048	.0905365	.1626174
#2	2.489008	.0060298	.0047747	17.76595	.0930903	.1623054
#3	2.495079	.0060846	.0046461	17.91697	.0911639	.1627223

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4760224	424.8470	F 49.48458	26.35936	.1398203	.0134459
Stddev	.0038968	3.5462	.45123	.22731	.0010782	.0009062
%RSD	.8186145	.8347068	.9118660	.8623455	.7711574	6.739382
#1	.4715544	421.2685	48.99636	26.16735	.1410510	.0130748
#2	.4787172	424.9125	49.57109	26.30040	.1390417	.0127841
#3	.4777957	428.3600	49.88630	26.61034	.1393682	.0144786

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.285722	.2224535	.7820657	10.15180	3.295320	-.131852
Stddev	.069857	.0073064	.0216246	.06758	.007160	.002028
%RSD	3.056238	3.284450	2.765060	.6657103	.2172901	1.537819
#1	2.206188	.2140353	.7816448	10.13105	3.288033	-.132572
#2	2.337142	.2271468	.8038977	10.22733	3.302347	-.129563
#3	2.313836	.2261782	.7606547	10.09703	3.295579	-.133421

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-12DLX2 Acquired: 12/20/2024 4:35:46 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ0 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002773	.2266958	2.846244	.0232863	.7900181	-.188552
Stddev	.000690	.0018337	.012836	.0016345	.0025194	.001564
%RSD	24.88028	.8088962	.4509689	7.019024	.3188988	.8296652
#1	-.002104	.2285297	2.833151	.0223666	.7871688	-.186931
#2	-.003482	.2266953	2.858806	.0251734	.7909346	-.188672
#3	-.002732	.2248622	2.846774	.0223189	.7919510	-.190053

Elem	Li6707
Units	ppm
Avg	.0777261
Stddev	.0022787
%RSD	2.931759
#1	.0758147
#2	.0802478
#3	.0771157

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2469.863	30334.32	2019.824	2097.746	2115.584
Stddev	14.843	242.45	4.316	17.572	8.528
%RSD	.6009690	.7992653	.2137035	.8376430	.4030987
#1	2469.757	30477.70	2022.551	2105.958	2117.969
#2	2484.759	30054.39	2022.073	2077.572	2122.666
#3	2455.074	30470.87	2014.847	2109.708	2106.118

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-13DLX2 Acquired: 12/20/2024 4:39:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ1 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2037651	-.119734	.3380863	.2058175	.0641600	50.00341
Stddev	.0031677	.002882	.0020133	.0064169	.0005822	.09629
%RSD	1.554603	2.406785	.5955073	3.117755	.9074192	.1925710
#1	.2071316	-.117353	.3376741	.2121904	.0635689	50.01033
#2	.2008432	-.122937	.3363111	.1993575	.0647328	49.90385
#3	.2033204	-.118911	.3402739	.2059046	.0641783	50.09605

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.567223	.0060523	.0032628	17.80571	.0812880	.1509996
Stddev	.007503	.0001665	.0001609	.06605	.0014475	.0005642
%RSD	.4787529	2.750828	4.932762	.3709400	1.780725	.3736194
#1	1.572921	.0061658	.0033397	17.87996	.0804411	.1511786
#2	1.558722	.0061299	.0030778	17.78365	.0829594	.1503676
#3	1.570027	.0058611	.0033708	17.75351	.0804636	.1514525

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4437804	366.9110	F 38.19807	25.80444	.1267988	.0108210
Stddev	.0077614	1.2971	.10213	.17415	.0002802	.0013280
%RSD	1.748930	.3535109	.2673812	.6748781	.2209437	12.27217
#1	.4472666	366.6748	38.24282	25.91291	.1271122	.0118634
#2	.4348871	365.7483	38.08120	25.60356	.1267117	.0093258
#3	.4491873	368.3100	38.27019	25.89684	.1265725	.0112737

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.631604	.1809128	.6778608	11.25677	3.287626	-.119454
Stddev	.290445	.0039363	.0200975	.12217	.005954	.002079
%RSD	11.03679	2.175801	2.964841	1.085344	.1811040	1.740800
#1	2.297396	.1812438	.6998352	11.22901	3.292069	-.119298
#2	2.822938	.1768215	.6733354	11.15086	3.280861	-.121608
#3	2.774477	.1846732	.6604118	11.39043	3.289950	-.117457

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-13DLX2 Acquired: 12/20/2024 4:39:36 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ1 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.002757	.2290802	3.034204	.0188611	.8211054	-.159525
Stddev	.000558	.0062969	.025205	.0014051	.0056207	.001038
%RSD	20.22991	2.748760	.8306864	7.449848	.6845324	.6505969
#1	-.002333	.2230957	3.030226	.0173595	.8150821	-.159315
#2	-.002550	.2356487	3.011224	.0201441	.8262104	-.158608
#3	-.003389	.2284961	3.061161	.0190797	.8220238	-.160651

Elem	Li6707
Units	ppm
Avg	.0784394
Stddev	.0064680
%RSD	8.245794
#1	.0717893
#2	.0788205
#3	.0847084

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2506.402	30785.92	2065.005	2133.380	2142.612
Stddev	8.933	248.83	14.971	13.173	5.963
%RSD	.3563992	.8082668	.7249878	.6174886	.2782952
#1	2509.456	30509.10	2052.460	2118.175	2144.367
#2	2513.407	30857.65	2081.578	2140.611	2147.500
#3	2496.342	30991.01	2060.976	2141.354	2135.968

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-14DLX2 Acquired: 12/20/2024 4:43:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ2 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3861788	-.133055	.2070164	.2028697	.0635182	89.33034
Stddev	.0029812	.005644	.0047524	.0037254	.0007733	.34804
%RSD	.7719613	4.241678	2.295643	1.836370	1.217424	.3896145
#1	.3864147	-.126785	.2016227	.2064092	.0643923	89.00287
#2	.3830867	-.134649	.2088379	.1989827	.0632388	89.29232
#3	.3890350	-.137730	.2105886	.2032172	.0629234	89.69583

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.611772	.0063729	.0022070	24.68218	.2332965	.2013636
Stddev	.009538	.0002560	.0001000	.08393	.0017770	.0007697
%RSD	.5917410	4.017259	4.532502	.3400502	.7616877	.3822274
#1	1.603116	.0061188	.0021672	24.58720	.2335462	.2005168
#2	1.610204	.0066308	.0023208	24.74634	.2349355	.2015535
#3	1.621997	.0063692	.0021330	24.71301	.2314079	.2020206

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3957685	368.0326	F 32.78825	60.33387	.2166435	.0102481
Stddev	.0061139	1.7496	.17468	.13029	.0003164	.0006286
%RSD	1.544815	.4753943	.5327544	.2159482	.1460460	6.134264
#1	.3986992	366.4651	32.61555	60.18471	.2164329	.0095897
#2	.3998653	367.7125	32.78436	60.39145	.2170073	.0108421
#3	.3887409	369.9202	32.96485	60.42544	.2164903	.0103124

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.852912	.5702036	.5275603	15.46051	3.456086	-.117553
Stddev	.904760	.0109319	.0169858	.23382	.009491	.009223
%RSD	23.48250	1.917199	3.219689	1.512342	.2746154	7.845704
#1	2.841977	.5769208	.5296315	15.33078	3.445264	-.125873
#2	4.586631	.5575894	.5434155	15.73044	3.462995	-.119150
#3	4.130129	.5761007	.5096338	15.32033	3.459998	-.107636

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-14DLX2 Acquired: 12/20/2024 4:43:26 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ2 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001718	.2150166	3.981533	.0190452	1.214376	-.167044
Stddev	.000156	.0048065	.007278	.0007526	.008662	.001003
%RSD	9.091339	2.235405	.1827950	3.951632	.7132534	.6002291
#1	-.001864	.2166870	3.976757	.0182164	1.204379	-.166523
#2	-.001737	.2095978	3.989910	.0192332	1.219627	-.166409
#3	-.001554	.2187650	3.977933	.0196860	1.219123	-.168200

Elem	Li6707
Units	ppm
Avg	.0992604
Stddev	.0020732
%RSD	2.088690
#1	.0971734
#2	.0992883
#3	.1013196

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2500.610	30723.19	2047.649	2126.530	2089.902
Stddev	7.840	149.89	4.881	13.272	4.819
%RSD	.3135402	.4878626	.2383882	.6241132	.2305812
#1	2500.089	30849.41	2053.157	2141.645	2092.703
#2	2508.697	30557.53	2045.935	2121.161	2092.665
#3	2493.042	30762.63	2043.857	2116.783	2084.337

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-15DLX2 Acquired: 12/20/2024 4:47:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ3 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1247231	-.044291	.1052283	.0520372	.0178500	50.66774	.5529577
Stddev	.0056067	.006579	.0024800	.0051691	.0012625	.44058	.0030984
%RSD	4.495332	14.85514	2.356749	9.933427	7.072894	.8695463	.5603384
#1	.1187976	-.037628	.1025780	.0543524	.0164654	50.22197	.5496473
#2	.1299445	-.050784	.1056141	.0556440	.0189375	50.67830	.5534374
#3	.1254271	-.044461	.1074927	.0461152	.0181470	51.10294	.5557882

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0052491	.0011368	66.66504	.0599365	.0919934	.1101685	135.1095
Stddev	.0000805	.0000852	.78596	.0005067	.0004631	.0037549	1.1298
%RSD	1.533743	7.494945	1.178970	.8454651	.5034133	3.408338	.8361898
#1	.0052074	.0012318	65.90267	.0604939	.0914704	.1106613	134.0064
#2	.0051980	.0011112	66.61980	.0595037	.0921584	.1136526	135.0579
#3	.0053419	.0010673	67.47264	.0598118	.0923513	.1061915	136.2642

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.987579	25.43185	.0821607	.0019425	2.800353	.2236916	.2759137
Stddev	.020862	.15009	.0013462	.0011162	.205872	.0072817	.0100360
%RSD	.6982939	.5901691	1.638460	57.46026	7.351646	3.255228	3.637357
#1	2.964659	25.34860	.0836742	.0006753	2.748904	.2193384	.2780167
#2	2.992620	25.34184	.0817112	.0027799	3.027070	.2196384	.2649928
#3	3.005459	25.60512	.0810969	.0023722	2.625085	.2320979	.2847314

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.00727	4.155646	-.044990	.0011646	.4141054	3.693087	.0047839
Stddev	.06809	.020745	.003053	.0002785	.0030986	.036257	.0014331
%RSD	.6803677	.4992092	6.785870	23.91707	.7482548	.9817584	29.95707
#1	10.01132	4.150026	-.046586	.0011168	.4148061	3.712613	.0061506
#2	9.93724	4.138290	-.041470	.0014639	.4107165	3.651252	.0032925
#3	10.07323	4.178623	-.046915	.0009130	.4167936	3.715397	.0049087

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-15DLX2 Acquired: 12/20/2024 4:47:16 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ3 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.9339165	-.034096	.0451838
Stddev	.0045457	.000428	.0018550
%RSD	.4867297	1.254861	4.105410
#1	.9290880	-.033607	.0430420
#2	.9345482	-.034398	.0462760
#3	.9381132	-.034284	.0462335

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2613.057	32199.18	2126.357	2219.600	2146.387
Stddev	5.214	115.07	16.987	7.733	2.940
%RSD	.1995510	.3573644	.7988939	.3483983	.1369673
#1	2611.829	32200.97	2120.074	2228.020	2149.488
#2	2608.567	32083.23	2145.591	2212.816	2146.033
#3	2618.776	32313.34	2113.406	2217.963	2143.641

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-16DLX2 Acquired: 12/20/2024 4:51:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ4 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5491843	-.070047	.3450106	.0887936	.0274884	90.98850	.8813724
Stddev	.0060637	.006071	.0009135	.0005848	.0024988	.89592	.0101547
%RSD	1.104130	8.667171	.2647796	.6586262	9.090371	.9846501	1.152147
#1	.5509733	-.067716	.3458440	.0881234	.0249939	90.59728	.8747622
#2	.5424273	-.065487	.3440339	.0892000	.0299914	90.35473	.8762901
#3	.5541522	-.076938	.3451540	.0890575	.0274799	92.01350	.8930648

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068987	.0049191	81.26638	.0925771	.1288353	.2616743	198.1589
Stddev	.0000959	.0000320	.60813	.0006442	.0000990	.0126108	2.1340
%RSD	1.389857	.6502397	.7483175	.6958698	.0768242	4.819261	1.076901
#1	.0067880	.0049361	80.83868	.0932614	.1288779	.2500792	197.0119
#2	.0069516	.0048822	80.99792	.0919822	.1287221	.2598432	196.8438
#3	.0069565	.0049389	81.96254	.0924878	.1289057	.2751006	200.6211

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.525125	51.16048	.1403215	.0043144	3.426859	.2966091	1.080538
Stddev	.046642	.79527	.0005779	.0008274	.487481	.0074322	.035473
%RSD	1.030728	1.554455	.4118330	19.17670	14.22529	2.505724	3.282928
#1	4.506617	50.57983	.1409307	.0048030	3.624593	.2904591	1.052882
#2	4.490579	50.83472	.1397811	.0047810	3.784405	.3048678	1.068200
#3	4.578181	52.06691	.1402527	.0033591	2.871578	.2945003	1.120533

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.75025	8.098269	-.058689	.0004733	8.910116	4.716453	.0086709
Stddev	.22212	.026628	.003059	.0001082	.026027	.039644	.0022103
%RSD	1.410279	.3288084	5.212408	22.86412	.2921046	.8405542	25.49101
#1	15.71824	8.073396	-.057023	.0003625	8.889267	4.690363	.0097237
#2	15.54586	8.095053	-.056826	.0005788	8.901794	4.696922	.0061310
#3	15.98663	8.126359	-.062220	.0004787	8.939286	4.762073	.0101580

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-16DLX2 Acquired: 12/20/2024 4:51:08 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ4 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6341520	-.056395	.0769037
Stddev	.0068874	.000478	.0030877
%RSD	1.086083	.8483895	4.015030
#1	.6291206	-.056099	.0798200
#2	.6313339	-.056140	.0736692
#3	.6420016	-.056947	.0772219

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2628.376	32316.73	2155.266	2232.423	2076.564
Stddev	3.408	173.34	10.871	11.831	4.485
%RSD	.1296529	.5363646	.5044095	.5299630	.2159630
#1	2631.409	32157.27	2164.256	2222.224	2080.063
#2	2624.688	32501.22	2158.358	2245.394	2071.508
#3	2629.032	32291.72	2143.184	2229.653	2078.121

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-17DLX2 Acquired: 12/20/2024 4:54:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ5 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2523749	-.071231	.1804865	.0744010	.0227662	69.36087	.6445496
Stddev	.0025053	.005974	.0004393	.0013492	.0027971	.41855	.0044413
%RSD	.9927055	8.386740	.2433706	1.813411	12.28608	.6034401	.6890563
#1	.2503801	-.075952	.1809872	.0759587	.0252675	68.90403	.6394320
#2	.2515578	-.073226	.1803058	.0736438	.0232851	69.45270	.6468210
#3	.2551868	-.064515	.1801663	.0736004	.0197460	69.72589	.6473958

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059555	.0022926	39.96406	.0670990	.0995214	.1599946	166.8130
Stddev	.0001174	.0001378	.21830	.0004326	.0004657	.0021148	1.3177
%RSD	1.971071	6.011214	.5462289	.6446749	.4679594	1.321788	.7899531
#1	.0058204	.0023865	39.71427	.0666161	.0994309	.1582805	165.2928
#2	.0060128	.0021344	40.05973	.0674510	.0991075	.1593455	167.5146
#3	.0060332	.0023570	40.11819	.0672298	.1000257	.1623579	167.6314

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.434243	35.12235	.0990239	.0039512	3.054196	.2630044	.5824229
Stddev	.026266	.34285	.0006494	.0008837	.557526	.0036189	.0126101
%RSD	.7648359	.9761629	.6558298	22.36431	18.25444	1.375990	2.165110
#1	3.404944	34.73291	.0995496	.0049561	3.449824	.2650345	.5679262
#2	3.442101	35.25547	.0992243	.0036022	2.416559	.2588262	.5908540
#3	3.455683	35.37868	.0982979	.0032953	3.296204	.2651525	.5884886

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.27101	5.475069	-.051429	.0005982	1.755746	4.341664	.0065758
Stddev	.06806	.016157	.002941	.0004250	.004221	.015475	.0013552
%RSD	.5546278	.2951009	5.717634	71.04155	.2404140	.3564281	20.60921
#1	12.22033	5.469480	-.049579	.0005598	1.753532	4.339196	.0070870
#2	12.24433	5.462449	-.054820	.0010412	1.753092	4.358225	.0050393
#3	12.34836	5.493279	-.049888	.0001938	1.760614	4.327572	.0076011

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-17DLX2 Acquired: 12/20/2024 4:54:58 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ5 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.7478691	-.050361	.0587743
Stddev	.0042390	.000562	.0049382
%RSD	.5668093	1.115468	8.402051
#1	.7441618	-.049775	.0631556
#2	.7524906	-.050895	.0534230
#3	.7469549	-.050413	.0597442

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2570.683	31810.60	2098.782	2188.689	2095.267
Stddev	6.615	109.70	16.840	9.030	5.814
%RSD	.2573151	.3448419	.8023852	.4125657	.2774607
#1	2571.849	31924.60	2112.059	2197.399	2096.188
#2	2576.638	31705.78	2079.840	2179.370	2100.566
#3	2563.563	31801.40	2104.448	2189.296	2089.049

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-18DLX2 Acquired: 12/20/2024 4:58:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ6 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1298929	-.050487	.0912221	.0585839	.0147177	57.12219	.5749964
Stddev	.0010890	.003972	.0006587	.0017166	.0020096	.11072	.0007629
%RSD	.8383484	7.866597	.7221292	2.930219	13.65417	.1938318	.1326773
#1	.1307650	-.046557	.0919581	.0601353	.0140921	57.24940	.5755742
#2	.1302413	-.050403	.0906878	.0567397	.0169656	57.06961	.5752833
#3	.1286723	-.054499	.0910204	.0588768	.0130953	57.04755	.5741316

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050519	.0012781	31.99418	.0587467	.0838963	.1246480	132.6878
Stddev	.0001853	.0001485	.11654	.0002491	.0005294	.0053563	.3244
%RSD	3.668190	11.61853	.3642586	.4239978	.6310413	4.297116	.2444461
#1	.0050547	.0012241	32.12314	.0585864	.0838747	.1305626	132.6891
#2	.0048652	.0011642	31.96299	.0586201	.0844362	.1201245	133.0115
#3	.0052358	.0014461	31.89640	.0590337	.0833780	.1232569	132.3628

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.186098	28.34960	.0814996	.0016351	2.778286	.1985412	.3067570
Stddev	.003132	.06120	.0002165	.0003115	.683715	.0123167	.0026515
%RSD	.0983067	.2158629	.2656946	19.05304	24.60925	6.203582	.8643544
#1	3.184420	28.38671	.0817288	.0015036	2.573987	.1843578	.3053583
#2	3.184162	28.38312	.0814715	.0019908	2.220009	.2047245	.3098149
#3	3.189711	28.27896	.0812985	.0014109	3.540862	.2065412	.3050977

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.40203	4.566014	-.033836	.0000329	.7414688	4.682759	.0019617
Stddev	.02519	.007127	.003172	.0002012	.0018225	.032220	.0026670
%RSD	.2030921	.1560849	9.374909	610.9915	.2457909	.6880602	135.9507
#1	12.42735	4.567578	-.037484	.0001275	.7401361	4.718556	.0043580
#2	12.37698	4.558234	-.031724	.0001694	.7407246	4.673642	-.000912
#3	12.40177	4.572228	-.032301	-.000198	.7435455	4.656080	.002439

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: P5181-18DLX2 Acquired: 12/20/2024 4:58:50 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: MYCYZ6 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	.6381744	-.032113	.0495249
Stddev	.0041854	.000442	.0028983
%RSD	.6558317	1.375541	5.852211
#1	.6357684	-.032616	.0505077
#2	.6430073	-.031786	.0518039
#3	.6357476	-.031937	.0462629

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2545.682	31531.96	2065.928	2170.338	2105.175
Stddev	12.026	40.61	18.748	6.651	7.532
%RSD	.4724067	.1287915	.9074722	.3064533	.3578036
#1	2536.059	31574.43	2044.395	2173.616	2098.523
#2	2559.163	31493.51	2074.769	2174.714	2113.354
#3	2541.822	31527.95	2078.621	2162.684	2103.648

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV076 Acquired: 12/20/2024 5:02:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV076 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ba4934
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.795691	4.513986	24.14586	4.741110	4.797056	404.0150	10.04207
Stddev	.014561	.012942	.06116	.013370	.010748	2.9985	.05828
%RSD	.3036264	.2867190	.2533083	.2820031	.2240596	.7421819	.5803412
#1	4.783874	4.500582	24.07622	4.727200	4.786921	402.3288	10.01852
#2	4.811958	4.514964	24.17050	4.742265	4.795919	402.2392	9.99925
#3	4.791242	4.526412	24.19087	4.753865	4.808327	407.4771	10.10844

Elem	Be2348	Cd2144	Ca3736	Cr2677	Co2286	Cu3247	Fe2598
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5012904	2.432352	402.7095	15.01069	2.460827	14.81631	405.1853
Stddev	.0018649	.005331	3.6302	.01416	.005973	.14674	2.5942
%RSD	.3720274	.2191574	.9014368	.0943131	.2427402	.9904200	.6402617
#1	.5011416	2.426220	400.6597	14.99740	2.454036	14.71185	404.3493
#2	.4995042	2.435880	400.5677	15.02558	2.465272	14.75301	403.1121
#3	.5032252	2.434957	406.9009	15.00910	2.463171	14.98409	408.0945

Elem	Mn2576	Mg2790	Ni2316	Ag3280	Na8183	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.86116	402.2300	2.470553	1.240465	404.2311	2.489513	14.60352
Stddev	.09058	2.5343	.005456	.003896	3.7200	.020060	.06602
%RSD	.6094992	.6300707	.2208455	.3140669	.9202659	.8057723	.4520843
#1	14.84003	401.2608	2.464258	1.237129	403.5772	2.503084	14.52983
#2	14.78302	400.3233	2.473466	1.244747	400.8814	2.498984	14.65729
#3	14.96044	405.1059	2.473933	1.239519	408.2347	2.466471	14.62342

Elem	K_7698	P_1774	B_2496	Mo2020	S_1820	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	148.9356	4.851917	4.875684	4.722589	4.912893	4.817210	4.847232
Stddev	1.1100	.016449	.012961	.015977	.025504	.016662	.012575
%RSD	.7452726	.3390232	.2658374	.3383068	.5191217	.3458839	.2594241
#1	148.2224	4.833016	4.883032	4.705597	4.886602	4.829478	4.832778
#2	148.3699	4.859747	4.860718	4.724864	4.937529	4.798241	4.855662
#3	150.2145	4.862989	4.883302	4.737307	4.914547	4.823911	4.853255

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCV076 Acquired: 12/20/2024 5:02:44 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV076 Custom ID2: Custom ID3:
Comment:

Elem	Ti3361	Sr4077	Li6707
Units	ppm	ppm	ppm
Avg	5.034103	4.805617	4.975342
Stddev	.025358	.030653	.038272
%RSD	.5037305	.6378586	.7692282
#1	5.025187	4.795166	4.956293
#2	5.014406	4.781555	4.950333
#3	5.062715	4.840128	5.019400

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1994.280	26317.51	1854.187	1716.788	1741.329
Stddev	5.257	57.20	12.874	6.813	3.536
%RSD	.2636150	.2173625	.6942956	.3968380	.2030380
#1	1998.359	26327.59	1848.261	1709.360	1743.978
#2	1996.133	26369.01	1868.957	1722.746	1742.694
#3	1988.347	26255.94	1845.344	1718.258	1737.314

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB076 Acquired: 12/20/2024 5:06:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB076 Custom ID2: Custom ID3:
Comment:

Elem	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.001685	-.001896	.0027059	-.002462	.0002271	.0004015
Stddev	.006664	.002090	.0018791	.002687	.0010486	.0157593
%RSD	395.4316	110.2729	69.44266	109.1493	461.7477	3924.773
#1	-.007878	-.000826	.0007261	-.004731	-.000893	-.002308
#2	.005366	-.000556	.0044646	.000505	.000389	.017340
#3	-.002543	-.004304	.0029271	-.003159	.001185	-.013827

Elem	Ba4934	Be2348	Cd2144	Ca3736	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008654	-.000038	.0002241	-.056037	-.000461	.0002041
Stddev	.0005828	.000107	.0001565	.036217	.000909	.0003183
%RSD	67.34360	282.6391	69.83777	64.63142	196.8886	155.9577
#1	.0010065	-.000157	.0000874	-.093016	-.001105	.0000648
#2	.0013647	-.000004	.0003948	-.054462	.000578	-.000021
#3	.0002250	.000048	.0001900	-.020633	-.000857	.000568

Elem	Cu3247	Fe2598	Mn2576	Mg2790	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.003580	.0293667	.0016791	.0191476	-.000348	.0005626
Stddev	.009752	.0473660	.0005777	.0243857	.000736	.0001007
%RSD	272.4120	161.2917	34.40684	127.3564	211.8264	17.90553
#1	.004624	.0500269	.0022984	.0448126	.000414	.0004503
#2	-.001001	.0628932	.0011547	-.003717	-.000401	.0005928
#3	-.014362	-.024820	.0015841	.016347	-.001056	.0006449

Elem	Na8183	V_2924	Zn2138	K_7698	P_1774	B_2496
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.195737	-.003063	.0000932	.5079821	.0001617	.0108893
Stddev	1.371605	.008512	.0073754	.2049750	.0011537	.0005265
%RSD	62.46672	277.8816	7916.581	40.35083	713.6488	4.834831
#1	3.737069	.003093	-.007868	.7329824	-.000743	.0108150
#2	1.740541	.000495	.006693	.4590894	-.000233	.0104039
#3	1.109601	-.012777	.001454	.3318745	.001461	.0114489

Reviewed By:Mohan
On:12/21/2024 3:07:26 AM
Inst Id :P5

Sample Name: CCB076 Acquired: 12/20/2024 5:06:21 Type: Unk
Method: SFAM01.1 INSTRUMENT P5 WITH 6 POINT ICAL-2(v33) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB076 Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	S_1820	Si2516	Sn1899	Ti3361	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005151	-.009773	-.001152	F -.008679	-.002243	.0002778
Stddev	.0007810	.002337	.001852	.000294	.003239	.0002011
%RSD	151.6293	23.91429	160.8023	3.385334	144.3822	72.39661
#1	.0004481	-.012464	-.001524	-.008353	-.005129	.0000545
#2	.0013274	-.008259	.000858	-.008923	.001260	.0003342
#3	-.000230	-.008595	-.002789	-.008762	-.002862	.0004448

Elem	Li6707
Units	ppm
Avg	F .0322840
Stddev	.0055248
%RSD	17.11310
#1	.0273410
#2	.0312628
#3	.0382481

Int. Std.	Y_2243	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2392.271	29596.75	1941.083	2028.376	2171.450
Stddev	5.368	80.95	9.680	6.068	6.750
%RSD	.2243695	.2735114	.4987034	.2991737	.3108353
#1	2395.767	29515.43	1943.448	2023.074	2175.063
#2	2386.091	29677.32	1930.440	2027.061	2163.663
#3	2394.954	29597.50	1949.363	2034.995	2175.624

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Prep Standard - Chemical Standard Summary

Order ID : P5182

Test : Metals CLP Full

Prepbatch ID : PB165619,

Sequence ID/Qc Batch ID: LB134036,

Standard ID :
MP83498,MP83499,MP83500,MP83501,MP83502,MP83503,MP83504,MP83505,MP83506,MP83507,MP83508,MP835
09,MP83510,MP83511,MP83512,MP83513,MP83514,

Chemical ID :
M5130,M5218,M5223,M5289,M5295,M5296,M5390,M5393,M5429,M5473,M5496,M5497,M5498,M5513,M5515,M5519
,M5658,M5697,M5698,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5816,M5817,M5818,M581
9,M5820,M5875,M5959,M5960,M5962,M5970,M5976,M5978,M5982,M5985,M5990,M5999,M6021,M6023,M6025,M60
28,M6030,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	MP83498	12/09/2024	12/28/2024	Janvi Patel	None	None	Sarabjit Jaswal 12/09/2024

FROM 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP83499	12/09/2024	12/28/2024	Eman Mughal	None	None	Sarabjit Jaswal 12/09/2024

FROM 1250.00000ml of M6121 + 1250.00000ml of W3112 = 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
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
921	ICPAES SPIKE SOL#6	MP83512	12/09/2024	01/06/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 12/09/2024

FROM 2.50000ml of M5962 + 50.00000ml of M5990 + 50.00000ml of M5999 + 147.50000ml of MP83500 = Final Quantity: 250.000 ml

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

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Metals STANDARD PREPARATION LOG

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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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	12/28/2024	05/20/2024 / jaswal	04/20/2021 / bin	M5130

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	12/28/2024	05/20/2024 / jaswal	04/20/2021 / bin	M5223

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Aluminum (Al) 10,000PPM	070622	07/06/2025	09/02/2022 / jaswal	07/12/2022 / jaswal	M5289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	04/20/2021 / bin	M5295

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	S2-MEB711673	11/02/2026	09/19/2022 / jaswal	08/20/2022 / jaswal	M5296

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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.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

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

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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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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.	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

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

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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.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	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

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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.	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

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

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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.	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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	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

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

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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.	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 #
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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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-SPK-5
Lot Number:	V2-MEB742037
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	100 µg/mL ea: Antimony,
	50 µg/mL ea: Selenium, Cadmium, Thallium,
	40 µg/mL ea: Arsenic,
	20 µg/mL ea: Lead

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	100.0 ± 0.7 µg/mL	Arsenic, As	40.00 ± 0.26 µg/mL
Cadmium, Cd	49.99 ± 0.22 µg/mL	Lead, Pb	19.99 ± 0.09 µg/mL
Selenium, Se	50.00 ± 0.23 µg/mL	Thallium, Tl	50.00 ± 0.22 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 12, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R 8/5/24

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

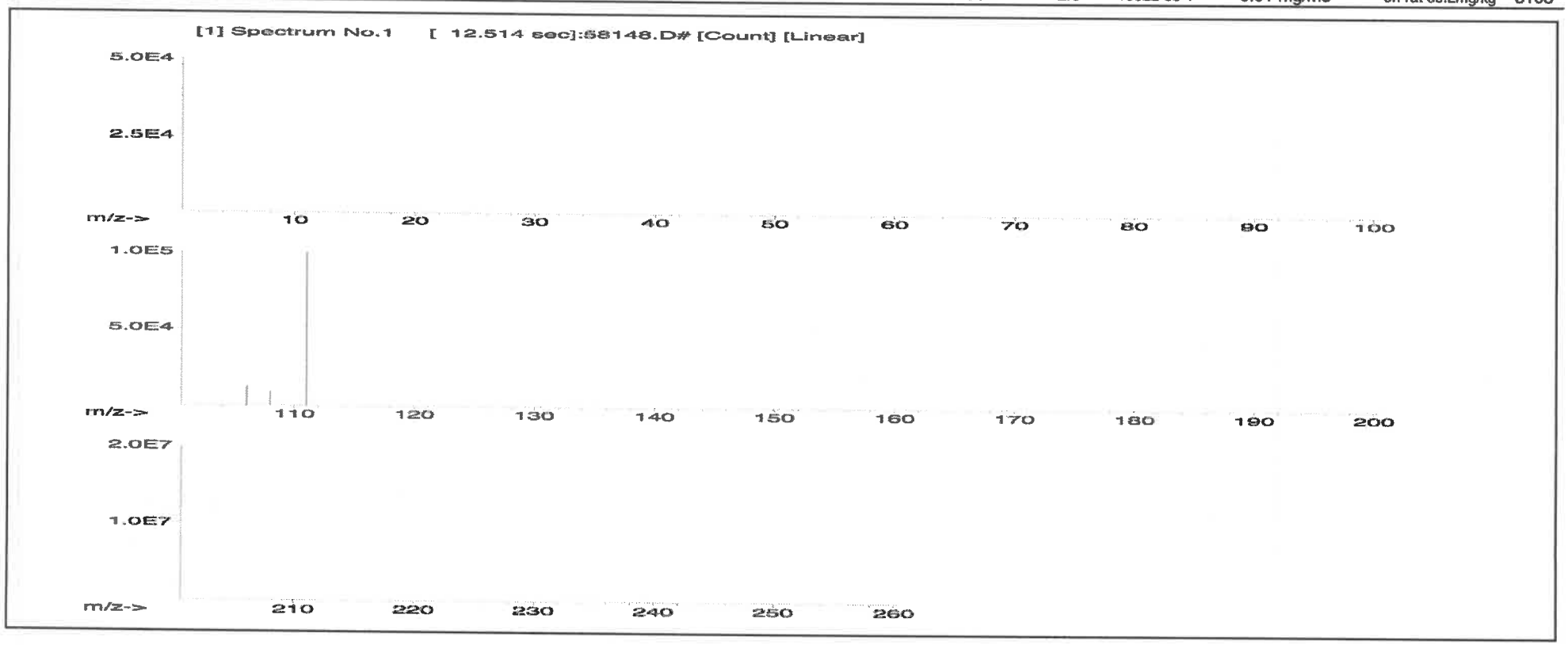
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**		**Lot #**		
Lot Number:	**070124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Cadmium (Cd)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	070124
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

M5296 OP: 09/19/2022 BH

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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:	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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**2 000 ± 7 µg/mL**	**Barium, Ba**	**2 000 ± 9 µg/mL**
Beryllium, Be	**50.00 ± 0.26 µg/mL**	**Calcium, Ca**	**5 000 ± 22 µg/mL**
Chromium, Cr	**200.0 ± 1.0 µg/mL**	**Cobalt, Co**	**500.0 ± 2.4 µg/mL**
Copper, Cu	**250.0 ± 1.0 µg/mL**	**Iron, Fe**	**1 000 ± 4 µg/mL**
Magnesium, Mg	**5 000 ± 20 µg/mL**	**Manganese, Mn**	**500.0 ± 2.0 µg/mL**
Nickel, Ni	**500.0 ± 2.2 µg/mL**	**Potassium, K**	**5 000 ± 19 µg/mL**
Silver, Ag	**250.0 ± 1.1 µg/mL**	**Sodium, Na**	**5 000 ± 18 µg/mL**
Vanadium, V	**499.7 ± 2.2 µg/mL**	**Zinc, Zn**	**500.0 ± 2.2 µg/mL**

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 27, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

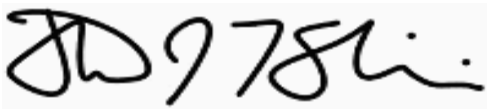
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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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.

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- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

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

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

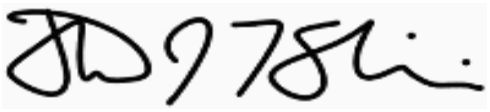
- Sealed TCT Bag Open Date: _____

- 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: 8/15/24 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

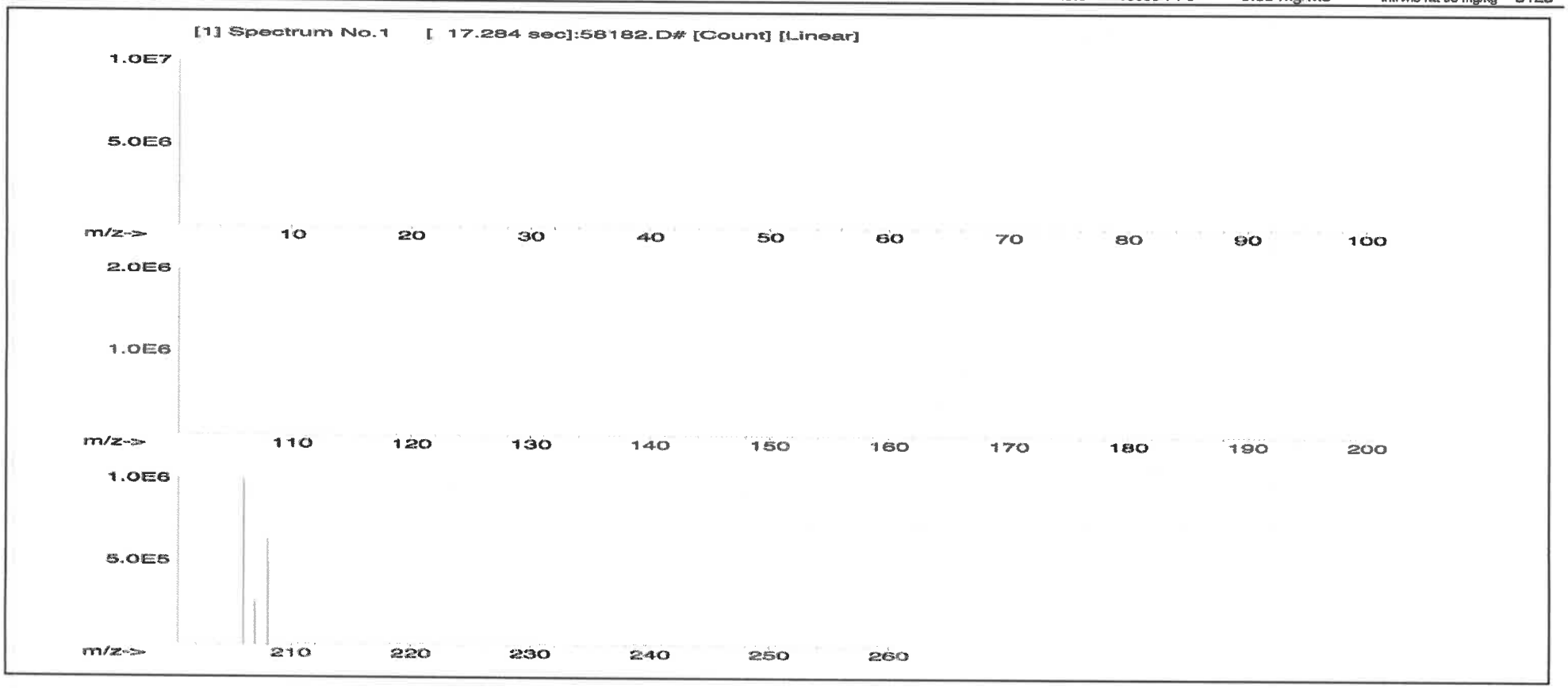
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

		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).

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

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



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

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

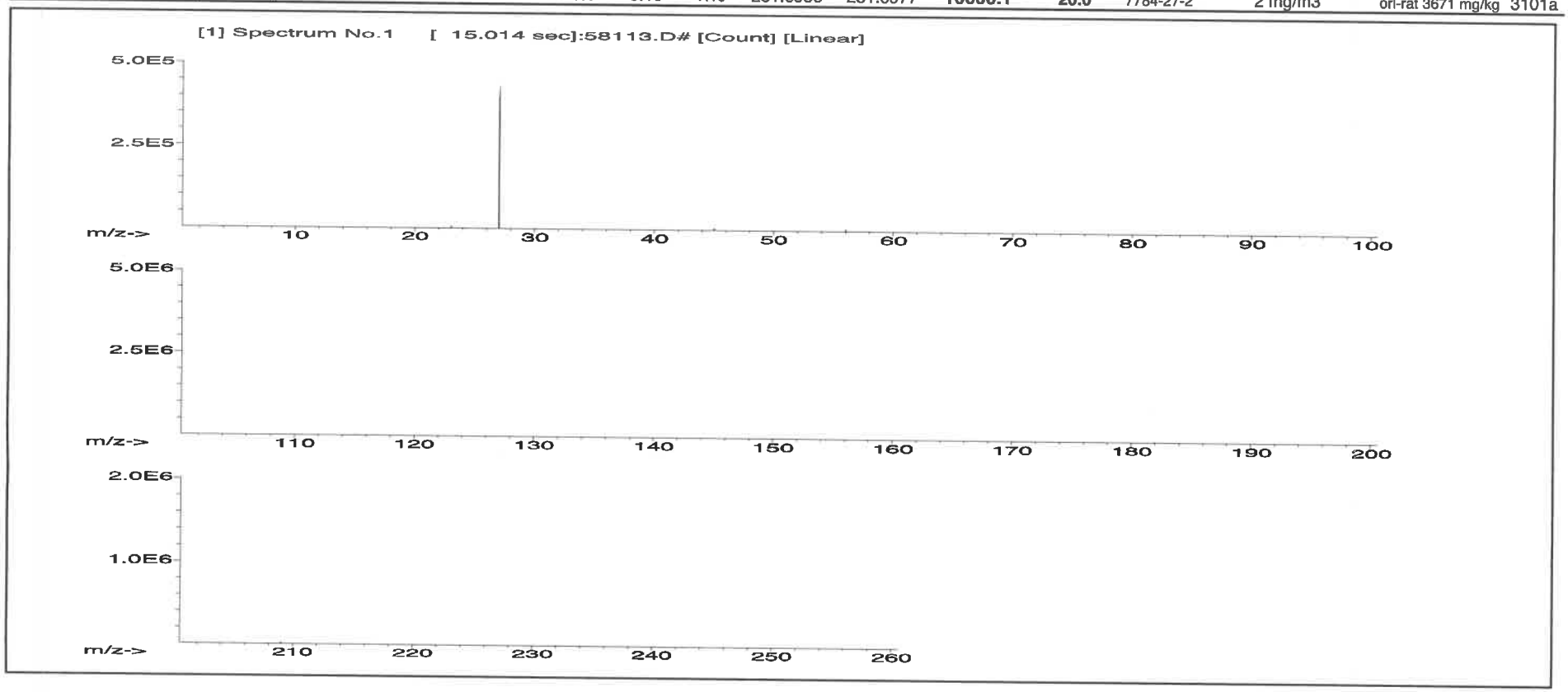
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**58113**			**Lot #**	
Lot Number:	**070622**		**Solvent:**	20370011	Nitric Acid
Description:	**Aluminum (Al)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	070625				
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	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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

R: 09/08/22 (BH)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

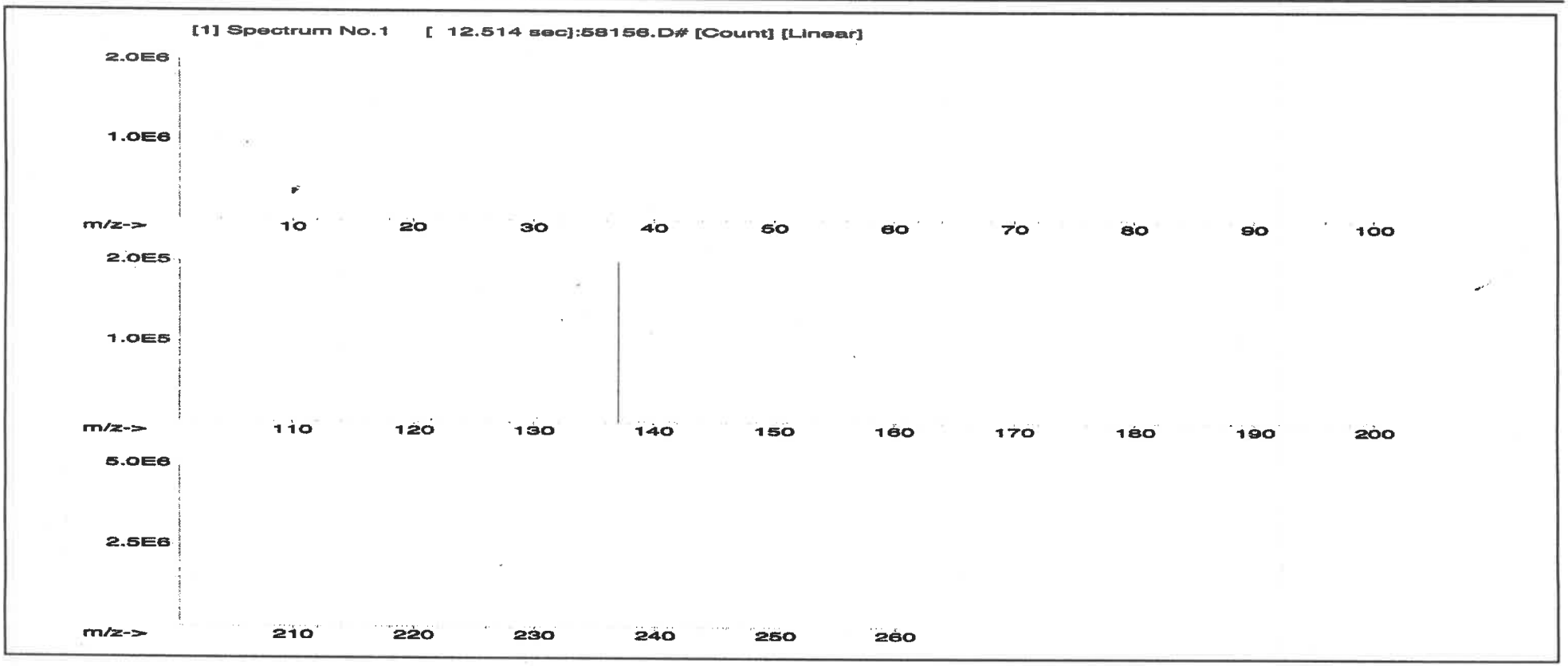
CERTIFIED WEIGHT REPORT:

		Lot #		
Part Number:	**57056**	**Solvent:**	20510011	Nitric Acid
Lot Number:	**072122**			
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	072125			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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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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M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

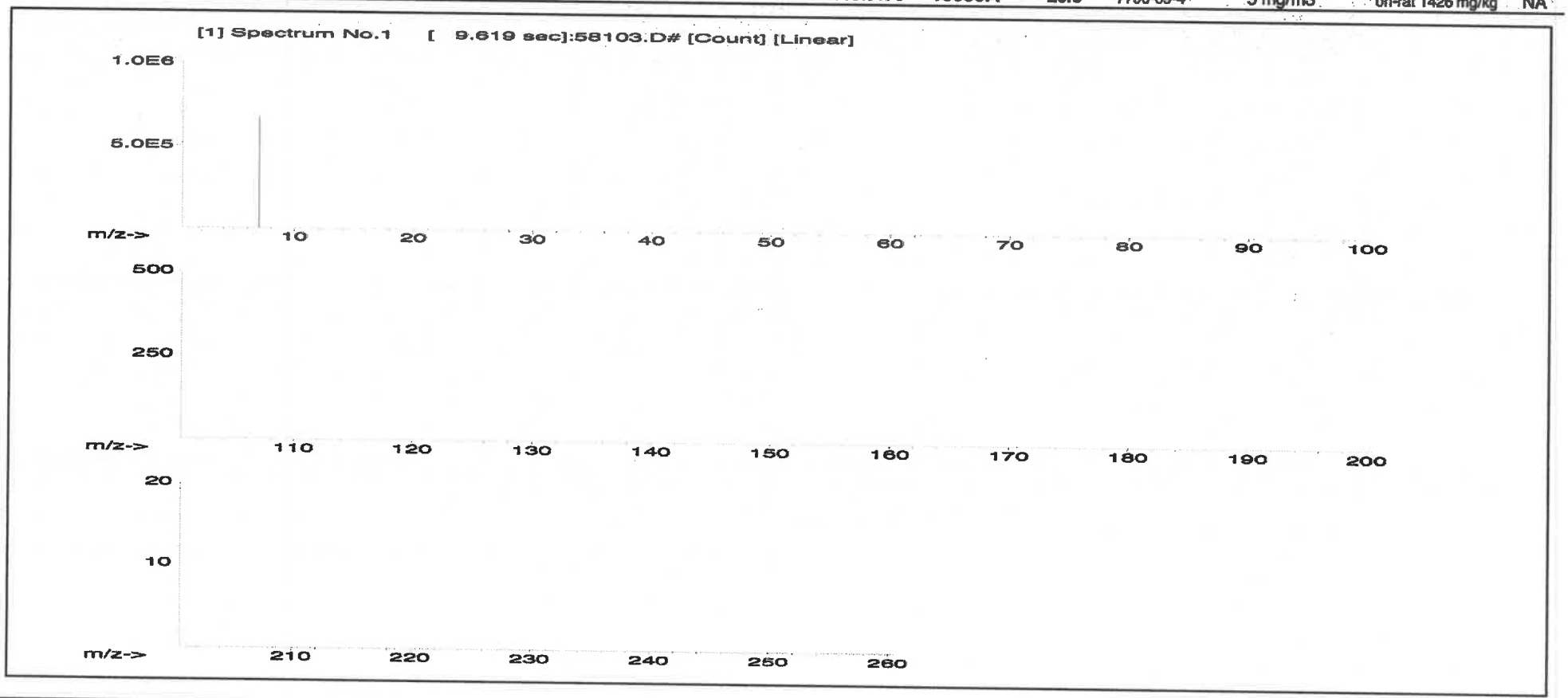
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (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. 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)

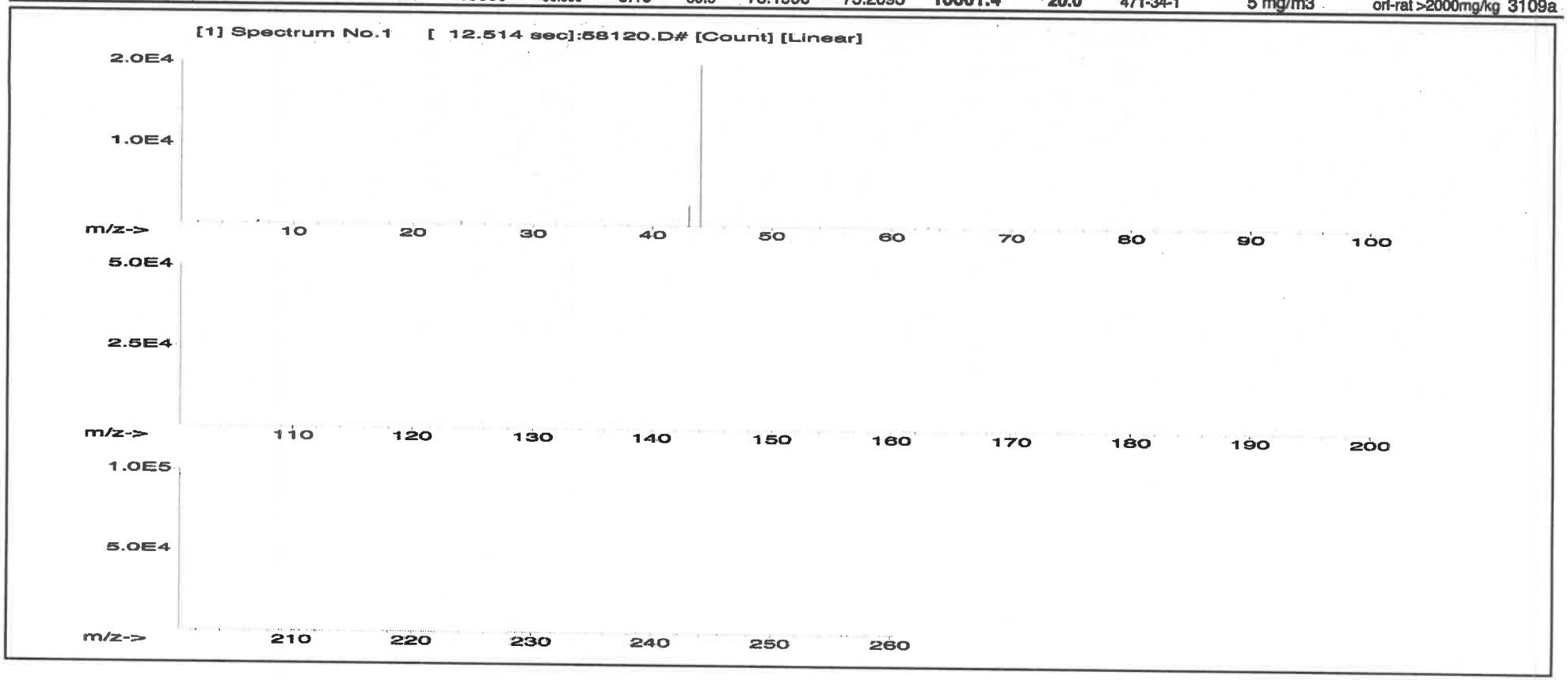
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

		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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* 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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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

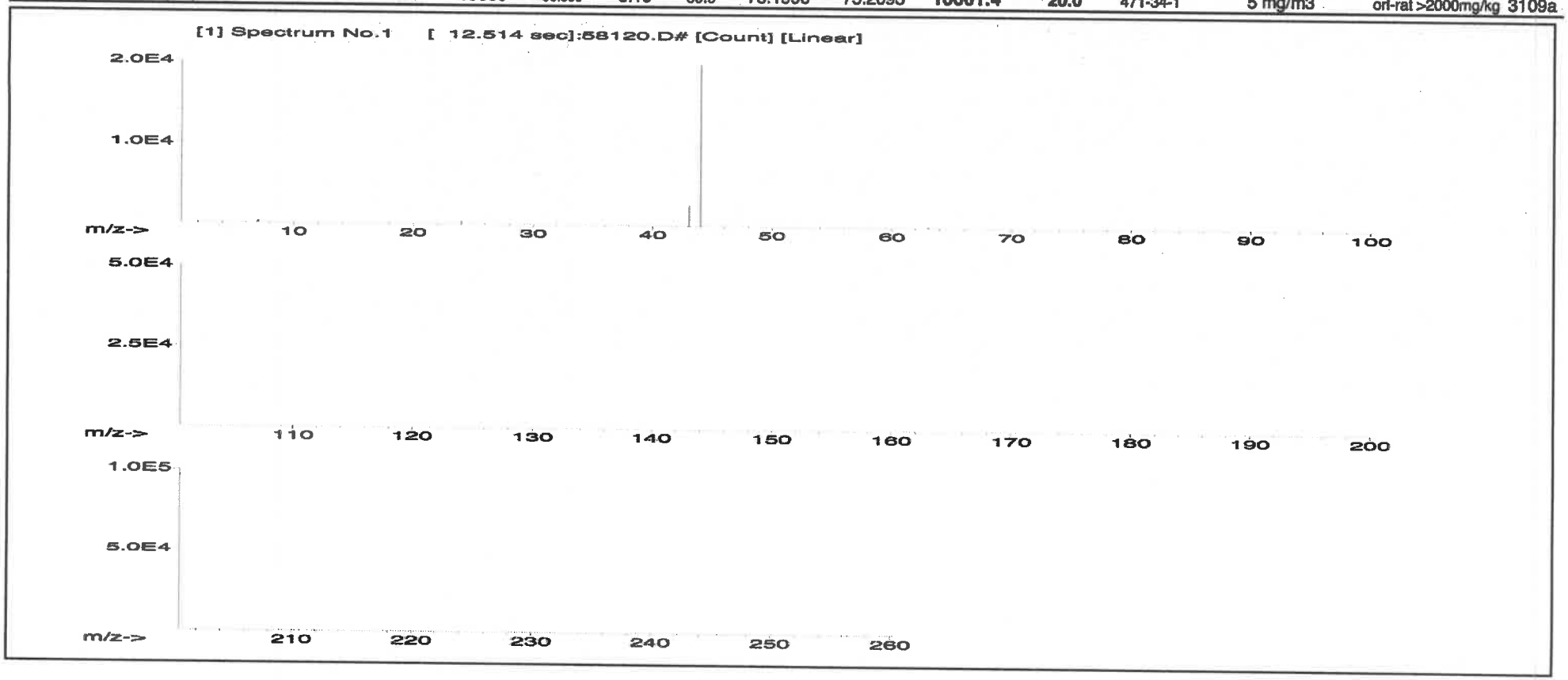
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 ± 0.058 Flask Uncertainty

		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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MS513 R:03/17/23 BE

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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

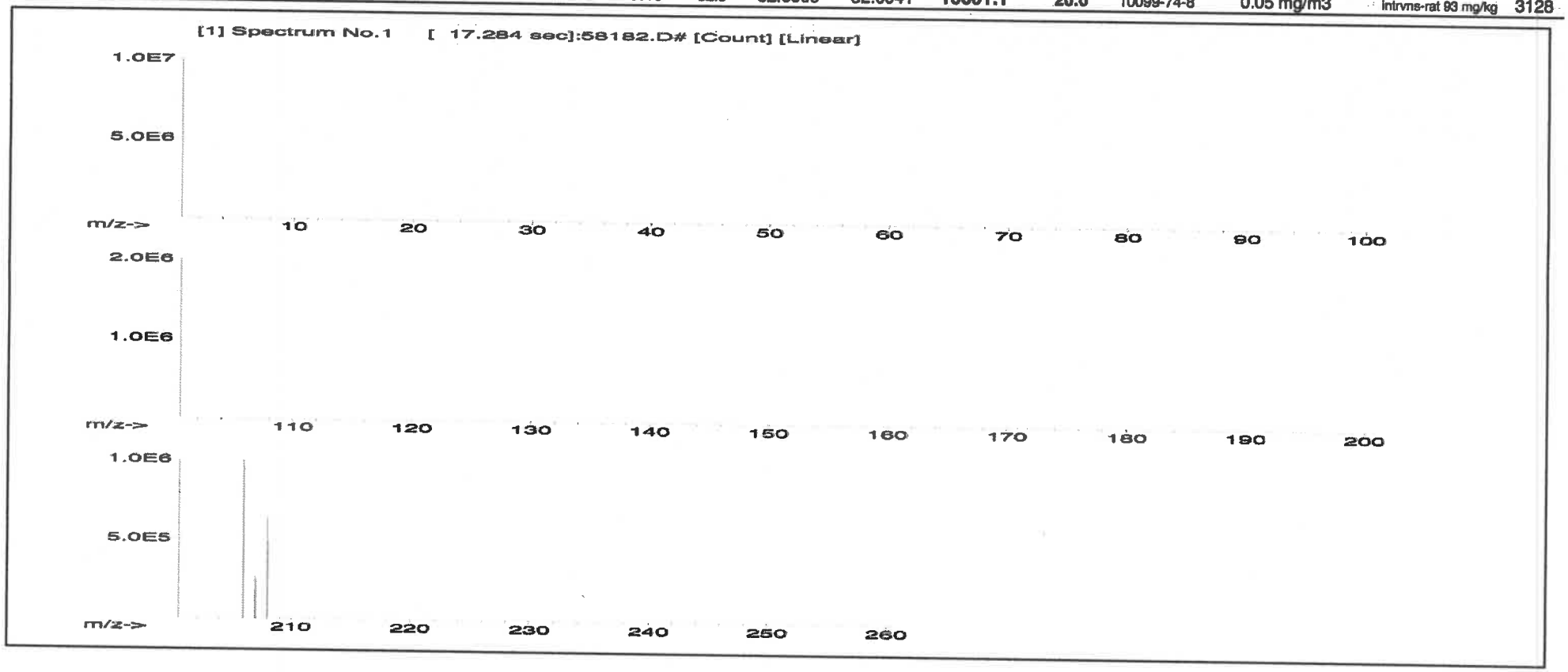
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

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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M5514 , M5515 R: 03/17/23

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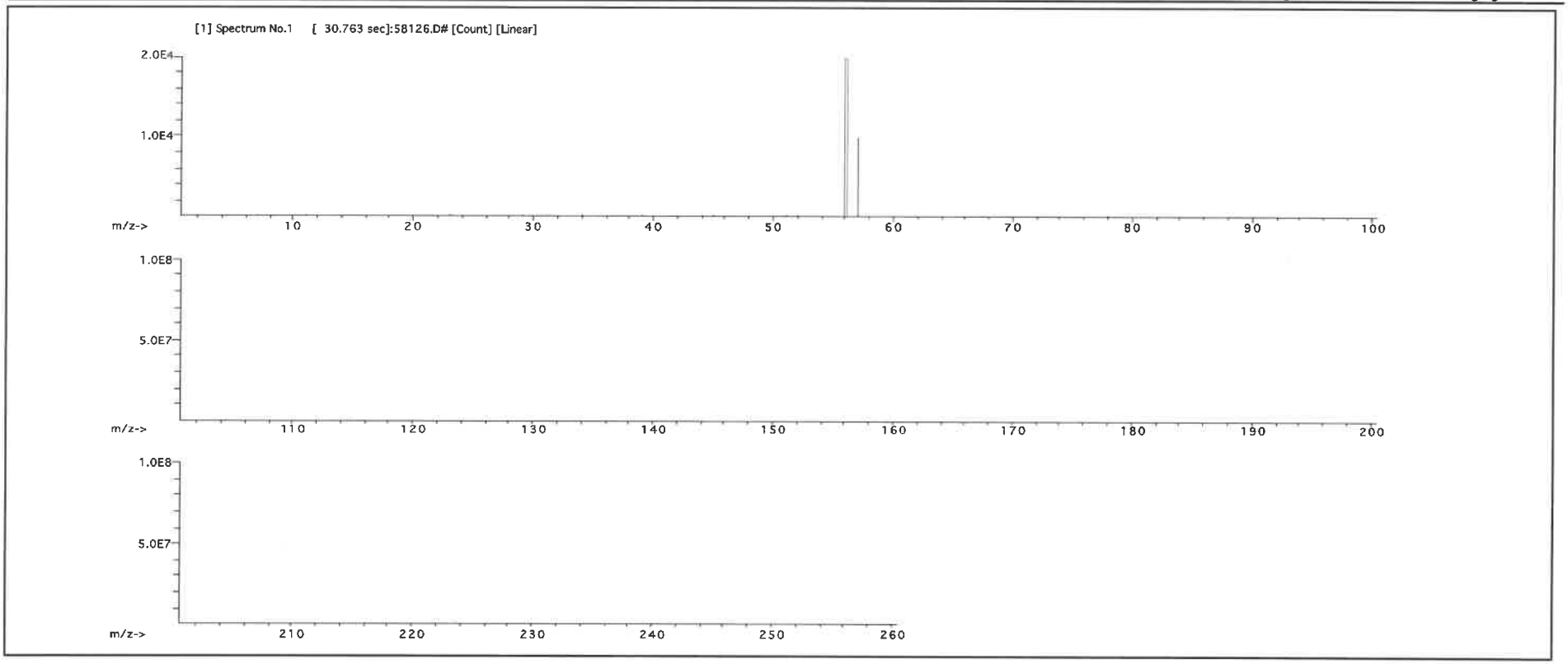
CERTIFIED WEIGHT REPORT:

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.
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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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M519. M520 (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

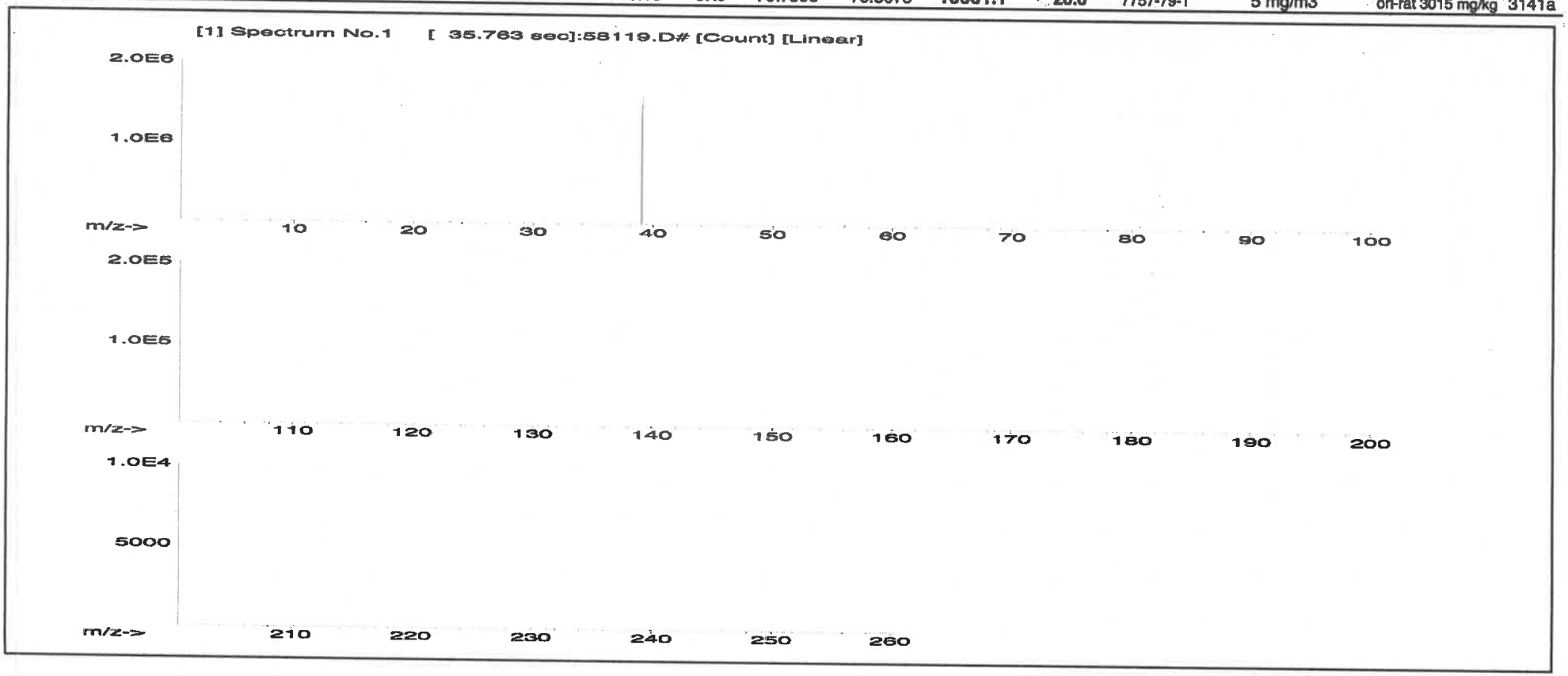
Lot #		
Solvent: 20510011		Nitric Acid
2%	60.0 (mL)	Nitric Acid

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:

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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M5658 R ! 8/25/23

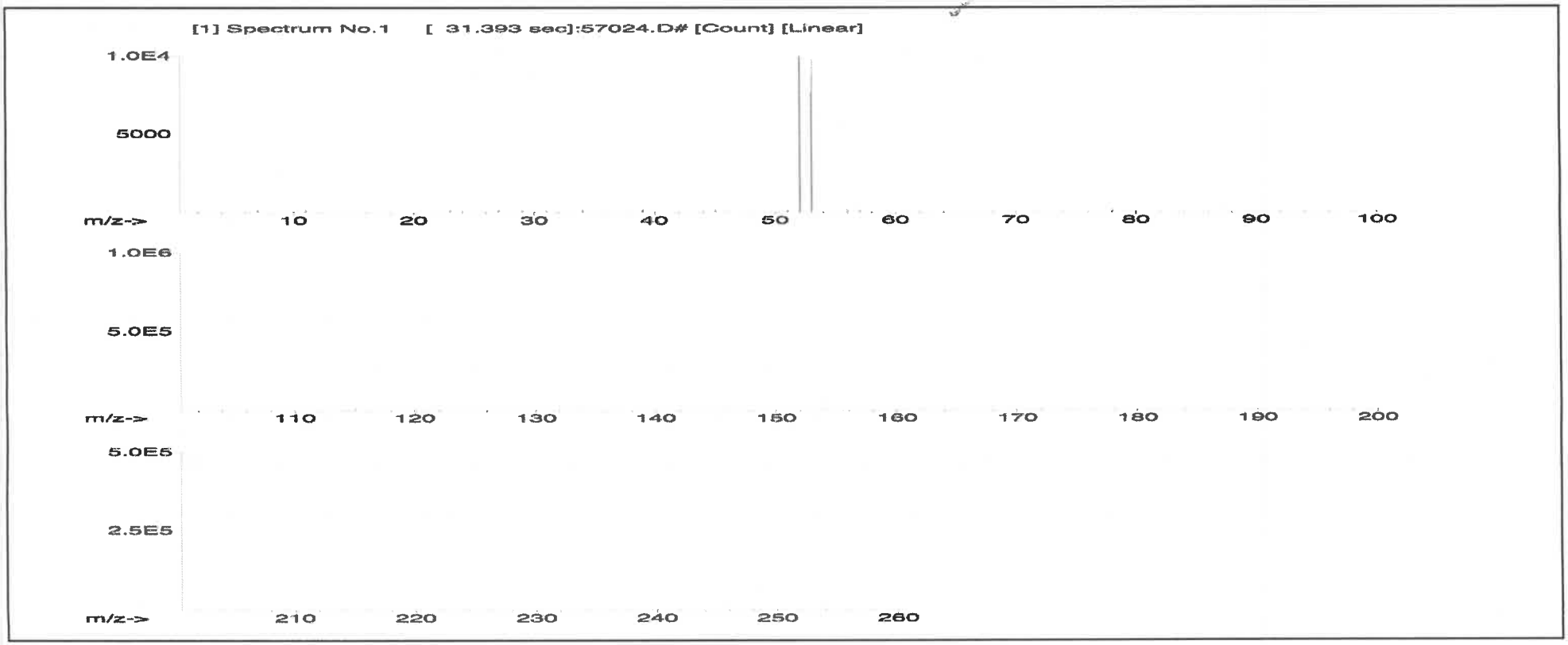
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CERTIFIED WEIGHT REPORT:

		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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* 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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M5697 R: 10/27/23

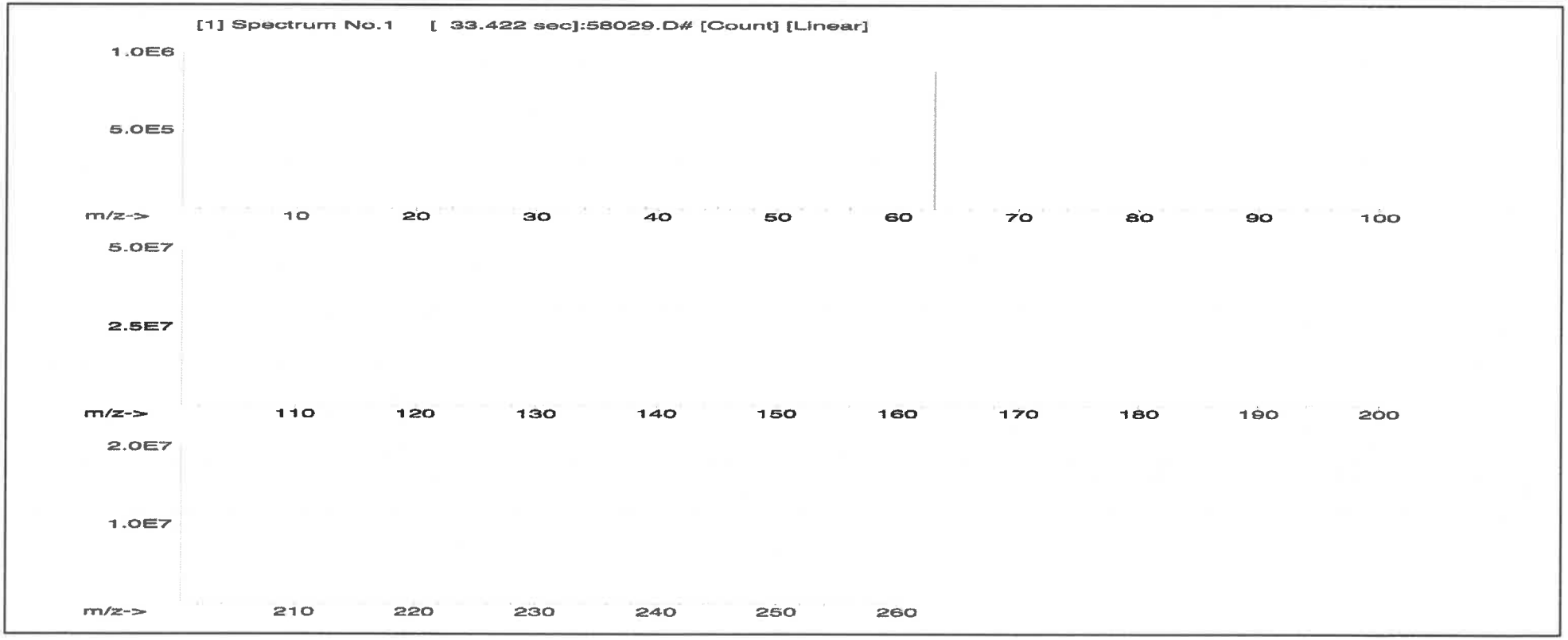
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CERTIFIED WEIGHT REPORT:

		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:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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M5648 R: 10/27/23

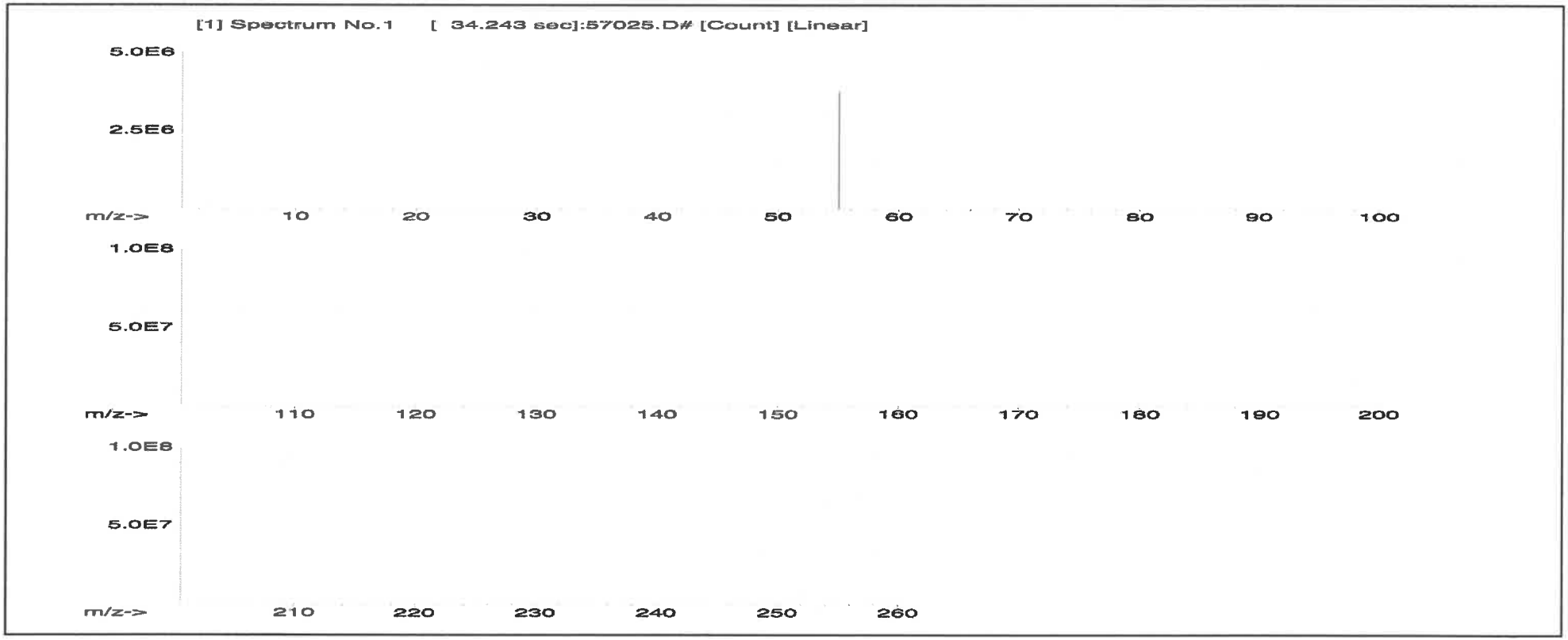
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CERTIFIED WEIGHT REPORT:

		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:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the balances that are calibrated with weights traceable to NIST (see above).
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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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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

M5768, M5769 (BP) R: 1/3/24

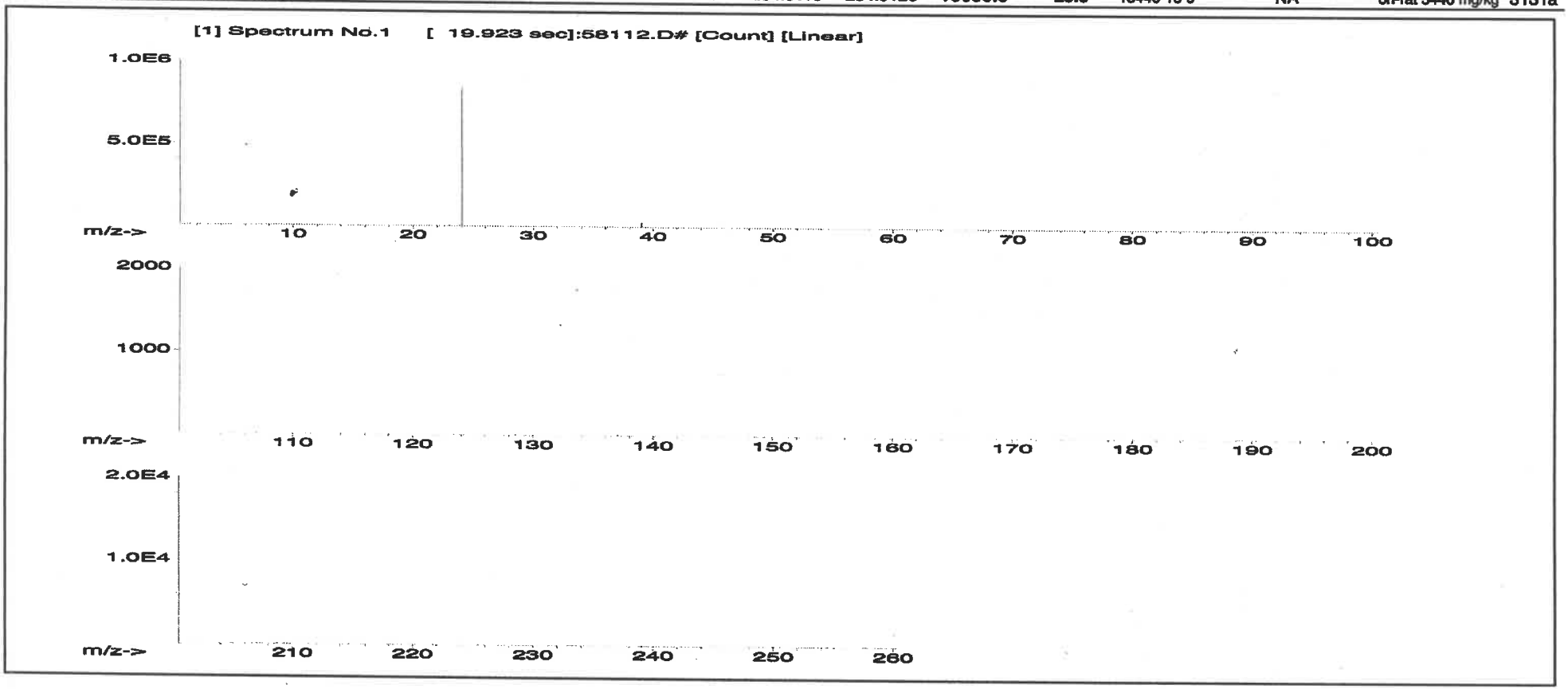
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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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

M5768, M5769 (BP) R: 1/3/24

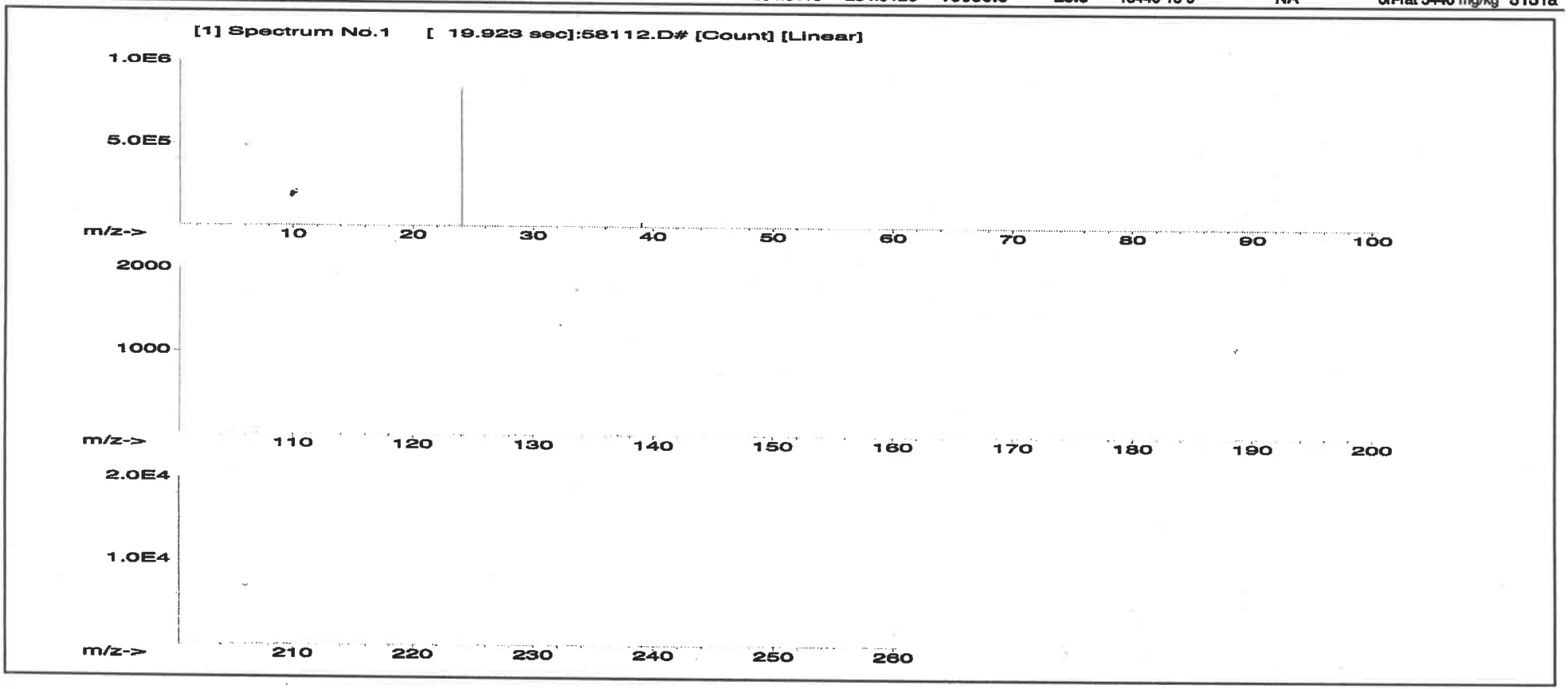
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* 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: 02/09/24 M5798

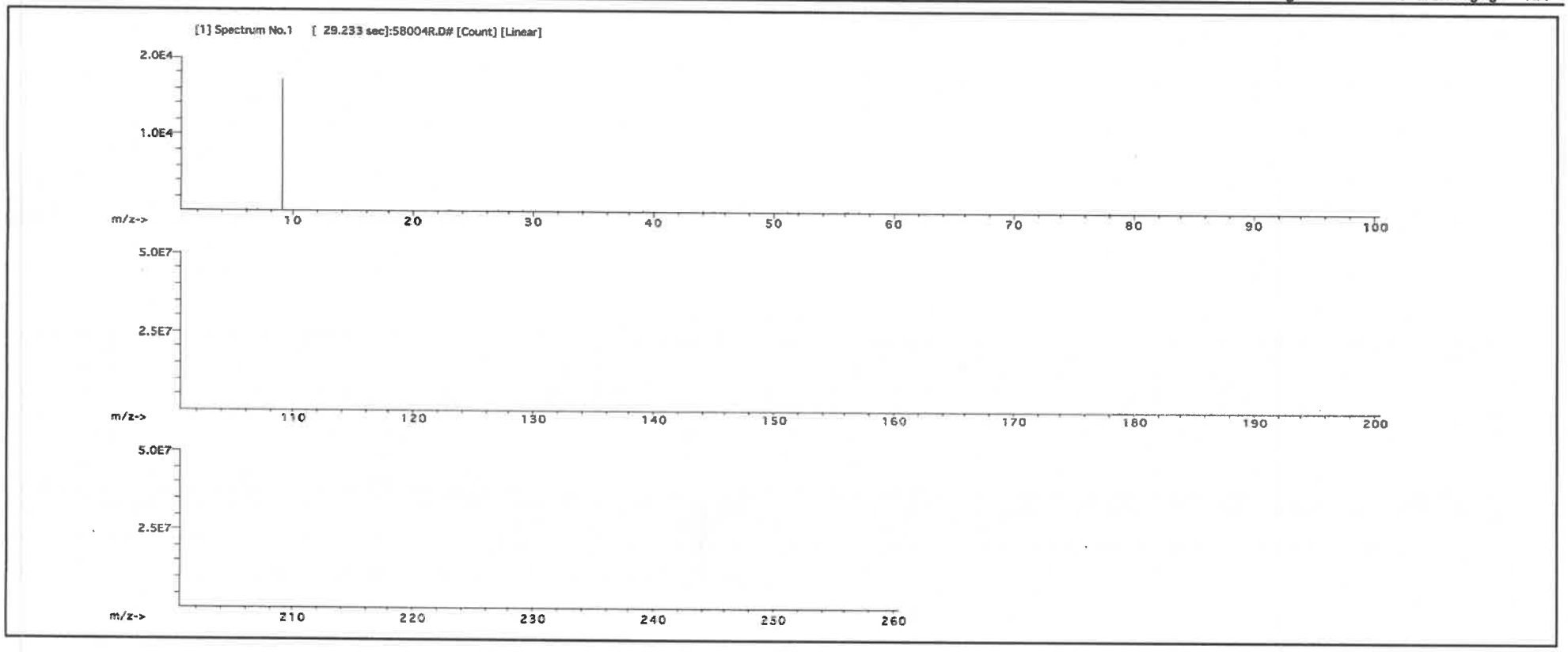
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

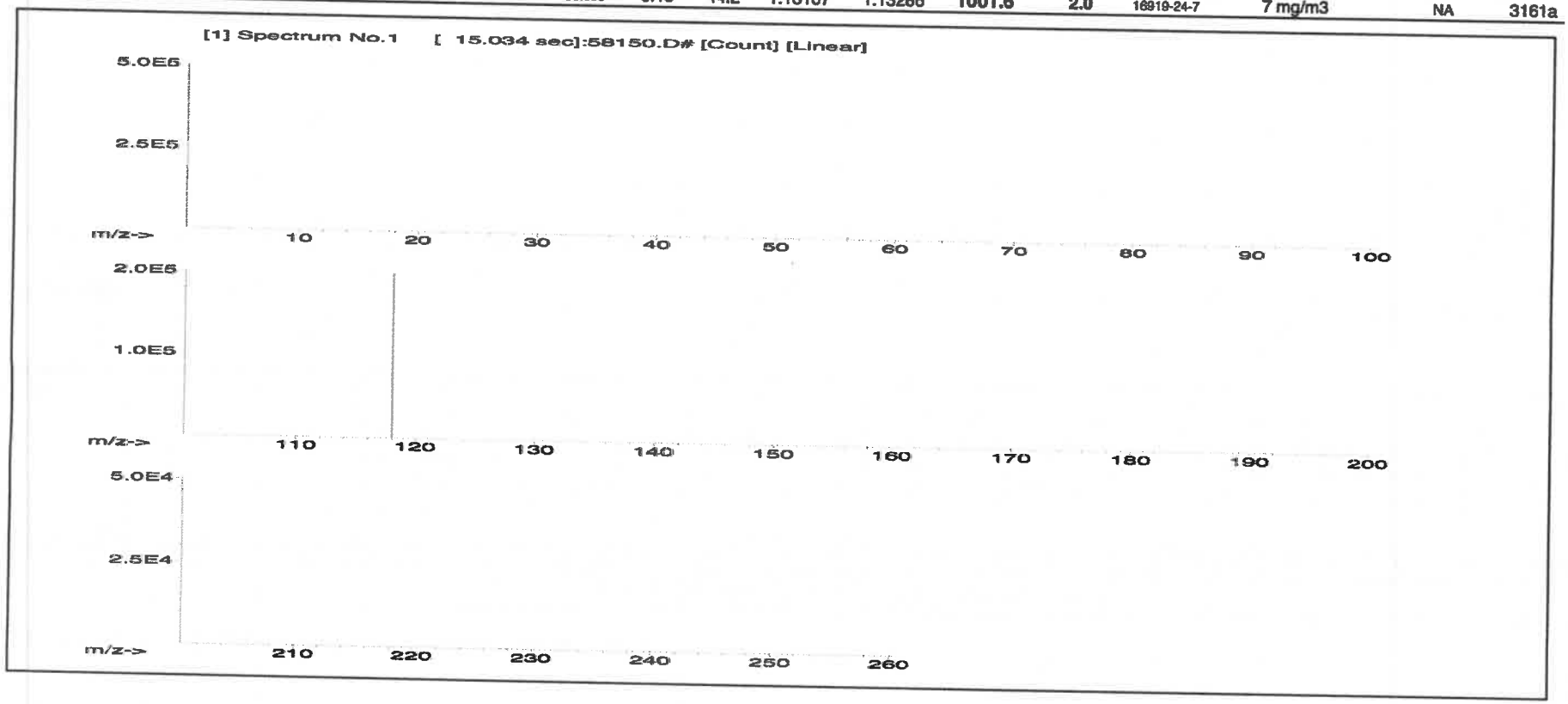
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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:

* 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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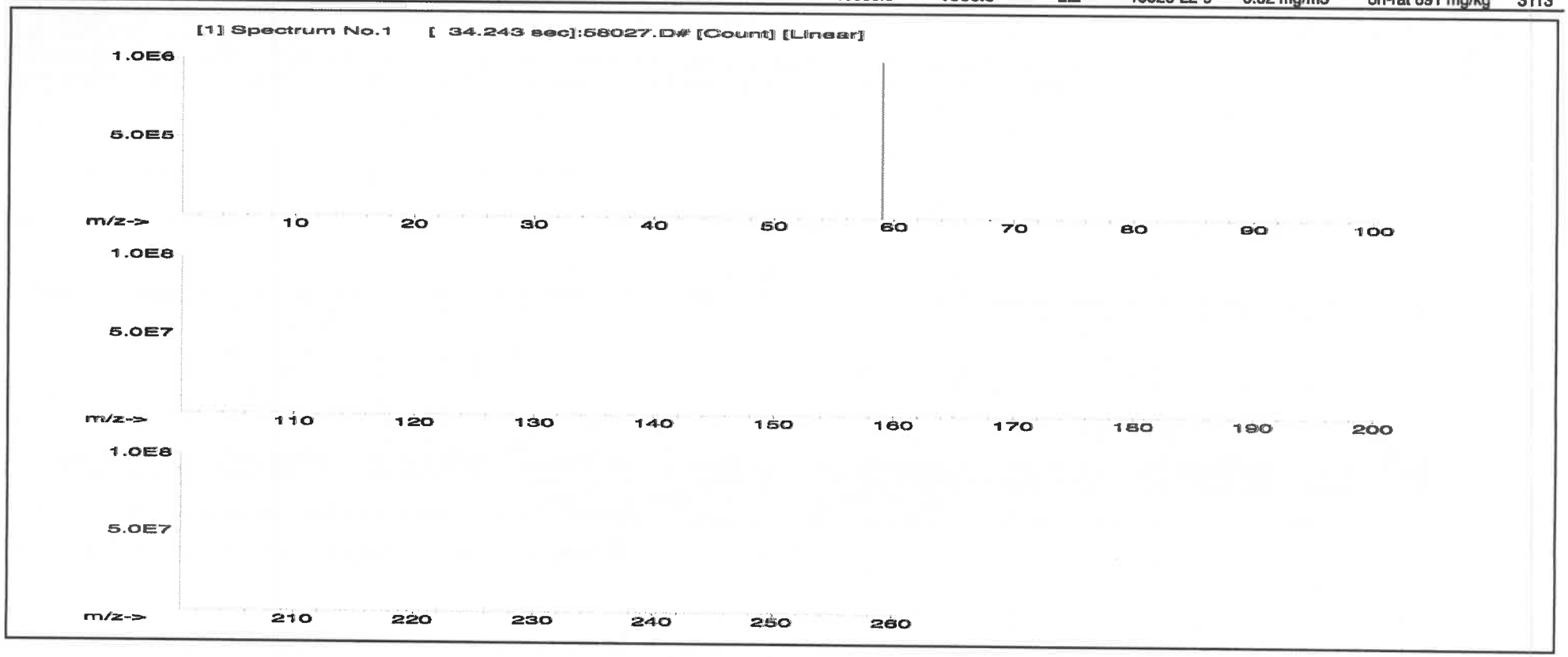
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CERTIFIED WEIGHT REPORT:

		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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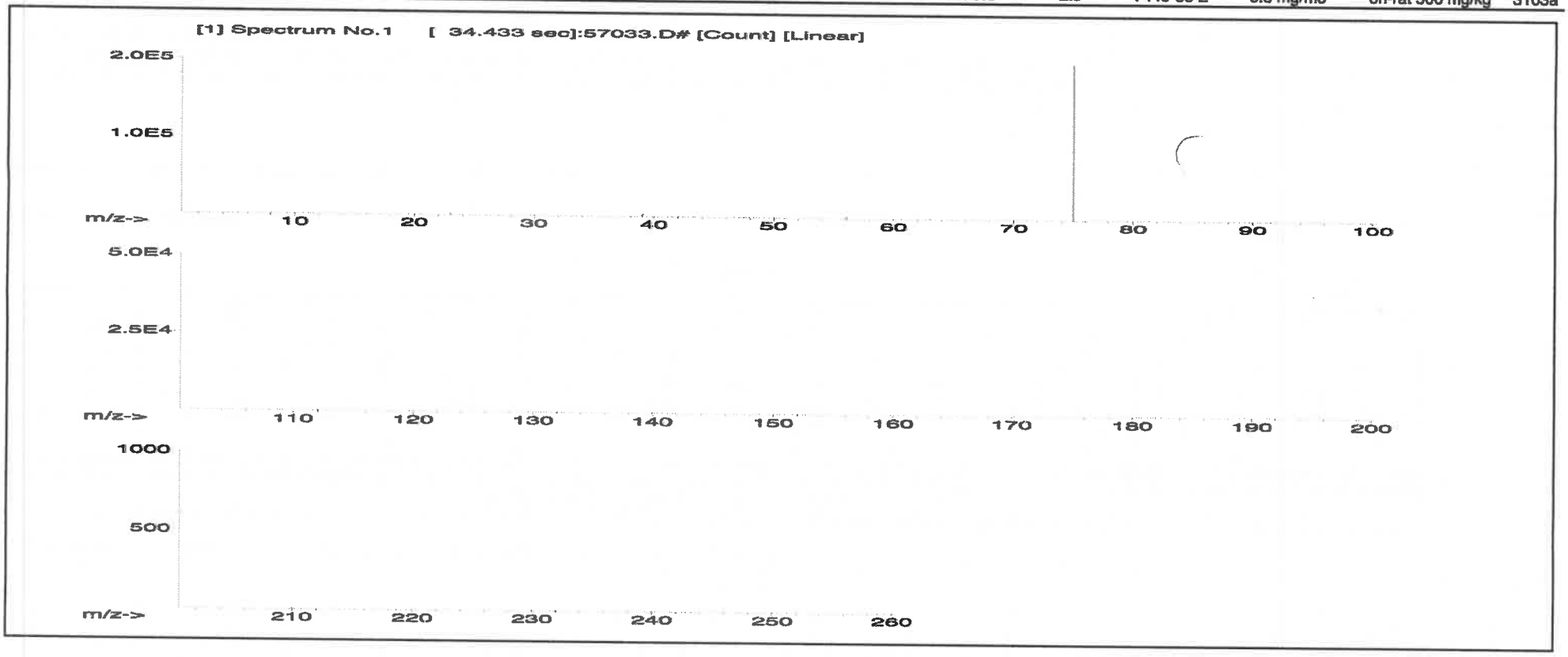
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CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	**2.0**	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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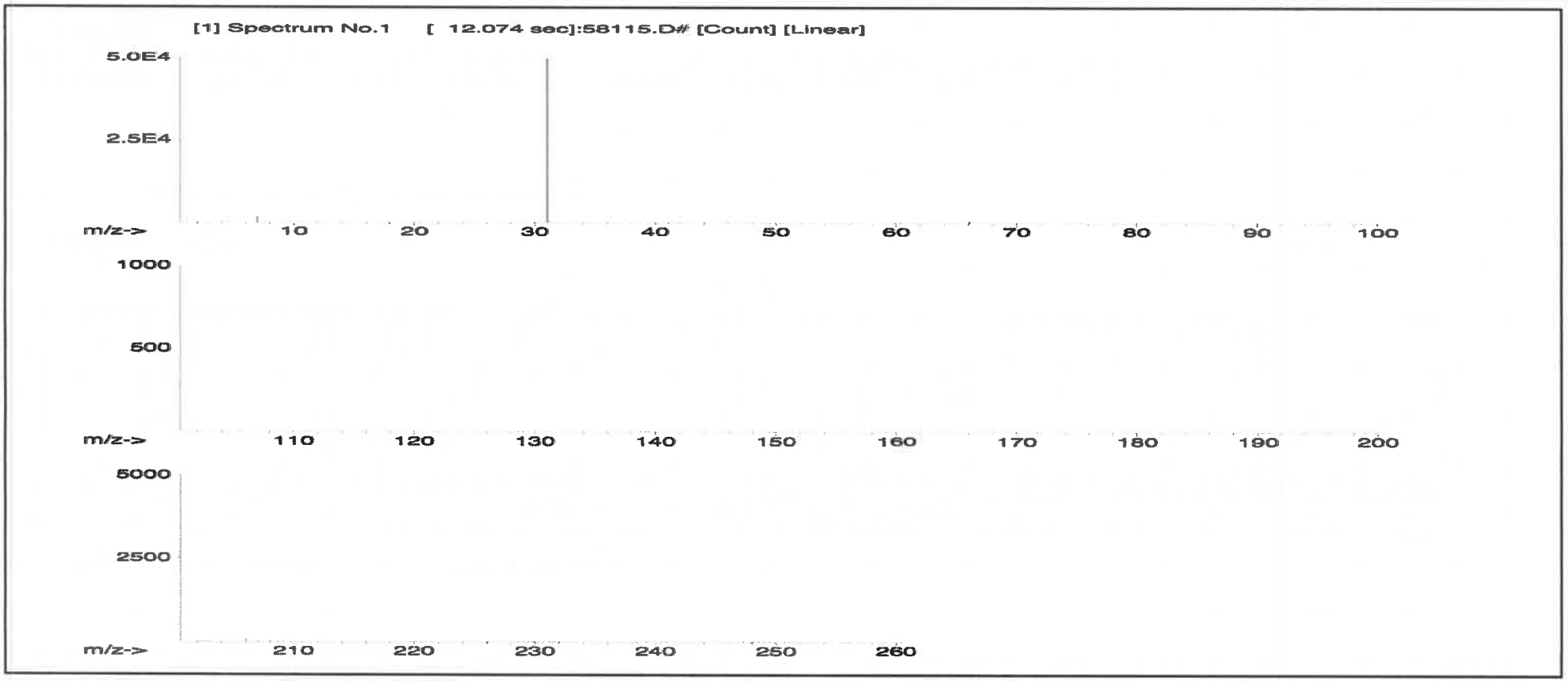
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CERTIFIED WEIGHT REPORT:

			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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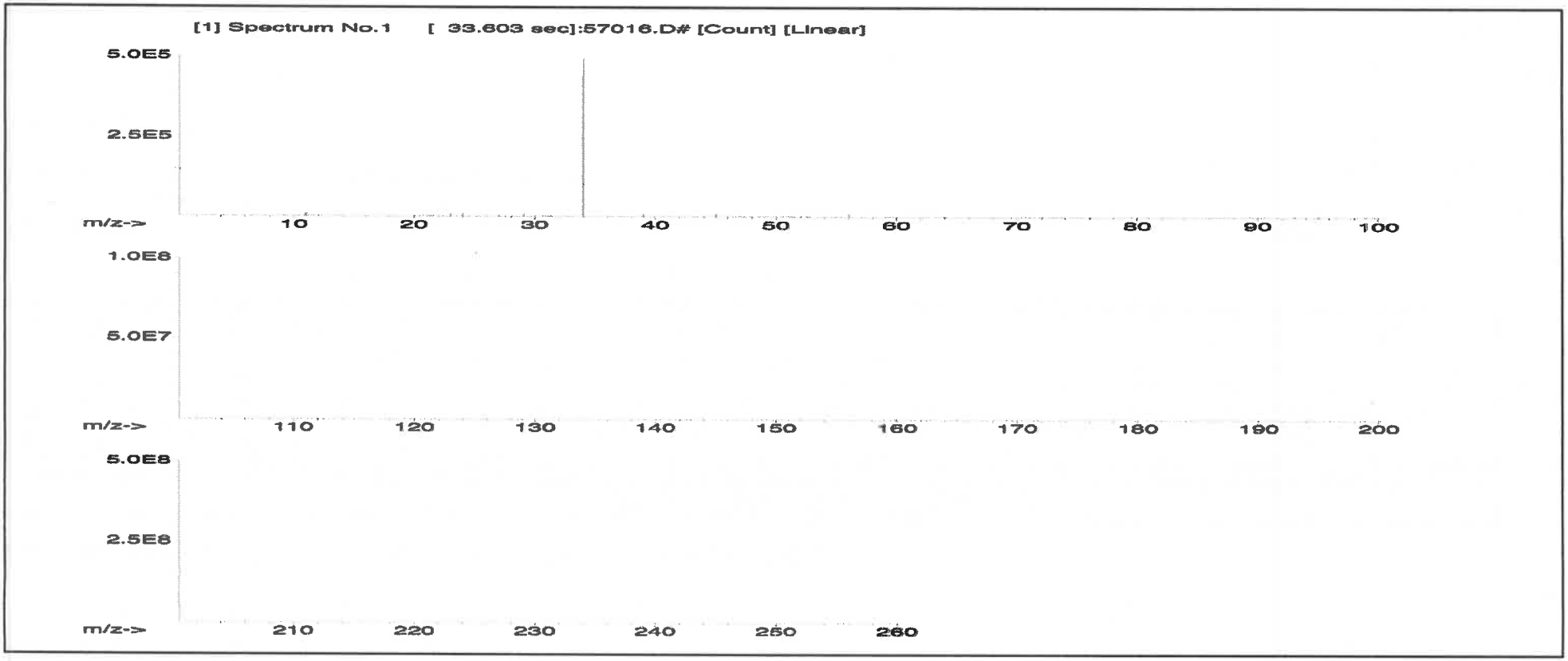
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CERTIFIED WEIGHT REPORT:

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:



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* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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CERTIFIED WEIGHT REPORT:

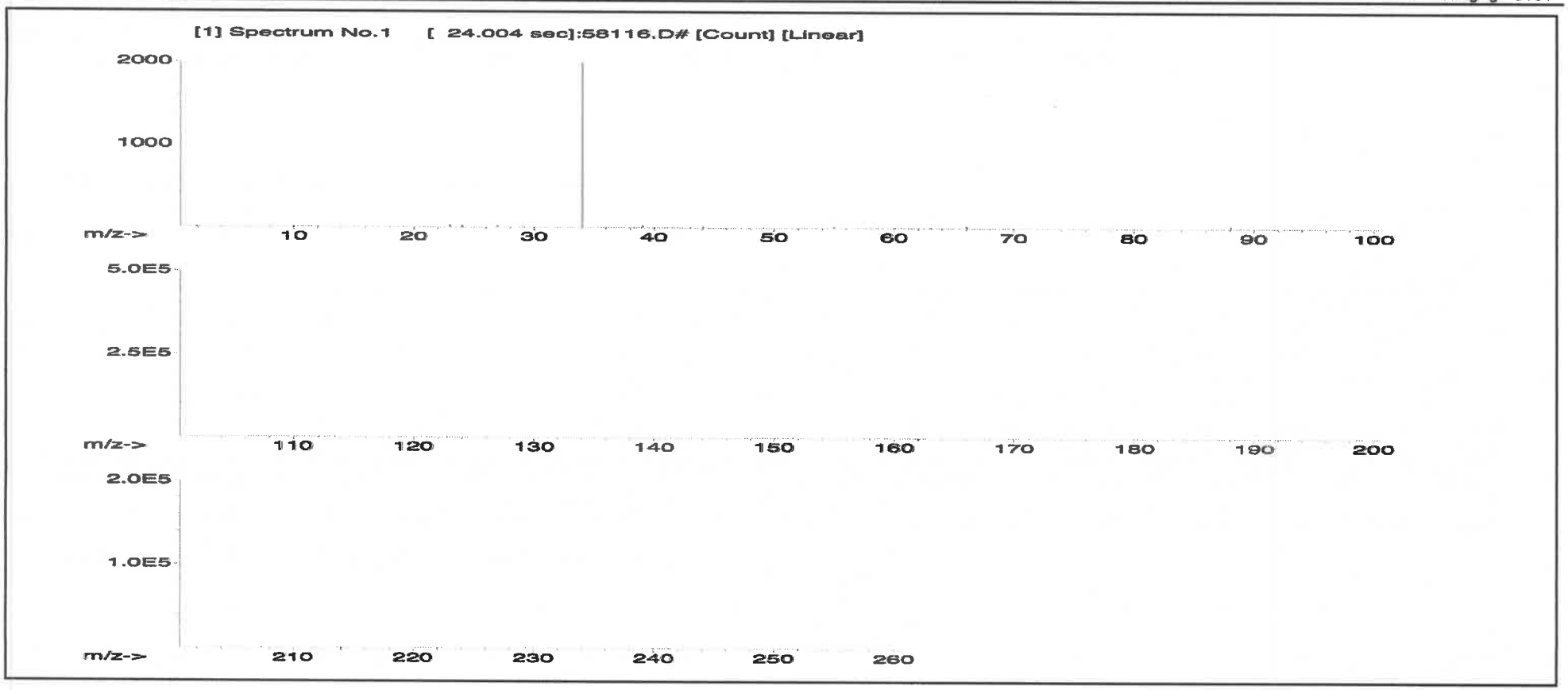
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

R: 02/09/24 M.5818

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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

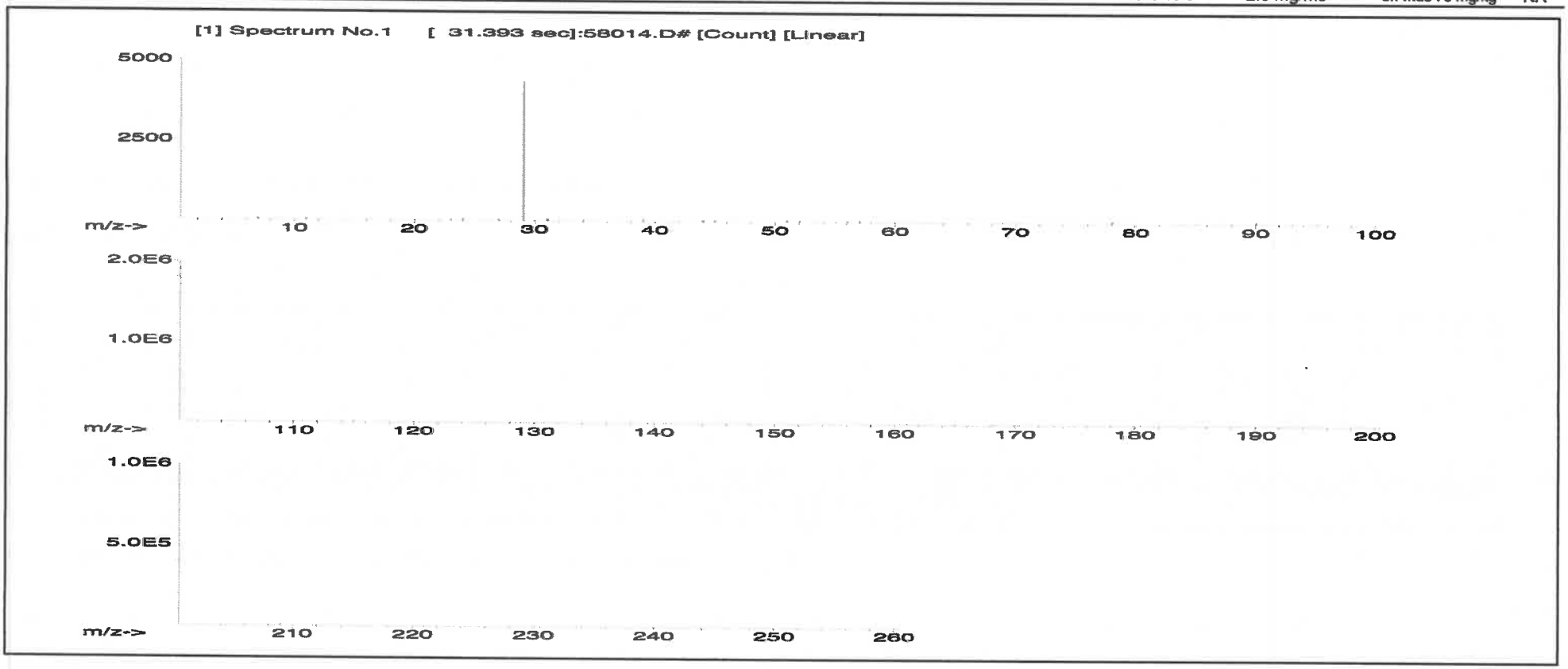
Aleah O'Brady

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:

* 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

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

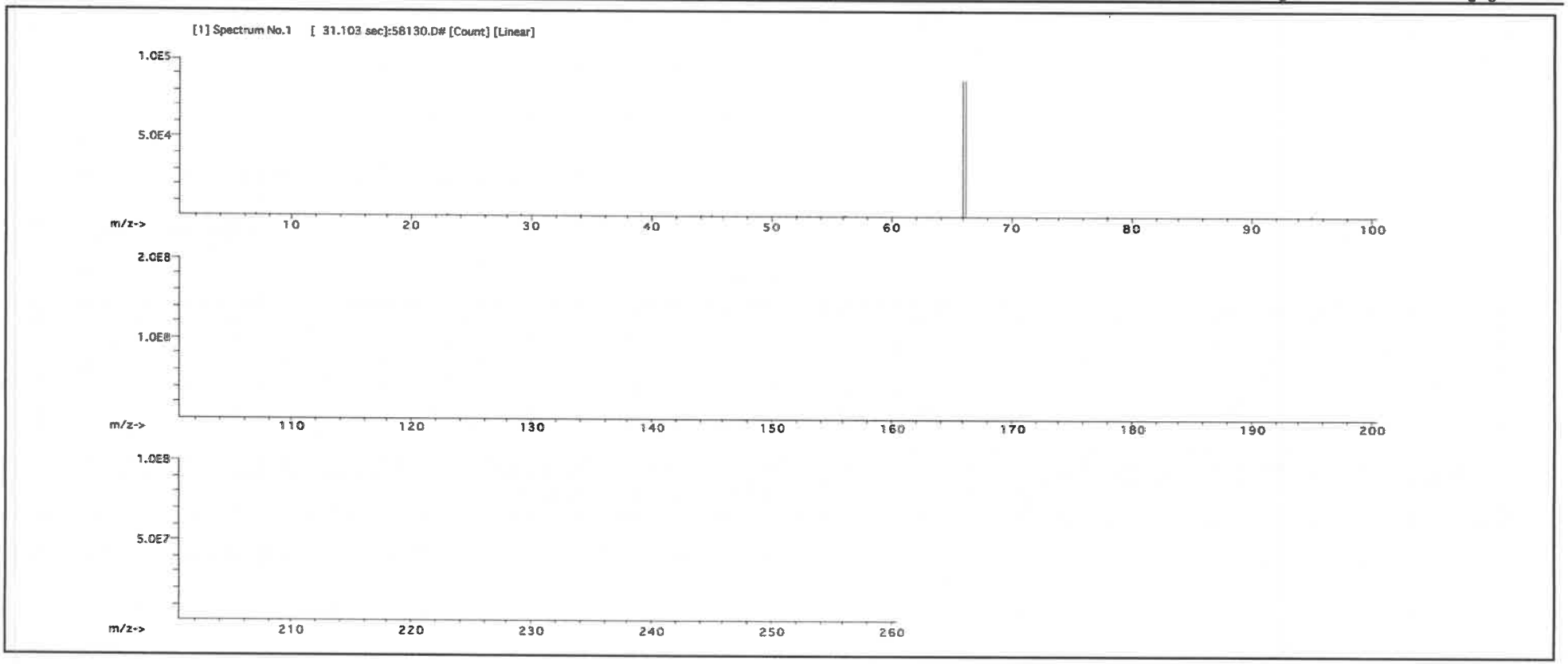
Weight shown below was diluted to (mL): 3000.4 0.06 Flask Uncertainty

		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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Certified Reference Material CRM

R: 02/09/24 M5820

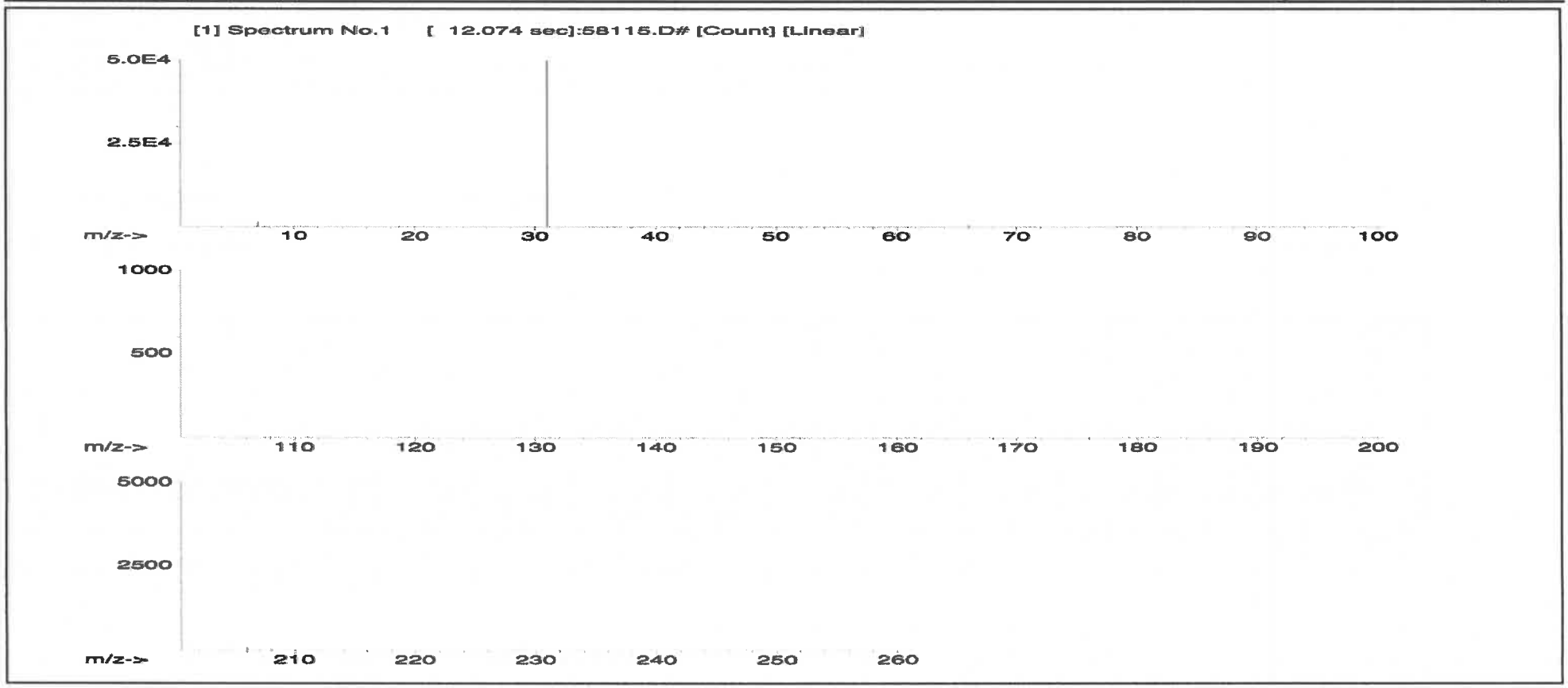
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CERTIFIED WEIGHT REPORT:

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:

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 20, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 20, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5960 KK R. 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57028
Lot Number: 041124
Description: Nickel (Ni)

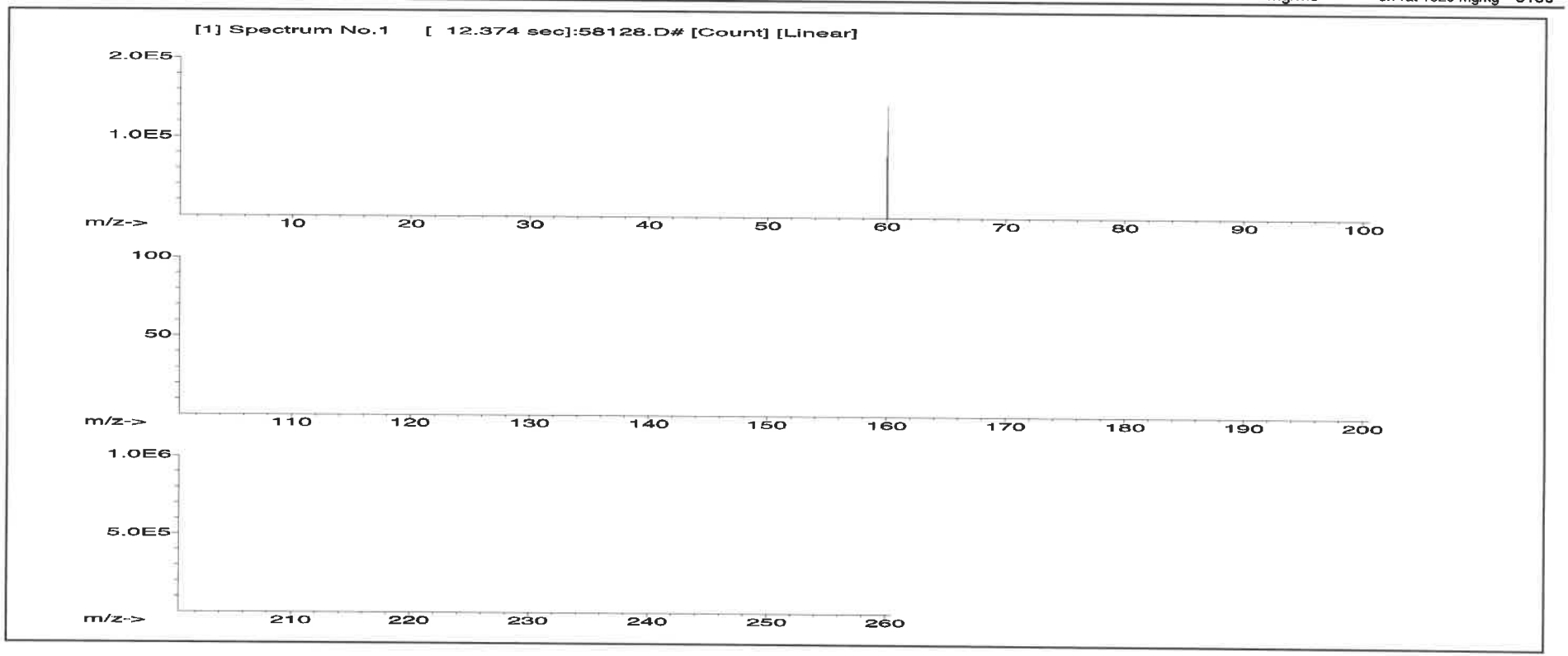
Expiration Date: 041127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 249.85

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.002 Flask Uncertainty

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	**Actual Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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.

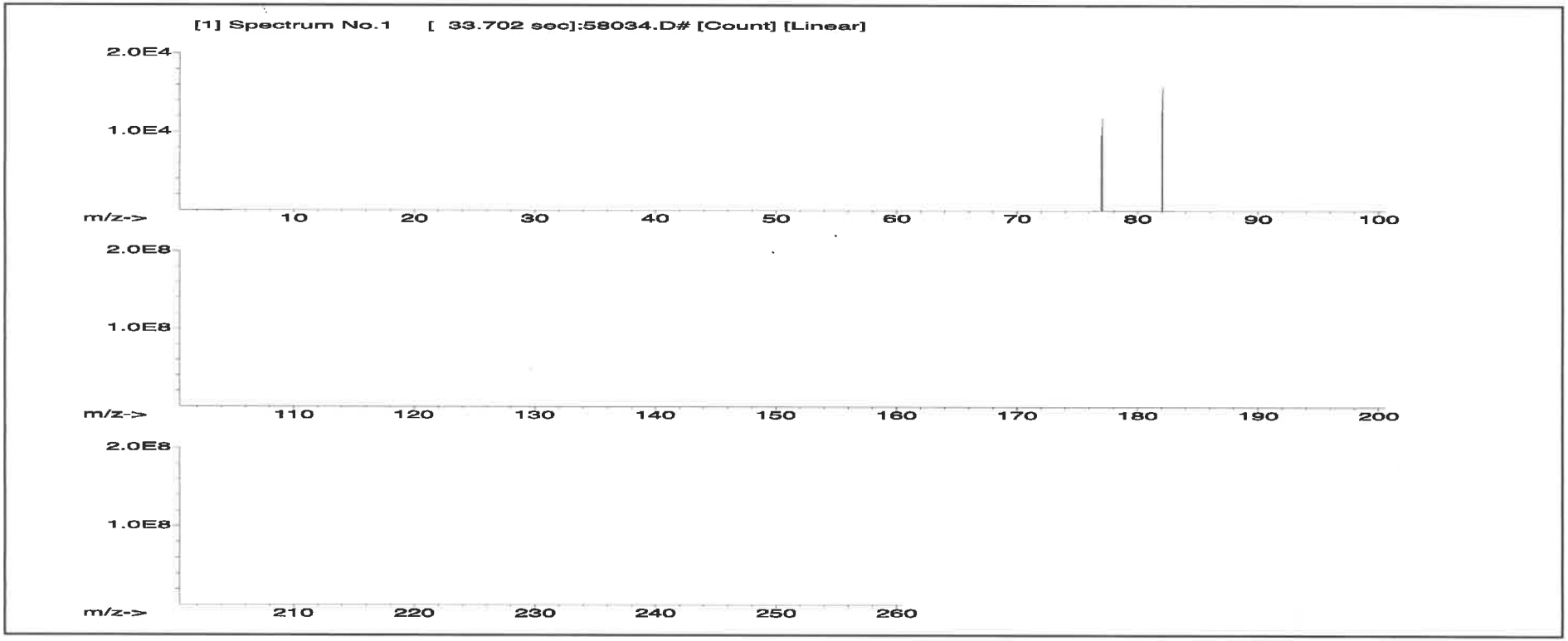
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



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

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

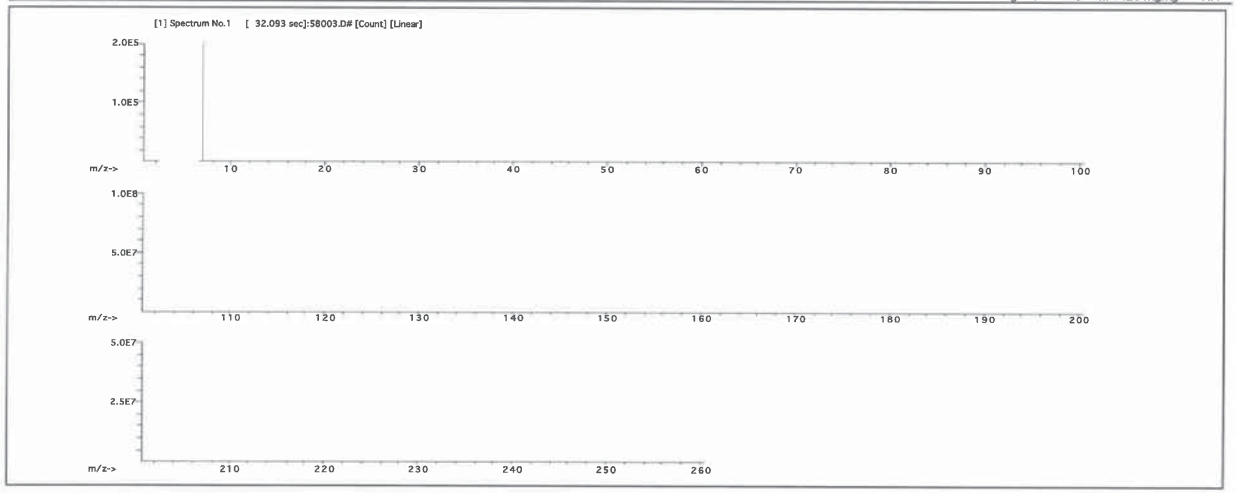
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**57003**	24002546	Nitric Acid
Lot Number:	**062124**		
Description:	**Lithium (Li)**		
		2.0%	5.0 (mL) Nitric Acid
Expiration Date:	062127		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05 Balance Uncertainty	
Volume shown below was diluted to (mL):	250.11	0.016 Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certificate of Analysis

M5976, M5977
R: 02/22/24

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/24

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO_3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	Ti Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/u_{char\ i}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma(w_i)^2\ (u_{char\ i})^2]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

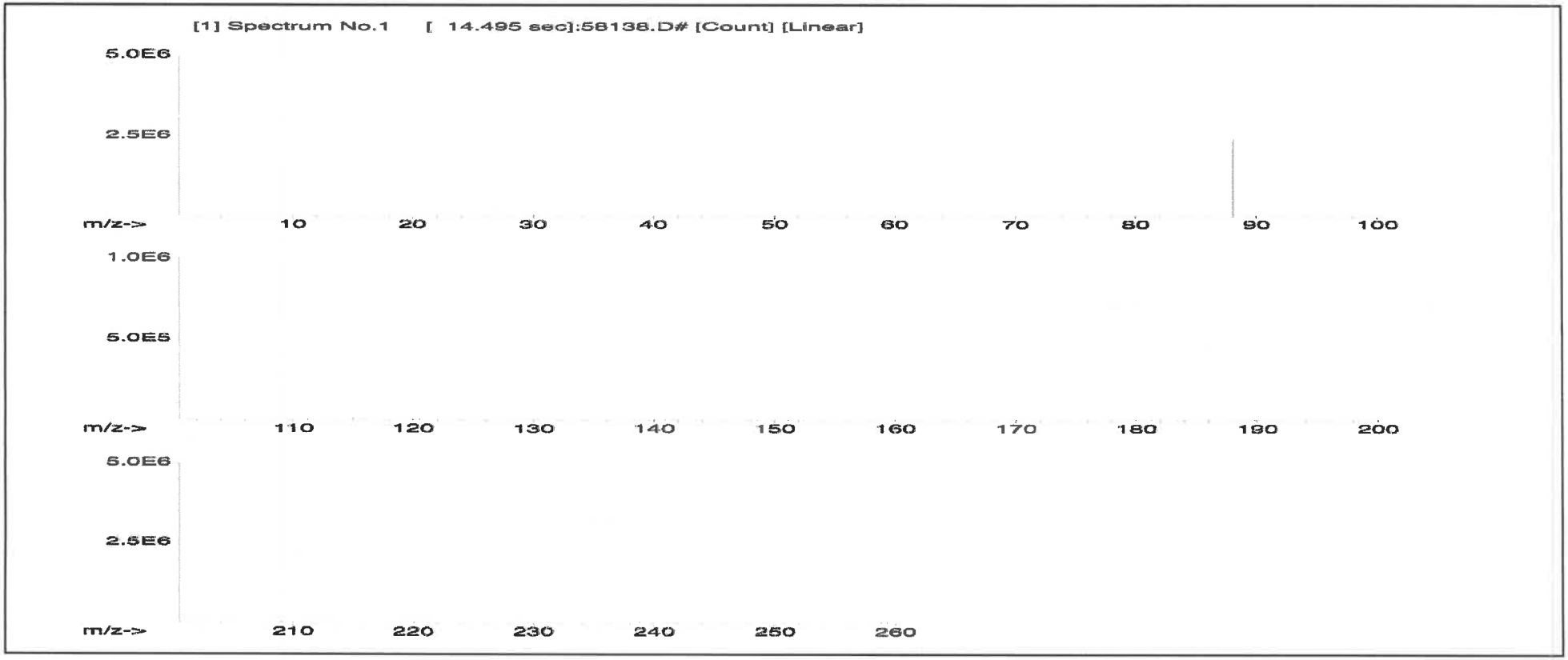
45982 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:	**57038**		**Lot #**		
Lot Number:	**031524**	**Solvent:**	24002546	Nitric Acid	
Description:	**Strontium (Sr)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	031527				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Formulated By:	Benson Chan	031524
Reviewed By:	Pedro L. Rentas	031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/2024
M5999

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-SPK-1
Lot Number:	T2-MEB721963
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Manganese, Nickel, Vanadium, Zinc, Cobalt, 250 µg/mL ea: Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium, Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.00 ± 0.26 µg/mL	Chromium, Cr	200.0 ± 1.1 µg/mL
Cobalt, Co	500.0 ± 2.4 µg/mL	Copper, Cu	250.0 ± 1.0 µg/mL
Iron, Fe	1 000 ± 4 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Silver, Ag	50.00 ± 0.22 µg/mL
Vanadium, V	500.0 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.070 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)\,(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 27, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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 6/21

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

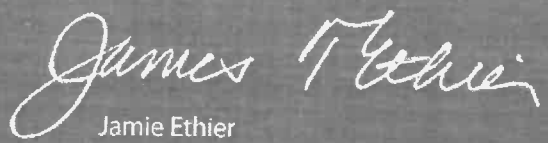
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

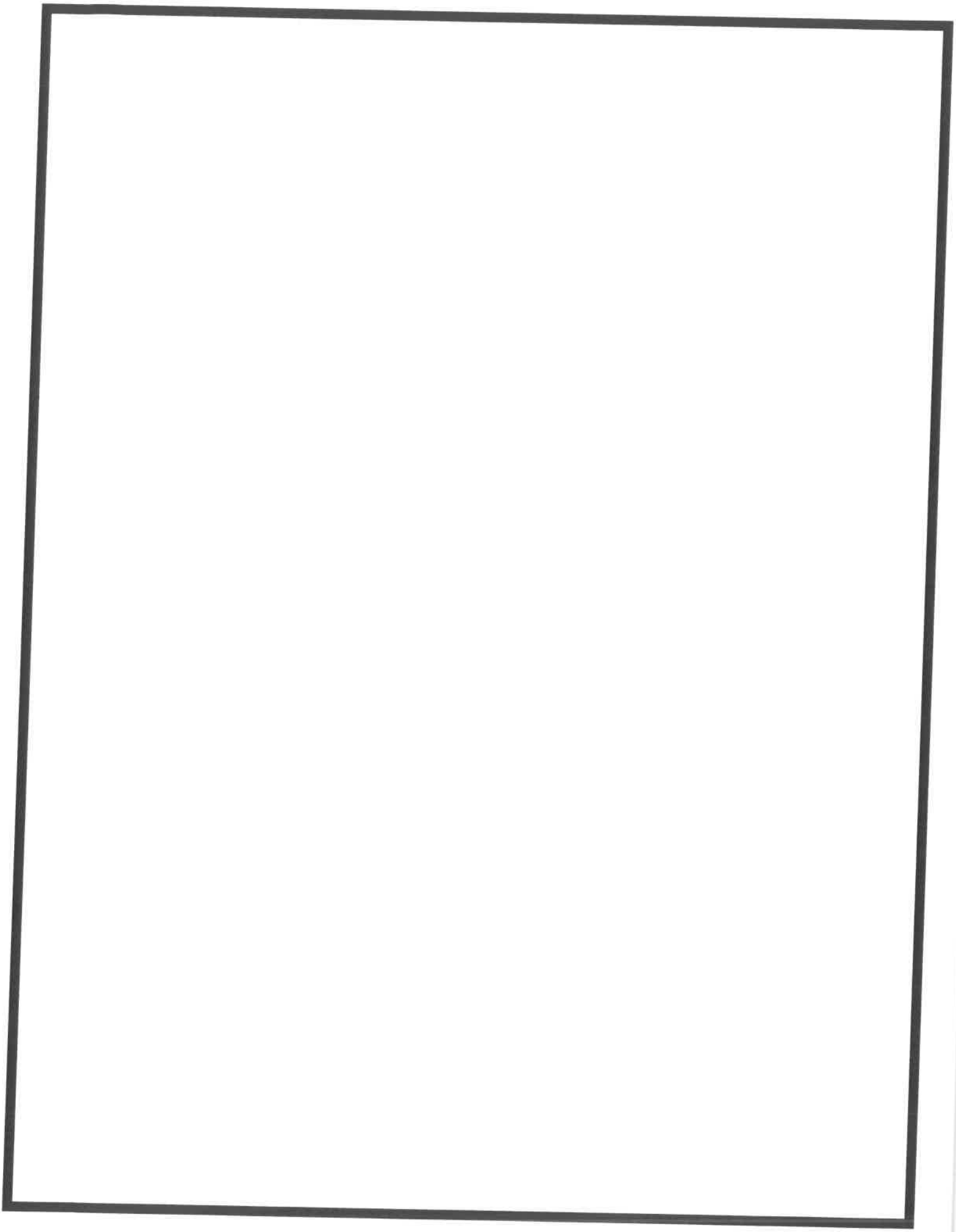
Office and Plant
299 Cedar Lane
Fairless Hills, PA 19030

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

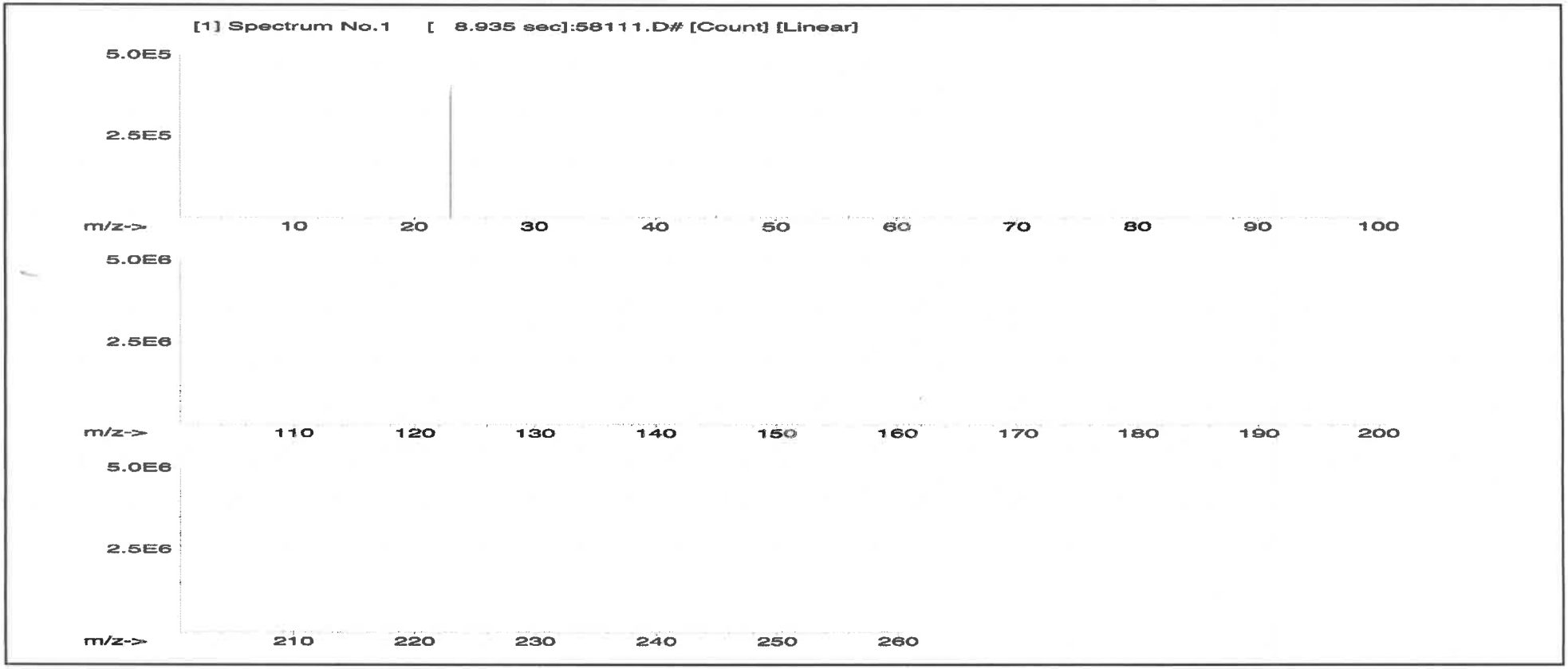
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

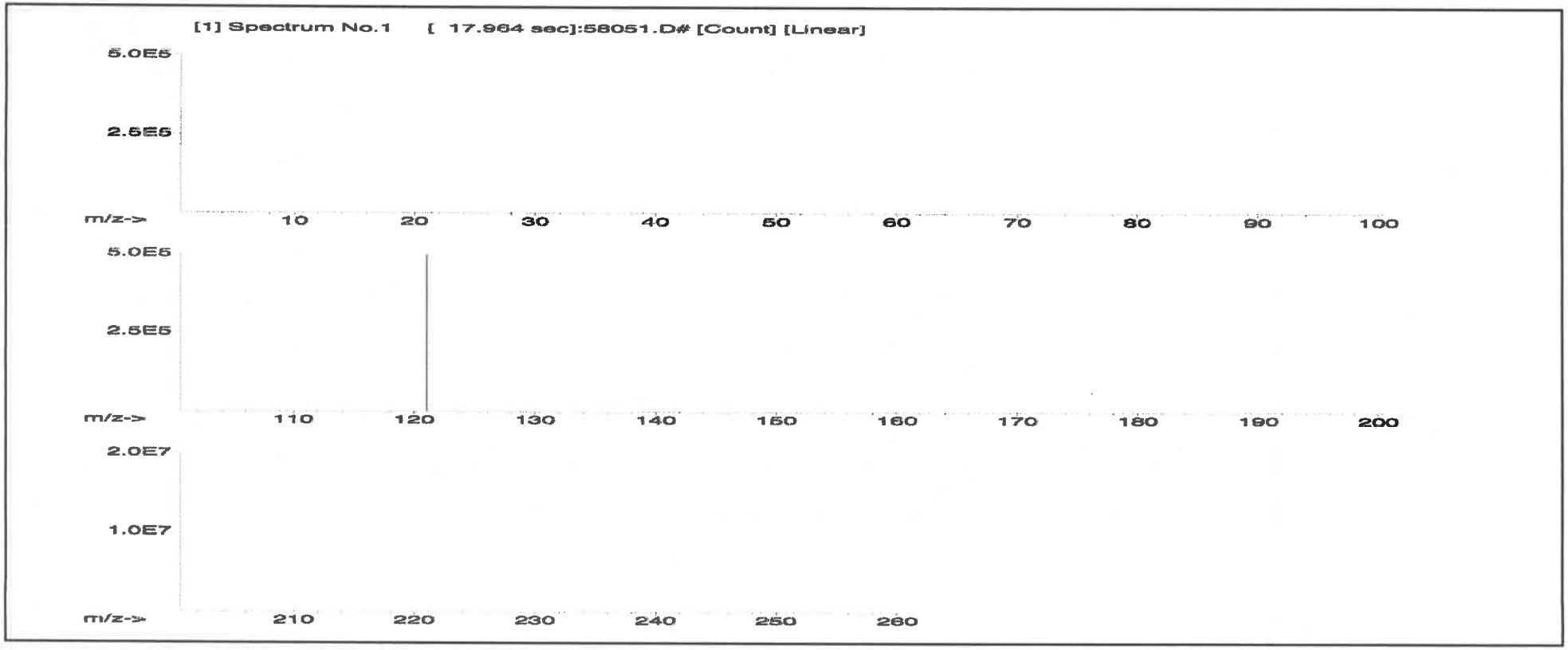
R: 01/03/24 M5802, M5803

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.
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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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M6030

R: 8/5/24

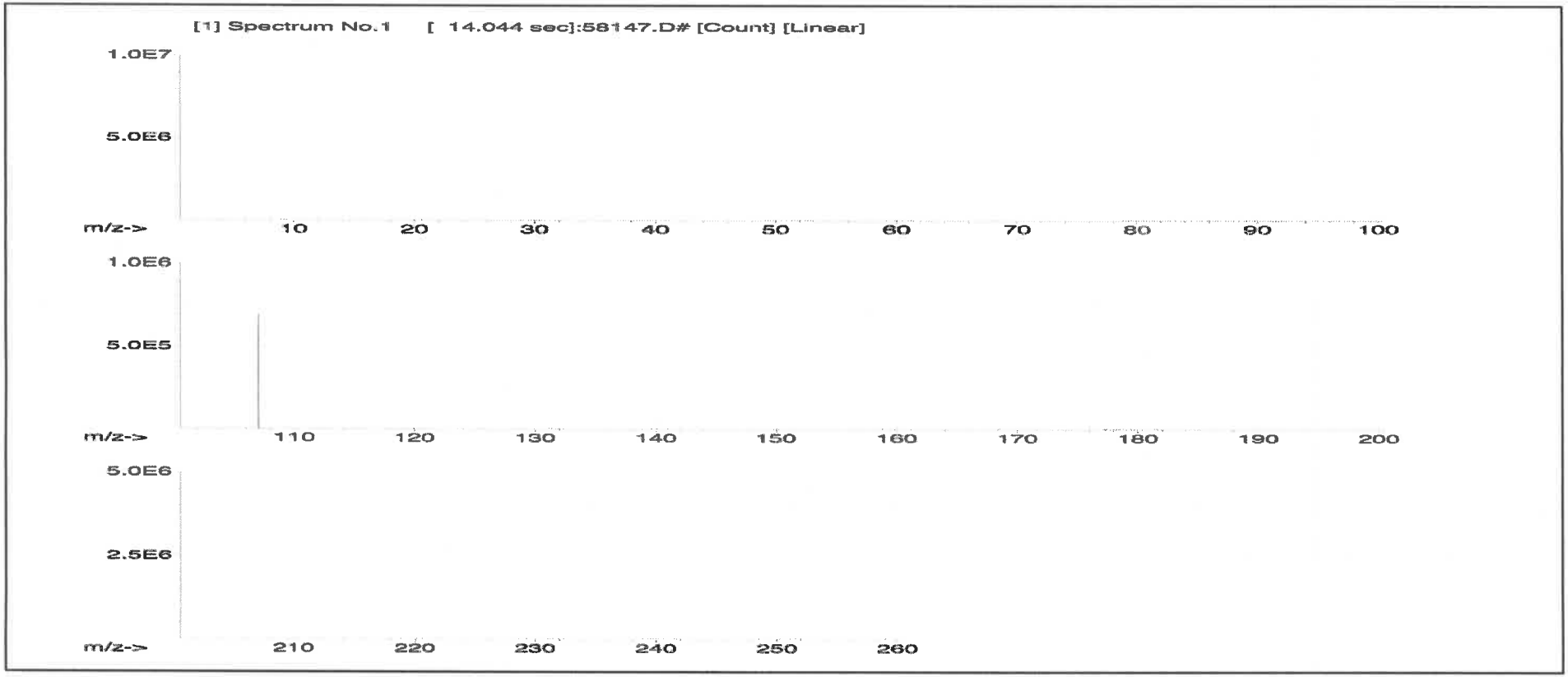
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

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:

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R: 03/16/23 M5473, M5474, M5475, M5476

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CERTIFIED WEIGHT REPORT:

Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

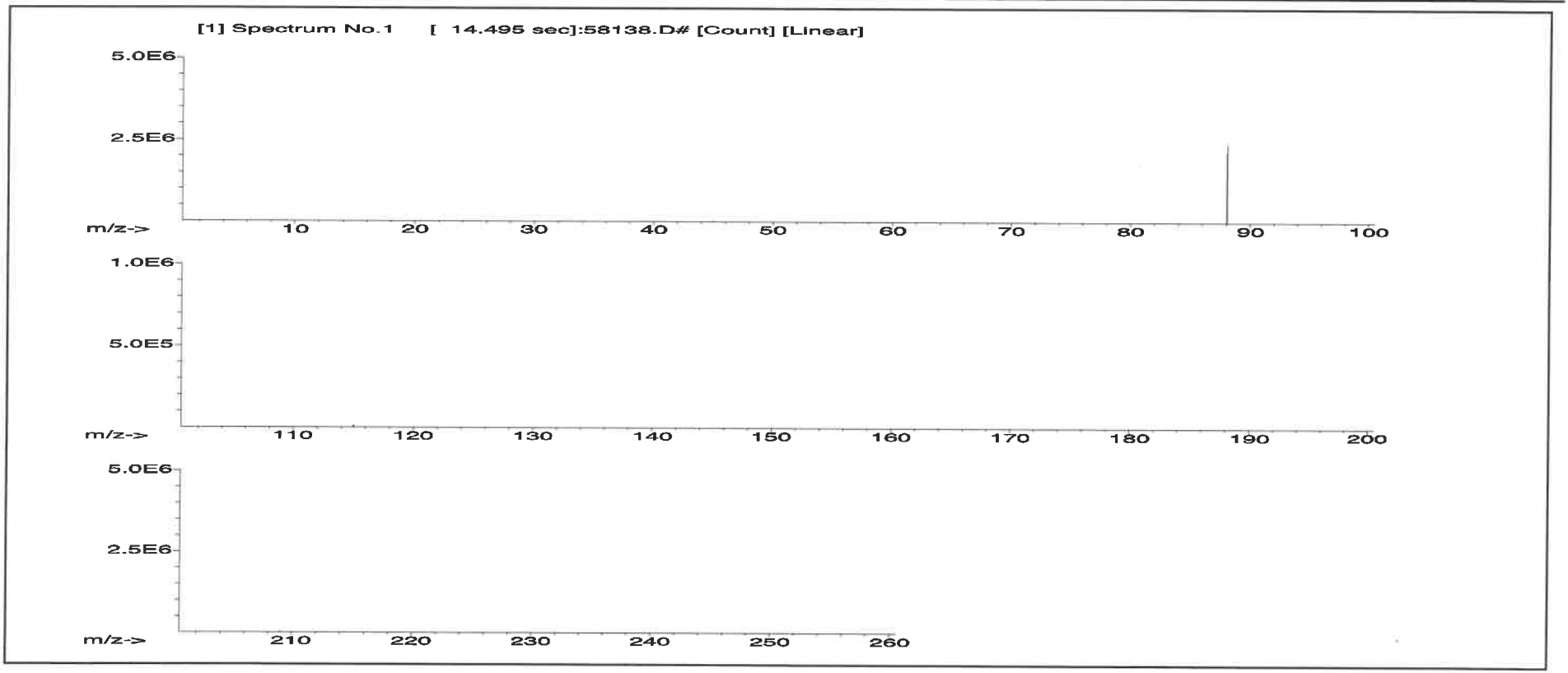
Expiration Date: 082925
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



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 ! 8/5/24

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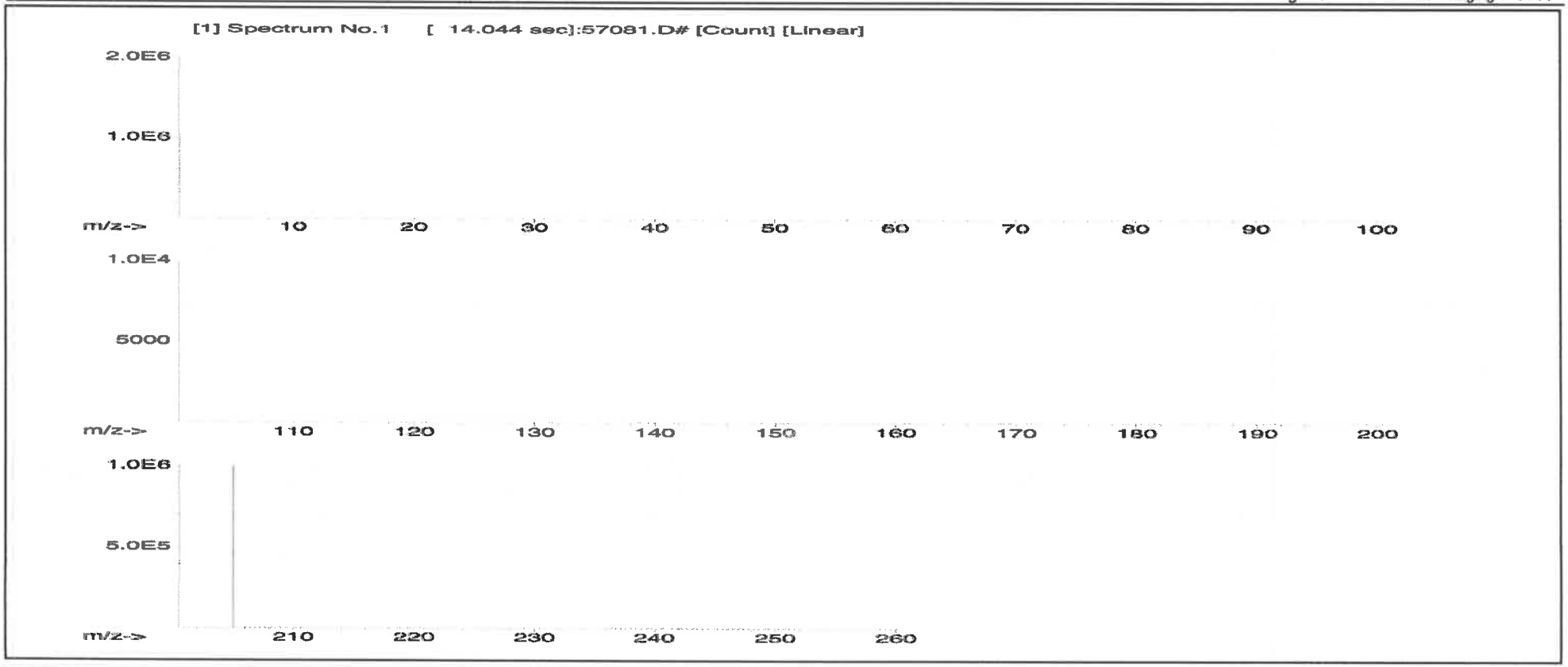
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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Bc. 8/5/24

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

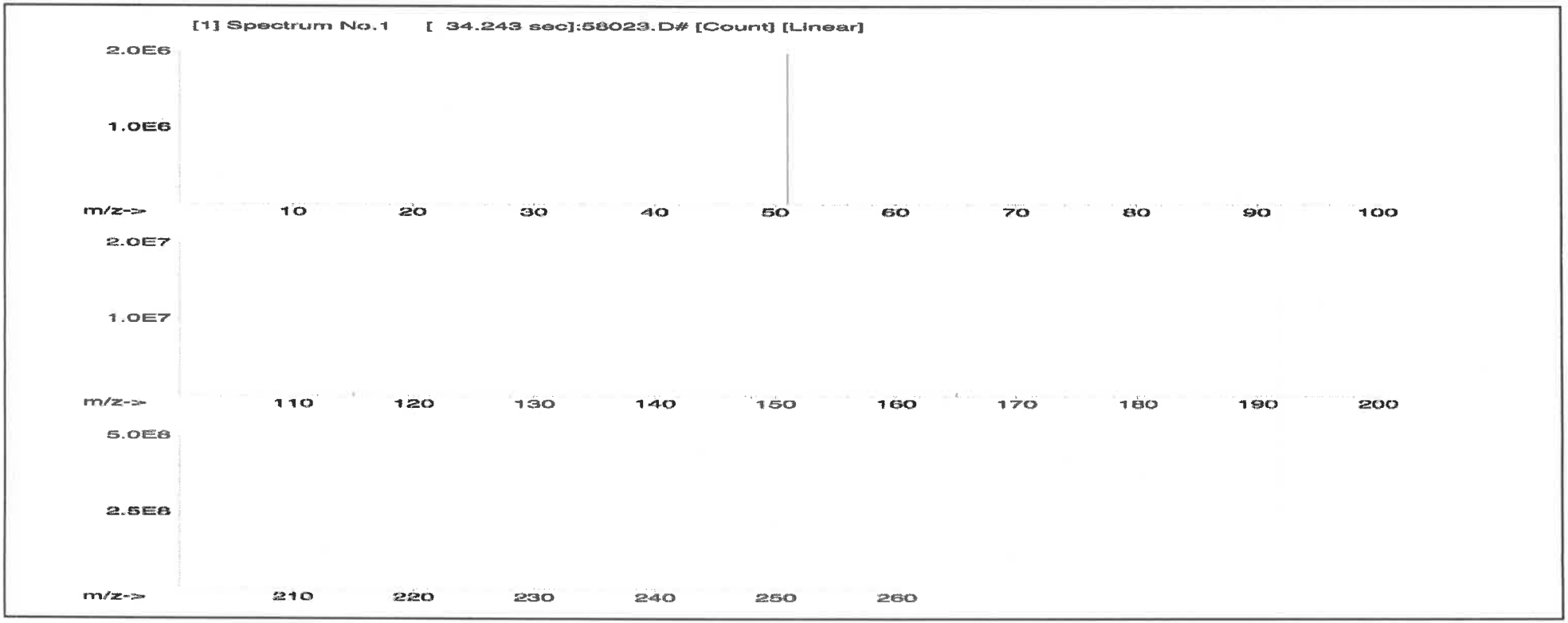
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	7803-55-6	0.05 mg/m3	orl-rat 58.1mg/kg	3165



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:

Certified by:

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Soil/Sludge Metals Preparation Sheet

PB165619

SOP ID : M3050B-Digestion-20, MSFAM01.1-Trace Metals-2

SDG No : MYCYZ9

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: 12/13/2024 **Time :** 09:45 **Temp :** 96 °C

End Digest Date: 12/13/2024 **Time :** 13:20 **Temp :** 96 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. # 2

Dig Technician Signature: SKD.

Supervisor Signature:

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LCSS	1.00	MP83506
LCSSD	0.5	MP83506
Spike Sol 6	2.00	MP83512
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	10.00	MP83498
1:1 HCL	10.00	MP83499
Conc. HNO3	5.00	M6126
30% H2O2	3.00	M6125
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 #35 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/13/24 14:15	SKD. met digestion.	SS (metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB165619

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P5182-01	MYCYZ9	N/A	1.33	100	Brown	Yellow	Medium	N/A	N/A	1
P5182-02	MYCZ00	N/A	1.41	100	Brown	Yellow	Medium	N/A	N/A	2
P5182-03	MYCZ01	N/A	1.40	100	Brown	Yellow	Medium	N/A	N/A	3
P5182-04	MYCZ02	N/A	1.32	100	Brown	Yellow	Medium	N/A	N/A	4
P5182-05	MYCZ03	N/A	1.46	100	Brown	Yellow	Medium	N/A	N/A	5
P5182-06	MYCZ04	N/A	1.25	100	Brown	Yellow	Medium	N/A	N/A	6
P5182-07	MYCZ05	N/A	1.26	100	Brown	Yellow	Medium	N/A	N/A	7
P5182-08	MYCZ06	N/A	1.32	100	Brown	Yellow	Medium	N/A	N/A	8
P5182-09	MYCZ07	N/A	1.21	100	Brown	Yellow	Medium	N/A	N/A	9
P5182-10	MYCZ08	N/A	1.17	100	Brown	Yellow	Medium	N/A	N/A	10
P5182-11	MYCZ09	N/A	1.20	100	Brown	Yellow	Medium	N/A	N/A	11
P5182-12	MYCZ10	N/A	1.25	100	Brown	Yellow	Medium	N/A	N/A	12
P5182-13	MYCZ11	N/A	1.22	100	Brown	Yellow	Medium	N/A	N/A	13
P5182-14	MYCZ12	N/A	1.38	100	Brown	Yellow	Medium	N/A	N/A	14
P5182-15	MYCZ13	N/A	1.28	100	Gray	Yellow	Medium	N/A	N/A	15
P5182-16	MYCZ14	N/A	1.21	100	Brown	Yellow	Medium	N/A	N/A	16
P5182-17	MYCZ15	N/A	1.19	100	Brown	Yellow	Medium	N/A	N/A	17
P5182-18	MYCZ16	N/A	1.34	100	Brown	Yellow	Medium	N/A	N/A	18
P5182-19	MYCZ17	N/A	1.39	100	Brown	Yellow	Medium	N/A	N/A	19
P5182-20	MYCZ18	N/A	1.31	100	Brown	Yellow	Medium	N/A	N/A	20
P5182-21	MYCZ18D	N/A	1.26	100	Brown	Yellow	Medium	N/A	N/A	22
P5182-22	MYCZ18S	N/A	1.36	100	Brown	Yellow	Medium	N/A	MP83512	27
PB165619BL	PBS619	N/A	1.00	100	Colorless	Colorless	Fine	N/A	N/A	28
PB165619BS	LCS619	N/A	1.00	100	Colorless	Colorless	Fine	N/A	MP83506	29
PB165619BSD	LCSD619	N/A	1.00	100	Colorless	Colorless	Fine	N/A	MP83506	30

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Fax : 908 789 8922

Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134036

Review By	Sarabjit Jaswal	Review On	12/21/2024 3:07:17 AM
Supervise By	Mohan Bera	Supervise On	12/21/2024 3:07:26 AM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	12/19/24 17:17		Kareem	OK
2	S1	S01	CAL2	12/19/24 17:21		Kareem	OK
3	S2	S02	CAL3	12/19/24 17:25		Kareem	OK
4	S3	S03	CAL4	12/19/24 17:29		Kareem	OK
5	S4	S04	CAL5	12/19/24 17:32		Kareem	OK
6	S5	S05	CAL6	12/19/24 17:36		Kareem	OK
7	S6	S06	CAL7	12/19/24 17:40		Kareem	OK
8	ICV008	ICV008	ICV	12/19/24 18:53	Inst. paused for Calibration review	Kareem	OK
9	ICB008	ICB008	ICB	12/19/24 18:57		Kareem	OK
10	ICSA008	ICSA008	ICSA	12/19/24 19:01		Kareem	OK
11	ICSAB008	ICSAB008	ICSAB	12/19/24 19:05		Kareem	OK
12	CCV069	CCV069	CCV	12/19/24 19:09		Kareem	OK
13	CCB069	CCB069	CCB	12/19/24 19:13		Kareem	OK
14	P5173-16DL	MYCZ54	SAM	12/19/24 19:17		Kareem	OK
15	P5173-17DL	MYCZ55	SAM	12/19/24 19:21		Kareem	OK
16	P5173-18DL	MYCZ56	SAM	12/19/24 19:24		Kareem	OK
17	P5173-19DL	MYCZ57	SAM	12/19/24 19:28		Kareem	OK
18	P5172-01DL	MYCZ19	SAM	12/19/24 19:32		Kareem	OK

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CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

19	P5172-02DL	MYCZ20	SAM	12/19/24 19:36		Kareem	OK
20	P5172-03DL	MYCZ21	SAM	12/19/24 19:40		Kareem	OK
21	P5172-04DL	MYCZ22	SAM	12/19/24 19:44		Kareem	OK
22	P5172-05DL	MYCZ23	SAM	12/19/24 19:47		Kareem	OK
23	P5172-06DL	MYCZ24	SAM	12/19/24 19:51		Kareem	OK
24	P5172-07DL	MYCZ25	SAM	12/19/24 19:55		Kareem	OK
25	P5172-08DL	MYCZ26	SAM	12/19/24 19:59		Kareem	OK
26	P5172-09DL	MYCZ27	SAM	12/19/24 20:03		Kareem	OK
27	P5172-10DL	MYCZ28	SAM	12/19/24 20:07		Kareem	OK
28	P5172-11DL	MYCZ29	SAM	12/19/24 20:10		Kareem	OK
29	P5172-12DL	MYCZ30	SAM	12/19/24 20:14		Kareem	OK
30	P5172-13DL	MYCZ31	SAM	12/19/24 20:18		Kareem	OK
31	P5172-14DL	MYCZ32	SAM	12/19/24 20:22		Kareem	OK
32	P5172-15DL	MYCZ33	SAM	12/19/24 20:26		Kareem	OK
33	P5172-16DL	MYCZ34	SAM	12/19/24 20:30		Kareem	OK
34	CCV070	CCV070	CCV	12/19/24 20:33		Kareem	OK
35	CCB070	CCB070	CCB	12/19/24 20:37		Kareem	OK
36	P5172-17DL	MYCZ35	SAM	12/19/24 20:41		Kareem	OK
37	P5172-18DL	MYCZ36	SAM	12/19/24 20:45		Kareem	OK
38	P5172-19DL	MYCZ37	SAM	12/19/24 20:49		Kareem	OK

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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

39	P5179-01DL	MYCZ89	SAM	12/19/24 20:53		Kareem	OK
40	P5179-02DL	MYCZ90	SAM	12/19/24 20:56		Kareem	OK
41	P5179-03DL	MYCZ91	SAM	12/19/24 21:00		Kareem	OK
42	P5179-04DL	MYCZ92	SAM	12/19/24 21:04		Kareem	OK
43	P5179-05DL	MYCZ93	SAM	12/19/24 21:08		Kareem	OK
44	P5179-06DL	MYCZ94	SAM	12/19/24 21:12		Kareem	OK
45	P5179-07DL	MYCZ95	SAM	12/19/24 21:16		Kareem	OK
46	P5179-08DL	MYCZ96	SAM	12/19/24 21:19		Kareem	OK
47	P5179-09DL	MYCZ97	SAM	12/19/24 21:23		Kareem	OK
48	P5179-10DL	MYCZ98	SAM	12/19/24 21:27		Kareem	OK
49	P5179-11DL	MYCZ99	SAM	12/19/24 21:31		Kareem	OK
50	P5179-12DL	MYCZA0	SAM	12/19/24 21:35		Kareem	OK
51	P5179-13DL	MYCZA1	SAM	12/19/24 21:39		Kareem	OK
52	P5179-14DL	MYCZA2	SAM	12/19/24 21:42		Kareem	OK
53	P5179-15DL	MYCZA3	SAM	12/19/24 21:46		Kareem	OK
54	P5179-16DL	MYCZA4	SAM	12/19/24 21:50		Kareem	OK
55	P5179-17DL	MYCZA5	SAM	12/19/24 21:54		Kareem	OK
56	CCV071	CCV071	CCV	12/19/24 21:58		Kareem	OK
57	CCB071	CCB071	CCB	12/19/24 22:01		Kareem	OK
58	PB165619BL	PBS619	MB	12/19/24 22:05		Kareem	OK

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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

59	PB165619BS	LCS619	LCS	12/19/24 22:09		Kareem	OK
60	PB165619BSD	LCSD619	LCSD	12/19/24 22:13		Kareem	OK
61	PB165604BL	PBS604	MB	12/19/24 22:17		Kareem	OK
62	PB165604BS	LCS604	LCS	12/19/24 22:21		Kareem	OK
63	PB165604BSD	LCSD604	LCSD	12/19/24 22:25		Kareem	OK
64	PB165656BL	PBS656	MB	12/19/24 22:29		Kareem	OK
65	PB165656BS	LCS656	LCS	12/19/24 22:33		Kareem	OK
66	PB165656BSD	LCSD656	LCSD	12/19/24 22:37		Kareem	OK
67	PB165690BL	PBS690	MB	12/19/24 22:41		Kareem	OK
68	PB165690BS	LCS690	LCS	12/19/24 22:45		Kareem	OK
69	PB165690BSD	LCSD690	LCSD	12/19/24 22:49		Kareem	OK
70	PB165716BL	PBS716	MB	12/19/24 22:53		Kareem	OK
71	PB165716BS	LCS716	LCS	12/19/24 22:57		Kareem	OK
72	PB165716BSD	LCSD716	LCSD	12/19/24 23:01		Kareem	OK
73	P5179-18DL	MYCZA6	SAM	12/19/24 23:05		Kareem	OK
74	P5179-19DL	MYCZA7	SAM	12/19/24 23:09		Kareem	OK
75	P5177-01DL	MYCZ59	SAM	12/19/24 23:13		Kareem	OK
76	P5177-02DL	MYCZ60	SAM	12/19/24 23:17		Kareem	OK
77	P5177-03DL	MYCZ61	SAM	12/19/24 23:21		Kareem	OK
78	CCV072	CCV072	CCV	12/19/24 23:24		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

79	CCB072	CCB072	CCB	12/19/24 23:28		Kareem	OK
80	P5177-04DL	MYCZ62	SAM	12/19/24 23:32		Kareem	OK
81	P5177-05DL	MYCZ63	SAM	12/19/24 23:36		Kareem	OK
82	P5177-06DL	MYCZ64	SAM	12/19/24 23:40		Kareem	OK
83	P5177-07DL	MYCZ65	SAM	12/19/24 23:44		Kareem	OK
84	P5177-08DL	MYCZ66	SAM	12/19/24 23:47		Kareem	OK
85	P5177-09DL	MYCZ67	SAM	12/19/24 23:51		Kareem	OK
86	P5177-10DL	MYCZ68	SAM	12/19/24 23:55		Kareem	OK
87	P5177-11DL	MYD012	SAM	12/19/24 23:59		Kareem	OK
88	P5177-12DL	MYD013	SAM	12/20/24 00:03		Kareem	OK
89	P5177-13DL	MYD014	SAM	12/20/24 00:06		Kareem	OK
90	P5177-14DL	MYD015	SAM	12/20/24 00:10		Kareem	OK
91	P5177-15DL	MYD016	SAM	12/20/24 00:14		Kareem	OK
92	P5177-16DL	MYD017	SAM	12/20/24 00:18		Kareem	OK
93	P5177-17DL	MYD018	SAM	12/20/24 00:22		Kareem	OK
94	P5177-18DL	MYD019	SAM	12/20/24 00:26		Kareem	OK
95	P5177-19DL	MYD020	SAM	12/20/24 00:30		Kareem	OK
96	P5178-01DL	MYCZ69	SAM	12/20/24 00:33		Kareem	OK
97	P5178-02DL	MYCZ70	SAM	12/20/24 00:37		Kareem	OK
98	P5178-03DL	MYCZ71	SAM	12/20/24 00:41		Kareem	OK

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Instrument ID: P5

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Supervise By	Mohan Bera	Supervise On	12/21/2024 3:07:26 AM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

99	P5178-04DL	MYCZ72	SAM	12/20/24 00:45		Kareem	OK
100	CCV073	CCV073	CCV	12/20/24 00:49		Kareem	OK
101	CCB073	CCB073	CCB	12/20/24 00:52		Kareem	OK
102	P5178-05DL	MYCZ73	SAM	12/20/24 00:56		Kareem	OK
103	P5178-06DL	MYCZ74	SAM	12/20/24 01:00		Kareem	OK
104	P5178-07DL	MYCZ75	SAM	12/20/24 01:04		Kareem	OK
105	P5178-08DL	MYCZ76	SAM	12/20/24 01:08		Kareem	OK
106	P5178-09DL	MYCZ77	SAM	12/20/24 01:12		Kareem	OK
107	P5178-10DL	MYCZ78	SAM	12/20/24 01:16		Kareem	OK
108	P5178-11DL	MYCZ79	SAM	12/20/24 01:19		Kareem	OK
109	P5178-12DL	MYCZ80	SAM	12/20/24 01:23		Kareem	OK
110	P5178-13DL	MYCZ81	SAM	12/20/24 01:27		Kareem	OK
111	P5178-14DL	MYCZ82	SAM	12/20/24 01:31	Not Use	Kareem	Not Ok
112	P5178-15DL	MYCZ83	SAM	12/20/24 01:35		Kareem	OK
113	P5178-16DL	MYCZ84	SAM	12/20/24 01:39		Kareem	OK
114	P5178-17DL	MYCZ85	SAM	12/20/24 01:42		Kareem	OK
115	P5178-18DL	MYCZ86	SAM	12/20/24 01:46		Kareem	OK
116	P5178-19DL	MYCZ87	SAM	12/20/24 01:50		Kareem	OK
117	P5178-20DL	MYCZ88	SAM	12/20/24 01:54		Kareem	OK
118	P5178-21DL	MYCZ88D	DUP	12/20/24 01:58		Kareem	OK

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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

119	P5178-20LDL	MYCZ88L	SD	12/20/24 02:02		Kareem	OK
120	P5178-22DL	MYCZ88S	MS	12/20/24 02:06		Kareem	OK
121	P5182-01DL	MYCYZ9	SAM	12/20/24 02:09		Kareem	OK
122	CCV074	CCV074	CCV	12/20/24 02:13		Kareem	OK
123	CCB074	CCB074	CCB	12/20/24 02:17		Kareem	OK
124	P5182-02DL	MYCZ00	SAM	12/20/24 02:21		Kareem	OK
125	P5182-03DL	MYCZ01	SAM	12/20/24 02:25		Kareem	OK
126	P5182-04DL	MYCZ02	SAM	12/20/24 02:29		Kareem	OK
127	P5182-05DL	MYCZ03	SAM	12/20/24 02:32		Kareem	OK
128	P5182-06DL	MYCZ04	SAM	12/20/24 02:36		Kareem	OK
129	P5182-07DL	MYCZ05	SAM	12/20/24 02:40		Kareem	OK
130	P5182-08DL	MYCZ06	SAM	12/20/24 02:44		Kareem	OK
131	P5182-09DL	MYCZ07	SAM	12/20/24 02:48		Kareem	OK
132	P5182-10DL	MYCZ08	SAM	12/20/24 02:52		Kareem	OK
133	P5182-11DL	MYCZ09	SAM	12/20/24 02:56		Kareem	OK
134	P5182-12DL	MYCZ10	SAM	12/20/24 02:59		Kareem	OK
135	P5182-13DL	MYCZ11	SAM	12/20/24 03:03		Kareem	OK
136	P5182-14DL	MYCZ12	SAM	12/20/24 03:07		Kareem	OK
137	P5182-15DL	MYCZ13	SAM	12/20/24 03:11		Kareem	OK
138	P5182-16DL	MYCZ14	SAM	12/20/24 03:15		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134036

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CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

139	P5182-17DL	MYCZ15	SAM	12/20/24 03:19		Kareem	OK
140	P5182-18DL	MYCZ16	SAM	12/20/24 03:22		Kareem	OK
141	P5182-19DL	MYCZ17	SAM	12/20/24 03:26		Kareem	OK
142	P5182-20DL	MYCZ18	SAM	12/20/24 03:30		Kareem	OK
143	P5182-21DL	MYCZ18D	DUP	12/20/24 03:34		Kareem	OK
144	CCV075	CCV075	CCV	12/20/24 03:38		Kareem	OK
145	CCB075	CCB075	CCB	12/20/24 03:41		Kareem	OK
146	P5182-20LDL	MYCZ18L	SD	12/20/24 03:45		Kareem	OK
147	P5182-22DL	MYCZ18S	MS	12/20/24 03:49		Kareem	OK
148	P5181-01DL	MYCYX9	SAM	12/20/24 03:53		Kareem	OK
149	P5181-02DL	MYCYY0	SAM	12/20/24 03:57	Mn high	Kareem	Dilution
150	P5181-03DL	MYCYY1	SAM	12/20/24 04:01	Mn high	Kareem	Dilution
151	P5181-04DL	MYCYY2	SAM	12/20/24 04:05	Mn high	Kareem	Dilution
152	P5181-05DL	MYCYY3	SAM	12/20/24 04:08	Mn high	Kareem	Dilution
153	P5181-06DL	MYCYY4	SAM	12/20/24 04:12		Kareem	OK
154	P5181-07DL	MYCYY5	SAM	12/20/24 04:16	Mn high	Kareem	Dilution
155	P5181-08DL	MYCYY6	SAM	12/20/24 04:20	Mn high	Kareem	Dilution
156	P5181-09DL	MYCYY7	SAM	12/20/24 04:24		Kareem	OK
157	P5181-10DL	MYCYY8	SAM	12/20/24 04:28	Mn high	Kareem	Dilution
158	P5181-11DL	MYCYY9	SAM	12/20/24 04:31	Mn high	Kareem	Dilution

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134036

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Supervise By	Mohan Bera	Supervise On	12/21/2024 3:07:26 AM

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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

159	P5181-12DL	MYCYZ0	SAM	12/20/24 04:35	Mn high	Kareem	Dilution
160	P5181-13DL	MYCYZ1	SAM	12/20/24 04:39	Mn high	Kareem	Dilution
161	P5181-14DL	MYCYZ2	SAM	12/20/24 04:43	Mn high	Kareem	Dilution
162	P5181-15DL	MYCYZ3	SAM	12/20/24 04:47		Kareem	OK
163	P5181-16DL	MYCYZ4	SAM	12/20/24 04:51		Kareem	OK
164	P5181-17DL	MYCYZ5	SAM	12/20/24 04:54		Kareem	OK
165	P5181-18DL	MYCYZ6	SAM	12/20/24 04:58		Kareem	OK
166	CCV076	CCV076	CCV	12/20/24 05:02		Kareem	OK
167	CCB076	CCB076	CCB	12/20/24 05:06		Kareem	OK
168	P5181-19DL	MYCYZ7	SAM	12/20/24 05:10		Kareem	OK
169	P5181-20DL	MYCYZ8	SAM	12/20/24 05:14		Kareem	OK
170	P5181-21DL	MYCYZ8D	DUP	12/20/24 05:18		Kareem	OK
171	P5181-20LDL	MYCYZ8L	SD	12/20/24 05:21		Kareem	OK
172	P5181-22DL	MYCYZ8S	MS	12/20/24 05:25		Kareem	OK
173	P5186-01DL	MYCZN9	SAM	12/20/24 05:29		Kareem	OK
174	P5186-02DL	MYCZP0	SAM	12/20/24 05:33		Kareem	OK
175	P5186-03DL	MYCZP1	SAM	12/20/24 05:37		Kareem	OK
176	P5186-04DL	MYCZP2	SAM	12/20/24 05:41		Kareem	OK
177	P5186-05DL	MYCZP3	SAM	12/20/24 05:45		Kareem	OK
178	P5186-06DL	MYCZP4	SAM	12/20/24 05:49		Kareem	OK

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Instrument ID: P5

Daily Analysis Runlog For Sequence/QCBatch ID # LB134036

Review By	Sarabjit Jaswal	Review On	12/21/2024 3:07:17 AM
Supervise By	Mohan Bera	Supervise On	12/21/2024 3:07:26 AM

STD. NAME	STD REF.#
ICAL Standard	MP83500,MP83507,MP83505,MP83504,MP83503,MP83502,MP83501
ICV Standard	MP83508
CCV Standard	MP83511
ICSA Standard	MP83509,MP83510
CRI Standard	
LCS Standard	MP83506
Chk Standard	MP83513,MP83514

179	P5186-07DL	MYCZP5	SAM	12/20/24 05:52		Kareem	OK
180	P5186-08DL	MYCZP6	SAM	12/20/24 05:56		Kareem	OK
181	P5186-09DL	MYCZP7	SAM	12/20/24 06:00	Mn high	Kareem	Dilution
182	P5186-10DL	MYCZP8	SAM	12/20/24 06:04		Kareem	OK
183	P5186-11DL	MYCZP9	SAM	12/20/24 06:08		Kareem	OK
184	P5186-12DL	MYCZQ0	SAM	12/20/24 06:11		Kareem	OK
185	P5186-13DL	MYCZQ1	SAM	12/20/24 06:15		Kareem	OK
186	P5186-14DL	MYCZQ2	SAM	12/20/24 06:19		Kareem	OK
187	P5186-15DL	MYCZQ3	SAM	12/20/24 06:23		Kareem	OK
188	CCV077	CCV077	CCV	12/20/24 06:27		Kareem	OK
189	CCB077	CCB077	CCB	12/20/24 06:30		Kareem	OK
190	P5186-16DL	MYCZQ4	SAM	12/20/24 06:35		Kareem	OK
191	P5186-17DL	MYCZQ5	SAM	12/20/24 06:38		Kareem	OK
192	P5186-18DL	MYCZQ6	SAM	12/20/24 06:42		Kareem	OK
193	P5186-19DL	MYCZQ7	SAM	12/20/24 06:46		Kareem	OK
194	P5186-20DL	MYCZQ8	SAM	12/20/24 06:50		Kareem	OK
195	P5186-21DL	MYCZQ8D	DUP	12/20/24 06:54		Kareem	OK
196	P5186-20LDL	MYCZQ8L	SD	12/20/24 06:58		Kareem	OK
197	P5186-22DL	MYCZQ8S	MS	12/20/24 07:02		Kareem	OK
198	P5189-01DL	MYCZH9	SAM	12/20/24 07:05		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

199	P5189-02DL	MYCZJ0	SAM	12/20/24 07:09		Kareem	OK
200	P5189-03DL	MYCZJ1	SAM	12/20/24 07:13		Kareem	OK
201	P5189-04DL	MYCZJ2	SAM	12/20/24 07:17		Kareem	OK
202	P5189-05DL	MYCZJ3	SAM	12/20/24 07:21		Kareem	OK
203	P5189-06DL	MYCZJ4	SAM	12/20/24 07:25		Kareem	OK
204	P5189-07DL	MYCZJ5	SAM	12/20/24 07:28		Kareem	OK
205	P5189-08DL	MYCZJ6	SAM	12/20/24 07:32		Kareem	OK
206	P5189-09DL	MYCZJ7	SAM	12/20/24 07:36		Kareem	OK
207	P5189-10DL	MYCZJ8	SAM	12/20/24 07:40		Kareem	OK
208	P5189-11DL	MYCZJ9	SAM	12/20/24 07:44		Kareem	OK
209	P5189-12DL	MYCZK0	SAM	12/20/24 07:48		Kareem	OK
210	CCV078	CCV078	CCV	12/20/24 07:51		Kareem	OK
211	CCB078	CCB078	CCB	12/20/24 07:55		Kareem	OK
212	P5189-13DL	MYCZK1	SAM	12/20/24 07:59		Kareem	OK
213	P5189-14DL	MYCZK2	SAM	12/20/24 08:03		Kareem	OK
214	P5189-15DL	MYCZK3	SAM	12/20/24 08:07		Kareem	OK
215	P5189-16DL	MYCZK4	SAM	12/20/24 08:11		Kareem	OK
216	P5189-17DL	MYCZK5	SAM	12/20/24 08:15		Kareem	OK
217	P5189-18DL	MYCZK6	SAM	12/20/24 08:18		Kareem	OK
218	P5189-19DL	MYCZK7	SAM	12/20/24 08:22		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

219	P5189-20DL	MYCZK8	SAM	12/20/24 08:26		Kareem	OK
220	P5189-21DL	MYCZK8D	DUP	12/20/24 08:30		Kareem	OK
221	P5189-20LDL	MYCZK8L	SD	12/20/24 08:34		Kareem	OK
222	P5189-22DL	MYCZK8S	MS	12/20/24 08:38		Kareem	OK
223	P5191-01DL	MYCZR9	SAM	12/20/24 08:42		Kareem	OK
224	P5191-02DL	MYCZS3	SAM	12/20/24 08:46		Kareem	OK
225	P5191-03DL	MYCZS4	SAM	12/20/24 08:50		Kareem	OK
226	P5191-04DL	MYCZS5	SAM	12/20/24 08:53		Kareem	OK
227	P5191-05DL	MYCZS6	SAM	12/20/24 08:57		Kareem	OK
228	P5191-06DL	MYCZS7	SAM	12/20/24 09:01		Kareem	OK
229	P5191-07DL	MYD022	SAM	12/20/24 09:05		Kareem	OK
230	P5191-08DL	MYD023	SAM	12/20/24 09:09		Kareem	OK
231	P5191-09DL	MYD024	SAM	12/20/24 09:13		Kareem	OK
232	CCV079	CCV079	CCV	12/20/24 09:34		Kareem	OK
233	CCB079	CCB079	CCB	12/20/24 09:38		Kareem	OK
234	P5191-10DL	MYD025	SAM	12/20/24 09:42		Kareem	OK
235	P5191-11DL	MYD026	SAM	12/20/24 09:46		Kareem	OK
236	P5191-12DL	MYD027	SAM	12/20/24 09:50		Kareem	OK
237	P5191-13DL	MYD033	SAM	12/20/24 09:53		Kareem	OK
238	P5191-14DL	MYD033D	DUP	12/20/24 09:57		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

239	P5191-13LDL	MYD033L	SD	12/20/24 10:01		Kareem	OK
240	P5191-15DL	MYD033S	MS	12/20/24 10:05		Kareem	OK
241	CCV080	CCV080	CCV	12/20/24 10:19		Kareem	OK
242	CCB080	CCB080	CCB	12/20/24 10:22		Kareem	OK