

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME29F6

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-01

% Solids: 90 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.13	J	12/06/2024	1346
7440-38-2	Arsenic	3.5	*	12/06/2024	1346
7440-39-3	Barium	8.4	*	12/06/2024	1346
7440-41-7	Beryllium	0.098	J	12/06/2024	1346
7440-43-9	Cadmium	0.51	U	12/06/2024	1346
7440-47-3	Chromium	4.8	*	12/06/2024	1346
7440-48-4	Cobalt	2.8	*	12/06/2024	1346
7440-50-8	Copper	6.4	*	12/06/2024	1346
7439-92-1	Lead	3.2	*	12/06/2024	1346
7439-96-5	Manganese	270	*	12/06/2024	1346
7440-02-0	Nickel	6.5	*	12/06/2024	1346
7782-49-2	Selenium	2.6	U	12/06/2024	1346
7440-22-4	Silver	0.051	J	12/06/2024	1346
7440-28-0	Thallium	0.18	J	12/06/2024	1346
7440-32-6	Titanium	29		12/06/2024	1346
7440-62-2	Vanadium	5.6	*	12/06/2024	1346
7440-66-6	Zinc	22	*	12/06/2024	1346

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

Comments:

FORM 1 - IN
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ME29F7

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-02

% Solids: 89.7 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.17	J	12/06/2024	1349
7440-38-2	Arsenic	5.0	*	12/06/2024	1349
7440-39-3	Barium	15	*	12/06/2024	1349
7440-41-7	Beryllium	0.084	J	12/06/2024	1349
7440-43-9	Cadmium	0.15	J	12/06/2024	1349
7440-47-3	Chromium	3.8	*	12/06/2024	1349
7440-48-4	Cobalt	2.7	*	12/06/2024	1349
7440-50-8	Copper	7.0	*	12/06/2024	1349
7439-92-1	Lead	3.7	*	12/06/2024	1349
7439-96-5	Manganese	520	*	12/06/2024	1349
7440-02-0	Nickel	8.4	*	12/06/2024	1349
7782-49-2	Selenium	2.3	U	12/06/2024	1349
7440-22-4	Silver	0.47	U	12/06/2024	1349
7440-28-0	Thallium	0.16	J	12/06/2024	1349
7440-32-6	Titanium	37		12/06/2024	1349
7440-62-2	Vanadium	5.7	*	12/06/2024	1349
7440-66-6	Zinc	18	*	12/06/2024	1349

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

Comments:

FORM 1 - IN
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ME29F8

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-03

% Solids: 84.8 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.15	J	12/06/2024	1352
7440-38-2	Arsenic	2.9	*	12/06/2024	1352
7440-39-3	Barium	7.4	*	12/06/2024	1352
7440-41-7	Beryllium	0.092	J	12/06/2024	1352
7440-43-9	Cadmium	0.097	J	12/06/2024	1352
7440-47-3	Chromium	4.7	*	12/06/2024	1352
7440-48-4	Cobalt	2.8	*	12/06/2024	1352
7440-50-8	Copper	7.5	*	12/06/2024	1352
7439-92-1	Lead	3.6	*	12/06/2024	1352
7439-96-5	Manganese	180	*	12/06/2024	1352
7440-02-0	Nickel	7.3	*	12/06/2024	1352
7782-49-2	Selenium	2.7	U	12/06/2024	1352
7440-22-4	Silver	0.54	U	12/06/2024	1352
7440-28-0	Thallium	0.11	J	12/06/2024	1352
7440-32-6	Titanium	28		12/06/2024	1352
7440-62-2	Vanadium	5.3	*	12/06/2024	1352
7440-66-6	Zinc	20	*	12/06/2024	1352

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

Comments:

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME29F9

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-06

% Solids: 89.4 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.093	J	12/06/2024	1404
7440-38-2	Arsenic	1.7	*	12/06/2024	1404
7440-39-3	Barium	3.8	J*	12/06/2024	1404
7440-41-7	Beryllium	0.071	J	12/06/2024	1404
7440-43-9	Cadmium	0.44	U	12/06/2024	1404
7440-47-3	Chromium	2.3	*	12/06/2024	1404
7440-48-4	Cobalt	1.8	*	12/06/2024	1404
7440-50-8	Copper	4.7	*	12/06/2024	1404
7439-92-1	Lead	2.6	*	12/06/2024	1404
7439-96-5	Manganese	150	*	12/06/2024	1404
7440-02-0	Nickel	3.9	*	12/06/2024	1404
7782-49-2	Selenium	2.2	U	12/06/2024	1404
7440-22-4	Silver	0.44	U	12/06/2024	1404
7440-28-0	Thallium	0.044	J	12/06/2024	1404
7440-32-6	Titanium	17		12/06/2024	1404
7440-62-2	Vanadium	3.3	*	12/06/2024	1404
7440-66-6	Zinc	13	*	12/06/2024	1404

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

Comments:

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME29G0

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-07

% Solids: 87.4 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.15	J	12/06/2024	1408
7440-38-2	Arsenic	3.0	*	12/06/2024	1408
7440-39-3	Barium	5.8	*	12/06/2024	1408
7440-41-7	Beryllium	0.080	J	12/06/2024	1408
7440-43-9	Cadmium	0.085	J	12/06/2024	1408
7440-47-3	Chromium	3.4	*	12/06/2024	1408
7440-48-4	Cobalt	2.4	*	12/06/2024	1408
7440-50-8	Copper	7.0	*	12/06/2024	1408
7439-92-1	Lead	3.8	*	12/06/2024	1408
7439-96-5	Manganese	220	*	12/06/2024	1408
7440-02-0	Nickel	5.6	*	12/06/2024	1408
7782-49-2	Selenium	2.5	U	12/06/2024	1408
7440-22-4	Silver	0.50	U	12/06/2024	1408
7440-28-0	Thallium	0.050	J	12/06/2024	1408
7440-32-6	Titanium	17		12/06/2024	1408
7440-62-2	Vanadium	4.6	*	12/06/2024	1408
7440-66-6	Zinc	20	*	12/06/2024	1408

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

Comments:

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME29G1

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-08

% Solids: 87.5 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.17	J	12/06/2024	1411
7440-38-2	Arsenic	3.8	*	12/06/2024	1411
7440-39-3	Barium	4.7	*	12/06/2024	1411
7440-41-7	Beryllium	0.073	J	12/06/2024	1411
7440-43-9	Cadmium	0.41	U	12/06/2024	1411
7440-47-3	Chromium	3.1	*	12/06/2024	1411
7440-48-4	Cobalt	2.3	*	12/06/2024	1411
7440-50-8	Copper	5.4	*	12/06/2024	1411
7439-92-1	Lead	3.2	*	12/06/2024	1411
7439-96-5	Manganese	160	*	12/06/2024	1411
7440-02-0	Nickel	5.2	*	12/06/2024	1411
7782-49-2	Selenium	0.34	J	12/06/2024	1411
7440-22-4	Silver	0.41	U	12/06/2024	1411
7440-28-0	Thallium	0.045	J	12/06/2024	1411
7440-32-6	Titanium	32		12/06/2024	1411
7440-62-2	Vanadium	4.4	*	12/06/2024	1411
7440-66-6	Zinc	16	*	12/06/2024	1411

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

Comments:

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME29G2

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

Lab Code: ACE Case No.: 51759 MA No. : 3227.1 SDG No.: ME29F6

Matrix: SOIL Lab Sample ID: P4977-09

% Solids: 88 Date Received: 11/23/2024

Analytical Method: ICP_MS

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
7440-36-0	Antimony	0.16	J	12/06/2024	1414
7440-38-2	Arsenic	3.6	*	12/06/2024	1414
7440-39-3	Barium	4.5	J*	12/06/2024	1414
7440-41-7	Beryllium	0.071	J	12/06/2024	1414
7440-43-9	Cadmium	0.51	U	12/06/2024	1414
7440-47-3	Chromium	3.2	*	12/06/2024	1414
7440-48-4	Cobalt	2.1	*	12/06/2024	1414
7440-50-8	Copper	4.8	*	12/06/2024	1414
7439-92-1	Lead	2.9	*	12/06/2024	1414
7439-96-5	Manganese	140	*	12/06/2024	1414
7440-02-0	Nickel	4.9	*	12/06/2024	1414
7782-49-2	Selenium	2.5	U	12/06/2024	1414
7440-22-4	Silver	0.51	U	12/06/2024	1414
7440-28-0	Thallium	0.046	J	12/06/2024	1414
7440-32-6	Titanium	27		12/06/2024	1414
7440-62-2	Vanadium	3.8	*	12/06/2024	1414
7440-66-6	Zinc	15	*	12/06/2024	1414

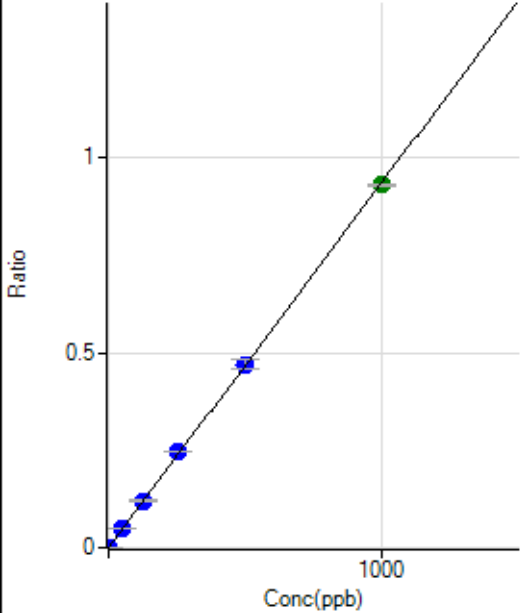
NOTE: Hardness (total) is reported in mg/L

Comments:

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7120624 MS.b\
Analysis File: P7120624 MS.batch.bin
DA Date-Time: 2024-12-06 13:39:51
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-12-06 11:34:41
2	005CALS.d	S01	2024-12-06 11:37:56
3	006CALS.d	S02	2024-12-06 11:41:14
4	007CALS.d	S03	2024-12-06 11:44:29
5	008CALS.d	S04	2024-12-06 11:47:26
6	009CALS.d	S05	2024-12-06 11:50:11
7	010CALS.d	S06	2024-12-06 11:52:57
8	011CALS.d	S07	2024-12-06 11:55:40
9	012CALS.d	S08	2024-12-06 11:58:26

9 Be [No Gas] ISTD:6 Li [No Gas]

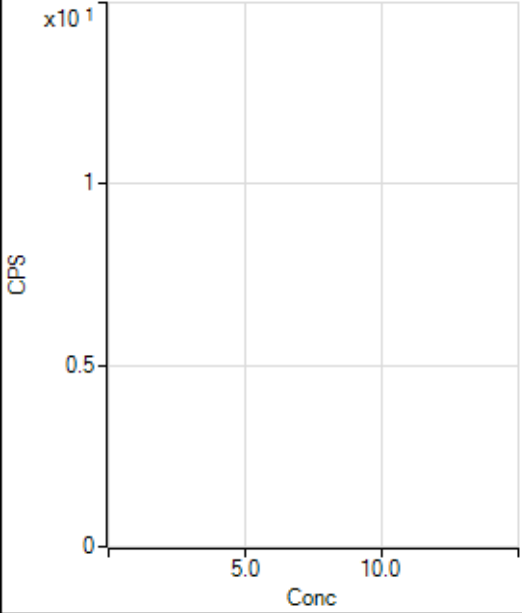


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25.55	0.0000	P	14.6
2	☐	0.100	0.102	208.89	0.0001	P	16.6
3	☐	1.000	1.063	1875.69	0.0010	P	1.4
4	☐	50.000	54.491	98407.63	0.0510	P	1.5
5	☐	125.000	129.119	235776.51	0.1209	P	6.2
6	☐	250.000	263.706	466218.59	0.2470	P	1.1
7	☐	500.000	502.261	903202.40	0.4704	P	5.5
8	☐	1000.000	994.704	1720213.71	0.9316	A	0.7
9	☐			390.01	0.0002	P	33.4

$y = 9.3652E-004 * x + 1.3618E-005$
R = 0.9999
DL = 0.006357

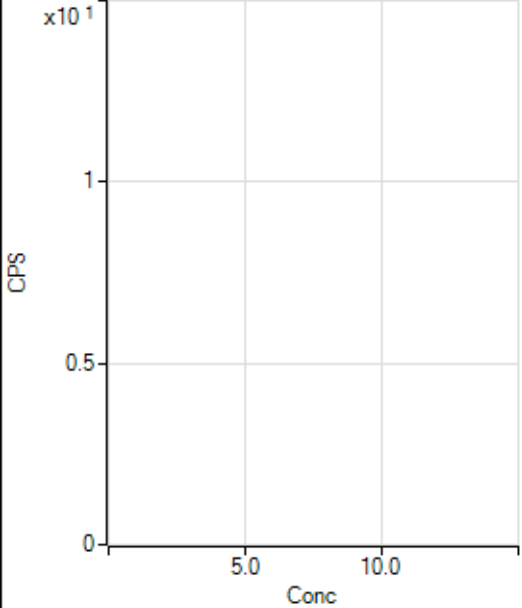
Weight: <None>
Min Conc: 0

12 C [No Gas] No available calibration points



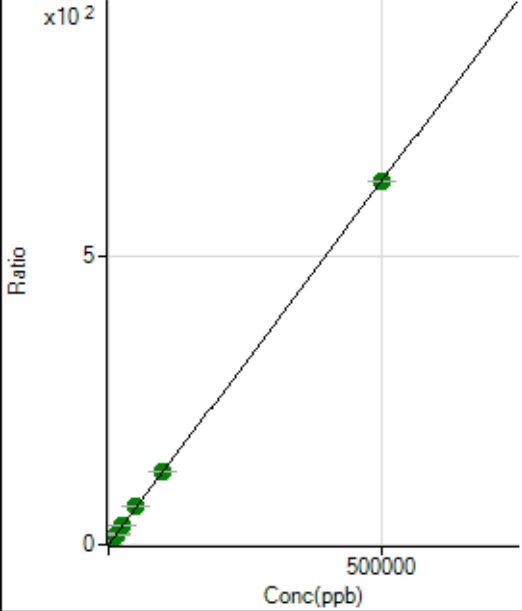
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

12 C [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

23 Na [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	116324.04	0.1356	P	0.4
2	☐	50.000	-37.838	76581.33	0.0880	P	0.6
3	☐	500.000	420.936	572672.48	0.6650	P	1.3
4	☐	5000.000	5487.948	5848944.08	7.0377	A	1.1
5	☐	12500.000	14047.354	13668647.30	17.8027	A	6.6
6	☐	25000.000	27047.413	25996471.28	34.1527	A	0.9
7	☐	50000.000	53869.181	51229792.02	67.8860	A	0.2
8	☐	100000.00	100158.63	96901939.67	126.1035	A	0.4
9	☐	500000.00	499435.51	491206054.90	628.2679	A	0.1

$y = 0.0013 * x + 0.1356$

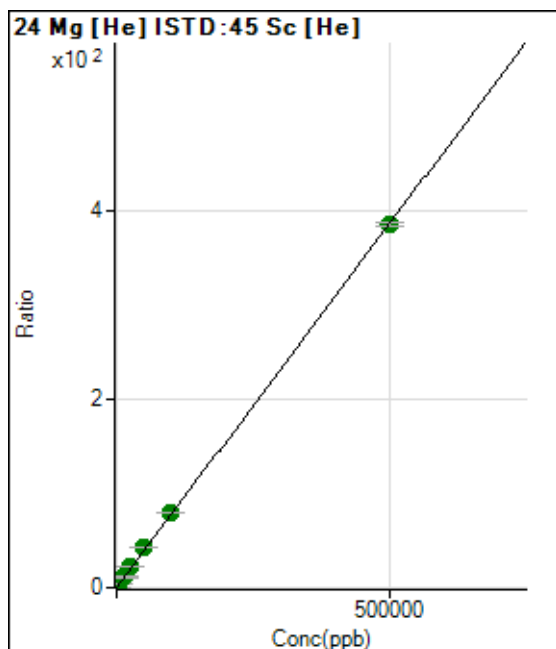
$R = 1.0000$

$DL = 1.449$

Weight: <None>

Min Conc: 0

Calibration for 003CALB.d



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	57631.90	0.0672	P	0.9
2	☐	50.000	-33.093	36239.36	0.0416	P	1.0
3	☐	500.000	460.887	364091.40	0.4228	P	0.4
4	☐	5000.000	5767.447	3754181.02	4.5171	A	0.5
5	☐	12500.000	14634.090	8721017.58	11.3582	A	6.6
6	☐	25000.000	28341.729	16695995.30	21.9344	A	0.6
7	☐	50000.000	56077.619	32701748.96	43.3343	A	0.7
8	☐	100000.00	103465.86	61395553.53	79.8971	A	0.3
9	☐	500000.00	498470.99	300740242.18	384.6665	A	1.0

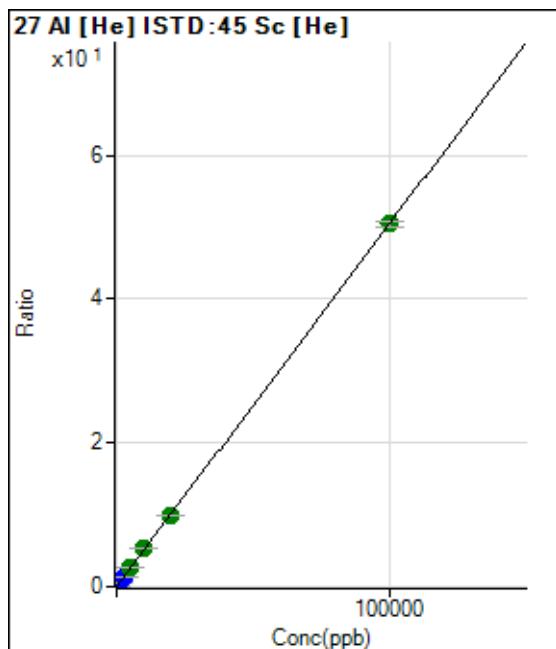
$$y = 7.7156E-004 * x + 0.0672$$

R = 0.9999

DL = 2.366

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7448.54	0.0087	P	1.6
2	☐	2.000	-14.383	1236.73	0.0014	P	7.2
3	☐	20.000	12.126	12746.48	0.0148	P	2.2
4	☐	1000.000	1101.310	469211.52	0.5646	P	0.6
5	☐	2500.000	2765.263	1078335.67	1.4044	P	6.5
6	☐	5000.000	5386.683	2076141.24	2.7276	A	2.0
7	☐	10000.000	10602.896	4045172.37	5.3604	A	0.5
8	☐	20000.000	19658.376	7631404.47	9.9311	A	0.9
9	☐	100000.00	99981.058	39460211.08	50.4733	A	1.3

$$y = 5.0474E-004 * x + 0.0087$$

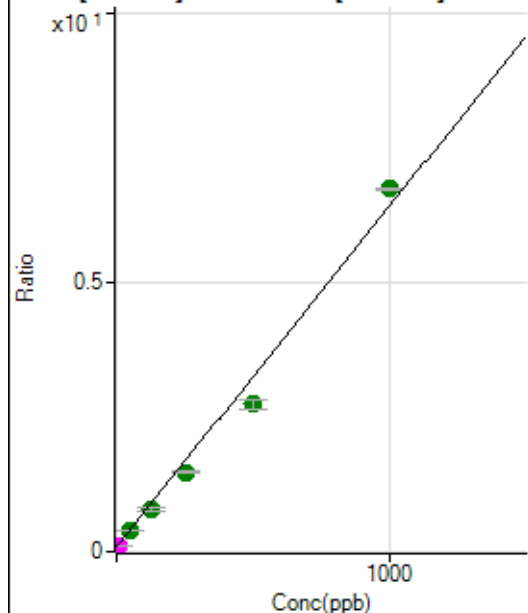
R = 1.0000

DL = 0.8154

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD :45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	835392.84	0.0945	P	0.1
2	☐	1.000	0.236	843687.91	0.0960	P	3.3
3	☐	10.000	2.551	971817.42	0.1106	M	17.1
4	☐	50.000	49.159	3543294.46	0.4050	A	1.8
5	☐	125.000	109.197	6733931.01	0.7842	A	5.9
6	☐	250.000	219.344	11756797.19	1.4799	A	1.3
7	☐	500.000	418.501	21712450.37	2.7378	A	6.1
8	☐	1000.000	1050.506	53222654.21	6.7296	A	0.4
9	☐			853753.93	0.1122	P	2.8

$$y = 0.0063 * x + 0.0945$$

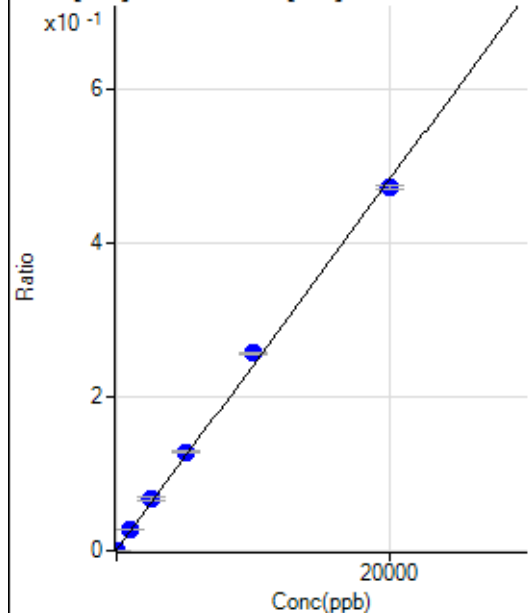
$$R = 0.9951$$

$$DL = 0.0297$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-12.575	370.01	0.0004	P	3.2
2	☐	0.000	-6.730	497.79	0.0006	P	18.3
3	☐	0.000	19.305	1032.27	0.0012	P	4.7
4	☐	1000.000	1122.657	23072.99	0.0278	P	2.1
5	☐	2500.000	2805.066	52385.99	0.0683	P	7.6
6	☐	5000.000	5308.428	97822.06	0.1285	P	0.9
7	☐	10000.000	10626.176	193578.79	0.2565	P	1.0
8	☐	20000.000	19565.539	362462.89	0.4717	P	0.9
9	☐			487.79	0.0006	P	10.1

$$y = 2.4071E-005 * x + 7.3386E-004$$

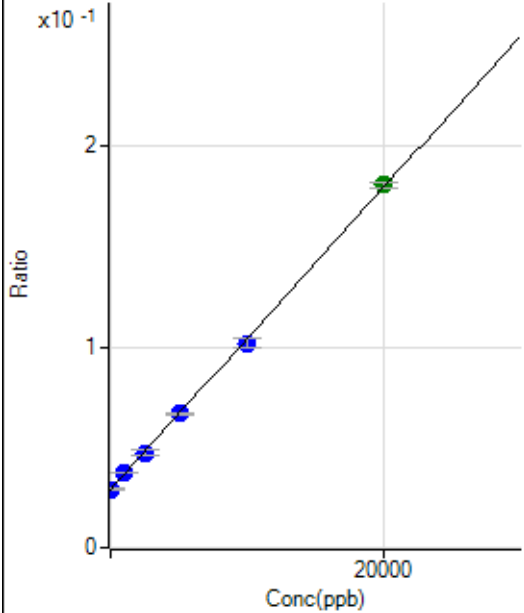
$$R = 0.9991$$

$$DL = 7.237$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]

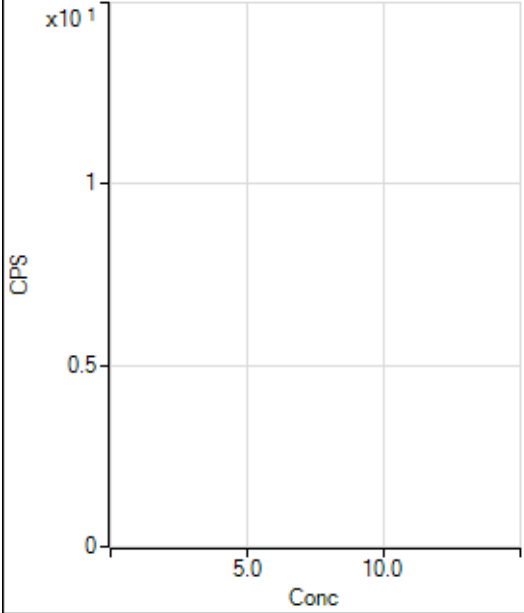


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-31.497	254602.40	0.0288	P	0.6
2	☐	0.000	8.398	255767.19	0.0291	P	3.4
3	☐	0.000	23.100	256853.88	0.0292	P	1.2
4	☐	1000.000	1075.954	324803.21	0.0371	P	0.8
5	☐	2500.000	2406.949	404809.00	0.0471	P	5.3
6	☐	5000.000	5031.428	531221.18	0.0669	P	1.6
7	☐	10000.000	9685.486	808283.62	0.1019	P	4.3
8	☐	20000.000	20157.234	1428551.54	0.1806	A	1.2
9	☐			201684.21	0.0265	P	2.8

$y = 7.5212E-006 * x + 0.0290$
R = 0.9998
DL = 201.8

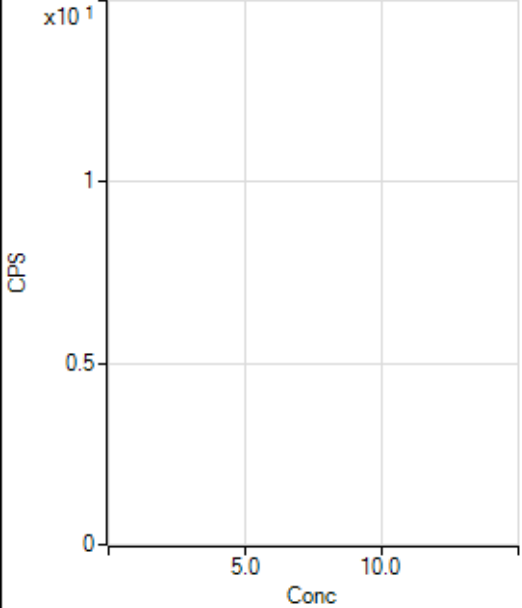
Weight: <None>
Min Conc: 0

35 Cl [No Gas] No available calibration points



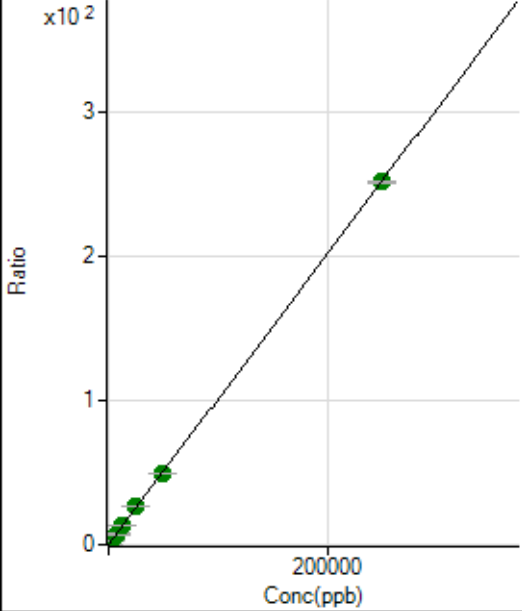
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

35 Cl [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

39 K [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	109224.71	0.1273	P	0.3
2	☐	50.000	6.968	116897.45	0.1343	P	1.0
3	☐	500.000	503.241	544990.74	0.6328	P	0.6
4	☐	2500.000	2722.797	2379030.69	2.8624	A	0.4
5	☐	6250.000	6928.546	5440730.61	7.0873	A	7.0
6	☐	12500.000	13267.121	10241338.87	13.4547	A	0.7
7	☐	25000.000	26568.160	20236947.06	26.8161	A	0.7
8	☐	50000.000	49179.374	38060805.82	49.5300	A	0.2
9	☐	250000.00	249949.76	196402828.19	251.2122	A	0.8

$y = 0.0010 * x + 0.1273$

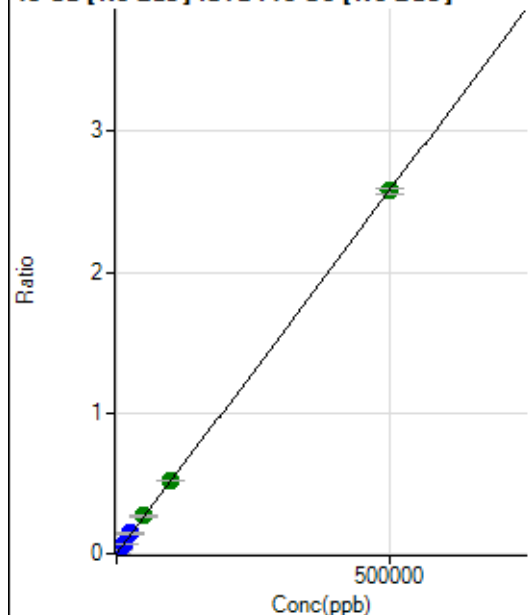
$R = 1.0000$

$DL = 1.005$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD: 45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4670.76	0.0005	P	6.7
2	☐	50.000	-18.876	3789.40	0.0004	P	2.7
3	☐	500.000	465.823	25771.93	0.0029	P	2.0
4	☐	5000.000	5719.984	262650.56	0.0300	P	0.8
5	☐	12500.000	13551.808	604400.24	0.0704	P	6.2
6	☐	25000.000	27872.367	1145598.98	0.1442	P	2.3
7	☐	50000.000	52156.432	2137172.68	0.2694	A	5.0
8	☐	100000.00	100260.46	4091784.80	0.5174	A	1.5
9	☐	500000.00	499555.19	19607960.27	2.5759	A	1.7

$$y = 5.1552E-006 * x + 5.2822E-004$$

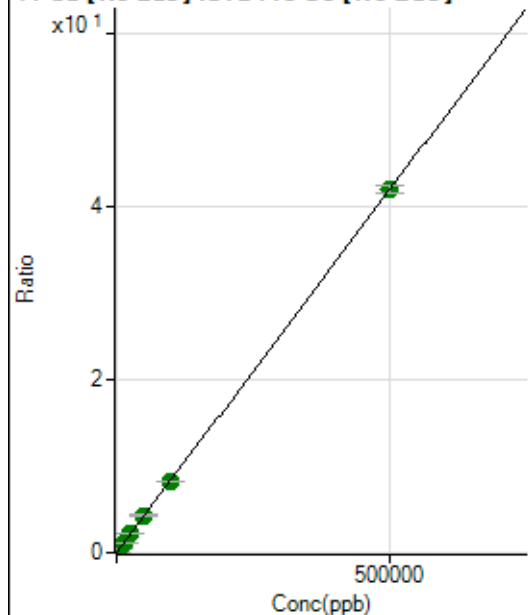
$$R = 1.0000$$

$$DL = 20.71$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD: 45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	85421.19	0.0097	P	1.4
2	☐	50.000	-19.612	70504.33	0.0080	P	2.7
3	☐	500.000	461.082	424408.45	0.0482	P	0.5
4	☐	5000.000	5375.335	4020800.22	0.4595	A	0.6
5	☐	12500.000	12671.210	9185885.56	1.0701	A	6.8
6	☐	25000.000	26156.045	17465150.44	2.1986	A	1.9
7	☐	50000.000	51460.973	34234679.21	4.3162	A	5.6
8	☐	100000.00	98407.943	65206395.14	8.2450	A	0.7
9	☐	500000.00	500106.52	318658088.59	41.8615	A	2.2

$$y = 8.3686E-005 * x + 0.0097$$

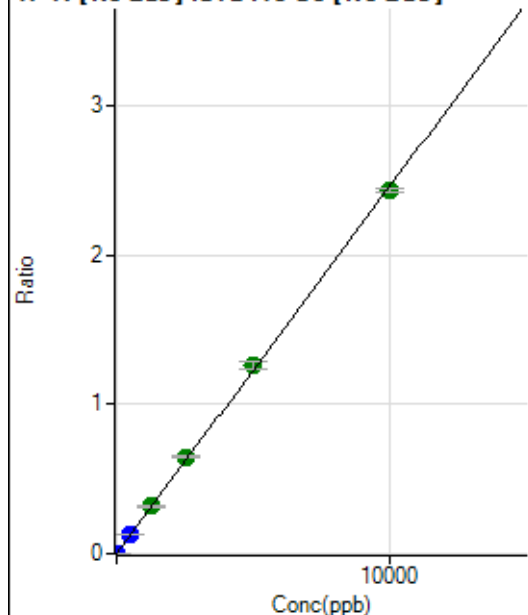
$$R = 1.0000$$

$$DL = 4.714$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD : 45 Sc [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.89	0.0000	P	11.5
2	☐	0.500	0.519	1230.06	0.0001	P	8.8
3	☐	5.000	5.302	11590.09	0.0013	P	0.9
4	☐	500.000	547.442	1179199.74	0.1348	P	0.8
5	☐	1250.000	1288.550	2723698.74	0.3172	A	5.9
6	☐	2500.000	2632.664	5147711.28	0.6480	A	2.1
7	☐	5000.000	5146.501	10051950.20	1.2668	A	3.9
8	☐	10000.000	9886.392	19245088.32	2.4335	A	0.9
9	☐			3347.09	0.0004	P	22.6

$$y = 2.4614E-004 * x + 1.2311E-005$$

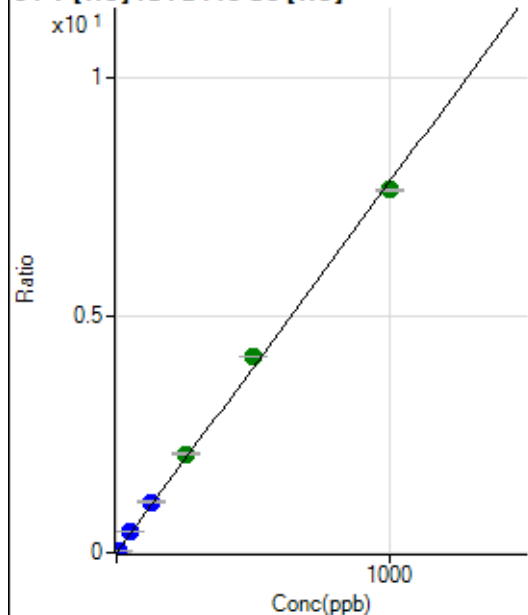
$$R = 0.9997$$

$$DL = 0.01721$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD : 45 Sc [He]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.56	0.0000	P	49.6
2	☐	0.500	0.520	3557.13	0.0041	P	1.8
3	☐	5.000	5.324	35849.21	0.0416	P	0.7
4	☐	50.000	55.373	359696.20	0.4328	P	0.9
5	☐	125.000	137.470	824930.48	1.0745	P	6.7
6	☐	250.000	266.106	1583124.14	2.0798	A	1.0
7	☐	500.000	530.115	3126687.87	4.1433	A	0.7
8	☐	1000.000	979.087	5880272.41	7.6523	A	0.4
9	☐			1185.62	0.0015	P	5.8

$$y = 0.0078 * x + 1.8144E-005$$

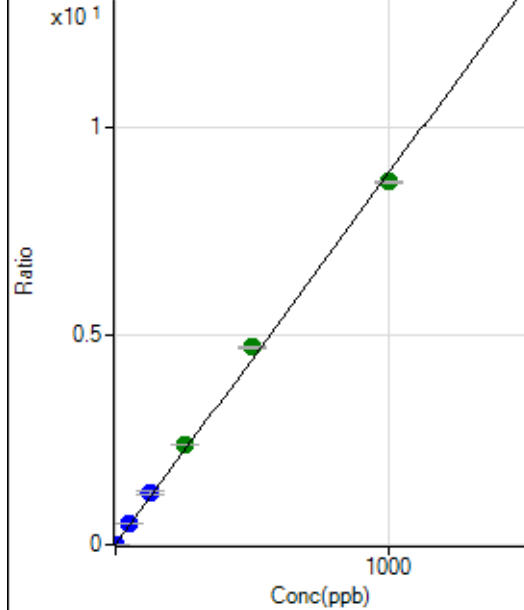
$$R = 0.9992$$

$$DL = 0.003455$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

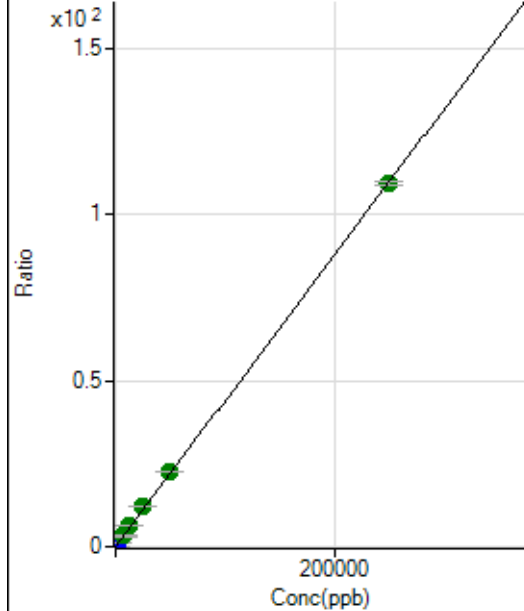


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1274.51	0.0015	P	6.2
2	☐	0.200	0.252	3242.60	0.0037	P	1.5
3	☐	2.000	2.127	17551.43	0.0204	P	0.8
4	☐	50.000	55.847	413576.91	0.4976	P	1.1
5	☐	125.000	139.546	953137.71	1.2412	P	6.1
6	☐	250.000	269.479	1823451.80	2.3956	A	0.6
7	☐	500.000	531.859	3566894.18	4.7266	A	0.7
8	☐	1000.000	977.090	6671514.69	8.6820	A	0.5
9	☐			11661.16	0.0149	P	13.2

$y = 0.0089 * x + 0.0015$
 $R = 0.9990$
 $DL = 0.03091$

Weight: <None>
Min Conc: 0

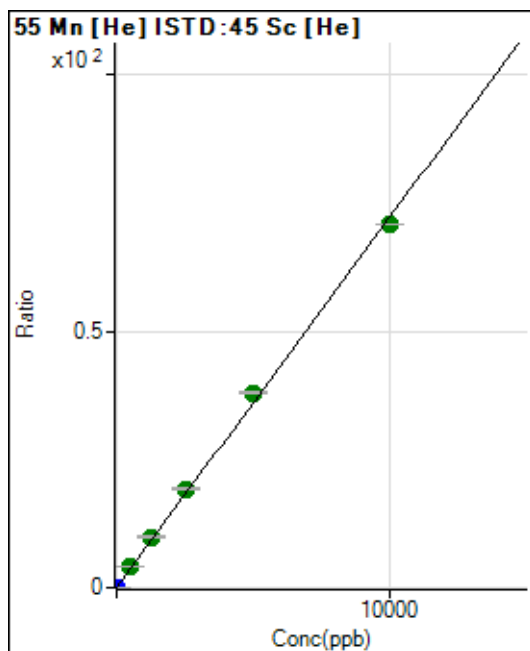
54 Fe [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	20954.64	0.0244	P	0.4
2	☐	5.000	-39.897	6049.05	0.0069	P	0.4
3	☐	50.000	11.510	25370.30	0.0295	P	0.6
4	☐	2500.000	2999.543	1111934.02	1.3379	P	0.2
5	☐	6250.000	7300.350	2473121.59	3.2211	A	6.6
6	☐	12500.000	14149.738	4734757.12	6.2203	A	0.4
7	☐	25000.000	27908.620	9240817.22	12.2450	A	1.0
8	☐	50000.000	51486.316	17342784.33	22.5692	A	0.3
9	☐	250000.00	249298.14	85360522.06	109.1867	A	1.1

$y = 4.3788E-004 * x + 0.0244$
 $R = 0.9999$
 $DL = 0.5884$

Weight: <None>
Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	324.45	0.0004	P	5.0
2	☒	0.100					
3	☐	1.000	1.087	7082.83	0.0082	P	3.3
4	☐	500.000	547.904	3285890.92	3.9537	A	0.8
5	☐	1250.000	1375.596	7620874.54	9.9258	A	6.6
6	☐	2500.000	2670.740	14668465.76	19.2707	A	0.5
7	☐	5000.000	5269.724	28694058.18	38.0233	A	0.3
8	☐	10000.000	9804.358	54361016.97	70.7424	A	0.1
9	☐			25513.99	0.0326	P	1.3

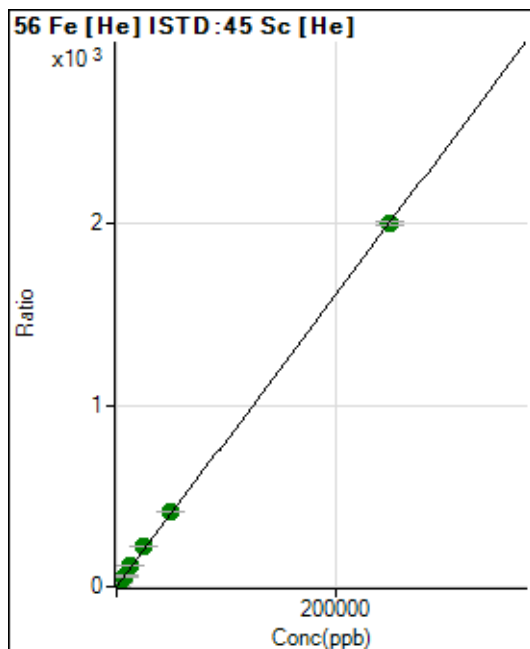
$$y = 0.0072 * x + 3.7811E-004$$

$$R = 0.9993$$

$$DL = 0.007858$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	341088.40	0.3975	P	0.3
2	☐	5.000	-39.063	73559.86	0.0845	P	0.0
3	☐	50.000	10.814	416939.37	0.4841	P	0.7
4	☐	2500.000	2843.608	19264717.21	23.1809	A	1.4
5	☐	6250.000	7170.462	44427281.56	57.8484	A	6.0
6	☐	12500.000	13935.651	85291908.73	112.0522	A	0.4
7	☐	25000.000	27618.491	167291289.73	221.6814	A	0.1
8	☐	50000.000	51213.053	315618073.08	410.7250	A	0.4
9	☐	250000.00	249397.31	1562507656.7	1.998.610	A	0.9

$$y = 0.0080 * x + 0.3975$$

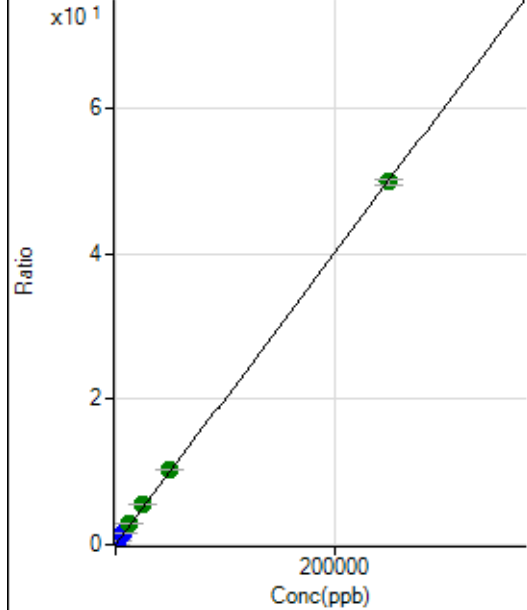
$$R = 0.9999$$

$$DL = 0.5178$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8831.56	0.0103	P	3.6
2	☐	5.000	-35.910	2695.82	0.0031	P	4.2
3	☐	50.000	14.438	11355.47	0.0132	P	2.8
4	☐	2500.000	2970.912	503298.38	0.6056	P	1.3
5	☐	6250.000	7547.123	1169377.47	1.5225	P	5.6
6	☐	12500.000	14024.126	2146775.30	2.8203	A	0.2
7	☐	25000.000	27636.248	4186534.59	5.5478	A	1.1
8	☐	50000.000	51250.010	7898988.01	10.2793	A	1.2
9	☐	250000.00	249373.03	39071199.41	49.9774	A	1.3

$$y = 2.0037E-004 * x + 0.0103$$

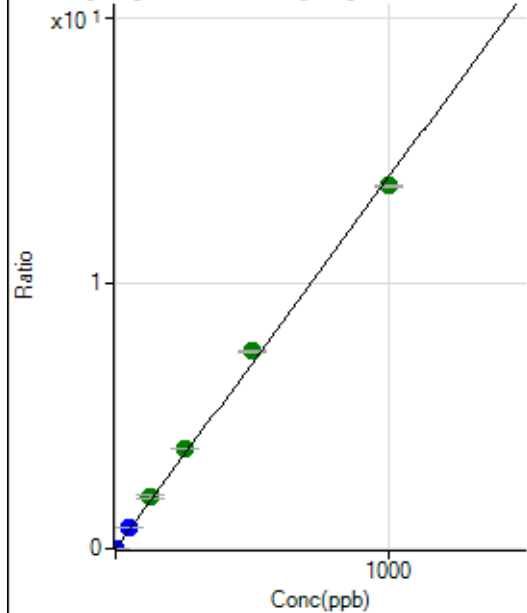
$$R = 0.9999$$

$$DL = 5.472$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	331.12	0.0004	P	12.2
2	☐	0.100	0.107	1642.33	0.0019	P	5.6
3	☐	1.000	1.134	13996.61	0.0163	P	0.8
4	☐	50.000	55.851	649576.26	0.7816	P	0.5
5	☐	125.000	139.947	1503241.12	1.9578	A	6.5
6	☐	250.000	268.295	2856794.47	3.7531	A	0.9
7	☐	500.000	531.975	5615341.10	7.4412	A	1.1
8	☐	1000.000	977.277	10504281.44	13.6697	A	0.4
9	☐			28710.80	0.0367	P	1.3

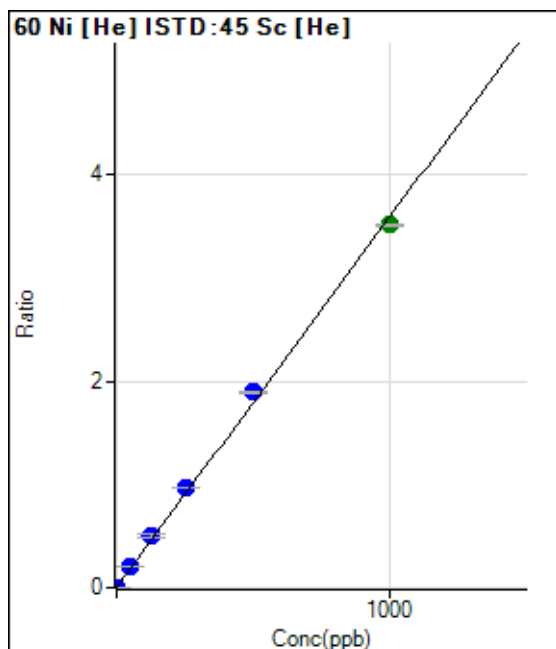
$$y = 0.0140 * x + 3.8587E-004$$

$$R = 0.9990$$

$$DL = 0.01011$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	412.23	0.0005	P	18.1
2	☐	0.100	0.115	778.92	0.0009	P	3.1
3	☐	1.000	1.114	3853.87	0.0045	P	0.7
4	☐	50.000	57.067	170509.12	0.2052	P	0.4
5	☐	125.000	141.098	389029.93	0.5065	P	5.7
6	☐	250.000	268.405	733112.72	0.9631	P	0.6
7	☐	500.000	527.320	1427589.06	1.8917	P	0.5
8	☐	1000.000	979.373	2699549.79	3.5131	A	0.3
9	☐			7876.57	0.0101	P	2.3

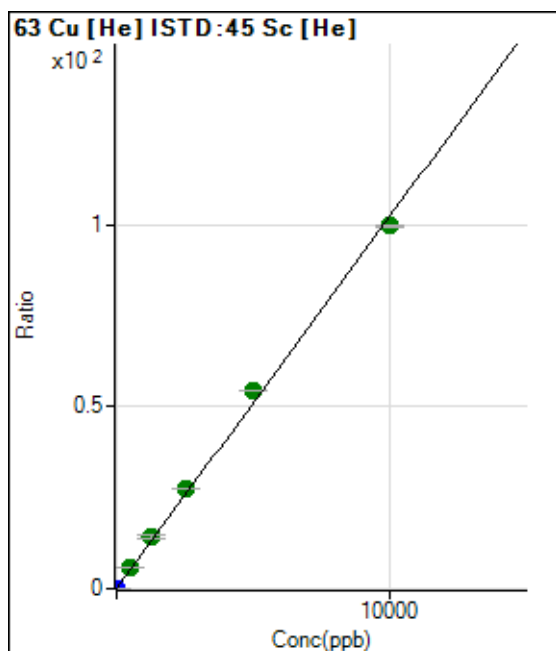
$$y = 0.0036 * x + 4.8055E-004$$

$$R = 0.9992$$

$$DL = 0.07295$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1143.39	0.0013	P	4.3
2	☐	0.200	0.237	3272.60	0.0038	P	4.8
3	☐	2.000	2.065	19342.57	0.0225	P	2.2
4	☐	500.000	563.893	4795497.08	5.7702	A	1.6
5	☐	1250.000	1405.012	11042070.67	14.3751	A	5.3
6	☐	2500.000	2692.480	20967669.69	27.5464	A	0.5
7	☐	5000.000	5344.985	41266003.55	54.6824	A	0.2
8	☐	10000.000	9756.816	76701783.86	99.8171	A	0.5
9	☐			14653.94	0.0187	P	4.8

$$y = 0.0102 * x + 0.0013$$

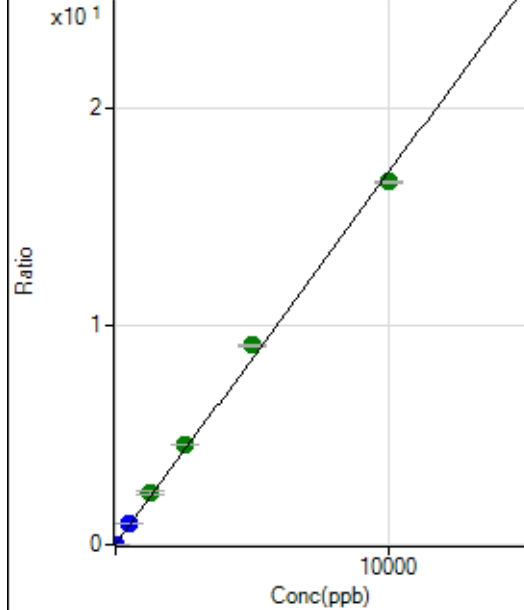
$$R = 0.9989$$

$$DL = 0.01674$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	662.24	0.0008	P	8.8
2	☒	0.200					
3	☐	2.000	5.440	8640.36	0.0100	P	0.9
4	☐	500.000	565.948	801428.35	0.9643	P	1.2
5	☐	1250.000	1394.985	1825322.46	2.3758	A	4.7
6	☐	2500.000	2689.670	3486212.69	4.5800	A	0.4
7	☐	5000.000	5354.881	6880567.60	9.1175	A	0.3
8	☐	10000.000	9753.721	12760946.20	16.6066	A	0.5
9	☐			15154.44	0.0194	P	1.5

$$y = 0.0017 * x + 7.7167E-004$$

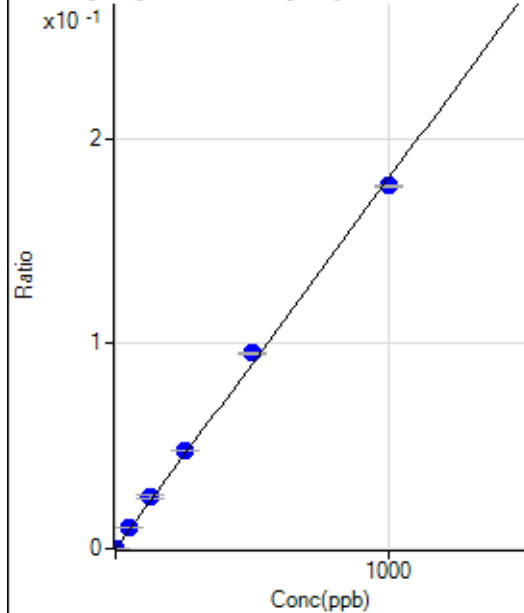
$$R = 0.9988$$

$$DL = 0.1191$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5.56	0.0000	P	35.2
2	☐	0.100	0.102	108.89	0.0000	P	3.4
3	☐	1.000	1.137	1137.84	0.0002	P	4.2
4	☐	50.000	55.411	53871.80	0.0100	P	0.4
5	☐	125.000	140.214	125809.58	0.0253	P	5.4
6	☐	250.000	264.938	239114.65	0.0478	P	0.2
7	☐	500.000	527.642	474710.33	0.0952	P	0.7
8	☐	1000.000	980.272	895209.27	0.1769	P	0.5
9	☐			511.13	0.0001	P	9.6

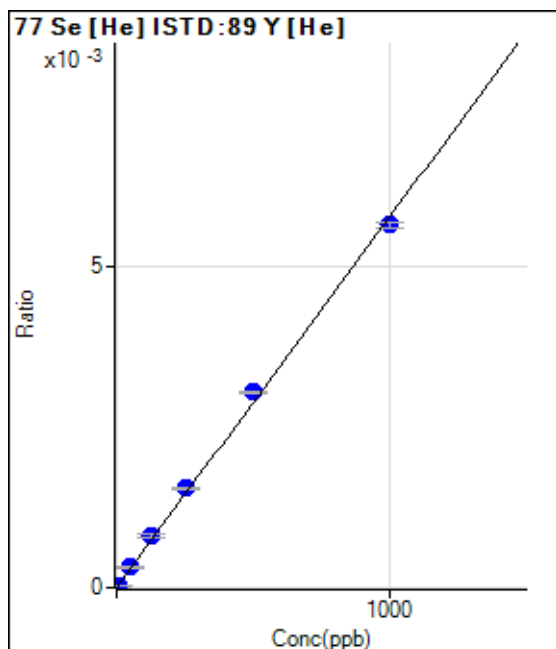
$$y = 1.8041E-004 * x + 1.0077E-006$$

$$R = 0.9992$$

$$DL = 0.005903$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	0.500	0.616	21.11	0.0000	P	8.8
3	☐	5.000	5.268	168.89	0.0000	P	9.2
4	☐	50.000	56.269	1749.01	0.0003	P	8.3
5	☐	125.000	141.440	4057.27	0.0008	P	6.3
6	☐	250.000	268.001	7730.96	0.0015	P	2.5
7	☐	500.000	527.756	15176.77	0.0030	P	1.3
8	☐	1000.000	979.252	28583.19	0.0056	P	1.5
9	☐			8.89	0.0000	P	44.4

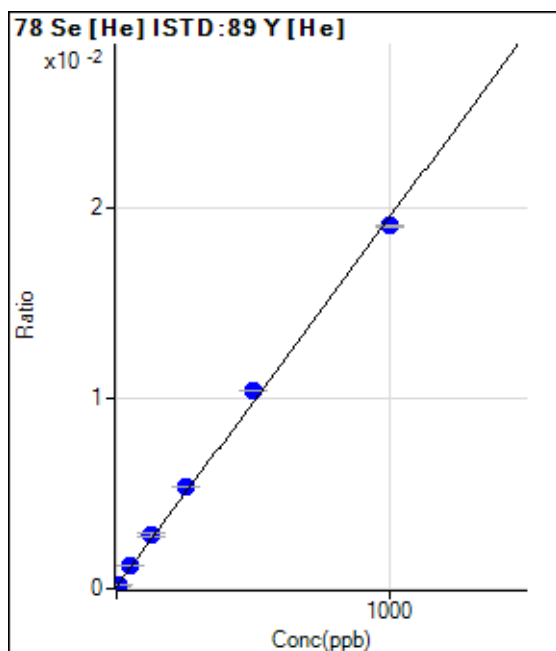
$$y = 5.7664\text{E-}006 * x + 2.0181\text{E-}007$$

$$R = 0.9992$$

$$DL = 0.1818$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	611.13	0.0001	P	10.7
2	☐	0.500	0.741	703.36	0.0001	P	5.5
3	☐	5.000	4.827	1126.72	0.0002	P	13.6
4	☐	50.000	55.024	6344.75	0.0012	P	2.5
5	☐	125.000	142.398	14269.20	0.0029	P	7.4
6	☐	250.000	269.932	26733.05	0.0053	P	0.7
7	☐	500.000	530.416	51831.48	0.0104	P	0.5
8	☐	1000.000	977.384	96473.56	0.0191	P	0.6
9	☐			553.35	0.0001	P	9.3

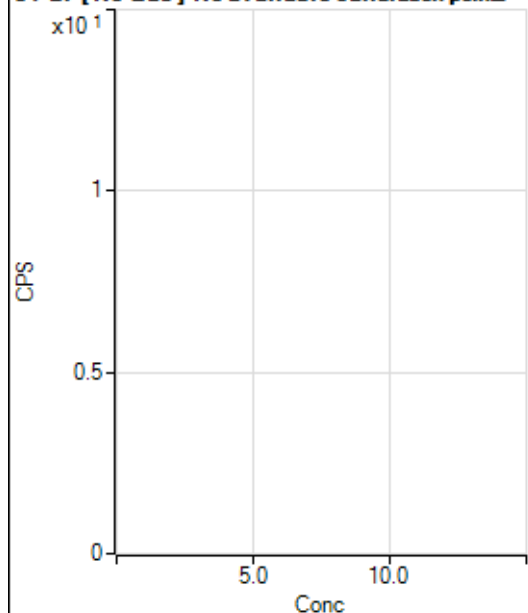
$$y = 1.9387\text{E-}005 * x + 1.1067\text{E-}004$$

$$R = 0.9990$$

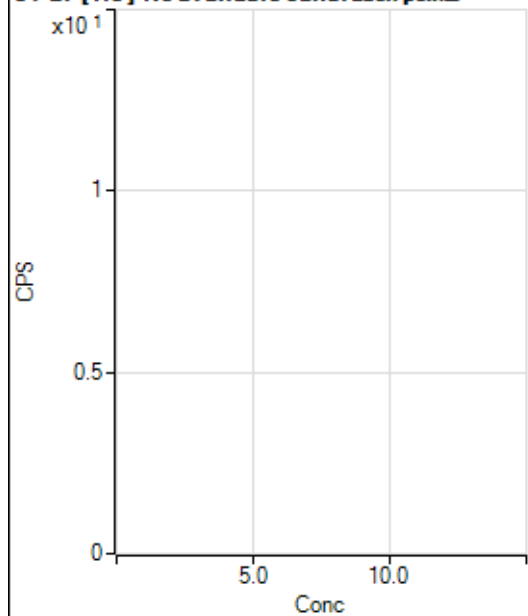
$$DL = 1.825$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

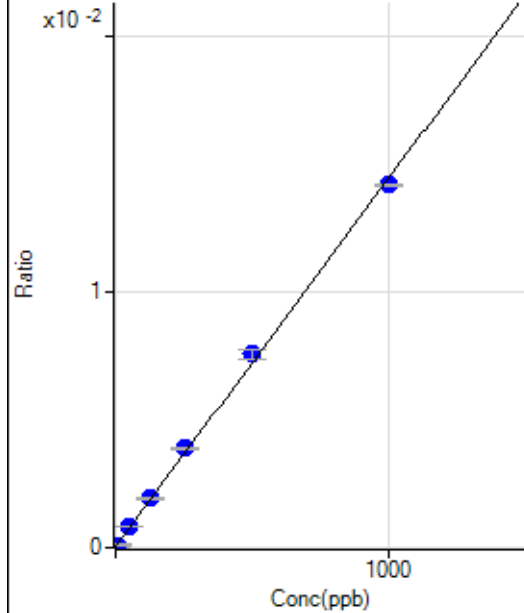
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18040.03		P	2.0
2	☐			17111.13		P	1.0
3	☐			17325.82		P	2.8
4	☐			16459.31		P	2.3
5	☐			15586.09		P	0.4
6	☐			14388.22		P	4.1
7	☐			14248.08		P	3.9
8	☐			14910.97		P	2.1
9	☐			16051.05		P	1.8

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			236.67		P	11.2
2	☐			68.89		P	2.8
3	☐			174.45		P	17.2
4	☐			104.45		P	19.5
5	☐			104.45		P	17.6
6	☐			75.55		P	9.2
7	☐			96.67		P	18.2
8	☐			124.45		P	19.4
9	☐			163.34		P	16.3

Calibration for 003CALB.d

82 Se [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	687.12	0.0000	P	18.0
2	☒	0.500					
3	☐	5.000	5.231	2130.75	0.0001	P	4.6
4	☐	50.000	56.272	16048.76	0.0008	P	1.1
5	☐	125.000	131.297	36515.81	0.0019	P	6.5
6	☐	250.000	266.629	68611.04	0.0039	P	1.0
7	☐	500.000	523.784	132478.42	0.0076	P	4.6
8	☐	1000.000	982.849	251052.06	0.0142	P	0.5
9	☐			785.31	0.0000	P	4.0

$y = 1.4391E-005 * x + 3.5690E-005$

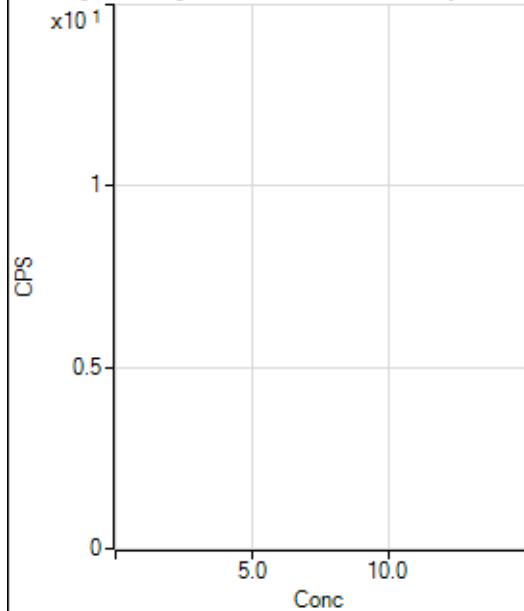
$R = 0.9994$

$DL = 1.341$

Weight: <None>

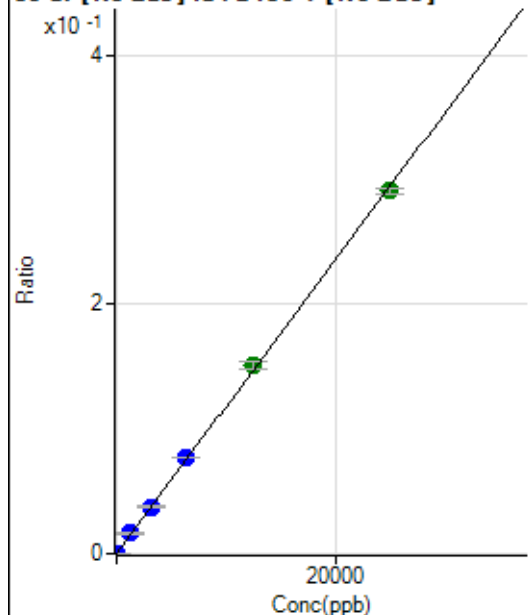
Min Conc: 0

83 Kr [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			346.67		P	20.8
2	☐			333.34		P	22.1
3	☐			371.12		P	10.0
4	☐			364.45		P	4.7
5	☐			338.89		P	7.9
6	☐			297.78		P	27.8
7	☐			344.45		P	9.1
8	☐			334.45		P	6.5
9	☐			360.01		P	10.7

86 Sr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	633.35	0.0000	P	4.0
2	☐	0.100	2.792	1272.29	0.0001	P	4.8
3	☐	1.000	25.916	6491.48	0.0003	P	0.8
4	☐	1250.000	1374.641	307735.74	0.0162	P	1.2
5	☐	3125.000	3202.436	715647.48	0.0377	P	6.2
6	☐	6250.000	6534.303	1363186.04	0.0769	P	1.0
7	☐	12500.000	12875.775	2651808.73	0.1516	A	4.3
8	☐	25000.000	24725.124	5153145.73	0.2911	A	1.2
9	☐			16214.57	0.0010	P	1.8

$$y = 1.1771E-005 * x + 3.2906E-005$$

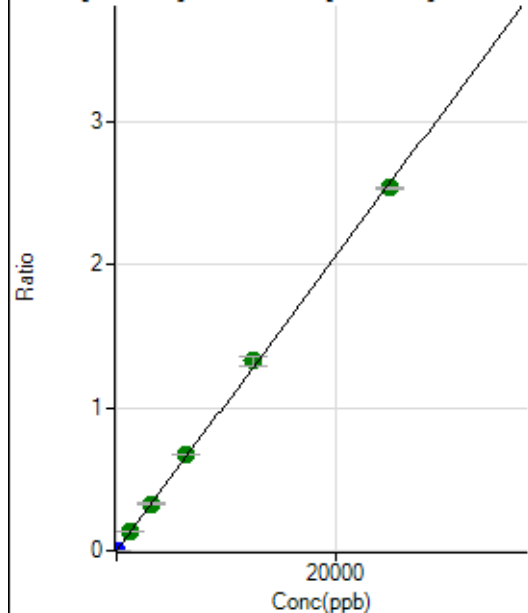
$$R = 0.9998$$

$$DL = 0.3328$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	382.23	0.0000	P	5.2
2	☐	0.100	2.959	6270.28	0.0003	P	2.0
3	☐	1.000	26.671	53006.08	0.0028	P	1.2
4	☐	1250.000	1365.797	2663786.09	0.1403	A	0.7
5	☐	3125.000	3181.990	6202282.13	0.3269	A	5.8
6	☐	6250.000	6533.453	11892457.04	0.6713	A	0.7
7	☐	12500.000	12904.169	23191358.82	1.3258	A	4.5
8	☐	25000.000	24714.138	44953599.33	2.5391	A	0.6
9	☐			136219.35	0.0081	P	1.3

$$y = 1.0274E-004 * x + 1.9859E-005$$

$$R = 0.9997$$

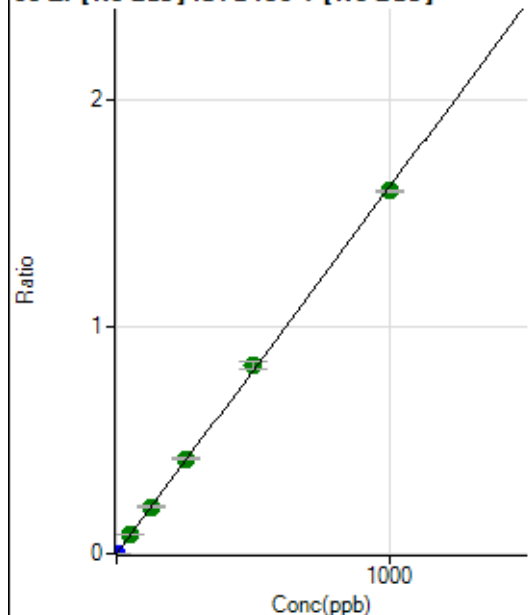
$$DL = 0.03038$$

Weight: <None>

Min Conc: 0

Calibration for 003CALB.d

90 Zr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	967.82	0.0001	P	3.6
2	☐	0.100	0.096	3981.69	0.0002	P	1.7
3	☐	1.000	1.015	32495.93	0.0017	P	1.4
4	☐	50.000	53.901	1655910.55	0.0872	A	0.9
5	☐	125.000	127.225	3905327.96	0.2058	A	5.8
6	☐	250.000	258.760	7416236.07	0.4186	A	1.2
7	☐	500.000	515.149	14580066.31	0.8334	A	3.7
8	☐	1000.000	989.762	28346462.08	1.6011	A	0.5
9	☐			18737.63	0.0011	P	5.5

$$y = 0.0016 * x + 5.0284E-005$$

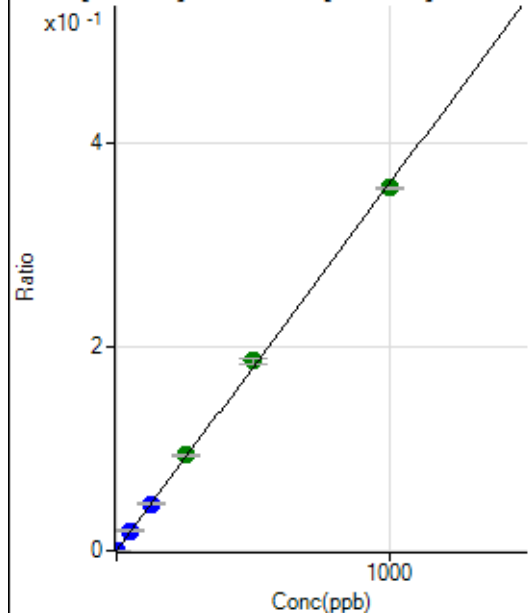
$$R = 0.9998$$

$$DL = 0.003326$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	184.45	0.0000	P	5.2
2	☐	0.100	0.100	882.25	0.0000	P	1.1
3	☐	1.000	1.008	7157.38	0.0004	P	0.7
4	☐	50.000	54.748	374515.37	0.0197	P	1.4
5	☐	125.000	127.578	872038.22	0.0460	P	6.0
6	☐	250.000	260.011	1659613.99	0.0937	A	0.7
7	☐	500.000	517.422	3261566.55	0.1864	A	3.3
8	☐	1000.000	988.226	6303024.77	0.3560	A	0.2
9	☐			4126.18	0.0002	P	5.3

$$y = 3.6024E-004 * x + 9.5822E-006$$

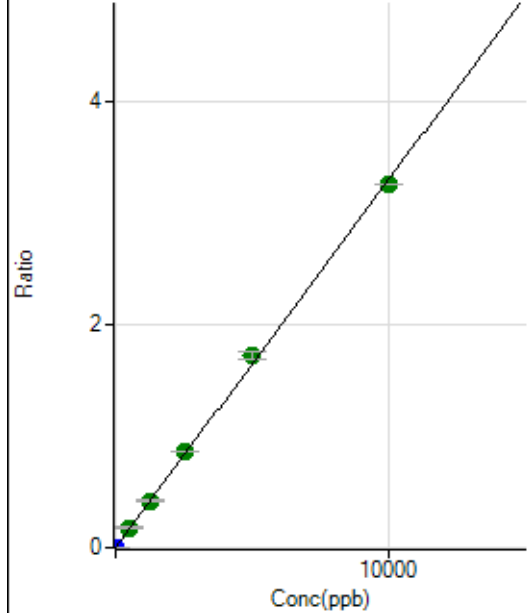
$$R = 0.9997$$

$$DL = 0.004182$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	396.68	0.0000	P	13.8
2	☐	0.500	0.588	4149.52	0.0002	P	3.2
3	☐	5.000	6.113	39107.61	0.0020	P	2.0
4	☐	500.000	545.542	3414855.61	0.1799	A	2.1
5	☐	1250.000	1275.288	7980373.63	0.4206	A	5.3
6	☐	2500.000	2598.087	15179535.05	0.8568	A	0.6
7	☐	5000.000	5205.572	30032047.89	1.7167	A	4.1
8	☐	10000.000	9867.253	57610191.36	3.2540	A	0.1
9	☐			16549.60	0.0010	P	14.4

$$y = 3.2977E-004 * x + 2.0615E-005$$

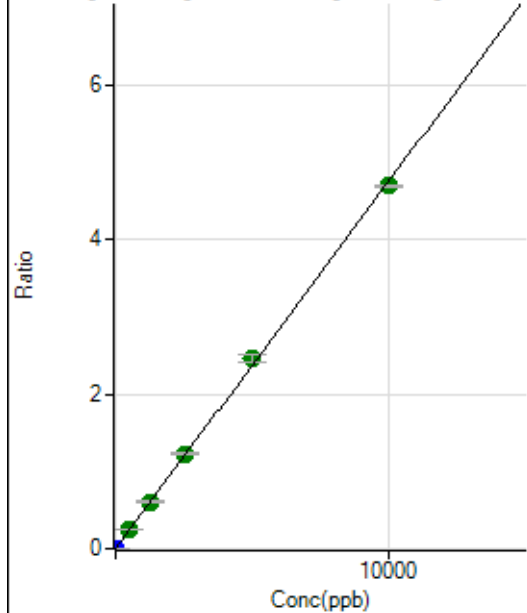
$$R = 0.9996$$

$$DL = 0.02584$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	151.11	0.0000	P	6.3
2	☐	0.500	0.501	4763.05	0.0002	P	2.5
3	☐	5.000	5.136	47058.58	0.0025	P	0.9
4	☐	500.000	541.999	4892398.54	0.2578	A	2.3
5	☐	1250.000	1270.849	11470415.66	0.6044	A	4.8
6	☐	2500.000	2592.348	21841909.40	1.2329	A	1.2
7	☐	5000.000	5178.622	43087948.80	2.4629	A	4.0
8	☐	10000.000	9882.896	83216530.98	4.7002	A	0.2
9	☐			16900.20	0.0010	P	21.6

$$y = 4.7559E-004 * x + 7.8498E-006$$

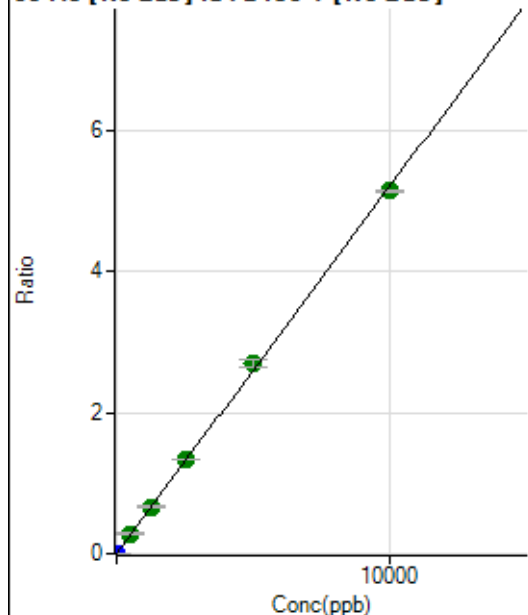
$$R = 0.9997$$

$$DL = 0.003133$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	222.23	0.0000	P	4.9
2	☐	0.500	0.518	5438.83	0.0003	P	4.6
3	☐	5.000	5.209	52304.14	0.0027	P	1.3
4	☐	500.000	545.503	5389750.06	0.2840	A	1.9
5	☐	1250.000	1266.668	12510982.32	0.6594	A	5.4
6	☐	2500.000	2578.765	23782574.09	1.3424	A	0.7
7	☐	5000.000	5182.103	47189280.41	2.6976	A	4.4
8	☐	10000.000	9884.898	91101923.09	5.1457	A	0.3
9	☐			32241.50	0.0019	P	10.6

$$y = 5.2056E-004 * x + 1.1547E-005$$

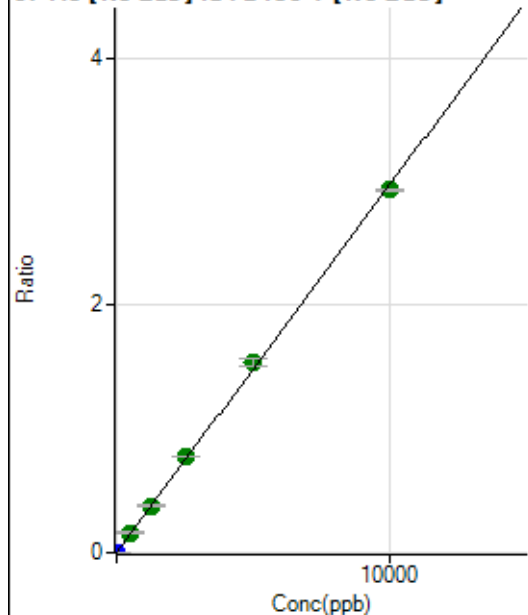
$$R = 0.9997$$

$$DL = 0.003249$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD : 89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	113.34	0.0000	P	19.0
2	☐	0.500	0.502	3003.68	0.0002	P	2.4
3	☐	5.000	5.116	29309.43	0.0015	P	0.6
4	☐	500.000	544.504	3070882.07	0.1618	A	1.8
5	☐	1250.000	1268.878	7153060.73	0.3770	A	5.8
6	☐	2500.000	2606.135	13719545.49	0.7744	A	0.8
7	☐	5000.000	5197.193	27014622.10	1.5443	A	4.3
8	☐	10000.000	9870.285	51924840.34	2.9328	A	0.6
9	☐			10232.69	0.0006	P	22.8

$$y = 2.9714E-004 * x + 5.8861E-006$$

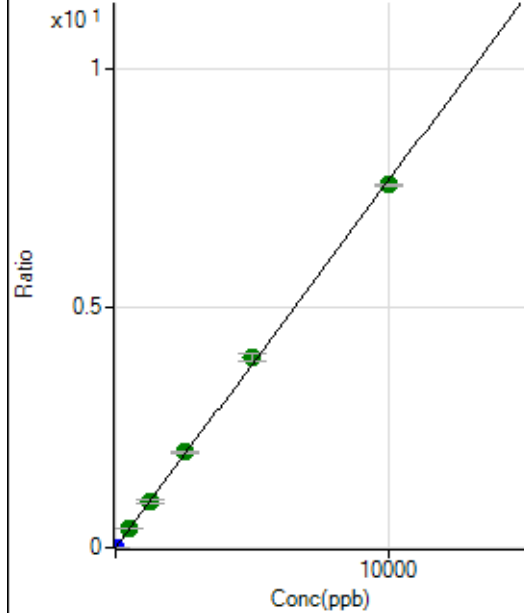
$$R = 0.9997$$

$$DL = 0.01127$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD :89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	253.34	0.0000	P	8.3
2	☐	0.500	0.495	7589.81	0.0004	P	3.4
3	☐	5.000	5.126	75648.86	0.0039	P	2.2
4	☐	500.000	541.267	7868642.94	0.4146	A	1.8
5	☐	1250.000	1264.948	18380623.61	0.9689	A	5.8
6	☐	2500.000	2595.845	35223947.53	1.9882	A	1.4
7	☐	5000.000	5173.785	69324799.52	3.9627	A	4.0
8	☐	10000.000	9885.215	134047676.89	7.5713	A	0.7
9	☐			25154.89	0.0015	P	22.2

$$y = 7.6592E-004 * x + 1.3164E-005$$

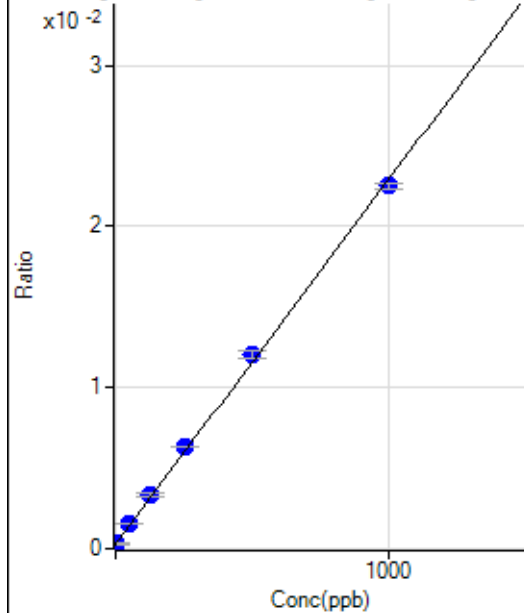
$$R = 0.9997$$

$$DL = 0.004289$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5572.24	0.0003	P	3.7
2	☐	0.100	-0.217	5485.54	0.0003	P	2.1
3	☐	1.000	1.271	6116.90	0.0003	P	4.1
4	☐	50.000	58.836	32917.20	0.0016	P	0.5
5	☐	125.000	135.771	69315.55	0.0033	P	6.6
6	☐	250.000	268.551	125709.09	0.0063	P	0.7
7	☐	500.000	520.704	241699.54	0.0121	P	4.4
8	☐	1000.000	983.222	453231.76	0.0225	P	1.5
9	☐			4891.99	0.0003	P	1.4

$$y = 2.2634E-005 * x + 2.7063E-004$$

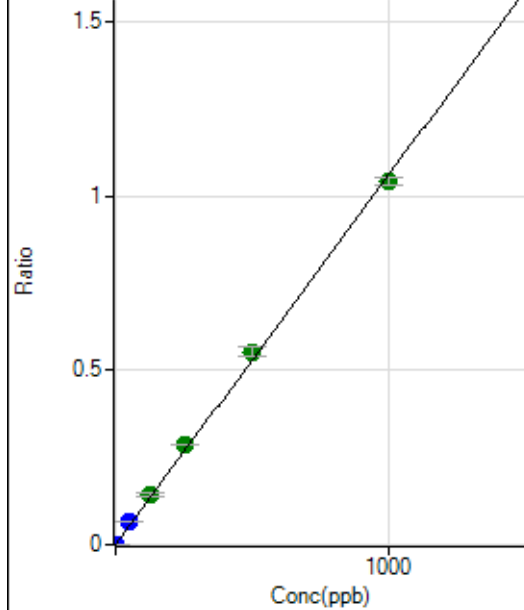
$$R = 0.9995$$

$$DL = 1.328$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	138.89	0.0000	P	11.5
2	☐	0.100	0.106	2456.90	0.0001	P	2.5
3	☐	1.000	1.115	24300.38	0.0012	P	0.8
4	☐	50.000	60.301	1314058.36	0.0640	P	1.1
5	☐	125.000	136.056	2992840.30	0.1443	A	5.5
6	☐	250.000	270.397	5678572.62	0.2868	A	0.6
7	☐	500.000	522.134	11101903.86	0.5538	A	4.7
8	☐	1000.000	981.937	20955550.38	1.0415	A	2.3
9	☐			4731.95	0.0002	P	20.4

$$y = 0.0011 * x + 6.7428E-006$$

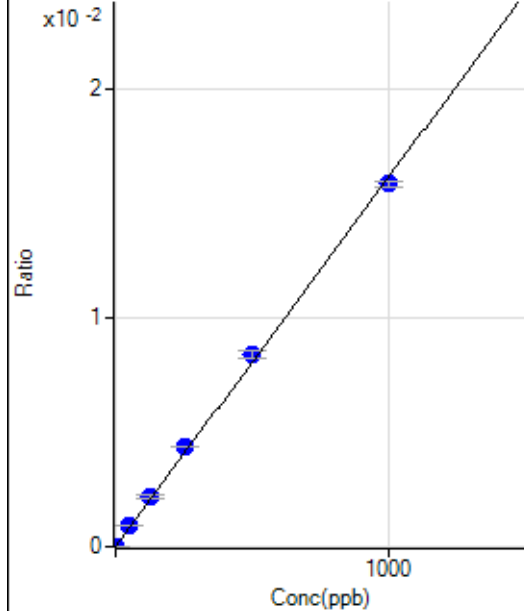
$$R = 0.9994$$

$$DL = 0.002184$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14.44	0.0000	P	12.6
2	☐	0.100	0.084	42.22	0.0000	P	35.3
3	☐	1.000	1.155	395.56	0.0000	P	11.4
4	☐	50.000	58.862	19545.48	0.0010	P	0.6
5	☐	125.000	135.076	45239.19	0.0022	P	6.7
6	☐	250.000	271.415	86810.77	0.0044	P	0.7
7	☐	500.000	520.821	168643.09	0.0084	P	4.9
8	☐	1000.000	982.533	319329.73	0.0159	P	1.5
9	☐			137.78	0.0000	P	9.4

$$y = 1.6152E-005 * x + 7.0099E-007$$

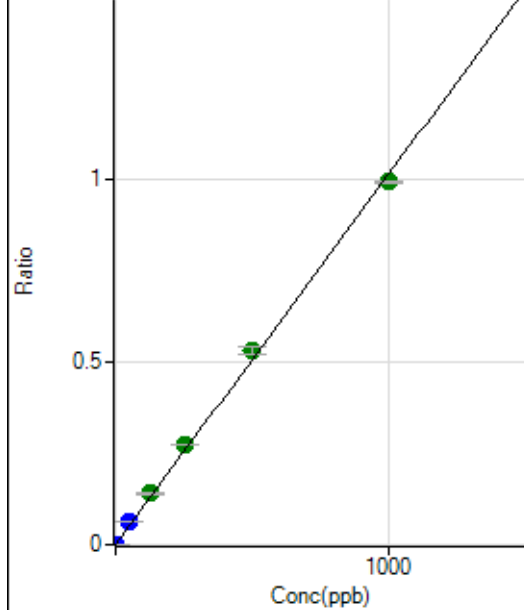
$$R = 0.9994$$

$$DL = 0.01642$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0000	P	36.7
2	☐	0.100	0.111	2398.00	0.0001	P	4.6
3	☐	1.000	1.115	23186.40	0.0011	P	1.8
4	☐	50.000	60.202	1254741.09	0.0611	P	1.0
5	☐	125.000	138.169	2906657.53	0.1402	A	5.9
6	☐	250.000	271.419	5451981.93	0.2754	A	0.4
7	☐	500.000	525.106	10680885.33	0.5327	A	3.9
8	☐	1000.000	979.936	20004975.39	0.9941	A	0.4
9	☐			4506.31	0.0002	P	18.9

$$y = 0.0010 * x + 3.7708E-006$$

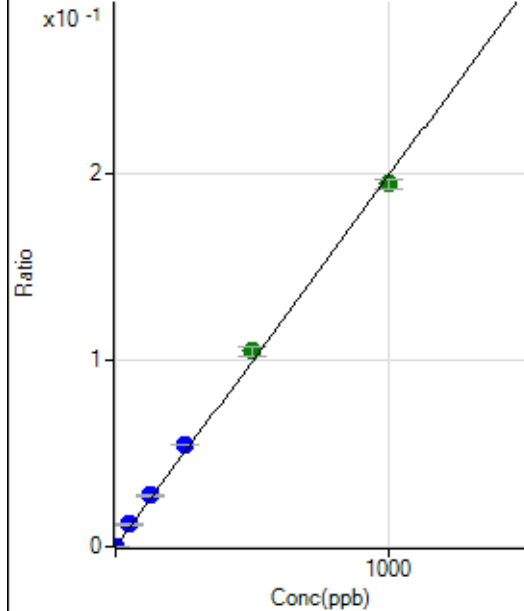
$$R = 0.9992$$

$$DL = 0.004094$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44.42	0.0000	P	34.5
2	☐	0.100	0.118	525.67	0.0000	P	11.4
3	☐	1.000	1.200	4907.99	0.0002	P	4.6
4	☐	50.000	59.667	243215.13	0.0118	P	1.2
5	☐	125.000	138.005	567591.62	0.0274	P	6.6
6	☐	250.000	275.216	1081049.44	0.0546	P	1.1
7	☐	500.000	526.714	2094559.88	0.1045	A	5.1
8	☐	1000.000	978.230	3904714.07	0.1941	A	2.3
9	☐			818.05	0.0000	P	19.3

$$y = 1.9838E-004 * x + 2.1596E-006$$

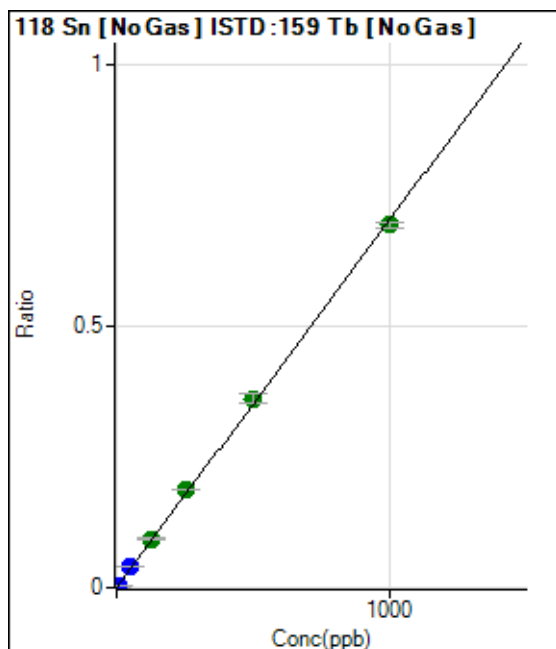
$$R = 0.9991$$

$$DL = 0.01127$$

Weight: <None>

Min Conc: 0

Calibration for 003CALB.d



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1911.26	0.0001	P	2.2
2	☐	0.500	0.665	11549.16	0.0006	P	3.9
3	☐	5.000	5.523	81192.42	0.0040	P	1.2
4	☐	50.000	57.468	831521.68	0.0405	P	0.9
5	☐	125.000	132.714	1935569.36	0.0934	A	6.1
6	☐	250.000	267.235	3719957.58	0.1879	A	0.8
7	☐	500.000	514.803	7253541.42	0.3619	A	4.9
8	☐	1000.000	986.949	13957067.29	0.6936	A	1.5
9	☐			5864.59	0.0003	P	10.2

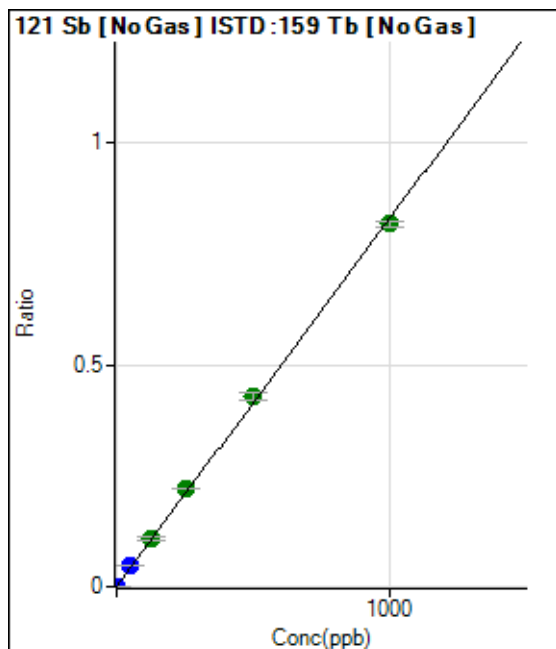
$$y = 7.0272\text{E-}004 * x + 9.2808\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.008784$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	28.89	0.0000	P	34.5
2	☐	0.200	0.213	3668.28	0.0002	P	4.8
3	☐	2.000	2.204	37319.50	0.0018	P	1.6
4	☐	50.000	56.596	962999.63	0.0469	P	1.1
5	☐	125.000	132.130	2268756.95	0.1094	A	6.5
6	☐	250.000	265.616	4355785.53	0.2200	A	0.4
7	☐	500.000	517.378	8591175.43	0.4285	A	4.1
8	☐	1000.000	986.186	16435258.37	0.8168	A	1.4
9	☐			8291.37	0.0004	P	11.7

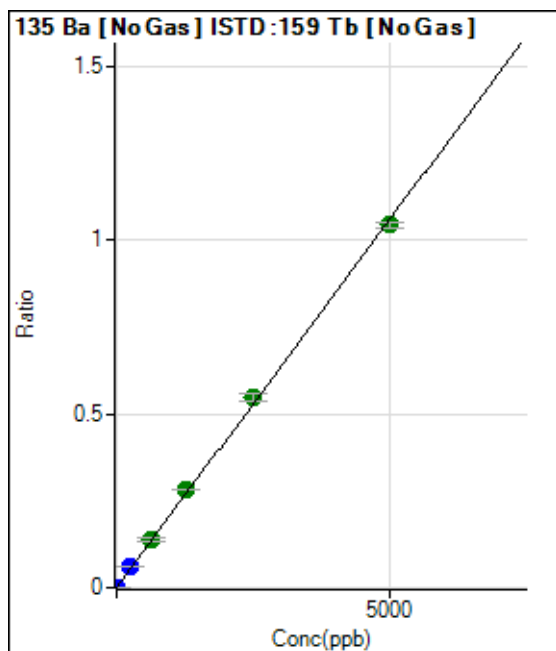
$$y = 8.2824\text{E-}004 * x + 1.4008\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.001752$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	21.2
2	☐	1.000	1.075	4749.73	0.0002	P	6.9
3	☐	10.000	10.646	46060.83	0.0023	P	0.8
4	☐	250.000	279.354	1213768.53	0.0591	P	1.1
5	☐	625.000	651.032	2855371.35	0.1377	A	5.5
6	☐	1250.000	1325.283	5549524.02	0.2803	A	0.7
7	☐	2500.000	2588.714	10977154.28	0.5475	A	3.9
8	☐	5000.000	4932.099	20988727.74	1.0431	A	1.4
9	☐			9747.87	0.0005	P	8.5

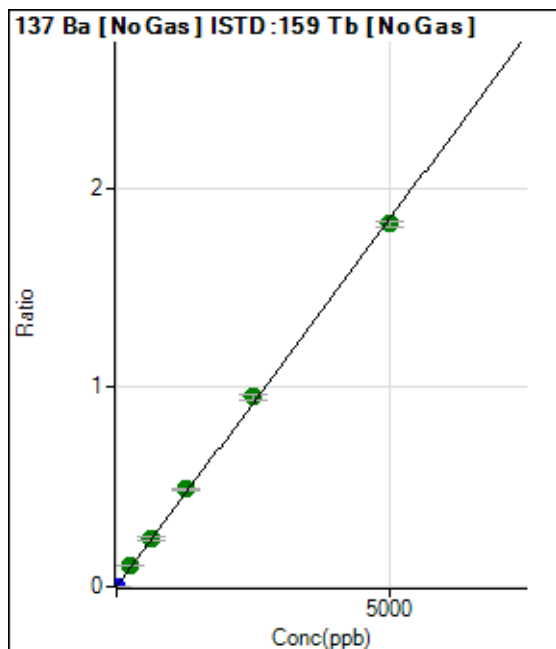
$$y = 2.1149E-004 * x + 2.9707E-006$$

$$R = 0.9996$$

$$DL = 0.008949$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	101.11	0.0000	P	21.2
2	☐	1.000	1.041	8013.44	0.0004	P	3.0
3	☐	10.000	10.727	80864.64	0.0040	P	1.3
4	☐	250.000	279.088	2112913.84	0.1029	A	1.5
5	☐	625.000	650.400	4969461.98	0.2397	A	6.1
6	☐	1250.000	1324.531	9664237.91	0.4881	A	0.7
7	☐	2500.000	2581.652	19077287.77	0.9514	A	3.3
8	☐	5000.000	4935.911	36599904.18	1.8189	A	1.4
9	☐			17101.58	0.0009	P	10.0

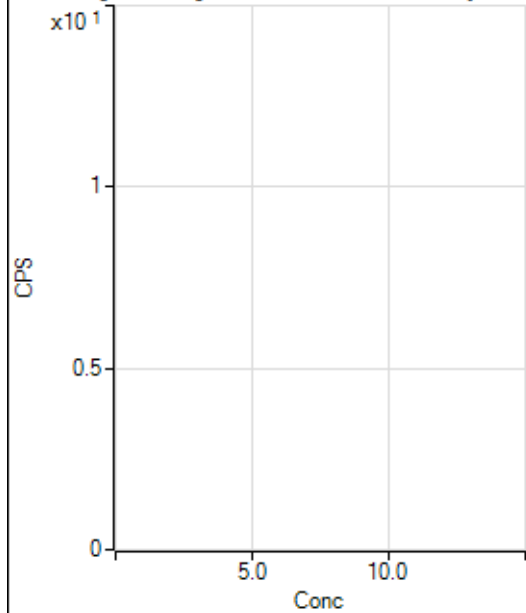
$$y = 3.6851E-004 * x + 4.9055E-006$$

$$R = 0.9997$$

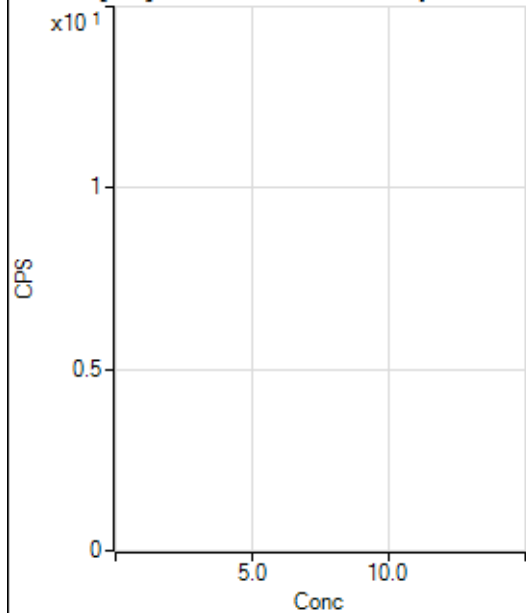
$$DL = 0.008463$$

Weight: <None>

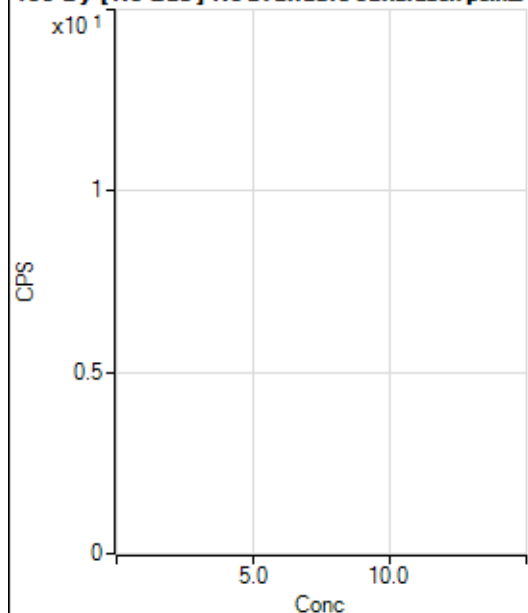
Min Conc: 0

150 Nd [No Gas] No available calibration points

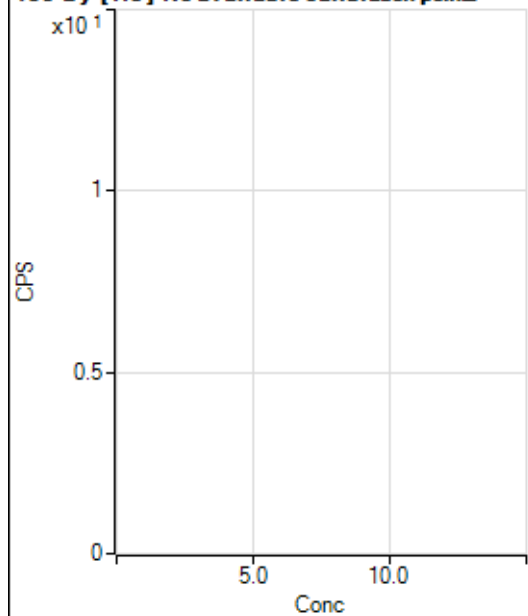
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	83.3
2	☐			13.33		P	75.0
3	☐			14.44		P	58.1
4	☐			93.33		P	29.2
5	☐			162.23		P	13.7
6	☐			296.67		P	17.4
7	☐			570.02		P	10.8
8	☐			1126.72		P	1.8
9	☐			377.79		P	16.8

150 Nd [He] No available calibration points

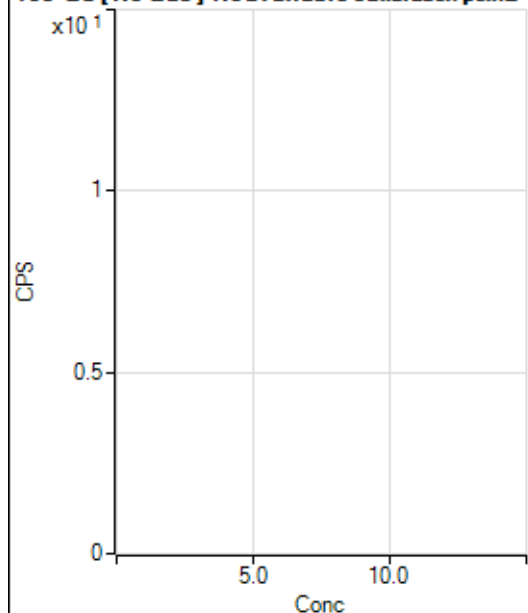
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐			2.22		P	86.6
3	☐			14.45		P	48.0
4	☐			13.33		P	50.0
5	☐			35.55		P	19.5
6	☐			74.44		P	29.1
7	☐			144.45		P	15.7
8	☐			338.90		P	6.3
9	☐			236.67		P	5.1

156 Dy [No Gas] No available calibration points

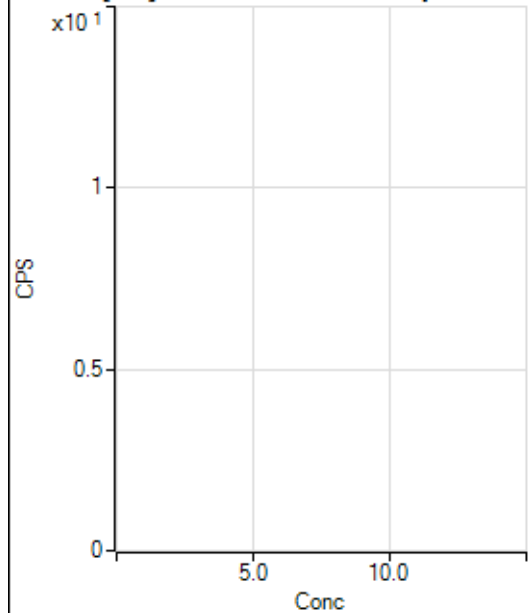
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	65.8
2	☐			17.78		P	39.0
3	☐			21.11		P	32.9
4	☐			47.78		P	21.3
5	☐			64.44		P	11.9
6	☐			98.89		P	10.3
7	☐			220.00		P	4.0
8	☐			398.90		P	7.1
9	☐			625.58		P	1.3

156 Dy [He] No available calibration points

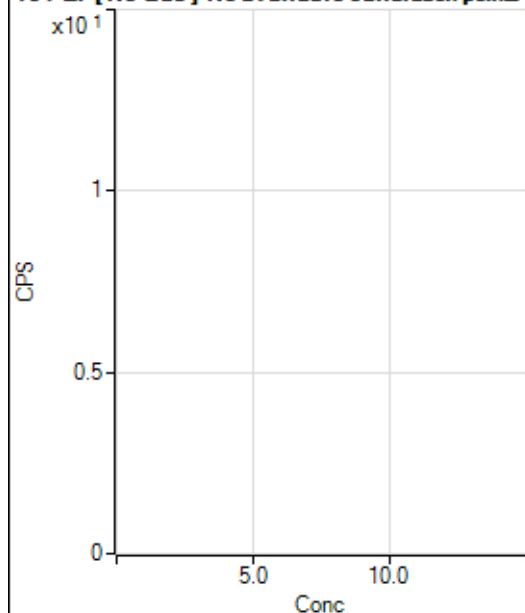
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			7.78		P	65.5
3	☐			15.56		P	53.9
4	☐			64.45		P	24.4
5	☐			148.89		P	15.7
6	☐			298.89		P	1.3
7	☐			596.69		P	5.9
8	☐			1105.61		P	2.5
9	☐			581.13		P	6.0

160 Gd [No Gas] No available calibration poin...

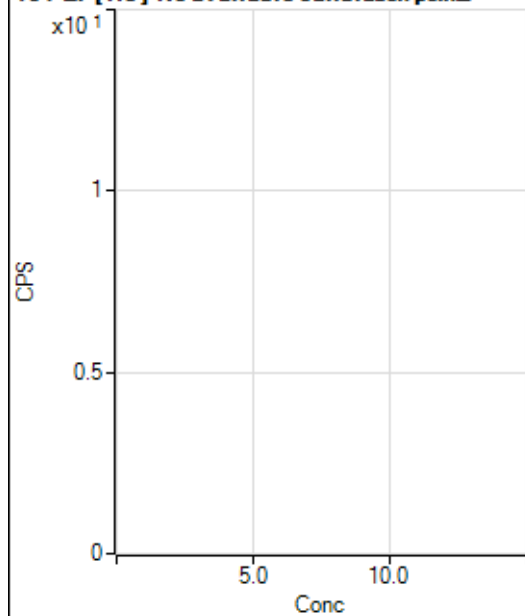
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			120.00		P	16.9
2	☐			100.00		P	15.3
3	☐			87.78		P	24.1
4	☐			120.00		P	16.9
5	☐			128.89		P	7.9
6	☐			137.78		P	9.2
7	☐			221.11		P	8.6
8	☐			302.23		P	3.5
9	☐			707.80		P	4.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			875.59		P	2.3
2	☐			781.14		P	7.7
3	☐			850.04		P	6.6
4	☐			802.25		P	10.0
5	☐			808.92		P	4.6
6	☐			864.48		P	5.5
7	☐			916.71		P	9.0
8	☐			934.48		P	3.0
9	☐			1220.07		P	7.2

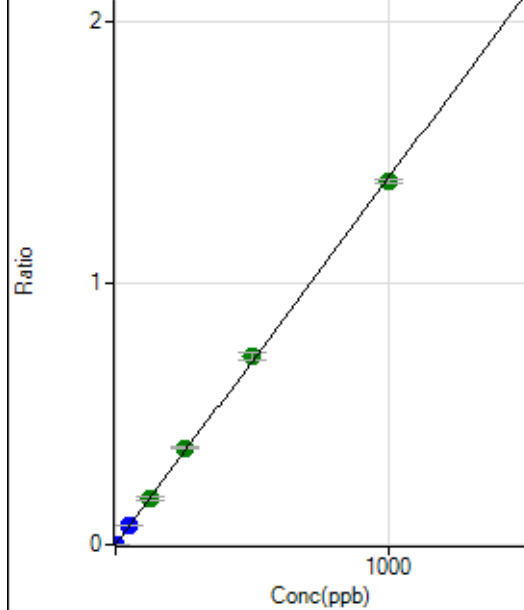
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	11.5
2	☐			76.67		P	17.4
3	☐			90.00		P	7.4
4	☐			103.34		P	11.2
5	☐			102.22		P	1.9
6	☐			151.11		P	18.8
7	☐			235.56		P	20.6
8	☐			367.79		P	22.6
9	☐			765.58		P	4.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			65.56		P	33.9
2	☐			46.67		P	7.1
3	☐			70.00		P	25.2
4	☐			70.00		P	31.2
5	☐			85.56		P	21.5
6	☐			101.11		P	5.0
7	☐			155.56		P	16.1
8	☐			243.34		P	7.2
9	☐			526.68		P	5.8

203 Tl [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	316.67	0.0000	P	20.4
2	☐	0.100	0.096	1945.72	0.0002	P	0.6
3	☐	1.000	1.009	17217.63	0.0014	P	1.0
4	☐	50.000	54.113	910077.73	0.0761	P	0.8
5	☐	125.000	127.261	2203652.83	0.1788	A	6.6
6	☐	250.000	264.087	4359225.53	0.3710	A	2.3
7	☐	500.000	513.612	8563201.75	0.7216	A	4.4
8	☐	1000.000	989.184	16251594.62	1.3898	A	1.2
9	☐			2522.50	0.0002	P	31.1

$$y = 0.0014 * x + 2.6506E-005$$

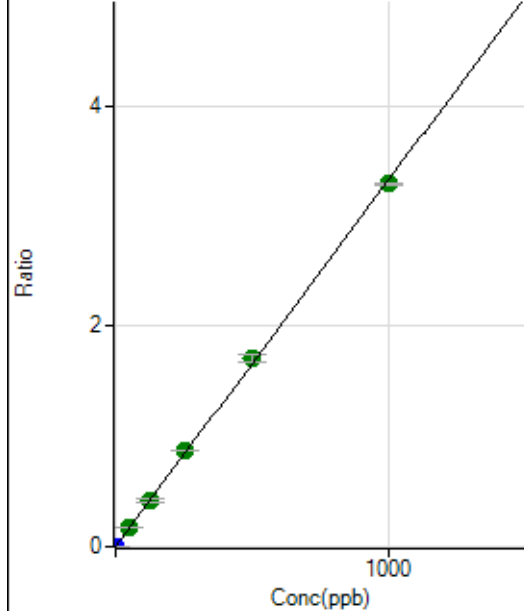
$$R = 0.9998$$

$$DL = 0.01154$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	747.82	0.0001	P	19.6
2	☐	0.100	0.096	4585.27	0.0004	P	4.4
3	☐	1.000	1.030	41562.27	0.0035	P	1.2
4	☐	50.000	53.801	2141037.73	0.1789	A	0.9
5	☐	125.000	126.282	5176415.86	0.4199	A	5.2
6	☐	250.000	262.005	10234302.97	0.8711	A	1.5
7	☐	500.000	513.646	20262025.26	1.7076	A	4.8
8	☐	1000.000	989.825	38482671.10	3.2906	A	0.6
9	☐			5719.12	0.0006	P	27.1

$$y = 0.0033 * x + 6.2593E-005$$

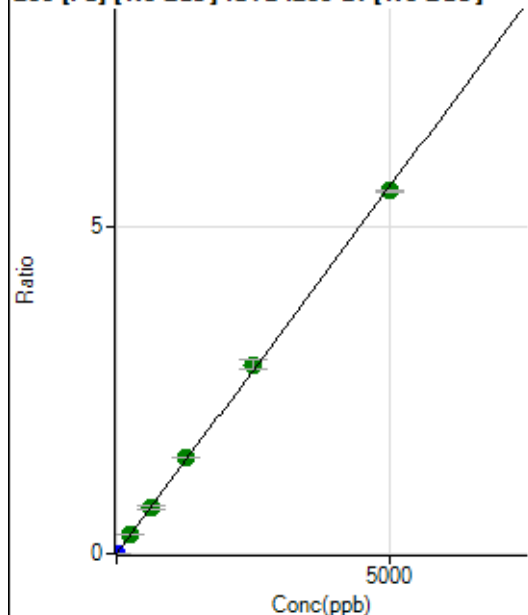
$$R = 0.9998$$

$$DL = 0.01105$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	494.46	0.0000	P	9.5
2	☐	0.100	0.137	2338.00	0.0002	P	6.6
3	☐	1.000	1.045	14453.33	0.0012	P	1.3
4	☐	250.000	271.867	3645833.73	0.3047	A	0.9
5	☐	625.000	631.213	8717961.33	0.7073	A	6.1
6	☐	1250.000	1308.110	17222360.44	1.4658	A	1.3
7	☐	2500.000	2577.416	34269148.10	2.8881	A	4.8
8	☐	5000.000	4944.894	64796496.81	5.5408	A	0.5
9	☐			12707.30	0.0012	P	18.5

$$y = 0.0011 * x + 4.1379E-005$$

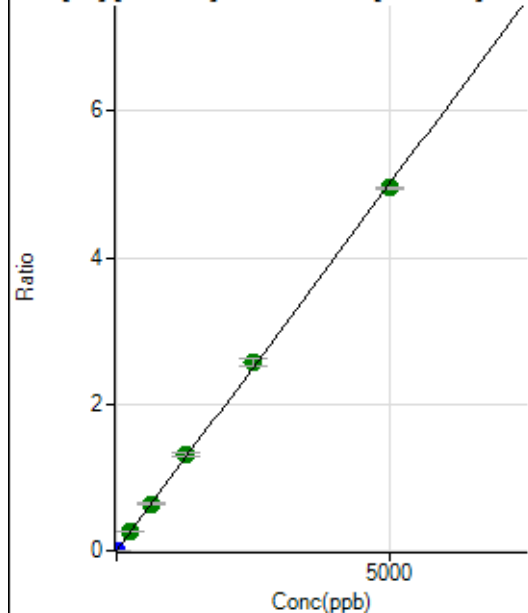
$$R = 0.9998$$

$$DL = 0.01054$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	425.57	0.0000	P	16.4
2	☐	0.100	0.134	2043.51	0.0002	P	5.6
3	☐	1.000	1.022	12617.04	0.0011	P	1.9
4	☐	250.000	273.009	3269867.38	0.2732	A	0.4
5	☐	625.000	636.228	7847805.02	0.6367	A	6.2
6	☐	1250.000	1313.468	15442886.16	1.3145	A	2.6
7	☐	2500.000	2569.399	30512319.27	2.5714	A	4.7
8	☐	5000.000	4946.879	57893711.91	4.9506	A	0.8
9	☐			11318.27	0.0011	P	17.4

$$y = 0.0010 * x + 3.5618E-005$$

$$R = 0.9998$$

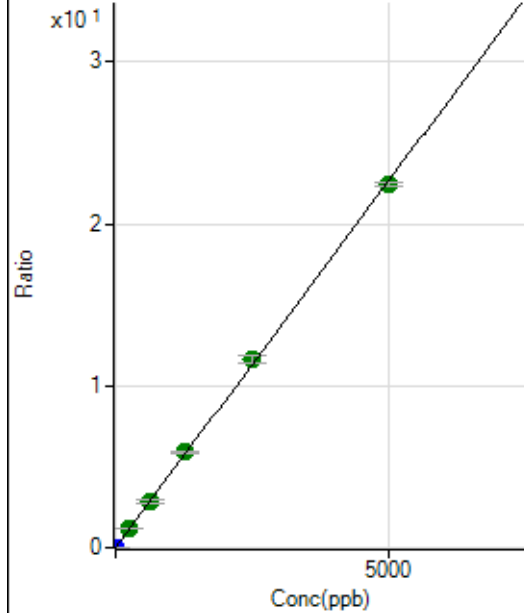
$$DL = 0.01751$$

Weight: <None>

Min Conc: 0

Calibration for 003CALB.d

208 Pb [No Gas] ISTD : 209 Bi [No Gas]

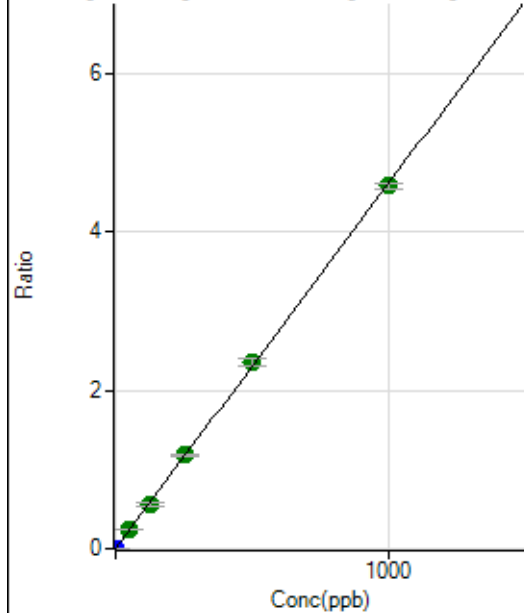


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1931.19	0.0002	P	9.6
2	☒	0.100					
3	☐	1.000	1.030	57525.66	0.0048	P	0.7
4	☐	250.000	271.209	14695516.69	1.2280	A	0.4
5	☐	625.000	634.143	35389025.10	2.8712	A	6.0
6	☐	1250.000	1307.512	69551508.55	5.9198	A	1.9
7	☐	2500.000	2569.491	138044881.27	11.6333	A	4.6
8	☐	5000.000	4948.673	262006511.10	22.4049	A	0.9
9	☐			50728.18	0.0050	P	17.8

$y = 0.0045 * x + 1.6161E-004$
 $R = 0.9998$
 $DL = 0.01024$

Weight: <None>
Min Conc: 0

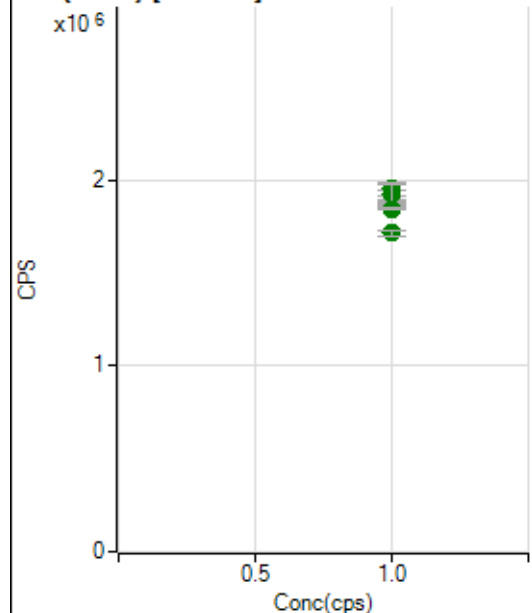
238 U [No Gas] ISTD : 209 Bi [No Gas]



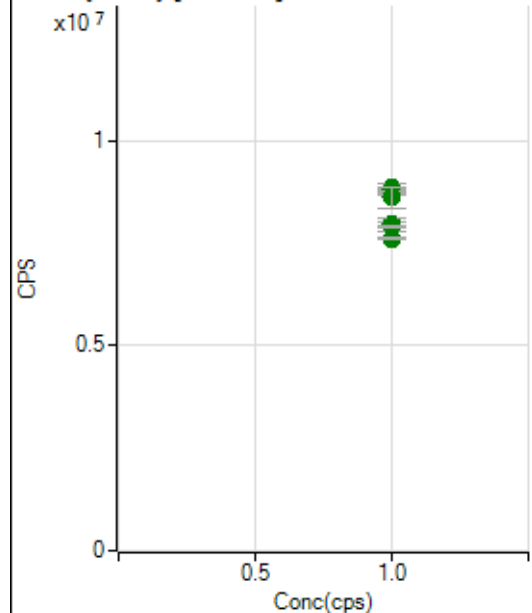
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	122.23	0.0000	P	69.7
2	☐	0.100	0.091	5147.72	0.0004	P	4.2
3	☐	1.000	0.963	53106.27	0.0045	P	1.3
4	☐	50.000	52.171	2882090.75	0.2408	A	1.1
5	☐	125.000	121.793	6930610.10	0.5622	A	5.8
6	☐	250.000	255.716	13869443.82	1.1805	A	1.8
7	☐	500.000	510.854	27992407.64	2.3583	A	3.2
8	☐	1000.000	993.437	53627930.31	4.5861	A	1.5
9	☐			7133.26	0.0007	P	33.8

$y = 0.0046 * x + 1.0241E-005$
 $R = 0.9999$
 $DL = 0.004635$

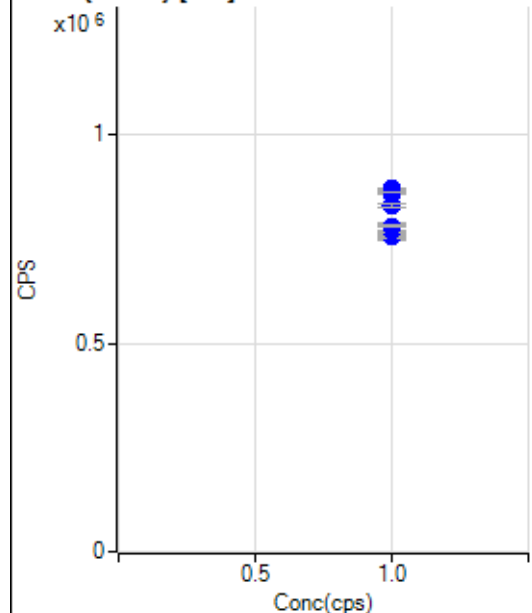
Weight: <None>
Min Conc: 0

6 Li (ISTD) [No Gas]

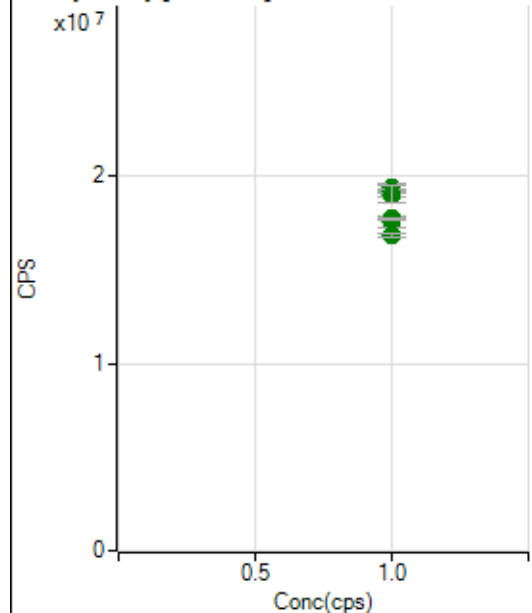
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1875596.40		A	0.9
2	☐	1.000		1914866.78		A	3.2
3	☐	1.000		1859307.56		A	0.9
4	☐	1.000		1927995.02		A	1.3
5	☐	1.000		1952833.58		A	4.0
6	☐	1.000		1887749.66		A	0.6
7	☐	1.000		1923766.53		A	5.2
8	☐	1.000		1846543.58		A	0.3
9	☐	1.000		1715347.07		A	2.1

45 Sc (ISTD) [No Gas]

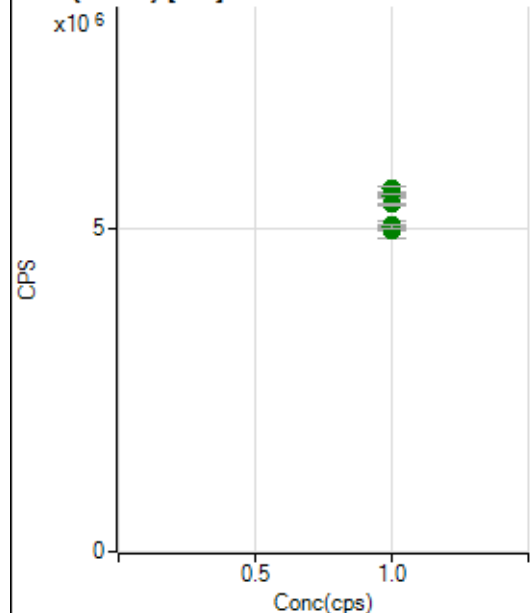
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8843679.31		A	0.3
2	☐	1.000		8799119.59		A	3.3
3	☐	1.000		8796998.76		A	1.0
4	☐	1.000		8750715.22		A	0.8
5	☐	1.000		8606487.65		A	5.6
6	☐	1.000		7945741.76		A	1.8
7	☐	1.000		7942934.32		A	3.8
8	☐	1.000		7908768.08		A	0.6
9	☐	1.000		7612596.21		A	1.0

45 Sc (ISTD) [He]

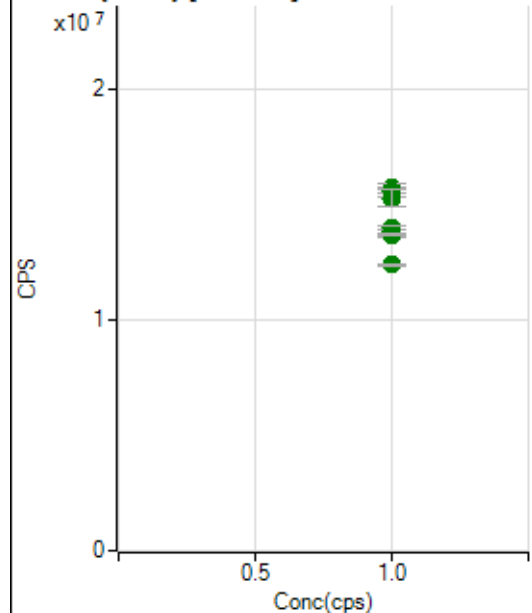
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		858149.95		P	0.3
2	☐	1.000		870578.90		P	0.4
3	☐	1.000		861228.11		P	0.1
4	☐	1.000		831133.77		P	1.0
5	☐	1.000		769596.10		P	5.4
6	☐	1.000		761183.25		P	0.3
7	☐	1.000		754646.83		P	0.3
8	☐	1.000		768435.06		P	0.5
9	☐	1.000		781838.83		P	1.0

89 Y (ISTD) [No Gas]

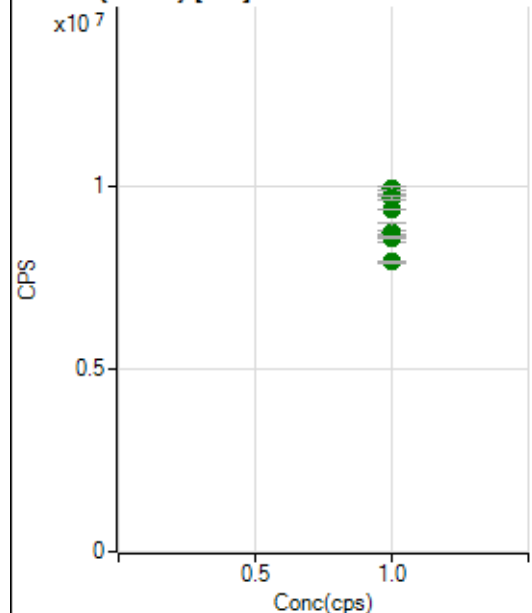
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		19247374.30		A	0.5
2	☐	1.000		19362781.65		A	2.9
3	☐	1.000		19206929.16		A	1.2
4	☐	1.000		18981994.02		A	1.0
5	☐	1.000		19007267.77		A	4.9
6	☐	1.000		17717257.65		A	1.1
7	☐	1.000		17510336.54		A	3.4
8	☐	1.000		17704640.29		A	0.4
9	☐	1.000		16818805.72		A	1.0

89 Y (ISTD) [He]

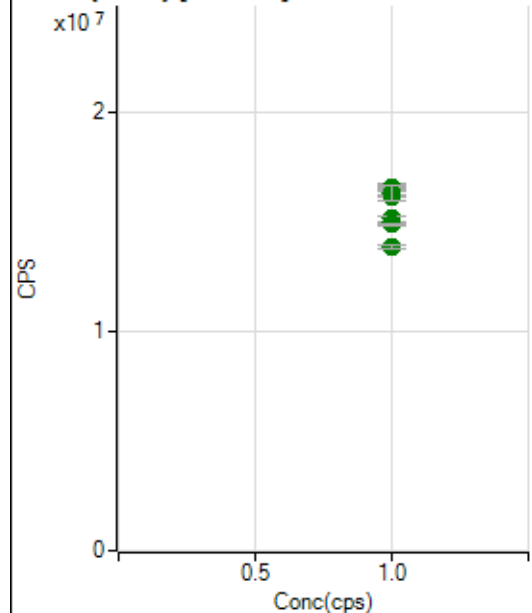
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5523889.08		A	0.7
2	☐	1.000		5624592.07		A	1.4
3	☐	1.000		5520634.08		A	0.8
4	☐	1.000		5388245.68		A	0.5
5	☐	1.000		4982771.39		A	5.4
6	☐	1.000		5002388.22		A	0.7
7	☐	1.000		4986738.26		A	0.2
8	☐	1.000		5061819.82		A	0.3
9	☐	1.000		5038301.49		A	1.0

103 Rh (ISTD) [No Gas]

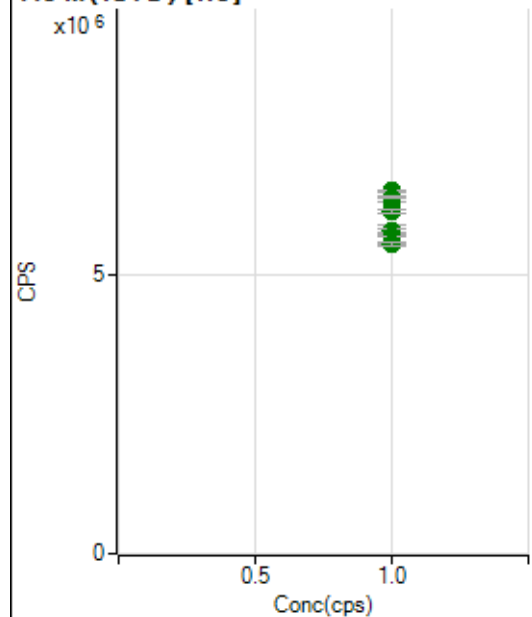
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		15723606.57		A	0.3
2	☐	1.000		15705078.93		A	2.4
3	☐	1.000		15572181.57		A	0.8
4	☐	1.000		15360202.82		A	0.1
5	☐	1.000		15287502.27		A	4.4
6	☐	1.000		14004208.26		A	1.2
7	☐	1.000		13857625.62		A	3.6
8	☐	1.000		13693603.27		A	0.3
9	☐	1.000		12396770.37		A	0.4

103 Rh (ISTD) [He]

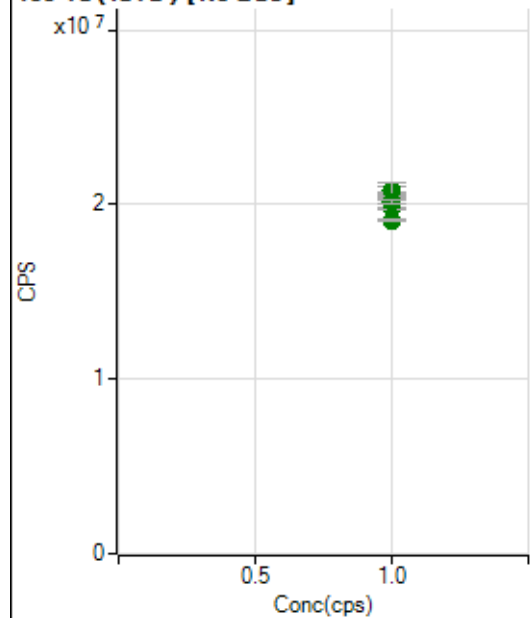
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9750054.65		A	0.6
2	☐	1.000		9904690.48		A	1.0
3	☐	1.000		9646971.94		A	1.0
4	☐	1.000		9351057.99		A	0.3
5	☐	1.000		8726894.73		A	6.3
6	☐	1.000		8679844.73		A	1.7
7	☐	1.000		8638736.89		A	0.5
8	☐	1.000		8576475.50		A	0.7
9	☐	1.000		7917251.34		A	0.7

115 In (ISTD) [No Gas]

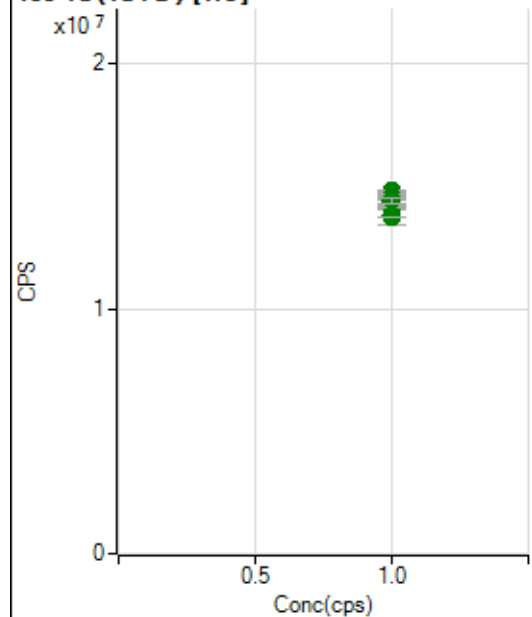
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		16389076.08		A	0.3
2	☐	1.000		16492454.25		A	3.3
3	☐	1.000		16521483.59		A	0.6
4	☐	1.000		16150612.15		A	0.5
5	☐	1.000		16279914.76		A	4.5
6	☐	1.000		15106217.54		A	2.2
7	☐	1.000		15007173.16		A	2.8
8	☐	1.000		14861436.05		A	0.7
9	☐	1.000		13852114.63		A	0.9

115 In (ISTD) [He]

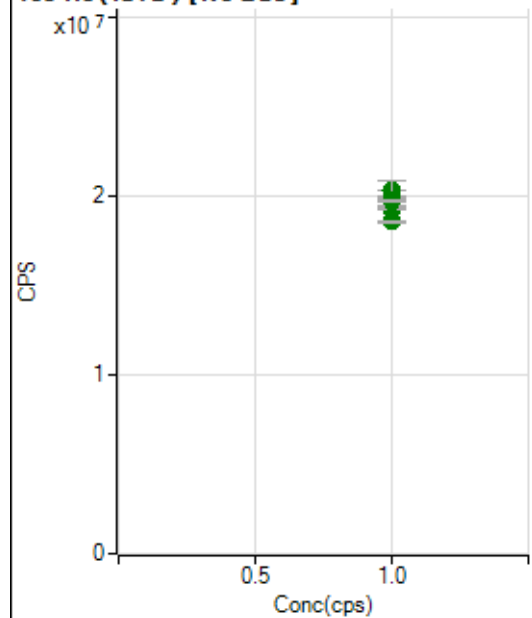
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6316860.73		A	0.2
2	☐	1.000		6508462.30		A	0.7
3	☐	1.000		6398068.24		A	0.5
4	☐	1.000		6144711.79		A	0.9
5	☐	1.000		5738189.91		A	6.1
6	☐	1.000		5786924.50		A	0.9
7	☐	1.000		5703541.73		A	0.6
8	☐	1.000		5703161.13		A	0.2
9	☐	1.000		5547714.83		A	1.0

159 Tb (ISTD) [No Gas]

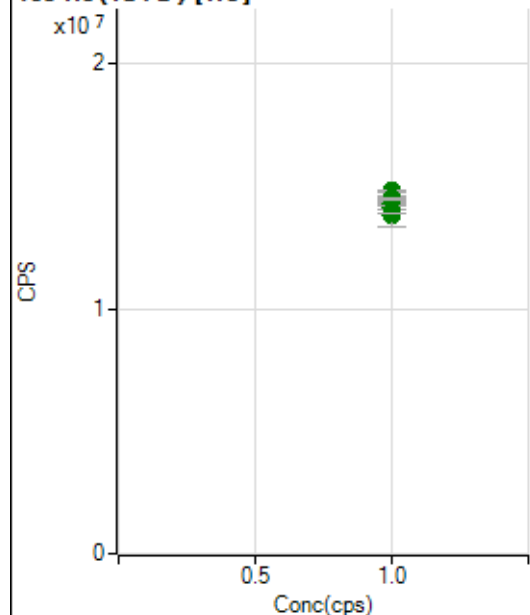
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		20592065.94		A	0.7
2	☐	1.000		20640059.83		A	3.3
3	☐	1.000		20430439.70		A	0.1
4	☐	1.000		20543571.22		A	0.3
5	☐	1.000		20775961.63		A	5.0
6	☐	1.000		19799582.48		A	0.3
7	☐	1.000		20066009.42		A	3.1
8	☐	1.000		20123273.03		A	0.9
9	☐	1.000		19061922.08		A	0.6

159 Tb (ISTD) [He]

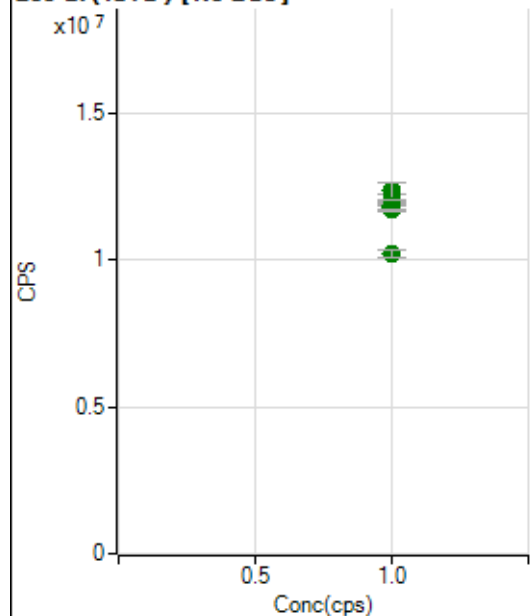
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14557720.34		A	1.2
2	☐	1.000		14803999.36		A	0.2
3	☐	1.000		14629992.84		A	0.8
4	☐	1.000		14388407.98		A	1.0
5	☐	1.000		13834605.49		A	6.3
6	☐	1.000		14124340.76		A	0.8
7	☐	1.000		14135037.43		A	0.5
8	☐	1.000		14402847.56		A	1.2
9	☐	1.000		13738147.71		A	0.2

165 Ho (ISTD) [No Gas]

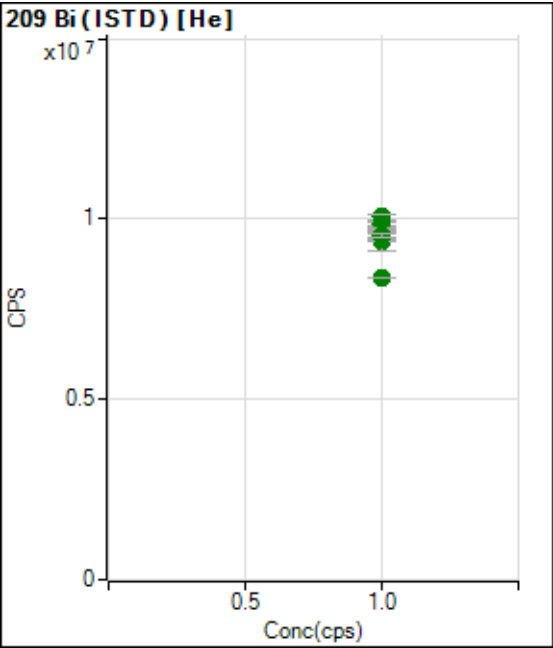
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		20001985.95		A	0.5
2	☐	1.000		19992759.42		A	3.2
3	☐	1.000		20049579.84		A	0.3
4	☐	1.000		19960364.84		A	0.2
5	☐	1.000		20323095.67		A	5.3
6	☐	1.000		19318367.49		A	0.7
7	☐	1.000		19693190.68		A	2.4
8	☐	1.000		19811743.45		A	0.6
9	☐	1.000		18593344.58		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14514288.67		A	0.6
2	☐	1.000		14810171.44		A	0.6
3	☐	1.000		14534959.09		A	1.1
4	☐	1.000		14503562.15		A	1.0
5	☐	1.000		13797322.71		A	6.6
6	☐	1.000		14271387.70		A	0.9
7	☐	1.000		14149886.46		A	1.0
8	☐	1.000		14468156.03		A	0.4
9	☐	1.000		13869660.35		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11951838.85		A	0.3
2	☐	1.000		12025069.40		A	3.4
3	☐	1.000		11924027.04		A	0.5
4	☐	1.000		11966823.57		A	0.6
5	☐	1.000		12348765.37		A	4.7
6	☐	1.000		11751086.35		A	1.5
7	☐	1.000		11877526.07		A	3.1
8	☐	1.000		11694581.77		A	0.8
9	☐	1.000		10207397.90		A	2.1



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9759808.05		A	0.9
2	☐	1.000		10058925.20		A	1.3
3	☐	1.000		9837887.77		A	1.2
4	☐	1.000		9796013.95		A	0.7
5	☐	1.000		9383221.94		A	6.1
6	☐	1.000		9728964.72		A	0.2
7	☐	1.000		9420496.18		A	0.6
8	☐	1.000		9550675.27		A	0.8
9	☐	1.000		8379944.81		A	0.3

US EPA Tune Check Report

Reviewed By:Mohan
On:12/10/2024 1:29:32
AM
Inst Id :P7
ClientSampleId
:TUNE001

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7120624 MS.b
Acq. Date-Time 2024-12-06 10:31:43
Report Comment ---
Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		11323	113230.24			0.378	5.000
24		86370	863698.76			0.679	5.000
25		10910	109098.15			0.567	5.000
26		12459	124594.99			0.415	5.000
59		155650	1556498.99			0.517	5.000
113		22307	223070.23			0.436	5.000
115		266497	2664971.19			0.807	5.000
206		58155	581549.12			0.258	5.000
207		49814	498139.11			0.450	5.000
208		121195	1211954.04			0.534	5.000
220		0	2.90			57.701	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	11304	11294	11363	11374	11280
24	86606	85385	86887	86656	86316
25	10853	10865	10880	10990	10961
26	12403	12410	12469	12518	12497
59	155432	154614	156793	155983	155427
113	22464	22335	22262	22256	22218
115	270277	265917	264887	265600	265804
206	58314	58033	58087	58020	58320
207	49966	49583	49610	49808	50102
208	121319	120363	121398	120816	122081

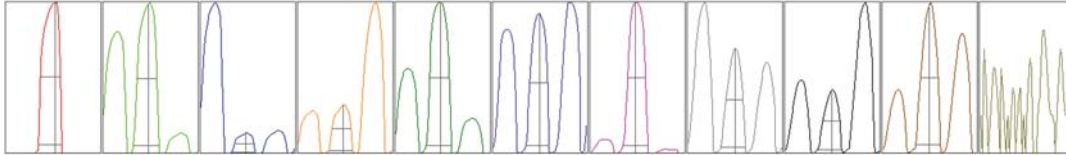
US EPA Tune Check Report

Reviewed By:Mohan
On:12/10/2024 1:29:32
AM
Inst Id :P7
ClientSampleId
:TUNE001

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	1	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	18967.48	9.10	8.90 - 9.10	
24	142674.72	23.95	23.90 - 24.10	
25	18622.54	24.95	24.90 - 25.10	
26	21192.26	25.95	25.90 - 26.10	
59	258116.64	58.95	58.90 - 59.10	
113	41486.00	113.00	112.90 - 113.10	
115	485393.22	114.95	114.90 - 115.10	
206	112515.14	206.05	205.90 - 206.10	
207	97043.46	207.00	206.90 - 207.10	
208	227722.77	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.739	0.900	
24	0.63	0.820	0.900	
25	0.62	0.739	0.900	
26	0.61	0.745	0.900	
59	0.63	0.793	0.900	
113	0.56	0.736	0.900	
115	0.55	0.789	0.900	
206	0.53	0.777	0.900	
207	0.54	0.745	0.900	
208	0.55	0.780	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

Reviewed By: Mohan
On: 12/10/2024 1:29:32 AM
Inst Id : P7
ClientSampleId
TUNE001

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.9 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.1 V	Deflect	16.2 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-65 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	136	Axis Gain	0.9976	QP Bias	-3.0 V
Mass Offset	130	Axis Offset	0.12		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	0.4 mm

EM

Discriminator	4.8 mV	Analog HV	2230 V	Pulse HV	1000 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		55971	559709.94			0.658	
89		64477	644767.12			0.558	
205		65104	651043.44			0.936	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	56443	56126	56081	55682	55523
89	64565	64922	64674	64058	64164
205	65687	65608	65310	64371	64546

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.5 V	Deflect	3.8 V

US EPA Tune Check Report

Reviewed By:Mohan
On:12/10/2024 1:29:32
AM
Inst Id :P7
ClientSampleId
TUNE001

Extract 2	-155.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	136	Axis Gain	0.9976	QP Bias	-13.0 V
Mass Offset	130	Axis Offset	0.12		
Hardware Settings					
Torch					
Torch H	0.1 mm	Torch V	0.4 mm		
EM					
Discriminator	4.8 mV	Analog HV	2230 V	Pulse HV	1000 V

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S00

Instrumnet Name :

P7

Client Sample ID :

S0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:34:41

DataFile Name :

004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.31	0.13	0.19	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00	N/A	ppb
Barium	135-1	0.00	0.00	0.00	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.00	0.01	0.00	0.00	N/A	ppb
Cadmium	106-1	0.50	-0.33	-0.17	0.00	N/A	ppb
Cadmium	111-1	0.00	0.00	0.00	0.00	N/A	ppb
Calcium	43-1	7.71	-2.09	-5.62	0.00	N/A	ppb
Calcium	44-1	-1.74	0.43	1.31	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	-0.01	0.00	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	0.01	0.00	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	0.11	-0.20	0.09	0.00	N/A	ppb
Iron	57-2	1.60	-1.99	0.38	0.00	N/A	ppb
Iron	54-2	-0.23	0.10	0.13	0.00	N/A	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:34:41 DataFile Name : 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	207-1	0.01	0.00	-0.01	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.81	-0.76	-0.05	0.00	N/A	ppb
Manganese	55-2	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	94-1	0.01	-0.01	0.00	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	-0.02	0.03	0.00	N/A	ppb
Phosphorus	31-2	-13.22	-12.15	-12.36	-12.58		ppb
Potassium	39-2	-0.18	-0.21	0.39	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.36	0.14	-0.50	0.00	N/A	ppb
Selenium	77-2	-0.03	0.07	-0.03	0.00	N/A	ppb
Selenium	78-2	-0.40	-0.30	0.70	0.00	N/A	ppb
Silicon	28-1	0.01	0.00	-0.01	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	0.28	-0.56	0.27	0.00	N/A	ppb
Strontium	86-1	0.12	-0.03	-0.09	0.00	N/A	ppb
Strontium	88-1	0.01	0.00	-0.01	0.00	N/A	ppb
Sulfur	34-1	-9.12	-56.61	-28.76	-31.50		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.00	0.00	0.00	0.00	N/A	ppb
Titanium	47-1	0.00	0.01	0.00	0.00	N/A	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S00

Instrumnet Name :

P7

Client Sample ID :

S0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:34:41

DataFile Name :

004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	-0.04	0.04	0.01	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S01 Instrumnet Name : P7
Client Sample ID : S01 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:37:56 DataFile Name : 005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-14.46	-14.15	-14.54	-14.38		ppb
Antimony	121-1	0.20	0.22	0.21	0.21	4.82	ppb
Arsenic	75-2	0.10	0.11	0.10	0.10	3.60	ppb
Barium	135-1	1.00	1.14	1.08	1.08	6.96	ppb
Barium	137-1	1.04	1.07	1.01	1.04	3.03	ppb
Beryllium	9-1	0.09	0.12	0.09	0.10	19.00	ppb
Bismuth	209-1				101		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.07	0.13	0.04	0.08	53.53	ppb
Cadmium	106-1	0.07	-0.32	-0.40	-0.22		ppb
Cadmium	111-1	0.11	0.13	0.10	0.12	12.50	ppb
Calcium	43-1	-19.68	-16.32	-20.63	-18.88		ppb
Calcium	44-1	-21.34	-16.61	-20.89	-19.61		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.25	0.25	0.26	0.25	2.42	ppb
Cobalt	59-2	0.12	0.10	0.11	0.11	7.03	ppb
Copper	63-2	0.23	0.26	0.22	0.24	7.39	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				103		%
Iron	56-2	-39.06	-39.07	-39.06	-39.06		ppb
Iron	57-2	-36.36	-36.20	-35.16	-35.91		ppb
Iron	54-2	-39.92	-39.83	-39.95	-39.90		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S01 Instrumnet Name : P7
Client Sample ID : S01 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:37:56 DataFile Name : 005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.13	0.15	0.13	0.14	8.33	ppb
Lead	207-1	0.13	0.15	0.13	0.13	7.06	ppb
Lead	208-1	Rejected	Rejected	Rejected			ppb
Lithium	6-1				102		%
Magnesium	24-2	-33.18	-32.50	-33.60	-33.09		ppb
Manganese	55-2	Rejected	Rejected	Rejected			ppb
Molybdenum	94-1	0.57	0.61	0.58	0.59	3.54	ppb
Molybdenum	95-1	0.49	0.52	0.49	0.50	2.53	ppb
Molybdenum	96-1	0.51	0.55	0.50	0.52	4.77	ppb
Molybdenum	97-1	0.49	0.51	0.51	0.50	2.51	ppb
Molybdenum	98-1	0.48	0.52	0.49	0.49	3.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.11	0.12	0.12	0.12	6.63	ppb
Phosphorus	31-2	-2.55	-6.42	-11.22	-6.73		ppb
Potassium	39-2	8.31	5.57	7.03	6.97	19.67	ppb
Rhodium	103-1				100		%
Rhodium	103-2				102		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	Rejected	Rejected	Rejected			ppb
Selenium	77-2	0.57	0.68	0.59	0.62	9.30	ppb
Selenium	78-2	1.09	0.38	0.75	0.74	48.20	ppb
Silicon	28-1	-0.08	0.81	-0.02	0.24	211.32	ppb
Silver	107-1	0.11	0.11	0.10	0.11	2.70	ppb
Silver	109-1	0.12	0.11	0.11	0.11	4.72	ppb
Sodium	23-2	-38.24	-37.39	-37.88	-37.84		ppb
Strontium	86-1	2.64	3.10	2.63	2.79	9.70	ppb
Strontium	88-1	2.89	3.00	2.99	2.96	2.16	ppb
Sulfur	34-1	-81.09	161.21	-54.93	8.40	1583.57	ppb
Terbium	159-1				100		%
Terbium	159-2				102		%
Thallium	203-1	0.10	0.10	0.10	0.10	0.75	ppb
Thallium	205-1	0.10	0.10	0.09	0.10	5.21	ppb
Tin	118-1	0.63	0.69	0.68	0.66	4.63	ppb
Titanium	47-1	0.46	0.55	0.54	0.52	9.62	ppb

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :S01

Instrumnet Name :P7

Client Sample ID :S01

Dilution Factor :1

Date & Time Acquired :2024-12-06 11:37:56

DataFile Name :005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.09	0.09	0.09	0.09	4.28	ppb
Vanadium	51-2	0.53	0.52	0.51	0.52	1.83	ppb
Yttrium	89-1				101		%
Yttrium	89-2				102		%
Zinc	66-2	Rejected	Rejected	Rejected			ppb
Zirconium	90-1	0.09	0.10	0.10	0.10	2.19	ppb
Zirconium	91-1	0.10	0.10	0.10	0.10	1.43	ppb

LB Number :
Lab Sample ID :
Client Sample ID :
Date & Time Acquired :

LB133800
S02
S02
2024-12-06 11:41:14

Operator :
Instrumnet Name :
Dilution Factor :
DataFile Name :

Jaswal
P7
1
006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	11.97	11.58	12.82	12.13	5.24	ppb
Antimony	121-1	2.17	2.20	2.24	2.20	1.59	ppb
Arsenic	75-2	1.08	1.17	1.15	1.14	4.26	ppb
Barium	135-1	10.58	10.61	10.75	10.65	0.83	ppb
Barium	137-1	10.58	10.76	10.84	10.73	1.27	ppb
Beryllium	9-1	1.05	1.08	1.06	1.06	1.40	ppb
Bismuth	209-1				100		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.06	1.10	1.31	1.16	11.79	ppb
Cadmium	106-1	1.55	1.62	0.64	1.27	42.76	ppb
Cadmium	111-1	1.26	1.18	1.16	1.20	4.64	ppb
Calcium	43-1	459.41	478.66	459.41	465.82	2.39	ppb
Calcium	44-1	459.52	464.23	459.49	461.08	0.59	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.11	2.15	2.12	2.13	0.82	ppb
Cobalt	59-2	1.13	1.14	1.13	1.13	0.85	ppb
Copper	63-2	2.12	2.03	2.05	2.07	2.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				101		%
Indium	115-2				101		%
Iron	56-2	11.27	10.40	10.77	10.81	4.05	ppb
Iron	57-2	15.64	12.34	15.33	14.44	12.62	ppb
Iron	54-2	11.35	11.22	11.96	11.51	3.45	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S02

Instrumnet Name :

P7

Client Sample ID :

S02

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:41:14

DataFile Name :

006CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.03	1.05	1.06	1.04	1.39	ppb
Lead	207-1	1.00	1.04	1.03	1.02	1.98	ppb
Lead	208-1	1.02	1.03	1.04	1.03	0.72	ppb
Lithium	6-1				99		%
Magnesium	24-2	458.28	461.50	462.88	460.89	0.51	ppb
Manganese	55-2	1.07	1.13	1.07	1.09	3.45	ppb
Molybdenum	94-1	6.24	6.09	6.00	6.11	2.02	ppb
Molybdenum	95-1	5.18	5.14	5.09	5.14	0.93	ppb
Molybdenum	96-1	5.28	5.15	5.20	5.21	1.28	ppb
Molybdenum	97-1	5.12	5.14	5.08	5.12	0.57	ppb
Molybdenum	98-1	5.18	5.20	5.00	5.13	2.22	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.12	1.10	1.12	1.11	0.78	ppb
Phosphorus	31-2	20.09	16.69	21.13	19.31	12.02	ppb
Potassium	39-2	501.23	501.06	507.43	503.24	0.72	ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	5.62	5.15	4.92	5.23	6.84	ppb
Selenium	77-2	5.23	4.80	5.77	5.27	9.27	ppb
Selenium	78-2	5.66	5.64	3.18	4.83	29.59	ppb
Silicon	28-1	6.00	0.87	0.79	2.55	117.06	ppb
Silver	107-1	1.11	1.11	1.12	1.12	0.79	ppb
Silver	109-1	1.10	1.11	1.14	1.11	1.85	ppb
Sodium	23-2	413.21	426.72	422.88	420.94	1.65	ppb
Strontium	86-1	25.64	26.06	26.05	25.92	0.92	ppb
Strontium	88-1	26.84	26.87	26.30	26.67	1.20	ppb
Sulfur	34-1	66.87	25.28	-22.85	23.10	194.38	ppb
Terbium	159-1				99		%
Terbium	159-2				100		%
Thallium	203-1	1.02	1.00	1.00	1.01	0.97	ppb
Thallium	205-1	1.04	1.04	1.01	1.03	1.26	ppb
Tin	118-1	5.45	5.55	5.58	5.52	1.23	ppb
Titanium	47-1	5.25	5.32	5.34	5.30	0.93	ppb

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :S02

Instrumnet Name :P7

Client Sample ID :S02

Dilution Factor :1

Date & Time Acquired :2024-12-06 11:41:14

DataFile Name :006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.95	0.97	0.97	0.96	1.27	ppb
Vanadium	51-2	5.35	5.28	5.34	5.32	0.71	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	5.43	5.39	5.50	5.44	1.01	ppb
Zirconium	90-1	1.01	1.03	1.00	1.01	1.47	ppb
Zirconium	91-1	1.01	1.01	1.00	1.01	0.74	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S03 Instrumnet Name : P7
Client Sample ID : S03 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:44:29 DataFile Name : 007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1094.67	1101.53	1107.72	1101.31	0.59	ppb
Antimony	121-1	55.98	57.24	56.57	56.60	1.12	ppb
Arsenic	75-2	55.46	55.63	55.14	55.41	0.45	ppb
Barium	135-1	276.23	282.17	279.66	279.35	1.07	ppb
Barium	137-1	276.56	283.80	276.90	279.09	1.46	ppb
Beryllium	9-1	53.81	55.38	54.28	54.49	1.48	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	58.69	58.62	59.28	58.86	0.61	ppb
Cadmium	106-1	58.64	59.24	58.63	58.84	0.59	ppb
Cadmium	111-1	58.83	60.10	60.07	59.67	1.22	ppb
Calcium	43-1	5673.09	5766.69	5720.17	5719.98	0.82	ppb
Calcium	44-1	5341.88	5411.88	5372.24	5375.34	0.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	56.22	55.13	56.20	55.85	1.11	ppb
Cobalt	59-2	56.00	55.52	56.03	55.85	0.52	ppb
Copper	63-2	571.30	553.97	566.41	563.89	1.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	56-2	2821.98	2817.72	2891.12	2843.61	1.45	ppb
Iron	57-2	3010.41	2929.60	2972.73	2970.91	1.36	ppb
Iron	54-2	3005.17	2995.42	2998.04	2999.54	0.17	ppb
Krypton	83-1						cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :S03Instrumnet Name :P7

Client Sample ID :S03Dilution Factor :1

Date & Time Acquired :2024-12-06 11:44:29DataFile Name :007CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	272.29	269.37	273.94	271.87	0.85	ppb
Lead	207-1	274.00	271.83	273.20	273.01	0.40	ppb
Lead	208-1	271.48	270.09	272.06	271.21	0.37	ppb
Lithium	6-1				103		%
Magnesium	24-2	5770.35	5737.70	5794.29	5767.45	0.49	ppb
Manganese	55-2	548.74	543.09	551.88	547.90	0.81	ppb
Molybdenum	94-1	535.76	558.11	542.75	545.54	2.10	ppb
Molybdenum	95-1	534.00	556.31	535.68	542.00	2.29	ppb
Molybdenum	96-1	537.25	557.00	542.26	545.50	1.88	ppb
Molybdenum	97-1	535.22	554.55	543.73	544.50	1.78	ppb
Molybdenum	98-1	530.50	550.07	543.23	541.27	1.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	56.83	57.08	57.29	57.07	0.40	ppb
Phosphorus	31-2	1143.07	1128.60	1096.30	1122.66	2.13	ppb
Potassium	39-2	2729.73	2710.41	2728.25	2722.80	0.39	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				99		%
Scandium	45-2				97		%
Selenium	82-1	56.34	56.88	55.59	56.27	1.15	ppb
Selenium	77-2	52.17	55.28	61.36	56.27	8.31	ppb
Selenium	78-2	56.73	54.56	53.79	55.02	2.77	ppb
Silicon	28-1	47.91	50.09	49.48	49.16	2.29	ppb
Silver	107-1	59.57	60.62	60.71	60.30	1.05	ppb
Silver	109-1	59.53	60.60	60.47	60.20	0.97	ppb
Sodium	23-2	5526.66	5419.23	5517.95	5487.95	1.09	ppb
Strontium	86-1	1362.74	1393.70	1367.48	1374.64	1.21	ppb
Strontium	88-1	1358.30	1376.81	1362.28	1365.80	0.71	ppb
Sulfur	34-1	1044.00	1120.74	1063.13	1075.95	3.71	ppb
Terbium	159-1				100		%
Terbium	159-2				99		%
Thallium	203-1	53.94	53.79	54.61	54.11	0.80	ppb
Thallium	205-1	54.23	53.86	53.31	53.80	0.86	ppb
Tin	118-1	56.89	57.82	57.69	57.47	0.88	ppb
Titanium	47-1	543.03	552.09	547.21	547.44	0.83	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S03

Instrumnet Name :

P7

Client Sample ID :

S03

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:44:29

DataFile Name :

007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	52.26	51.56	52.69	52.17	1.09	ppb
Vanadium	51-2	55.58	54.78	55.76	55.37	0.95	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	570.92	558.37	568.55	565.95	1.18	ppb
Zirconium	90-1	53.41	54.38	53.91	53.90	0.90	ppb
Zirconium	91-1	54.04	55.60	54.61	54.75	1.45	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :S04Instrumnet Name :P7

Client Sample ID :S04Dilution Factor :1

Date & Time Acquired :2024-12-06 11:47:26DataFile Name :008CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2959.26	2736.52	2600.00	2765.26	6.56	ppb
Antimony	121-1	122.35	135.25	138.79	132.13	6.55	ppb
Arsenic	75-2	147.88	139.90	132.86	140.21	5.36	ppb
Barium	135-1	609.74	666.74	676.62	651.03	5.55	ppb
Barium	137-1	604.54	668.54	678.11	650.40	6.15	ppb
Beryllium	9-1	119.85	134.51	133.00	129.12	6.24	ppb
Bismuth	209-1				103		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	124.62	139.69	140.92	135.08	6.72	ppb
Cadmium	106-1	124.60	141.73	140.99	135.77	7.13	ppb
Cadmium	111-1	127.50	144.00	142.51	138.00	6.61	ppb
Calcium	43-1	12570.65	14061.62	14023.15	13551.81	6.27	ppb
Calcium	44-1	11667.82	13162.97	13182.84	12671.21	6.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	147.53	140.62	130.48	139.55	6.15	ppb
Cobalt	59-2	149.51	138.96	131.37	139.95	6.51	ppb
Copper	63-2	1480.76	1401.61	1332.67	1405.01	5.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				95		%
Indium	115-1				99		%
Indium	115-2				91		%
Iron	56-2	7520.11	7302.97	6688.31	7170.46	6.02	ppb
Iron	57-2	7940.13	7605.00	7096.24	7547.12	5.63	ppb
Iron	54-2	7740.02	7377.91	6783.12	7300.35	6.62	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S04

Instrumnet Name :

P7

Client Sample ID :

S04

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:47:26

DataFile Name :

008CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	586.67	651.52	655.45	631.21	6.12	ppb
Lead	207-1	591.50	650.95	666.24	636.23	6.21	ppb
Lead	208-1	590.26	651.07	661.09	634.14	6.04	ppb
Lithium	6-1				104		%
Magnesium	24-2	15692.70	14415.83	13793.74	14634.09	6.62	ppb
Manganese	55-2	1462.52	1381.71	1282.56	1375.60	6.55	ppb
Molybdenum	94-1	1198.22	1319.80	1307.84	1275.29	5.25	ppb
Molybdenum	95-1	1200.72	1307.85	1303.98	1270.85	4.78	ppb
Molybdenum	96-1	1187.28	1303.79	1308.93	1266.67	5.43	ppb
Molybdenum	97-1	1185.04	1325.20	1296.40	1268.88	5.83	ppb
Molybdenum	98-1	1180.35	1312.36	1302.13	1264.95	5.81	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	148.89	141.59	132.81	141.10	5.70	ppb
Phosphorus	31-2	3015.06	2815.23	2584.91	2805.07	7.67	ppb
Potassium	39-2	7381.57	7000.31	6403.75	6928.55	7.11	ppb
Rhodium	103-1				97		%
Rhodium	103-2				90		%
Scandium	45-1				97		%
Scandium	45-2				90		%
Selenium	82-1	121.26	136.88	135.75	131.30	6.63	ppb
Selenium	77-2	151.70	136.01	136.60	141.44	6.29	ppb
Selenium	78-2	153.55	142.04	131.61	142.40	7.71	ppb
Silicon	28-1	100.75	113.59	113.25	109.20	6.70	ppb
Silver	107-1	127.56	139.36	141.25	136.06	5.45	ppb
Silver	109-1	128.96	144.08	141.47	138.17	5.85	ppb
Sodium	23-2	15042.82	13911.97	13187.28	14047.35	6.66	ppb
Strontium	86-1	2972.10	3333.39	3301.82	3202.44	6.25	ppb
Strontium	88-1	2967.82	3302.28	3275.87	3181.99	5.84	ppb
Sulfur	34-1	2021.92	2631.68	2567.25	2406.95	13.92	ppb
Terbium	159-1				101		%
Terbium	159-2				95		%
Thallium	203-1	117.51	131.98	132.30	127.26	6.64	ppb
Thallium	205-1	118.75	129.13	130.97	126.28	5.22	ppb
Tin	118-1	123.41	138.15	136.58	132.71	6.10	ppb
Titanium	47-1	1200.23	1336.92	1328.50	1288.55	5.95	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S04

Instrumnet Name :

P7

Client Sample ID :

S04

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:47:26

DataFile Name :

008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	113.74	125.00	126.63	121.79	5.77	ppb
Vanadium	51-2	145.47	139.57	127.37	137.47	6.72	ppb
Yttrium	89-1				99		%
Yttrium	89-2				90		%
Zinc	66-2	1466.16	1382.36	1336.44	1394.99	4.72	ppb
Zirconium	90-1	118.80	132.35	130.52	127.23	5.78	ppb
Zirconium	91-1	118.79	131.99	131.95	127.58	5.96	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S05 Instrumnet Name : P7
Client Sample ID : S05 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:50:11 DataFile Name : 009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5503.74	5298.18	5358.12	5386.68	1.96	ppb
Antimony	121-1	264.31	266.28	266.26	265.62	0.42	ppb
Arsenic	75-2	265.44	264.56	264.82	264.94	0.17	ppb
Barium	135-1	1315.13	1333.51	1327.21	1325.28	0.70	ppb
Barium	137-1	1314.83	1327.22	1331.54	1324.53	0.65	ppb
Beryllium	9-1	261.65	267.09	262.38	263.71	1.12	ppb
Bismuth	209-1				98		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	271.60	269.55	273.10	271.41	0.66	ppb
Cadmium	106-1	269.88	269.65	266.13	268.55	0.78	ppb
Cadmium	111-1	271.85	277.48	276.33	275.22	1.08	ppb
Calcium	43-1	27144.25	28357.58	28115.27	27872.37	2.30	ppb
Calcium	44-1	25571.31	26413.29	26483.54	26156.04	1.94	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	271.43	268.29	268.72	269.48	0.63	ppb
Cobalt	59-2	265.74	270.59	268.56	268.30	0.91	ppb
Copper	63-2	2699.65	2678.10	2699.69	2692.48	0.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				98		%
Indium	115-1				92		%
Indium	115-2				92		%
Iron	56-2	13987.92	13884.61	13934.43	13935.65	0.37	ppb
Iron	57-2	14046.87	14003.04	14022.46	14024.13	0.16	ppb
Iron	54-2	14214.85	14100.29	14134.08	14149.74	0.42	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S05

Instrumnet Name :

P7

Client Sample ID :

S05

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:50:11

DataFile Name :

009CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1291.59	1325.95	1306.79	1308.11	1.32	ppb
Lead	207-1	1273.94	1337.48	1328.99	1313.47	2.63	ppb
Lead	208-1	1280.56	1328.29	1313.69	1307.51	1.87	ppb
Lithium	6-1				101		%
Magnesium	24-2	28503.97	28157.62	28363.60	28341.73	0.61	ppb
Manganese	55-2	2684.98	2656.19	2671.05	2670.74	0.54	ppb
Molybdenum	94-1	2587.43	2591.84	2614.99	2598.09	0.57	ppb
Molybdenum	95-1	2559.06	2595.07	2622.91	2592.35	1.23	ppb
Molybdenum	96-1	2557.91	2584.43	2593.96	2578.76	0.72	ppb
Molybdenum	97-1	2583.85	2626.46	2608.09	2606.13	0.82	ppb
Molybdenum	98-1	2558.75	2630.93	2597.85	2595.84	1.39	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	268.95	266.66	269.60	268.41	0.58	ppb
Phosphorus	31-2	5327.00	5252.51	5345.78	5308.43	0.93	ppb
Potassium	39-2	13320.25	13162.35	13318.76	13267.12	0.68	ppb
Rhodium	103-1				89		%
Rhodium	103-2				89		%
Scandium	45-1				90		%
Scandium	45-2				89		%
Selenium	82-1	263.59	267.76	268.53	266.63	1.00	ppb
Selenium	77-2	261.69	275.14	267.17	268.00	2.52	ppb
Selenium	78-2	272.17	268.27	269.36	269.93	0.75	ppb
Silicon	28-1	215.82	221.86	220.35	219.34	1.43	ppb
Silver	107-1	268.85	271.83	270.51	270.40	0.55	ppb
Silver	109-1	271.90	272.23	270.12	271.42	0.42	ppb
Sodium	23-2	27304.42	26994.14	26843.68	27047.41	0.87	ppb
Strontium	86-1	6461.56	6562.43	6578.91	6534.30	0.97	ppb
Strontium	88-1	6484.67	6577.80	6537.89	6533.45	0.72	ppb
Sulfur	34-1	4870.39	5143.99	5079.90	5031.43	2.84	ppb
Terbium	159-1				96		%
Terbium	159-2				97		%
Thallium	203-1	257.70	269.83	264.73	264.09	2.31	ppb
Thallium	205-1	258.09	265.97	261.95	262.00	1.50	ppb
Tin	118-1	264.79	268.45	268.46	267.23	0.79	ppb
Titanium	47-1	2569.18	2675.96	2652.85	2632.66	2.13	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S05

Instrumnet Name :

P7

Client Sample ID :

S05

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:50:11

DataFile Name :

009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	251.36	260.60	255.18	255.72	1.82	ppb
Vanadium	51-2	264.28	264.90	269.14	266.11	0.99	ppb
Yttrium	89-1				92		%
Yttrium	89-2				91		%
Zinc	66-2	2696.76	2693.61	2678.64	2689.67	0.36	ppb
Zirconium	90-1	256.75	257.35	262.19	258.76	1.15	ppb
Zirconium	91-1	257.83	261.13	261.07	260.01	0.73	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S06

Instrumnet Name :

P7

Client Sample ID :

S06

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:52:57

DataFile Name :

010CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10540.85	10640.00	10627.84	10602.90	0.51	ppb
Antimony	121-1	493.12	525.17	533.84	517.38	4.15	ppb
Arsenic	75-2	530.02	529.77	523.14	527.64	0.74	ppb
Barium	135-1	2474.94	2627.32	2663.89	2588.71	3.87	ppb
Barium	137-1	2486.68	2609.56	2648.72	2581.65	3.27	ppb
Beryllium	9-1	473.41	505.30	528.07	502.26	5.47	ppb
Bismuth	209-1				99		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	491.63	535.62	535.22	520.82	4.85	ppb
Cadmium	106-1	493.87	531.04	537.20	520.70	4.50	ppb
Cadmium	111-1	496.64	534.94	548.57	526.71	5.11	ppb
Calcium	43-1	49136.15	53513.21	53819.93	52156.43	5.02	ppb
Calcium	44-1	48129.11	53099.83	53153.98	51460.97	5.61	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	531.99	527.81	535.77	531.86	0.75	ppb
Cobalt	59-2	526.14	537.34	532.45	531.98	1.06	ppb
Copper	63-2	5348.59	5332.83	5353.53	5344.99	0.20	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				97		%
Indium	115-1				92		%
Indium	115-2				90		%
Iron	56-2	27623.47	27583.01	27648.98	27618.49	0.12	ppb
Iron	57-2	27338.24	27967.78	27602.73	27636.25	1.14	ppb
Iron	54-2	28168.85	27631.84	27925.16	27908.62	0.96	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S06 Instrumnet Name : P7
Client Sample ID : S06 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:52:57 DataFile Name : 010CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2434.19	2656.49	2641.57	2577.42	4.82	ppb
Lead	207-1	2429.87	2623.53	2654.80	2569.40	4.74	ppb
Lead	208-1	2432.30	2635.81	2640.37	2569.49	4.62	ppb
Lithium	6-1				103		%
Magnesium	24-2	55788.19	56490.07	55954.60	56077.62	0.65	ppb
Manganese	55-2	5254.17	5265.52	5289.48	5269.72	0.34	ppb
Molybdenum	94-1	4960.06	5332.39	5324.27	5205.57	4.09	ppb
Molybdenum	95-1	4942.93	5268.87	5324.07	5178.62	3.98	ppb
Molybdenum	96-1	4923.18	5286.19	5336.95	5182.10	4.35	ppb
Molybdenum	97-1	4938.76	5314.60	5338.21	5197.19	4.31	ppb
Molybdenum	98-1	4933.36	5272.28	5315.71	5173.78	4.05	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	525.18	530.13	526.65	527.32	0.48	ppb
Phosphorus	31-2	10508.78	10704.01	10665.74	10626.18	0.97	ppb
Potassium	39-2	26766.01	26537.31	26401.17	26568.16	0.69	ppb
Rhodium	103-1				88		%
Rhodium	103-2				89		%
Scandium	45-1				90		%
Scandium	45-2				88		%
Selenium	82-1	496.11	534.28	540.97	523.78	4.62	ppb
Selenium	77-2	535.85	524.36	523.06	527.76	1.33	ppb
Selenium	78-2	529.36	533.66	528.23	530.42	0.54	ppb
Silicon	28-1	388.17	433.07	434.26	418.50	6.28	ppb
Silver	107-1	493.66	534.90	537.85	522.13	4.73	ppb
Silver	109-1	501.23	535.78	538.31	525.11	3.95	ppb
Sodium	23-2	53785.99	53965.25	53856.29	53869.18	0.17	ppb
Strontium	86-1	12239.62	13154.37	13233.34	12875.77	4.29	ppb
Strontium	88-1	12252.21	13112.19	13348.11	12904.17	4.47	ppb
Sulfur	34-1	9016.40	10052.87	9987.19	9685.49	5.99	ppb
Terbium	159-1				97		%
Terbium	159-2				97		%
Thallium	203-1	487.45	528.85	524.53	513.61	4.43	ppb
Thallium	205-1	485.06	528.16	527.72	513.65	4.82	ppb
Tin	118-1	486.02	524.39	533.99	514.80	4.93	ppb
Titanium	47-1	4913.25	5255.97	5270.28	5146.50	3.93	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S06

Instrumnet Name :

P7

Client Sample ID :

S06

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:52:57

DataFile Name :

010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	492.27	523.37	516.92	510.85	3.21	ppb
Vanadium	51-2	528.53	534.22	527.60	530.11	0.68	ppb
Yttrium	89-1				91		%
Yttrium	89-2				90		%
Zinc	66-2	5375.65	5342.71	5346.28	5354.88	0.34	ppb
Zirconium	90-1	493.30	523.32	528.83	515.15	3.71	ppb
Zirconium	91-1	497.59	525.19	529.49	517.42	3.35	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S07

Instrumnet Name :

P7

Client Sample ID :

S07

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:55:40

DataFile Name :

011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19759.61	19755.22	19460.29	19658.38	0.87	ppb
Antimony	121-1	971.46	987.67	999.42	986.19	1.42	ppb
Arsenic	75-2	985.49	979.55	975.78	980.27	0.50	ppb
Barium	135-1	4855.79	4948.22	4992.29	4932.10	1.41	ppb
Barium	137-1	4868.44	4931.93	5007.36	4935.91	1.41	ppb
Beryllium	9-1	999.05	998.22	986.84	994.70	0.69	ppb
Bismuth	209-1				98		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	967.06	984.09	996.45	982.53	1.50	ppb
Cadmium	106-1	966.27	987.02	996.38	983.22	1.57	ppb
Cadmium	111-1	954.57	980.01	1000.11	978.23	2.33	ppb
Calcium	43-1	98618.00	101524.19	100639.21	100260.47	1.49	ppb
Calcium	44-1	97682.05	99099.62	98442.16	98407.94	0.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	971.93	978.14	981.20	977.09	0.48	ppb
Cobalt	59-2	980.22	978.38	973.24	977.28	0.37	ppb
Copper	63-2	9709.52	9797.92	9763.01	9756.82	0.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				100		%
Indium	115-1				91		%
Indium	115-2				90		%
Iron	56-2	51436.80	51185.39	51016.97	51213.05	0.41	ppb
Iron	57-2	51610.28	51571.08	50568.67	51250.01	1.15	ppb
Iron	54-2	51352.69	51625.29	51480.97	51486.32	0.26	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S07

Instrumnet Name :

P7

Client Sample ID :

S07

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:55:40

DataFile Name :

011CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4918.58	4960.05	4956.05	4944.89	0.46	ppb
Lead	207-1	4902.30	4977.85	4960.48	4946.88	0.80	ppb
Lead	208-1	4898.33	4981.58	4966.12	4948.67	0.89	ppb
Lithium	6-1				98		%
Magnesium	24-2	103571.58	103749.13	103076.89	103465.87	0.34	ppb
Manganese	55-2	9813.03	9803.35	9796.70	9804.36	0.08	ppb
Molybdenum	94-1	9875.69	9853.21	9872.87	9867.25	0.12	ppb
Molybdenum	95-1	9891.11	9898.92	9858.66	9882.90	0.22	ppb
Molybdenum	96-1	9852.22	9893.73	9908.75	9884.90	0.30	ppb
Molybdenum	97-1	9807.66	9909.77	9893.43	9870.28	0.56	ppb
Molybdenum	98-1	9809.66	9956.79	9889.20	9885.21	0.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	976.29	978.99	982.84	979.37	0.34	ppb
Phosphorus	31-2	19402.47	19768.04	19526.10	19565.54	0.95	ppb
Potassium	39-2	49226.76	49055.76	49255.60	49179.37	0.22	ppb
Rhodium	103-1				87		%
Rhodium	103-2				88		%
Scandium	45-1				89		%
Scandium	45-2				90		%
Selenium	82-1	977.38	983.61	987.56	982.85	0.52	ppb
Selenium	77-2	989.43	985.33	963.00	979.25	1.45	ppb
Selenium	78-2	976.95	983.93	971.28	977.38	0.65	ppb
Silicon	28-1	1045.85	1050.86	1054.80	1050.51	0.43	ppb
Silver	107-1	960.36	980.81	1004.64	981.94	2.26	ppb
Silver	109-1	975.61	981.04	983.16	979.94	0.40	ppb
Sodium	23-2	99818.01	100078.35	100579.53	100158.63	0.39	ppb
Strontium	86-1	24384.77	24812.38	24978.22	24725.12	1.24	ppb
Strontium	88-1	24549.86	24728.61	24863.94	24714.14	0.64	ppb
Sulfur	34-1	19811.76	20325.85	20334.09	20157.23	1.48	ppb
Terbium	159-1				98		%
Terbium	159-2				99		%
Thallium	203-1	978.68	987.36	1001.51	989.18	1.17	ppb
Thallium	205-1	990.17	995.87	983.44	989.83	0.63	ppb
Tin	118-1	971.83	988.67	1000.35	986.95	1.45	ppb
Titanium	47-1	9805.54	9984.39	9869.25	9886.39	0.92	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S07

Instrumnet Name :

P7

Client Sample ID :

S07

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:55:40

DataFile Name :

011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	982.00	988.42	1009.90	993.44	1.47	ppb
Vanadium	51-2	977.30	983.18	976.79	979.09	0.36	ppb
Yttrium	89-1				92		%
Yttrium	89-2				92		%
Zinc	66-2	9731.64	9808.94	9720.58	9753.72	0.49	ppb
Zirconium	90-1	985.06	989.52	994.71	989.76	0.49	ppb
Zirconium	91-1	986.49	990.44	987.75	988.23	0.20	ppb

LB Number :
Lab Sample ID :
Client Sample ID :
Date & Time Acquired :

LB133800
S08
S08
2024-12-06 11:58:26

Operator :
Instrumnet Name :
Dilution Factor :
DataFile Name :

Jaswal
P7
1
012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	101400.28	98931.71	99611.18	99981.06	1.28	ppb
Antimony	121-1	0.58	0.53	0.46	0.52	11.78	ppb
Arsenic	75-2	0.61	0.56	0.50	0.56	9.67	ppb
Barium	135-1	2.64	2.32	2.25	2.40	8.57	ppb
Barium	137-1	2.69	2.35	2.22	2.42	10.07	ppb
Beryllium	9-1	0.31	0.23	0.15	0.23	35.53	ppb
Bismuth	209-1				85		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.42	0.44	0.36	0.40	10.44	ppb
Cadmium	106-1	-0.79	-0.48	-0.59	-0.62		ppb
Cadmium	111-1	0.25	0.18	0.18	0.21	20.28	ppb
Calcium	43-1	490045.97	506126.07	502493.54	499555.19	1.69	ppb
Calcium	44-1	487667.47	507744.62	504907.48	500106.52	2.17	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.77	1.36	1.41	1.51	14.70	ppb
Cobalt	59-2	2.63	2.60	2.56	2.60	1.29	ppb
Copper	63-2	1.80	1.66	1.64	1.70	5.18	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				93		%
Holmium	165-2				96		%
Indium	115-1				85		%
Indium	115-2				88		%
Iron	56-2	251934.78	248678.64	247578.54	249397.32	0.91	ppb
Iron	57-2	252946.64	248529.45	246643.02	249373.04	1.30	ppb
Iron	54-2	252176.68	248927.99	246789.75	249298.14	1.09	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S08 Instrumnet Name : P7
Client Sample ID : S08 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:58:26 DataFile Name : 012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.28	1.06	0.87	1.07	19.11	ppb
Lead	207-1	1.28	1.04	0.90	1.07	17.94	ppb
Lead	208-1	1.27	1.04	0.88	1.06	18.43	ppb
Lithium	6-1				91		%
Magnesium	24-2	503658.50	493458.68	498295.82	498471.00	1.02	ppb
Manganese	55-2	4.54	4.45	4.43	4.47	1.36	ppb
Molybdenum	94-1	3.40	2.79	2.57	2.92	14.76	ppb
Molybdenum	95-1	2.58	2.03	1.67	2.09	21.77	ppb
Molybdenum	96-1	4.06	3.64	3.28	3.66	10.69	ppb
Molybdenum	97-1	2.50	2.01	1.57	2.03	23.06	ppb
Molybdenum	98-1	2.40	1.87	1.53	1.93	22.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.63	2.75	2.65	2.67	2.41	ppb
Phosphorus	31-2	-1.54	-6.34	-5.78	-4.56		ppb
Potassium	39-2	252133.81	248069.90	249645.58	249949.76	0.82	ppb
Rhodium	103-1				79		%
Rhodium	103-2				81		%
Scandium	45-1				86		%
Scandium	45-2				91		%
Selenium	82-1	0.91	0.66	0.72	0.76	17.15	ppb
Selenium	77-2	0.43	0.19	0.19	0.27	50.09	ppb
Selenium	78-2	0.37	-0.64	0.14	-0.04		ppb
Silicon	28-1	3.25	2.89	2.27	2.80	17.64	ppb
Silver	107-1	0.28	0.22	0.18	0.23	20.95	ppb
Silver	109-1	0.28	0.22	0.19	0.23	19.18	ppb
Sodium	23-2	498845.67	499881.89	499578.96	499435.51	0.11	ppb
Strontium	86-1	77.63	80.62	79.11	79.12	1.89	ppb
Strontium	88-1	77.65	79.65	78.65	78.65	1.27	ppb
Sulfur	34-1	-444.81	-309.32	-256.21	-336.78		ppb
Terbium	159-1				93		%
Terbium	159-2				94		%
Thallium	203-1	0.22	0.15	0.11	0.16	34.90	ppb
Thallium	205-1	0.20	0.14	0.11	0.15	30.56	ppb
Tin	118-1	0.35	0.31	0.26	0.31	14.57	ppb
Titanium	47-1	2.15	1.71	1.35	1.74	23.27	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S08

Instrumnet Name :

P7

Client Sample ID :

S08

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:58:26

DataFile Name :

012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.20	0.14	0.10	0.15	34.33	ppb
Vanadium	51-2	0.20	0.18	0.19	0.19	5.82	ppb
Yttrium	89-1				87		%
Yttrium	89-2				91		%
Zinc	66-2	11.12	10.78	10.90	10.93	1.55	ppb
Zirconium	90-1	0.70	0.65	0.62	0.66	5.76	ppb
Zirconium	91-1	0.69	0.66	0.62	0.65	5.52	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICV001

Instrumnet Name :

P7

Client Sample ID :

ICV001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 12:43:35

DataFile Name :

013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	465.23	464.56	469.86	466.55	0.62	ppb
Antimony	121-1	204.07	207.45	206.76	206.09	0.87	ppb
Arsenic	75-2	202.02	201.52	202.92	202.15	0.35	ppb
Barium	135-1	101.04	103.45	104.57	103.02	1.75	ppb
Barium	137-1	101.49	102.69	102.79	102.32	0.71	ppb
Beryllium	9-1	98.54	103.05	102.37	101.32	2.40	ppb
Bismuth	209-1				99		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	162.15	164.73	166.19	164.36	1.24	ppb
Cadmium	106-1	167.02	171.08	171.14	169.75	1.39	ppb
Cadmium	111-1	108.05	110.02	109.87	109.31	1.00	ppb
Calcium	43-1	2289.97	2326.56	2314.21	2310.25	0.81	ppb
Calcium	44-1	2093.54	2136.19	2107.52	2112.42	1.03	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	101.47	101.19	101.75	101.47	0.27	ppb
Cobalt	59-2	101.76	102.80	102.84	102.47	0.60	ppb
Copper	63-2	97.57	97.23	97.79	97.53	0.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				99		%
Indium	115-1				95		%
Indium	115-2				94		%
Iron	56-2	2007.80	1994.68	2031.10	2011.20	0.92	ppb
Iron	57-2	2075.41	2076.52	2091.72	2081.22	0.44	ppb
Iron	54-2	2136.77	2148.42	2176.66	2153.95	0.95	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICV001

Instrumnet Name :

P7

Client Sample ID :

ICV001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 12:43:35

DataFile Name :

013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	207.08	209.25	210.29	208.87	0.78	ppb
Lead	207-1	197.96	201.16	201.02	200.05	0.90	ppb
Lead	208-1	202.66	203.44	204.18	203.43	0.37	ppb
Lithium	6-1				102		%
Magnesium	24-2	1093.45	1096.86	1106.16	1098.83	0.60	ppb
Manganese	55-2	99.24	99.23	100.27	99.58	0.60	ppb
Molybdenum	94-1	5078.33	5158.39	5149.42	5128.72	0.86	ppb
Molybdenum	95-1	5004.88	5141.88	5124.02	5090.26	1.46	ppb
Molybdenum	96-1	5035.93	5146.66	5127.31	5103.30	1.16	ppb
Molybdenum	97-1	5055.46	5154.75	5141.17	5117.13	1.05	ppb
Molybdenum	98-1	5030.90	5139.30	5145.88	5105.36	1.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	104.89	104.48	105.76	105.04	0.62	ppb
Phosphorus	31-2	-10.15	-12.94	-9.30	-10.80		ppb
Potassium	39-2	1897.81	1865.20	1886.59	1883.20	0.88	ppb
Rhodium	103-1				95		%
Rhodium	103-2				94		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	203.59	209.55	208.49	207.21	1.53	ppb
Selenium	77-2	191.90	208.84	210.52	203.75	5.05	ppb
Selenium	78-2	206.96	208.33	203.83	206.37	1.12	ppb
Silicon	28-1	76.55	82.34	84.85	81.24	5.24	ppb
Silver	107-1	52.91	53.96	54.25	53.71	1.31	ppb
Silver	109-1	52.32	53.28	53.78	53.13	1.40	ppb
Sodium	23-2	1868.27	1913.72	1890.50	1890.83	1.20	ppb
Strontium	86-1	13071.68	13289.85	13255.03	13205.52	0.89	ppb
Strontium	88-1	12958.09	13369.24	13261.95	13196.43	1.62	ppb
Sulfur	34-1	8.65	-56.54	-121.68	-56.52		ppb
Terbium	159-1				96		%
Terbium	159-2				98		%
Thallium	203-1	203.63	208.82	208.10	206.85	1.36	ppb
Thallium	205-1	201.26	204.51	203.90	203.23	0.85	ppb
Tin	118-1	543.10	547.99	552.26	547.78	0.84	ppb
Titanium	47-1	5122.39	5225.24	5167.79	5171.81	1.00	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICV001 Instrumnet Name : P7
Client Sample ID : ICV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 12:43:35 DataFile Name : 013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	523.56	527.79	537.43	529.59	1.34	ppb
Vanadium	51-2	96.96	97.95	97.95	97.62	0.59	ppb
Yttrium	89-1				95		%
Yttrium	89-2				94		%
Zinc	66-2	201.65	202.91	206.08	203.55	1.12	ppb
Zirconium	90-1	508.67	518.51	513.38	513.52	0.96	ppb
Zirconium	91-1	498.70	522.00	517.51	512.73	2.41	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :ICB001Instrumnet Name :P7

Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired :2024-12-06 13:03:05DataFile Name :014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-16.70	-16.64	-16.71	-16.69		ppb
Antimony	121-1	0.01	0.01	0.01	0.01	12.91	ppb
Arsenic	75-2	0.00	0.01	0.01	0.01	68.58	ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	0.00	-0.01	0.00		ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	23.50	ppb
Bismuth	209-1				100		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.01	0.00	0.01	0.00		ppb
Cadmium	106-1	-1.66	-1.77	-2.08	-1.84		ppb
Cadmium	111-1	0.00	0.00	0.00	0.00		ppb
Calcium	43-1	-92.08	-91.41	-92.22	-91.90		ppb
Calcium	44-1	-92.62	-93.45	-93.32	-93.13		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.00	0.01	0.01	131.69	ppb
Cobalt	59-2	0.00	0.01	0.01	0.01	38.66	ppb
Copper	63-2	0.00	0.00	0.00	0.00	1249.81	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				100		%
Indium	115-1				97		%
Indium	115-2				99		%
Iron	56-2	-46.46	-46.51	-46.55	-46.51		ppb
Iron	57-2	-43.96	-44.07	-44.32	-44.12		ppb
Iron	54-2	-46.99	-46.14	-46.38	-46.50		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICB001 Instrumnet Name : P7
Client Sample ID : ICB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:03:05 DataFile Name : 014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.01	0.01	0.01	23.82	ppb
Lead	207-1	0.01	0.01	0.01	0.01	7.02	ppb
Lead	208-1	0.01	0.01	0.01	0.01	1.41	ppb
Lithium	6-1				100		%
Magnesium	24-2	-86.03	-86.10	-86.08	-86.07		ppb
Manganese	55-2	0.01	0.00	0.00	0.00	159.36	ppb
Molybdenum	94-1	0.03	0.05	0.05	0.04	16.24	ppb
Molybdenum	95-1	0.03	0.04	0.04	0.04	10.49	ppb
Molybdenum	96-1	0.05	0.04	0.04	0.04	8.04	ppb
Molybdenum	97-1	0.04	0.03	0.04	0.04	14.54	ppb
Molybdenum	98-1	0.04	0.03	0.04	0.04	16.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.04	-0.02	-0.01	-0.02		ppb
Phosphorus	31-2	-10.32	-11.85	-7.96	-10.04		ppb
Potassium	39-2	-46.42	-47.83	-46.70	-46.98		ppb
Rhodium	103-1				97		%
Rhodium	103-2				98		%
Scandium	45-1				98		%
Scandium	45-2				98		%
Selenium	82-1	-0.44	-0.15	-0.42	-0.34		ppb
Selenium	77-2	0.07	-0.03	0.07	0.04	169.84	ppb
Selenium	78-2	-0.20	0.28	0.27	0.12	234.51	ppb
Silicon	28-1	-0.95	-1.01	-0.94	-0.96		ppb
Silver	107-1	0.00	0.00	0.00	0.00	76.91	ppb
Silver	109-1	0.00	0.00	0.00	0.00	195.23	ppb
Sodium	23-2	-86.96	-87.36	-86.63	-86.99		ppb
Strontium	86-1	0.02	-0.20	-0.23	-0.14		ppb
Strontium	88-1	0.06	0.04	0.07	0.05	29.06	ppb
Sulfur	34-1	-10.19	-30.35	18.13	-7.47		ppb
Terbium	159-1				97		%
Terbium	159-2				98		%
Thallium	203-1	0.00	0.00	0.00	0.00		ppb
Thallium	205-1	0.00	0.00	0.00	0.00	162.29	ppb
Tin	118-1	0.03	0.02	0.01	0.02	40.74	ppb
Titanium	47-1	0.03	0.03	0.05	0.04	23.83	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICB001

Instrumnet Name :

P7

Client Sample ID :

ICB001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:03:05

DataFile Name :

014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	19.71	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	82.30	ppb
Yttrium	89-1				97		%
Yttrium	89-2				97		%
Zinc	66-2	-0.14	-0.15	-0.19	-0.16		ppb
Zirconium	90-1	0.00	0.00	0.01	0.01	39.27	ppb
Zirconium	91-1	0.00	0.01	0.01	0.01	65.32	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSA001 Instrumnet Name : P7
Client Sample ID : ICSA001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:06:20 DataFile Name : 015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	92171.79	92537.00	92995.28	92568.02	0.45	ppb
Antimony	121-1	1.24	1.26	1.28	1.26	1.71	ppb
Arsenic	75-2	0.38	0.37	0.35	0.36	4.31	ppb
Barium	135-1	1.47	1.46	1.50	1.48	1.58	ppb
Barium	137-1	1.43	1.52	1.50	1.48	3.31	ppb
Beryllium	9-1	0.26	0.25	0.30	0.27	9.03	ppb
Bismuth	209-1				97		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	9.34	9.52	9.36	9.41	1.06	ppb
Cadmium	106-1	-1.72	-1.95	-1.47	-1.71		ppb
Cadmium	111-1	0.44	0.44	0.44	0.44	0.90	ppb
Calcium	43-1	100007.89	100429.77	100869.38	100435.68	0.43	ppb
Calcium	44-1	98978.24	99716.23	99105.12	99266.53	0.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	20.64	20.59	20.72	20.65	0.31	ppb
Cobalt	59-2	1.26	1.26	1.27	1.26	0.30	ppb
Copper	63-2	7.45	7.38	7.45	7.43	0.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				93		%
Indium	115-2				94		%
Iron	56-2	105151.58	101634.24	104998.86	103928.23	1.91	ppb
Iron	57-2	105200.04	104456.05	103731.52	104462.54	0.70	ppb
Iron	54-2	104853.61	103420.34	104424.55	104232.83	0.71	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSA001 Instrumnet Name : P7
Client Sample ID : ICSA001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:06:20 DataFile Name : 015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5.47	5.27	5.21	5.32	2.51	ppb
Lead	207-1	4.76	4.72	4.70	4.73	0.71	ppb
Lead	208-1	5.06	4.92	4.89	4.95	1.78	ppb
Lithium	6-1				95		%
Magnesium	24-2	98452.43	99748.77	100024.58	99408.59	0.84	ppb
Manganese	55-2	8.23	8.09	8.21	8.18	0.89	ppb
Molybdenum	94-1	1596.16	1626.05	1615.76	1612.66	0.94	ppb
Molybdenum	95-1	1937.26	1986.41	1944.19	1955.95	1.36	ppb
Molybdenum	96-1	1886.10	1943.62	1930.63	1920.12	1.57	ppb
Molybdenum	97-1	1938.85	1989.59	1969.36	1965.93	1.30	ppb
Molybdenum	98-1	1941.09	1966.65	1956.76	1954.83	0.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	6.15	5.97	6.09	6.07	1.56	ppb
Phosphorus	31-2	97512.17	98849.89	99181.57	98514.55	0.90	ppb
Potassium	39-2	98888.04	99456.80	99921.86	99422.23	0.52	ppb
Rhodium	103-1				89		%
Rhodium	103-2				90		%
Scandium	45-1				92		%
Scandium	45-2				92		%
Selenium	82-1	0.02	-0.17	-0.34	-0.16		ppb
Selenium	77-2	0.08	0.41	0.08	0.19	101.75	ppb
Selenium	78-2	-1.07	-0.63	-0.75	-0.82		ppb
Silicon	28-1	0.15	0.33	0.13	0.20	55.28	ppb
Silver	107-1	0.03	0.03	0.03	0.03	4.66	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.68	ppb
Sodium	23-2	101134.92	100052.06	101229.59	100805.52	0.65	ppb
Strontium	86-1	847.30	884.03	872.41	867.91	2.16	ppb
Strontium	88-1	851.29	873.49	862.16	862.31	1.29	ppb
Sulfur	34-1	96474.37	96869.96	95286.54	96210.29	0.86	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.20	0.19	0.16	0.18	12.54	ppb
Thallium	205-1	0.21	0.18	0.17	0.19	10.89	ppb
Tin	118-1	0.32	0.30	0.26	0.29	9.36	ppb
Titanium	47-1	2020.26	2017.32	2013.45	2017.01	0.17	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICSA001

Instrumnet Name :

P7

Client Sample ID :

ICSA001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:06:20

DataFile Name :

015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.02	0.02	3.39	ppb
Vanadium	51-2	0.18	0.19	0.21	0.19	9.09	ppb
Yttrium	89-1				94		%
Yttrium	89-2				94		%
Zinc	66-2	14.26	14.25	14.67	14.39	1.69	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	5.57	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	1.16	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSAB001 Instrumnet Name : P7
Client Sample ID : ICSAB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:09:23 DataFile Name : 016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93008.60	92609.96	92951.49	92856.68	0.23	ppb
Antimony	121-1	21.17	21.66	21.59	21.47	1.21	ppb
Arsenic	75-2	20.12	20.40	19.96	20.16	1.12	ppb
Barium	135-1	21.34	21.67	21.65	21.55	0.87	ppb
Barium	137-1	21.28	21.52	21.61	21.47	0.79	ppb
Beryllium	9-1	20.62	21.08	20.73	20.81	1.16	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	26.28	26.40	25.81	26.16	1.18	ppb
Cadmium	106-1	15.51	16.06	16.28	15.95	2.48	ppb
Cadmium	111-1	20.47	20.68	20.57	20.58	0.52	ppb
Calcium	43-1	99923.40	102202.38	103575.24	101900.34	1.81	ppb
Calcium	44-1	99141.07	100604.37	101726.63	100490.69	1.29	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40.71	40.68	40.54	40.65	0.22	ppb
Cobalt	59-2	21.24	21.40	21.33	21.32	0.37	ppb
Copper	63-2	26.39	26.39	26.17	26.32	0.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				104		%
Indium	115-1				99		%
Indium	115-2				96		%
Iron	56-2	104759.86	105024.64	103857.62	104547.37	0.59	ppb
Iron	57-2	104386.33	103999.69	103585.00	103990.34	0.39	ppb
Iron	54-2	104220.20	104076.61	103655.52	103984.11	0.28	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSAB001 Instrumnet Name : P7
Client Sample ID : ICSAB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:09:23 DataFile Name : 016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	26.13	25.83	26.26	26.08	0.85	ppb
Lead	207-1	24.59	24.46	25.06	24.70	1.28	ppb
Lead	208-1	25.05	24.98	25.26	25.10	0.59	ppb
Lithium	6-1				91		%
Magnesium	24-2	100001.64	99093.43	100632.46	99909.18	0.77	ppb
Manganese	55-2	27.75	28.15	27.83	27.91	0.76	ppb
Molybdenum	94-1	1594.08	1619.36	1628.47	1613.97	1.10	ppb
Molybdenum	95-1	1929.68	1957.80	1984.67	1957.38	1.40	ppb
Molybdenum	96-1	1906.76	1944.70	1971.94	1941.14	1.69	ppb
Molybdenum	97-1	1926.78	1975.25	1983.66	1961.90	1.56	ppb
Molybdenum	98-1	1919.13	1968.44	1988.06	1958.54	1.81	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	25.90	26.27	25.72	25.96	1.08	ppb
Phosphorus	31-2	99227.62	98494.01	98694.55	98805.39	0.38	ppb
Potassium	39-2	99588.24	99240.18	99304.41	99377.61	0.19	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				96		%
Scandium	45-2				95		%
Selenium	82-1	19.40	20.17	19.79	19.78	1.95	ppb
Selenium	77-2	18.53	19.96	19.31	19.27	3.71	ppb
Selenium	78-2	19.22	20.26	19.38	19.62	2.84	ppb
Silicon	28-1	0.06	0.25	0.62	0.31	91.96	ppb
Silver	107-1	19.03	19.48	19.52	19.34	1.41	ppb
Silver	109-1	19.02	19.41	19.15	19.19	1.03	ppb
Sodium	23-2	100034.37	100139.92	98932.14	99702.14	0.67	ppb
Strontium	86-1	850.49	877.79	889.77	872.68	2.31	ppb
Strontium	88-1	860.57	873.23	884.96	872.92	1.40	ppb
Sulfur	34-1	96288.26	96315.46	98509.15	97037.62	1.31	ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	20.66	20.77	20.99	20.81	0.81	ppb
Thallium	205-1	20.63	20.63	21.00	20.75	1.02	ppb
Tin	118-1	0.20	0.21	0.21	0.20	2.97	ppb
Titanium	47-1	2001.16	2014.46	2066.55	2027.39	1.70	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICSAB001

Instrumnet Name :

P7

Client Sample ID :

ICSAB001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:09:23

DataFile Name :

016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.02	0.02	1.50	ppb
Vanadium	51-2	19.79	20.06	19.93	19.93	0.67	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	34.24	34.59	34.31	34.38	0.54	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	4.18	ppb
Zirconium	91-1	0.02	0.03	0.02	0.02	17.83	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCV001Instrumnet Name :P7

Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired :2024-12-06 13:19:55DataFile Name :019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52053.41	52119.21	51300.26	51824.29	0.88	ppb
Antimony	121-1	510.04	519.05	525.90	518.33	1.53	ppb
Arsenic	75-2	525.49	534.42	530.48	530.13	0.84	ppb
Barium	135-1	2521.86	2561.33	2583.30	2555.50	1.22	ppb
Barium	137-1	2518.44	2531.21	2587.08	2545.58	1.43	ppb
Beryllium	9-1	492.33	506.08	502.91	500.44	1.44	ppb
Bismuth	209-1				98		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	501.75	517.00	523.87	514.21	2.20	ppb
Cadmium	106-1	508.36	516.85	520.79	515.34	1.23	ppb
Cadmium	111-1	516.22	525.82	524.19	522.08	0.98	ppb
Calcium	43-1	245287.18	251464.66	251051.80	249267.88	1.39	ppb
Calcium	44-1	243670.43	251662.11	248724.45	248018.99	1.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	496.83	499.39	502.97	499.73	0.62	ppb
Cobalt	59-2	500.91	501.77	497.57	500.08	0.44	ppb
Copper	63-2	4980.49	4998.42	4943.88	4974.26	0.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				99		%
Indium	115-1				94		%
Indium	115-2				92		%
Iron	56-2	127652.65	128095.96	127597.10	127781.90	0.21	ppb
Iron	57-2	127395.21	129214.94	126334.31	127648.15	1.14	ppb
Iron	54-2	126512.49	127632.28	126378.17	126840.98	0.54	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV001

Instrumnet Name :

P7

Client Sample ID :

CCV001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:19:55

DataFile Name :

019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2577.97	2568.17	2570.85	2572.33	0.20	ppb
Lead	207-1	2549.74	2555.58	2590.51	2565.28	0.86	ppb
Lead	208-1	2551.45	2566.16	2583.58	2567.06	0.63	ppb
Lithium	6-1				91		%
Magnesium	24-2	263178.61	264841.79	263885.01	263968.47	0.32	ppb
Manganese	55-2	4931.94	4994.36	4954.87	4960.39	0.64	ppb
Molybdenum	94-1	5110.99	5144.05	5200.09	5151.71	0.87	ppb
Molybdenum	95-1	5078.62	5128.86	5187.28	5131.59	1.06	ppb
Molybdenum	96-1	5089.90	5160.00	5190.84	5146.91	1.01	ppb
Molybdenum	97-1	5078.87	5151.71	5205.36	5145.31	1.23	ppb
Molybdenum	98-1	5063.65	5177.69	5169.32	5136.89	1.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	489.16	487.83	482.54	486.51	0.72	ppb
Phosphorus	31-2	10301.58	10089.44	10154.21	10181.74	1.07	ppb
Potassium	39-2	128082.27	128523.21	125701.65	127435.71	1.19	ppb
Rhodium	103-1				90		%
Rhodium	103-2				88		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	498.31	509.70	511.70	506.57	1.43	ppb
Selenium	77-2	516.41	513.18	519.84	516.47	0.64	ppb
Selenium	78-2	496.88	500.74	494.95	497.52	0.59	ppb
Silicon	28-1	440.04	453.12	454.22	449.13	1.76	ppb
Silver	107-1	515.15	517.25	525.70	519.37	1.07	ppb
Silver	109-1	507.44	526.51	523.26	519.07	1.97	ppb
Sodium	23-2	255567.41	254811.92	253397.05	254592.13	0.43	ppb
Strontium	86-1	12447.31	12746.29	12555.17	12582.92	1.20	ppb
Strontium	88-1	12575.79	12721.46	12813.71	12703.65	0.94	ppb
Sulfur	34-1	8260.48	8481.45	8354.87	8365.60	1.33	ppb
Terbium	159-1				102		%
Terbium	159-2				98		%
Thallium	203-1	514.17	511.05	519.03	514.75	0.78	ppb
Thallium	205-1	514.17	510.90	520.19	515.09	0.91	ppb
Tin	118-1	497.47	509.24	512.87	506.53	1.59	ppb
Titanium	47-1	5004.39	5064.87	5013.42	5027.56	0.65	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV001

Instrumnet Name :

P7

Client Sample ID :

CCV001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:19:55

DataFile Name :

019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	515.20	520.83	519.87	518.63	0.58	ppb
Vanadium	51-2	506.14	510.53	506.15	507.61	0.50	ppb
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	4993.30	5003.64	4998.20	4998.38	0.10	ppb
Zirconium	90-1	505.37	515.55	520.91	513.94	1.54	ppb
Zirconium	91-1	504.00	516.42	517.80	512.74	1.48	ppb

LB Number : LB133800

Operator : Jaswal

Lab Sample ID : CCB001

Instrumnet Name : P7

Client Sample ID : CCB001

Dilution Factor : 1

Date & Time Acquired : 2024-12-06 13:22:38

DataFile Name : 020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-16.33	-16.42	-16.60	-16.45		ppb
Antimony	121-1	0.38	0.23	0.19	0.27	36.97	ppb
Arsenic	75-2	0.00	0.01	0.00	0.01	33.90	ppb
Barium	135-1	0.66	0.14	0.05	0.29	115.36	ppb
Barium	137-1	0.71	0.16	0.05	0.30	116.43	ppb
Beryllium	9-1	0.16	0.10	0.07	0.11	43.37	ppb
Bismuth	209-1				105		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.21	0.06	0.03	0.10	100.29	ppb
Cadmium	106-1	-1.41	-1.36	-1.61	-1.46		ppb
Cadmium	111-1	0.18	0.06	0.03	0.09	92.04	ppb
Calcium	43-1	-23.16	-74.95	-87.29	-61.80		ppb
Calcium	44-1	-17.34	-71.76	-85.09	-58.07		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.01	0.01	0.01	20.87	ppb
Cobalt	59-2	0.00	-0.01	0.00	0.00		ppb
Copper	63-2	0.08	0.08	0.07	0.08	12.07	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				98		%
Iron	56-2	-45.30	-45.66	-45.87	-45.61		ppb
Iron	57-2	-42.31	-42.24	-42.80	-42.45		ppb
Iron	54-2	-45.59	-45.72	-45.98	-45.76		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB001 Instrumnet Name : P7
Client Sample ID : CCB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:22:38 DataFile Name : 020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.75	0.24	0.13	0.38	87.50	ppb
Lead	207-1	0.73	0.24	0.12	0.36	88.14	ppb
Lead	208-1	0.75	0.24	0.13	0.37	88.82	ppb
Lithium	6-1				97		%
Magnesium	24-2	-84.01	-84.55	-84.61	-84.39		ppb
Manganese	55-2	0.03	0.03	0.01	0.02	39.27	ppb
Molybdenum	94-1	1.60	0.53	0.27	0.80	88.39	ppb
Molybdenum	95-1	1.50	0.48	0.20	0.73	93.56	ppb
Molybdenum	96-1	1.54	0.49	0.20	0.74	94.44	ppb
Molybdenum	97-1	1.56	0.46	0.20	0.74	97.74	ppb
Molybdenum	98-1	1.53	0.47	0.20	0.73	96.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	-0.01	0.01	0.01	135.41	ppb
Phosphorus	31-2	-11.74	-11.46	-10.21	-11.13		ppb
Potassium	39-2	-36.67	-35.41	-36.37	-36.15		ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				97		%
Scandium	45-2				96		%
Selenium	82-1	0.14	-0.03	-0.10	0.00	8235.46	ppb
Selenium	77-2	0.07	-0.03	0.07	0.04	168.67	ppb
Selenium	78-2	-0.76	0.12	-0.57	-0.40		ppb
Silicon	28-1	-0.13	0.05	0.03	-0.01		ppb
Silver	107-1	0.21	0.10	0.07	0.13	62.09	ppb
Silver	109-1	0.21	0.09	0.06	0.12	64.11	ppb
Sodium	23-2	-59.15	-61.03	-62.75	-60.98		ppb
Strontium	86-1	3.01	0.86	-0.07	1.27	124.49	ppb
Strontium	88-1	3.41	0.83	0.24	1.49	113.13	ppb
Sulfur	34-1	-476.19	-415.19	-362.81	-418.06		ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	0.22	0.13	0.11	0.15	38.54	ppb
Thallium	205-1	0.21	0.13	0.10	0.15	38.37	ppb
Tin	118-1	0.18	0.06	0.03	0.09	88.63	ppb
Titanium	47-1	1.50	0.39	0.17	0.68	104.37	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB001

Instrumnet Name :

P7

Client Sample ID :

CCB001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:22:38

DataFile Name :

020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.13	0.03	0.01	0.06	113.39	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	26.30	ppb
Yttrium	89-1				99		%
Yttrium	89-2				97		%
Zinc	66-2	-0.13	-0.15	-0.20	-0.16		ppb
Zirconium	90-1	0.20	0.08	0.05	0.11	71.69	ppb
Zirconium	91-1	0.18	0.07	0.05	0.10	69.53	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :PB165402BLInstrumnet Name :P7

Client Sample ID :PBS402Dilution Factor :1

Date & Time Acquired :2024-12-06 13:25:53DataFile Name :021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-16.83	-16.73	-16.77	-16.78		ppb
Antimony	121-1	0.04	0.04	0.05	0.04	5.02	ppb
Arsenic	75-2	0.01	0.01	0.00	0.01	77.30	ppb
Barium	135-1	0.00	0.01	0.01	0.01	101.37	ppb
Barium	137-1	0.01	0.01	0.01	0.01	21.84	ppb
Beryllium	9-1	0.06	0.03	0.02	0.04	46.29	ppb
Bismuth	209-1				109		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.03	-0.01	-0.01	0.00	560.66	ppb
Cadmium	106-1	-1.15	-1.59	-1.45	-1.40		ppb
Cadmium	111-1	0.01	0.01	0.01	0.01	28.05	ppb
Calcium	43-1	-82.41	-83.25	-82.36	-82.67		ppb
Calcium	44-1	-82.31	-82.63	-82.02	-82.32		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.05	0.06	0.04	0.05	17.62	ppb
Cobalt	59-2	-0.01	0.00	-0.01	-0.01		ppb
Copper	63-2	0.05	0.05	0.05	0.05	1.89	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				100		%
Iron	56-2	-46.14	-46.21	-46.12	-46.16		ppb
Iron	57-2	-43.48	-43.10	-42.83	-43.14		ppb
Iron	54-2	-47.00	-47.07	-46.49	-46.85		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BL Instrumnet Name : P7
Client Sample ID : PBS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:25:53 DataFile Name : 021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.08	0.07	0.07	0.07	6.32	ppb
Lead	207-1	0.08	0.07	0.07	0.07	8.60	ppb
Lead	208-1	0.08	0.07	0.07	0.07	6.05	ppb
Lithium	6-1				98		%
Magnesium	24-2	-85.19	-85.32	-85.39	-85.30		ppb
Manganese	55-2	0.22	0.20	0.21	0.21	5.23	ppb
Molybdenum	94-1	0.05	0.05	0.04	0.05	8.99	ppb
Molybdenum	95-1	0.04	0.04	0.03	0.04	8.92	ppb
Molybdenum	96-1	0.04	0.04	0.03	0.04	12.31	ppb
Molybdenum	97-1	0.04	0.02	0.03	0.03	28.37	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	8.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	0.03	0.04	0.03	39.89	ppb
Phosphorus	31-2	-11.44	-12.11	-10.77	-11.44		ppb
Potassium	39-2	-41.18	-39.71	-39.91	-40.27		ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				99		%
Selenium	82-1	-0.06	-0.13	-0.19	-0.13		ppb
Selenium	77-2	-0.03	0.07	0.07	0.04	172.94	ppb
Selenium	78-2	-0.96	-0.76	0.21	-0.50		ppb
Silicon	28-1	-0.76	-0.96	-0.63	-0.78		ppb
Silver	107-1	0.02	0.02	0.02	0.02	8.48	ppb
Silver	109-1	0.02	0.01	0.02	0.02	19.78	ppb
Sodium	23-2	-69.31	-69.14	-69.47	-69.31		ppb
Strontium	86-1	0.05	0.02	-0.14	-0.02		ppb
Strontium	88-1	0.16	0.19	0.13	0.16	16.68	ppb
Sulfur	34-1	-385.50	-379.66	-289.05	-351.40		ppb
Terbium	159-1				105		%
Terbium	159-2				102		%
Thallium	203-1	0.08	0.08	0.07	0.08	7.17	ppb
Thallium	205-1	0.08	0.09	0.07	0.08	8.02	ppb
Tin	118-1	0.10	0.10	0.10	0.10	3.89	ppb
Titanium	47-1	0.03	0.00	0.02	0.02	76.30	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165402BL

Instrumnet Name :

P7

Client Sample ID :

PBS402

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:25:53

DataFile Name :

021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	43.99	ppb
Yttrium	89-1				102		%
Yttrium	89-2				99		%
Zinc	66-2	0.19	0.23	0.09	0.17	41.70	ppb
Zirconium	90-1	0.00	0.00	0.01	0.00	32.54	ppb
Zirconium	91-1	0.00	0.01	0.01	0.01	55.26	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BS Instrumnet Name : P7
Client Sample ID : LCS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:36:13 DataFile Name : 023LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.86	21.43	21.53	21.27	1.69	ppb
Antimony	121-1	3.99	4.08	4.08	4.05	1.28	ppb
Arsenic	75-2	2.08	1.95	2.13	2.05	4.56	ppb
Barium	135-1	18.77	19.36	19.49	19.21	1.99	ppb
Barium	137-1	18.77	19.14	19.46	19.12	1.79	ppb
Beryllium	9-1	1.86	1.92	1.87	1.88	1.82	ppb
Bismuth	209-1				103		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.90	1.81	1.76	1.82	3.96	ppb
Cadmium	106-1	0.27	0.01	0.38	0.22	86.15	ppb
Cadmium	111-1	2.08	2.13	2.16	2.13	1.89	ppb
Calcium	43-1	867.05	899.80	919.30	895.38	2.95	ppb
Calcium	44-1	883.05	912.17	905.52	900.25	1.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.72	3.79	3.75	3.75	0.97	ppb
Cobalt	59-2	1.96	1.98	1.96	1.97	0.63	ppb
Copper	63-2	3.98	4.00	4.06	4.01	1.06	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	352.96	349.29	350.95	351.07	0.52	ppb
Iron	57-2	371.85	371.88	370.70	371.48	0.18	ppb
Iron	54-2	371.19	367.96	375.73	371.62	1.05	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BS Instrumnet Name : P7
Client Sample ID : LCS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:36:13 DataFile Name : 023LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.89	2.00	2.04	1.98	4.06	ppb
Lead	207-1	1.88	1.94	1.96	1.92	2.19	ppb
Lead	208-1	1.91	1.95	1.99	1.95	2.06	ppb
Lithium	6-1				98		%
Magnesium	24-2	870.30	865.49	876.33	870.71	0.62	ppb
Manganese	55-2	1.92	1.90	1.94	1.92	1.04	ppb
Molybdenum	94-1	10.95	11.20	11.25	11.13	1.45	ppb
Molybdenum	95-1	9.05	9.59	9.47	9.37	3.01	ppb
Molybdenum	96-1	9.28	9.88	9.56	9.57	3.10	ppb
Molybdenum	97-1	9.19	9.34	9.51	9.35	1.69	ppb
Molybdenum	98-1	9.14	9.56	9.37	9.36	2.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.93	1.98	1.98	1.96	1.53	ppb
Phosphorus	31-2	33.01	39.71	34.78	35.83	9.69	ppb
Potassium	39-2	964.74	960.12	970.89	965.25	0.56	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				98		%
Selenium	82-1	9.50	9.84	9.24	9.53	3.17	ppb
Selenium	77-2	10.88	9.19	8.88	9.65	11.14	ppb
Selenium	78-2	9.31	9.17	10.62	9.70	8.23	ppb
Silicon	28-1	6.67	7.39	7.15	7.07	5.22	ppb
Silver	107-1	1.98	2.07	2.09	2.05	3.03	ppb
Silver	109-1	1.99	2.08	2.05	2.04	2.39	ppb
Sodium	23-2	847.18	862.56	859.92	856.55	0.96	ppb
Strontium	86-1	46.35	48.67	46.61	47.21	2.70	ppb
Strontium	88-1	47.46	48.46	47.90	47.94	1.04	ppb
Sulfur	34-1	-121.03	-33.56	-2.25	-52.28		ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	1.94	1.97	1.99	1.97	1.32	ppb
Thallium	205-1	1.90	1.96	2.00	1.95	2.55	ppb
Tin	118-1	9.58	9.93	9.96	9.82	2.12	ppb
Titanium	47-1	3.76	4.06	3.79	3.87	4.19	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165402BS

Instrumnet Name :

P7

Client Sample ID :

LCS402

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:36:13

DataFile Name :

023LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.69	1.74	1.78	1.74	2.39	ppb
Vanadium	51-2	9.70	9.69	9.76	9.72	0.39	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	10.05	9.80	10.14	10.00	1.75	ppb
Zirconium	90-1	1.82	1.90	1.88	1.87	2.20	ppb
Zirconium	91-1	1.78	1.85	1.87	1.83	2.48	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BL Instrumnet Name : P7
Client Sample ID : PBS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:39:31 DataFile Name : 024CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-16.78	-16.79	-16.77	-16.78		ppb
Antimony	121-1	0.01	0.02	0.01	0.01	15.41	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00	4724.81	ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.03	0.02	0.01	0.02	31.09	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	0.01	0.00	0.00		ppb
Cadmium	106-1	-1.41	-0.93	-1.52	-1.29		ppb
Cadmium	111-1	0.00	0.00	0.00	0.00	95.72	ppb
Calcium	43-1	-91.03	-92.10	-93.30	-92.14		ppb
Calcium	44-1	-89.98	-91.63	-91.14	-90.92		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.01	0.00		ppb
Cobalt	59-2	0.00	0.01	0.00	0.01	30.72	ppb
Copper	63-2	0.00	0.00	0.00	0.00	2436.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				99		%
Iron	56-2	-46.46	-46.51	-46.50	-46.49		ppb
Iron	57-2	-42.26	-43.22	-42.36	-42.61		ppb
Iron	54-2	-45.80	-46.00	-46.28	-46.03		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BL Instrumnet Name : P7
Client Sample ID : PBS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:39:31 DataFile Name : 024CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.06	0.04	0.04	0.05	14.01	ppb
Lead	207-1	0.06	0.05	0.05	0.05	8.83	ppb
Lead	208-1	0.05	0.05	0.04	0.05	13.21	ppb
Lithium	6-1				96		%
Magnesium	24-2	-85.29	-85.19	-85.31	-85.26		ppb
Manganese	55-2	-0.01	-0.01	-0.02	-0.01		ppb
Molybdenum	94-1	0.03	0.01	0.02	0.02	36.53	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	21.54	ppb
Molybdenum	96-1	0.01	0.00	0.01	0.01	43.27	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.01	0.00	0.00	0.00	119.75	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	0.00	0.00	0.00		ppb
Phosphorus	31-2	-12.22	-5.46	-13.54	-10.41		ppb
Potassium	39-2	-37.24	-38.67	-37.52	-37.81		ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				97		%
Selenium	82-1	-0.25	-0.33	-0.46	-0.35		ppb
Selenium	77-2	0.07	0.07	-0.03	0.04	170.51	ppb
Selenium	78-2	-0.09	-0.12	-0.46	-0.22		ppb
Silicon	28-1	-0.04	-0.72	-0.36	-0.37		ppb
Silver	107-1	0.01	0.02	0.01	0.01	13.03	ppb
Silver	109-1	0.02	0.01	0.01	0.01	20.97	ppb
Sodium	23-2	-78.92	-78.96	-78.61	-78.83		ppb
Strontium	86-1	0.01	-0.21	-0.31	-0.17		ppb
Strontium	88-1	-0.02	-0.03	-0.07	-0.04		ppb
Sulfur	34-1	40.91	-121.83	-48.32	-43.08		ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	0.09	0.07	0.08	0.08	11.82	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	4.94	ppb
Tin	118-1	0.00	0.00	0.07	0.02	190.93	ppb
Titanium	47-1	0.02	0.01	0.05	0.02	83.51	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165403BL

Instrumnet Name :

P7

Client Sample ID :

PBS403

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:39:31

DataFile Name :

024CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	49.06	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	-0.23	-0.18	-0.22	-0.21		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	64.20	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	15.88	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BS Instrumnet Name : P7
Client Sample ID : LCS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:42:49 DataFile Name : 025LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.04	21.20	22.42	21.55	3.51	ppb
Antimony	121-1	4.05	4.00	4.03	4.02	0.66	ppb
Arsenic	75-2	2.06	2.19	2.15	2.13	3.05	ppb
Barium	135-1	19.06	19.24	19.20	19.17	0.51	ppb
Barium	137-1	18.99	18.93	19.09	19.00	0.43	ppb
Beryllium	9-1	1.89	1.92	1.92	1.91	0.91	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	2.17	2.09	2.24	2.17	3.44	ppb
Cadmium	106-1	0.86	1.43	1.53	1.28	28.25	ppb
Cadmium	111-1	2.08	2.13	2.17	2.13	2.30	ppb
Calcium	43-1	898.14	902.62	898.20	899.65	0.29	ppb
Calcium	44-1	886.30	900.13	899.12	895.18	0.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.73	3.73	3.78	3.75	0.73	ppb
Cobalt	59-2	1.96	1.97	1.98	1.97	0.51	ppb
Copper	63-2	3.94	3.99	4.04	3.99	1.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				101		%
Indium	115-2				100		%
Iron	56-2	351.14	344.20	346.73	347.36	1.01	ppb
Iron	57-2	369.68	372.39	374.76	372.28	0.68	ppb
Iron	54-2	366.36	369.53	372.07	369.32	0.78	ppb
Krypton	83-1						cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :PB165403BSInstrumnet Name :P7

Client Sample ID :LCS403Dilution Factor :1

Date & Time Acquired :2024-12-06 13:42:49DataFile Name :025LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.93	1.99	1.98	1.97	1.64	ppb
Lead	207-1	1.94	1.90	2.02	1.95	3.09	ppb
Lead	208-1	1.90	1.93	1.98	1.94	1.93	ppb
Lithium	6-1				99		%
Magnesium	24-2	867.52	866.31	861.88	865.24	0.34	ppb
Manganese	55-2	1.90	1.95	1.97	1.94	1.85	ppb
Molybdenum	94-1	11.09	11.18	11.18	11.15	0.47	ppb
Molybdenum	95-1	9.25	9.41	9.45	9.37	1.10	ppb
Molybdenum	96-1	9.51	9.53	9.59	9.54	0.47	ppb
Molybdenum	97-1	9.26	9.44	9.46	9.38	1.17	ppb
Molybdenum	98-1	9.34	9.41	9.52	9.42	0.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.87	2.00	1.91	1.93	3.46	ppb
Phosphorus	31-2	39.26	40.74	32.05	37.35	12.45	ppb
Potassium	39-2	962.35	963.58	966.37	964.10	0.21	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				98		%
Selenium	82-1	9.65	9.72	9.81	9.73	0.82	ppb
Selenium	77-2	9.73	9.62	11.39	10.24	9.69	ppb
Selenium	78-2	8.34	9.19	9.27	8.93	5.78	ppb
Silicon	28-1	6.90	6.36	6.86	6.71	4.56	ppb
Silver	107-1	2.04	2.02	2.07	2.05	1.15	ppb
Silver	109-1	2.02	2.07	2.08	2.05	1.58	ppb
Sodium	23-2	845.65	848.39	850.60	848.21	0.29	ppb
Strontium	86-1	48.48	46.31	47.57	47.45	2.30	ppb
Strontium	88-1	46.47	47.74	48.63	47.62	2.28	ppb
Sulfur	34-1	-0.43	21.00	29.31	16.63	92.28	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	1.92	1.95	1.95	1.94	0.83	ppb
Thallium	205-1	1.91	1.96	1.94	1.94	1.12	ppb
Tin	118-1	9.82	9.99	9.85	9.89	0.92	ppb
Titanium	47-1	3.95	3.94	3.86	3.92	1.31	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165403BS

Instrumnet Name :

P7

Client Sample ID :

LCS403

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:42:49

DataFile Name :

025LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.70	1.72	1.75	1.72	1.24	ppb
Vanadium	51-2	9.60	9.61	9.57	9.60	0.20	ppb
Yttrium	89-1				100		%
Yttrium	89-2				98		%
Zinc	66-2	9.72	9.90	9.61	9.74	1.49	ppb
Zirconium	90-1	1.86	1.84	1.91	1.87	1.71	ppb
Zirconium	91-1	1.89	1.88	1.85	1.87	1.18	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-01 Instrumnet Name : P7
Client Sample ID : ME29F6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:46:02 DataFile Name : 026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3173.73	3161.84	3200.82	3178.80	0.63	ppb
Antimony	121-1	0.24	0.25	0.25	0.25	1.69	ppb
Arsenic	75-2	6.91	6.89	6.43	6.75	4.02	ppb
Barium	135-1	16.04	16.36	16.46	16.29	1.36	ppb
Barium	137-1	16.19	16.40	16.28	16.29	0.63	ppb
Beryllium	9-1	0.15	0.23	0.18	0.19	21.06	ppb
Bismuth	209-1				107		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.38	0.47	0.38	0.41	12.94	ppb
Cadmium	106-1	0.33	0.22	-0.55	0.00	20627.47	ppb
Cadmium	111-1	0.12	0.12	0.15	0.13	13.91	ppb
Calcium	43-1	216854.76	224300.12	228185.61	223113.50	2.58	ppb
Calcium	44-1	217503.10	224480.31	228500.06	223494.49	2.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	9.33	9.11	9.29	9.24	1.25	ppb
Cobalt	59-2	5.49	5.53	5.52	5.51	0.36	ppb
Copper	63-2	12.50	12.34	12.44	12.43	0.65	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				102		%
Indium	115-1				103		%
Indium	115-2				99		%
Iron	56-2	11866.40	11782.00	12003.26	11883.89	0.94	ppb
Iron	57-2	13102.63	13062.72	13377.83	13181.06	1.30	ppb
Iron	54-2	11974.43	11908.46	11969.29	11950.73	0.31	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-01 Instrumnet Name : P7
Client Sample ID : ME29F6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:46:02 DataFile Name : 026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6.59	6.74	6.62	6.65	1.16	ppb
Lead	207-1	5.91	6.02	5.85	5.93	1.42	ppb
Lead	208-1	6.14	6.25	6.20	6.20	0.86	ppb
Lithium	6-1				101		%
Magnesium	24-2	54947.87	54193.21	54288.53	54476.53	0.75	ppb
Manganese	55-2	529.10	529.99	532.74	530.61	0.36	ppb
Molybdenum	94-1	6.48	6.54	6.57	6.53	0.73	ppb
Molybdenum	95-1	1.53	1.54	1.58	1.55	1.73	ppb
Molybdenum	96-1	2.11	2.15	2.20	2.15	2.19	ppb
Molybdenum	97-1	1.46	1.53	1.58	1.52	3.70	ppb
Molybdenum	98-1	1.55	1.56	1.57	1.56	0.80	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.58	12.42	12.59	12.53	0.74	ppb
Phosphorus	31-2	416.40	399.64	431.36	415.80	3.82	ppb
Potassium	39-2	423.72	421.86	423.87	423.15	0.26	ppb
Rhodium	103-1				101		%
Rhodium	103-2				97		%
Scandium	45-1				103		%
Scandium	45-2				100		%
Selenium	82-1	0.14	0.72	-0.01	0.28	136.91	ppb
Selenium	77-2	3.80	5.37	4.81	4.66	17.13	ppb
Selenium	78-2	-0.04	0.57	0.82	0.45	98.17	ppb
Silicon	28-1	190.27	190.46	171.23	183.99	6.00	ppb
Silver	107-1	0.13	0.08	0.07	0.10	35.20	ppb
Silver	109-1	0.14	0.08	0.07	0.09	41.37	ppb
Sodium	23-2	138.65	140.25	142.92	140.61	1.53	ppb
Strontium	86-1	4101.15	4199.16	4254.49	4184.93	1.86	ppb
Strontium	88-1	4113.98	4249.11	4217.49	4193.52	1.69	ppb
Sulfur	34-1	-74.62	84.33	179.79	63.17	203.45	ppb
Terbium	159-1				107		%
Terbium	159-2				103		%
Thallium	203-1	0.38	0.31	0.32	0.34	11.99	ppb
Thallium	205-1	0.38	0.32	0.31	0.34	10.78	ppb
Tin	118-1	0.30	0.26	0.28	0.28	6.91	ppb
Titanium	47-1	54.01	60.23	57.01	57.08	5.45	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-01

Instrumnet Name :

P7

Client Sample ID :

ME29F6

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:46:02

DataFile Name :

026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.86	0.91	0.91	0.89	3.23	ppb
Vanadium	51-2	10.98	10.92	10.94	10.95	0.29	ppb
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	42.03	42.22	43.12	42.46	1.37	ppb
Zirconium	90-1	2.81	2.92	2.90	2.88	2.02	ppb
Zirconium	91-1	2.88	2.96	2.96	2.93	1.62	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-02 Instrumnet Name : P7
Client Sample ID : ME29F7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:49:12 DataFile Name : 027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2272.31	2278.75	2243.77	2264.94	0.82	ppb
Antimony	121-1	0.36	0.36	0.35	0.36	1.57	ppb
Arsenic	75-2	10.61	10.66	10.77	10.68	0.78	ppb
Barium	135-1	31.75	31.76	31.58	31.70	0.32	ppb
Barium	137-1	31.61	31.64	31.44	31.56	0.34	ppb
Beryllium	9-1	0.17	0.20	0.17	0.18	10.02	ppb
Bismuth	209-1				107		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.53	0.57	0.47	0.52	9.40	ppb
Cadmium	106-1	0.34	-0.01	0.23	0.19	97.25	ppb
Cadmium	111-1	0.33	0.32	0.36	0.33	6.98	ppb
Calcium	43-1	246531.19	249825.08	245522.61	247292.96	0.91	ppb
Calcium	44-1	249064.80	248620.65	243458.27	247047.91	1.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.27	8.16	8.22	8.21	0.68	ppb
Cobalt	59-2	5.93	5.89	5.88	5.90	0.51	ppb
Copper	63-2	15.11	15.05	15.00	15.06	0.35	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				100		%
Iron	56-2	12766.53	12920.32	12462.13	12716.33	1.83	ppb
Iron	57-2	14220.75	14330.79	14166.72	14239.42	0.59	ppb
Iron	54-2	12723.18	13035.93	12622.59	12793.90	1.68	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-02 Instrumnet Name : P7
Client Sample ID : ME29F7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:49:12 DataFile Name : 027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	8.41	8.32	8.39	8.37	0.52	ppb
Lead	207-1	7.56	7.41	7.59	7.52	1.28	ppb
Lead	208-1	7.87	7.76	7.92	7.85	1.06	ppb
Lithium	6-1				97		%
Magnesium	24-2	63269.49	62714.23	62525.87	62836.53	0.62	ppb
Manganese	55-2	1112.81	1126.34	1100.98	1113.38	1.14	ppb
Molybdenum	94-1	6.42	6.54	6.41	6.46	1.15	ppb
Molybdenum	95-1	1.92	1.95	1.90	1.92	1.13	ppb
Molybdenum	96-1	2.50	2.41	2.46	2.46	1.72	ppb
Molybdenum	97-1	1.93	1.93	1.96	1.94	0.96	ppb
Molybdenum	98-1	1.92	1.91	1.94	1.92	0.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	18.09	18.26	17.97	18.11	0.81	ppb
Phosphorus	31-2	442.48	453.43	451.37	449.09	1.30	ppb
Potassium	39-2	394.47	390.93	392.10	392.50	0.46	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				102		%
Scandium	45-2				100		%
Selenium	82-1	0.41	0.07	0.24	0.24	71.31	ppb
Selenium	77-2	5.43	4.89	5.66	5.32	7.45	ppb
Selenium	78-2	0.52	1.33	0.40	0.75	67.61	ppb
Silicon	28-1	156.09	157.44	156.65	156.73	0.43	ppb
Silver	107-1	0.04	0.04	0.04	0.04	7.70	ppb
Silver	109-1	0.04	0.04	0.04	0.04	6.27	ppb
Sodium	23-2	163.93	163.27	163.05	163.42	0.28	ppb
Strontium	86-1	4371.36	4332.42	4408.09	4370.62	0.87	ppb
Strontium	88-1	4375.65	4339.68	4407.26	4374.20	0.77	ppb
Sulfur	34-1	296.56	264.26	195.07	251.97	20.58	ppb
Terbium	159-1				108		%
Terbium	159-2				102		%
Thallium	203-1	0.34	0.33	0.35	0.34	3.13	ppb
Thallium	205-1	0.33	0.34	0.35	0.34	3.14	ppb
Tin	118-1	0.32	0.33	0.36	0.34	5.82	ppb
Titanium	47-1	78.91	79.67	79.15	79.24	0.49	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-02

Instrumnet Name :

P7

Client Sample ID :

ME29F7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:49:12

DataFile Name :

027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.12	1.10	1.12	1.11	1.15	ppb
Vanadium	51-2	12.27	12.26	12.11	12.21	0.73	ppb
Yttrium	89-1				107		%
Yttrium	89-2				103		%
Zinc	66-2	39.20	38.52	38.95	38.89	0.89	ppb
Zirconium	90-1	2.65	2.70	2.69	2.68	0.94	ppb
Zirconium	91-1	2.64	2.68	2.67	2.67	0.76	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03 Instrumnet Name : P7
Client Sample ID : ME29F8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:52:21 DataFile Name : 028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2057.56	2071.80	2062.91	2064.09	0.35	ppb
Antimony	121-1	0.27	0.28	0.29	0.28	4.08	ppb
Arsenic	75-2	5.23	5.59	5.12	5.32	4.64	ppb
Barium	135-1	13.29	14.05	14.05	13.79	3.19	ppb
Barium	137-1	13.15	13.89	13.97	13.67	3.33	ppb
Beryllium	9-1	0.19	0.17	0.16	0.17	10.32	ppb
Bismuth	209-1				111		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.25	0.37	0.32	0.31	17.95	ppb
Cadmium	106-1	0.47	0.11	-0.36	0.07	580.31	ppb
Cadmium	111-1	0.15	0.19	0.19	0.18	13.13	ppb
Calcium	43-1	195480.51	209184.71	209427.08	204697.43	3.90	ppb
Calcium	44-1	195943.56	209788.70	212960.12	206230.79	4.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.70	8.66	8.63	8.66	0.45	ppb
Cobalt	59-2	5.13	5.18	5.16	5.15	0.52	ppb
Copper	63-2	13.89	14.02	13.92	13.94	0.48	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				113		%
Holmium	165-2				104		%
Indium	115-1				107		%
Indium	115-2				101		%
Iron	56-2	7128.61	7078.14	7025.62	7077.46	0.73	ppb
Iron	57-2	8364.40	8248.91	8368.22	8327.18	0.81	ppb
Iron	54-2	7130.08	7168.42	7093.38	7130.63	0.53	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03 Instrumnet Name : P7
Client Sample ID : ME29F8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:52:21 DataFile Name : 028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6.84	7.24	7.25	7.11	3.27	ppb
Lead	207-1	6.18	6.50	6.44	6.37	2.66	ppb
Lead	208-1	6.38	6.68	6.70	6.59	2.68	ppb
Lithium	6-1				97		%
Magnesium	24-2	53223.15	54030.32	52440.14	53231.21	1.49	ppb
Manganese	55-2	338.56	336.49	336.47	337.17	0.36	ppb
Molybdenum	94-1	5.22	5.53	5.48	5.41	3.07	ppb
Molybdenum	95-1	0.78	0.88	0.84	0.83	6.46	ppb
Molybdenum	96-1	1.36	1.44	1.36	1.39	3.50	ppb
Molybdenum	97-1	0.82	0.90	0.86	0.86	4.24	ppb
Molybdenum	98-1	0.80	0.85	0.85	0.83	3.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.39	13.60	13.25	13.42	1.32	ppb
Phosphorus	31-2	301.70	314.68	296.61	304.33	3.06	ppb
Potassium	39-2	320.82	321.80	317.34	319.99	0.73	ppb
Rhodium	103-1				105		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.59	-0.03	0.21	0.26	121.47	ppb
Selenium	77-2	4.19	4.16	3.19	3.85	14.78	ppb
Selenium	78-2	0.18	1.17	0.26	0.54	102.22	ppb
Silicon	28-1	113.98	123.04	120.36	119.13	3.91	ppb
Silver	107-1	0.04	0.05	0.05	0.05	9.93	ppb
Silver	109-1	0.05	0.05	0.05	0.05	1.95	ppb
Sodium	23-2	128.28	128.32	127.43	128.01	0.39	ppb
Strontium	86-1	3767.31	4053.33	4049.74	3956.79	4.15	ppb
Strontium	88-1	3777.90	4057.59	4052.56	3962.68	4.04	ppb
Sulfur	34-1	166.89	393.92	384.12	314.98	40.75	ppb
Terbium	159-1				112		%
Terbium	159-2				103		%
Thallium	203-1	0.20	0.21	0.20	0.21	2.51	ppb
Thallium	205-1	0.18	0.20	0.21	0.20	5.66	ppb
Tin	118-1	0.29	0.26	0.26	0.27	5.49	ppb
Titanium	47-1	48.23	52.13	52.16	50.84	4.45	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-03

Instrumnet Name :

P7

Client Sample ID :

ME29F8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:52:21

DataFile Name :

028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.24	1.28	1.31	1.28	3.02	ppb
Vanadium	51-2	9.77	9.84	9.76	9.79	0.43	ppb
Yttrium	89-1				111		%
Yttrium	89-2				103		%
Zinc	66-2	36.23	36.88	36.42	36.51	0.92	ppb
Zirconium	90-1	2.50	2.66	2.65	2.60	3.42	ppb
Zirconium	91-1	2.54	2.69	2.72	2.65	3.71	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4977-04Instrumnet Name :P7

Client Sample ID :ME29F8DDilution Factor :1

Date & Time Acquired :2024-12-06 13:55:32DataFile Name :029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2153.54	2128.99	2149.30	2143.94	0.61	ppb
Antimony	121-1	0.29	0.29	0.28	0.28	1.29	ppb
Arsenic	75-2	5.44	5.82	5.38	5.55	4.30	ppb
Barium	135-1	13.57	14.29	14.36	14.07	3.13	ppb
Barium	137-1	13.77	14.14	14.44	14.12	2.38	ppb
Beryllium	9-1	0.23	0.21	0.16	0.20	18.98	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.39	0.28	0.43	0.37	20.79	ppb
Cadmium	106-1	0.43	-0.23	-0.19	0.00	11920.70	ppb
Cadmium	111-1	0.16	0.19	0.15	0.17	10.08	ppb
Calcium	43-1	200988.36	210500.49	211829.82	207772.89	2.85	ppb
Calcium	44-1	201998.21	210258.42	210462.15	207572.93	2.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.68	8.76	8.57	8.67	1.09	ppb
Cobalt	59-2	5.18	5.23	5.17	5.19	0.69	ppb
Copper	63-2	14.31	14.32	14.30	14.31	0.08	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				105		%
Indium	115-1				107		%
Indium	115-2				100		%
Iron	56-2	7238.35	7269.91	7268.55	7258.93	0.25	ppb
Iron	57-2	8523.98	8584.75	8549.06	8552.60	0.36	ppb
Iron	54-2	7289.58	7393.60	7308.29	7330.49	0.76	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-04 Instrumnet Name : P7
Client Sample ID : ME29F8D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:55:32 DataFile Name : 029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.21	7.49	7.38	7.36	1.89	ppb
Lead	207-1	6.55	6.69	6.64	6.63	1.03	ppb
Lead	208-1	6.73	6.91	6.87	6.84	1.43	ppb
Lithium	6-1				96		%
Magnesium	24-2	54932.32	54537.51	54946.66	54805.50	0.42	ppb
Manganese	55-2	337.99	343.30	342.27	341.19	0.83	ppb
Molybdenum	94-1	5.52	5.76	6.13	5.80	5.29	ppb
Molybdenum	95-1	0.85	0.91	0.93	0.90	4.65	ppb
Molybdenum	96-1	1.40	1.45	1.44	1.43	1.97	ppb
Molybdenum	97-1	0.86	0.91	0.91	0.89	3.52	ppb
Molybdenum	98-1	0.91	0.91	0.88	0.90	2.04	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.41	13.61	13.22	13.41	1.45	ppb
Phosphorus	31-2	316.97	321.80	322.22	320.33	0.91	ppb
Potassium	39-2	325.10	331.68	327.45	328.07	1.02	ppb
Rhodium	103-1				104		%
Rhodium	103-2				99		%
Scandium	45-1				102		%
Scandium	45-2				100		%
Selenium	82-1	0.20	0.36	0.22	0.26	32.77	ppb
Selenium	77-2	4.71	3.67	4.24	4.21	12.30	ppb
Selenium	78-2	0.47	0.14	0.38	0.33	51.01	ppb
Silicon	28-1	123.79	127.00	126.99	125.92	1.47	ppb
Silver	107-1	0.04	0.05	0.04	0.04	14.70	ppb
Silver	109-1	0.04	0.04	0.04	0.04	5.51	ppb
Sodium	23-2	126.89	127.21	127.92	127.34	0.42	ppb
Strontium	86-1	3880.32	3984.99	3993.30	3952.87	1.59	ppb
Strontium	88-1	3905.35	4005.70	3972.18	3961.07	1.29	ppb
Sulfur	34-1	331.68	415.44	427.30	391.47	13.31	ppb
Terbium	159-1				111		%
Terbium	159-2				103		%
Thallium	203-1	0.17	0.19	0.17	0.18	4.45	ppb
Thallium	205-1	0.18	0.18	0.18	0.18	2.08	ppb
Tin	118-1	0.26	0.25	0.25	0.25	1.43	ppb
Titanium	47-1	52.31	54.33	52.96	53.20	1.93	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-04

Instrumnet Name :

P7

Client Sample ID :

ME29F8D

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:55:32

DataFile Name :

029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.29	1.32	1.34	1.31	1.92	ppb
Vanadium	51-2	9.99	10.08	10.11	10.06	0.66	ppb
Yttrium	89-1				110		%
Yttrium	89-2				103		%
Zinc	66-2	37.39	37.59	36.71	37.23	1.25	ppb
Zirconium	90-1	2.64	2.72	2.91	2.76	5.04	ppb
Zirconium	91-1	2.72	2.73	2.76	2.74	0.61	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4977-03LX5Instrumnet Name :P7

Client Sample ID :ME29F8LDilution Factor :5

Date & Time Acquired :2024-12-06 13:58:41DataFile Name :030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	387.24	388.15	391.73	389.04	0.61	ppb
Antimony	121-1	0.06	0.07	0.06	0.06	4.86	ppb
Arsenic	75-2	1.13	1.13	1.15	1.13	1.14	ppb
Barium	135-1	2.57	2.71	2.76	2.68	3.69	ppb
Barium	137-1	2.53	2.66	2.74	2.64	3.92	ppb
Beryllium	9-1	0.05	0.05	0.03	0.04	21.75	ppb
Bismuth	209-1				109		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.08	0.08	0.08	0.08	3.81	ppb
Cadmium	106-1	-0.57	-0.23	-0.67	-0.49		ppb
Cadmium	111-1	0.04	0.04	0.04	0.04	7.99	ppb
Calcium	43-1	37746.53	40442.13	41344.23	39844.29	4.70	ppb
Calcium	44-1	37752.96	39978.44	40680.60	39470.67	3.87	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.76	1.77	1.76	1.76	0.21	ppb
Cobalt	59-2	0.98	0.99	0.98	0.98	0.48	ppb
Copper	63-2	2.81	2.76	2.69	2.76	2.16	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				102		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	56-2	1337.53	1340.55	1337.31	1338.46	0.14	ppb
Iron	57-2	1598.29	1599.92	1594.38	1597.53	0.18	ppb
Iron	54-2	1383.33	1383.28	1390.74	1385.78	0.31	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03LX5 Instrumnet Name : P7
Client Sample ID : ME29F8L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 13:58:41 DataFile Name : 030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.49	1.47	1.52	1.50	1.78	ppb
Lead	207-1	1.35	1.36	1.35	1.35	0.40	ppb
Lead	208-1	1.37	1.38	1.41	1.39	1.48	ppb
Lithium	6-1				95		%
Magnesium	24-2	10396.25	10403.36	10342.58	10380.73	0.32	ppb
Manganese	55-2	64.78	64.57	65.34	64.90	0.62	ppb
Molybdenum	94-1	1.03	1.14	1.09	1.08	5.35	ppb
Molybdenum	95-1	0.15	0.17	0.17	0.16	6.43	ppb
Molybdenum	96-1	0.25	0.27	0.28	0.26	5.83	ppb
Molybdenum	97-1	0.16	0.17	0.16	0.17	4.79	ppb
Molybdenum	98-1	0.15	0.15	0.18	0.16	8.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.66	2.72	2.56	2.65	3.20	ppb
Phosphorus	31-2	48.54	54.20	49.63	50.79	5.91	ppb
Potassium	39-2	33.54	33.25	34.86	33.88	2.54	ppb
Rhodium	103-1				103		%
Rhodium	103-2				100		%
Scandium	45-1				101		%
Scandium	45-2				98		%
Selenium	82-1	-0.10	-0.52	-0.63	-0.41		ppb
Selenium	77-2	0.70	1.12	0.28	0.70	59.63	ppb
Selenium	78-2	-1.35	0.05	-0.73	-0.68		ppb
Silicon	28-1	25.27	26.53	27.53	26.44	4.28	ppb
Silver	107-1	0.01	0.01	0.01	0.01	3.45	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.75	ppb
Sodium	23-2	-29.46	-31.54	-30.26	-30.42		ppb
Strontium	86-1	753.93	790.99	803.51	782.81	3.29	ppb
Strontium	88-1	745.54	782.02	799.56	775.70	3.55	ppb
Sulfur	34-1	193.00	452.85	522.27	389.38	44.58	ppb
Terbium	159-1				108		%
Terbium	159-2				102		%
Thallium	203-1	0.06	0.05	0.05	0.05	7.04	ppb
Thallium	205-1	0.05	0.06	0.05	0.05	6.24	ppb
Tin	118-1	0.07	0.07	0.07	0.07	3.44	ppb
Titanium	47-1	9.41	10.07	10.17	9.88	4.20	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-03LX5

Instrumnet Name :

P7

Client Sample ID :

ME29F8L

Dilution Factor :

5

Date & Time Acquired :

2024-12-06 13:58:41

DataFile Name :

030SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.23	0.24	0.25	0.24	4.81	ppb
Vanadium	51-2	1.83	1.88	1.87	1.86	1.47	ppb
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	7.21	6.92	7.27	7.13	2.60	ppb
Zirconium	90-1	0.48	0.51	0.53	0.51	5.15	ppb
Zirconium	91-1	0.49	0.53	0.54	0.52	4.81	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4977-05Instrumnet Name :P7

Client Sample ID :ME29F8SDilution Factor :1

Date & Time Acquired :2024-12-06 14:01:53DataFile Name :031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2427.06	2415.72	2466.27	2436.35	1.09	ppb
Antimony	121-1	20.23	20.19	20.59	20.33	1.09	ppb
Arsenic	75-2	12.95	13.04	13.06	13.02	0.45	ppb
Barium	135-1	395.89	393.91	406.04	398.62	1.63	ppb
Barium	137-1	397.85	393.89	401.81	397.85	1.00	ppb
Beryllium	9-1	10.01	9.66	9.71	9.79	1.89	ppb
Bismuth	209-1				109		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	8.95	8.71	9.08	8.91	2.11	ppb
Cadmium	106-1	8.97	8.80	8.48	8.75	2.85	ppb
Cadmium	111-1	10.25	10.38	10.42	10.35	0.86	ppb
Calcium	43-1	206090.21	205367.34	206467.24	205974.93	0.27	ppb
Calcium	44-1	206440.78	206419.78	205925.33	206261.96	0.14	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48.22	48.43	48.52	48.39	0.32	ppb
Cobalt	59-2	102.98	103.01	103.38	103.12	0.22	ppb
Copper	63-2	59.97	60.60	60.65	60.41	0.63	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				104		%
Indium	115-1				104		%
Indium	115-2				100		%
Iron	56-2	7206.28	7200.64	7270.14	7225.69	0.53	ppb
Iron	57-2	8422.71	8355.53	8596.97	8458.40	1.47	ppb
Iron	54-2	7301.43	7347.75	7405.92	7351.70	0.71	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-05

Instrumnet Name :

P7

Client Sample ID :

ME29F8S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:01:53

DataFile Name :

031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	11.20	11.12	10.98	11.10	1.02	ppb
Lead	207-1	10.14	10.36	10.07	10.19	1.47	ppb
Lead	208-1	10.37	10.57	10.40	10.45	1.00	ppb
Lithium	6-1				94		%
Magnesium	24-2	53625.40	53515.65	53650.61	53597.22	0.13	ppb
Manganese	55-2	424.62	427.00	431.12	427.58	0.77	ppb
Molybdenum	94-1	5.55	5.60	5.53	5.56	0.68	ppb
Molybdenum	95-1	0.89	0.85	0.85	0.86	2.76	ppb
Molybdenum	96-1	1.42	1.41	1.42	1.42	0.27	ppb
Molybdenum	97-1	0.84	0.85	0.87	0.85	1.93	ppb
Molybdenum	98-1	0.85	0.84	0.86	0.85	1.20	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	110.85	110.93	112.28	111.35	0.72	ppb
Phosphorus	31-2	309.67	305.38	316.09	310.38	1.74	ppb
Potassium	39-2	323.45	318.62	324.88	322.31	1.02	ppb
Rhodium	103-1				102		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	20.22	19.73	19.95	19.96	1.23	ppb
Selenium	77-2	21.56	25.32	22.61	23.16	8.38	ppb
Selenium	78-2	18.69	18.39	18.53	18.54	0.80	ppb
Silicon	28-1	151.64	159.08	130.55	147.09	10.06	ppb
Silver	107-1	9.87	9.84	9.97	9.89	0.70	ppb
Silver	109-1	9.91	9.67	10.03	9.87	1.84	ppb
Sodium	23-2	120.81	117.79	120.76	119.78	1.44	ppb
Strontium	86-1	3942.46	3926.28	3941.88	3936.87	0.23	ppb
Strontium	88-1	3877.80	3954.30	3960.67	3930.93	1.17	ppb
Sulfur	34-1	544.14	435.70	414.85	464.90	14.93	ppb
Terbium	159-1				110		%
Terbium	159-2				103		%
Thallium	203-1	9.56	9.82	9.68	9.68	1.32	ppb
Thallium	205-1	9.48	9.82	9.67	9.66	1.76	ppb
Tin	118-1	0.23	0.24	0.23	0.23	1.13	ppb
Titanium	47-1	151.12	152.70	145.79	149.87	2.42	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-05

Instrumnet Name :

P7

Client Sample ID :

ME29F8S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:01:53

DataFile Name :

031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.28	1.32	1.30	1.30	1.86	ppb
Vanadium	51-2	107.19	107.59	107.53	107.43	0.20	ppb
Yttrium	89-1				109		%
Yttrium	89-2				103		%
Zinc	66-2	132.86	133.00	134.07	133.31	0.50	ppb
Zirconium	90-1	2.64	2.62	2.65	2.64	0.51	ppb
Zirconium	91-1	2.59	2.67	2.73	2.66	2.59	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-06

Instrumnet Name :

P7

Client Sample ID :

ME29F9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:04:59

DataFile Name :

032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1672.51	1668.06	1657.41	1665.99	0.47	ppb
Antimony	121-1	0.21	0.21	0.22	0.21	2.29	ppb
Arsenic	75-2	4.00	3.86	3.81	3.89	2.48	ppb
Barium	135-1	8.33	8.62	8.38	8.44	1.85	ppb
Barium	137-1	8.40	8.64	8.45	8.50	1.53	ppb
Beryllium	9-1	0.15	0.14	0.18	0.16	12.89	ppb
Bismuth	209-1				109		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.22	0.30	0.18	0.24	26.62	ppb
Cadmium	106-1	0.05	-0.06	-0.16	-0.06		ppb
Cadmium	111-1	0.16	0.15	0.18	0.16	8.29	ppb
Calcium	43-1	200185.82	200083.70	204336.28	201535.26	1.20	ppb
Calcium	44-1	201284.96	201204.47	204559.84	202349.76	0.95	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.21	5.11	5.01	5.11	1.91	ppb
Cobalt	59-2	3.97	4.01	3.97	3.98	0.59	ppb
Copper	63-2	10.61	10.70	10.68	10.66	0.42	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	56-2	7281.30	7296.85	7191.97	7256.71	0.78	ppb
Iron	57-2	8461.91	8555.74	8400.83	8472.82	0.92	ppb
Iron	54-2	7391.13	7363.04	7317.01	7357.06	0.51	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-06 Instrumnet Name : P7
Client Sample ID : ME29F9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:04:59 DataFile Name : 032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6.16	6.19	6.12	6.16	0.60	ppb
Lead	207-1	5.56	5.59	5.62	5.59	0.50	ppb
Lead	208-1	5.75	5.77	5.73	5.75	0.42	ppb
Lithium	6-1				96		%
Magnesium	24-2	55442.03	54996.16	54525.64	54987.94	0.83	ppb
Manganese	55-2	332.06	327.81	321.58	327.15	1.61	ppb
Molybdenum	94-1	4.17	4.36	4.19	4.24	2.52	ppb
Molybdenum	95-1	0.60	0.96	0.62	0.73	27.93	ppb
Molybdenum	96-1	1.00	1.28	1.05	1.11	13.19	ppb
Molybdenum	97-1	0.58	0.89	0.61	0.69	24.46	ppb
Molybdenum	98-1	0.62	0.82	0.62	0.68	16.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.82	8.84	8.78	8.81	0.38	ppb
Phosphorus	31-2	340.47	359.82	356.95	352.41	2.96	ppb
Potassium	39-2	351.00	356.57	351.13	352.90	0.90	ppb
Rhodium	103-1				102		%
Rhodium	103-2				98		%
Scandium	45-1				100		%
Scandium	45-2				98		%
Selenium	82-1	0.18	0.03	-0.02	0.06	161.55	ppb
Selenium	77-2	2.64	3.05	2.35	2.68	13.06	ppb
Selenium	78-2	0.93	-0.36	-0.03	0.18	365.87	ppb
Silicon	28-1	248.57	241.85	250.12	246.85	1.78	ppb
Silver	107-1	0.07	0.06	0.04	0.06	25.89	ppb
Silver	109-1	0.07	0.05	0.04	0.05	26.18	ppb
Sodium	23-2	129.80	132.46	130.49	130.92	1.05	ppb
Strontium	86-1	3600.24	3646.54	3644.94	3630.57	0.72	ppb
Strontium	88-1	3594.06	3603.83	3675.31	3624.40	1.22	ppb
Sulfur	34-1	290.39	252.79	321.08	288.09	11.87	ppb
Terbium	159-1				110		%
Terbium	159-2				102		%
Thallium	203-1	0.11	0.09	0.11	0.10	6.48	ppb
Thallium	205-1	0.11	0.10	0.10	0.10	2.06	ppb
Tin	118-1	0.14	0.18	0.18	0.17	13.47	ppb
Titanium	47-1	37.94	37.12	38.42	37.83	1.73	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-06

Instrumnet Name :

P7

Client Sample ID :

ME29F9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:04:59

DataFile Name :

032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.89	0.90	0.90	0.90	0.69	ppb
Vanadium	51-2	7.57	7.50	7.49	7.52	0.55	ppb
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	30.17	30.29	29.71	30.06	1.01	ppb
Zirconium	90-1	1.97	2.00	2.04	2.00	1.64	ppb
Zirconium	91-1	2.00	2.05	1.99	2.01	1.61	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-07 Instrumnet Name : P7
Client Sample ID : ME29G0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:08:10 DataFile Name : 033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1690.17	1682.16	1675.78	1682.70	0.43	ppb
Antimony	121-1	0.31	0.31	0.30	0.31	1.73	ppb
Arsenic	75-2	6.08	5.94	5.90	5.97	1.65	ppb
Barium	135-1	11.77	11.88	11.82	11.82	0.46	ppb
Barium	137-1	11.61	11.85	11.67	11.71	1.11	ppb
Beryllium	9-1	0.16	0.14	0.17	0.16	7.37	ppb
Bismuth	209-1				109		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.27	0.29	0.30	0.29	4.84	ppb
Cadmium	106-1	0.35	-0.13	0.36	0.19	146.13	ppb
Cadmium	111-1	0.16	0.17	0.16	0.17	4.04	ppb
Calcium	43-1	250175.72	257640.72	252530.47	253448.97	1.51	ppb
Calcium	44-1	248335.23	256029.56	251781.58	252048.79	1.53	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.94	6.87	6.80	6.87	1.00	ppb
Cobalt	59-2	4.91	4.84	4.77	4.84	1.50	ppb
Copper	63-2	14.05	14.19	14.07	14.10	0.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	56-2	9611.72	9669.30	9568.68	9616.57	0.52	ppb
Iron	57-2	11072.21	11264.45	11191.71	11176.13	0.87	ppb
Iron	54-2	9569.08	9757.58	9671.69	9666.11	0.98	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-07

Instrumnet Name :

P7

Client Sample ID :

ME29G0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:08:10

DataFile Name :

033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.99	8.18	8.10	8.09	1.20	ppb
Lead	207-1	7.23	7.38	7.28	7.30	1.02	ppb
Lead	208-1	7.45	7.58	7.57	7.53	0.99	ppb
Lithium	6-1				93		%
Magnesium	24-2	77161.91	78516.69	77082.04	77586.88	1.04	ppb
Manganese	55-2	442.48	442.27	443.55	442.77	0.15	ppb
Molybdenum	94-1	5.66	5.66	5.79	5.71	1.34	ppb
Molybdenum	95-1	1.26	1.25	1.28	1.26	1.54	ppb
Molybdenum	96-1	1.75	1.79	1.86	1.80	3.12	ppb
Molybdenum	97-1	1.29	1.30	1.25	1.28	1.82	ppb
Molybdenum	98-1	1.24	1.31	1.30	1.29	3.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.55	11.16	11.29	11.33	1.77	ppb
Phosphorus	31-2	528.73	495.62	494.01	506.12	3.87	ppb
Potassium	39-2	258.11	260.30	257.19	258.53	0.62	ppb
Rhodium	103-1				102		%
Rhodium	103-2				98		%
Scandium	45-1				100		%
Scandium	45-2				99		%
Selenium	82-1	0.26	0.01	0.13	0.14	94.61	ppb
Selenium	77-2	3.77	3.82	4.09	3.89	4.46	ppb
Selenium	78-2	0.84	0.35	0.52	0.57	43.01	ppb
Silicon	28-1	133.63	119.68	120.55	124.62	6.27	ppb
Silver	107-1	0.04	0.04	0.04	0.04	1.34	ppb
Silver	109-1	0.03	0.04	0.04	0.04	12.25	ppb
Sodium	23-2	161.49	170.10	160.26	163.95	3.27	ppb
Strontium	86-1	4155.18	4248.54	4272.81	4225.51	1.47	ppb
Strontium	88-1	4195.90	4224.49	4277.08	4232.49	0.97	ppb
Sulfur	34-1	356.18	418.95	411.74	395.63	8.68	ppb
Terbium	159-1				110		%
Terbium	159-2				102		%
Thallium	203-1	0.11	0.10	0.11	0.11	3.06	ppb
Thallium	205-1	0.10	0.10	0.11	0.10	4.10	ppb
Tin	118-1	0.24	0.27	0.25	0.25	4.80	ppb
Titanium	47-1	34.44	34.47	35.96	34.96	2.49	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-07

Instrumnet Name :

P7

Client Sample ID :

ME29G0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:08:10

DataFile Name :

033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.06	1.06	1.06	1.06	0.10	ppb
Vanadium	51-2	9.16	9.11	9.21	9.16	0.57	ppb
Yttrium	89-1				108		%
Yttrium	89-2				102		%
Zinc	66-2	39.54	40.19	39.37	39.70	1.09	ppb
Zirconium	90-1	2.47	2.56	2.54	2.52	1.91	ppb
Zirconium	91-1	2.50	2.56	2.58	2.55	1.58	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4977-08Instrumnet Name :P7

Client Sample ID :ME29G1Dilution Factor :1

Date & Time Acquired :2024-12-06 14:11:19DataFile Name :034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2273.02	2261.96	2272.63	2269.21	0.28	ppb
Antimony	121-1	0.39	0.43	0.44	0.42	6.03	ppb
Arsenic	75-2	9.37	9.48	9.30	9.38	0.99	ppb
Barium	135-1	11.26	11.52	11.94	11.58	2.96	ppb
Barium	137-1	11.02	11.62	11.70	11.45	3.24	ppb
Beryllium	9-1	0.19	0.17	0.18	0.18	4.13	ppb
Bismuth	209-1				110		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.36	0.28	0.37	0.33	15.08	ppb
Cadmium	106-1	-0.04	0.11	0.00	0.02	347.31	ppb
Cadmium	111-1	0.14	0.16	0.14	0.15	7.36	ppb
Calcium	43-1	205983.02	222176.22	221401.68	216520.31	4.22	ppb
Calcium	44-1	205300.78	220885.49	220621.08	215602.45	4.14	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.60	7.70	7.69	7.67	0.70	ppb
Cobalt	59-2	5.58	5.62	5.67	5.62	0.78	ppb
Copper	63-2	13.40	13.12	13.38	13.30	1.18	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				113		%
Holmium	165-2				104		%
Indium	115-1				107		%
Indium	115-2				99		%
Iron	56-2	8317.01	8196.64	8191.19	8234.95	0.86	ppb
Iron	57-2	9486.04	9410.48	9529.11	9475.21	0.63	ppb
Iron	54-2	8281.87	8215.26	8127.86	8208.33	0.94	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-08 Instrumnet Name : P7
Client Sample ID : ME29G1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:11:19 DataFile Name : 034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.95	8.45	8.64	8.35	4.27	ppb
Lead	207-1	7.24	7.59	7.73	7.52	3.38	ppb
Lead	208-1	7.47	7.85	8.05	7.79	3.76	ppb
Lithium	6-1				95		%
Magnesium	24-2	49706.42	49636.01	50127.70	49823.38	0.53	ppb
Manganese	55-2	382.97	383.61	381.27	382.61	0.32	ppb
Molybdenum	94-1	5.90	6.22	6.42	6.18	4.30	ppb
Molybdenum	95-1	0.85	0.95	0.97	0.92	6.57	ppb
Molybdenum	96-1	1.49	1.58	1.55	1.54	2.86	ppb
Molybdenum	97-1	0.88	0.90	0.91	0.90	1.69	ppb
Molybdenum	98-1	0.91	0.94	0.93	0.93	1.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.63	12.81	12.58	12.67	0.98	ppb
Phosphorus	31-2	355.00	368.78	371.05	364.94	2.38	ppb
Potassium	39-2	351.98	353.50	357.28	354.26	0.77	ppb
Rhodium	103-1				103		%
Rhodium	103-2				98		%
Scandium	45-1				102		%
Scandium	45-2				98		%
Selenium	82-1	1.20	0.66	0.64	0.84	38.13	ppb
Selenium	77-2	5.61	3.56	3.70	4.29	26.63	ppb
Selenium	78-2	1.10	1.17	0.84	1.03	16.56	ppb
Silicon	28-1	131.10	147.44	144.27	140.93	6.15	ppb
Silver	107-1	0.05	0.04	0.04	0.04	3.43	ppb
Silver	109-1	0.04	0.04	0.05	0.05	6.92	ppb
Sodium	23-2	119.96	119.59	121.54	120.36	0.86	ppb
Strontium	86-1	4155.27	4377.22	4448.71	4327.06	3.54	ppb
Strontium	88-1	4206.91	4424.81	4410.99	4347.57	2.81	ppb
Sulfur	34-1	390.21	622.75	595.39	536.12	23.71	ppb
Terbium	159-1				112		%
Terbium	159-2				102		%
Thallium	203-1	0.12	0.11	0.12	0.12	3.95	ppb
Thallium	205-1	0.10	0.11	0.12	0.11	6.15	ppb
Tin	118-1	0.26	0.29	0.30	0.28	7.55	ppb
Titanium	47-1	76.39	80.77	81.09	79.42	3.31	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-08

Instrumnet Name :

P7

Client Sample ID :

ME29G1

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:11:19

DataFile Name :

034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.23	1.27	1.32	1.28	3.36	ppb
Vanadium	51-2	10.87	10.75	10.74	10.78	0.66	ppb
Yttrium	89-1				110		%
Yttrium	89-2				102		%
Zinc	66-2	38.94	38.58	39.33	38.95	0.97	ppb
Zirconium	90-1	2.87	3.00	3.10	2.99	3.79	ppb
Zirconium	91-1	2.86	3.14	3.06	3.02	4.68	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-09 Instrumnet Name : P7
Client Sample ID : ME29G2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:14:29 DataFile Name : 035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1751.88	1763.26	1792.56	1769.23	1.19	ppb
Antimony	121-1	0.30	0.32	0.32	0.31	4.05	ppb
Arsenic	75-2	7.39	6.89	6.96	7.08	3.81	ppb
Barium	135-1	8.43	9.01	8.94	8.79	3.60	ppb
Barium	137-1	8.50	9.13	8.94	8.86	3.63	ppb
Beryllium	9-1	0.15	0.15	0.13	0.14	10.79	ppb
Bismuth	209-1				110		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.21	0.30	0.25	0.25	16.49	ppb
Cadmium	106-1	-0.25	-0.23	-0.71	-0.40		ppb
Cadmium	111-1	0.09	0.10	0.10	0.10	4.48	ppb
Calcium	43-1	170198.58	181419.33	178102.70	176573.54	3.26	ppb
Calcium	44-1	168101.85	179607.79	178996.86	175568.83	3.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.27	6.29	6.43	6.33	1.43	ppb
Cobalt	59-2	4.17	4.22	4.28	4.22	1.30	ppb
Copper	63-2	9.29	9.44	9.61	9.45	1.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				112		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				99		%
Iron	56-2	6206.41	6105.92	6264.52	6192.28	1.30	ppb
Iron	57-2	7347.84	7302.48	7561.77	7404.03	1.87	ppb
Iron	54-2	6286.62	6294.27	6422.53	6334.47	1.21	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-09 Instrumnet Name : P7
Client Sample ID : ME29G2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:14:29 DataFile Name : 035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5.84	6.32	6.21	6.12	4.05	ppb
Lead	207-1	5.22	5.63	5.61	5.49	4.14	ppb
Lead	208-1	5.43	5.85	5.82	5.70	4.05	ppb
Lithium	6-1				95		%
Magnesium	24-2	49048.45	48506.76	49581.22	49045.48	1.10	ppb
Manganese	55-2	276.29	277.62	284.32	279.41	1.54	ppb
Molybdenum	94-1	4.43	4.80	4.80	4.67	4.58	ppb
Molybdenum	95-1	0.69	0.73	0.69	0.70	3.37	ppb
Molybdenum	96-1	1.14	1.20	1.20	1.18	3.21	ppb
Molybdenum	97-1	0.65	0.74	0.69	0.69	6.66	ppb
Molybdenum	98-1	0.67	0.74	0.75	0.72	6.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	9.61	9.69	9.71	9.67	0.56	ppb
Phosphorus	31-2	287.42	276.80	295.84	286.69	3.33	ppb
Potassium	39-2	273.59	273.19	286.93	277.91	2.81	ppb
Rhodium	103-1				103		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				97		%
Selenium	82-1	0.56	0.43	0.63	0.54	19.22	ppb
Selenium	77-2	3.59	3.86	4.03	3.83	5.77	ppb
Selenium	78-2	0.70	0.54	0.46	0.57	21.77	ppb
Silicon	28-1	107.52	112.80	116.01	112.11	3.82	ppb
Silver	107-1	0.03	0.03	0.03	0.03	4.67	ppb
Silver	109-1	0.03	0.03	0.03	0.03	5.44	ppb
Sodium	23-2	93.54	95.59	97.11	95.41	1.88	ppb
Strontium	86-1	3200.10	3460.39	3487.08	3382.52	4.69	ppb
Strontium	88-1	3232.89	3485.52	3502.00	3406.80	4.43	ppb
Sulfur	34-1	373.23	570.25	531.39	491.62	21.23	ppb
Terbium	159-1				111		%
Terbium	159-2				101		%
Thallium	203-1	0.09	0.10	0.10	0.10	7.21	ppb
Thallium	205-1	0.09	0.09	0.10	0.09	5.13	ppb
Tin	118-1	0.23	0.26	0.26	0.25	7.28	ppb
Titanium	47-1	51.98	55.13	54.16	53.76	3.00	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-09

Instrumnet Name :

P7

Client Sample ID :

ME29G2

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:14:29

DataFile Name :

035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.83	0.92	0.89	0.88	5.19	ppb
Vanadium	51-2	7.35	7.46	7.64	7.48	1.96	ppb
Yttrium	89-1				109		%
Yttrium	89-2				101		%
Zinc	66-2	29.00	28.97	29.11	29.03	0.26	ppb
Zirconium	90-1	2.14	2.38	2.36	2.29	5.84	ppb
Zirconium	91-1	2.15	2.35	2.34	2.28	4.91	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV002

Instrumnet Name :

P7

Client Sample ID :

CCV002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:17:39

DataFile Name :

036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51170.65	50946.65	50655.82	50924.37	0.51	ppb
Antimony	121-1	484.26	499.09	505.93	496.43	2.23	ppb
Arsenic	75-2	496.64	507.91	503.26	502.60	1.13	ppb
Barium	135-1	2375.17	2474.35	2496.66	2448.72	2.64	ppb
Barium	137-1	2390.08	2458.50	2462.95	2437.18	1.68	ppb
Beryllium	9-1	465.34	485.80	485.41	478.85	2.44	ppb
Bismuth	209-1				101		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	496.17	508.41	515.36	506.64	1.92	ppb
Cadmium	106-1	495.80	512.26	517.79	508.62	2.25	ppb
Cadmium	111-1	506.08	516.35	525.68	516.04	1.90	ppb
Calcium	43-1	240521.75	245642.34	252105.77	246089.95	2.36	ppb
Calcium	44-1	239409.99	246401.81	251316.48	245709.43	2.44	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	493.57	492.48	494.12	493.39	0.17	ppb
Cobalt	59-2	508.84	504.22	512.44	508.50	0.81	ppb
Copper	63-2	5056.30	4991.17	5050.31	5032.59	0.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				97		%
Indium	115-1				97		%
Indium	115-2				90		%
Iron	56-2	127347.76	128560.89	127749.88	127886.18	0.48	ppb
Iron	57-2	129112.32	129167.62	128187.15	128822.36	0.43	ppb
Iron	54-2	126803.92	127786.96	127685.19	127425.36	0.42	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV002 Instrumnet Name : P7
Client Sample ID : CCV002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:17:39 DataFile Name : 036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2411.44	2547.59	2538.24	2499.09	3.04	ppb
Lead	207-1	2413.73	2528.48	2517.76	2486.66	2.55	ppb
Lead	208-1	2413.67	2523.83	2521.90	2486.47	2.54	ppb
Lithium	6-1				89		%
Magnesium	24-2	257034.20	257506.33	259649.97	258063.50	0.54	ppb
Manganese	55-2	4812.02	4819.36	4839.46	4823.62	0.29	ppb
Molybdenum	94-1	4819.00	4982.69	5052.80	4951.49	2.42	ppb
Molybdenum	95-1	4794.17	5002.32	4977.83	4924.77	2.31	ppb
Molybdenum	96-1	4833.80	5029.54	4996.71	4953.35	2.12	ppb
Molybdenum	97-1	4796.11	5020.34	5035.12	4950.53	2.71	ppb
Molybdenum	98-1	4837.78	5041.89	5025.39	4968.35	2.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	489.36	489.02	488.35	488.91	0.11	ppb
Phosphorus	31-2	9806.58	9895.38	10009.93	9903.96	1.03	ppb
Potassium	39-2	125577.66	125420.20	126345.24	125781.03	0.39	ppb
Rhodium	103-1				92		%
Rhodium	103-2				87		%
Scandium	45-1				94		%
Scandium	45-2				92		%
Selenium	82-1	485.55	502.75	507.14	498.48	2.29	ppb
Selenium	77-2	500.97	506.46	497.37	501.60	0.91	ppb
Selenium	78-2	488.97	507.21	498.82	498.33	1.83	ppb
Silicon	28-1	494.85	505.01	519.90	506.59	2.49	ppb
Silver	107-1	493.53	506.83	504.89	501.75	1.43	ppb
Silver	109-1	490.18	506.55	511.14	502.62	2.19	ppb
Sodium	23-2	254743.21	256813.10	251095.80	254217.37	1.14	ppb
Strontium	86-1	11812.52	12333.65	12454.49	12200.22	2.80	ppb
Strontium	88-1	12053.89	12551.84	12620.65	12408.79	2.49	ppb
Sulfur	34-1	8703.03	8819.15	9095.57	8872.58	2.27	ppb
Terbium	159-1				104		%
Terbium	159-2				97		%
Thallium	203-1	477.06	507.01	506.44	496.83	3.45	ppb
Thallium	205-1	485.22	509.90	509.82	501.65	2.84	ppb
Tin	118-1	473.91	491.29	500.22	488.47	2.74	ppb
Titanium	47-1	4677.22	4858.81	4988.66	4841.56	3.23	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV002

Instrumnet Name :

P7

Client Sample ID :

CCV002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:17:39

DataFile Name :

036CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	482.71	503.02	508.15	497.96	2.70	ppb
Vanadium	51-2	499.81	500.67	499.14	499.87	0.15	ppb
Yttrium	89-1				99		%
Yttrium	89-2				93		%
Zinc	66-2	5074.37	5026.61	4992.78	5031.25	0.81	ppb
Zirconium	90-1	479.53	497.53	497.77	491.61	2.13	ppb
Zirconium	91-1	480.11	495.70	497.88	491.23	1.97	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB002

Instrumnet Name :

P7

Client Sample ID :

CCB002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:20:22

DataFile Name :

037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-14.40	-14.86	-14.62	-14.63		ppb
Antimony	121-1	0.29	0.25	0.21	0.25	14.86	ppb
Arsenic	75-2	0.03	0.02	0.01	0.02	47.27	ppb
Barium	135-1	0.30	0.17	0.15	0.20	39.94	ppb
Barium	137-1	0.28	0.20	0.15	0.21	31.10	ppb
Beryllium	9-1	0.07	0.11	0.06	0.08	33.49	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.10	0.10	0.03	0.07	54.65	ppb
Cadmium	106-1	-1.11	-1.14	-0.91	-1.05		ppb
Cadmium	111-1	0.07	0.04	0.04	0.05	33.34	ppb
Calcium	43-1	-55.38	-63.65	-73.45	-64.16		ppb
Calcium	44-1	-54.61	-64.53	-70.70	-63.28		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.06	0.02	0.02	0.03	69.95	ppb
Cobalt	59-2	0.02	0.02	0.01	0.02	6.91	ppb
Copper	63-2	0.31	0.29	0.27	0.29	6.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				98		%
Indium	115-1				99		%
Indium	115-2				96		%
Iron	56-2	-40.51	-41.12	-41.74	-41.12		ppb
Iron	57-2	-37.13	-37.03	-37.73	-37.30		ppb
Iron	54-2	-39.99	-40.92	-41.98	-40.96		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB002 Instrumnet Name : P7
Client Sample ID : CCB002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:20:22 DataFile Name : 037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.53	0.44	0.41	0.46	14.10	ppb
Lead	207-1	0.51	0.43	0.41	0.45	12.52	ppb
Lead	208-1	0.52	0.44	0.41	0.46	12.96	ppb
Lithium	6-1				91		%
Magnesium	24-2	-73.61	-75.18	-76.18	-74.99		ppb
Manganese	55-2	0.27	0.22	0.23	0.24	10.68	ppb
Molybdenum	94-1	0.74	0.53	0.42	0.57	29.03	ppb
Molybdenum	95-1	0.66	0.47	0.35	0.49	31.70	ppb
Molybdenum	96-1	0.70	0.49	0.36	0.52	33.14	ppb
Molybdenum	97-1	0.65	0.48	0.39	0.51	25.70	ppb
Molybdenum	98-1	0.69	0.45	0.35	0.50	34.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	0.04	0.03	0.03	32.39	ppb
Phosphorus	31-2	-11.66	-13.12	-12.34	-12.37		ppb
Potassium	39-2	-30.70	-32.20	-32.35	-31.75		ppb
Rhodium	103-1				97		%
Rhodium	103-2				96		%
Scandium	45-1				92		%
Scandium	45-2				91		%
Selenium	82-1	-0.26	-0.48	-0.77	-0.50		ppb
Selenium	77-2	-0.03	0.08	-0.03	0.00	3146.84	ppb
Selenium	78-2	-0.49	-0.05	0.04	-0.17		ppb
Silicon	28-1	-0.48	-0.38	-0.38	-0.41		ppb
Silver	107-1	0.14	0.10	0.10	0.11	20.09	ppb
Silver	109-1	0.13	0.10	0.08	0.10	26.62	ppb
Sodium	23-2	-55.24	-56.45	-58.55	-56.75		ppb
Strontium	86-1	1.60	1.22	0.95	1.26	25.73	ppb
Strontium	88-1	1.61	1.05	0.88	1.18	32.26	ppb
Sulfur	34-1	-54.53	-1.24	-7.08	-20.95		ppb
Terbium	159-1				100		%
Terbium	159-2				98		%
Thallium	203-1	0.15	0.13	0.11	0.13	15.38	ppb
Thallium	205-1	0.16	0.13	0.11	0.14	19.25	ppb
Tin	118-1	0.08	0.07	0.06	0.07	19.33	ppb
Titanium	47-1	0.53	0.43	0.32	0.43	24.79	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB002

Instrumnet Name :

P7

Client Sample ID :

CCB002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:20:22

DataFile Name :

037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.05	0.03	0.03	0.04	29.41	ppb
Vanadium	51-2	0.03	0.03	0.02	0.02	21.95	ppb
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	0.27	0.25	0.23	0.25	8.06	ppb
Zirconium	90-1	0.09	0.07	0.06	0.07	23.11	ppb
Zirconium	91-1	0.10	0.06	0.05	0.07	31.25	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-01 Instrumnet Name : P7
Client Sample ID : ME29D7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:24:11 DataFile Name : 038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2864.36	2795.19	2754.51	2804.69	1.98	ppb
Antimony	121-1	0.48	0.49	0.50	0.49	2.39	ppb
Arsenic	75-2	8.47	8.28	8.67	8.47	2.33	ppb
Barium	135-1	14.42	14.68	15.09	14.73	2.27	ppb
Barium	137-1	14.35	14.55	15.23	14.71	3.14	ppb
Beryllium	9-1	0.27	0.23	0.22	0.24	11.17	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.50	0.52	0.53	0.51	2.62	ppb
Cadmium	106-1	-0.85	-0.59	-0.86	-0.77		ppb
Cadmium	111-1	0.21	0.21	0.23	0.22	5.24	ppb
Calcium	43-1	270865.87	267615.62	279843.17	272774.88	2.32	ppb
Calcium	44-1	269301.94	270172.36	280084.07	273186.12	2.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	12.41	12.36	12.18	12.32	1.00	ppb
Cobalt	59-2	8.11	8.02	7.91	8.01	1.26	ppb
Copper	63-2	14.56	14.73	14.45	14.58	0.97	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				97		%
Iron	56-2	13610.15	13506.52	13302.17	13472.94	1.16	ppb
Iron	57-2	15127.84	14905.24	15102.30	15045.13	0.81	ppb
Iron	54-2	13782.44	13628.79	13283.49	13564.91	1.88	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-01

Instrumnet Name :

P7

Client Sample ID :

ME29D7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:24:11

DataFile Name :

038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.44	9.59	9.91	9.65	2.48	ppb
Lead	207-1	8.52	8.69	8.97	8.73	2.61	ppb
Lead	208-1	8.82	8.95	9.24	9.00	2.40	ppb
Lithium	6-1				90		%
Magnesium	24-2	81827.66	81020.50	80268.38	81038.85	0.96	ppb
Manganese	55-2	516.95	514.13	496.43	509.17	2.18	ppb
Molybdenum	94-1	9.06	9.23	9.49	9.26	2.32	ppb
Molybdenum	95-1	2.13	2.13	2.17	2.14	0.97	ppb
Molybdenum	96-1	2.92	3.06	3.01	3.00	2.33	ppb
Molybdenum	97-1	2.14	2.17	2.19	2.17	1.13	ppb
Molybdenum	98-1	2.10	2.17	2.22	2.16	2.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	17.72	17.50	17.34	17.52	1.07	ppb
Phosphorus	31-2	500.88	483.83	499.73	494.81	1.93	ppb
Potassium	39-2	492.83	489.73	483.99	488.85	0.92	ppb
Rhodium	103-1				97		%
Rhodium	103-2				95		%
Scandium	45-1				96		%
Scandium	45-2				97		%
Selenium	82-1	0.98	0.26	0.58	0.61	58.60	ppb
Selenium	77-2	4.19	3.64	4.28	4.04	8.65	ppb
Selenium	78-2	0.66	0.72	0.04	0.47	79.26	ppb
Silicon	28-1	146.27	135.59	146.83	142.90	4.43	ppb
Silver	107-1	0.15	0.09	0.08	0.11	36.29	ppb
Silver	109-1	0.15	0.08	0.07	0.10	41.04	ppb
Sodium	23-2	190.09	191.28	187.33	189.57	1.07	ppb
Strontium	86-1	4499.08	4561.62	4699.23	4586.65	2.23	ppb
Strontium	88-1	4464.27	4572.96	4725.86	4587.69	2.86	ppb
Sulfur	34-1	77.56	100.99	284.28	154.28	73.37	ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.21	0.16	0.16	0.17	15.87	ppb
Thallium	205-1	0.21	0.15	0.14	0.17	20.13	ppb
Tin	118-1	0.21	0.23	0.24	0.23	5.73	ppb
Titanium	47-1	66.73	67.73	69.93	68.13	2.40	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-01

Instrumnet Name :

P7

Client Sample ID :

ME29D7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:24:11

DataFile Name :

038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.46	1.50	1.56	1.51	3.21	ppb
Vanadium	51-2	13.40	13.32	13.17	13.29	0.85	ppb
Yttrium	89-1				104		%
Yttrium	89-2				100		%
Zinc	66-2	42.57	42.25	42.10	42.30	0.56	ppb
Zirconium	90-1	4.03	4.18	4.24	4.15	2.60	ppb
Zirconium	91-1	4.07	4.14	4.17	4.13	1.29	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-02

Instrumnet Name :

P7

Client Sample ID :

ME29D8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:27:22

DataFile Name :

039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2063.83	2019.67	2050.96	2044.82	1.11	ppb
Antimony	121-1	0.28	0.29	0.28	0.28	1.97	ppb
Arsenic	75-2	5.37	5.24	5.44	5.35	1.92	ppb
Barium	135-1	12.78	12.44	12.47	12.56	1.52	ppb
Barium	137-1	12.40	12.32	12.51	12.41	0.78	ppb
Beryllium	9-1	0.20	0.17	0.15	0.17	15.53	ppb
Bismuth	209-1				108		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.37	0.51	0.55	0.47	20.22	ppb
Cadmium	106-1	-0.07	-0.65	-0.29	-0.34		ppb
Cadmium	111-1	0.14	0.13	0.13	0.13	3.96	ppb
Calcium	43-1	257559.30	256929.43	257816.38	257435.04	0.18	ppb
Calcium	44-1	258396.80	258432.67	257749.75	258193.07	0.15	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	9.10	8.88	9.03	9.01	1.24	ppb
Cobalt	59-2	4.87	4.68	4.83	4.80	2.10	ppb
Copper	63-2	12.26	12.27	12.35	12.29	0.42	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				105		%
Indium	115-1				106		%
Indium	115-2				100		%
Iron	56-2	10280.77	10141.75	10176.43	10199.65	0.71	ppb
Iron	57-2	11826.58	11681.39	11760.71	11756.23	0.62	ppb
Iron	54-2	10217.02	10169.95	10240.43	10209.13	0.35	ppb
Krypton	83-1						cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4976-02Instrumnet Name :P7

Client Sample ID :ME29D8Dilution Factor :1

Date & Time Acquired :2024-12-06 14:27:22DataFile Name :039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.20	8.81	8.96	8.99	2.15	ppb
Lead	207-1	8.25	8.06	8.17	8.16	1.17	ppb
Lead	208-1	8.54	8.32	8.47	8.44	1.32	ppb
Lithium	6-1				90		%
Magnesium	24-2	72198.49	69817.89	70829.60	70948.66	1.68	ppb
Manganese	55-2	505.62	499.66	499.38	501.55	0.70	ppb
Molybdenum	94-1	5.85	5.71	6.30	5.95	5.19	ppb
Molybdenum	95-1	1.16	1.07	1.07	1.10	4.70	ppb
Molybdenum	96-1	1.75	1.64	1.61	1.67	4.51	ppb
Molybdenum	97-1	1.16	1.09	1.06	1.11	4.70	ppb
Molybdenum	98-1	1.13	1.08	1.08	1.10	2.85	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.64	10.46	10.42	10.50	1.10	ppb
Phosphorus	31-2	399.32	390.73	395.16	395.07	1.09	ppb
Potassium	39-2	344.60	322.61	334.31	333.84	3.29	ppb
Rhodium	103-1				102		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				100		%
Selenium	82-1	0.78	0.57	0.24	0.53	50.69	ppb
Selenium	77-2	4.37	3.55	2.99	3.64	19.05	ppb
Selenium	78-2	0.01	1.14	0.86	0.67	88.27	ppb
Silicon	28-1	113.17	100.34	97.39	103.63	8.10	ppb
Silver	107-1	0.04	0.04	0.03	0.04	8.95	ppb
Silver	109-1	0.04	0.03	0.03	0.03	9.46	ppb
Sodium	23-2	146.11	140.21	145.90	144.07	2.32	ppb
Strontium	86-1	4063.11	4039.58	4045.28	4049.32	0.30	ppb
Strontium	88-1	4086.22	4100.55	4086.30	4091.02	0.20	ppb
Sulfur	34-1	292.09	318.67	278.06	296.27	6.96	ppb
Terbium	159-1				109		%
Terbium	159-2				103		%
Thallium	203-1	0.12	0.11	0.11	0.11	5.26	ppb
Thallium	205-1	0.12	0.11	0.11	0.12	3.77	ppb
Tin	118-1	0.24	0.23	0.25	0.24	4.45	ppb
Titanium	47-1	64.20	64.55	76.72	68.49	10.41	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-02

Instrumnet Name :

P7

Client Sample ID :

ME29D8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:27:22

DataFile Name :

039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.20	1.17	1.20	1.19	1.30	ppb
Vanadium	51-2	11.65	11.43	11.60	11.56	0.98	ppb
Yttrium	89-1				109		%
Yttrium	89-2				104		%
Zinc	66-2	35.54	34.80	34.41	34.91	1.65	ppb
Zirconium	90-1	2.67	2.69	2.80	2.72	2.52	ppb
Zirconium	91-1	2.72	2.77	2.73	2.74	1.07	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4976-03Instrumnet Name :P7

Client Sample ID :ME29D9Dilution Factor :1

Date & Time Acquired :2024-12-06 14:30:30DataFile Name :040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2242.51	2269.81	2265.99	2259.44	0.65	ppb
Antimony	121-1	0.34	0.35	0.36	0.35	3.95	ppb
Arsenic	75-2	9.67	9.72	10.05	9.82	2.07	ppb
Barium	135-1	12.78	13.06	13.07	12.97	1.28	ppb
Barium	137-1	12.77	13.04	13.00	12.94	1.12	ppb
Beryllium	9-1	0.20	0.17	0.16	0.18	9.28	ppb
Bismuth	209-1				110		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.29	0.44	0.34	0.35	21.32	ppb
Cadmium	106-1	-0.72	-0.55	-1.05	-0.77		ppb
Cadmium	111-1	0.12	0.13	0.12	0.12	1.62	ppb
Calcium	43-1	272464.08	277994.73	274883.85	275114.22	1.01	ppb
Calcium	44-1	270170.53	277669.68	272332.56	273390.92	1.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.19	8.49	8.30	8.33	1.83	ppb
Cobalt	59-2	5.24	5.26	5.29	5.27	0.53	ppb
Copper	63-2	12.66	12.74	12.66	12.69	0.38	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				105		%
Indium	115-1				106		%
Indium	115-2				100		%
Iron	56-2	8115.12	8162.55	8140.93	8139.53	0.29	ppb
Iron	57-2	9877.33	9919.25	9912.78	9903.12	0.23	ppb
Iron	54-2	8209.75	8279.32	8257.10	8248.72	0.43	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-03 Instrumnet Name : P7
Client Sample ID : ME29D9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:30:30 DataFile Name : 040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.19	7.39	7.10	7.22	2.02	ppb
Lead	207-1	6.44	6.51	6.43	6.46	0.64	ppb
Lead	208-1	6.71	6.81	6.70	6.74	0.89	ppb
Lithium	6-1				93		%
Magnesium	24-2	56168.32	56671.15	57377.54	56739.00	1.07	ppb
Manganese	55-2	820.22	812.81	814.79	815.94	0.47	ppb
Molybdenum	94-1	5.83	6.11	6.16	6.03	2.91	ppb
Molybdenum	95-1	0.76	0.78	0.78	0.77	1.80	ppb
Molybdenum	96-1	1.37	1.39	1.39	1.38	1.06	ppb
Molybdenum	97-1	0.75	0.73	0.78	0.75	3.13	ppb
Molybdenum	98-1	0.72	0.77	0.77	0.75	3.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.13	11.76	11.89	11.93	1.59	ppb
Phosphorus	31-2	330.97	348.57	325.80	335.11	3.56	ppb
Potassium	39-2	324.31	322.51	320.43	322.42	0.60	ppb
Rhodium	103-1				103		%
Rhodium	103-2				98		%
Scandium	45-1				102		%
Scandium	45-2				99		%
Selenium	82-1	0.84	0.48	0.42	0.58	39.26	ppb
Selenium	77-2	2.39	3.94	3.75	3.36	25.04	ppb
Selenium	78-2	1.28	0.26	0.41	0.65	85.09	ppb
Silicon	28-1	103.64	103.44	107.16	104.74	2.00	ppb
Silver	107-1	0.04	0.04	0.04	0.04	11.32	ppb
Silver	109-1	0.04	0.04	0.05	0.04	9.08	ppb
Sodium	23-2	127.31	129.93	129.10	128.78	1.04	ppb
Strontium	86-1	4669.35	4831.25	4842.65	4781.09	2.03	ppb
Strontium	88-1	4744.50	4785.34	4818.53	4782.79	0.78	ppb
Sulfur	34-1	804.55	757.78	782.89	781.74	2.99	ppb
Terbium	159-1				111		%
Terbium	159-2				103		%
Thallium	203-1	0.08	0.08	0.08	0.08	1.30	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	2.79	ppb
Tin	118-1	0.17	0.18	0.19	0.18	4.19	ppb
Titanium	47-1	62.61	63.48	64.67	63.59	1.63	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-03

Instrumnet Name :

P7

Client Sample ID :

ME29D9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:30:30

DataFile Name :

040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.11	1.15	1.10	1.12	2.04	ppb
Vanadium	51-2	11.37	11.50	11.53	11.46	0.74	ppb
Yttrium	89-1				110		%
Yttrium	89-2				103		%
Zinc	66-2	40.07	40.48	39.39	39.98	1.38	ppb
Zirconium	90-1	2.94	3.01	3.04	3.00	1.72	ppb
Zirconium	91-1	2.94	3.08	3.06	3.03	2.54	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-04 Instrumnet Name : P7
Client Sample ID : ME29E0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:33:42 DataFile Name : 041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17884.75	17840.69	17789.69	17838.38	0.27	ppb
Antimony	121-1	0.44	0.43	0.44	0.44	1.18	ppb
Arsenic	75-2	16.25	15.63	16.89	16.26	3.86	ppb
Barium	135-1	93.17	92.52	93.03	92.91	0.37	ppb
Barium	137-1	92.22	93.44	92.72	92.79	0.66	ppb
Beryllium	9-1	0.52	0.54	0.57	0.54	4.05	ppb
Bismuth	209-1				113		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.15	0.88	1.04	1.02	13.66	ppb
Cadmium	106-1	0.71	0.15	-0.01	0.29	132.70	ppb
Cadmium	111-1	0.02	0.05	0.05	0.04	37.34	ppb
Calcium	43-1	3208.03	3217.80	3187.14	3204.32	0.49	ppb
Calcium	44-1	3093.31	3003.52	3071.05	3055.96	1.53	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	29.49	30.04	29.54	29.69	1.01	ppb
Cobalt	59-2	27.57	28.05	27.64	27.75	0.92	ppb
Copper	63-2	24.63	24.65	24.52	24.60	0.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				104		%
Indium	115-1				106		%
Indium	115-2				100		%
Iron	56-2	49650.32	50785.27	50398.06	50277.88	1.15	ppb
Iron	57-2	49472.20	50731.21	49236.59	49813.33	1.61	ppb
Iron	54-2	49916.76	50743.45	50801.46	50487.23	0.98	ppb
Krypton	83-1						cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4976-04Instrumnet Name :P7

Client Sample ID :ME29E0Dilution Factor :1

Date & Time Acquired :2024-12-06 14:33:42DataFile Name :041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	27.07	27.59	27.84	27.50	1.43	ppb
Lead	207-1	25.35	25.56	25.86	25.59	1.00	ppb
Lead	208-1	26.01	26.38	26.64	26.34	1.22	ppb
Lithium	6-1				95		%
Magnesium	24-2	9109.21	9209.54	9105.17	9141.30	0.65	ppb
Manganese	55-2	427.20	438.22	434.92	433.45	1.30	ppb
Molybdenum	94-1	21.18	21.38	21.21	21.26	0.49	ppb
Molybdenum	95-1	0.20	0.21	0.20	0.20	3.59	ppb
Molybdenum	96-1	2.73	2.75	2.73	2.73	0.53	ppb
Molybdenum	97-1	0.21	0.19	0.21	0.20	5.36	ppb
Molybdenum	98-1	0.21	0.20	0.19	0.20	4.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	90.01	91.34	90.49	90.61	0.74	ppb
Phosphorus	31-2	304.60	306.67	306.63	305.97	0.39	ppb
Potassium	39-2	2689.27	2657.44	2656.39	2667.70	0.70	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				98		%
Scandium	45-2				97		%
Selenium	82-1	0.82	0.57	0.46	0.61	29.44	ppb
Selenium	77-2	6.41	7.27	6.53	6.74	6.96	ppb
Selenium	78-2	1.00	0.66	0.55	0.74	31.57	ppb
Silicon	28-1	228.64	226.17	225.88	226.90	0.67	ppb
Silver	107-1	0.23	0.24	0.24	0.24	1.17	ppb
Silver	109-1	0.22	0.23	0.23	0.23	2.13	ppb
Sodium	23-2	208.92	215.22	210.72	211.62	1.53	ppb
Strontium	86-1	341.02	347.24	345.90	344.72	0.95	ppb
Strontium	88-1	350.27	350.50	348.13	349.63	0.37	ppb
Sulfur	34-1	10461.33	10298.77	10252.25	10337.45	1.06	ppb
Terbium	159-1				110		%
Terbium	159-2				103		%
Thallium	203-1	0.10	0.10	0.10	0.10	3.74	ppb
Thallium	205-1	0.10	0.10	0.10	0.10	4.26	ppb
Tin	118-1	0.58	0.58	0.57	0.58	0.97	ppb
Titanium	47-1	60.67	59.84	61.28	60.60	1.20	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-04

Instrumnet Name :

P7

Client Sample ID :

ME29E0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:33:42

DataFile Name :

041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.53	0.54	0.54	0.54	1.20	ppb
Vanadium	51-2	34.48	34.69	34.35	34.51	0.50	ppb
Yttrium	89-1				106		%
Yttrium	89-2				101		%
Zinc	66-2	186.18	187.25	185.10	186.18	0.58	ppb
Zirconium	90-1	11.48	11.78	11.50	11.59	1.46	ppb
Zirconium	91-1	11.63	11.75	11.63	11.67	0.61	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-05 Instrumnet Name : P7
Client Sample ID : ME29E1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:36:50 DataFile Name : 042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2134.59	2111.46	2102.17	2116.07	0.79	ppb
Antimony	121-1	0.35	0.35	0.35	0.35	0.12	ppb
Arsenic	75-2	6.73	7.06	7.03	6.94	2.67	ppb
Barium	135-1	11.43	11.54	11.87	11.61	1.99	ppb
Barium	137-1	11.50	11.50	11.43	11.48	0.37	ppb
Beryllium	9-1	0.19	0.20	0.19	0.19	4.60	ppb
Bismuth	209-1				110		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.41	0.58	0.32	0.43	30.32	ppb
Cadmium	106-1	-0.26	-0.66	-0.99	-0.64		ppb
Cadmium	111-1	0.14	0.14	0.16	0.15	9.31	ppb
Calcium	43-1	307603.98	308917.97	310739.41	309087.12	0.51	ppb
Calcium	44-1	308601.00	308006.24	311330.72	309312.65	0.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.00	6.86	6.80	6.89	1.47	ppb
Cobalt	59-2	6.41	6.35	6.34	6.37	0.61	ppb
Copper	63-2	13.50	13.24	13.51	13.42	1.12	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	56-2	9905.85	9713.17	9943.04	9854.02	1.25	ppb
Iron	57-2	11977.03	11728.43	11768.15	11824.54	1.13	ppb
Iron	54-2	10054.79	9979.74	9964.10	9999.54	0.48	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-05 Instrumnet Name : P7
Client Sample ID : ME29E1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:36:50 DataFile Name : 042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.30	9.43	9.45	9.39	0.88	ppb
Lead	207-1	8.33	8.49	8.47	8.43	1.06	ppb
Lead	208-1	8.67	8.81	8.82	8.77	0.97	ppb
Lithium	6-1				91		%
Magnesium	24-2	44782.18	44473.42	44135.78	44463.80	0.73	ppb
Manganese	55-2	453.13	445.47	455.88	451.49	1.19	ppb
Molybdenum	94-1	6.83	6.69	6.94	6.82	1.83	ppb
Molybdenum	95-1	1.65	1.71	1.72	1.69	2.40	ppb
Molybdenum	96-1	2.28	2.30	2.25	2.28	1.12	ppb
Molybdenum	97-1	1.71	1.73	1.64	1.69	2.65	ppb
Molybdenum	98-1	1.68	1.68	1.69	1.68	0.20	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.21	13.08	13.01	13.10	0.77	ppb
Phosphorus	31-2	354.41	361.18	356.42	357.34	0.97	ppb
Potassium	39-2	385.74	390.03	387.57	387.78	0.56	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	0.50	0.44	0.31	0.42	23.17	ppb
Selenium	77-2	3.85	4.70	4.19	4.24	10.06	ppb
Selenium	78-2	0.66	-0.39	0.20	0.15	340.94	ppb
Silicon	28-1	122.56	121.22	122.32	122.03	0.59	ppb
Silver	107-1	0.03	0.02	0.03	0.03	11.52	ppb
Silver	109-1	0.02	0.02	0.02	0.02	5.23	ppb
Sodium	23-2	164.30	162.83	167.69	164.94	1.51	ppb
Strontium	86-1	6960.71	6909.10	6831.58	6900.46	0.94	ppb
Strontium	88-1	6974.91	6994.96	6877.11	6949.00	0.91	ppb
Sulfur	34-1	184.12	281.45	365.77	277.11	32.80	ppb
Terbium	159-1				108		%
Terbium	159-2				101		%
Thallium	203-1	0.09	0.09	0.10	0.09	10.38	ppb
Thallium	205-1	0.09	0.09	0.09	0.09	2.25	ppb
Tin	118-1	0.20	0.21	0.20	0.20	2.84	ppb
Titanium	47-1	50.93	51.78	52.41	51.71	1.44	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-05

Instrumnet Name :

P7

Client Sample ID :

ME29E1

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:36:50

DataFile Name :

042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.14	1.17	1.17	1.16	1.50	ppb
Vanadium	51-2	8.89	8.87	8.84	8.87	0.27	ppb
Yttrium	89-1				105		%
Yttrium	89-2				99		%
Zinc	66-2	34.58	33.91	34.06	34.18	1.02	ppb
Zirconium	90-1	3.04	3.02	3.01	3.02	0.52	ppb
Zirconium	91-1	3.13	3.12	2.96	3.07	3.06	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-06 Instrumnet Name : P7
Client Sample ID : ME29E2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:40:00 DataFile Name : 043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2340.11	2372.37	2354.46	2355.65	0.69	ppb
Antimony	121-1	0.43	0.40	0.42	0.42	2.52	ppb
Arsenic	75-2	8.10	8.23	8.10	8.14	0.95	ppb
Barium	135-1	13.25	13.45	13.08	13.26	1.38	ppb
Barium	137-1	13.11	13.37	13.24	13.24	0.99	ppb
Beryllium	9-1	0.22	0.21	0.23	0.22	6.04	ppb
Bismuth	209-1				108		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.39	0.60	0.37	0.45	27.73	ppb
Cadmium	106-1	0.55	-0.43	-0.13	0.00		ppb
Cadmium	111-1	0.19	0.18	0.17	0.18	5.81	ppb
Calcium	43-1	259956.73	265992.85	261394.20	262447.93	1.20	ppb
Calcium	44-1	258208.09	266475.95	262788.06	262490.70	1.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.89	8.83	8.66	8.79	1.37	ppb
Cobalt	59-2	7.27	7.27	7.29	7.28	0.10	ppb
Copper	63-2	15.91	16.28	16.03	16.07	1.17	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				97		%
Iron	56-2	12294.12	12264.35	12205.44	12254.64	0.37	ppb
Iron	57-2	14125.26	13832.51	13688.80	13882.19	1.60	ppb
Iron	54-2	12261.86	12285.07	12302.61	12283.18	0.17	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-06 Instrumnet Name : P7
Client Sample ID : ME29E2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:40:00 DataFile Name : 043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.78	9.99	9.84	9.87	1.07	ppb
Lead	207-1	8.84	8.89	8.74	8.83	0.89	ppb
Lead	208-1	9.11	9.28	9.13	9.17	0.98	ppb
Lithium	6-1				92		%
Magnesium	24-2	60168.33	60239.20	60757.41	60388.31	0.53	ppb
Manganese	55-2	507.80	517.24	510.04	511.69	0.96	ppb
Molybdenum	94-1	8.40	8.65	8.62	8.56	1.57	ppb
Molybdenum	95-1	2.38	2.36	2.35	2.36	0.54	ppb
Molybdenum	96-1	2.97	3.08	3.09	3.05	2.29	ppb
Molybdenum	97-1	2.29	2.46	2.36	2.37	3.67	ppb
Molybdenum	98-1	2.35	2.38	2.38	2.37	0.80	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	15.98	16.08	16.11	16.06	0.44	ppb
Phosphorus	31-2	395.36	400.38	405.19	400.31	1.23	ppb
Potassium	39-2	455.82	460.05	458.71	458.19	0.47	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	0.51	0.59	0.53	0.54	6.94	ppb
Selenium	77-2	2.49	3.91	4.19	3.53	25.82	ppb
Selenium	78-2	1.05	0.00	-0.42	0.21	365.08	ppb
Silicon	28-1	115.22	119.56	112.29	115.69	3.16	ppb
Silver	107-1	0.03	0.03	0.02	0.03	9.47	ppb
Silver	109-1	0.02	0.03	0.03	0.02	13.10	ppb
Sodium	23-2	161.52	163.44	163.36	162.77	0.67	ppb
Strontium	86-1	5643.94	5746.78	5772.06	5720.93	1.19	ppb
Strontium	88-1	5705.29	5782.03	5841.61	5776.31	1.18	ppb
Sulfur	34-1	350.87	437.56	406.15	398.19	11.02	ppb
Terbium	159-1				107		%
Terbium	159-2				101		%
Thallium	203-1	0.14	0.13	0.13	0.13	5.02	ppb
Thallium	205-1	0.14	0.14	0.14	0.14	1.94	ppb
Tin	118-1	0.24	0.25	0.23	0.24	3.19	ppb
Titanium	47-1	61.72	62.41	62.22	62.12	0.57	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-06

Instrumnet Name :

P7

Client Sample ID :

ME29E2

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:40:00

DataFile Name :

043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.43	1.44	1.43	1.43	0.59	ppb
Vanadium	51-2	11.16	11.37	11.41	11.31	1.19	ppb
Yttrium	89-1				105		%
Yttrium	89-2				99		%
Zinc	66-2	42.78	43.03	42.46	42.76	0.66	ppb
Zirconium	90-1	3.50	3.59	3.61	3.57	1.64	ppb
Zirconium	91-1	3.55	3.72	3.61	3.63	2.44	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-07 Instrumnet Name : P7
Client Sample ID : ME29E3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:43:09 DataFile Name : 044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1477.60	1485.51	1491.38	1484.83	0.47	ppb
Antimony	121-1	0.21	0.21	0.20	0.21	3.18	ppb
Arsenic	75-2	4.90	4.72	4.63	4.75	2.94	ppb
Barium	135-1	9.68	9.63	9.52	9.61	0.85	ppb
Barium	137-1	9.52	9.69	9.47	9.56	1.20	ppb
Beryllium	9-1	0.13	0.16	0.11	0.13	19.74	ppb
Bismuth	209-1				110		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.35	0.21	0.25	0.27	27.44	ppb
Cadmium	106-1	0.16	-0.18	-0.86	-0.29		ppb
Cadmium	111-1	0.12	0.14	0.11	0.13	9.96	ppb
Calcium	43-1	233447.75	232177.82	233141.85	232922.47	0.28	ppb
Calcium	44-1	230781.24	231277.34	230460.88	230839.82	0.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.32	6.24	6.28	6.28	0.61	ppb
Cobalt	59-2	3.72	3.69	3.75	3.72	0.89	ppb
Copper	63-2	9.43	9.70	9.72	9.62	1.70	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	56-2	8067.04	8044.03	8072.55	8061.21	0.19	ppb
Iron	57-2	9462.52	9333.42	9537.82	9444.59	1.09	ppb
Iron	54-2	8189.97	8106.37	8099.86	8132.07	0.62	ppb
Krypton	83-1						cps

LB Number :	LB133800	Operator :	Jaswal
Lab Sample ID :	P4976-07	Instrumnet Name :	P7
Client Sample ID :	ME29E3	Dilution Factor :	1
Date & Time Acquired :	2024-12-06 14:43:09	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5.96	6.08	6.07	6.04	1.07	ppb
Lead	207-1	5.36	5.48	5.47	5.44	1.22	ppb
Lead	208-1	5.58	5.70	5.64	5.64	1.05	ppb
Lithium	6-1				94		%
Magnesium	24-2	59192.42	59685.79	60042.36	59640.19	0.72	ppb
Manganese	55-2	357.03	362.66	358.83	359.50	0.80	ppb
Molybdenum	94-1	4.83	4.99	4.99	4.94	1.90	ppb
Molybdenum	95-1	0.95	0.99	0.99	0.97	2.50	ppb
Molybdenum	96-1	1.44	1.43	1.46	1.44	1.14	ppb
Molybdenum	97-1	0.96	1.00	0.98	0.98	2.04	ppb
Molybdenum	98-1	0.93	0.97	0.98	0.96	2.53	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.34	8.04	8.14	8.18	1.86	ppb
Phosphorus	31-2	311.13	302.68	302.86	305.56	1.58	ppb
Potassium	39-2	243.00	236.95	243.75	241.23	1.55	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	-0.02	0.49	0.24	0.23	109.47	ppb
Selenium	77-2	5.40	5.70	4.79	5.29	8.75	ppb
Selenium	78-2	1.00	-0.10	1.44	0.78	101.09	ppb
Silicon	28-1	101.01	102.24	101.44	101.56	0.61	ppb
Silver	107-1	0.02	0.02	0.02	0.02	4.22	ppb
Silver	109-1	0.02	0.02	0.02	0.02	12.39	ppb
Sodium	23-2	122.05	127.35	126.90	125.43	2.34	ppb
Strontium	86-1	4005.06	4138.62	4114.14	4085.94	1.74	ppb
Strontium	88-1	4073.52	4147.46	4092.82	4104.60	0.93	ppb
Sulfur	34-1	405.71	444.47	428.72	426.30	4.57	ppb
Terbium	159-1				109		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.07	0.07	0.07	3.68	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	1.79	ppb
Tin	118-1	0.19	0.20	0.20	0.20	3.64	ppb
Titanium	47-1	45.48	46.35	45.44	45.76	1.13	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-07

Instrumnet Name :

P7

Client Sample ID :

ME29E3

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:43:09

DataFile Name :

044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.87	0.88	0.86	0.87	1.25	ppb
Vanadium	51-2	7.79	7.83	7.78	7.80	0.38	ppb
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	25.79	26.25	26.06	26.03	0.90	ppb
Zirconium	90-1	2.20	2.31	2.29	2.27	2.55	ppb
Zirconium	91-1	2.22	2.33	2.31	2.29	2.59	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08 Instrumnet Name : P7
Client Sample ID : ME29E4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:46:19 DataFile Name : 045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2425.36	2397.52	2392.75	2405.21	0.73	ppb
Antimony	121-1	0.29	0.30	0.29	0.29	1.98	ppb
Arsenic	75-2	26.80	26.56	27.09	26.82	0.98	ppb
Barium	135-1	14.70	15.11	15.06	14.96	1.48	ppb
Barium	137-1	14.74	15.01	14.96	14.90	0.94	ppb
Beryllium	9-1	0.17	0.17	0.18	0.17	3.64	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.44	0.37	0.27	0.36	22.66	ppb
Cadmium	106-1	-0.30	-0.31	-0.04	-0.22		ppb
Cadmium	111-1	0.15	0.14	0.12	0.14	9.59	ppb
Calcium	43-1	205895.59	203785.15	205308.68	204996.47	0.53	ppb
Calcium	44-1	202578.29	204437.23	208157.37	205057.63	1.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.75	7.80	7.79	7.78	0.36	ppb
Cobalt	59-2	6.54	6.49	6.53	6.52	0.38	ppb
Copper	63-2	15.04	14.90	15.25	15.06	1.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				97		%
Iron	56-2	10825.98	10709.78	10826.59	10787.45	0.62	ppb
Iron	57-2	11889.77	12004.40	12132.03	12008.74	1.01	ppb
Iron	54-2	10747.01	10836.77	10846.56	10810.11	0.51	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08 Instrumnet Name : P7
Client Sample ID : ME29E4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:46:19 DataFile Name : 045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.16	7.00	7.21	7.13	1.56	ppb
Lead	207-1	6.27	6.40	6.49	6.38	1.73	ppb
Lead	208-1	6.60	6.59	6.74	6.64	1.26	ppb
Lithium	6-1				94		%
Magnesium	24-2	55085.62	54231.77	54633.25	54650.21	0.78	ppb
Manganese	55-2	570.54	564.42	570.45	568.47	0.62	ppb
Molybdenum	94-1	7.98	8.00	8.11	8.03	0.83	ppb
Molybdenum	95-1	2.86	2.93	2.93	2.91	1.45	ppb
Molybdenum	96-1	3.51	3.55	3.54	3.53	0.52	ppb
Molybdenum	97-1	2.86	2.91	2.97	2.92	1.92	ppb
Molybdenum	98-1	2.89	2.92	2.97	2.93	1.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.19	13.16	12.85	13.07	1.44	ppb
Phosphorus	31-2	390.30	398.25	398.86	395.81	1.21	ppb
Potassium	39-2	343.65	346.12	343.26	344.34	0.45	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				96		%
Scandium	45-2				95		%
Selenium	82-1	0.35	0.21	0.36	0.30	28.18	ppb
Selenium	77-2	4.16	3.74	3.45	3.78	9.51	ppb
Selenium	78-2	-0.34	-0.59	0.35	-0.20		ppb
Silicon	28-1	97.24	99.26	93.23	96.58	3.18	ppb
Silver	107-1	0.03	0.03	0.03	0.03	0.75	ppb
Silver	109-1	0.03	0.03	0.03	0.03	2.40	ppb
Sodium	23-2	130.00	127.69	132.53	130.07	1.86	ppb
Strontium	86-1	3609.08	3597.33	3661.40	3622.60	0.94	ppb
Strontium	88-1	3591.24	3574.93	3685.37	3617.18	1.65	ppb
Sulfur	34-1	2525.39	2500.50	2623.61	2549.83	2.55	ppb
Terbium	159-1				108		%
Terbium	159-2				101		%
Thallium	203-1	0.14	0.14	0.14	0.14	1.67	ppb
Thallium	205-1	0.14	0.14	0.13	0.14	1.71	ppb
Tin	118-1	0.21	0.21	0.21	0.21	0.83	ppb
Titanium	47-1	73.79	77.00	76.08	75.63	2.18	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08

Instrumnet Name :

P7

Client Sample ID :

ME29E4

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:46:19

DataFile Name :

045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.47	1.45	1.50	1.47	1.51	ppb
Vanadium	51-2	11.36	11.25	11.28	11.30	0.48	ppb
Yttrium	89-1				104		%
Yttrium	89-2				100		%
Zinc	66-2	40.40	40.61	39.59	40.20	1.34	ppb
Zirconium	90-1	3.08	3.11	3.11	3.10	0.56	ppb
Zirconium	91-1	3.13	3.09	3.11	3.11	0.66	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-09 Instrumnet Name : P7
Client Sample ID : ME29E4D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:49:28 DataFile Name : 046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2422.80	2447.18	2413.29	2427.76	0.72	ppb
Antimony	121-1	0.29	0.29	0.30	0.29	1.34	ppb
Arsenic	75-2	28.07	27.62	27.25	27.64	1.48	ppb
Barium	135-1	14.89	15.18	15.09	15.05	0.98	ppb
Barium	137-1	14.79	14.95	15.22	14.99	1.46	ppb
Beryllium	9-1	0.18	0.21	0.19	0.19	9.60	ppb
Bismuth	209-1				108		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.30	0.43	0.32	0.35	20.39	ppb
Cadmium	106-1	0.27	-0.49	-0.42	-0.21		ppb
Cadmium	111-1	0.13	0.11	0.13	0.12	9.78	ppb
Calcium	43-1	203096.15	206162.17	204790.69	204683.00	0.75	ppb
Calcium	44-1	202709.79	203802.15	205448.51	203986.82	0.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.82	7.78	7.73	7.78	0.56	ppb
Cobalt	59-2	6.60	6.57	6.54	6.57	0.40	ppb
Copper	63-2	14.81	14.87	14.73	14.80	0.45	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	56-2	10684.01	10742.73	10637.01	10687.92	0.50	ppb
Iron	57-2	12067.01	12031.40	11842.14	11980.18	1.01	ppb
Iron	54-2	10782.65	10840.34	10744.88	10789.29	0.45	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-09 Instrumnet Name : P7
Client Sample ID : ME29E4D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:49:28 DataFile Name : 046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.07	7.26	7.28	7.20	1.63	ppb
Lead	207-1	6.26	6.56	6.46	6.42	2.42	ppb
Lead	208-1	6.53	6.75	6.75	6.68	1.94	ppb
Lithium	6-1				94		%
Magnesium	24-2	53308.95	53640.11	53317.16	53422.07	0.35	ppb
Manganese	55-2	562.99	560.31	555.36	559.55	0.69	ppb
Molybdenum	94-1	7.99	7.94	8.08	8.01	0.88	ppb
Molybdenum	95-1	2.86	2.97	2.98	2.94	2.13	ppb
Molybdenum	96-1	3.53	3.59	3.54	3.55	0.95	ppb
Molybdenum	97-1	2.92	2.90	3.05	2.96	2.71	ppb
Molybdenum	98-1	2.97	3.03	2.99	3.00	1.14	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.20	12.97	12.98	13.05	0.99	ppb
Phosphorus	31-2	386.39	400.52	397.67	394.86	1.89	ppb
Potassium	39-2	339.02	340.92	337.02	338.99	0.57	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	0.11	0.13	0.14	0.13	13.11	ppb
Selenium	77-2	3.46	4.53	4.33	4.11	13.90	ppb
Selenium	78-2	0.27	-0.03	0.28	0.18	99.28	ppb
Silicon	28-1	93.29	98.70	97.27	96.42	2.91	ppb
Silver	107-1	0.03	0.03	0.03	0.03	13.30	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.71	ppb
Sodium	23-2	126.01	127.70	126.19	126.63	0.73	ppb
Strontium	86-1	3730.57	3815.75	3846.83	3797.71	1.58	ppb
Strontium	88-1	3809.98	3854.59	3833.46	3832.68	0.58	ppb
Sulfur	34-1	2484.27	2569.77	2588.66	2547.57	2.18	ppb
Terbium	159-1				107		%
Terbium	159-2				100		%
Thallium	203-1	0.13	0.14	0.14	0.14	1.08	ppb
Thallium	205-1	0.13	0.13	0.14	0.13	0.69	ppb
Tin	118-1	0.18	0.20	0.21	0.20	7.97	ppb
Titanium	47-1	72.68	73.38	73.95	73.33	0.87	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-09

Instrumnet Name :

P7

Client Sample ID :

ME29E4D

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:49:28

DataFile Name :

046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.46	1.49	1.49	1.48	1.10	ppb
Vanadium	51-2	11.19	11.26	11.19	11.22	0.34	ppb
Yttrium	89-1				104		%
Yttrium	89-2				99		%
Zinc	66-2	40.26	40.92	40.28	40.48	0.93	ppb
Zirconium	90-1	3.03	3.15	3.09	3.09	2.00	ppb
Zirconium	91-1	3.08	3.31	3.17	3.19	3.66	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08LX5 Instrumnet Name : P7
Client Sample ID : ME29E4L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 14:52:38 DataFile Name : 047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	452.80	460.14	457.46	456.80	0.81	ppb
Antimony	121-1	0.06	0.06	0.06	0.06	2.98	ppb
Arsenic	75-2	5.31	5.15	5.18	5.22	1.60	ppb
Barium	135-1	2.80	2.84	2.99	2.88	3.52	ppb
Barium	137-1	2.78	2.86	2.89	2.84	2.14	ppb
Beryllium	9-1	0.03	0.04	0.05	0.04	22.89	ppb
Bismuth	209-1				108		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.10	0.07	0.03	0.07	47.43	ppb
Cadmium	106-1	-0.10	-0.30	-0.60	-0.34		ppb
Cadmium	111-1	0.02	0.03	0.04	0.03	25.11	ppb
Calcium	43-1	38153.73	39848.88	39811.78	39271.46	2.47	ppb
Calcium	44-1	37447.05	39450.48	39708.48	38868.67	3.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.56	1.47	1.54	1.52	2.99	ppb
Cobalt	59-2	1.26	1.27	1.23	1.25	1.72	ppb
Copper	63-2	2.97	3.02	2.92	2.97	1.79	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				100		%
Indium	115-1				102		%
Indium	115-2				97		%
Iron	56-2	2057.05	2040.63	2049.84	2049.18	0.40	ppb
Iron	57-2	2358.05	2343.94	2317.41	2339.80	0.88	ppb
Iron	54-2	2141.72	2141.24	2127.97	2136.98	0.37	ppb
Krypton	83-1						cps

LB Number :	LB133800	Operator :	Jaswal
Lab Sample ID :	P4976-08LX5	Instrumnet Name :	P7
Client Sample ID :	ME29E4L	Dilution Factor :	5
Date & Time Acquired :	2024-12-06 14:52:38	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.49	1.53	1.54	1.52	1.84	ppb
Lead	207-1	1.36	1.38	1.39	1.38	1.22	ppb
Lead	208-1	1.39	1.43	1.44	1.42	1.65	ppb
Lithium	6-1				95		%
Magnesium	24-2	10516.27	10572.76	10544.46	10544.50	0.27	ppb
Manganese	55-2	109.74	111.18	109.63	110.18	0.78	ppb
Molybdenum	94-1	1.51	1.51	1.56	1.52	1.79	ppb
Molybdenum	95-1	0.56	0.56	0.57	0.56	0.86	ppb
Molybdenum	96-1	0.67	0.69	0.71	0.69	3.04	ppb
Molybdenum	97-1	0.56	0.56	0.57	0.57	1.00	ppb
Molybdenum	98-1	0.56	0.56	0.56	0.56	0.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.57	2.56	2.59	2.57	0.50	ppb
Phosphorus	31-2	66.63	65.08	64.50	65.40	1.68	ppb
Potassium	39-2	42.14	42.29	39.60	41.34	3.65	ppb
Rhodium	103-1				100		%
Rhodium	103-2				97		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	-0.14	-0.39	-0.16	-0.23		ppb
Selenium	77-2	1.58	0.40	0.84	0.94	63.46	ppb
Selenium	78-2	-0.25	-0.37	-0.80	-0.47		ppb
Silicon	28-1	19.75	20.43	20.77	20.32	2.55	ppb
Silver	107-1	0.01	0.01	0.01	0.01	11.43	ppb
Silver	109-1	0.01	0.01	0.01	0.01	6.89	ppb
Sodium	23-2	-31.47	-32.15	-32.63	-32.08		ppb
Strontium	86-1	696.59	714.07	707.58	706.08	1.25	ppb
Strontium	88-1	683.27	714.10	713.09	703.49	2.49	ppb
Sulfur	34-1	808.84	964.46	902.51	891.94	8.78	ppb
Terbium	159-1				105		%
Terbium	159-2				99		%
Thallium	203-1	0.03	0.03	0.03	0.03	8.89	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	9.70	ppb
Tin	118-1	0.07	0.07	0.07	0.07	4.70	ppb
Titanium	47-1	13.79	14.43	14.24	14.15	2.35	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08LX5

Instrumnet Name :

P7

Client Sample ID :

ME29E4L

Dilution Factor :

5

Date & Time Acquired :

2024-12-06 14:52:38

DataFile Name :

047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.26	0.27	0.28	0.27	3.45	ppb
Vanadium	51-2	2.25	2.15	2.15	2.18	2.59	ppb
Yttrium	89-1				101		%
Yttrium	89-2				96		%
Zinc	66-2	8.47	8.59	8.35	8.47	1.41	ppb
Zirconium	90-1	0.56	0.59	0.62	0.59	4.97	ppb
Zirconium	91-1	0.59	0.59	0.61	0.59	1.78	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10RE Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:55:49 DataFile Name : 048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2348.46	2383.57	2378.46	2370.16	0.80	ppb
Antimony	121-1	0.28	0.28	0.28	0.28	1.84	ppb
Arsenic	75-2	26.65	27.57	26.77	27.00	1.84	ppb
Barium	135-1	14.72	14.83	14.95	14.83	0.78	ppb
Barium	137-1	14.67	14.67	14.73	14.69	0.25	ppb
Beryllium	9-1	0.18	0.24	0.19	0.20	14.64	ppb
Bismuth	209-1				107		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.42	0.47	0.32	0.40	19.53	ppb
Cadmium	106-1	0.50	-0.14	0.15	0.17	189.12	ppb
Cadmium	111-1	0.12	0.11	0.17	0.13	25.29	ppb
Calcium	43-1	202042.29	203258.96	202361.87	202554.37	0.31	ppb
Calcium	44-1	201112.67	202490.91	201177.18	201593.58	0.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.52	7.71	7.63	7.62	1.20	ppb
Cobalt	59-2	6.37	6.38	6.42	6.39	0.39	ppb
Copper	63-2	14.65	14.82	14.71	14.73	0.57	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				95		%
Iron	56-2	10481.07	10651.49	10636.45	10589.67	0.89	ppb
Iron	57-2	11636.00	11961.71	11873.54	11823.75	1.42	ppb
Iron	54-2	10612.15	10721.31	10602.91	10645.46	0.62	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10RE Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:55:49 DataFile Name : 048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.05	6.99	7.13	7.06	0.98	ppb
Lead	207-1	6.26	6.26	6.36	6.29	0.87	ppb
Lead	208-1	6.51	6.53	6.63	6.56	1.00	ppb
Lithium	6-1				94		%
Magnesium	24-2	52292.02	53306.98	53222.38	52940.46	1.06	ppb
Manganese	55-2	558.66	562.58	561.44	560.89	0.36	ppb
Molybdenum	94-1	7.85	8.05	7.97	7.96	1.28	ppb
Molybdenum	95-1	2.95	2.83	2.85	2.88	2.28	ppb
Molybdenum	96-1	3.49	3.51	3.56	3.52	1.10	ppb
Molybdenum	97-1	2.87	2.88	2.91	2.89	0.83	ppb
Molybdenum	98-1	2.89	2.90	2.92	2.90	0.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.75	12.94	12.76	12.82	0.83	ppb
Phosphorus	31-2	388.85	390.64	392.72	390.73	0.50	ppb
Potassium	39-2	329.20	333.23	330.86	331.10	0.61	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				95		%
Scandium	45-2				95		%
Selenium	82-1	0.21	0.03	-0.19	0.02	1131.41	ppb
Selenium	77-2	4.52	4.21	4.35	4.36	3.66	ppb
Selenium	78-2	-0.09	0.28	-0.21	-0.01		ppb
Silicon	28-1	91.29	94.67	95.27	93.74	2.29	ppb
Silver	107-1	0.03	0.03	0.03	0.03	7.18	ppb
Silver	109-1	0.02	0.03	0.03	0.03	11.88	ppb
Sodium	23-2	118.96	120.41	121.41	120.26	1.02	ppb
Strontium	86-1	3669.31	3681.59	3709.12	3686.67	0.55	ppb
Strontium	88-1	3676.58	3725.46	3783.37	3728.47	1.43	ppb
Sulfur	34-1	2532.55	2533.53	2589.62	2551.90	1.28	ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.14	0.13	0.14	0.14	6.88	ppb
Thallium	205-1	0.14	0.14	0.14	0.14	1.23	ppb
Tin	118-1	0.21	0.23	0.22	0.22	5.35	ppb
Titanium	47-1	2003.90	2052.21	2070.94	2042.35	1.69	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-10RE

Instrumnet Name :

P7

Client Sample ID :

ME29E4S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:55:49

DataFile Name :

048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.46	1.47	1.47	1.47	0.42	ppb
Vanadium	51-2	11.13	11.13	11.22	11.16	0.48	ppb
Yttrium	89-1				103		%
Yttrium	89-2				98		%
Zinc	66-2	40.01	40.27	40.24	40.18	0.35	ppb
Zirconium	90-1	3.07	3.03	3.12	3.08	1.51	ppb
Zirconium	91-1	3.13	3.08	3.18	3.13	1.69	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4976-11Instrumnet Name :P7

Client Sample ID :ME29E5Dilution Factor :1

Date & Time Acquired :2024-12-06 14:58:59DataFile Name :049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2503.79	2512.37	2521.45	2512.54	0.35	ppb
Antimony	121-1	0.21	0.21	0.22	0.21	2.03	ppb
Arsenic	75-2	4.65	4.91	4.84	4.80	2.85	ppb
Barium	135-1	17.04	16.86	16.92	16.94	0.55	ppb
Barium	137-1	16.69	16.69	16.88	16.75	0.66	ppb
Beryllium	9-1	0.21	0.24	0.19	0.21	12.20	ppb
Bismuth	209-1				107		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.42	0.47	0.55	0.48	13.36	ppb
Cadmium	106-1	0.43	0.05	-0.37	0.04	1009.02	ppb
Cadmium	111-1	0.16	0.16	0.17	0.16	3.35	ppb
Calcium	43-1	268253.30	273115.50	269266.78	270211.86	0.95	ppb
Calcium	44-1	264765.56	271633.96	271048.68	269149.40	1.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.99	8.95	8.96	8.97	0.26	ppb
Cobalt	59-2	5.43	5.62	5.53	5.52	1.77	ppb
Copper	63-2	12.97	13.18	13.00	13.05	0.87	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	56-2	12483.85	12467.99	12519.47	12490.43	0.21	ppb
Iron	57-2	13905.54	14253.80	14131.75	14097.03	1.25	ppb
Iron	54-2	12594.33	12613.98	12419.34	12542.55	0.85	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-11 Instrumnet Name : P7
Client Sample ID : ME29E5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:58:59 DataFile Name : 049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	8.02	8.12	8.12	8.08	0.71	ppb
Lead	207-1	7.27	7.26	7.23	7.25	0.29	ppb
Lead	208-1	7.53	7.54	7.52	7.53	0.17	ppb
Lithium	6-1				92		%
Magnesium	24-2	67724.96	68615.78	68800.92	68380.55	0.84	ppb
Manganese	55-2	778.65	767.67	780.28	775.53	0.88	ppb
Molybdenum	94-1	7.55	7.63	7.58	7.59	0.52	ppb
Molybdenum	95-1	1.71	1.72	1.75	1.73	1.14	ppb
Molybdenum	96-1	2.39	2.41	2.42	2.41	0.62	ppb
Molybdenum	97-1	1.68	1.75	1.67	1.70	2.56	ppb
Molybdenum	98-1	1.73	1.71	1.74	1.72	0.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.23	12.26	12.09	12.19	0.76	ppb
Phosphorus	31-2	421.63	432.29	439.97	431.30	2.14	ppb
Potassium	39-2	289.55	290.46	288.25	289.42	0.38	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				96		%
Selenium	82-1	-0.16	0.41	0.02	0.09	332.23	ppb
Selenium	77-2	3.90	3.33	3.22	3.49	10.49	ppb
Selenium	78-2	-0.65	-0.02	-0.52	-0.40		ppb
Silicon	28-1	100.61	76.35	95.08	90.68	14.02	ppb
Silver	107-1	0.03	0.03	0.03	0.03	7.12	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.49	ppb
Sodium	23-2	133.99	131.19	136.75	133.98	2.08	ppb
Strontium	86-1	5475.14	5464.76	5467.36	5469.09	0.10	ppb
Strontium	88-1	5496.68	5511.30	5569.24	5525.74	0.69	ppb
Sulfur	34-1	719.32	818.80	754.17	764.10	6.61	ppb
Terbium	159-1				107		%
Terbium	159-2				101		%
Thallium	203-1	0.04	0.04	0.04	0.04	7.48	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	5.48	ppb
Tin	118-1	0.17	0.18	0.17	0.17	3.50	ppb
Titanium	47-1	66.25	67.06	66.83	66.71	0.62	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-11

Instrumnet Name :

P7

Client Sample ID :

ME29E5

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:58:59

DataFile Name :

049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.24	1.23	1.25	1.24	1.03	ppb
Vanadium	51-2	11.28	11.49	11.49	11.42	1.08	ppb
Yttrium	89-1				104		%
Yttrium	89-2				100		%
Zinc	66-2	34.25	34.38	34.38	34.34	0.22	ppb
Zirconium	90-1	3.46	3.38	3.43	3.42	1.10	ppb
Zirconium	91-1	3.51	3.45	3.40	3.45	1.49	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-12 Instrumnet Name : P7
Client Sample ID : ME29E6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:02:07 DataFile Name : 050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2485.12	2478.47	2474.95	2479.51	0.21	ppb
Antimony	121-1	0.41	0.42	0.42	0.42	1.69	ppb
Arsenic	75-2	8.89	8.96	9.09	8.98	1.18	ppb
Barium	135-1	16.91	17.06	16.67	16.88	1.17	ppb
Barium	137-1	16.82	16.79	17.01	16.87	0.69	ppb
Beryllium	9-1	0.22	0.18	0.24	0.21	13.17	ppb
Bismuth	209-1				107		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.63	0.58	0.47	0.56	14.53	ppb
Cadmium	106-1	0.76	0.32	0.34	0.47	52.00	ppb
Cadmium	111-1	0.21	0.20	0.19	0.20	5.29	ppb
Calcium	43-1	283227.14	298087.51	291045.38	290786.68	2.56	ppb
Calcium	44-1	282976.40	296084.24	288675.62	289245.42	2.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.36	8.47	8.40	8.41	0.65	ppb
Cobalt	59-2	6.33	6.22	6.32	6.29	0.98	ppb
Copper	63-2	17.50	17.44	17.62	17.52	0.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	56-2	14055.38	13995.77	14014.68	14021.94	0.22	ppb
Iron	57-2	15809.70	15766.64	15680.71	15752.35	0.42	ppb
Iron	54-2	13983.98	14052.75	14159.34	14065.36	0.63	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-12 Instrumnet Name : P7
Client Sample ID : ME29E6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:02:07 DataFile Name : 050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	10.12	10.29	10.16	10.19	0.83	ppb
Lead	207-1	8.93	9.25	9.15	9.11	1.78	ppb
Lead	208-1	9.38	9.59	9.47	9.48	1.07	ppb
Lithium	6-1				92		%
Magnesium	24-2	65906.69	65606.59	65369.93	65627.74	0.41	ppb
Manganese	55-2	469.64	469.88	469.35	469.62	0.06	ppb
Molybdenum	94-1	8.47	8.67	8.71	8.62	1.46	ppb
Molybdenum	95-1	1.79	1.80	1.70	1.76	2.99	ppb
Molybdenum	96-1	2.54	2.60	2.59	2.58	1.33	ppb
Molybdenum	97-1	1.69	1.83	1.77	1.77	4.01	ppb
Molybdenum	98-1	1.71	1.75	1.74	1.73	1.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	15.03	14.83	15.06	14.97	0.87	ppb
Phosphorus	31-2	517.53	514.02	512.89	514.82	0.47	ppb
Potassium	39-2	420.06	416.34	431.84	422.75	1.91	ppb
Rhodium	103-1				98		%
Rhodium	103-2				95		%
Scandium	45-1				99		%
Scandium	45-2				95		%
Selenium	82-1	0.46	0.31	-0.08	0.23	122.14	ppb
Selenium	77-2	4.50	3.63	4.15	4.09	10.77	ppb
Selenium	78-2	0.25	0.23	-0.67	-0.06		ppb
Silicon	28-1	99.02	102.48	135.85	112.45	18.09	ppb
Silver	107-1	0.02	0.02	0.03	0.02	8.54	ppb
Silver	109-1	0.02	0.02	0.02	0.02	15.76	ppb
Sodium	23-2	164.63	165.07	162.86	164.19	0.71	ppb
Strontium	86-1	7333.93	7363.24	7624.97	7440.71	2.15	ppb
Strontium	88-1	7320.39	7532.44	7563.11	7471.98	1.77	ppb
Sulfur	34-1	367.87	480.09	454.32	434.10	13.54	ppb
Terbium	159-1				108		%
Terbium	159-2				101		%
Thallium	203-1	0.13	0.14	0.13	0.13	2.42	ppb
Thallium	205-1	0.14	0.14	0.14	0.14	1.69	ppb
Tin	118-1	0.19	0.18	0.18	0.18	2.99	ppb
Titanium	47-1	73.22	76.69	76.82	75.57	2.70	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-12

Instrumnet Name :

P7

Client Sample ID :

ME29E6

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:02:07

DataFile Name :

050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.21	1.23	1.20	1.21	1.34	ppb
Vanadium	51-2	13.74	13.63	13.52	13.63	0.78	ppb
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	54.69	54.74	54.89	54.77	0.19	ppb
Zirconium	90-1	3.91	4.16	3.98	4.02	3.24	ppb
Zirconium	91-1	3.87	3.96	3.83	3.89	1.72	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-13

Instrumnet Name :

P7

Client Sample ID :

ME29E7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:05:17

DataFile Name :

051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2498.62	2539.19	2493.57	2510.46	1.00	ppb
Antimony	121-1	0.30	0.29	0.29	0.29	0.66	ppb
Arsenic	75-2	6.63	6.53	6.43	6.53	1.49	ppb
Barium	135-1	17.67	17.57	17.60	17.62	0.27	ppb
Barium	137-1	17.36	17.70	17.82	17.63	1.35	ppb
Beryllium	9-1	0.21	0.23	0.22	0.22	5.31	ppb
Bismuth	209-1				107		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.33	0.45	0.39	0.39	15.69	ppb
Cadmium	106-1	0.29	0.46	-0.16	0.20	165.75	ppb
Cadmium	111-1	0.16	0.16	0.17	0.17	4.48	ppb
Calcium	43-1	212483.54	218907.29	219612.53	217001.12	1.81	ppb
Calcium	44-1	213998.14	216265.77	220639.67	216967.86	1.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.56	6.62	6.59	6.59	0.44	ppb
Cobalt	59-2	5.68	5.77	5.68	5.71	0.86	ppb
Copper	63-2	18.64	19.10	18.50	18.75	1.68	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				96		%
Iron	56-2	12445.70	12431.95	12404.46	12427.37	0.17	ppb
Iron	57-2	13905.17	13762.36	13759.02	13808.85	0.60	ppb
Iron	54-2	12345.96	12525.79	12330.57	12400.77	0.88	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-13 Instrumnet Name : P7
Client Sample ID : ME29E7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:05:17 DataFile Name : 051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	8.00	8.34	8.28	8.21	2.20	ppb
Lead	207-1	7.19	7.40	7.35	7.31	1.45	ppb
Lead	208-1	7.46	7.68	7.65	7.60	1.56	ppb
Lithium	6-1				93		%
Magnesium	24-2	44969.60	46077.44	45524.87	45523.97	1.22	ppb
Manganese	55-2	1012.71	1018.04	1023.03	1017.93	0.51	ppb
Molybdenum	94-1	6.36	6.67	6.57	6.53	2.43	ppb
Molybdenum	95-1	1.34	1.40	1.38	1.38	2.08	ppb
Molybdenum	96-1	1.97	2.00	2.01	2.00	0.98	ppb
Molybdenum	97-1	1.39	1.36	1.45	1.40	3.03	ppb
Molybdenum	98-1	1.36	1.38	1.41	1.38	1.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.45	13.89	13.65	13.66	1.61	ppb
Phosphorus	31-2	446.35	454.32	450.88	450.52	0.89	ppb
Potassium	39-2	356.32	360.59	356.06	357.65	0.71	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				98		%
Scandium	45-2				95		%
Selenium	82-1	1.15	0.49	0.45	0.70	56.53	ppb
Selenium	77-2	6.21	5.79	5.21	5.74	8.73	ppb
Selenium	78-2	1.35	0.95	0.47	0.92	47.53	ppb
Silicon	28-1	96.52	90.79	87.07	91.46	5.20	ppb
Silver	107-1	0.01	0.02	0.02	0.02	15.91	ppb
Silver	109-1	0.02	0.01	0.02	0.02	21.97	ppb
Sodium	23-2	108.31	111.02	109.67	109.66	1.23	ppb
Strontium	86-1	4332.78	4425.92	4418.24	4392.31	1.18	ppb
Strontium	88-1	4345.64	4391.79	4417.47	4384.97	0.83	ppb
Sulfur	34-1	335.88	314.99	383.27	344.71	10.15	ppb
Terbium	159-1				107		%
Terbium	159-2				101		%
Thallium	203-1	0.13	0.13	0.14	0.13	4.72	ppb
Thallium	205-1	0.13	0.14	0.13	0.13	3.90	ppb
Tin	118-1	0.22	0.17	0.20	0.20	14.24	ppb
Titanium	47-1	54.40	55.73	56.82	55.65	2.18	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-13

Instrumnet Name :

P7

Client Sample ID :

ME29E7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:05:17

DataFile Name :

051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.12	1.15	1.15	1.14	1.66	ppb
Vanadium	51-2	10.06	10.08	10.21	10.12	0.82	ppb
Yttrium	89-1				106		%
Yttrium	89-2				102		%
Zinc	66-2	39.31	40.17	40.08	39.85	1.18	ppb
Zirconium	90-1	2.88	3.09	3.00	2.99	3.45	ppb
Zirconium	91-1	3.00	2.98	2.99	2.99	0.37	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-14

Instrumnet Name :

P7

Client Sample ID :

ME29E8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:08:25

DataFile Name :

052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2394.77	2362.33	2373.74	2376.95	0.69	ppb
Antimony	121-1	0.29	0.28	0.30	0.29	3.35	ppb
Arsenic	75-2	7.03	7.07	6.91	7.00	1.24	ppb
Barium	135-1	15.05	15.33	15.32	15.23	1.06	ppb
Barium	137-1	15.59	15.30	15.12	15.34	1.53	ppb
Beryllium	9-1	0.20	0.19	0.17	0.19	7.39	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.33	0.44	0.55	0.44	24.26	ppb
Cadmium	106-1	0.07	-0.15	-0.28	-0.12		ppb
Cadmium	111-1	0.19	0.16	0.15	0.17	12.92	ppb
Calcium	43-1	182372.03	187179.05	185704.52	185085.20	1.33	ppb
Calcium	44-1	181011.74	187027.72	185448.31	184495.93	1.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	11.09	11.20	10.91	11.07	1.32	ppb
Cobalt	59-2	5.76	5.70	5.70	5.72	0.63	ppb
Copper	63-2	15.11	15.43	15.16	15.23	1.10	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	56-2	11166.50	11202.97	11066.90	11145.46	0.63	ppb
Iron	57-2	12318.93	12222.90	12154.91	12232.25	0.67	ppb
Iron	54-2	11130.20	11242.60	10972.47	11115.09	1.22	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-14 Instrumnet Name : P7
Client Sample ID : ME29E8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:08:25 DataFile Name : 052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.00	9.02	8.97	9.00	0.27	ppb
Lead	207-1	8.09	8.21	8.17	8.16	0.77	ppb
Lead	208-1	8.44	8.44	8.45	8.45	0.09	ppb
Lithium	6-1				92		%
Magnesium	24-2	35246.94	35583.35	34727.31	35185.86	1.23	ppb
Manganese	55-2	467.48	461.56	460.19	463.08	0.84	ppb
Molybdenum	94-1	6.61	6.66	6.62	6.63	0.37	ppb
Molybdenum	95-1	0.98	1.01	0.98	0.99	1.48	ppb
Molybdenum	96-1	1.66	1.69	1.69	1.68	0.98	ppb
Molybdenum	97-1	1.04	0.99	0.94	0.99	4.95	ppb
Molybdenum	98-1	1.03	0.99	0.98	1.00	2.89	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	14.77	14.70	14.84	14.77	0.47	ppb
Phosphorus	31-2	495.07	508.61	495.87	499.85	1.52	ppb
Potassium	39-2	423.75	427.38	423.07	424.73	0.55	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	0.19	-0.04	0.07	0.07	153.48	ppb
Selenium	77-2	3.76	4.15	3.89	3.94	5.01	ppb
Selenium	78-2	0.16	-0.28	-0.56	-0.23		ppb
Silicon	28-1	162.34	172.00	165.37	166.57	2.97	ppb
Silver	107-1	0.05	0.05	0.05	0.05	3.56	ppb
Silver	109-1	0.04	0.05	0.05	0.05	5.81	ppb
Sodium	23-2	169.92	170.47	171.28	170.56	0.40	ppb
Strontium	86-1	3384.29	3378.96	3346.85	3370.04	0.60	ppb
Strontium	88-1	3399.49	3396.44	3371.65	3389.20	0.45	ppb
Sulfur	34-1	729.75	803.80	753.28	762.28	4.96	ppb
Terbium	159-1				107		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.07	0.07	0.07	2.76	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	5.64	ppb
Tin	118-1	1.29	1.24	1.26	1.26	1.98	ppb
Titanium	47-1	72.45	73.15	73.75	73.12	0.89	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-14

Instrumnet Name :

P7

Client Sample ID :

ME29E8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:08:25

DataFile Name :

052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.43	1.41	1.42	1.42	0.82	ppb
Vanadium	51-2	13.33	13.68	13.69	13.57	1.51	ppb
Yttrium	89-1				104		%
Yttrium	89-2				98		%
Zinc	66-2	78.32	78.57	77.03	77.98	1.06	ppb
Zirconium	90-1	3.28	3.29	3.20	3.26	1.44	ppb
Zirconium	91-1	3.34	3.25	3.23	3.28	1.81	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-15 Instrumnet Name : P7
Client Sample ID : ME29E9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:11:37 DataFile Name : 053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3295.82	3388.12	3320.15	3334.70	1.43	ppb
Antimony	121-1	0.25	0.26	0.27	0.26	3.16	ppb
Arsenic	75-2	6.85	6.93	6.98	6.92	0.92	ppb
Barium	135-1	20.29	21.96	21.19	21.15	3.97	ppb
Barium	137-1	20.12	21.51	21.57	21.07	3.89	ppb
Beryllium	9-1	0.19	0.24	0.17	0.20	16.68	ppb
Bismuth	209-1				110		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.31	0.44	0.36	0.37	17.53	ppb
Cadmium	106-1	-0.06	-0.81	-0.60	-0.49		ppb
Cadmium	111-1	0.11	0.13	0.14	0.13	13.47	ppb
Calcium	43-1	180707.64	193271.38	191255.88	188411.63	3.58	ppb
Calcium	44-1	179041.50	192077.19	193205.91	188108.20	4.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	10.78	10.70	11.00	10.83	1.47	ppb
Cobalt	59-2	7.25	7.10	7.25	7.20	1.17	ppb
Copper	63-2	16.73	16.83	16.89	16.82	0.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				95		%
Iron	56-2	14365.65	14159.50	14224.74	14249.96	0.74	ppb
Iron	57-2	15494.36	15317.76	15244.68	15352.27	0.84	ppb
Iron	54-2	14427.35	14120.84	14179.41	14242.53	1.14	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-15 Instrumnet Name : P7
Client Sample ID : ME29E9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:11:37 DataFile Name : 053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	8.09	8.61	8.61	8.44	3.54	ppb
Lead	207-1	7.33	7.77	7.81	7.64	3.50	ppb
Lead	208-1	7.62	8.12	8.04	7.93	3.45	ppb
Lithium	6-1				92		%
Magnesium	24-2	42798.78	42513.22	42971.71	42761.24	0.54	ppb
Manganese	55-2	446.73	431.21	432.01	436.65	2.00	ppb
Molybdenum	94-1	6.44	6.97	7.03	6.81	4.78	ppb
Molybdenum	95-1	0.91	0.94	0.93	0.92	2.05	ppb
Molybdenum	96-1	1.57	1.72	1.70	1.66	5.12	ppb
Molybdenum	97-1	0.93	0.95	0.98	0.95	2.42	ppb
Molybdenum	98-1	0.90	0.96	0.96	0.94	3.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	16.24	16.27	15.98	16.16	0.99	ppb
Phosphorus	31-2	388.44	374.84	375.98	379.75	1.99	ppb
Potassium	39-2	373.91	370.60	378.05	374.19	1.00	ppb
Rhodium	103-1				99		%
Rhodium	103-2				95		%
Scandium	45-1				96		%
Scandium	45-2				93		%
Selenium	82-1	0.10	0.01	0.08	0.06	73.84	ppb
Selenium	77-2	4.28	5.11	5.28	4.89	10.93	ppb
Selenium	78-2	0.36	-0.23	0.56	0.23	177.47	ppb
Silicon	28-1	134.63	145.26	140.90	140.26	3.81	ppb
Silver	107-1	0.04	0.04	0.04	0.04	8.39	ppb
Silver	109-1	0.03	0.04	0.04	0.04	3.24	ppb
Sodium	23-2	119.64	116.92	124.35	120.30	3.13	ppb
Strontium	86-1	3063.47	3235.51	3239.83	3179.60	3.16	ppb
Strontium	88-1	3070.10	3249.75	3282.30	3200.72	3.57	ppb
Sulfur	34-1	448.35	676.59	612.60	579.18	20.33	ppb
Terbium	159-1				108		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.08	0.08	0.08	7.70	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	5.03	ppb
Tin	118-1	0.47	0.50	0.49	0.49	3.12	ppb
Titanium	47-1	84.84	90.49	90.68	88.67	3.74	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-15

Instrumnet Name :

P7

Client Sample ID :

ME29E9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:11:37

DataFile Name :

053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.58	1.66	1.66	1.63	2.70	ppb
Vanadium	51-2	16.79	16.61	16.73	16.71	0.55	ppb
Yttrium	89-1				104		%
Yttrium	89-2				97		%
Zinc	66-2	58.63	58.50	59.41	58.85	0.83	ppb
Zirconium	90-1	3.13	3.37	3.38	3.29	4.15	ppb
Zirconium	91-1	3.24	3.41	3.47	3.37	3.52	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-16

Instrumnet Name :

P7

Client Sample ID :

ME29F0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:14:45

DataFile Name :

054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1791.59	1788.79	1787.36	1789.25	0.12	ppb
Antimony	121-1	0.20	0.21	0.21	0.21	4.59	ppb
Arsenic	75-2	7.04	7.25	6.98	7.09	1.97	ppb
Barium	135-1	14.72	15.35	15.44	15.17	2.58	ppb
Barium	137-1	14.91	15.23	15.33	15.16	1.47	ppb
Beryllium	9-1	0.14	0.17	0.16	0.16	9.83	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.34	0.29	0.39	0.34	15.33	ppb
Cadmium	106-1	-0.75	-0.10	-0.77	-0.54		ppb
Cadmium	111-1	0.10	0.12	0.11	0.11	10.05	ppb
Calcium	43-1	158575.44	158480.61	158925.11	158660.39	0.15	ppb
Calcium	44-1	156658.65	159188.68	158554.03	158133.79	0.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.59	5.60	5.62	5.60	0.25	ppb
Cobalt	59-2	4.69	4.61	4.68	4.66	0.87	ppb
Copper	63-2	12.43	12.28	12.24	12.32	0.82	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	56-2	9239.45	9359.88	9249.69	9283.01	0.72	ppb
Iron	57-2	10080.02	10235.77	10039.81	10118.53	1.02	ppb
Iron	54-2	9173.43	9345.35	9345.63	9288.14	1.07	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-16 Instrumnet Name : P7
Client Sample ID : ME29F0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:14:45 DataFile Name : 054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6.66	6.98	6.86	6.83	2.30	ppb
Lead	207-1	5.97	6.11	6.13	6.07	1.40	ppb
Lead	208-1	6.20	6.35	6.36	6.30	1.40	ppb
Lithium	6-1				89		%
Magnesium	24-2	37056.38	37091.07	36335.75	36827.74	1.16	ppb
Manganese	55-2	322.19	327.10	326.13	325.14	0.80	ppb
Molybdenum	94-1	6.03	6.43	6.43	6.30	3.64	ppb
Molybdenum	95-1	1.67	1.75	1.71	1.71	2.29	ppb
Molybdenum	96-1	2.11	2.27	2.28	2.22	4.43	ppb
Molybdenum	97-1	1.67	1.77	1.69	1.71	2.90	ppb
Molybdenum	98-1	1.70	1.74	1.75	1.73	1.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.29	10.43	10.32	10.34	0.70	ppb
Phosphorus	31-2	323.79	320.77	326.40	323.65	0.87	ppb
Potassium	39-2	304.35	297.18	300.56	300.70	1.19	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				95		%
Scandium	45-2				93		%
Selenium	82-1	-0.01	-0.36	0.26	-0.04		ppb
Selenium	77-2	3.40	3.10	3.20	3.23	4.67	ppb
Selenium	78-2	-0.38	0.31	-0.45	-0.17		ppb
Silicon	28-1	112.65	115.04	117.42	115.04	2.07	ppb
Silver	107-1	0.02	0.02	0.02	0.02	5.69	ppb
Silver	109-1	0.01	0.02	0.02	0.02	12.46	ppb
Sodium	23-2	82.43	84.15	79.84	82.14	2.64	ppb
Strontium	86-1	2967.51	3091.14	3123.06	3060.57	2.68	ppb
Strontium	88-1	2985.76	3090.19	3117.36	3064.44	2.27	ppb
Sulfur	34-1	51.38	61.56	61.27	58.07	9.98	ppb
Terbium	159-1				107		%
Terbium	159-2				100		%
Thallium	203-1	0.06	0.05	0.05	0.05	5.66	ppb
Thallium	205-1	0.05	0.05	0.05	0.05	2.36	ppb
Tin	118-1	0.22	0.25	0.23	0.23	5.78	ppb
Titanium	47-1	41.76	42.41	47.44	43.87	7.09	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-16

Instrumnet Name :

P7

Client Sample ID :

ME29F0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:14:45

DataFile Name :

054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.95	1.00	0.99	0.98	2.21	ppb
Vanadium	51-2	7.79	7.87	7.61	7.76	1.67	ppb
Yttrium	89-1				103		%
Yttrium	89-2				97		%
Zinc	66-2	32.94	32.68	32.53	32.71	0.63	ppb
Zirconium	90-1	2.55	2.68	2.67	2.63	2.66	ppb
Zirconium	91-1	2.56	2.70	3.02	2.76	8.54	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-17 Instrumnet Name : P7
Client Sample ID : ME29F1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:17:54 DataFile Name : 055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1955.02	1960.64	1951.31	1955.66	0.24	ppb
Antimony	121-1	0.24	0.23	0.25	0.24	3.45	ppb
Arsenic	75-2	8.12	8.48	8.28	8.29	2.18	ppb
Barium	135-1	16.13	16.37	16.39	16.30	0.90	ppb
Barium	137-1	16.05	16.43	16.37	16.28	1.27	ppb
Beryllium	9-1	0.17	0.20	0.17	0.18	7.95	ppb
Bismuth	209-1				110		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.31	0.30	0.29	0.30	2.70	ppb
Cadmium	106-1	-0.24	-0.60	-1.24	-0.70		ppb
Cadmium	111-1	0.14	0.14	0.15	0.14	4.75	ppb
Calcium	43-1	165903.86	167155.41	169187.42	167415.56	0.99	ppb
Calcium	44-1	164553.19	165118.13	170041.04	166570.79	1.81	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.11	6.15	6.23	6.16	0.98	ppb
Cobalt	59-2	5.20	5.17	5.10	5.16	0.97	ppb
Copper	63-2	12.86	12.90	12.88	12.88	0.16	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				102		%
Indium	115-1				103		%
Indium	115-2				96		%
Iron	56-2	10622.72	10675.51	10743.38	10680.54	0.57	ppb
Iron	57-2	11718.01	11679.06	11802.61	11733.23	0.54	ppb
Iron	54-2	10603.70	10672.62	10528.84	10601.72	0.68	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-17 Instrumnet Name : P7
Client Sample ID : ME29F1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:17:54 DataFile Name : 055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.45	7.62	7.61	7.56	1.26	ppb
Lead	207-1	6.65	6.70	6.75	6.70	0.73	ppb
Lead	208-1	6.96	7.05	7.05	7.02	0.68	ppb
Lithium	6-1				88		%
Magnesium	24-2	40449.52	40511.19	40941.89	40634.20	0.66	ppb
Manganese	55-2	376.75	369.94	366.38	371.02	1.42	ppb
Molybdenum	94-1	7.41	7.31	7.35	7.35	0.66	ppb
Molybdenum	95-1	1.76	1.83	1.80	1.80	1.73	ppb
Molybdenum	96-1	2.43	2.47	2.44	2.45	0.72	ppb
Molybdenum	97-1	1.83	1.84	1.76	1.81	2.28	ppb
Molybdenum	98-1	1.76	1.81	1.84	1.80	2.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.15	11.03	11.39	11.19	1.62	ppb
Phosphorus	31-2	305.45	310.95	304.23	306.88	1.17	ppb
Potassium	39-2	319.81	322.37	321.69	321.29	0.41	ppb
Rhodium	103-1				99		%
Rhodium	103-2				97		%
Scandium	45-1				95		%
Scandium	45-2				94		%
Selenium	82-1	0.27	-0.19	-0.29	-0.07		ppb
Selenium	77-2	3.67	3.09	4.90	3.88	23.79	ppb
Selenium	78-2	0.87	-0.17	0.41	0.37	140.56	ppb
Silicon	28-1	131.10	130.86	133.62	131.86	1.16	ppb
Silver	107-1	0.01	0.02	0.02	0.02	17.73	ppb
Silver	109-1	0.01	0.02	0.02	0.02	13.47	ppb
Sodium	23-2	97.49	93.76	96.16	95.80	1.98	ppb
Strontium	86-1	3205.50	3266.47	3278.23	3250.07	1.20	ppb
Strontium	88-1	3164.66	3297.95	3278.42	3247.01	2.22	ppb
Sulfur	34-1	-2.71	-35.11	59.66	7.28	661.39	ppb
Terbium	159-1				108		%
Terbium	159-2				102		%
Thallium	203-1	0.06	0.06	0.06	0.06	0.75	ppb
Thallium	205-1	0.06	0.06	0.06	0.06	2.17	ppb
Tin	118-1	0.30	0.32	0.30	0.31	4.24	ppb
Titanium	47-1	47.86	48.37	50.30	48.85	2.63	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-17

Instrumnet Name :

P7

Client Sample ID :

ME29F1

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:17:54

DataFile Name :

055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.95	0.96	0.96	0.95	0.58	ppb
Vanadium	51-2	9.15	8.89	9.02	9.02	1.45	ppb
Yttrium	89-1				103		%
Yttrium	89-2				98		%
Zinc	66-2	38.30	37.60	37.41	37.77	1.24	ppb
Zirconium	90-1	3.10	3.20	3.19	3.16	1.72	ppb
Zirconium	91-1	3.12	3.22	3.25	3.19	2.19	ppb

LB Number :	LB133800	Operator :	Jaswal
Lab Sample ID :	P4976-18	Instrumnet Name :	P7
Client Sample ID :	ME29F2	Dilution Factor :	1
Date & Time Acquired :	2024-12-06 15:21:02	DataFile Name :	056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2999.31	3020.37	3007.10	3008.93	0.35	ppb
Antimony	121-1	0.27	0.27	0.28	0.28	2.25	ppb
Arsenic	75-2	5.65	5.55	5.86	5.69	2.81	ppb
Barium	135-1	16.31	15.97	16.13	16.14	1.04	ppb
Barium	137-1	16.25	15.83	16.15	16.08	1.37	ppb
Beryllium	9-1	0.21	0.24	0.20	0.22	10.00	ppb
Bismuth	209-1				110		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.36	0.28	0.47	0.37	25.65	ppb
Cadmium	106-1	-0.45	-0.83	-0.80	-0.70		ppb
Cadmium	111-1	0.20	0.19	0.18	0.19	5.08	ppb
Calcium	43-1	218081.98	212888.76	211632.56	214201.10	1.60	ppb
Calcium	44-1	219869.93	212841.31	211368.67	214693.30	2.12	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	9.41	9.66	9.66	9.58	1.53	ppb
Cobalt	59-2	5.55	5.64	5.55	5.58	0.95	ppb
Copper	63-2	19.25	19.36	19.09	19.23	0.70	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				104		%
Indium	115-1				103		%
Indium	115-2				96		%
Iron	56-2	12079.13	12193.16	12148.50	12140.26	0.47	ppb
Iron	57-2	13266.34	13483.92	13461.83	13404.03	0.89	ppb
Iron	54-2	11991.30	12180.15	12125.48	12098.97	0.80	ppb
Krypton	83-1						cps

LB Number :	LB133800	Operator :	Jaswal
Lab Sample ID :	P4976-18	Instrumnet Name :	P7
Client Sample ID :	ME29F2	Dilution Factor :	1
Date & Time Acquired :	2024-12-06 15:21:02	DataFile Name :	056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	9.98	9.62	9.57	9.72	2.28	ppb
Lead	207-1	8.90	8.72	8.58	8.73	1.87	ppb
Lead	208-1	9.25	8.97	8.93	9.05	1.97	ppb
Lithium	6-1				86		%
Magnesium	24-2	52496.85	51719.12	51635.67	51950.55	0.91	ppb
Manganese	55-2	422.25	416.76	422.98	420.66	0.81	ppb
Molybdenum	94-1	6.88	6.84	6.88	6.87	0.34	ppb
Molybdenum	95-1	1.34	1.32	1.28	1.31	2.35	ppb
Molybdenum	96-1	1.98	1.95	1.97	1.96	0.84	ppb
Molybdenum	97-1	1.31	1.29	1.34	1.31	1.63	ppb
Molybdenum	98-1	1.32	1.28	1.32	1.31	1.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	14.27	14.37	13.97	14.20	1.45	ppb
Phosphorus	31-2	618.89	593.80	594.26	602.32	2.38	ppb
Potassium	39-2	403.49	401.52	403.27	402.76	0.27	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				94		%
Scandium	45-2				93		%
Selenium	82-1	3.57	3.06	3.57	3.40	8.63	ppb
Selenium	77-2	6.72	8.28	8.09	7.70	11.00	ppb
Selenium	78-2	3.97	2.59	2.86	3.14	23.44	ppb
Silicon	28-1	186.54	175.44	177.32	179.77	3.30	ppb
Silver	107-1	0.02	0.03	0.03	0.03	8.39	ppb
Silver	109-1	0.02	0.02	0.02	0.02	3.34	ppb
Sodium	23-2	127.00	129.76	127.45	128.07	1.16	ppb
Strontium	86-1	4003.66	3916.30	3939.87	3953.28	1.14	ppb
Strontium	88-1	4015.03	3918.41	3970.39	3967.94	1.22	ppb
Sulfur	34-1	206.17	-2.13	101.29	101.78	102.33	ppb
Terbium	159-1				109		%
Terbium	159-2				102		%
Thallium	203-1	0.07	0.07	0.08	0.07	2.33	ppb
Thallium	205-1	0.08	0.08	0.07	0.08	2.78	ppb
Tin	118-1	0.33	0.33	0.32	0.33	3.07	ppb
Titanium	47-1	66.76	64.09	64.75	65.20	2.14	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-18

Instrumnet Name :

P7

Client Sample ID :

ME29F2

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:21:02

DataFile Name :

056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.34	1.31	1.31	1.32	1.37	ppb
Vanadium	51-2	14.15	14.25	14.26	14.22	0.43	ppb
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	53.12	52.84	52.52	52.83	0.56	ppb
Zirconium	90-1	3.22	3.10	3.15	3.15	1.94	ppb
Zirconium	91-1	3.27	3.14	3.17	3.19	2.21	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :P4976-19Instrumnet Name :P7

Client Sample ID :ME29F3Dilution Factor :1

Date & Time Acquired :2024-12-06 15:24:12DataFile Name :057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2088.81	2100.96	2067.15	2085.64	0.82	ppb
Antimony	121-1	0.21	0.20	0.20	0.20	2.45	ppb
Arsenic	75-2	2.99	2.94	2.78	2.90	3.79	ppb
Barium	135-1	15.67	15.49	15.93	15.69	1.41	ppb
Barium	137-1	15.75	15.52	15.59	15.62	0.77	ppb
Beryllium	9-1	0.17	0.17	0.14	0.16	11.02	ppb
Bismuth	209-1				112		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.47	0.21	0.43	0.37	37.15	ppb
Cadmium	106-1	-0.26	-1.05	-1.20	-0.84		ppb
Cadmium	111-1	0.09	0.11	0.10	0.10	8.11	ppb
Calcium	43-1	150684.09	151093.33	149780.57	150519.33	0.45	ppb
Calcium	44-1	151714.16	150147.51	150355.35	150739.01	0.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.80	6.71	6.75	6.76	0.67	ppb
Cobalt	59-2	5.20	4.98	5.08	5.09	2.12	ppb
Copper	63-2	11.17	11.04	11.14	11.12	0.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				96		%
Iron	56-2	10321.71	10208.82	10416.19	10315.57	1.01	ppb
Iron	57-2	11204.42	11150.82	11255.02	11203.42	0.47	ppb
Iron	54-2	10343.35	10453.96	10432.46	10409.92	0.56	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-19 Instrumnet Name : P7
Client Sample ID : ME29F3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:24:12 DataFile Name : 057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6.03	6.12	6.16	6.10	1.10	ppb
Lead	207-1	5.44	5.54	5.43	5.47	1.10	ppb
Lead	208-1	5.68	5.73	5.71	5.71	0.39	ppb
Lithium	6-1				88		%
Magnesium	24-2	31188.18	31079.75	30894.47	31054.13	0.48	ppb
Manganese	55-2	346.93	350.99	354.39	350.77	1.06	ppb
Molybdenum	94-1	6.61	6.57	7.05	6.74	3.94	ppb
Molybdenum	95-1	0.85	0.88	0.88	0.87	2.17	ppb
Molybdenum	96-1	1.54	1.55	1.56	1.55	0.77	ppb
Molybdenum	97-1	0.84	0.89	0.87	0.87	3.13	ppb
Molybdenum	98-1	0.87	0.90	0.91	0.89	2.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.50	10.26	10.30	10.35	1.22	ppb
Phosphorus	31-2	370.34	398.64	387.61	385.53	3.70	ppb
Potassium	39-2	279.45	283.94	284.44	282.61	0.97	ppb
Rhodium	103-1				100		%
Rhodium	103-2				97		%
Scandium	45-1				94		%
Scandium	45-2				93		%
Selenium	82-1	0.23	0.55	0.25	0.34	51.34	ppb
Selenium	77-2	4.52	4.27	2.85	3.88	23.26	ppb
Selenium	78-2	-0.16	0.11	-0.85	-0.30		ppb
Silicon	28-1	130.68	132.69	133.61	132.33	1.13	ppb
Silver	107-1	0.02	0.02	0.02	0.02	11.17	ppb
Silver	109-1	0.02	0.02	0.02	0.02	0.48	ppb
Sodium	23-2	80.59	80.41	81.16	80.72	0.49	ppb
Strontium	86-1	3155.81	3187.70	3171.30	3171.60	0.50	ppb
Strontium	88-1	3126.55	3176.55	3186.94	3163.35	1.02	ppb
Sulfur	34-1	180.72	123.70	65.37	123.26	46.79	ppb
Terbium	159-1				109		%
Terbium	159-2				102		%
Thallium	203-1	0.04	0.04	0.04	0.04	4.48	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	2.68	ppb
Tin	118-1	0.25	0.26	0.29	0.27	9.15	ppb
Titanium	47-1	63.46	62.49	61.72	62.56	1.39	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-19

Instrumnet Name :

P7

Client Sample ID :

ME29F3

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:24:12

DataFile Name :

057SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.69	0.70	0.70	0.70	0.71	ppb
Vanadium	51-2	8.63	8.58	8.56	8.59	0.40	ppb
Yttrium	89-1				104		%
Yttrium	89-2				98		%
Zinc	66-2	36.15	35.46	35.13	35.58	1.46	ppb
Zirconium	90-1	3.22	3.29	3.20	3.24	1.37	ppb
Zirconium	91-1	3.25	3.28	3.22	3.25	0.99	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-20 Instrumnet Name : P7
Client Sample ID : ME29F4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:27:19 DataFile Name : 058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2147.59	2125.17	2158.29	2143.68	0.79	ppb
Antimony	121-1	0.32	0.32	0.31	0.32	1.81	ppb
Arsenic	75-2	5.91	5.77	6.29	5.99	4.53	ppb
Barium	135-1	9.97	10.12	10.01	10.03	0.78	ppb
Barium	137-1	9.79	10.26	10.10	10.05	2.40	ppb
Beryllium	9-1	0.14	0.19	0.19	0.17	15.64	ppb
Bismuth	209-1				111		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.51	0.36	0.43	0.43	17.36	ppb
Cadmium	106-1	-0.30	-0.65	-0.95	-0.63		ppb
Cadmium	111-1	0.16	0.16	0.15	0.16	5.90	ppb
Calcium	43-1	208475.65	220933.55	219304.90	216238.03	3.13	ppb
Calcium	44-1	209221.89	222437.06	219415.12	217024.69	3.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.65	7.63	7.75	7.68	0.85	ppb
Cobalt	59-2	5.98	5.96	6.00	5.98	0.35	ppb
Copper	63-2	12.81	12.67	12.96	12.81	1.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	56-2	10096.70	9923.94	10105.91	10042.18	1.02	ppb
Iron	57-2	11525.22	11355.01	11334.12	11404.78	0.92	ppb
Iron	54-2	10140.33	10094.59	10183.18	10139.36	0.44	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-20 Instrumnet Name : P7
Client Sample ID : ME29F4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:27:19 DataFile Name : 058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.29	7.48	7.46	7.41	1.43	ppb
Lead	207-1	6.50	6.73	6.55	6.59	1.82	ppb
Lead	208-1	6.73	6.96	6.92	6.87	1.78	ppb
Lithium	6-1				90		%
Magnesium	24-2	49799.28	49056.22	50058.59	49638.03	1.05	ppb
Manganese	55-2	411.74	407.28	415.03	411.35	0.95	ppb
Molybdenum	94-1	6.32	6.58	6.64	6.52	2.63	ppb
Molybdenum	95-1	1.41	1.45	1.51	1.46	3.19	ppb
Molybdenum	96-1	1.99	2.09	2.07	2.05	2.68	ppb
Molybdenum	97-1	1.42	1.49	1.45	1.46	2.51	ppb
Molybdenum	98-1	1.42	1.49	1.50	1.47	3.27	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.68	12.42	12.56	12.55	1.07	ppb
Phosphorus	31-2	331.64	326.22	333.39	330.42	1.13	ppb
Potassium	39-2	383.62	378.97	392.55	385.05	1.79	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	0.44	0.46	0.39	0.43	7.30	ppb
Selenium	77-2	3.70	3.78	2.65	3.38	18.57	ppb
Selenium	78-2	0.16	0.21	0.28	0.21	27.72	ppb
Silicon	28-1	127.29	139.76	132.18	133.08	4.72	ppb
Silver	107-1	0.01	0.02	0.02	0.02	21.37	ppb
Silver	109-1	0.01	0.01	0.02	0.01	11.04	ppb
Sodium	23-2	114.02	114.30	117.94	115.42	1.89	ppb
Strontium	86-1	3990.68	4153.70	4153.05	4099.15	2.29	ppb
Strontium	88-1	3989.84	4201.86	4162.70	4118.13	2.74	ppb
Sulfur	34-1	99.93	216.34	191.37	169.21	36.22	ppb
Terbium	159-1				110		%
Terbium	159-2				102		%
Thallium	203-1	0.07	0.08	0.07	0.07	2.61	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	1.49	ppb
Tin	118-1	0.22	0.21	0.20	0.21	2.93	ppb
Titanium	47-1	45.54	47.60	49.25	47.46	3.91	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-20

Instrumnet Name :

P7

Client Sample ID :

ME29F4

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:27:19

DataFile Name :

058SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.11	1.13	1.12	1.12	0.67	ppb
Vanadium	51-2	9.69	9.60	9.66	9.65	0.45	ppb
Yttrium	89-1				105		%
Yttrium	89-2				99		%
Zinc	66-2	36.47	36.67	36.42	36.52	0.37	ppb
Zirconium	90-1	2.87	2.96	3.01	2.95	2.46	ppb
Zirconium	91-1	2.83	3.04	2.93	2.93	3.62	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-21 Instrumnet Name : P7
Client Sample ID : ME29F5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:30:30 DataFile Name : 059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2088.93	2098.14	2106.75	2097.94	0.42	ppb
Antimony	121-1	0.32	0.31	0.32	0.32	2.93	ppb
Arsenic	75-2	6.34	6.27	6.28	6.30	0.65	ppb
Barium	135-1	10.35	10.26	10.69	10.43	2.21	ppb
Barium	137-1	10.46	10.11	10.34	10.30	1.76	ppb
Beryllium	9-1	0.17	0.18	0.20	0.18	7.97	ppb
Bismuth	209-1				111		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.31	0.24	0.37	0.31	21.19	ppb
Cadmium	106-1	-0.16	-0.40	-0.55	-0.37		ppb
Cadmium	111-1	0.13	0.14	0.14	0.14	4.60	ppb
Calcium	43-1	174299.03	172520.83	173473.10	173430.99	0.51	ppb
Calcium	44-1	174982.77	170943.51	174071.78	173332.68	1.22	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.60	7.73	7.65	7.66	0.80	ppb
Cobalt	59-2	5.92	6.00	5.95	5.96	0.62	ppb
Copper	63-2	14.26	14.20	14.09	14.18	0.64	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	56-2	9883.99	9789.77	9655.18	9776.31	1.18	ppb
Iron	57-2	10862.56	10797.88	10845.98	10835.47	0.31	ppb
Iron	54-2	9870.04	9855.50	9729.29	9818.28	0.79	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-21 Instrumnet Name : P7
Client Sample ID : ME29F5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:30:30 DataFile Name : 059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.30	7.07	7.37	7.25	2.13	ppb
Lead	207-1	6.45	6.28	6.48	6.40	1.68	ppb
Lead	208-1	6.72	6.52	6.81	6.68	2.20	ppb
Lithium	6-1				89		%
Magnesium	24-2	40893.05	41142.80	40545.83	40860.56	0.73	ppb
Manganese	55-2	349.54	347.94	347.97	348.48	0.26	ppb
Molybdenum	94-1	6.04	6.03	6.32	6.13	2.67	ppb
Molybdenum	95-1	1.94	1.91	1.97	1.94	1.65	ppb
Molybdenum	96-1	2.44	2.35	2.48	2.42	2.78	ppb
Molybdenum	97-1	1.91	1.85	1.97	1.91	3.10	ppb
Molybdenum	98-1	1.95	1.93	2.01	1.96	2.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.34	12.80	12.99	13.04	2.13	ppb
Phosphorus	31-2	326.64	337.47	332.13	332.08	1.63	ppb
Potassium	39-2	404.60	400.79	398.99	401.46	0.71	ppb
Rhodium	103-1				100		%
Rhodium	103-2				97		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	0.95	-0.08	0.30	0.39	134.31	ppb
Selenium	77-2	4.67	3.61	3.57	3.95	15.84	ppb
Selenium	78-2	-0.05	0.80	0.34	0.36	116.09	ppb
Silicon	28-1	151.26	121.89	134.20	135.78	10.86	ppb
Silver	107-1	0.02	0.02	0.02	0.02	5.17	ppb
Silver	109-1	0.02	0.01	0.01	0.01	5.41	ppb
Sodium	23-2	111.26	109.22	109.20	109.89	1.08	ppb
Strontium	86-1	3339.92	3260.84	3364.09	3321.62	1.63	ppb
Strontium	88-1	3352.60	3307.74	3364.89	3341.74	0.90	ppb
Sulfur	34-1	175.91	48.05	131.78	118.58	54.77	ppb
Terbium	159-1				109		%
Terbium	159-2				103		%
Thallium	203-1	0.07	0.07	0.07	0.07	2.24	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	5.33	ppb
Tin	118-1	0.24	0.24	0.25	0.24	3.26	ppb
Titanium	47-1	45.10	43.99	47.86	45.65	4.36	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-21

Instrumnet Name :

P7

Client Sample ID :

ME29F5

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:30:30

DataFile Name :

059SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.10	1.09	1.13	1.11	1.83	ppb
Vanadium	51-2	8.90	8.97	8.83	8.90	0.83	ppb
Yttrium	89-1				105		%
Yttrium	89-2				98		%
Zinc	66-2	53.49	54.22	53.13	53.62	1.03	ppb
Zirconium	90-1	2.52	2.45	2.56	2.51	2.23	ppb
Zirconium	91-1	2.50	2.48	2.56	2.52	1.67	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV003

Instrumnet Name :

P7

Client Sample ID :

CCV003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:33:38

DataFile Name :

060CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50831.17	60778.87	50109.62	53906.55	11.06	ppb
Antimony	121-1	485.59	495.79	498.16	493.18	1.35	ppb
Arsenic	75-2	486.31	598.04	480.14	521.50	12.72	ppb
Barium	135-1	2439.00	2456.22	2486.36	2460.52	0.97	ppb
Barium	137-1	2420.76	2430.81	2455.93	2435.83	0.74	ppb
Beryllium	9-1	464.87	482.57	480.44	475.96	2.03	ppb
Bismuth	209-1				100		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	497.88	500.64	509.92	502.81	1.25	ppb
Cadmium	106-1	500.05	500.71	511.03	503.93	1.22	ppb
Cadmium	111-1	508.43	505.49	519.37	511.10	1.43	ppb
Calcium	43-1	245901.77	250046.68	248909.24	248285.89	0.86	ppb
Calcium	44-1	243932.58	247199.20	247430.18	246187.32	0.79	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	497.35	602.73	486.54	528.88	12.14	ppb
Cobalt	59-2	507.64	621.94	496.10	541.89	12.84	ppb
Copper	63-2	5091.89	6200.27	5016.93	5436.36	12.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				93		%
Indium	115-1				93		%
Indium	115-2				84		%
Iron	56-2	127878.33	154771.27	126766.54	136472.05	11.62	ppb
Iron	57-2	129490.96	155739.76	126487.25	137239.32	11.73	ppb
Iron	54-2	127815.21	154034.42	126412.67	136087.43	11.43	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV003

Instrumnet Name :

P7

Client Sample ID :

CCV003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:33:38

DataFile Name :

060CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2527.97	2522.39	2539.31	2529.89	0.34	ppb
Lead	207-1	2496.49	2491.58	2499.06	2495.71	0.15	ppb
Lead	208-1	2499.86	2495.33	2513.72	2502.97	0.38	ppb
Lithium	6-1				87		%
Magnesium	24-2	255090.12	306638.57	249796.05	270508.25	11.61	ppb
Manganese	55-2	4846.18	5893.19	4778.60	5172.66	12.08	ppb
Molybdenum	94-1	5000.15	5073.89	4991.97	5022.00	0.90	ppb
Molybdenum	95-1	4945.40	5045.63	5007.65	4999.56	1.01	ppb
Molybdenum	96-1	4966.08	5063.49	5038.29	5022.62	1.01	ppb
Molybdenum	97-1	4993.81	5066.07	5028.63	5029.50	0.72	ppb
Molybdenum	98-1	5011.25	5035.48	5022.84	5023.19	0.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	494.22	596.03	483.03	524.43	11.87	ppb
Phosphorus	31-2	9816.26	11721.34	9622.96	10386.85	11.17	ppb
Potassium	39-2	124051.55	150950.44	122786.17	132596.05	12.00	ppb
Rhodium	103-1				89		%
Rhodium	103-2				82		%
Scandium	45-1				91		%
Scandium	45-2				84		%
Selenium	82-1	496.72	506.56	500.29	501.19	0.99	ppb
Selenium	77-2	479.51	599.81	492.59	523.97	12.60	ppb
Selenium	78-2	490.00	599.25	480.45	523.23	12.61	ppb
Silicon	28-1	503.18	503.55	515.56	507.43	1.39	ppb
Silver	107-1	499.43	500.28	507.74	502.48	0.91	ppb
Silver	109-1	496.76	494.43	508.08	499.76	1.46	ppb
Sodium	23-2	248743.35	301906.95	247370.41	266006.90	11.69	ppb
Strontium	86-1	12318.58	12407.66	12384.32	12370.18	0.37	ppb
Strontium	88-1	12399.16	12582.10	12387.77	12456.34	0.88	ppb
Sulfur	34-1	8736.45	8818.90	8840.61	8798.65	0.62	ppb
Terbium	159-1				102		%
Terbium	159-2				92		%
Thallium	203-1	504.58	499.55	510.73	504.95	1.11	ppb
Thallium	205-1	503.43	506.54	508.65	506.20	0.52	ppb
Tin	118-1	483.56	487.30	495.26	488.71	1.22	ppb
Titanium	47-1	4877.42	4851.83	4900.17	4876.47	0.50	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV003

Instrumnet Name :

P7

Client Sample ID :

CCV003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:33:38

DataFile Name :

060CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	501.37	493.02	502.74	499.04	1.05	ppb
Vanadium	51-2	499.89	609.28	496.43	535.20	11.99	ppb
Yttrium	89-1				95		%
Yttrium	89-2				87		%
Zinc	66-2	5047.19	6157.45	5010.62	5405.09	12.06	ppb
Zirconium	90-1	493.49	504.20	493.19	496.96	1.26	ppb
Zirconium	91-1	491.88	503.69	496.82	497.46	1.19	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCB003Instrumnet Name :P7

Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired :2024-12-06 15:36:21DataFile Name :061CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-15.18	-15.61	-15.57	-15.45		ppb
Antimony	121-1	0.27	0.24	0.21	0.24	11.02	ppb
Arsenic	75-2	0.00	0.03	0.01	0.01	93.18	ppb
Barium	135-1	0.39	0.17	0.13	0.23	60.96	ppb
Barium	137-1	0.33	0.16	0.13	0.21	50.87	ppb
Beryllium	9-1	0.11	0.09	0.07	0.09	27.96	ppb
Bismuth	209-1				108		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.15	0.04	0.00	0.06	129.52	ppb
Cadmium	106-1	-1.32	-1.16	-1.86	-1.45		ppb
Cadmium	111-1	0.11	0.05	0.03	0.06	64.80	ppb
Calcium	43-1	-55.77	-68.20	-72.89	-65.62		ppb
Calcium	44-1	-53.31	-70.47	-74.97	-66.25		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.06	0.03	0.03	88.01	ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	27.20	ppb
Copper	63-2	0.22	0.20	0.15	0.19	19.71	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				98		%
Indium	115-1				99		%
Indium	115-2				94		%
Iron	56-2	-41.62	-42.69	-43.55	-42.62		ppb
Iron	57-2	-38.71	-40.35	-41.07	-40.05		ppb
Iron	54-2	-42.42	-43.09	-42.96	-42.83		ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB003 Instrumnet Name : P7
Client Sample ID : CCB003 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:36:21 DataFile Name : 061CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.47	0.39	0.36	0.41	13.19	ppb
Lead	207-1	0.41	0.41	0.32	0.38	13.07	ppb
Lead	208-1	0.45	0.39	0.35	0.40	11.96	ppb
Lithium	6-1				90		%
Magnesium	24-2	-78.22	-79.40	-81.13	-79.58		ppb
Manganese	55-2	0.24	0.20	0.17	0.20	18.28	ppb
Molybdenum	94-1	0.55	0.48	0.38	0.47	18.82	ppb
Molybdenum	95-1	0.53	0.45	0.34	0.44	21.66	ppb
Molybdenum	96-1	0.51	0.44	0.34	0.43	20.00	ppb
Molybdenum	97-1	0.48	0.43	0.31	0.41	20.44	ppb
Molybdenum	98-1	0.56	0.43	0.32	0.44	27.34	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	0.02	0.00	0.02	84.60	ppb
Phosphorus	31-2	-13.54	-11.80	-13.68	-13.01		ppb
Potassium	39-2	-34.90	-34.50	-36.63	-35.34		ppb
Rhodium	103-1				97		%
Rhodium	103-2				95		%
Scandium	45-1				91		%
Scandium	45-2				89		%
Selenium	82-1	0.25	0.00	-0.35	-0.03		ppb
Selenium	77-2	0.08	-0.03	0.08	0.04	161.84	ppb
Selenium	78-2	-0.65	-0.52	-0.41	-0.53		ppb
Silicon	28-1	-1.30	-0.90	-1.02	-1.07		ppb
Silver	107-1	0.15	0.09	0.07	0.10	42.33	ppb
Silver	109-1	0.18	0.09	0.07	0.11	54.41	ppb
Sodium	23-2	-60.39	-62.76	-63.63	-62.26		ppb
Strontium	86-1	1.01	0.65	0.32	0.66	52.20	ppb
Strontium	88-1	1.25	0.92	0.75	0.97	26.15	ppb
Sulfur	34-1	-123.49	40.00	24.75	-19.58		ppb
Terbium	159-1				101		%
Terbium	159-2				98		%
Thallium	203-1	0.13	0.10	0.08	0.10	22.14	ppb
Thallium	205-1	0.12	0.10	0.09	0.10	17.91	ppb
Tin	118-1	0.15	0.07	0.06	0.09	52.39	ppb
Titanium	47-1	0.48	0.41	0.31	0.40	20.99	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB003

Instrumnet Name :

P7

Client Sample ID :

CCB003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:36:21

DataFile Name :

061CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.03	0.02	0.03	22.95	ppb
Vanadium	51-2	0.01	0.02	0.02	0.02	3.90	ppb
Yttrium	89-1				96		%
Yttrium	89-2				92		%
Zinc	66-2	0.33	0.36	0.35	0.35	3.83	ppb
Zirconium	90-1	0.08	0.07	0.06	0.07	15.67	ppb
Zirconium	91-1	0.09	0.06	0.06	0.07	23.14	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-10

Instrumnet Name :

P7

Client Sample ID :

ME29E4S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 16:46:55

DataFile Name :

062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2831.13	2826.40	2800.77	2819.43	0.58	ppb
Antimony	121-1	20.11	21.05	20.89	20.68	2.43	ppb
Arsenic	75-2	34.02	35.02	34.63	34.56	1.46	ppb
Barium	135-1	391.27	412.91	419.39	407.86	3.61	ppb
Barium	137-1	397.42	408.25	414.21	406.63	2.09	ppb
Beryllium	9-1	9.90	10.04	10.71	10.22	4.23	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	9.26	10.19	9.00	9.48	6.61	ppb
Cadmium	106-1	7.84	6.19	6.61	6.88	12.50	ppb
Cadmium	111-1	10.15	10.57	10.71	10.48	2.77	ppb
Calcium	43-1	190731.71	200484.81	204826.75	198681.09	3.63	ppb
Calcium	44-1	190762.95	201050.62	203865.55	198559.71	3.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48.42	48.63	48.02	48.35	0.64	ppb
Cobalt	59-2	107.04	108.34	105.79	107.06	1.19	ppb
Copper	63-2	61.62	62.43	61.69	61.92	0.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				96		%
Indium	115-2				93		%
Iron	56-2	10795.99	10980.89	10705.06	10827.31	1.30	ppb
Iron	57-2	11956.13	12162.14	11865.58	11994.62	1.27	ppb
Iron	54-2	10902.30	11057.02	10822.55	10927.29	1.09	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-10

Instrumnet Name :

P7

Client Sample ID :

ME29E4S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 16:46:55

DataFile Name :

062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	11.12	11.24	11.29	11.21	0.78	ppb
Lead	207-1	10.14	10.27	10.35	10.25	1.03	ppb
Lead	208-1	10.50	10.64	10.71	10.61	1.02	ppb
Lithium	6-1				90		%
Magnesium	24-2	53423.44	53797.16	52681.79	53300.80	1.07	ppb
Manganese	55-2	660.80	654.49	641.82	652.37	1.48	ppb
Molybdenum	94-1	7.62	7.81	8.00	7.81	2.45	ppb
Molybdenum	95-1	2.79	2.96	2.90	2.88	2.91	ppb
Molybdenum	96-1	3.30	3.44	3.58	3.44	4.05	ppb
Molybdenum	97-1	2.78	2.86	2.92	2.85	2.39	ppb
Molybdenum	98-1	2.77	2.91	2.96	2.88	3.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	112.29	113.81	112.11	112.73	0.83	ppb
Phosphorus	31-2	398.88	393.98	385.98	392.95	1.66	ppb
Potassium	39-2	344.03	346.13	361.49	350.55	2.72	ppb
Rhodium	103-1				93		%
Rhodium	103-2				92		%
Scandium	45-1				96		%
Scandium	45-2				92		%
Selenium	82-1	20.08	20.70	21.11	20.63	2.51	ppb
Selenium	77-2	23.49	23.37	22.89	23.25	1.38	ppb
Selenium	78-2	17.69	19.30	18.92	18.64	4.51	ppb
Silicon	28-1	97.49	102.49	103.19	101.06	3.07	ppb
Silver	107-1	9.84	10.25	10.22	10.11	2.26	ppb
Silver	109-1	9.87	10.20	10.32	10.13	2.29	ppb
Sodium	23-2	112.39	115.62	113.41	113.81	1.45	ppb
Strontium	86-1	3531.50	3621.91	3703.84	3619.08	2.38	ppb
Strontium	88-1	3586.60	3716.30	3710.06	3670.99	1.99	ppb
Sulfur	34-1	2090.86	2475.40	2668.09	2411.45	12.19	ppb
Terbium	159-1				100		%
Terbium	159-2				98		%
Thallium	203-1	9.73	10.07	10.14	9.98	2.21	ppb
Thallium	205-1	9.79	10.07	10.01	9.96	1.50	ppb
Tin	118-1	0.22	0.21	0.19	0.20	8.94	ppb
Titanium	47-1	163.70	170.63	177.54	170.62	4.06	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-10

Instrumnet Name :

P7

Client Sample ID :

ME29E4S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 16:46:55

DataFile Name :

062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.38	1.43	1.47	1.43	3.15	ppb
Vanadium	51-2	111.58	112.78	111.43	111.93	0.66	ppb
Yttrium	89-1				99		%
Yttrium	89-2				96		%
Zinc	66-2	137.92	140.88	137.64	138.81	1.29	ppb
Zirconium	90-1	2.91	3.03	3.05	3.00	2.52	ppb
Zirconium	91-1	3.48	3.09	3.12	3.23	6.78	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCV004Instrumnet Name :P7

Client Sample ID :CCV004Dilution Factor :1

Date & Time Acquired :2024-12-06 17:03:37DataFile Name :064CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50745.72	51491.40	50761.32	50999.48	0.84	ppb
Antimony	121-1	467.55	502.43	509.49	493.16	4.55	ppb
Arsenic	75-2	490.06	495.48	492.22	492.59	0.55	ppb
Barium	135-1	2299.36	2482.08	2492.98	2424.81	4.49	ppb
Barium	137-1	2286.97	2487.00	2493.28	2422.41	4.84	ppb
Beryllium	9-1	470.37	511.33	512.14	497.95	4.80	ppb
Bismuth	209-1				94		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	473.10	513.85	520.69	502.55	5.12	ppb
Cadmium	106-1	472.79	508.69	524.11	501.86	5.25	ppb
Cadmium	111-1	484.22	521.36	523.51	509.69	4.33	ppb
Calcium	43-1	227241.62	249117.17	252344.15	242900.98	5.62	ppb
Calcium	44-1	227408.83	248137.48	252184.32	242576.88	5.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	487.27	500.10	488.78	492.05	1.43	ppb
Cobalt	59-2	508.75	502.96	509.05	506.92	0.68	ppb
Copper	63-2	4998.38	5056.36	5014.83	5023.19	0.59	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				95		%
Indium	115-1				90		%
Indium	115-2				86		%
Iron	56-2	127690.05	127643.41	128125.49	127819.65	0.21	ppb
Iron	57-2	128501.43	128001.36	128579.96	128360.92	0.24	ppb
Iron	54-2	126361.35	127255.20	127686.84	127101.13	0.53	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV004

Instrumnet Name :

P7

Client Sample ID :

CCV004

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:03:37

DataFile Name :

064CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2388.58	2526.34	2553.76	2489.56	3.56	ppb
Lead	207-1	2363.76	2484.83	2533.02	2460.53	3.54	ppb
Lead	208-1	2367.57	2494.41	2523.63	2461.87	3.37	ppb
Lithium	6-1				87		%
Magnesium	24-2	253155.02	256288.26	254193.20	254545.49	0.63	ppb
Manganese	55-2	4850.90	4872.48	4874.81	4866.06	0.27	ppb
Molybdenum	94-1	4672.15	5092.34	5057.25	4940.58	4.72	ppb
Molybdenum	95-1	4665.87	5045.82	5032.61	4914.77	4.39	ppb
Molybdenum	96-1	4686.28	5076.46	5051.71	4938.15	4.42	ppb
Molybdenum	97-1	4671.97	5020.52	5049.84	4914.11	4.28	ppb
Molybdenum	98-1	4677.16	5030.45	5021.45	4909.69	4.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	488.66	488.97	487.31	488.32	0.18	ppb
Phosphorus	31-2	9918.72	10025.61	9848.12	9930.82	0.90	ppb
Potassium	39-2	124683.29	125793.51	124857.94	125111.58	0.48	ppb
Rhodium	103-1				87		%
Rhodium	103-2				84		%
Scandium	45-1				92		%
Scandium	45-2				88		%
Selenium	82-1	466.21	504.82	506.97	492.67	4.66	ppb
Selenium	77-2	493.91	494.90	492.55	493.79	0.24	ppb
Selenium	78-2	484.16	495.60	495.91	491.89	1.36	ppb
Silicon	28-1	475.51	521.82	525.05	507.46	5.46	ppb
Silver	107-1	476.67	518.75	515.96	503.79	4.67	ppb
Silver	109-1	472.93	517.29	514.85	501.69	4.97	ppb
Sodium	23-2	252168.75	252775.10	253116.96	252686.94	0.19	ppb
Strontium	86-1	11553.27	12641.93	12576.78	12257.33	4.98	ppb
Strontium	88-1	11569.70	12517.99	12472.17	12186.62	4.39	ppb
Sulfur	34-1	8187.73	8942.94	9187.21	8772.63	5.94	ppb
Terbium	159-1				97		%
Terbium	159-2				93		%
Thallium	203-1	482.57	510.63	514.85	502.68	3.49	ppb
Thallium	205-1	486.20	513.30	514.14	504.55	3.15	ppb
Tin	118-1	456.88	497.81	500.85	485.18	5.06	ppb
Titanium	47-1	4551.44	4922.18	4944.33	4805.98	4.59	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV004

Instrumnet Name :

P7

Client Sample ID :

CCV004

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:03:37

DataFile Name :

064CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	470.02	501.56	507.79	493.12	4.11	ppb
Vanadium	51-2	491.36	492.83	493.22	492.47	0.20	ppb
Yttrium	89-1				93		%
Yttrium	89-2				90		%
Zinc	66-2	4980.36	5062.98	5019.21	5020.85	0.82	ppb
Zirconium	90-1	462.95	500.24	504.86	489.35	4.70	ppb
Zirconium	91-1	469.13	502.18	512.16	494.49	4.55	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCB004Instrumnet Name :P7

Client Sample ID :CCB004Dilution Factor :1

Date & Time Acquired :2024-12-06 17:06:18DataFile Name :065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-11.13	-11.66	-13.07	-11.95		ppb
Antimony	121-1	0.29	0.26	0.21	0.25	15.85	ppb
Arsenic	75-2	0.06	0.06	0.02	0.05	42.93	ppb
Barium	135-1	0.44	0.37	0.33	0.38	14.25	ppb
Barium	137-1	0.46	0.38	0.33	0.39	16.27	ppb
Beryllium	9-1	0.13	0.08	0.09	0.10	25.48	ppb
Bismuth	209-1				100		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.16	0.02	0.05	0.08	95.03	ppb
Cadmium	106-1	-1.82	-1.81	-2.15	-1.93		ppb
Cadmium	111-1	0.11	0.10	0.08	0.10	15.01	ppb
Calcium	43-1	-35.83	-45.01	-50.14	-43.66		ppb
Calcium	44-1	-37.43	-44.84	-50.44	-44.23		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.10	0.08	0.07	0.08	20.83	ppb
Cobalt	59-2	0.05	0.04	0.04	0.04	6.37	ppb
Copper	63-2	0.57	0.51	0.40	0.49	17.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				96		%
Indium	115-1				94		%
Indium	115-2				93		%
Iron	56-2	-32.37	-34.34	-36.34	-34.35		ppb
Iron	57-2	-28.75	-31.82	-33.29	-31.28		ppb
Iron	54-2	-32.54	-33.66	-36.65	-34.28		ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB004

Instrumnet Name :

P7

Client Sample ID :

CCB004

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:06:18

DataFile Name :

065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.48	0.43	0.40	0.44	9.10	ppb
Lead	207-1	0.48	0.43	0.37	0.43	12.64	ppb
Lead	208-1	0.49	0.43	0.38	0.43	11.91	ppb
Lithium	6-1				87		%
Magnesium	24-2	-61.07	-64.76	-67.43	-64.42		ppb
Manganese	55-2	0.53	0.47	0.40	0.47	13.42	ppb
Molybdenum	94-1	1.09	0.92	0.82	0.94	14.55	ppb
Molybdenum	95-1	0.99	0.88	0.78	0.88	11.78	ppb
Molybdenum	96-1	1.04	0.83	0.79	0.89	15.29	ppb
Molybdenum	97-1	1.00	0.86	0.78	0.88	12.60	ppb
Molybdenum	98-1	1.01	0.87	0.80	0.89	12.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.09	0.07	0.04	0.07	38.74	ppb
Phosphorus	31-2	-13.16	-12.53	-16.63	-14.11		ppb
Potassium	39-2	-32.04	-33.80	-35.38	-33.74		ppb
Rhodium	103-1				92		%
Rhodium	103-2				93		%
Scandium	45-1				89		%
Scandium	45-2				89		%
Selenium	82-1	0.38	-0.20	-0.41	-0.08		ppb
Selenium	77-2	-0.03	-0.03	0.08	0.00	2278.54	ppb
Selenium	78-2	-0.95	-0.43	0.08	-0.44		ppb
Silicon	28-1	0.65	0.39	0.05	0.37	82.16	ppb
Silver	107-1	0.17	0.14	0.11	0.14	19.93	ppb
Silver	109-1	0.17	0.14	0.12	0.14	18.72	ppb
Sodium	23-2	-56.38	-59.21	-63.11	-59.57		ppb
Strontium	86-1	2.45	2.31	1.37	2.04	28.64	ppb
Strontium	88-1	2.37	2.02	1.89	2.09	12.04	ppb
Sulfur	34-1	10.80	6.81	-20.31	-0.90		ppb
Terbium	159-1				95		%
Terbium	159-2				94		%
Thallium	203-1	0.19	0.19	0.17	0.18	6.83	ppb
Thallium	205-1	0.20	0.17	0.15	0.18	13.83	ppb
Tin	118-1	0.13	0.12	0.08	0.11	23.89	ppb
Titanium	47-1	0.98	0.83	0.67	0.83	19.10	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB004

Instrumnet Name :

P7

Client Sample ID :

CCB004

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:06:18

DataFile Name :

065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.08	0.07	0.06	0.07	15.74	ppb
Vanadium	51-2	0.05	0.05	0.04	0.05	18.98	ppb
Yttrium	89-1				92		%
Yttrium	89-2				92		%
Zinc	66-2	0.82	0.70	0.65	0.72	12.13	ppb
Zirconium	90-1	0.15	0.12	0.11	0.13	17.99	ppb
Zirconium	91-1	0.13	0.14	0.11	0.12	11.15	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-03A

Instrumnet Name :

P7

Client Sample ID :

ME29F8A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:21:52

DataFile Name :

066SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2122.19	2112.84	2107.57	2114.20	0.35	ppb
Antimony	121-1	0.28	0.28	0.28	0.28	0.56	ppb
Arsenic	75-2	5.43	5.23	5.30	5.32	1.87	ppb
Barium	135-1	13.97	14.32	13.94	14.08	1.52	ppb
Barium	137-1	13.76	14.22	13.91	13.96	1.69	ppb
Beryllium	9-1	0.17	0.18	0.19	0.18	6.77	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.28	0.30	0.41	0.33	21.88	ppb
Cadmium	106-1	-1.82	-1.67	-1.95	-1.81		ppb
Cadmium	111-1	0.15	0.18	0.15	0.16	11.94	ppb
Calcium	43-1	204210.26	207480.87	206593.49	206094.88	0.82	ppb
Calcium	44-1	204172.60	208398.35	203421.77	205330.91	1.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.81	8.76	8.80	8.79	0.33	ppb
Cobalt	59-2	5.19	5.22	5.17	5.19	0.49	ppb
Copper	63-2	13.84	13.73	13.63	13.73	0.77	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				95		%
Iron	56-2	7222.86	7134.81	7165.75	7174.47	0.62	ppb
Iron	57-2	8475.15	8441.43	8269.01	8395.19	1.32	ppb
Iron	54-2	7241.79	7115.77	7147.57	7168.37	0.91	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03A Instrumnet Name : P7
Client Sample ID : ME29F8A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:21:52 DataFile Name : 066SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	22.85	23.28	23.22	23.12	1.00	ppb
Lead	207-1	21.97	22.20	21.94	22.04	0.64	ppb
Lead	208-1	22.10	22.49	22.34	22.31	0.87	ppb
Lithium	6-1				90		%
Magnesium	24-2	54534.75	53447.82	53791.15	53924.57	1.03	ppb
Manganese	55-2	343.58	340.38	336.44	340.14	1.05	ppb
Molybdenum	94-1	5.50	5.60	5.44	5.51	1.40	ppb
Molybdenum	95-1	0.86	0.88	0.88	0.87	1.21	ppb
Molybdenum	96-1	1.37	1.42	1.39	1.39	1.81	ppb
Molybdenum	97-1	0.81	0.83	0.83	0.82	1.92	ppb
Molybdenum	98-1	0.87	0.84	0.87	0.86	1.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.47	13.43	13.32	13.40	0.59	ppb
Phosphorus	31-2	310.21	286.15	310.40	302.25	4.61	ppb
Potassium	39-2	316.51	318.68	314.52	316.57	0.66	ppb
Rhodium	103-1				94		%
Rhodium	103-2				94		%
Scandium	45-1				95		%
Scandium	45-2				93		%
Selenium	82-1	1.29	0.89	0.70	0.96	31.41	ppb
Selenium	77-2	3.26	4.36	4.21	3.94	15.09	ppb
Selenium	78-2	-0.30	0.89	0.18	0.26	232.37	ppb
Silicon	28-1	145.14	136.10	143.41	141.55	3.39	ppb
Silver	107-1	0.09	0.07	0.05	0.07	21.41	ppb
Silver	109-1	0.09	0.06	0.06	0.07	21.59	ppb
Sodium	23-2	119.64	120.50	120.86	120.33	0.52	ppb
Strontium	86-1	3926.43	3987.20	3952.88	3955.51	0.77	ppb
Strontium	88-1	3990.75	4016.91	4017.46	4008.37	0.38	ppb
Sulfur	34-1	349.50	516.40	506.72	457.54	20.48	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	0.35	0.27	0.23	0.28	22.06	ppb
Thallium	205-1	0.35	0.26	0.22	0.28	22.67	ppb
Tin	118-1	0.19	0.21	0.20	0.20	4.85	ppb
Titanium	47-1	50.66	52.95	52.81	52.14	2.46	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-03A

Instrumnet Name :

P7

Client Sample ID :

ME29F8A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:21:52

DataFile Name :

066SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.25	1.30	1.29	1.28	2.01	ppb
Vanadium	51-2	9.97	9.89	9.84	9.90	0.64	ppb
Yttrium	89-1				100		%
Yttrium	89-2				97		%
Zinc	66-2	36.66	36.14	36.21	36.33	0.78	ppb
Zirconium	90-1	2.62	2.68	2.65	2.65	1.09	ppb
Zirconium	91-1	2.63	2.62	2.64	2.63	0.47	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08ARE Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:25:01 DataFile Name : 067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2431.20	2504.64	2454.30	2463.38	1.52	ppb
Antimony	121-1	0.29	0.31	0.30	0.30	3.94	ppb
Arsenic	75-2	117.69	118.64	116.72	117.69	0.82	ppb
Barium	135-1	15.10	15.32	15.44	15.29	1.14	ppb
Barium	137-1	15.02	15.45	15.27	15.25	1.42	ppb
Beryllium	9-1	0.23	0.19	0.19	0.20	11.85	ppb
Bismuth	209-1				106		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.25	0.38	0.43	0.35	25.30	ppb
Cadmium	106-1	0.39	-0.46	-1.37	-0.48		ppb
Cadmium	111-1	0.14	0.13	0.13	0.14	3.74	ppb
Calcium	43-1	196255.66	200985.43	201104.80	199448.63	1.39	ppb
Calcium	44-1	196908.45	198888.80	203153.98	199650.41	1.60	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.73	7.96	7.99	7.89	1.77	ppb
Cobalt	59-2	6.48	6.48	6.47	6.47	0.05	ppb
Copper	63-2	15.09	14.86	14.90	14.95	0.82	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				95		%
Iron	56-2	10525.82	10725.40	10735.75	10662.32	1.11	ppb
Iron	57-2	11629.63	11770.13	11939.74	11779.83	1.32	ppb
Iron	54-2	10522.20	10807.41	10637.73	10655.78	1.35	ppb
Krypton	83-1						cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08ARE Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:25:01 DataFile Name : 067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	23.00	23.21	23.12	23.11	0.45	ppb
Lead	207-1	21.68	22.19	21.99	21.96	1.16	ppb
Lead	208-1	22.12	22.42	22.36	22.30	0.71	ppb
Lithium	6-1				90		%
Magnesium	24-2	52218.48	53164.67	53953.98	53112.38	1.64	ppb
Manganese	55-2	556.97	567.28	562.32	562.19	0.92	ppb
Molybdenum	94-1	7.83	8.57	7.91	8.10	5.04	ppb
Molybdenum	95-1	2.85	2.90	2.85	2.86	0.98	ppb
Molybdenum	96-1	3.44	3.52	3.52	3.49	1.25	ppb
Molybdenum	97-1	2.91	2.85	2.84	2.87	1.44	ppb
Molybdenum	98-1	2.86	2.84	2.94	2.88	1.88	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.09	13.14	13.15	13.12	0.25	ppb
Phosphorus	31-2	391.92	395.74	387.33	391.66	1.08	ppb
Potassium	39-2	370.84	374.33	383.94	376.37	1.80	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				95		%
Scandium	45-2				93		%
Selenium	82-1	0.58	0.49	0.52	0.53	8.15	ppb
Selenium	77-2	3.26	2.76	4.98	3.66	31.71	ppb
Selenium	78-2	-0.37	-0.05	0.38	-0.01		ppb
Silicon	28-1	148.71	168.08	129.13	148.64	13.10	ppb
Silver	107-1	0.03	0.03	0.03	0.03	0.77	ppb
Silver	109-1	0.03	0.04	0.04	0.04	1.55	ppb
Sodium	23-2	125.34	126.33	125.69	125.79	0.40	ppb
Strontium	86-1	3512.71	3553.26	3575.06	3547.01	0.89	ppb
Strontium	88-1	3556.89	3573.89	3585.45	3572.08	0.40	ppb
Sulfur	34-1	2415.58	2411.73	2450.94	2426.08	0.89	ppb
Terbium	159-1				104		%
Terbium	159-2				99		%
Thallium	203-1	0.17	0.18	0.18	0.18	1.47	ppb
Thallium	205-1	0.18	0.18	0.18	0.18	1.52	ppb
Tin	118-1	0.19	0.18	0.18	0.18	1.14	ppb
Titanium	47-1	79.47	76.94	78.10	78.17	1.62	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08ARE

Instrumnet Name :

P7

Client Sample ID :

ME29E4A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:25:01

DataFile Name :

067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.44	1.45	1.49	1.46	1.94	ppb
Vanadium	51-2	11.48	11.49	11.36	11.45	0.65	ppb
Yttrium	89-1				102		%
Yttrium	89-2				98		%
Zinc	66-2	39.25	39.87	39.94	39.68	0.96	ppb
Zirconium	90-1	3.33	3.15	3.09	3.19	4.00	ppb
Zirconium	91-1	3.09	3.21	3.17	3.16	2.07	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08A Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:35:27 DataFile Name : 068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2502.13	2477.28	2498.38	2492.60	0.54	ppb
Antimony	121-1	0.29	0.29	0.30	0.30	2.36	ppb
Arsenic	75-2	78.20	79.86	78.98	79.01	1.05	ppb
Barium	135-1	15.46	15.50	15.76	15.57	1.05	ppb
Barium	137-1	15.26	15.41	15.55	15.41	0.96	ppb
Beryllium	9-1	0.25	0.20	0.21	0.22	10.61	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.42	0.48	0.29	0.40	24.22	ppb
Cadmium	106-1	-1.31	-0.80	-1.96	-1.36		ppb
Cadmium	111-1	0.14	0.12	0.14	0.13	6.69	ppb
Calcium	43-1	203254.22	202819.85	205595.27	203889.78	0.73	ppb
Calcium	44-1	203789.68	203118.52	205291.47	204066.56	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.06	7.93	8.13	8.04	1.21	ppb
Cobalt	59-2	6.53	6.60	6.50	6.54	0.82	ppb
Copper	63-2	14.92	15.17	15.23	15.11	1.09	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				94		%
Iron	56-2	10905.23	10775.43	10796.90	10825.85	0.64	ppb
Iron	57-2	11930.85	12024.68	11952.58	11969.37	0.41	ppb
Iron	54-2	11182.77	10773.82	10847.81	10934.80	1.99	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08A

Instrumnet Name :

P7

Client Sample ID :

ME29E4A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:35:27

DataFile Name :

068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	19.06	19.55	19.15	19.25	1.35	ppb
Lead	207-1	18.09	18.42	18.00	18.17	1.23	ppb
Lead	208-1	18.37	18.84	18.47	18.56	1.32	ppb
Lithium	6-1				89		%
Magnesium	24-2	54387.91	54519.09	54699.74	54535.58	0.29	ppb
Manganese	55-2	579.18	571.18	563.91	571.43	1.34	ppb
Molybdenum	94-1	7.97	8.08	8.18	8.08	1.33	ppb
Molybdenum	95-1	2.85	2.97	2.94	2.92	2.17	ppb
Molybdenum	96-1	3.52	3.62	3.57	3.57	1.42	ppb
Molybdenum	97-1	2.92	2.95	2.87	2.91	1.27	ppb
Molybdenum	98-1	2.90	2.91	2.98	2.93	1.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.28	13.35	13.40	13.35	0.45	ppb
Phosphorus	31-2	400.11	400.77	390.98	397.29	1.38	ppb
Potassium	39-2	367.00	371.43	395.64	378.02	4.08	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				95		%
Scandium	45-2				92		%
Selenium	82-1	0.79	0.24	0.27	0.43	70.82	ppb
Selenium	77-2	4.45	4.53	5.06	4.68	7.04	ppb
Selenium	78-2	0.07	0.34	0.70	0.37	85.69	ppb
Silicon	28-1	123.57	136.64	125.21	128.47	5.54	ppb
Silver	107-1	0.03	0.03	0.03	0.03	0.35	ppb
Silver	109-1	0.03	0.03	0.03	0.03	7.18	ppb
Sodium	23-2	123.81	124.15	125.62	124.53	0.78	ppb
Strontium	86-1	3565.80	3661.95	3628.85	3618.86	1.35	ppb
Strontium	88-1	3597.05	3653.35	3631.16	3627.19	0.78	ppb
Sulfur	34-1	2579.73	2540.90	2588.76	2569.80	0.99	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	0.19	0.19	0.17	0.18	6.69	ppb
Thallium	205-1	0.20	0.17	0.16	0.18	10.41	ppb
Tin	118-1	0.19	0.17	0.19	0.18	6.05	ppb
Titanium	47-1	80.57	77.70	78.45	78.91	1.89	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08A

Instrumnet Name :

P7

Client Sample ID :

ME29E4A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:35:27

DataFile Name :

068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.44	1.50	1.49	1.48	2.18	ppb
Vanadium	51-2	11.43	11.45	11.62	11.50	0.90	ppb
Yttrium	89-1				100		%
Yttrium	89-2				97		%
Zinc	66-2	39.11	38.81	40.16	39.36	1.80	ppb
Zirconium	90-1	3.02	3.15	3.12	3.10	2.23	ppb
Zirconium	91-1	3.04	3.13	3.21	3.13	2.68	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV005

Instrumnet Name :

P7

Client Sample ID :

CCV005

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:47:03

DataFile Name :

071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51394.48	52069.54	52224.68	51896.23	0.85	ppb
Antimony	121-1	493.52	512.82	508.78	505.04	2.01	ppb
Arsenic	75-2	496.73	492.04	490.90	493.23	0.63	ppb
Barium	135-1	2425.87	2534.78	2491.13	2483.93	2.21	ppb
Barium	137-1	2406.14	2525.36	2521.09	2484.20	2.72	ppb
Beryllium	9-1	488.67	514.62	509.84	504.38	2.74	ppb
Bismuth	209-1				95		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	512.21	515.68	522.79	516.89	1.04	ppb
Cadmium	106-1	500.39	522.98	518.96	514.11	2.34	ppb
Cadmium	111-1	515.29	526.77	527.66	523.24	1.32	ppb
Calcium	43-1	244828.76	249239.24	250891.43	248319.81	1.26	ppb
Calcium	44-1	243555.63	250457.47	248735.49	247582.86	1.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	496.76	499.90	505.81	500.82	0.92	ppb
Cobalt	59-2	515.85	509.68	518.04	514.52	0.84	ppb
Copper	63-2	5066.83	5046.01	5076.88	5063.24	0.31	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				96		%
Indium	115-1				91		%
Indium	115-2				89		%
Iron	56-2	129601.17	127124.93	128651.57	128459.22	0.97	ppb
Iron	57-2	129013.89	127293.12	130368.89	128891.97	1.20	ppb
Iron	54-2	128377.56	127850.36	129226.19	128484.70	0.54	ppb
Krypton	83-1						cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV005

Instrumnet Name :

P7

Client Sample ID :

CCV005

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:47:03

DataFile Name :

071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2519.72	2577.11	2552.78	2549.87	1.13	ppb
Lead	207-1	2482.76	2550.58	2526.15	2519.83	1.36	ppb
Lead	208-1	2496.20	2559.44	2538.50	2531.38	1.27	ppb
Lithium	6-1				85		%
Magnesium	24-2	255603.10	251545.01	254817.13	253988.41	0.85	ppb
Manganese	55-2	4890.01	4873.81	4933.69	4899.17	0.63	ppb
Molybdenum	94-1	4964.27	5070.12	5091.18	5041.86	1.35	ppb
Molybdenum	95-1	4962.16	5032.43	5074.26	5022.95	1.13	ppb
Molybdenum	96-1	4996.30	5097.15	5101.85	5065.10	1.18	ppb
Molybdenum	97-1	5021.31	5099.08	5130.50	5083.63	1.11	ppb
Molybdenum	98-1	5003.45	5084.58	5113.29	5067.10	1.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	493.00	494.84	497.45	495.10	0.45	ppb
Phosphorus	31-2	9904.91	9844.05	9913.70	9887.55	0.38	ppb
Potassium	39-2	126743.88	126005.75	125989.38	126246.33	0.34	ppb
Rhodium	103-1				86		%
Rhodium	103-2				85		%
Scandium	45-1				89		%
Scandium	45-2				88		%
Selenium	82-1	496.05	504.58	504.50	501.71	0.98	ppb
Selenium	77-2	504.72	517.50	522.99	515.07	1.82	ppb
Selenium	78-2	506.73	498.89	494.79	500.14	1.21	ppb
Silicon	28-1	534.43	546.64	544.17	541.75	1.19	ppb
Silver	107-1	503.06	525.44	517.01	515.17	2.19	ppb
Silver	109-1	504.26	516.91	515.38	512.18	1.35	ppb
Sodium	23-2	253612.17	251319.20	252538.36	252489.91	0.45	ppb
Strontium	86-1	12401.80	12467.81	12516.75	12462.12	0.46	ppb
Strontium	88-1	12348.43	12461.98	12595.31	12468.57	0.99	ppb
Sulfur	34-1	8721.01	8945.45	8899.19	8855.22	1.34	ppb
Terbium	159-1				97		%
Terbium	159-2				95		%
Thallium	203-1	504.78	516.13	510.09	510.33	1.11	ppb
Thallium	205-1	508.47	519.35	513.95	513.92	1.06	ppb
Tin	118-1	493.64	499.87	498.98	497.50	0.68	ppb
Titanium	47-1	4936.21	4995.75	4960.90	4964.29	0.60	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV005

Instrumnet Name :

P7

Client Sample ID :

CCV005

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:47:03

DataFile Name :

071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	496.17	509.79	509.13	505.03	1.52	ppb
Vanadium	51-2	505.19	504.91	511.17	507.09	0.70	ppb
Yttrium	89-1				92		%
Yttrium	89-2				90		%
Zinc	66-2	5054.81	5038.30	5101.26	5064.79	0.64	ppb
Zirconium	90-1	495.03	503.90	504.11	501.01	1.03	ppb
Zirconium	91-1	499.49	501.90	505.13	502.17	0.56	ppb

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCB005Instrumnet Name :P7

Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired :2024-12-06 17:49:44DataFile Name :072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-12.39	-12.11	-12.47	-12.32		ppb
Antimony	121-1	0.35	0.28	0.26	0.30	15.23	ppb
Arsenic	75-2	0.02	0.05	0.03	0.03	58.31	ppb
Barium	135-1	0.40	0.27	0.23	0.30	29.73	ppb
Barium	137-1	0.40	0.27	0.25	0.31	26.46	ppb
Beryllium	9-1	0.17	0.12	0.12	0.14	21.14	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.15	0.06	0.08	0.10	50.68	ppb
Cadmium	106-1	-1.29	-1.61	-1.25	-1.38		ppb
Cadmium	111-1	0.10	0.07	0.07	0.08	22.37	ppb
Calcium	43-1	-42.02	-53.19	-58.66	-51.29		ppb
Calcium	44-1	-43.96	-57.49	-62.41	-54.62		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.10	0.10	0.06	0.09	23.00	ppb
Cobalt	59-2	0.05	0.04	0.04	0.04	11.03	ppb
Copper	63-2	0.50	0.49	0.47	0.49	3.53	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				98		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	56-2	-34.64	-35.30	-35.89	-35.28		ppb
Iron	57-2	-31.31	-31.66	-32.59	-31.85		ppb
Iron	54-2	-34.51	-35.50	-35.84	-35.28		ppb
Krypton	83-1						cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCB005Instrumnet Name :P7

Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired :2024-12-06 17:49:44DataFile Name :072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.48	0.37	0.31	0.39	22.35	ppb
Lead	207-1	0.46	0.36	0.31	0.38	19.97	ppb
Lead	208-1	0.47	0.36	0.31	0.38	21.92	ppb
Lithium	6-1				88		%
Magnesium	24-2	-65.39	-66.45	-67.54	-66.46		ppb
Manganese	55-2	0.46	0.47	0.42	0.45	5.86	ppb
Molybdenum	94-1	0.99	0.76	0.62	0.79	23.63	ppb
Molybdenum	95-1	0.90	0.68	0.55	0.71	25.18	ppb
Molybdenum	96-1	0.94	0.63	0.60	0.72	25.86	ppb
Molybdenum	97-1	0.93	0.69	0.57	0.73	24.85	ppb
Molybdenum	98-1	0.93	0.67	0.57	0.73	25.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.08	0.09	0.07	0.08	15.19	ppb
Phosphorus	31-2	-11.52	-15.18	-13.82	-13.51		ppb
Potassium	39-2	-31.04	-32.04	-32.98	-32.02		ppb
Rhodium	103-1				94		%
Rhodium	103-2				95		%
Scandium	45-1				90		%
Scandium	45-2				90		%
Selenium	82-1	-0.24	-0.09	-0.42	-0.25		ppb
Selenium	77-2	0.08	0.08	0.42	0.19	102.91	ppb
Selenium	78-2	-0.49	-0.41	-1.06	-0.65		ppb
Silicon	28-1	0.09	-0.33	-0.49	-0.24		ppb
Silver	107-1	0.16	0.13	0.11	0.13	19.86	ppb
Silver	109-1	0.16	0.14	0.11	0.13	18.74	ppb
Sodium	23-2	-54.49	-57.39	-58.94	-56.94		ppb
Strontium	86-1	2.11	1.32	1.13	1.52	34.35	ppb
Strontium	88-1	2.09	1.59	1.30	1.66	24.04	ppb
Sulfur	34-1	39.06	10.73	-24.06	8.58	368.63	ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	0.23	0.19	0.18	0.20	12.83	ppb
Thallium	205-1	0.22	0.19	0.18	0.20	12.37	ppb
Tin	118-1	0.12	0.09	0.08	0.10	20.86	ppb
Titanium	47-1	0.89	0.57	0.50	0.66	31.76	ppb

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB005

Instrumnet Name :

P7

Client Sample ID :

CCB005

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:49:44

DataFile Name :

072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.07	0.05	0.04	0.05	31.42	ppb
Vanadium	51-2	0.04	0.04	0.04	0.04	4.53	ppb
Yttrium	89-1				94		%
Yttrium	89-2				93		%
Zinc	66-2	0.75	0.65	0.66	0.69	7.75	ppb
Zirconium	90-1	0.14	0.10	0.09	0.11	21.30	ppb
Zirconium	91-1	0.15	0.12	0.10	0.12	21.83	ppb

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:34:41 DataFile Name : 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7315	7525	7505	7449	1.56	cps
Antimony	121-1	27	40	20	29	35.25	cps
Arsenic	75-2	3	7	7	6	34.70	cps
Barium	135-1	70	47	67	61	20.65	cps
Barium	137-1	87	127	90	101	21.95	cps
Beryllium	9-1	30	23	23	26	15.07	cps
Bismuth	209-1	11911790	11963112	11980615	11951839	0.30	cps
Bismuth	209-2	9711753	9704802	9862869	9759808	0.92	cps
Bromine	81-1	17654	18378	18088	18040	2.02	cps
Bromine	81-2	227	217	267	237	11.18	cps
Cadmium	108-1	13	17	13	14	13.35	cps
Cadmium	106-1	5785	5461	5471	5572	3.30	cps
Cadmium	111-1	40	32	61	44	34.03	cps
Calcium	43-1	5004	4584	4424	4671	6.42	cps
Calcium	44-1	83820	85881	86562	85421	1.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1357	1203	1263	1275	6.06	cps
Cobalt	59-2	377	300	317	331	12.18	cps
Copper	63-2	1117	1203	1110	1143	4.55	cps
Dysprosium	156-1	7	17	30	18	65.83	cps
Dysprosium	156-2	0	3	7	3	100.05	cps
Erbium	164-1	87	80	100	89	11.46	cps
Erbium	164-2	60	47	90	66	33.85	cps
Gadolinium	160-1	130	97	133	120	16.90	cps
Gadolinium	160-2	853	880	893	876	2.33	cps
Holmium	165-1	19882728	20051702	20071528	20001986	0.52	cps
Holmium	165-2	14595815	14518266	14428785	14514289	0.58	cps
Indium	115-1	16443006	16338598	16385625	16389076	0.32	cps
Indium	115-2	6305336	6312008	6333239	6316861	0.23	cps
Iron	56-2	341924	340731	340610	341088	0.21	cps
Iron	57-2	9109	8516	8869	8832	3.38	cps
Iron	54-2	20874	21055	20935	20955	0.44	cps
Krypton	83-1	287	327	427	347	20.80	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P7
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:34:41 DataFile Name : 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	547	473	463	494	9.20	cps
Lead	207-1	497	420	360	426	16.10	cps
Lead	208-1	2123	1900	1770	1931	9.25	cps
Lithium	6-1	1885943	1856018	1884828	1875596	0.90	cps
Magnesium	24-2	58183	57296	57417	57632	0.83	cps
Manganese	55-2	333	307	333	324	4.75	cps
Molybdenum	94-1	457	353	380	397	13.52	cps
Molybdenum	95-1	153	160	140	151	6.74	cps
Molybdenum	96-1	233	213	220	222	4.58	cps
Molybdenum	97-1	90	133	117	113	19.29	cps
Molybdenum	98-1	240	243	277	253	8.00	cps
Neodymium	150-1	3	23	10	12	83.33	cps
Neodymium	150-2	3	7	7	6	34.70	cps
Nickel	60-2	393	350	493	412	17.83	cps
Phosphorus	31-2	357	380	373	370	3.25	cps
Potassium	39-2	109097	109369	109208	109225	0.13	cps
Rhodium	103-1	15775183	15666176	15729461	15723607	0.35	cps
Rhodium	103-2	9745633	9694946	9809585	9750055	0.59	cps
Scandium	45-1	8811064	8858796	8861178	8843679	0.32	cps
Scandium	45-2	858345	860698	855406	858150	0.31	cps
Selenium	82-1	785	730	546	687	18.20	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	573	577	683	611	10.24	cps
Silicon	28-1	832947	836554	836678	835393	0.25	cps
Silver	107-1	147	150	120	139	11.84	cps
Silver	109-1	70	110	53	78	37.45	cps
Sodium	23-2	116658	116067	116248	116324	0.26	cps
Strontium	86-1	660	630	610	633	3.97	cps
Strontium	88-1	403	380	363	382	5.26	cps
Sulfur	34-1	255149	253367	255291	254602	0.42	cps
Terbium	159-1	20512952	20758499	20504746	20592066	0.70	cps
Terbium	159-2	14720060	14364311	14588790	14557720	1.24	cps
Thallium	203-1	390	277	283	317	20.08	cps
Thallium	205-1	913	677	653	748	19.24	cps
Tin	118-1	1913	1963	1857	1911	2.79	cps
Titanium	47-1	103	123	100	109	11.59	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S00

Instrumnet Name :

P7

Client Sample ID :

S0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:34:41

DataFile Name :

004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	220	70	77	122	69.34	cps
Vanadium	51-2	20	7	20	16	49.47	cps
Yttrium	89-1	19213830	19352153	19176140	19247374	0.48	cps
Yttrium	89-2	5570833	5500343	5500490	5523889	0.74	cps
Zinc	66-2	600	717	670	662	8.87	cps
Zirconium	90-1	930	977	997	968	3.54	cps
Zirconium	91-1	173	193	187	184	5.52	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S01 Instrumnet Name : P7
Client Sample ID : S01 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:37:56 DataFile Name : 005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1200	1343	1167	1237	7.59	cps
Antimony	121-1	3587	3714	3704	3668	1.92	cps
Arsenic	75-2	107	113	107	109	3.54	cps
Barium	135-1	4497	4864	4888	4750	4.61	cps
Barium	137-1	8139	7956	7946	8013	1.36	cps
Beryllium	9-1	187	240	200	209	13.29	cps
Bismuth	209-1	12297873	11552138	12225197	12025069	3.42	cps
Bismuth	209-2	10088825	10171407	9916543	10058925	1.29	cps
Bromine	81-1	17147	17257	16930	17111	0.97	cps
Bromine	81-2	70	70	67	69	2.79	cps
Cadmium	108-1	40	57	30	42	31.91	cps
Cadmium	106-1	5728	5228	5501	5486	4.57	cps
Cadmium	111-1	524	570	483	526	8.24	cps
Calcium	43-1	3831	3757	3781	3789	0.99	cps
Calcium	44-1	70664	69958	70891	70504	0.69	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3200	3234	3294	3243	1.46	cps
Cobalt	59-2	1737	1570	1620	1642	5.21	cps
Copper	63-2	3230	3457	3130	3273	5.12	cps
Dysprosium	156-1	20	23	10	18	39.03	cps
Dysprosium	156-2	13	3	7	8	65.47	cps
Erbium	164-1	90	63	77	77	17.39	cps
Erbium	164-2	50	43	47	47	7.15	cps
Gadolinium	160-1	117	87	97	100	15.27	cps
Gadolinium	160-2	827	713	803	781	7.66	cps
Holmium	165-1	20375125	19250427	20352726	19992759	3.22	cps
Holmium	165-2	14796872	14901375	14732267	14810171	0.58	cps
Indium	115-1	16842195	15868344	16766824	16492454	3.29	cps
Indium	115-2	6553729	6458945	6512713	6508462	0.73	cps
Iron	56-2	73288	73877	73515	73560	0.40	cps
Iron	57-2	2607	2657	2824	2696	4.21	cps
Iron	54-2	6018	6105	6025	6049	0.80	cps
Krypton	83-1	277	307	417	333	22.11	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S01 Instrumnet Name : P7
Client Sample ID : S01 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:37:56 DataFile Name : 005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2277	2417	2320	2338	3.07	cps
Lead	207-1	2047	2090	1994	2044	2.37	cps
Lead	208-1	Rejected	Rejected	Rejected			cps
Lithium	6-1	1949894	1844329	1950377	1914867	3.19	cps
Magnesium	24-2	36049	36807	35862	36239	1.38	cps
Manganese	55-2	Rejected	Rejected	Rejected			cps
Molybdenum	94-1	4107	4154	4187	4150	0.97	cps
Molybdenum	95-1	4784	4737	4768	4763	0.50	cps
Molybdenum	96-1	5464	5531	5321	5439	1.97	cps
Molybdenum	97-1	2974	2934	3104	3004	2.96	cps
Molybdenum	98-1	7555	7632	7582	7590	0.51	cps
Neodymium	150-1	13	23	3	13	75.02	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	750	803	783	779	3.46	cps
Phosphorus	31-2	583	507	403	498	18.15	cps
Potassium	39-2	117643	116213	116837	116897	0.61	cps
Rhodium	103-1	15968389	15265553	15881295	15705079	2.44	cps
Rhodium	103-2	9978526	9945647	9789899	9904690	1.02	cps
Scandium	45-1	8975589	8460098	8961673	8799120	3.34	cps
Scandium	45-2	867422	874617	869698	870579	0.42	cps
Selenium	82-1	Rejected	Rejected	Rejected			cps
Selenium	77-2	20	23	20	21	9.11	cps
Selenium	78-2	750	667	693	703	6.05	cps
Silicon	28-1	843203	842496	845364	843688	0.18	cps
Silver	107-1	2540	2400	2430	2457	3.00	cps
Silver	109-1	2547	2324	2324	2398	5.38	cps
Sodium	23-2	75862	77427	76455	76581	1.03	cps
Strontium	86-1	1260	1300	1257	1272	1.90	cps
Strontium	88-1	6235	6145	6431	6270	2.34	cps
Sulfur	34-1	255055	255824	256423	255767	0.27	cps
Terbium	159-1	21048528	19843946	21027705	20640060	3.34	cps
Terbium	159-2	14809382	14774401	14828215	14803999	0.18	cps
Thallium	203-1	1977	1880	1980	1946	2.92	cps
Thallium	205-1	4678	4607	4471	4585	2.29	cps
Tin	118-1	11268	11431	11948	11549	3.08	cps
Titanium	47-1	1130	1257	1303	1230	7.29	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S01

Instrumnet Name :

P7

Client Sample ID :

S01

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:37:56

DataFile Name :

005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5201	5181	5061	5148	1.47	cps
Vanadium	51-2	3617	3550	3504	3557	1.60	cps
Yttrium	89-1	19707976	18719831	19660538	19362782	2.88	cps
Yttrium	89-2	5687751	5649051	5536974	5624592	1.39	cps
Zinc	66-2	Rejected	Rejected	Rejected			cps
Zirconium	90-1	3997	3831	4117	3982	3.62	cps
Zirconium	91-1	897	863	887	882	1.94	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S02 Instrumnet Name : P7
Client Sample ID : S02 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:41:14 DataFile Name : 006CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12699	12492	13049	12746	2.21	cps
Antimony	121-1	36767	37282	37910	37319	1.53	cps
Arsenic	75-2	1077	1170	1167	1138	4.65	cps
Barium	135-1	45820	45887	46476	46061	0.78	cps
Barium	137-1	79789	81109	81696	80865	1.21	cps
Beryllium	9-1	1877	1897	1853	1876	1.16	cps
Bismuth	209-1	11947211	11854931	11969938	11924027	0.51	cps
Bismuth	209-2	9923494	9699287	9890882	9837888	1.23	cps
Bromine	81-1	17193	17858	16926	17326	2.77	cps
Bromine	81-2	177	203	143	174	17.23	cps
Cadmium	108-1	363	377	447	396	11.32	cps
Cadmium	106-1	6251	6275	5825	6117	4.14	cps
Cadmium	111-1	5168	4819	4737	4908	4.66	cps
Calcium	43-1	25238	26336	25742	25772	2.13	cps
Calcium	44-1	419219	426436	427571	424408	1.07	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	17477	17677	17500	17551	0.62	cps
Cobalt	59-2	13917	14103	13970	13997	0.69	cps
Copper	63-2	19833	18962	19232	19343	2.31	cps
Dysprosium	156-1	13	23	27	21	32.88	cps
Dysprosium	156-2	7	23	17	16	53.90	cps
Erbium	164-1	83	97	90	90	7.41	cps
Erbium	164-2	57	90	63	70	25.20	cps
Gadolinium	160-1	100	100	63	88	24.12	cps
Gadolinium	160-2	840	800	910	850	6.55	cps
Holmium	165-1	20026482	20010660	20111598	20049580	0.27	cps
Holmium	165-2	14635104	14349787	14619986	14534959	1.10	cps
Indium	115-1	16451599	16633625	16479227	16521484	0.59	cps
Indium	115-2	6430806	6399103	6364296	6398068	0.52	cps
Iron	56-2	420761	413498	416559	416939	0.87	cps
Iron	57-2	11581	10977	11508	11355	2.90	cps
Iron	54-2	25348	25225	25538	25370	0.62	cps
Krypton	83-1	357	413	343	371	10.01	cps

LB Number : LB133800

Operator : Jaswal

Lab Sample ID : S02

Instrumnet Name : P7

Client Sample ID : S02

Dilution Factor : 1

Date & Time Acquired : 2024-12-06 11:41:14

DataFile Name : 006CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	14264	14428	14668	14453	1.41	cps
Lead	207-1	12379	12756	12716	12617	1.64	cps
Lead	208-1	57188	57321	58069	57526	0.83	cps
Lithium	6-1	1879139	1851015	1847769	1859308	0.93	cps
Magnesium	24-2	362919	363974	365382	364091	0.34	cps
Manganese	55-2	6962	7342	6945	7083	3.17	cps
Molybdenum	94-1	39490	38925	38908	39108	0.85	cps
Molybdenum	95-1	46952	46985	47239	47059	0.33	cps
Molybdenum	96-1	52397	51587	52929	52304	1.29	cps
Molybdenum	97-1	29019	29396	29513	29309	0.88	cps
Molybdenum	98-1	75567	76660	74720	75649	1.29	cps
Neodymium	150-1	13	7	23	14	58.06	cps
Neodymium	150-2	7	20	17	14	48.02	cps
Nickel	60-2	3874	3817	3871	3854	0.83	cps
Phosphorus	31-2	1050	977	1070	1032	4.76	cps
Potassium	39-2	544089	542321	548562	544991	0.59	cps
Rhodium	103-1	15662351	15433477	15620717	15572182	0.78	cps
Rhodium	103-2	9578096	9610010	9752809	9646972	0.96	cps
Scandium	45-1	8712966	8791024	8887006	8796999	0.99	cps
Scandium	45-2	862560	859980	861144	861228	0.15	cps
Selenium	82-1	2214	2105	2073	2131	3.47	cps
Selenium	77-2	167	153	187	169	9.93	cps
Selenium	78-2	1210	1210	960	1127	12.81	cps
Silicon	28-1	1153208	878533	883712	971817	16.17	cps
Silver	107-1	24163	24234	24504	24300	0.74	cps
Silver	109-1	22912	22982	23666	23186	1.80	cps
Sodium	23-2	565180	578108	574729	572672	1.17	cps
Strontium	86-1	6355	6511	6608	6491	1.97	cps
Strontium	88-1	52727	53316	52975	53006	0.56	cps
Sulfur	34-1	257288	256843	256430	256854	0.17	cps
Terbium	159-1	20444829	20425076	20421414	20430440	0.06	cps
Terbium	159-2	14588189	14756394	14545396	14629993	0.76	cps
Thallium	203-1	17441	17017	17194	17218	1.24	cps
Thallium	205-1	41951	41610	41126	41562	1.00	cps
Tin	118-1	80158	81489	81931	81192	1.14	cps
Titanium	47-1	11361	11615	11795	11590	1.88	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S02

Instrumnet Name :

P7

Client Sample ID :

S02

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:41:14

DataFile Name :

006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	52432	53142	53744	53106	1.24	cps
Vanadium	51-2	36060	35505	35983	35849	0.84	cps
Yttrium	89-1	18986401	19172570	19461816	19206929	1.25	cps
Yttrium	89-2	5488476	5500686	5572741	5520634	0.82	cps
Zinc	66-2	8639	8556	8726	8640	0.98	cps
Zirconium	90-1	31938	32967	32583	32496	1.60	cps
Zirconium	91-1	7118	7158	7195	7157	0.54	cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :S03Instrumnet Name :P7

Client Sample ID :S03Dilution Factor :1

Date & Time Acquired :2024-12-06 11:44:29DataFile Name :007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	467419	473401	466815	469212	0.78	cps
Antimony	121-1	955592	972253	961153	963000	0.88	cps
Arsenic	75-2	54189	54025	53402	53872	0.77	cps
Barium	135-1	1204178	1223860	1213268	1213769	0.81	cps
Barium	137-1	2100739	2144793	2093209	2112914	1.32	cps
Beryllium	9-1	97110	98724	99389	98408	1.19	cps
Bismuth	209-1	11901342	12051854	11947274	11966824	0.64	cps
Bismuth	209-2	9798081	9862848	9727112	9796014	0.69	cps
Bromine	81-1	16853	16089	16436	16459	2.32	cps
Bromine	81-2	127	87	100	104	19.50	cps
Cadmium	108-1	19553	19430	19653	19545	0.57	cps
Cadmium	106-1	32934	33044	32774	32917	0.41	cps
Cadmium	111-1	240595	244565	244486	243215	0.93	cps
Calcium	43-1	262850	262760	262341	262651	0.10	cps
Calcium	44-1	4031773	4016995	4013632	4020800	0.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	417199	411846	411685	413577	0.76	cps
Cobalt	59-2	652747	651345	644637	649576	0.67	cps
Copper	63-2	4868997	4752396	4765098	4795497	1.33	cps
Dysprosium	156-1	57	50	37	48	21.31	cps
Dysprosium	156-2	77	70	47	64	24.44	cps
Erbium	164-1	97	97	117	103	11.17	cps
Erbium	164-2	73	47	90	70	31.22	cps
Gadolinium	160-1	130	133	97	120	16.90	cps
Gadolinium	160-2	770	743	893	802	9.98	cps
Holmium	165-1	19996000	19955110	19929985	19960365	0.17	cps
Holmium	165-2	14586798	14580869	14343020	14503562	0.96	cps
Indium	115-1	16230803	16163293	16057740	16150612	0.54	cps
Indium	115-2	6191566	6086010	6156560	6144712	0.87	cps
Iron	56-2	19162639	19260270	19371243	19264717	0.54	cps
Iron	57-2	510964	500755	498176	503298	1.34	cps
Iron	54-2	1116324	1120099	1099380	1111934	0.99	cps
Krypton	83-1	360	383	350	364	4.69	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S03 Instrumnet Name : P7
Client Sample ID : S03 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:44:29 DataFile Name : 007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3631657	3638091	3667753	3645834	0.53	cps
Lead	207-1	3263802	3278913	3266887	3269867	0.24	cps
Lead	208-1	14629736	14739141	14717673	14695517	0.39	cps
Lithium	6-1	1926334	1902871	1954780	1927995	1.35	cps
Magnesium	24-2	3764049	3767732	3730762	3754181	0.54	cps
Manganese	55-2	3297994	3285519	3274159	3285891	0.36	cps
Molybdenum	94-1	3381108	3453652	3409806	3414856	1.07	cps
Molybdenum	95-1	4859750	4964334	4853112	4892399	1.28	cps
Molybdenum	96-1	5351559	5440447	5377244	5389750	0.85	cps
Molybdenum	97-1	3043195	3091775	3077677	3070882	0.81	cps
Molybdenum	98-1	7774991	7905066	7925872	7868643	1.04	cps
Neodymium	150-1	70	87	123	93	29.23	cps
Neodymium	150-2	13	20	7	13	49.99	cps
Nickel	60-2	170163	172047	169317	170509	0.82	cps
Phosphorus	31-2	23528	23391	22300	23073	2.92	cps
Potassium	39-2	2389873	2389347	2357872	2379031	0.77	cps
Rhodium	103-1	15356542	15377631	15346436	15360203	0.10	cps
Rhodium	103-2	9345607	9378434	9329133	9351058	0.27	cps
Scandium	45-1	8828077	8684336	8739733	8750715	0.83	cps
Scandium	45-2	832880	838367	822154	831134	0.99	cps
Selenium	82-1	16197	16029	15919	16049	0.87	cps
Selenium	77-2	1630	1717	1900	1749	7.88	cps
Selenium	78-2	6555	6288	6191	6345	2.97	cps
Silicon	28-1	3505329	3567817	3556738	3543294	0.94	cps
Silver	107-1	1302423	1318711	1321041	1314058	0.77	cps
Silver	109-1	1244878	1260812	1258534	1254741	0.69	cps
Sodium	23-2	5902082	5827687	5817064	5848944	0.79	cps
Strontium	86-1	307556	308413	307238	307736	0.20	cps
Strontium	88-1	2670614	2654342	2666403	2663786	0.32	cps
Sulfur	34-1	325566	325278	323566	324803	0.33	cps
Terbium	159-1	20611269	20506906	20512539	20543571	0.29	cps
Terbium	159-2	14539651	14356481	14269092	14388408	0.96	cps
Thallium	203-1	902168	911145	916920	910078	0.82	cps
Thallium	205-1	2146416	2158636	2118062	2141038	0.97	cps
Tin	118-1	825914	835141	833510	831522	0.59	cps
Titanium	47-1	1180085	1180234	1177280	1179200	0.14	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S03

Instrumnet Name :

P7

Client Sample ID :

S03

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:44:29

DataFile Name :

007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2871147	2868926	2906200	2882091	0.73	cps
Vanadium	51-2	361844	358930	358314	359696	0.52	cps
Yttrium	89-1	19134700	18762575	19048707	18981994	1.03	cps
Yttrium	89-2	5415231	5382089	5367417	5388246	0.45	cps
Zinc	66-2	810196	797633	796457	801428	0.95	cps
Zirconium	90-1	1654055	1651473	1662204	1655911	0.34	cps
Zirconium	91-1	372656	375979	374910	374515	0.45	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S04 Instrumnet Name : P7
Client Sample ID : S04 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:47:26 DataFile Name : 008CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1094375	1068648	1071984	1078336	1.30	cps
Antimony	121-1	2227773	2260493	2318004	2268757	2.01	cps
Arsenic	75-2	125854	125609	125966	125810	0.15	cps
Barium	135-1	2834981	2845575	2885558	2855371	0.93	cps
Barium	137-1	4897733	4971655	5038998	4969462	1.42	cps
Beryllium	9-1	229336	239883	238110	235777	2.40	cps
Bismuth	209-1	13009040	12093041	11944215	12348765	4.67	cps
Bismuth	209-2	8857941	9295721	9996004	9383222	6.12	cps
Bromine	81-1	15655	15588	15515	15586	0.45	cps
Bromine	81-2	123	87	103	104	17.58	cps
Cadmium	108-1	44264	45545	45909	45239	1.91	cps
Cadmium	106-1	67948	70195	69803	69316	1.73	cps
Cadmium	111-1	556124	576512	570139	567592	1.84	cps
Calcium	43-1	598956	608872	605372	604400	0.83	cps
Calcium	44-1	9040242	9265880	9251534	9185886	1.38	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	955864	961662	941887	953138	1.07	cps
Cobalt	59-2	1523623	1494689	1491412	1503241	1.18	cps
Copper	63-2	11035961	11025611	11064640	11042071	0.18	cps
Dysprosium	156-1	73	60	60	64	11.94	cps
Dysprosium	156-2	147	127	173	149	15.73	cps
Erbium	164-1	100	103	103	102	1.88	cps
Erbium	164-2	67	87	103	86	21.45	cps
Gadolinium	160-1	127	140	120	129	7.90	cps
Gadolinium	160-2	770	813	843	809	4.56	cps
Holmium	165-1	21557183	19673645	19738459	20323096	5.26	cps
Holmium	165-2	12958246	13677454	14756268	13797323	6.56	cps
Indium	115-1	17119940	15899388	15820417	16279915	4.48	cps
Indium	115-2	5384552	5747756	6082261	5738190	6.08	cps
Iron	56-2	44180108	45293341	43808396	44427282	1.74	cps
Iron	57-2	1166433	1179511	1162189	1169377	0.77	cps
Iron	54-2	2486626	2502660	2430079	2473122	1.54	cps
Krypton	83-1	313	367	337	339	7.89	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S04 Instrumnet Name : P7
Client Sample ID : S04 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:47:26 DataFile Name : 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8552312	8828840	8772732	8717961	1.68	cps
Lead	207-1	7701022	7878308	7964086	7847805	1.71	cps
Lead	208-1	34767129	35648478	35751468	35389025	1.53	cps
Lithium	6-1	2042956	1904060	1911485	1952834	4.00	cps
Magnesium	24-2	8868815	8603350	8690888	8721018	1.55	cps
Manganese	55-2	7687255	7665448	7509920	7620875	1.27	cps
Molybdenum	94-1	7933823	8035538	7971760	7980374	0.64	cps
Molybdenum	95-1	11465428	11483424	11462396	11470416	0.10	cps
Molybdenum	96-1	12409047	12530135	12593764	12510982	0.75	cps
Molybdenum	97-1	7069748	7269695	7119739	7153061	1.45	cps
Molybdenum	98-1	18151271	18557240	18433361	18380624	1.13	cps
Neodymium	150-1	157	187	143	162	13.68	cps
Neodymium	150-2	43	30	33	36	19.51	cps
Nickel	60-2	389337	390812	386941	389030	0.50	cps
Phosphorus	31-2	53403	52667	51088	52386	2.26	cps
Potassium	39-2	5494210	5504535	5323446	5440731	1.87	cps
Rhodium	103-1	16067834	14966253	14828420	15287502	4.44	cps
Rhodium	103-2	8199393	8692197	9289095	8726895	6.25	cps
Scandium	45-1	9167762	8338526	8313175	8606488	5.65	cps
Scandium	45-2	728445	768856	811487	769596	5.40	cps
Selenium	82-1	35754	37027	36766	36516	1.84	cps
Selenium	77-2	4127	3904	4141	4057	3.28	cps
Selenium	78-2	14564	14254	13990	14269	2.01	cps
Silicon	28-1	6699983	6769910	6731900	6733931	0.52	cps
Silver	107-1	2974458	2982842	3021221	2992840	0.83	cps
Silver	109-1	2876190	2949796	2893986	2906658	1.32	cps
Sodium	23-2	13880291	13556787	13568863	13668647	1.34	cps
Strontium	86-1	703042	724975	718926	715647	1.58	cps
Strontium	88-1	6122170	6263869	6220807	6202282	1.17	cps
Sulfur	34-1	405523	407085	401819	404809	0.67	cps
Terbium	159-1	21983980	20179548	20164357	20775962	5.04	cps
Terbium	159-2	13038429	13692357	14773030	13834605	6.33	cps
Thallium	203-1	2147962	2242597	2220399	2203653	2.25	cps
Thallium	205-1	5136217	5191999	5201031	5176416	0.68	cps
Tin	118-1	1908588	1960976	1937144	1935569	1.36	cps
Titanium	47-1	2708511	2744072	2718513	2723699	0.67	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :S04

Instrumnet Name :P7

Client Sample ID :S04

Dilution Factor :1

Date & Time Acquired :2024-12-06 11:47:26

DataFile Name :008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6830707	6978526	6982597	6930610	1.25	cps
Vanadium	51-2	828255	838705	807832	824930	1.90	cps
Yttrium	89-1	20077461	18461738	18482604	19007268	4.88	cps
Yttrium	89-2	4716935	4976267	5255113	4982771	5.40	cps
Zinc	66-2	1818873	1810088	1847007	1825322	1.06	cps
Zirconium	90-1	3859451	3953450	3903083	3905328	1.20	cps
Zirconium	91-1	859391	878021	878703	872038	1.26	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S05 Instrumnet Name : P7
Client Sample ID : S05 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:50:11 DataFile Name : 009CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2119587	2048215	2060621	2076141	1.84	cps
Antimony	121-1	4349817	4361202	4356338	4355786	0.13	cps
Arsenic	75-2	241538	237602	238204	239115	0.89	cps
Barium	135-1	5526597	5577026	5544948	5549524	0.46	cps
Barium	137-1	9627578	9671854	9693282	9664238	0.35	cps
Beryllium	9-1	463398	469061	466197	466219	0.61	cps
Bismuth	209-1	11930188	11576404	11746667	11751086	1.51	cps
Bismuth	209-2	9710026	9738080	9738788	9728965	0.17	cps
Bromine	81-1	15064	14007	14093	14388	4.08	cps
Bromine	81-2	70	73	83	76	9.18	cps
Cadmium	108-1	87176	86107	87149	86811	0.70	cps
Cadmium	106-1	126750	126041	124336	125709	0.99	cps
Cadmium	111-1	1071615	1088582	1082952	1081049	0.80	cps
Calcium	43-1	1138952	1152136	1145709	1145599	0.58	cps
Calcium	44-1	17430250	17433641	17531560	17465150	0.33	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1835281	1820783	1814292	1823452	0.59	cps
Cobalt	59-2	2827437	2889674	2853273	2856794	1.09	cps
Copper	63-2	21008169	20917512	20977328	20967670	0.22	cps
Dysprosium	156-1	97	90	110	99	10.30	cps
Dysprosium	156-2	297	303	297	299	1.29	cps
Erbium	164-1	140	183	130	151	18.76	cps
Erbium	164-2	107	97	100	101	5.04	cps
Gadolinium	160-1	147	143	123	138	9.16	cps
Gadolinium	160-2	810	887	897	864	5.49	cps
Holmium	165-1	19433584	19356284	19165235	19318367	0.72	cps
Holmium	165-2	14391345	14280455	14142363	14271388	0.87	cps
Indium	115-1	15468564	15026595	14823493	15106218	2.18	cps
Indium	115-2	5821840	5812982	5725951	5786925	0.92	cps
Iron	56-2	85547882	85232325	85095519	85291909	0.27	cps
Iron	57-2	2148661	2149903	2141761	2146775	0.20	cps
Iron	54-2	4752967	4732247	4719057	4734757	0.36	cps
Krypton	83-1	253	393	247	298	27.81	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S05 Instrumnet Name : P7
Client Sample ID : S05 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:50:11 DataFile Name : 009CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17266366	17199981	17200733	17222360	0.22	cps
Lead	207-1	15210108	15495230	15623320	15442886	1.37	cps
Lead	208-1	69168691	69618984	69866851	69551509	0.51	cps
Lithium	6-1	1891000	1875132	1897117	1887750	0.60	cps
Magnesium	24-2	16779027	16637069	16671891	16695995	0.44	cps
Manganese	55-2	14735899	14631816	14637682	14668466	0.40	cps
Molybdenum	94-1	15271967	15153079	15113559	15179535	0.54	cps
Molybdenum	95-1	21783113	21880421	21862195	21841909	0.24	cps
Molybdenum	96-1	23831865	23850837	23665020	23782574	0.43	cps
Molybdenum	97-1	13741341	13835611	13581684	13719545	0.94	cps
Molybdenum	98-1	35076222	35724117	34871504	35223948	1.26	cps
Neodymium	150-1	350	293	247	297	17.44	cps
Neodymium	150-2	73	97	53	74	29.14	cps
Nickel	60-2	734059	730520	734760	733113	0.31	cps
Phosphorus	31-2	98092	97085	98289	97822	0.66	cps
Potassium	39-2	10274497	10191395	10258125	10241339	0.43	cps
Rhodium	103-1	14174096	13993418	13845110	14004208	1.18	cps
Rhodium	103-2	8834048	8657492	8547994	8679845	1.66	cps
Scandium	45-1	8108542	7852717	7875966	7945742	1.78	cps
Scandium	45-2	760622	763435	759494	761183	0.27	cps
Selenium	82-1	68532	68948	68353	68611	0.44	cps
Selenium	77-2	7612	7899	7682	7731	1.93	cps
Selenium	78-2	27172	26440	26587	26733	1.45	cps
Silicon	28-1	11819231	11745758	11705402	11756797	0.49	cps
Silver	107-1	5666148	5701598	5667972	5678573	0.35	cps
Silver	109-1	5481039	5461395	5413513	5451982	0.64	cps
Sodium	23-2	26223112	26022174	25744128	25996471	0.93	cps
Strontium	86-1	1361844	1369992	1357722	1363186	0.46	cps
Strontium	88-1	11924307	11980973	11772091	11892457	0.91	cps
Sulfur	34-1	532387	531749	529527	531221	0.28	cps
Terbium	159-1	19869689	19774734	19754324	19799582	0.31	cps
Terbium	159-2	14073061	14248682	14051279	14124341	0.77	cps
Thallium	203-1	4319606	4388843	4369228	4359226	0.82	cps
Thallium	205-1	10236601	10236349	10229958	10234303	0.04	cps
Tin	118-1	3699056	3732271	3728546	3719958	0.49	cps
Titanium	47-1	5127796	5172411	5142927	5147711	0.44	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :S05

Instrumnet Name :P7

Client Sample ID :S05

Dilution Factor :1

Date & Time Acquired :2024-12-06 11:50:11

DataFile Name :009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	13843526	13926934	13837872	13869444	0.36	cps
Vanadium	51-2	1571119	1580603	1597650	1583124	0.85	cps
Yttrium	89-1	17897884	17728327	17525562	17717258	1.05	cps
Yttrium	89-2	5043611	4977881	4985673	5002388	0.72	cps
Zinc	66-2	3492808	3501633	3464197	3486213	0.56	cps
Zirconium	90-1	7434091	7380848	7433770	7416236	0.41	cps
Zirconium	91-1	1662546	1667888	1648407	1659614	0.61	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S06 Instrumnet Name : P7
Client Sample ID : S06 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:52:57 DataFile Name : 010CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4036293	4050606	4048618	4045172	0.19	cps
Antimony	121-1	8486962	8616350	8670215	8591175	1.10	cps
Arsenic	75-2	475871	476474	471786	474710	0.54	cps
Barium	135-1	10876757	11006966	11047740	10977154	0.81	cps
Barium	137-1	19042071	19049386	19140406	19077288	0.29	cps
Beryllium	9-1	899778	905105	904725	903202	0.33	cps
Bismuth	209-1	12297686	11644834	11690059	11877526	3.07	cps
Bismuth	209-2	9488274	9394599	9378615	9420496	0.63	cps
Bromine	81-1	13616	14454	14674	14248	3.92	cps
Bromine	81-2	77	103	110	97	18.24	cps
Cadmium	108-1	165018	171383	169528	168643	1.94	cps
Cadmium	106-1	237906	243454	243738	241700	1.36	cps
Cadmium	111-1	2047369	2102238	2134073	2094560	2.09	cps
Calcium	43-1	2105019	2138762	2167737	2137173	1.47	cps
Calcium	44-1	33481280	34459624	34763134	34234679	1.96	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3580814	3532137	3587731	3566894	0.85	cps
Cobalt	59-2	5574174	5659827	5612022	5615341	0.76	cps
Copper	63-2	41444832	41083438	41269741	41266004	0.44	cps
Dysprosium	156-1	230	213	217	220	4.01	cps
Dysprosium	156-2	600	630	560	597	5.89	cps
Erbium	164-1	257	270	180	236	20.62	cps
Erbium	164-2	180	157	130	156	16.08	cps
Gadolinium	160-1	237	227	200	221	8.57	cps
Gadolinium	160-2	823	980	947	917	9.00	cps
Holmium	165-1	20238119	19426493	19414960	19693191	2.40	cps
Holmium	165-2	14198027	13993061	14258571	14149886	0.98	cps
Indium	115-1	15477417	14699169	14844934	15007173	2.76	cps
Indium	115-2	5692760	5741212	5676652	5703542	0.59	cps
Iron	56-2	167933334	166716908	167223628	167291290	0.37	cps
Iron	57-2	4156710	4227630	4175264	4186535	0.88	cps
Iron	54-2	9360757	9129489	9232207	9240817	1.25	cps
Krypton	83-1	333	320	380	344	9.15	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S06 Instrumnet Name : P7
Client Sample ID : S06 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:52:57 DataFile Name : 010CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	33542783	34662744	34601917	34269148	1.84	cps
Lead	207-1	29904668	30573891	31058399	30512319	1.90	cps
Lead	208-1	135424766	138964400	139745478	138044881	1.67	cps
Lithium	6-1	2029382	1912567	1829351	1923767	5.22	cps
Magnesium	24-2	32652568	32871304	32581375	32701749	0.46	cps
Manganese	55-2	28714168	28609560	28758447	28694058	0.27	cps
Molybdenum	94-1	29755422	30298880	30041842	30032048	0.91	cps
Molybdenum	95-1	42764216	43175749	43323881	43087949	0.67	cps
Molybdenum	96-1	46620256	47413023	47534563	47189280	1.05	cps
Molybdenum	97-1	26695349	27209093	27139425	27014622	1.03	cps
Molybdenum	98-1	68736074	69577159	69661166	69324800	0.74	cps
Neodymium	150-1	640	547	523	570	10.83	cps
Neodymium	150-2	137	127	170	144	15.71	cps
Nickel	60-2	1427010	1432117	1423641	1427589	0.30	cps
Phosphorus	31-2	192151	194577	194009	193579	0.66	cps
Potassium	39-2	20461236	20169768	20079838	20236947	0.99	cps
Rhodium	103-1	14435306	13567303	13570268	13857626	3.61	cps
Rhodium	103-2	8602857	8681091	8632263	8638737	0.46	cps
Scandium	45-1	8292813	7737886	7798104	7942934	3.83	cps
Scandium	45-2	757407	753022	753512	754647	0.32	cps
Selenium	82-1	130526	133095	133814	132478	1.30	cps
Selenium	77-2	15378	15074	15078	15177	1.15	cps
Selenium	78-2	51623	52128	51743	51831	0.51	cps
Silicon	28-1	21115047	21896624	22125681	21712450	2.44	cps
Silver	107-1	10880442	11238550	11186720	11101904	1.74	cps
Silver	109-1	10566475	10767205	10708975	10680885	0.97	cps
Sodium	23-2	51338089	51210618	51140669	51229792	0.20	cps
Strontium	86-1	2621362	2668382	2665682	2651809	1.00	cps
Strontium	88-1	22898747	23211231	23464098	23191359	1.22	cps
Sulfur	34-1	803080	809661	812110	808284	0.58	cps
Terbium	159-1	20779773	19808928	19609327	20066009	3.12	cps
Terbium	159-2	14198923	14069681	14136509	14135037	0.46	cps
Thallium	203-1	8422237	8652289	8615079	8563202	1.44	cps
Thallium	205-1	19830681	20446443	20508952	20262025	1.85	cps
Tin	118-1	7098995	7301462	7360168	7253541	1.89	cps
Titanium	47-1	10029074	10010698	10116079	10051950	0.56	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S06

Instrumnet Name :

P7

Client Sample ID :

S06

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:52:57

DataFile Name :

010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	27946752	28134560	27895910	27992408	0.45	cps
Vanadium	51-2	3128759	3144114	3107191	3126688	0.59	cps
Yttrium	89-1	18191124	17230007	17109878	17510337	3.38	cps
Yttrium	89-2	4976463	4985119	4998633	4986738	0.22	cps
Zinc	66-2	6932472	6850099	6859132	6880568	0.66	cps
Zirconium	90-1	14516613	14586281	14637306	14580066	0.42	cps
Zirconium	91-1	3260967	3259986	3263747	3261567	0.06	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S07 Instrumnet Name : P7
Client Sample ID : S07 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:55:40 DataFile Name : 011CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7708687	7631309	7554218	7631404	1.01	cps
Antimony	121-1	16345508	16455879	16504388	16435258	0.50	cps
Arsenic	75-2	898532	892474	894622	895209	0.34	cps
Barium	135-1	20862535	21052036	21051612	20988728	0.52	cps
Barium	137-1	36446528	36561206	36791979	36599904	0.48	cps
Beryllium	9-1	1733883	1724210	1702549	1720214	0.93	cps
Bismuth	209-1	11787126	11699070	11597549	11694582	0.81	cps
Bismuth	209-2	9529461	9491229	9631336	9550675	0.76	cps
Bromine	81-1	15275	14751	14707	14911	2.12	cps
Bromine	81-2	97	137	140	124	19.38	cps
Cadmium	108-1	317324	319757	320908	319330	0.57	cps
Cadmium	106-1	449796	454849	455050	453232	0.66	cps
Cadmium	111-1	3847096	3911059	3955987	3904714	1.40	cps
Calcium	43-1	4037676	4115725	4121953	4091785	1.15	cps
Calcium	44-1	64931539	65225894	65461752	65206395	0.41	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6669239	6645960	6699345	6671515	0.40	cps
Cobalt	59-2	10588103	10464420	10460322	10504281	0.69	cps
Copper	63-2	76709451	76647874	76748027	76701784	0.07	cps
Dysprosium	156-1	367	410	420	399	7.11	cps
Dysprosium	156-2	1083	1097	1137	1106	2.51	cps
Erbium	164-1	430	273	400	368	22.61	cps
Erbium	164-2	223	257	250	243	7.25	cps
Gadolinium	160-1	307	310	290	302	3.54	cps
Gadolinium	160-2	923	967	913	934	3.03	cps
Holmium	165-1	19950058	19719110	19766062	19811743	0.62	cps
Holmium	165-2	14454749	14529132	14420587	14468156	0.38	cps
Indium	115-1	14984621	14768220	14831467	14861436	0.75	cps
Indium	115-2	5700767	5696017	5712700	5703161	0.15	cps
Iron	56-2	318564309	313896355	314393555	315618073	0.81	cps
Iron	57-2	7993875	7909384	7793705	7898988	1.27	cps
Iron	54-2	17383712	17304316	17340325	17342784	0.23	cps
Krypton	83-1	333	357	313	334	6.48	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S07 Instrumnet Name : P7
Client Sample ID : S07 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:55:40 DataFile Name : 011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	64963041	65021356	64405094	64796497	0.53	cps
Lead	207-1	57827797	58280339	57572999	57893712	0.62	cps
Lead	208-1	261402569	263859229	260757734	262006511	0.62	cps
Lithium	6-1	1853136	1844340	1842154	1846544	0.31	cps
Magnesium	24-2	61763027	61261391	61162242	61395554	0.52	cps
Manganese	55-2	54678678	54088463	54315911	54361017	0.55	cps
Molybdenum	94-1	57639096	57754719	57436759	57610191	0.28	cps
Molybdenum	95-1	83255657	83679097	82714839	83216531	0.58	cps
Molybdenum	96-1	90768599	91542259	90994912	91101923	0.44	cps
Molybdenum	97-1	51576869	52337539	51860113	51924840	0.74	cps
Molybdenum	98-1	132974535	135548218	133620278	134047677	1.00	cps
Neodymium	150-1	1127	1107	1147	1127	1.78	cps
Neodymium	150-2	363	323	330	339	6.32	cps
Nickel	60-2	2704397	2685259	2708993	2699550	0.47	cps
Phosphorus	31-2	361239	364422	361728	362463	0.47	cps
Potassium	39-2	38286008	37778762	38117648	38060806	0.68	cps
Rhodium	103-1	13746332	13679468	13655010	13693603	0.35	cps
Rhodium	103-2	8573891	8515957	8639579	8576476	0.72	cps
Scandium	45-1	7933704	7855800	7936801	7908768	0.58	cps
Scandium	45-2	772244	764662	768399	768435	0.49	cps
Selenium	82-1	249570	252236	251350	251052	0.54	cps
Selenium	77-2	28835	28695	28220	28583	1.13	cps
Selenium	78-2	96277	96891	96253	96474	0.37	cps
Silicon	28-1	53157313	52883883	53626768	53222654	0.71	cps
Silver	107-1	20693172	20927299	21246180	20955550	1.32	cps
Silver	109-1	20106849	20021195	19886882	20004975	0.55	cps
Sodium	23-2	97051855	96349372	97304592	96901940	0.51	cps
Strontium	86-1	5080443	5191711	5187283	5153146	1.22	cps
Strontium	88-1	44639181	45157191	45064426	44953599	0.61	cps
Sulfur	34-1	1412472	1428978	1444204	1428552	1.11	cps
Terbium	159-1	20314873	20116457	19938488	20123273	0.94	cps
Terbium	159-2	14409601	14227577	14571365	14402848	1.19	cps
Thallium	203-1	16207332	16228800	16318652	16251595	0.36	cps
Thallium	205-1	38799799	38731903	37916312	38482671	1.28	cps
Tin	118-1	13875372	13977939	14017891	13957067	0.53	cps
Titanium	47-1	19148505	19306323	19280437	19245088	0.44	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S07 Instrumnet Name : P7
Client Sample ID : S07 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:55:40 DataFile Name : 011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	53433906	53381586	54068299	53627930	0.71	cps
Vanadium	51-2	5898675	5875891	5866251	5880272	0.28	cps
Yttrium	89-1	17698348	17774315	17641258	17704640	0.38	cps
Yttrium	89-2	5053669	5050033	5081757	5061820	0.34	cps
Zinc	66-2	12795337	12770340	12717162	12760946	0.31	cps
Zirconium	90-1	28201841	28451245	28386300	28346462	0.46	cps
Zirconium	91-1	6289659	6342002	6277413	6303025	0.54	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S08 Instrumnet Name : P7
Client Sample ID : S08 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:58:26 DataFile Name : 012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	39678261	38954997	39747375	39460211	1.11	cps
Antimony	121-1	9246	8346	7282	8291	11.86	cps
Arsenic	75-2	550	520	463	511	8.61	cps
Barium	135-1	10741	9343	9160	9748	8.87	cps
Barium	137-1	19083	16520	15702	17102	10.31	cps
Beryllium	9-1	523	380	267	390	32.98	cps
Bismuth	209-1	10418591	9980811	10222792	10207398	2.15	cps
Bismuth	209-2	8354395	8398037	8387402	8379945	0.27	cps
Bromine	81-1	15748	16333	16072	16051	1.82	cps
Bromine	81-2	163	137	190	163	16.33	cps
Cadmium	108-1	143	147	123	138	9.16	cps
Cadmium	106-1	4841	4921	4914	4892	0.91	cps
Cadmium	111-1	1004	719	732	818	19.69	cps
Calcium	43-1	19289748	19656220	19877913	19607960	1.51	cps
Calcium	44-1	311622829	320111435	324240002	318658089	2.02	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	13325	10587	11071	11661	12.53	cps
Cobalt	59-2	28834	28637	28661	28711	0.37	cps
Copper	63-2	15335	14294	14334	14654	4.02	cps
Dysprosium	156-1	617	627	633	626	1.34	cps
Dysprosium	156-2	580	547	617	581	6.03	cps
Erbium	164-1	760	800	737	766	4.18	cps
Erbium	164-2	493	553	533	527	5.80	cps
Gadolinium	160-1	720	733	670	708	4.72	cps
Gadolinium	160-2	1283	1257	1120	1220	7.18	cps
Holmium	165-1	18454604	18540445	18784985	18593345	0.92	cps
Holmium	165-2	13893534	13845952	13869495	13869660	0.17	cps
Indium	115-1	13975906	13735033	13845405	13852115	0.87	cps
Indium	115-2	5486405	5565867	5590872	5547715	0.98	cps
Iron	56-2	1564925950	1554381524	1568215497	1562507657	0.46	cps
Iron	57-2	39293604	38849438	39070556	39071199	0.57	cps
Iron	54-2	85610019	85036819	85434729	85360522	0.34	cps
Krypton	83-1	363	320	397	360	10.68	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : S08 Instrumnet Name : P7
Client Sample ID : S08 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 11:58:26 DataFile Name : 012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	15399	12306	10417	12707	19.79	cps
Lead	207-1	13690	10718	9547	11318	18.87	cps
Lead	208-1	61408	48524	42253	50728	19.25	cps
Lithium	6-1	1718183	1678102	1749757	1715347	2.09	cps
Magnesium	24-2	301265916	297015102	303939709	300740242	1.16	cps
Manganese	55-2	25682	25322	25538	25514	0.71	cps
Molybdenum	94-1	19400	15695	14554	16550	15.31	cps
Molybdenum	95-1	20979	16219	13503	16900	22.39	cps
Molybdenum	96-1	36105	31771	28849	32242	11.32	cps
Molybdenum	97-1	12736	10037	7926	10233	23.56	cps
Molybdenum	98-1	31404	24107	19954	25155	23.04	cps
Neodymium	150-1	313	440	380	378	16.77	cps
Neodymium	150-2	223	247	240	237	5.08	cps
Nickel	60-2	7672	8062	7895	7877	2.49	cps
Phosphorus	31-2	540	453	470	488	9.43	cps
Potassium	39-2	196420730	194467144	198320610	196402828	0.98	cps
Rhodium	103-1	12377418	12353715	12459178	12396770	0.45	cps
Rhodium	103-2	7853879	7960219	7937656	7917251	0.71	cps
Scandium	45-1	7633972	7531908	7671908	7612596	0.95	cps
Scandium	45-2	775122	779978	790416	781839	1.00	cps
Selenium	82-1	829	753	774	785	5.03	cps
Selenium	77-2	13	7	7	9	43.25	cps
Selenium	78-2	587	497	577	553	8.92	cps
Silicon	28-1	877615	848987	834660	853754	2.56	cps
Silver	107-1	5761	4614	3821	4732	20.62	cps
Silver	109-1	5444	4327	3747	4506	19.14	cps
Sodium	23-2	486409366	490473206	496735593	491206055	1.06	cps
Strontium	86-1	16089	16363	16192	16215	0.85	cps
Strontium	88-1	135918	136698	136042	136219	0.31	cps
Sulfur	34-1	196047	201102	207904	201684	2.95	cps
Terbium	159-1	19147601	18936173	19101992	19061922	0.58	cps
Terbium	159-2	13703116	13752913	13758414	13738148	0.22	cps
Thallium	203-1	3427	2330	1810	2523	32.72	cps
Thallium	205-1	7479	5431	4247	5719	28.59	cps
Tin	118-1	6475	5855	5264	5865	10.32	cps
Titanium	47-1	4141	3264	2637	3347	22.57	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

S08

Instrumnet Name :

P7

Client Sample ID :

S08

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 11:58:26

DataFile Name :

012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	9890	6578	4931	7133	35.41	cps
Vanadium	51-2	1253	1137	1167	1186	5.11	cps
Yttrium	89-1	16995764	16665274	16795380	16818806	0.99	cps
Yttrium	89-2	4980391	5051550	5082963	5038301	1.04	cps
Zinc	66-2	15268	14921	15275	15154	1.33	cps
Zirconium	90-1	20054	18375	17784	18738	6.28	cps
Zirconium	91-1	4377	4111	3891	4126	5.91	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICV001 Instrumnet Name : P7
Client Sample ID : ICV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 12:43:35 DataFile Name : 013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	197298	195728	196021	196349	0.43	cps
Antimony	121-1	3382474	3404425	3367191	3384697	0.55	cps
Arsenic	75-2	189172	188406	189608	189062	0.32	cps
Barium	135-1	427722	433548	434888	432053	0.88	cps
Barium	137-1	748539	749892	744906	747779	0.34	cps
Beryllium	9-1	178356	181857	184330	181514	1.65	cps
Bismuth	209-1	11845857	11881675	11751599	11826377	0.57	cps
Bismuth	209-2	9895939	10118961	10059189	10024696	1.15	cps
Bromine	81-1	15725	15465	15201	15464	1.69	cps
Bromine	81-2	150	137	123	137	9.75	cps
Cadmium	108-1	52428	52732	52792	52651	0.37	cps
Cadmium	106-1	81071	82083	81487	81547	0.62	cps
Cadmium	111-1	429017	432487	428619	430041	0.49	cps
Calcium	43-1	105376	105662	104510	105182	0.57	cps
Calcium	44-1	1579397	1589947	1560530	1576624	0.95	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	731603	724830	721954	726129	0.68	cps
Cobalt	59-2	1153600	1157653	1147266	1152840	0.45	cps
Copper	63-2	809823	801692	798804	803440	0.71	cps
Dysprosium	156-1	40	33	37	37	9.10	cps
Dysprosium	156-2	37	33	43	38	13.48	cps
Erbium	164-1	80	93	87	87	7.69	cps
Erbium	164-2	57	53	27	46	36.09	cps
Gadolinium	160-1	103	97	87	96	8.78	cps
Gadolinium	160-2	907	873	900	893	1.97	cps
Holmium	165-1	19303479	19581075	19389053	19424536	0.73	cps
Holmium	165-2	14324586	14430863	14301520	14352323	0.48	cps
Indium	115-1	15582120	15568069	15433526	15527905	0.53	cps
Indium	115-2	6018272	5980031	5872269	5956857	1.27	cps
Iron	56-2	13356512	13184020	13292876	13277802	0.66	cps
Iron	57-2	345286	343193	342398	343625	0.43	cps
Iron	54-2	777897	776885	779448	778077	0.17	cps
Krypton	83-1	327	307	253	296	12.83	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICV001 Instrumnet Name : P7
Client Sample ID : ICV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 12:43:35 DataFile Name : 013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2749180	2786318	2769568	2768356	0.67	cps
Lead	207-1	2347202	2392336	2364553	2368030	0.96	cps
Lead	208-1	10870666	10945585	10865310	10893854	0.41	cps
Lithium	6-1	1932463	1884046	1922370	1912960	1.34	cps
Magnesium	24-2	737997	735260	734077	735778	0.27	cps
Manganese	55-2	580519	576599	577191	578103	0.37	cps
Molybdenum	94-1	31145163	30838450	30737520	30907045	0.69	cps
Molybdenum	95-1	44267061	44331969	44110143	44236391	0.26	cps
Molybdenum	96-1	48752763	48568389	48311393	48544182	0.46	cps
Molybdenum	97-1	27936261	27766658	27650986	27784635	0.52	cps
Molybdenum	98-1	71660259	71358331	71340009	71452866	0.25	cps
Neodymium	150-1	20	40	17	26	49.38	cps
Neodymium	150-2	13	7	7	9	43.25	cps
Nickel	60-2	305206	302021	302831	303353	0.55	cps
Phosphorus	31-2	397	340	407	381	9.43	cps
Potassium	39-2	1647823	1610612	1612622	1623686	1.29	cps
Rhodium	103-1	15145598	14803699	14788663	14912653	1.35	cps
Rhodium	103-2	9233881	9141576	9151332	9175596	0.55	cps
Scandium	45-1	8543817	8437969	8388654	8456814	0.94	cps
Scandium	45-2	810255	804925	797365	804182	0.81	cps
Selenium	82-1	55152	55316	54956	55141	0.33	cps
Selenium	77-2	5745	6241	6288	6091	4.95	cps
Selenium	78-2	21399	21502	21038	21313	1.14	cps
Silicon	28-1	4937866	5185241	5288004	5137037	3.50	cps
Silver	107-1	1123191	1134146	1131456	1129598	0.51	cps
Silver	109-1	1062318	1071146	1072876	1068780	0.53	cps
Sodium	23-2	2013685	2046445	2003942	2021357	1.10	cps
Strontium	86-1	2862033	2836418	2824642	2841031	0.67	cps
Strontium	88-1	24758742	24900173	24662403	24773773	0.48	cps
Sulfur	34-1	248552	241336	235815	241901	2.64	cps
Terbium	159-1	20012357	19813696	19662335	19829463	0.89	cps
Terbium	159-2	14104231	14373718	14352463	14276804	1.05	cps
Thallium	203-1	3389276	3486145	3436024	3437148	1.41	cps
Thallium	205-1	7926375	8078697	7966420	7990498	0.99	cps
Tin	118-1	7639564	7631694	7632424	7634561	0.06	cps
Titanium	47-1	10772440	10852603	10670544	10765196	0.85	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICV001 Instrumnet Name : P7
Client Sample ID : ICV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 12:43:35 DataFile Name : 013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	28630977	28949333	29155150	28911820	0.91	cps
Vanadium	51-2	614013	616244	610467	613575	0.47	cps
Yttrium	89-1	18597305	18128361	18100502	18275389	1.53	cps
Yttrium	89-2	5190165	5181933	5178966	5183688	0.11	cps
Zinc	66-2	278796	278686	280371	279284	0.34	cps
Zirconium	90-1	15303256	15205882	15032427	15180522	0.90	cps
Zirconium	91-1	3341209	3409109	3374589	3374969	1.01	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICB001 Instrumnet Name : P7
Client Sample ID : ICB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:03:05 DataFile Name : 014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	210	237	203	217	8.14	cps
Antimony	121-1	180	210	173	188	10.40	cps
Arsenic	75-2	7	13	13	11	34.61	cps
Barium	135-1	50	77	50	59	26.15	cps
Barium	137-1	53	103	57	71	39.31	cps
Beryllium	9-1	40	47	40	42	9.12	cps
Bismuth	209-1	11939074	11812495	11937992	11896521	0.61	cps
Bismuth	209-2	10120043	10154632	10154466	10143047	0.20	cps
Bromine	81-1	15972	15862	16506	16113	2.14	cps
Bromine	81-2	137	163	140	147	9.91	cps
Cadmium	108-1	10	13	17	13	25.01	cps
Cadmium	106-1	4651	4581	4501	4577	1.64	cps
Cadmium	111-1	33	57	24	38	44.61	cps
Calcium	43-1	463	497	457	472	4.54	cps
Calcium	44-1	16519	16022	15989	16177	1.84	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1397	1213	1343	1318	7.16	cps
Cobalt	59-2	373	427	390	397	6.88	cps
Copper	63-2	1120	1147	1097	1121	2.23	cps
Dysprosium	156-1	27	23	10	20	44.10	cps
Dysprosium	156-2	13	0	0	4	173.21	cps
Erbium	164-1	100	80	80	87	13.32	cps
Erbium	164-2	67	50	47	54	19.68	cps
Gadolinium	160-1	110	87	110	102	13.18	cps
Gadolinium	160-2	903	863	850	872	3.18	cps
Holmium	165-1	19449578	19449711	19249722	19383004	0.60	cps
Holmium	165-2	14492016	14547261	14548500	14529259	0.22	cps
Indium	115-1	16008501	15936622	15917218	15954114	0.30	cps
Indium	115-2	6230707	6217724	6246776	6231735	0.23	cps
Iron	56-2	21282	20838	20474	20865	1.94	cps
Iron	57-2	1253	1227	1180	1220	3.04	cps
Iron	54-2	3247	3540	3434	3407	4.36	cps
Krypton	83-1	413	343	303	353	15.76	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICB001 Instrumnet Name : P7
Client Sample ID : ICB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:03:05 DataFile Name : 014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	647	583	610	613	5.18	cps
Lead	207-1	560	537	550	549	2.13	cps
Lead	208-1	2407	2387	2420	2405	0.70	cps
Lithium	6-1	1836551	1879643	1918888	1878361	2.19	cps
Magnesium	24-2	663	610	620	631	4.49	cps
Manganese	55-2	380	303	340	341	11.24	cps
Molybdenum	94-1	597	677	670	648	6.85	cps
Molybdenum	95-1	447	517	503	489	7.60	cps
Molybdenum	96-1	657	633	593	628	5.10	cps
Molybdenum	97-1	313	297	357	322	9.61	cps
Molybdenum	98-1	777	680	847	768	10.90	cps
Neodymium	150-1	3	7	0	3	100.05	cps
Neodymium	150-2	3	7	3	4	43.40	cps
Nickel	60-2	293	337	373	334	11.97	cps
Phosphorus	31-2	410	377	453	413	9.30	cps
Potassium	39-2	68125	66548	67177	67283	1.18	cps
Rhodium	103-1	15234359	15175899	15260623	15223627	0.28	cps
Rhodium	103-2	9596220	9519092	9503162	9539491	0.52	cps
Scandium	45-1	8657849	8716876	8647955	8674227	0.43	cps
Scandium	45-2	844680	839854	835853	840129	0.53	cps
Selenium	82-1	547	626	553	576	7.59	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	580	623	620	608	3.97	cps
Silicon	28-1	766104	767908	765574	766529	0.16	cps
Silver	107-1	153	167	140	153	8.70	cps
Silver	109-1	137	67	80	94	39.35	cps
Sodium	23-2	22113	21565	22236	21971	1.63	cps
Strontium	86-1	617	570	563	583	4.98	cps
Strontium	88-1	480	440	497	472	6.17	cps
Sulfur	34-1	250643	251029	252198	251290	0.32	cps
Terbium	159-1	19961885	19872168	20131629	19988561	0.66	cps
Terbium	159-2	14472466	14337816	14205739	14338674	0.93	cps
Thallium	203-1	333	280	260	291	13.02	cps
Thallium	205-1	777	797	730	768	4.46	cps
Tin	118-1	2264	2150	2040	2151	5.19	cps
Titanium	47-1	177	170	203	183	9.62	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICB001

Instrumnet Name :

P7

Client Sample ID :

ICB001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:03:05

DataFile Name :

014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	223	250	273	249	10.05	cps
Vanadium	51-2	17	27	33	26	32.81	cps
Yttrium	89-1	18593865	18686493	18668105	18649488	0.26	cps
Yttrium	89-2	5430408	5368200	5351898	5383502	0.77	cps
Zinc	66-2	447	440	377	421	9.17	cps
Zirconium	90-1	1050	1090	1183	1108	6.18	cps
Zirconium	91-1	200	220	263	228	14.21	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSA001 Instrumnet Name : P7
Client Sample ID : ICSA001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:06:20 DataFile Name : 015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	36747029	37077453	36869891	36898124	0.45	cps
Antimony	121-1	21099	21533	21950	21527	1.98	cps
Arsenic	75-2	360	353	327	347	5.09	cps
Barium	135-1	6448	6398	6625	6490	1.84	cps
Barium	137-1	10914	11638	11521	11358	3.42	cps
Beryllium	9-1	467	447	513	476	7.19	cps
Bismuth	209-1	11595051	11653658	11590327	11613012	0.30	cps
Bismuth	209-2	9713481	9566152	9655249	9644961	0.77	cps
Bromine	81-1	17450	17941	18582	17991	3.15	cps
Bromine	81-2	320	283	310	304	6.23	cps
Cadmium	108-1	3114	3177	3137	3143	1.02	cps
Cadmium	106-1	4758	4657	4904	4773	2.60	cps
Cadmium	111-1	1818	1850	1833	1834	0.87	cps
Calcium	43-1	4222965	4202028	4280118	4235037	0.95	cps
Calcium	44-1	67855982	67736944	68274851	67955926	0.42	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	146009	146362	145706	146026	0.22	cps
Cobalt	59-2	14223	14300	14220	14248	0.32	cps
Copper	63-2	61221	61010	60866	61033	0.29	cps
Dysprosium	156-1	90	70	70	77	15.06	cps
Dysprosium	156-2	67	50	30	49	37.55	cps
Erbium	164-1	167	120	150	146	16.25	cps
Erbium	164-2	70	80	120	90	29.40	cps
Gadolinium	160-1	160	133	160	151	10.19	cps
Gadolinium	160-2	897	980	957	944	4.55	cps
Holmium	165-1	19981245	19906270	20139182	20008899	0.59	cps
Holmium	165-2	14832158	14565409	14751845	14716471	0.93	cps
Indium	115-1	15143386	15391221	15268136	15267581	0.81	cps
Indium	115-2	5835420	6024457	5912017	5923965	1.61	cps
Iron	56-2	665647337	646615470	660998923	657753910	1.51	cps
Iron	57-2	16654671	16619802	16331323	16535265	1.07	cps
Iron	54-2	36277830	35961489	35929318	36056213	0.53	cps
Krypton	83-1	370	367	330	356	6.24	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSA001 Instrumnet Name : P7
Client Sample ID : ICSA001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:06:20 DataFile Name : 015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	71490	69319	68133	69647	2.44	cps
Lead	207-1	55670	55432	54890	55331	0.72	cps
Lead	208-1	267298	261235	258632	262388	1.69	cps
Lithium	6-1	1793684	1783602	1744657	1773981	1.46	cps
Magnesium	24-2	60041616	61136292	60661637	60613182	0.91	cps
Manganese	55-2	47190	46655	46809	46885	0.59	cps
Molybdenum	94-1	9532840	9633510	9764396	9643582	1.20	cps
Molybdenum	95-1	16685593	16971812	16943949	16867118	0.94	cps
Molybdenum	96-1	17780908	18176224	18416578	18124570	1.77	cps
Molybdenum	97-1	10433272	10620467	10723174	10592305	1.39	cps
Molybdenum	98-1	26924346	27060208	27463679	27149411	1.03	cps
Neodymium	150-1	70	73	103	82	22.33	cps
Neodymium	150-2	57	50	57	54	7.07	cps
Nickel	60-2	17807	17367	17534	17569	1.27	cps
Phosphorus	31-2	1854256	1889104	1875544	1872968	0.94	cps
Potassium	39-2	78549112	79396140	78929574	78958275	0.54	cps
Rhodium	103-1	14012788	13923063	14128234	14021361	0.73	cps
Rhodium	103-2	8769026	8873594	8667756	8770125	1.17	cps
Scandium	45-1	8182578	8107842	8222560	8170993	0.71	cps
Scandium	45-2	789721	793678	785346	789581	0.53	cps
Selenium	82-1	651	598	564	604	7.28	cps
Selenium	77-2	3	13	3	7	86.65	cps
Selenium	78-2	467	517	493	492	5.08	cps
Silicon	28-1	780656	782730	783241	782209	0.18	cps
Silver	107-1	793	803	857	818	4.16	cps
Silver	109-1	757	710	730	732	3.20	cps
Sodium	23-2	100556232	99979159	100092692	100209361	0.31	cps
Strontium	86-1	181210	187524	188776	185837	2.18	cps
Strontium	88-1	1584239	1612521	1623494	1606751	1.26	cps
Sulfur	34-1	6174808	6142533	6131520	6149620	0.37	cps
Terbium	159-1	20538883	20561266	20652559	20584236	0.29	cps
Terbium	159-2	14665888	14659974	14363747	14563203	1.19	cps
Thallium	203-1	3634	3427	2897	3319	11.45	cps
Thallium	205-1	8846	7679	7365	7964	9.80	cps
Tin	118-1	6482	6188	5731	6134	6.16	cps
Titanium	47-1	4069064	4026021	4075156	4056747	0.66	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :ICSA001

Instrumnet Name :P7

Client Sample ID :ICSA001

Dilution Factor :1

Date & Time Acquired :2024-12-06 13:06:20

DataFile Name :015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1200	1177	1243	1207	2.80	cps
Vanadium	51-2	1113	1210	1323	1216	8.65	cps
Yttrium	89-1	18109875	17964706	18324703	18133095	1.00	cps
Yttrium	89-2	5194127	5248152	5127158	5189812	1.17	cps
Zinc	66-2	19777	19867	20227	19957	1.19	cps
Zirconium	90-1	1367	1377	1437	1393	2.72	cps
Zirconium	91-1	297	297	300	298	0.65	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSAB001 Instrumnet Name : P7
Client Sample ID : ICSAB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:09:23 DataFile Name : 016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	38501804	38213397	38462613	38392605	0.41	cps
Antimony	121-1	380313	386282	389054	385217	1.16	cps
Arsenic	75-2	19560	19800	19480	19613	0.85	cps
Barium	135-1	97910	98753	99692	98785	0.90	cps
Barium	137-1	170181	170906	173403	171497	0.99	cps
Beryllium	9-1	33596	33449	32841	33296	1.20	cps
Bismuth	209-1	12081449	12215624	12049336	12115470	0.73	cps
Bismuth	209-2	9795500	9797977	9815605	9803028	0.11	cps
Bromine	81-1	20077	20972	21286	20778	3.02	cps
Bromine	81-2	510	543	570	541	5.56	cps
Cadmium	108-1	9220	9196	9086	9167	0.78	cps
Cadmium	106-1	13480	13657	13903	13680	1.56	cps
Cadmium	111-1	88106	88418	88836	88453	0.41	cps
Calcium	43-1	4391599	4496624	4434987	4441070	1.19	cps
Calcium	44-1	70741306	71863601	70719286	71108064	0.92	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	297818	296623	296449	296963	0.25	cps
Cobalt	59-2	243921	244954	244843	244573	0.23	cps
Copper	63-2	222485	221732	220508	221575	0.45	cps
Dysprosium	156-1	130	110	83	108	21.72	cps
Dysprosium	156-2	80	93	87	87	7.69	cps
Erbium	164-1	133	140	163	146	10.82	cps
Erbium	164-2	77	123	70	90	32.29	cps
Gadolinium	160-1	167	163	177	169	4.11	cps
Gadolinium	160-2	940	937	917	931	1.36	cps
Holmium	165-1	21191021	21103637	21064291	21119650	0.31	cps
Holmium	165-2	15127348	15003210	15062058	15064205	0.41	cps
Indium	115-1	16164195	16225585	16344217	16244666	0.56	cps
Indium	115-2	6045166	6036707	6087355	6056410	0.45	cps
Iron	56-2	688586523	688103803	682382977	686357768	0.50	cps
Iron	57-2	17159313	17040751	17020770	17073611	0.44	cps
Iron	54-2	37440851	37268927	37223049	37310942	0.31	cps
Krypton	83-1	360	333	350	348	3.87	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : ICSAB001 Instrumnet Name : P7
Client Sample ID : ICSAB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:09:23 DataFile Name : 016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	354277	354069	355059	354468	0.15	cps
Lead	207-1	297763	299459	302621	299948	0.82	cps
Lead	208-1	1372365	1383293	1379999	1378552	0.41	cps
Lithium	6-1	1738346	1693058	1690637	1707347	1.57	cps
Magnesium	24-2	63323017	62546421	63696362	63188600	0.93	cps
Manganese	55-2	164491	166338	164923	165251	0.58	cps
Molybdenum	94-1	10171958	10181197	10141774	10164976	0.20	cps
Molybdenum	95-1	17757712	17751337	17825059	17778036	0.23	cps
Molybdenum	96-1	19205781	19299626	19385263	19296890	0.47	cps
Molybdenum	97-1	11077821	11189389	11130947	11132719	0.50	cps
Molybdenum	98-1	28441438	28742868	28755309	28646538	0.62	cps
Neodymium	150-1	90	70	97	86	16.22	cps
Neodymium	150-2	73	37	80	63	36.84	cps
Nickel	60-2	76574	77402	76008	76661	0.91	cps
Phosphorus	31-2	1959186	1938445	1947876	1948503	0.53	cps
Potassium	39-2	82136494	81586290	81869592	81864125	0.34	cps
Rhodium	103-1	14774416	14761100	14683936	14739818	0.33	cps
Rhodium	103-2	9065115	9041149	9156630	9087632	0.67	cps
Scandium	45-1	8516518	8525935	8297717	8446723	1.53	cps
Scandium	45-2	819989	817349	819658	818999	0.18	cps
Selenium	82-1	6092	6214	6051	6119	1.38	cps
Selenium	77-2	577	620	603	600	3.64	cps
Selenium	78-2	2604	2707	2630	2647	2.03	cps
Silicon	28-1	807562	819009	816186	814252	0.73	cps
Silver	107-1	437778	444986	450698	444487	1.46	cps
Silver	109-1	418379	424037	422767	421728	0.70	cps
Sodium	23-2	103275342	103051375	102097348	102808022	0.61	cps
Strontium	86-1	194338	197603	198402	196781	1.09	cps
Strontium	88-1	1711110	1710712	1717323	1713049	0.22	cps
Sulfur	34-1	6414887	6423725	6388683	6409099	0.28	cps
Terbium	159-1	21683679	21535303	21756535	21658506	0.52	cps
Terbium	159-2	15174295	14907624	15136703	15072874	0.96	cps
Thallium	203-1	350984	356840	355658	354494	0.87	cps
Thallium	205-1	829385	838719	841861	836655	0.78	cps
Tin	118-1	5011	5151	5164	5109	1.66	cps
Titanium	47-1	4195074	4227632	4220846	4214517	0.41	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

ICSAB001

Instrumnet Name :

P7

Client Sample ID :

ICSAB001

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:09:23

DataFile Name :

016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1227	1257	1207	1230	2.05	cps
Vanadium	51-2	126857	128141	127708	127569	0.51	cps
Yttrium	89-1	19349153	19064423	18884448	19099342	1.23	cps
Yttrium	89-2	5386181	5376970	5407781	5390311	0.29	cps
Zinc	66-2	48432	48766	48505	48567	0.36	cps
Zirconium	90-1	1483	1500	1450	1478	1.72	cps
Zirconium	91-1	347	360	303	337	8.80	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV001 Instrumnet Name : P7
Client Sample ID : CCV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:19:55 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	21251271	21156966	20999023	21135753	0.60	cps
Antimony	121-1	8977901	8990124	8970196	8979407	0.11	cps
Arsenic	75-2	503169	501777	500119	501688	0.30	cps
Barium	135-1	11335115	11328077	11251392	11304861	0.41	cps
Barium	137-1	19723999	19506400	19633606	19621335	0.56	cps
Beryllium	9-1	793344	796553	797367	795755	0.27	cps
Bismuth	209-1	11798239	11761777	11610431	11723483	0.85	cps
Bismuth	209-2	9109329	9057611	9142836	9103259	0.47	cps
Bromine	81-1	14390	13723	14390	14168	2.72	cps
Bromine	81-2	130	147	107	128	15.72	cps
Cadmium	108-1	172246	174637	174266	173717	0.74	cps
Cadmium	106-1	250287	250299	248326	249637	0.45	cps
Cadmium	111-1	2176501	2181476	2141615	2166531	1.00	cps
Calcium	43-1	10869104	10915234	10939562	10907967	0.33	cps
Calcium	44-1	175287031	177337217	175947491	176190580	0.59	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3570174	3568130	3623785	3587363	0.88	cps
Cobalt	59-2	5665439	5642861	5642450	5650250	0.23	cps
Copper	63-2	41199970	41112851	41004770	41105864	0.24	cps
Dysprosium	156-1	493	473	457	474	3.87	cps
Dysprosium	156-2	807	1010	920	912	11.17	cps
Erbium	164-1	460	537	500	499	7.69	cps
Erbium	164-2	330	293	400	341	15.89	cps
Gadolinium	160-1	543	457	457	486	10.31	cps
Gadolinium	160-2	1083	1047	1237	1122	8.98	cps
Holmium	165-1	20631789	20340583	20210421	20394264	1.06	cps
Holmium	165-2	14359833	14412104	14259676	14343871	0.54	cps
Indium	115-1	15638060	15429768	15364606	15477478	0.92	cps
Indium	115-2	5886901	5780490	5836535	5834642	0.91	cps
Iron	56-2	827315508	825460361	829132494	827302788	0.22	cps
Iron	57-2	20648350	20823925	20530370	20667548	0.71	cps
Iron	54-2	44812673	44951723	44882956	44882450	0.15	cps
Krypton	83-1	343	370	403	372	8.08	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV001 Instrumnet Name : P7
Client Sample ID : CCV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:19:55 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	34081301	33846822	33446212	33791445	0.95	cps
Lead	207-1	30105418	30081176	30099940	30095511	0.04	cps
Lead	208-1	136289091	136651212	135808831	136249712	0.31	cps
Lithium	6-1	1720561	1680587	1692930	1698026	1.21	cps
Magnesium	24-2	164242448	164338941	165116658	164566015	0.29	cps
Manganese	55-2	28774204	28972430	28984087	28910240	0.41	cps
Molybdenum	94-1	32071957	31786811	31765803	31874857	0.54	cps
Molybdenum	95-1	45960414	45706694	45698908	45788672	0.32	cps
Molybdenum	96-1	50417329	50331629	50053813	50267590	0.38	cps
Molybdenum	97-1	28716144	28683450	28650870	28683488	0.11	cps
Molybdenum	98-1	73798454	74308824	73340781	73816019	0.66	cps
Neodymium	150-1	693	753	780	742	5.98	cps
Neodymium	150-2	287	253	203	248	16.93	cps
Nickel	60-2	1418960	1407034	1403446	1409813	0.58	cps
Phosphorus	31-2	201100	195849	198753	198567	1.32	cps
Potassium	39-2	104137915	103901072	102473302	103504096	0.87	cps
Rhodium	103-1	14345564	14023929	14068546	14146013	1.23	cps
Rhodium	103-2	8624297	8463918	8508746	8532320	0.97	cps
Scandium	45-1	8591899	8416486	8449111	8485832	1.10	cps
Scandium	45-2	808579	803975	810708	807754	0.43	cps
Selenium	82-1	137137	138114	137069	137440	0.43	cps
Selenium	77-2	15805	15401	15665	15624	1.31	cps
Selenium	78-2	51713	51098	50720	51177	0.98	cps
Silicon	28-1	24691649	24882818	25037815	24870760	0.70	cps
Silver	107-1	11612540	11472897	11482921	11522786	0.68	cps
Silver	109-1	10940825	11170162	10932214	11014400	1.23	cps
Sodium	23-2	260005716	257761329	258477236	258748094	0.44	cps
Strontium	86-1	2788525	2811909	2738099	2779511	1.36	cps
Strontium	88-1	24585222	24490426	24386085	24487245	0.41	cps
Sulfur	34-1	783195	781193	776177	780188	0.46	cps
Terbium	159-1	21252484	20912020	20593843	20919449	1.57	cps
Terbium	159-2	14228046	14186211	14412155	14275471	0.84	cps
Thallium	203-1	8522937	8445142	8466590	8478223	0.47	cps
Thallium	205-1	20167322	19977113	20078620	20074352	0.47	cps
Tin	118-1	7431473	7485431	7424041	7446982	0.45	cps
Titanium	47-1	10583510	10492736	10426401	10500882	0.75	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV001 Instrumnet Name : P7
Client Sample ID : CCV001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:19:55 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	28060568	28279172	27864209	28067983	0.74	cps
Vanadium	51-2	3198649	3208041	3207162	3204617	0.16	cps
Yttrium	89-1	19028346	18737942	18523783	18763357	1.35	cps
Yttrium	89-2	5307279	5204185	5225492	5245652	1.04	cps
Zinc	66-2	6874494	6849497	6899354	6874449	0.36	cps
Zirconium	90-1	15556197	15627553	15609360	15597703	0.24	cps
Zirconium	91-1	3455008	3486073	3455442	3465508	0.51	cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :CCB001Instrumnet Name :P7

Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired :2024-12-06 13:22:38DataFile Name :020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	357	323	247	309	18.26	cps
Antimony	121-1	6675	3937	3297	4636	38.70	cps
Arsenic	75-2	10	13	10	11	17.30	cps
Barium	135-1	3054	687	287	1342	111.41	cps
Barium	137-1	5635	1280	467	2460	112.94	cps
Beryllium	9-1	310	193	143	216	39.68	cps
Bismuth	209-1	12736694	12344159	12507491	12529448	1.57	cps
Bismuth	209-2	10144289	10095277	10277153	10172240	0.93	cps
Bromine	81-1	14197	14030	14057	14095	0.64	cps
Bromine	81-2	220	247	237	234	5.75	cps
Cadmium	108-1	87	33	23	48	71.27	cps
Cadmium	106-1	5078	4941	4831	4950	2.50	cps
Cadmium	111-1	795	278	151	408	83.56	cps
Calcium	43-1	3547	1207	660	1805	84.98	cps
Calcium	44-1	71213	31077	21416	41235	64.04	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1260	1263	1277	1267	0.70	cps
Cobalt	59-2	260	243	323	276	15.32	cps
Copper	63-2	1800	1737	1647	1728	4.46	cps
Dysprosium	156-1	13	10	13	12	15.73	cps
Dysprosium	156-2	7	7	7	7	0.00	cps
Erbium	164-1	83	77	63	74	13.68	cps
Erbium	164-2	47	43	67	52	24.17	cps
Gadolinium	160-1	70	107	83	87	21.42	cps
Gadolinium	160-2	887	887	960	911	4.65	cps
Holmium	165-1	20427891	20205808	20331108	20321602	0.55	cps
Holmium	165-2	14685144	14534451	14549415	14589670	0.57	cps
Indium	115-1	16749813	16317884	16257893	16441863	1.63	cps
Indium	115-2	6251304	6225899	6186877	6221360	0.52	cps
Iron	56-2	28290	25999	24550	26280	7.18	cps
Iron	57-2	1487	1503	1407	1466	3.53	cps
Iron	54-2	3654	3617	3510	3594	2.07	cps
Krypton	83-1	337	317	307	320	4.77	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB001 Instrumnet Name : P7
Client Sample ID : CCB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:22:38 DataFile Name : 020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	11242	3881	2394	5839	81.15	cps
Lead	207-1	9727	3390	2000	5039	81.74	cps
Lead	208-1	45121	15464	9198	23261	82.49	cps
Lithium	6-1	1844801	1778395	1821937	1815044	1.86	cps
Magnesium	24-2	1920	1580	1540	1680	12.43	cps
Manganese	55-2	497	480	390	456	12.60	cps
Molybdenum	94-1	10678	3664	2034	5458	84.15	cps
Molybdenum	95-1	14094	4461	1977	6844	93.52	cps
Molybdenum	96-1	15812	4988	2207	7669	93.73	cps
Molybdenum	97-1	9176	2660	1233	4357	97.20	cps
Molybdenum	98-1	23126	7002	3087	11072	95.93	cps
Neodymium	150-1	10	17	7	11	45.82	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	450	380	437	422	8.80	cps
Phosphorus	31-2	370	377	400	382	4.12	cps
Potassium	39-2	74136	75412	74364	74637	0.91	cps
Rhodium	103-1	15697581	15524851	15181074	15467835	1.70	cps
Rhodium	103-2	9531830	9514074	9444403	9496769	0.49	cps
Scandium	45-1	8676446	8506736	8439063	8540748	1.43	cps
Scandium	45-2	819727	822283	819467	820492	0.19	cps
Selenium	82-1	734	661	643	679	7.08	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	510	603	537	550	8.74	cps
Silicon	28-1	812677	806450	798799	805975	0.86	cps
Silver	107-1	4971	2290	1563	2942	61.01	cps
Silver	109-1	4687	2013	1427	2709	64.16	cps
Sodium	23-2	50131	48342	46406	48293	3.86	cps
Strontium	86-1	1333	807	603	914	41.20	cps
Strontium	88-1	7225	1974	827	3342	102.09	cps
Sulfur	34-1	220771	220356	221927	221018	0.37	cps
Terbium	159-1	21267337	20609128	20618967	20831811	1.81	cps
Terbium	159-2	14539500	14468072	14472898	14493490	0.28	cps
Thallium	203-1	4317	2564	2297	3059	35.88	cps
Thallium	205-1	9750	5981	5108	6946	35.52	cps
Tin	118-1	4738	2850	2320	3303	38.47	cps
Titanium	47-1	3300	917	447	1555	98.42	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB001 Instrumnet Name : P7
Client Sample ID : CCB001 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:22:38 DataFile Name : 020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8053	2004	647	3568	110.52	cps
Vanadium	51-2	33	30	40	34	14.78	cps
Yttrium	89-1	19496002	18745800	18778535	19006779	2.23	cps
Yttrium	89-2	5320141	5339606	5384779	5348175	0.62	cps
Zinc	66-2	457	423	357	412	12.35	cps
Zirconium	90-1	7145	3417	2384	4315	58.04	cps
Zirconium	91-1	1437	660	510	869	57.25	cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :PB165402BLInstrumnet Name :P7

Client Sample ID :PBS402Dilution Factor :1

Date & Time Acquired :2024-12-06 13:25:53DataFile Name :021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	157	197	183	179	11.39	cps
Antimony	121-1	830	770	847	816	4.94	cps
Arsenic	75-2	17	20	7	14	48.02	cps
Barium	135-1	60	103	100	88	27.47	cps
Barium	137-1	157	150	173	160	7.51	cps
Beryllium	9-1	120	80	63	88	33.18	cps
Bismuth	209-1	12999904	13020237	13076138	13032093	0.30	cps
Bismuth	209-2	10366436	10498405	10285915	10383585	1.03	cps
Bromine	81-1	13973	13807	14154	13978	1.24	cps
Bromine	81-2	123	110	140	124	12.08	cps
Cadmium	108-1	27	10	13	17	52.93	cps
Cadmium	106-1	5268	5044	5124	5145	2.20	cps
Cadmium	111-1	78	78	96	84	12.60	cps
Calcium	43-1	900	873	897	890	1.63	cps
Calcium	44-1	24123	24193	24176	24164	0.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1653	1680	1550	1628	4.22	cps
Cobalt	59-2	260	280	237	259	8.38	cps
Copper	63-2	1567	1543	1557	1556	0.75	cps
Dysprosium	156-1	13	17	17	16	12.40	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	103	90	90	94	8.15	cps
Erbium	164-2	50	47	43	47	7.15	cps
Gadolinium	160-1	107	77	50	78	36.45	cps
Gadolinium	160-2	907	913	1013	944	6.33	cps
Holmium	165-1	21293810	20826003	20950675	21023496	1.15	cps
Holmium	165-2	15001170	15097286	14714539	14937665	1.33	cps
Indium	115-1	17085709	16960305	16788251	16944755	0.88	cps
Indium	115-2	6366540	6367196	6259106	6330947	0.98	cps
Iron	56-2	23619	22974	23545	23379	1.51	cps
Iron	57-2	1343	1397	1440	1393	3.47	cps
Iron	54-2	3264	3214	3420	3299	3.27	cps
Krypton	83-1	320	377	317	338	9.98	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BL Instrumnet Name : P7
Client Sample ID : PBS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:25:53 DataFile Name : 021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1653	1623	1533	1603	3.90	cps
Lead	207-1	1473	1333	1350	1386	5.52	cps
Lead	208-1	6797	6391	6341	6510	3.85	cps
Lithium	6-1	1826994	1849301	1812123	1829473	1.02	cps
Magnesium	24-2	1217	1120	1077	1138	6.30	cps
Manganese	55-2	1663	1520	1607	1597	4.52	cps
Molybdenum	94-1	720	723	663	702	4.80	cps
Molybdenum	95-1	533	527	467	509	7.22	cps
Molybdenum	96-1	643	620	543	602	8.69	cps
Molybdenum	97-1	350	253	270	291	17.75	cps
Molybdenum	98-1	770	770	687	742	6.48	cps
Neodymium	150-1	7	10	13	10	33.30	cps
Neodymium	150-2	0	3	10	4	114.60	cps
Nickel	60-2	463	493	530	496	6.74	cps
Phosphorus	31-2	390	373	400	388	3.47	cps
Potassium	39-2	73068	73747	73466	73427	0.47	cps
Rhodium	103-1	16088484	16091888	15855346	16011906	0.85	cps
Rhodium	103-2	9660452	9821779	9751160	9744464	0.83	cps
Scandium	45-1	8706716	8818309	8651417	8725481	0.97	cps
Scandium	45-2	850468	843897	842606	845657	0.50	cps
Selenium	82-1	685	664	636	662	3.68	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	507	530	627	554	11.48	cps
Silicon	28-1	780732	779339	782938	781003	0.23	cps
Silver	107-1	587	607	537	577	6.25	cps
Silver	109-1	543	393	450	462	16.39	cps
Sodium	23-2	41145	41011	40603	40920	0.69	cps
Strontium	86-1	660	650	603	638	4.74	cps
Strontium	88-1	707	767	650	708	8.24	cps
Sulfur	34-1	227480	230783	232312	230192	1.07	cps
Terbium	159-1	21540636	21500134	21544992	21528587	0.11	cps
Terbium	159-2	15033842	14885804	14633442	14851030	1.36	cps
Thallium	203-1	1890	1810	1693	1798	5.50	cps
Thallium	205-1	4207	4537	4007	4251	6.30	cps
Tin	118-1	3444	3554	3500	3499	1.57	cps
Titanium	47-1	173	117	147	146	19.48	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BL Instrumnet Name : P7
Client Sample ID : PBS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:25:53 DataFile Name : 021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	50	43	20	38	41.70	cps
Vanadium	51-2	33	43	27	34	24.35	cps
Yttrium	89-1	19702401	19626141	19320853	19549798	1.03	cps
Yttrium	89-2	5499822	5525286	5458333	5494480	0.62	cps
Zinc	66-2	937	977	780	898	11.58	cps
Zirconium	90-1	1143	1083	1160	1129	3.57	cps
Zirconium	91-1	217	267	223	236	11.52	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BS Instrumnet Name : P7
Client Sample ID : LCS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:36:13 DataFile Name : 023LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	16129	16345	16299	16258	0.70	cps
Antimony	121-1	69085	70210	69691	69662	0.81	cps
Arsenic	75-2	2030	1920	2070	2007	3.87	cps
Barium	135-1	83044	85153	85022	84406	1.40	cps
Barium	137-1	144694	146623	147920	146412	1.11	cps
Beryllium	9-1	3290	3297	3234	3274	1.06	cps
Bismuth	209-1	12455399	12349924	12300974	12368766	0.64	cps
Bismuth	209-2	10213530	10047138	10173093	10144587	0.86	cps
Bromine	81-1	14954	15452	14938	15114	1.93	cps
Bromine	81-2	167	187	187	180	6.41	cps
Cadmium	108-1	657	623	600	627	4.54	cps
Cadmium	106-1	5785	5628	5755	5722	1.45	cps
Cadmium	111-1	8679	8838	8885	8801	1.23	cps
Calcium	43-1	43599	44455	45665	44573	2.33	cps
Calcium	44-1	728885	739884	740692	736487	0.90	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	28998	29499	29021	29173	0.97	cps
Cobalt	59-2	23305	23542	23181	23343	0.78	cps
Copper	63-2	35275	35395	35729	35466	0.66	cps
Dysprosium	156-1	20	20	17	19	10.18	cps
Dysprosium	156-2	7	7	10	8	24.71	cps
Erbium	164-1	107	80	97	94	14.27	cps
Erbium	164-2	37	80	63	60	36.43	cps
Gadolinium	160-1	63	67	103	78	28.53	cps
Gadolinium	160-2	927	843	1010	927	8.99	cps
Holmium	165-1	20545033	20151516	20251387	20315979	1.01	cps
Holmium	165-2	14629022	14515064	14531401	14558495	0.42	cps
Indium	115-1	16585907	16484878	16178511	16416432	1.29	cps
Indium	115-2	6292267	6369965	6200195	6287476	1.35	cps
Iron	56-2	2708276	2679847	2676197	2688106	0.65	cps
Iron	57-2	71204	71107	70521	70944	0.52	cps
Iron	54-2	156979	155571	157555	156702	0.65	cps
Krypton	83-1	350	327	370	349	6.22	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165402BS Instrumnet Name : P7
Client Sample ID : LCS402 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:36:13 DataFile Name : 023LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	26857	28203	28660	27906	3.36	cps
Lead	207-1	23854	24359	24569	24261	1.51	cps
Lead	208-1	109494	111251	112581	111109	1.39	cps
Lithium	6-1	1878218	1819055	1833123	1843465	1.68	cps
Magnesium	24-2	620215	616230	619825	618757	0.36	cps
Manganese	55-2	11972	11838	12015	11941	0.77	cps
Molybdenum	94-1	70013	70140	71580	70578	1.23	cps
Molybdenum	95-1	83171	86262	86614	85349	2.22	cps
Molybdenum	96-1	93402	97311	95774	95496	2.06	cps
Molybdenum	97-1	52785	52534	54344	53221	1.84	cps
Molybdenum	98-1	135198	138566	137940	137235	1.31	cps
Neodymium	150-1	27	20	10	19	44.42	cps
Neodymium	150-2	13	3	7	8	65.47	cps
Nickel	60-2	6208	6355	6321	6295	1.22	cps
Phosphorus	31-2	1283	1417	1310	1337	5.28	cps
Potassium	39-2	920614	915416	919420	918483	0.30	cps
Rhodium	103-1	15805834	15827292	15799079	15810735	0.09	cps
Rhodium	103-2	9618169	9672751	9526742	9605887	0.77	cps
Scandium	45-1	8723154	8603825	8669341	8665440	0.69	cps
Scandium	45-2	839669	838480	833884	837344	0.36	cps
Selenium	82-1	3325	3349	3238	3304	1.77	cps
Selenium	77-2	340	290	277	302	11.05	cps
Selenium	78-2	1573	1573	1703	1617	4.64	cps
Silicon	28-1	1191244	1214239	1210550	1205344	1.02	cps
Silver	107-1	43926	45769	45869	45188	2.42	cps
Silver	109-1	42218	44010	42883	43037	2.10	cps
Sodium	23-2	1008471	1023266	1014884	1015540	0.73	cps
Strontium	86-1	11154	11441	11161	11252	1.45	cps
Strontium	88-1	94410	94391	94840	94547	0.27	cps
Sulfur	34-1	245261	247567	251493	248107	1.27	cps
Terbium	159-1	20900528	20778177	20614761	20764489	0.69	cps
Terbium	159-2	14457801	14537566	14411629	14468999	0.44	cps
Thallium	203-1	34276	34591	34728	34532	0.67	cps
Thallium	205-1	79480	81425	82512	81139	1.89	cps
Tin	118-1	142688	146941	146146	145258	1.56	cps
Titanium	47-1	8182	8696	8199	8359	3.49	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165402BS

Instrumnet Name :

P7

Client Sample ID :

LCS402

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:36:13

DataFile Name :

023LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	97510	99514	100979	99334	1.75	cps
Vanadium	51-2	63704	63506	63627	63612	0.16	cps
Yttrium	89-1	19283342	18884872	19193860	19120692	1.09	cps
Yttrium	89-2	5404146	5454323	5381567	5413345	0.69	cps
Zinc	66-2	15011	14637	15038	14895	1.50	cps
Zirconium	90-1	57709	58864	59403	58659	1.47	cps
Zirconium	91-1	12575	12759	13123	12819	2.17	cps

LB Number :LB133800Operator :Jaswal

Lab Sample ID :PB165403BLInstrumnet Name :P7

Client Sample ID :PBS403Dilution Factor :1

Date & Time Acquired :2024-12-06 13:39:31DataFile Name :024CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	173	170	180	174	2.92	cps
Antimony	121-1	253	320	240	271	15.81	cps
Arsenic	75-2	10	3	3	6	69.34	cps
Barium	135-1	73	43	63	60	25.46	cps
Barium	137-1	103	87	110	100	12.02	cps
Beryllium	9-1	70	60	50	60	16.67	cps
Bismuth	209-1	11951624	12639127	12461164	12350638	2.89	cps
Bismuth	209-2	10114153	10082061	10062706	10086307	0.26	cps
Bromine	81-1	15361	15508	15165	15345	1.12	cps
Bromine	81-2	217	247	167	210	19.24	cps
Cadmium	108-1	7	20	13	13	49.99	cps
Cadmium	106-1	4814	5308	4908	5010	5.23	cps
Cadmium	111-1	49	46	49	48	3.84	cps
Calcium	43-1	497	473	410	460	9.75	cps
Calcium	44-1	17941	17637	17631	17736	1.00	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1263	1260	1177	1233	3.98	cps
Cobalt	59-2	373	413	377	388	5.72	cps
Copper	63-2	1117	1123	1087	1109	1.76	cps
Dysprosium	156-1	7	7	10	8	24.71	cps
Dysprosium	156-2	13	10	3	9	57.30	cps
Erbium	164-1	80	80	73	78	4.95	cps
Erbium	164-2	70	53	53	59	16.34	cps
Gadolinium	160-1	80	113	103	99	17.30	cps
Gadolinium	160-2	1003	960	933	966	3.66	cps
Holmium	165-1	19475390	20572656	20257793	20101946	2.81	cps
Holmium	165-2	14650277	14318162	14469179	14479206	1.15	cps
Indium	115-1	15820992	16764918	16505023	16363645	2.98	cps
Indium	115-2	6279579	6262759	6287874	6276738	0.20	cps
Iron	56-2	20875	20718	20744	20779	0.40	cps
Iron	57-2	1507	1363	1503	1458	5.61	cps
Iron	54-2	3607	3574	3460	3547	2.17	cps
Krypton	83-1	380	410	373	388	5.04	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BL Instrumnet Name : P7
Client Sample ID : PBS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:39:31 DataFile Name : 024CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1233	1147	1120	1167	5.08	cps
Lead	207-1	1087	1057	1033	1059	2.53	cps
Lead	208-1	4867	4620	4404	4630	5.01	cps
Lithium	6-1	1767992	1816473	1828205	1804223	1.77	cps
Magnesium	24-2	1117	1197	1117	1143	4.04	cps
Manganese	55-2	247	263	220	243	8.98	cps
Molybdenum	94-1	540	480	540	520	6.66	cps
Molybdenum	95-1	180	193	177	183	4.81	cps
Molybdenum	96-1	267	267	317	283	10.19	cps
Molybdenum	97-1	117	100	110	109	7.71	cps
Molybdenum	98-1	400	310	250	320	23.59	cps
Neodymium	150-1	7	7	13	9	43.25	cps
Neodymium	150-2	3	13	10	9	57.30	cps
Nickel	60-2	373	393	410	392	4.68	cps
Phosphorus	31-2	363	503	340	402	21.96	cps
Potassium	39-2	74260	73895	74655	74270	0.51	cps
Rhodium	103-1	15119141	15904174	15658106	15560473	2.58	cps
Rhodium	103-2	9675471	9653715	9647118	9658768	0.15	cps
Scandium	45-1	8428734	8858740	8678800	8655425	2.50	cps
Scandium	45-2	826257	835597	833340	831731	0.59	cps
Selenium	82-1	590	604	559	584	3.94	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	593	583	553	577	3.61	cps
Silicon	28-1	794080	796604	800159	796948	0.38	cps
Silver	107-1	447	487	400	444	9.76	cps
Silver	109-1	433	383	320	379	14.99	cps
Sodium	23-2	29993	30290	30574	30285	0.96	cps
Strontium	86-1	607	593	563	588	3.78	cps
Strontium	88-1	330	320	250	300	14.53	cps
Sulfur	34-1	247249	249020	248760	248343	0.39	cps
Terbium	159-1	20175323	21274360	20772318	20740667	2.65	cps
Terbium	159-2	14574332	14231464	14410671	14405489	1.19	cps
Thallium	203-1	1877	1653	1713	1748	6.61	cps
Thallium	205-1	4121	4031	4211	4121	2.18	cps
Tin	118-1	1803	1983	2924	2237	26.89	cps
Titanium	47-1	143	123	203	157	26.57	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BL Instrumnet Name : P7
Client Sample ID : PBS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:39:31 DataFile Name : 024CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	30	43	60	44	33.82	cps
Vanadium	51-2	27	20	30	26	19.92	cps
Yttrium	89-1	18393954	19507626	19217711	19039763	3.03	cps
Yttrium	89-2	5444705	5382219	5437271	5421398	0.63	cps
Zinc	66-2	317	393	337	349	11.40	cps
Zirconium	90-1	997	1047	980	1008	3.44	cps
Zirconium	91-1	223	233	220	226	3.08	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BS Instrumnet Name : P7
Client Sample ID : LCS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:42:49 DataFile Name : 025LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	16322	16315	16783	16473	1.63	cps
Antimony	121-1	69889	68854	69356	69366	0.75	cps
Arsenic	75-2	2034	2137	2124	2098	2.68	cps
Barium	135-1	84019	84686	84502	84402	0.41	cps
Barium	137-1	145862	145152	146381	145798	0.42	cps
Beryllium	9-1	3250	3380	3360	3330	2.10	cps
Bismuth	209-1	12479021	12451174	12305428	12411874	0.75	cps
Bismuth	209-2	10062519	10133966	10173759	10123415	0.56	cps
Bromine	81-1	15568	15462	15358	15463	0.68	cps
Bromine	81-2	200	260	237	232	13.03	cps
Cadmium	108-1	743	717	767	742	3.37	cps
Cadmium	106-1	6045	6301	6348	6231	2.62	cps
Cadmium	111-1	8623	8840	9008	8824	2.19	cps
Calcium	43-1	45030	45281	44762	45024	0.58	cps
Calcium	44-1	731794	742698	736714	737069	0.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	29309	29152	29425	29295	0.47	cps
Cobalt	59-2	23515	23562	23565	23547	0.12	cps
Copper	63-2	35242	35529	35820	35530	0.81	cps
Dysprosium	156-1	43	17	13	24	67.26	cps
Dysprosium	156-2	17	3	7	9	78.08	cps
Erbium	164-1	87	87	77	83	6.93	cps
Erbium	164-2	47	57	73	59	22.87	cps
Gadolinium	160-1	57	77	83	72	19.21	cps
Gadolinium	160-2	803	993	957	918	10.98	cps
Holmium	165-1	20441541	20437080	20329774	20402798	0.31	cps
Holmium	165-2	14504979	14543525	14595548	14548017	0.31	cps
Indium	115-1	16595489	16563694	16465069	16541417	0.41	cps
Indium	115-2	6318739	6322492	6224367	6288533	0.88	cps
Iron	56-2	2715835	2656385	2665249	2679156	1.20	cps
Iron	57-2	71358	71482	71663	71501	0.21	cps
Iron	54-2	156342	156783	157237	156787	0.29	cps
Krypton	83-1	297	303	310	303	2.20	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : PB165403BS Instrumnet Name : P7
Client Sample ID : LCS403 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:42:49 DataFile Name : 025LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	27511	28326	27742	27860	1.51	cps
Lead	207-1	24646	24175	25334	24718	2.36	cps
Lead	208-1	109511	110862	112106	110826	1.17	cps
Lithium	6-1	1821851	1870268	1850972	1847697	1.32	cps
Magnesium	24-2	622957	619264	614495	618905	0.69	cps
Manganese	55-2	11911	12155	12242	12103	1.41	cps
Molybdenum	94-1	70669	71694	70633	70999	0.85	cps
Molybdenum	95-1	84710	86685	85756	85717	1.15	cps
Molybdenum	96-1	95338	96130	95378	95615	0.47	cps
Molybdenum	97-1	52969	54340	53641	53650	1.28	cps
Molybdenum	98-1	137769	139552	139118	138813	0.67	cps
Neodymium	150-1	13	13	13	13	0.00	cps
Neodymium	150-2	0	7	3	3	100.05	cps
Nickel	60-2	6071	6438	6155	6221	3.09	cps
Phosphorus	31-2	1420	1443	1263	1376	7.12	cps
Potassium	39-2	925339	922071	921591	923000	0.22	cps
Rhodium	103-1	15888225	15742181	15762673	15797693	0.50	cps
Rhodium	103-2	9584254	9642574	9575096	9600641	0.38	cps
Scandium	45-1	8729573	8738976	8677161	8715236	0.38	cps
Scandium	45-2	845830	841889	839307	842342	0.39	cps
Selenium	82-1	3354	3395	3369	3373	0.60	cps
Selenium	77-2	307	300	360	322	10.21	cps
Selenium	78-2	1483	1557	1587	1542	3.45	cps
Silicon	28-1	1205309	1176286	1195780	1192458	1.24	cps
Silver	107-1	45247	44789	45809	45282	1.13	cps
Silver	109-1	42713	43769	43870	43451	1.47	cps
Sodium	23-2	1014248	1012417	1011646	1012770	0.13	cps
Strontium	86-1	11598	11174	11294	11356	1.92	cps
Strontium	88-1	92116	95215	95574	94302	2.02	cps
Sulfur	34-1	253360	255041	253780	254060	0.34	cps
Terbium	159-1	20829946	20793067	20790796	20804603	0.11	cps
Terbium	159-2	14594404	14386806	14516367	14499192	0.72	cps
Thallium	203-1	34039	34397	34089	34175	0.57	cps
Thallium	205-1	80201	81811	80021	80677	1.22	cps
Tin	118-1	145728	147951	145876	146518	0.85	cps
Titanium	47-1	8603	8576	8346	8508	1.66	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

PB165403BS

Instrumnet Name :

P7

Client Sample ID :

LCS403

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:42:49

DataFile Name :

025LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	98275	98974	99310	98853	0.53	cps
Vanadium	51-2	63496	63242	62817	63185	0.54	cps
Yttrium	89-1	19214532	19333829	19052245	19200202	0.74	cps
Yttrium	89-2	5448031	5390908	5465180	5434706	0.72	cps
Zinc	66-2	14647	14834	14377	14619	1.57	cps
Zirconium	90-1	58744	58646	59684	59025	0.97	cps
Zirconium	91-1	13273	13256	12862	13130	1.77	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-01 Instrumnet Name : P7
Client Sample ID : ME29F6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:46:02 DataFile Name : 026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1382351	1376606	1382078	1380345	0.23	cps
Antimony	121-1	4494	4581	4611	4562	1.33	cps
Arsenic	75-2	6965	6918	6515	6799	3.64	cps
Barium	135-1	75324	76159	76953	76145	1.07	cps
Barium	137-1	132497	132965	132551	132671	0.19	cps
Beryllium	9-1	297	427	337	353	18.85	cps
Bismuth	209-1	12880568	12617191	12746913	12748224	1.03	cps
Bismuth	209-2	9911424	10020645	10113341	10015137	1.01	cps
Bromine	81-1	16519	16746	17300	16855	2.38	cps
Bromine	81-2	567	497	647	570	13.17	cps
Cadmium	108-1	153	183	150	162	11.32	cps
Cadmium	106-1	6171	6061	5701	5978	4.11	cps
Cadmium	111-1	584	559	707	616	12.88	cps
Calcium	43-1	10432336	10483694	10468673	10461568	0.25	cps
Calcium	44-1	169866244	170330224	170183631	170126700	0.14	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	72433	70732	71472	71545	1.19	cps
Cobalt	59-2	66265	66691	66041	66332	0.50	cps
Copper	63-2	110913	109453	109412	109926	0.78	cps
Dysprosium	156-1	39104	39067	39024	39065	0.10	cps
Dysprosium	156-2	32280	33453	33309	33014	1.94	cps
Erbium	164-1	33998	35188	35231	34806	2.01	cps
Erbium	164-2	24061	24378	24735	24391	1.38	cps
Gadolinium	160-1	39552	40201	40542	40098	1.25	cps
Gadolinium	160-2	29875	30193	29217	29762	1.67	cps
Holmium	165-1	21561454	21295773	21458971	21438732	0.62	cps
Holmium	165-2	14561749	15040802	15024313	14875621	1.83	cps
Indium	115-1	17170139	16833142	16749682	16917654	1.32	cps
Indium	115-2	6211761	6313401	6283068	6269410	0.83	cps
Iron	56-2	81943160	81327712	82170290	81813721	0.53	cps
Iron	57-2	2262164	2254328	2289596	2268696	0.82	cps
Iron	54-2	4521243	4494513	4480381	4498712	0.46	cps
Krypton	83-1	440	307	457	401	20.50	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-01 Instrumnet Name : P7
Client Sample ID : ME29F6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:46:02 DataFile Name : 026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	95673	95770	95056	95500	0.41	cps
Lead	207-1	76628	76450	75123	76067	1.08	cps
Lead	208-1	360249	358990	359758	359666	0.18	cps
Lithium	6-1	1918717	1881518	1866797	1889010	1.42	cps
Magnesium	24-2	36445063	35929828	35698238	36024376	1.06	cps
Manganese	55-2	3276945	3281062	3271064	3276357	0.15	cps
Molybdenum	94-1	44969	44848	44708	44842	0.29	cps
Molybdenum	95-1	15358	15245	15542	15382	0.97	cps
Molybdenum	96-1	23128	23305	23676	23370	1.20	cps
Molybdenum	97-1	9196	9510	9693	9466	2.65	cps
Molybdenum	98-1	25035	24798	24911	24915	0.48	cps
Neodymium	150-1	62973	64061	64962	63999	1.56	cps
Neodymium	150-2	39091	38619	38576	38762	0.74	cps
Nickel	60-2	39128	38637	38830	38865	0.64	cps
Phosphorus	31-2	9233	8883	9460	9192	3.16	cps
Potassium	39-2	474563	472760	470610	472644	0.42	cps
Rhodium	103-1	16193596	15724075	15750743	15889471	1.66	cps
Rhodium	103-2	9424981	9485125	9492529	9467545	0.39	cps
Scandium	45-1	9327368	9062293	8895288	9094983	2.40	cps
Scandium	45-2	858286	857916	850892	855698	0.49	cps
Selenium	82-1	786	948	726	820	13.98	cps
Selenium	77-2	123	173	157	151	16.85	cps
Selenium	78-2	613	677	710	667	7.37	cps
Silicon	28-1	12090324	11757957	10460740	11436341	7.53	cps
Silver	107-1	3287	2087	1780	2385	33.40	cps
Silver	109-1	3140	1773	1540	2151	40.18	cps
Sodium	23-2	266012	267618	268290	267307	0.44	cps
Strontium	86-1	1007462	1018399	1024482	1016781	0.85	cps
Strontium	88-1	8815363	8989068	8858810	8887747	1.02	cps
Sulfur	34-1	265505	268793	270227	268175	0.90	cps
Terbium	159-1	22184086	21986928	22081808	22084274	0.45	cps
Terbium	159-2	15072335	15116743	14853095	15014058	0.94	cps
Thallium	203-1	7295	5845	6031	6390	12.35	cps
Thallium	205-1	16917	14388	13794	15033	11.03	cps
Tin	118-1	6728	6071	6462	6420	5.15	cps
Titanium	47-1	124117	134456	124943	127839	4.49	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-01

Instrumnet Name :

P7

Client Sample ID :

ME29F6

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:46:02

DataFile Name :

026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	51245	53299	53417	52654	2.32	cps
Vanadium	51-2	73699	73243	72798	73247	0.61	cps
Yttrium	89-1	20855784	20590468	20444240	20630164	1.01	cps
Yttrium	89-2	5580761	5558656	5608605	5582674	0.45	cps
Zinc	66-2	62082	62333	63126	62514	0.87	cps
Zirconium	90-1	95941	98457	96772	97057	1.32	cps
Zirconium	91-1	21803	22147	21970	21973	0.78	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-02 Instrumnet Name : P7
Client Sample ID : ME29F7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:49:12 DataFile Name : 027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	992345	993189	982579	989371	0.60	cps
Antimony	121-1	6595	6665	6555	6605	0.84	cps
Arsenic	75-2	10944	10847	11061	10951	0.98	cps
Barium	135-1	147215	149080	149680	148659	0.86	cps
Barium	137-1	255347	258749	259626	257907	0.88	cps
Beryllium	9-1	320	370	310	333	9.64	cps
Bismuth	209-1	12587576	13024566	12780940	12797694	1.71	cps
Bismuth	209-2	9941434	10002830	9987720	9977328	0.32	cps
Bromine	81-1	17551	17667	17667	17628	0.38	cps
Bromine	81-2	707	847	623	726	15.56	cps
Cadmium	108-1	203	220	187	203	8.20	cps
Cadmium	106-1	6101	5998	6178	6092	1.48	cps
Cadmium	111-1	1462	1436	1647	1515	7.60	cps
Calcium	43-1	11384556	11581867	11547678	11504700	0.92	cps
Calcium	44-1	186715804	187114311	185890037	186573384	0.33	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	64353	63372	64126	63950	0.80	cps
Cobalt	59-2	71583	70890	71087	71187	0.50	cps
Copper	63-2	133879	133136	133294	133436	0.29	cps
Dysprosium	156-1	50858	51792	51922	51524	1.13	cps
Dysprosium	156-2	44055	43587	43484	43709	0.70	cps
Erbium	164-1	41063	41832	42000	41632	1.20	cps
Erbium	164-2	28506	28689	29281	28825	1.40	cps
Gadolinium	160-1	49815	50143	50053	50003	0.34	cps
Gadolinium	160-2	37226	36026	36922	36725	1.70	cps
Holmium	165-1	21587265	21638296	21669388	21631650	0.19	cps
Holmium	165-2	14953913	14957974	15132019	15014635	0.68	cps
Indium	115-1	17034953	17074799	17062999	17057584	0.12	cps
Indium	115-2	6317251	6262965	6311743	6297319	0.47	cps
Iron	56-2	88177632	89061185	86312249	87850355	1.60	cps
Iron	57-2	2455694	2469786	2452903	2459461	0.37	cps
Iron	54-2	4805072	4913038	4779924	4832678	1.46	cps
Krypton	83-1	433	473	407	438	7.67	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-02 Instrumnet Name : P7
Client Sample ID : ME29F7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:49:12 DataFile Name : 027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	119102	122026	120636	120588	1.21	cps
Lead	207-1	95680	97006	97473	96720	0.96	cps
Lead	208-1	450553	459733	460623	456969	1.22	cps
Lithium	6-1	1811555	1832555	1826726	1823612	0.59	cps
Magnesium	24-2	41976998	41527697	41594622	41699772	0.58	cps
Manganese	55-2	6895251	6965470	6840107	6900276	0.91	cps
Molybdenum	94-1	43885	45303	44049	44413	1.75	cps
Molybdenum	95-1	18936	19426	18846	19069	1.64	cps
Molybdenum	96-1	26948	26371	26691	26670	1.09	cps
Molybdenum	97-1	11915	12042	12152	12036	0.98	cps
Molybdenum	98-1	30425	30719	30963	30702	0.88	cps
Neodymium	150-1	77722	78038	79147	78302	0.96	cps
Neodymium	150-2	47068	47453	46750	47090	0.75	cps
Nickel	60-2	56121	56540	55900	56187	0.58	cps
Phosphorus	31-2	9777	9983	9987	9916	1.21	cps
Potassium	39-2	449573	445651	448718	447981	0.46	cps
Rhodium	103-1	15724531	15659316	15875628	15753158	0.70	cps
Rhodium	103-2	9488266	9616502	9644644	9583137	0.87	cps
Scandium	45-1	8953965	8989098	9119554	9020872	0.97	cps
Scandium	45-2	858720	857039	861003	858921	0.23	cps
Selenium	82-1	853	763	807	808	5.61	cps
Selenium	77-2	180	160	187	176	7.91	cps
Selenium	78-2	690	770	673	711	7.27	cps
Silicon	28-1	9673579	9788088	9884598	9782088	1.08	cps
Silver	107-1	1043	1177	1210	1143	7.71	cps
Silver	109-1	937	963	1063	988	6.76	cps
Sodium	23-2	293451	292165	293277	292964	0.24	cps
Strontium	86-1	1057658	1061285	1071093	1063346	0.65	cps
Strontium	88-1	9235141	9273186	9341578	9283302	0.58	cps
Sulfur	34-1	279873	278787	278088	278916	0.32	cps
Terbium	159-1	21912741	22185251	22399553	22165848	1.10	cps
Terbium	159-2	14882012	15007348	14576247	14821869	1.50	cps
Thallium	203-1	6378	6395	6658	6477	2.43	cps
Thallium	205-1	14695	15662	15836	15398	3.99	cps
Tin	118-1	7002	7265	7762	7343	5.26	cps
Titanium	47-1	174023	176388	177776	176062	1.08	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-02

Instrumnet Name :

P7

Client Sample ID :

ME29F7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 13:49:12

DataFile Name :

027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	65434	66268	66216	65973	0.71	cps
Vanadium	51-2	82370	82128	81515	82004	0.54	cps
Yttrium	89-1	20542394	20797961	20630099	20656818	0.63	cps
Yttrium	89-2	5712107	5639416	5687295	5679606	0.65	cps
Zinc	66-2	57978	56864	57758	57534	1.03	cps
Zirconium	90-1	89185	91914	90819	90639	1.52	cps
Zirconium	91-1	19753	20295	20044	20031	1.35	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03 Instrumnet Name : P7
Client Sample ID : ME29F8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:52:21 DataFile Name : 028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	906930	910117	909630	908893	0.19	cps
Antimony	121-1	5201	5358	5418	5325	2.10	cps
Arsenic	75-2	5434	5708	5304	5482	3.76	cps
Barium	135-1	66227	67365	67770	67121	1.19	cps
Barium	137-1	114180	116038	117460	115893	1.42	cps
Beryllium	9-1	360	307	293	320	11.02	cps
Bismuth	209-1	13465717	13087792	13098864	13217458	1.63	cps
Bismuth	209-2	10015525	10110012	10174695	10100077	0.79	cps
Bromine	81-1	16376	17470	17120	16989	3.29	cps
Bromine	81-2	533	527	603	554	7.66	cps
Cadmium	108-1	113	150	133	132	13.89	cps
Cadmium	106-1	6622	6185	5981	6263	5.22	cps
Cadmium	111-1	764	923	920	869	10.47	cps
Calcium	43-1	9567960	9706525	9707457	9660647	0.83	cps
Calcium	44-1	155696478	158032301	160249824	157992868	1.44	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	68250	67661	67687	67866	0.49	cps
Cobalt	59-2	62442	62888	62807	62712	0.38	cps
Copper	63-2	124206	124936	124567	124570	0.29	cps
Dysprosium	156-1	35331	35846	36133	35770	1.14	cps
Dysprosium	156-2	28893	29615	29782	29430	1.60	cps
Erbium	164-1	31790	32548	32514	32284	1.33	cps
Erbium	164-2	22007	22405	22017	22143	1.02	cps
Gadolinium	160-1	35278	36210	36675	36054	1.97	cps
Gadolinium	160-2	26659	26679	26378	26572	0.63	cps
Holmium	165-1	22873426	22695721	22093597	22554248	1.81	cps
Holmium	165-2	15086477	15057387	15302404	15148756	0.88	cps
Indium	115-1	18093378	17437294	17281708	17604127	2.45	cps
Indium	115-2	6362450	6353425	6356434	6357436	0.07	cps
Iron	56-2	49808559	49293931	49113438	49405309	0.73	cps
Iron	57-2	1460379	1435550	1461622	1452517	1.01	cps
Iron	54-2	2725013	2730444	2712174	2722544	0.34	cps
Krypton	83-1	407	477	477	453	8.91	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03 Instrumnet Name : P7
Client Sample ID : ME29F8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:52:21 DataFile Name : 028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	103765	106688	106929	105794	1.66	cps
Lead	207-1	83759	85573	84893	84742	1.08	cps
Lead	208-1	391333	397978	399296	396202	1.08	cps
Lithium	6-1	1846279	1794338	1802727	1814448	1.54	cps
Magnesium	24-2	35621841	36040955	35112573	35591790	1.31	cps
Manganese	55-2	2115907	2096004	2103665	2105192	0.48	cps
Molybdenum	94-1	38330	38664	38467	38487	0.44	cps
Molybdenum	95-1	8299	8976	8553	8609	3.97	cps
Molybdenum	96-1	15822	15996	15155	15657	2.84	cps
Molybdenum	97-1	5504	5698	5498	5567	2.04	cps
Molybdenum	98-1	13690	13920	13947	13852	1.02	cps
Neodymium	150-1	55137	56332	56218	55896	1.18	cps
Neodymium	150-2	34034	33714	33222	33657	1.21	cps
Nickel	60-2	42019	42530	41594	42048	1.11	cps
Phosphorus	31-2	6925	7172	6822	6973	2.58	cps
Potassium	39-2	389337	388886	386456	388226	0.40	cps
Rhodium	103-1	16955558	16196421	16268338	16473439	2.54	cps
Rhodium	103-2	9697753	9634679	9641732	9658055	0.36	cps
Scandium	45-1	9489426	8996483	8986940	9157616	3.14	cps
Scandium	45-2	866039	863159	866383	865194	0.20	cps
Selenium	82-1	971	738	816	842	14.09	cps
Selenium	77-2	140	137	107	128	14.37	cps
Selenium	78-2	657	753	663	691	7.81	cps
Silicon	28-1	7728094	7841309	7680658	7750020	1.07	cps
Silver	107-1	1230	1407	1350	1329	6.79	cps
Silver	109-1	1200	1190	1200	1197	0.48	cps
Sodium	23-2	257112	256304	256289	256568	0.18	cps
Strontium	86-1	975822	1000160	1003962	993315	1.54	cps
Strontium	88-1	8535355	8733283	8763360	8677333	1.43	cps
Sulfur	34-1	287355	287790	286822	287322	0.17	cps
Terbium	159-1	23544555	22646001	22792085	22994214	2.10	cps
Terbium	159-2	15066158	14930456	15143744	15046786	0.72	cps
Thallium	203-1	4167	4227	4084	4160	1.73	cps
Thallium	205-1	9123	9570	9810	9501	3.67	cps
Tin	118-1	6968	6315	6311	6532	5.79	cps
Titanium	47-1	112776	115553	115498	114609	1.39	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03 Instrumnet Name : P7
Client Sample ID : ME29F8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:52:21 DataFile Name : 028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	77025	77581	79576	78060	1.72	cps
Vanadium	51-2	66127	66372	66101	66200	0.23	cps
Yttrium	89-1	21989604	20948722	21046991	21328439	2.69	cps
Yttrium	89-2	5748395	5651561	5736331	5712096	0.92	cps
Zinc	66-2	54084	54867	54382	54444	0.73	cps
Zirconium	90-1	90038	91127	91302	90822	0.75	cps
Zirconium	91-1	20337	20531	20858	20576	1.28	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-04 Instrumnet Name : P7
Client Sample ID : ME29F8D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:55:32 DataFile Name : 029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	943886	921685	932311	932627	1.19	cps
Antimony	121-1	5551	5411	5274	5412	2.56	cps
Arsenic	75-2	5631	5901	5518	5683	3.47	cps
Barium	135-1	66685	68780	68715	68060	1.75	cps
Barium	137-1	117911	118550	120356	118939	1.07	cps
Beryllium	9-1	413	367	290	357	17.46	cps
Bismuth	209-1	13154870	12948519	13013389	13038926	0.81	cps
Bismuth	209-2	10172177	10135756	10056504	10121479	0.58	cps
Bromine	81-1	16499	17384	17297	17060	2.86	cps
Bromine	81-2	617	560	667	614	8.69	cps
Cadmium	108-1	163	120	173	152	18.63	cps
Cadmium	106-1	6508	6035	6018	6187	4.50	cps
Cadmium	111-1	798	893	742	811	9.39	cps
Calcium	43-1	9547994	9725814	9764987	9679598	1.19	cps
Calcium	44-1	155782718	157709191	157503574	156998494	0.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	67698	67467	66184	67116	1.21	cps
Cobalt	59-2	62754	62620	61934	62436	0.70	cps
Copper	63-2	127296	125810	125857	126321	0.67	cps
Dysprosium	156-1	36364	37065	36992	36807	1.05	cps
Dysprosium	156-2	30426	30149	29902	30159	0.87	cps
Erbium	164-1	32725	33366	33219	33104	1.02	cps
Erbium	164-2	22785	22014	22829	22543	2.03	cps
Gadolinium	160-1	36478	36374	36738	36530	0.51	cps
Gadolinium	160-2	26749	27136	27040	26975	0.75	cps
Holmium	165-1	22310210	22027240	22337090	22224846	0.77	cps
Holmium	165-2	15387711	15308409	15006584	15234234	1.32	cps
Indium	115-1	17719683	17426010	17381506	17509066	1.05	cps
Indium	115-2	6386231	6297864	6292319	6325471	0.83	cps
Iron	56-2	50303509	49897384	49990293	50063729	0.43	cps
Iron	57-2	1480229	1472307	1469225	1473920	0.39	cps
Iron	54-2	2770820	2775353	2749187	2765120	0.51	cps
Krypton	83-1	467	437	420	441	5.36	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-04 Instrumnet Name : P7
Client Sample ID : ME29F8D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:55:32 DataFile Name : 029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	106869	109207	108126	108067	1.08	cps
Lead	207-1	86761	87147	86915	86941	0.22	cps
Lead	208-1	402662	407363	406706	405577	0.63	cps
Lithium	6-1	1808834	1767606	1813205	1796548	1.40	cps
Magnesium	24-2	36570161	35859295	36201904	36210454	0.98	cps
Manganese	55-2	2101219	2107890	2105847	2104985	0.16	cps
Molybdenum	94-1	39376	40169	42741	40762	4.32	cps
Molybdenum	95-1	8803	9213	9406	9141	3.37	cps
Molybdenum	96-1	15832	16079	15902	15938	0.80	cps
Molybdenum	97-1	5568	5761	5805	5711	2.21	cps
Molybdenum	98-1	15225	14888	14391	14834	2.83	cps
Neodymium	150-1	57206	58173	57992	57790	0.89	cps
Neodymium	150-2	34472	34288	33182	33981	2.05	cps
Nickel	60-2	41852	41935	40832	41540	1.48	cps
Phosphorus	31-2	7205	7215	7238	7220	0.24	cps
Potassium	39-2	390983	391778	388959	390574	0.37	cps
Rhodium	103-1	16486440	16129294	16306463	16307399	1.10	cps
Rhodium	103-2	9570148	9703403	9681278	9651610	0.74	cps
Scandium	45-1	9210253	8958043	8937709	9035335	1.68	cps
Scandium	45-2	861475	850835	852578	854963	0.67	cps
Selenium	82-1	826	854	812	831	2.54	cps
Selenium	77-2	157	120	140	139	13.22	cps
Selenium	78-2	687	637	670	664	3.83	cps
Silicon	28-1	8071059	8031797	8012918	8038591	0.37	cps
Silver	107-1	1047	1327	1190	1188	11.79	cps
Silver	109-1	1033	1067	1113	1071	3.75	cps
Sodium	23-2	254251	251462	252738	252817	0.55	cps
Strontium	86-1	977645	981607	984552	981268	0.35	cps
Strontium	88-1	8582476	8606665	8542467	8577203	0.38	cps
Sulfur	34-1	290317	288010	288153	288827	0.45	cps
Terbium	159-1	23214906	22733407	22598063	22848792	1.42	cps
Terbium	159-2	15196526	14900413	14853208	14983382	1.24	cps
Thallium	203-1	3534	3734	3510	3593	3.42	cps
Thallium	205-1	8496	8673	8636	8602	1.08	cps
Tin	118-1	6355	6128	6081	6188	2.36	cps
Titanium	47-1	118709	119902	116612	118407	1.41	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-04 Instrumnet Name : P7
Client Sample ID : ME29F8D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 13:55:32 DataFile Name : 029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	78268	79156	80354	79259	1.32	cps
Vanadium	51-2	67252	67025	67416	67231	0.29	cps
Yttrium	89-1	21389479	20912449	20931604	21077844	1.28	cps
Yttrium	89-2	5729843	5611540	5674058	5671813	1.04	cps
Zinc	66-2	55503	55115	53937	54851	1.49	cps
Zirconium	90-1	92398	93069	99582	95016	4.18	cps
Zirconium	91-1	21193	20768	20978	20980	1.01	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03LX5 Instrumnet Name : P7
Client Sample ID : ME29F8L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 13:58:41 DataFile Name : 030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	172782	171632	173397	172603	0.52	cps
Antimony	121-1	1140	1213	1167	1173	3.16	cps
Arsenic	75-2	1130	1127	1137	1131	0.45	cps
Barium	135-1	12352	12596	12866	12605	2.04	cps
Barium	137-1	21233	21583	22244	21687	2.37	cps
Beryllium	9-1	113	100	80	98	17.16	cps
Bismuth	209-1	13193164	13113641	12611427	12972744	2.43	cps
Bismuth	209-2	10407602	10190762	10208369	10268911	1.17	cps
Bromine	81-1	16139	16176	15512	15942	2.34	cps
Bromine	81-2	277	317	287	293	7.10	cps
Cadmium	108-1	47	43	43	44	4.34	cps
Cadmium	106-1	5828	5815	5601	5748	2.21	cps
Cadmium	111-1	216	229	238	228	4.68	cps
Calcium	43-1	1801568	1847759	1840411	1829913	1.36	cps
Calcium	44-1	29260167	29661567	29406714	29442816	0.69	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	14514	14407	14374	14431	0.51	cps
Cobalt	59-2	11982	11932	11838	11917	0.61	cps
Copper	63-2	25468	24831	24263	24854	2.43	cps
Dysprosium	156-1	6665	6892	6615	6724	2.19	cps
Dysprosium	156-2	5358	5508	5374	5413	1.52	cps
Erbium	164-1	6091	6095	6125	6104	0.30	cps
Erbium	164-2	4201	4171	4161	4177	0.50	cps
Gadolinium	160-1	6512	6668	6922	6701	3.09	cps
Gadolinium	160-2	5618	5464	5748	5610	2.53	cps
Holmium	165-1	22064946	21138293	20835649	21346296	3.00	cps
Holmium	165-2	14991334	14887764	14528922	14802674	1.64	cps
Indium	115-1	17822899	17218891	16822392	17288060	2.91	cps
Indium	115-2	6357782	6355805	6271555	6328381	0.78	cps
Iron	56-2	9406949	9343589	9335217	9361918	0.42	cps
Iron	57-2	279773	277560	277025	278119	0.52	cps
Iron	54-2	533364	528604	532103	531357	0.46	cps
Krypton	83-1	327	413	440	393	15.07	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03LX5 Instrumnet Name : P7
Client Sample ID : ME29F8L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 13:58:41 DataFile Name : 030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	22559	22185	22071	22272	1.15	cps
Lead	207-1	18282	18306	17501	18030	2.54	cps
Lead	208-1	84210	83766	82550	83509	1.03	cps
Lithium	6-1	1827583	1754610	1789613	1790602	2.04	cps
Magnesium	24-2	6846139	6789871	6760214	6798742	0.64	cps
Manganese	55-2	395932	391130	396378	394480	0.74	cps
Molybdenum	94-1	7502	7952	7489	7648	3.45	cps
Molybdenum	95-1	1677	1790	1747	1738	3.29	cps
Molybdenum	96-1	2924	3047	3064	3011	2.54	cps
Molybdenum	97-1	1143	1150	1043	1112	5.37	cps
Molybdenum	98-1	2684	2640	2917	2747	5.42	cps
Neodymium	150-1	10134	10137	10314	10195	1.01	cps
Neodymium	150-2	6462	6181	6442	6362	2.46	cps
Nickel	60-2	8482	8599	8106	8396	3.07	cps
Phosphorus	31-2	1610	1710	1620	1647	3.34	cps
Potassium	39-2	136250	134791	136345	135795	0.64	cps
Rhodium	103-1	16710279	16146734	15838415	16231809	2.72	cps
Rhodium	103-2	9737545	9785250	9630872	9717889	0.81	cps
Scandium	45-1	9233110	8840241	8613439	8895597	3.52	cps
Scandium	45-2	846407	838882	840085	841791	0.48	cps
Selenium	82-1	717	566	528	603	16.54	cps
Selenium	77-2	23	37	10	23	57.15	cps
Selenium	78-2	467	617	527	537	14.07	cps
Silicon	28-1	2345885	2316422	2311289	2324532	0.80	cps
Silver	107-1	420	397	390	402	3.92	cps
Silver	109-1	347	360	293	333	10.58	cps
Sodium	23-2	83367	80442	81900	81903	1.79	cps
Strontium	86-1	186205	187095	187724	187008	0.41	cps
Strontium	88-1	1601636	1609220	1625195	1612017	0.75	cps
Sulfur	34-1	281407	286710	283852	283990	0.93	cps
Terbium	159-1	22619656	21900610	21931216	22150494	1.84	cps
Terbium	159-2	14869694	14754722	14820348	14814921	0.39	cps
Thallium	203-1	1407	1260	1287	1318	5.93	cps
Thallium	205-1	3210	3324	2914	3149	6.72	cps
Tin	118-1	3237	3067	3080	3128	3.02	cps
Titanium	47-1	21489	22019	21662	21723	1.25	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-03LX5

Instrumnet Name :

P7

Client Sample ID :

ME29F8L

Dilution Factor :

5

Date & Time Acquired :

2024-12-06 13:58:41

DataFile Name :

030SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	14007	14455	14712	14391	2.48	cps
Vanadium	51-2	12118	12352	12292	12254	0.99	cps
Yttrium	89-1	20905032	20024414	19779689	20236379	2.92	cps
Yttrium	89-2	5521390	5522433	5455448	5499757	0.70	cps
Zinc	66-2	11048	10534	11041	10874	2.71	cps
Zirconium	90-1	17187	17687	17861	17578	1.99	cps
Zirconium	91-1	3904	4051	4004	3986	1.88	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-05 Instrumnet Name : P7
Client Sample ID : ME29F8S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:01:53 DataFile Name : 031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1051435	1039680	1053021	1048046	0.70	cps
Antimony	121-1	377376	384688	384874	382313	1.12	cps
Arsenic	75-2	13329	13473	13179	13327	1.10	cps
Barium	135-1	1886123	1916828	1938165	1913705	1.37	cps
Barium	137-1	3302718	3339752	3341963	3328145	0.66	cps
Beryllium	9-1	16305	16002	16138	16148	0.94	cps
Bismuth	209-1	13043047	12978967	13156889	13059634	0.69	cps
Bismuth	209-2	10118690	10111094	10011883	10080556	0.59	cps
Bromine	81-1	15802	16419	16619	16280	2.62	cps
Bromine	81-2	530	563	517	537	4.48	cps
Cadmium	108-1	3270	3254	3327	3284	1.17	cps
Cadmium	106-1	10671	10811	10441	10641	1.76	cps
Cadmium	111-1	45860	47408	46719	46662	1.66	cps
Calcium	43-1	9389505	9526436	9544361	9486767	0.89	cps
Calcium	44-1	152690314	155446254	154538644	154225071	0.91	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	366335	365517	363374	365075	0.42	cps
Cobalt	59-2	1227899	1220150	1215070	1221040	0.53	cps
Copper	63-2	523975	526013	522369	524119	0.35	cps
Dysprosium	156-1	35441	35792	35395	35543	0.61	cps
Dysprosium	156-2	28863	28753	29047	28888	0.51	cps
Erbium	164-1	32254	32524	32354	32377	0.42	cps
Erbium	164-2	21443	22078	22431	21984	2.28	cps
Gadolinium	160-1	34810	36176	36283	35757	2.30	cps
Gadolinium	160-2	26101	26766	26769	26545	1.45	cps
Holmium	165-1	22137366	21942275	21978991	22019544	0.47	cps
Holmium	165-2	15175997	15185738	14851182	15070972	1.26	cps
Indium	115-1	17175443	17112071	17032970	17106828	0.42	cps
Indium	115-2	6327138	6278156	6275523	6293606	0.46	cps
Iron	56-2	49545794	49181978	49266946	49331573	0.39	cps
Iron	57-2	1447082	1426177	1455716	1442991	1.05	cps
Iron	54-2	2745566	2744699	2744729	2744998	0.02	cps
Krypton	83-1	413	477	433	441	7.34	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-05 Instrumnet Name : P7
Client Sample ID : ME29F8S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:01:53 DataFile Name : 031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	164225	162286	162373	162961	0.67	cps
Lead	207-1	132801	134966	133027	133598	0.89	cps
Lead	208-1	614658	622921	621557	619712	0.71	cps
Lithium	6-1	1737639	1765742	1771474	1758285	1.03	cps
Magnesium	24-2	35319112	35015354	34830257	35054908	0.70	cps
Manganese	55-2	2611450	2608819	2613477	2611248	0.09	cps
Molybdenum	94-1	38474	39256	38614	38781	1.08	cps
Molybdenum	95-1	8986	8656	8646	8763	2.21	cps
Molybdenum	96-1	15575	15685	15712	15657	0.46	cps
Molybdenum	97-1	5294	5404	5528	5409	2.16	cps
Molybdenum	98-1	13800	13877	14137	13938	1.27	cps
Neodymium	150-1	55003	56094	55468	55522	0.99	cps
Neodymium	150-2	32898	32948	32684	32844	0.43	cps
Nickel	60-2	339242	337261	338680	338394	0.30	cps
Phosphorus	31-2	6978	6845	7008	6944	1.25	cps
Potassium	39-2	385385	378742	381079	381735	0.88	cps
Rhodium	103-1	16203597	16051886	16016936	16090806	0.62	cps
Rhodium	103-2	9734071	9722948	9543883	9666967	1.10	cps
Scandium	45-1	8833262	8993610	8962555	8929809	0.95	cps
Scandium	45-2	852248	846649	840058	846318	0.72	cps
Selenium	82-1	6796	6718	6760	6758	0.58	cps
Selenium	77-2	710	837	730	759	8.97	cps
Selenium	78-2	2697	2674	2627	2666	1.34	cps
Silicon	28-1	9294710	9885798	8236883	9139130	9.14	cps
Silver	107-1	235931	240172	238770	238291	0.91	cps
Silver	109-1	226496	225899	229800	227398	0.92	cps
Sodium	23-2	245011	240188	241455	242218	1.03	cps
Strontium	86-1	966155	972119	972430	970235	0.36	cps
Strontium	88-1	8289131	8539867	8522522	8450507	1.66	cps
Sulfur	34-1	292549	290524	288116	290396	0.76	cps
Terbium	159-1	22526035	23007776	22568901	22700904	1.17	cps
Terbium	159-2	14984928	14986318	14805589	14925612	0.70	cps
Thallium	203-1	175533	179336	179189	178019	1.21	cps
Thallium	205-1	411885	424513	423741	420046	1.69	cps
Tin	118-1	5761	5968	5798	5842	1.89	cps
Titanium	47-1	328679	338146	321735	329520	2.50	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-05

Instrumnet Name :

P7

Client Sample ID :

ME29F8S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:01:53

DataFile Name :

031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	76954	79462	79294	78570	1.78	cps
Vanadium	51-2	713975	711935	706004	710638	0.58	cps
Yttrium	89-1	20805150	21019815	20943391	20922785	0.52	cps
Yttrium	89-2	5702195	5722589	5590657	5671813	1.25	cps
Zinc	66-2	193429	192365	192402	192732	0.31	cps
Zirconium	90-1	89902	90249	90815	90322	0.51	cps
Zirconium	91-1	19647	20388	20819	20284	2.92	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-06 Instrumnet Name : P7
Client Sample ID : ME29F9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:04:59 DataFile Name : 032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	719071	716349	713761	716394	0.37	cps
Antimony	121-1	3944	4041	4094	4026	1.89	cps
Arsenic	75-2	4057	3917	3834	3936	2.87	cps
Barium	135-1	40364	41166	40484	40671	1.06	cps
Barium	137-1	70892	71911	71130	71311	0.75	cps
Beryllium	9-1	270	267	327	288	11.72	cps
Bismuth	209-1	13064234	13069061	13116097	13083131	0.22	cps
Bismuth	209-2	10132385	10039896	10084184	10085488	0.46	cps
Bromine	81-1	18251	19990	20254	19499	5.58	cps
Bromine	81-2	1417	1400	1180	1332	9.92	cps
Cadmium	108-1	97	127	83	102	21.71	cps
Cadmium	106-1	6218	6068	6088	6125	1.33	cps
Cadmium	111-1	757	718	842	772	8.20	cps
Calcium	43-1	9231502	9191680	9234177	9219120	0.26	cps
Calcium	44-1	150688771	150055294	150073528	150272531	0.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40257	39505	38853	39538	1.78	cps
Cobalt	59-2	47134	47562	47221	47305	0.48	cps
Copper	63-2	92678	93322	93359	93119	0.41	cps
Dysprosium	156-1	32932	32915	33192	33013	0.47	cps
Dysprosium	156-2	26174	26766	26258	26399	1.21	cps
Erbium	164-1	28643	29084	29758	29162	1.93	cps
Erbium	164-2	19737	19817	19921	19825	0.46	cps
Gadolinium	160-1	32778	33376	32745	32967	1.08	cps
Gadolinium	160-2	24428	23957	24612	24332	1.39	cps
Holmium	165-1	22284323	22187273	22143486	22205027	0.32	cps
Holmium	165-2	15054852	15076011	14983365	15038076	0.32	cps
Indium	115-1	17280897	17330052	17066630	17225860	0.81	cps
Indium	115-2	6355961	6297145	6236837	6296648	0.95	cps
Iron	56-2	49521988	49569856	48995239	49362361	0.65	cps
Iron	57-2	1438207	1452383	1430127	1440239	0.78	cps
Iron	54-2	2749278	2735754	2726185	2737072	0.42	cps
Krypton	83-1	403	393	390	396	1.75	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-06 Instrumnet Name : P7
Client Sample ID : ME29F9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:04:59 DataFile Name : 032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	90660	91253	90488	90800	0.44	cps
Lead	207-1	73182	73527	74201	73637	0.70	cps
Lead	208-1	342135	343783	342126	342681	0.28	cps
Lithium	6-1	1776210	1811673	1793802	1793895	0.99	cps
Magnesium	24-2	36122628	35791279	35582200	35832036	0.76	cps
Manganese	55-2	2020383	1992199	1959668	1990750	1.53	cps
Molybdenum	94-1	29015	30098	28939	29351	2.21	cps
Molybdenum	95-1	6085	9586	6255	7308	27.01	cps
Molybdenum	96-1	11064	13928	11545	12179	12.59	cps
Molybdenum	97-1	3704	5550	3854	4369	23.47	cps
Molybdenum	98-1	10097	13173	10037	11102	16.16	cps
Neodymium	150-1	51346	51012	51607	51322	0.58	cps
Neodymium	150-2	30974	30630	30817	30807	0.56	cps
Nickel	60-2	27075	27118	26991	27061	0.24	cps
Phosphorus	31-2	7529	7912	7875	7772	2.72	cps
Potassium	39-2	404595	408842	405339	406259	0.56	cps
Rhodium	103-1	16052868	16157769	16087273	16099303	0.33	cps
Rhodium	103-2	9708561	9553954	9518584	9593700	1.05	cps
Scandium	45-1	8940638	8906612	8761665	8869638	1.07	cps
Scandium	45-2	843122	842150	844444	843238	0.14	cps
Selenium	82-1	797	744	731	757	4.60	cps
Selenium	77-2	87	100	77	88	13.33	cps
Selenium	78-2	723	583	613	640	11.52	cps
Silicon	28-1	14881525	14446581	14669320	14665809	1.48	cps
Silver	107-1	1790	1567	1110	1489	23.28	cps
Silver	109-1	1697	1267	1043	1336	24.86	cps
Sodium	23-2	251929	254448	253050	253142	0.50	cps
Strontium	86-1	882376	885598	885020	884331	0.19	cps
Strontium	88-1	7682900	7633799	7783533	7700077	0.99	cps
Sulfur	34-1	279042	275461	275478	276660	0.75	cps
Terbium	159-1	22872865	22539009	22808797	22740224	0.78	cps
Terbium	159-2	15036697	14809363	14904188	14916749	0.77	cps
Thallium	203-1	2274	2087	2324	2228	5.60	cps
Thallium	205-1	5408	5224	5341	5324	1.74	cps
Tin	118-1	4414	4998	5004	4805	7.05	cps
Titanium	47-1	83612	81498	82970	82693	1.31	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-06

Instrumnet Name :

P7

Client Sample ID :

ME29F9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:04:59

DataFile Name :

032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	53778	54317	54712	54269	0.86	cps
Vanadium	51-2	49885	49400	49461	49582	0.53	cps
Yttrium	89-1	20805835	20616829	20612428	20678364	0.53	cps
Yttrium	89-2	5619593	5622543	5567769	5603302	0.55	cps
Zinc	66-2	43961	44078	43369	43803	0.87	cps
Zirconium	90-1	67323	67836	68890	68016	1.17	cps
Zirconium	91-1	15161	15428	14998	15196	1.43	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-07 Instrumnet Name : P7
Client Sample ID : ME29G0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:08:10 DataFile Name : 033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	727323	724966	726261	726183	0.16	cps
Antimony	121-1	5921	5895	5748	5855	1.59	cps
Arsenic	75-2	6175	6115	5965	6085	1.78	cps
Barium	135-1	56769	57027	57000	56932	0.25	cps
Barium	137-1	97511	99146	98072	98243	0.85	cps
Beryllium	9-1	283	263	300	282	6.51	cps
Bismuth	209-1	13002963	12993972	13082465	13026466	0.37	cps
Bismuth	209-2	10067368	10099689	9975275	10047444	0.64	cps
Bromine	81-1	17774	17567	18472	17938	2.64	cps
Bromine	81-2	833	743	797	791	5.72	cps
Cadmium	108-1	117	123	127	122	4.17	cps
Cadmium	106-1	6341	6068	6348	6253	2.56	cps
Cadmium	111-1	777	831	790	799	3.52	cps
Calcium	43-1	11585676	11703601	11463105	11584128	1.04	cps
Calcium	44-1	186699137	188808677	185540637	187016151	0.89	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	53300	52839	52638	52926	0.64	cps
Cobalt	59-2	58293	57600	56978	57624	1.14	cps
Copper	63-2	122395	123813	123491	123233	0.60	cps
Dysprosium	156-1	41127	42063	41989	41726	1.25	cps
Dysprosium	156-2	32625	33049	33978	33217	2.08	cps
Erbium	164-1	38640	38643	39442	38908	1.19	cps
Erbium	164-2	26308	25784	26572	26221	1.53	cps
Gadolinium	160-1	43002	43437	43293	43244	0.51	cps
Gadolinium	160-2	30563	31566	30821	30983	1.68	cps
Holmium	165-1	22253460	21891225	22003086	22049257	0.84	cps
Holmium	165-2	15068977	15064250	14968591	15033939	0.38	cps
Indium	115-1	17362723	17398096	17100792	17287204	0.94	cps
Indium	115-2	6347803	6219109	6220094	6262335	1.18	cps
Iron	56-2	65330721	65816026	65496739	65547828	0.38	cps
Iron	57-2	1881091	1916393	1914660	1904048	1.05	cps
Iron	54-2	3556951	3631906	3620131	3602996	1.12	cps
Krypton	83-1	417	467	427	437	6.06	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-07 Instrumnet Name : P7
Client Sample ID : ME29G0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:08:10 DataFile Name : 033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	116914	119644	119251	118603	1.24	cps
Lead	207-1	94542	96392	95835	95590	0.99	cps
Lead	208-1	440510	447882	450757	446383	1.18	cps
Lithium	6-1	1730140	1762592	1756903	1749878	0.99	cps
Magnesium	24-2	50302776	51259674	50603876	50722109	0.96	cps
Manganese	55-2	2694824	2697517	2720330	2704224	0.52	cps
Molybdenum	94-1	39587	38988	39819	39465	1.09	cps
Molybdenum	95-1	12709	12415	12762	12629	1.48	cps
Molybdenum	96-1	19400	19436	20244	19693	2.42	cps
Molybdenum	97-1	8152	8089	7802	8014	2.33	cps
Molybdenum	98-1	20191	21059	20878	20709	2.21	cps
Neodymium	150-1	62347	60817	62029	61731	1.31	cps
Neodymium	150-2	36734	35632	36470	36279	1.59	cps
Nickel	60-2	35372	34229	34810	34804	1.64	cps
Phosphorus	31-2	11361	10704	10731	10932	3.40	cps
Potassium	39-2	326245	328589	327759	327531	0.36	cps
Rhodium	103-1	15927158	16120627	15868909	15972231	0.83	cps
Rhodium	103-2	9647101	9599817	9462720	9569879	1.00	cps
Scandium	45-1	8979456	8808135	8801647	8863079	1.14	cps
Scandium	45-2	843977	845209	849908	846365	0.37	cps
Selenium	82-1	828	740	776	781	5.68	cps
Selenium	77-2	123	127	133	128	3.98	cps
Selenium	78-2	713	670	677	687	3.40	cps
Silicon	28-1	8427264	7490278	7533047	7816863	6.77	cps
Silver	107-1	1103	1100	1127	1110	1.31	cps
Silver	109-1	793	987	910	897	10.86	cps
Sodium	23-2	285820	295389	286507	289238	1.85	cps
Strontium	86-1	1026372	1033789	1037737	1032633	0.56	cps
Strontium	88-1	9040634	8966690	9061234	9022853	0.55	cps
Sulfur	34-1	284696	283423	282737	283619	0.35	cps
Terbium	159-1	22774135	22669303	22779223	22740887	0.27	cps
Terbium	159-2	14830976	14974188	14868774	14891312	0.50	cps
Thallium	203-1	2264	2207	2340	2270	2.95	cps
Thallium	205-1	5168	5171	5521	5287	3.84	cps
Tin	118-1	5971	6328	6135	6145	2.91	cps
Titanium	47-1	76232	74837	78023	76364	2.09	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :P4977-07

Instrumnet Name :P7

Client Sample ID :ME29G0

Dilution Factor :1

Date & Time Acquired :2024-12-06 14:08:10

DataFile Name :033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	63765	63738	64056	63853	0.28	cps
Vanadium	51-2	60454	60193	61220	60622	0.88	cps
Yttrium	89-1	20971169	20658872	20620025	20750022	0.93	cps
Yttrium	89-2	5619593	5700141	5601775	5640503	0.93	cps
Zinc	66-2	57460	58487	57624	57857	0.95	cps
Zirconium	90-1	84722	86480	85785	85662	1.03	cps
Zirconium	91-1	19116	19259	19373	19249	0.67	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-08 Instrumnet Name : P7
Client Sample ID : ME29G1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:11:19 DataFile Name : 034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	974029	970996	968825	971283	0.27	cps
Antimony	121-1	7722	8036	8232	7997	3.22	cps
Arsenic	75-2	9530	9633	9343	9502	1.55	cps
Barium	135-1	56739	55270	57081	56363	1.71	cps
Barium	137-1	96743	97135	97431	97103	0.36	cps
Beryllium	9-1	350	303	317	323	7.43	cps
Bismuth	209-1	13622681	13154120	12792887	13189896	3.15	cps
Bismuth	209-2	10258880	10144352	10081665	10161632	0.88	cps
Bromine	81-1	16469	17083	16576	16710	1.96	cps
Bromine	81-2	530	643	697	623	13.66	cps
Cadmium	108-1	153	117	150	140	14.48	cps
Cadmium	106-1	6415	6185	6111	6237	2.54	cps
Cadmium	111-1	721	776	692	730	5.82	cps
Calcium	43-1	9966000	10099364	9976158	10013840	0.74	cps
Calcium	44-1	161254528	163002411	161383588	161880175	0.60	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	58168	59005	58519	58564	0.72	cps
Cobalt	59-2	66091	66627	66768	66495	0.54	cps
Copper	63-2	116636	114417	115864	115639	0.97	cps
Dysprosium	156-1	40080	39860	40004	39981	0.28	cps
Dysprosium	156-2	32247	32377	32521	32382	0.42	cps
Erbium	164-1	36541	36361	35555	36152	1.45	cps
Erbium	164-2	24101	25036	24912	24683	2.06	cps
Gadolinium	160-1	39539	40335	40301	40058	1.12	cps
Gadolinium	160-2	30149	29200	29084	29478	1.98	cps
Holmium	165-1	23226053	22125738	22249934	22533908	2.67	cps
Holmium	165-2	15156705	15114538	14960814	15077352	0.68	cps
Indium	115-1	18121630	17132730	17304546	17519635	3.02	cps
Indium	115-2	6254234	6278314	6307417	6279988	0.42	cps
Iron	56-2	56483989	55767211	55346728	55865976	1.03	cps
Iron	57-2	1610238	1600233	1609142	1606537	0.34	cps
Iron	54-2	3076251	3056931	3003807	3045663	1.23	cps
Krypton	83-1	333	527	353	404	26.29	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-08 Instrumnet Name : P7
Client Sample ID : ME29G1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:11:19 DataFile Name : 034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	121907	125102	124372	123793	1.35	cps
Lead	207-1	99172	100377	99467	99672	0.63	cps
Lead	208-1	463058	469452	468268	466926	0.73	cps
Lithium	6-1	1857625	1737232	1752875	1782577	3.67	cps
Magnesium	24-2	32371754	32381663	32476750	32410055	0.18	cps
Manganese	55-2	2328654	2336547	2306321	2323841	0.67	cps
Molybdenum	94-1	43013	43006	43996	43339	1.31	cps
Molybdenum	95-1	9066	9543	9623	9411	3.20	cps
Molybdenum	96-1	17244	17304	16790	17112	1.64	cps
Molybdenum	97-1	5878	5704	5705	5762	1.74	cps
Molybdenum	98-1	15588	15261	14861	15237	2.39	cps
Neodymium	150-1	63700	63315	63988	63667	0.53	cps
Neodymium	150-2	37239	37156	37660	37352	0.72	cps
Nickel	60-2	38566	39191	38212	38656	1.28	cps
Phosphorus	31-2	7819	8112	8102	8011	2.08	cps
Potassium	39-2	405176	407163	407544	406627	0.31	cps
Rhodium	103-1	16727806	15963195	15828590	16173197	3.00	cps
Rhodium	103-2	9502582	9460930	9565832	9509782	0.56	cps
Scandium	45-1	9380481	8813489	8736412	8976794	3.92	cps
Scandium	45-2	842607	844059	838248	841638	0.36	cps
Selenium	82-1	1161	939	925	1008	13.13	cps
Selenium	77-2	183	117	120	140	26.83	cps
Selenium	78-2	743	750	707	733	3.18	cps
Silicon	28-1	8653481	9039896	8785854	8826410	2.22	cps
Silver	107-1	1340	1217	1203	1253	6.01	cps
Silver	109-1	1173	1103	1233	1170	5.56	cps
Sodium	23-2	241343	241363	241763	241490	0.10	cps
Strontium	86-1	1071351	1070859	1077672	1073294	0.35	cps
Strontium	88-1	9461385	9442798	9321062	9408415	0.81	cps
Sulfur	34-1	299812	297104	292708	296542	1.21	cps
Terbium	159-1	23791135	22651934	22573596	23005555	2.96	cps
Terbium	159-2	14896526	15088314	14774344	14919728	1.06	cps
Thallium	203-1	2564	2430	2524	2506	2.73	cps
Thallium	205-1	5531	5725	5765	5673	2.20	cps
Tin	118-1	6492	6695	6792	6659	2.30	cps
Titanium	47-1	176483	175336	174480	175433	0.57	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4977-08

Instrumnet Name :

P7

Client Sample ID :

ME29G1

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:11:19

DataFile Name :

034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	77802	77423	78121	77782	0.45	cps
Vanadium	51-2	71572	70916	70363	70950	0.85	cps
Yttrium	89-1	21889722	20770948	20567402	21076024	3.38	cps
Yttrium	89-2	5634884	5627059	5565650	5609198	0.68	cps
Zinc	66-2	56506	56095	56781	56461	0.61	cps
Zirconium	90-1	102813	101766	104129	102903	1.15	cps
Zirconium	91-1	22788	23676	22858	23107	2.14	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-09 Instrumnet Name : P7
Client Sample ID : ME29G2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:14:29 DataFile Name : 035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	751609	754632	756827	754356	0.35	cps
Antimony	121-1	5848	6025	6125	5999	2.34	cps
Arsenic	75-2	7445	7018	6975	7146	3.64	cps
Barium	135-1	41811	42921	43249	42660	1.77	cps
Barium	137-1	73449	75747	75348	74848	1.64	cps
Beryllium	9-1	287	277	230	264	11.44	cps
Bismuth	209-1	13585408	12898362	12992848	13158873	2.83	cps
Bismuth	209-2	10144143	10028803	10039168	10070705	0.63	cps
Bromine	81-1	16109	16162	16172	16148	0.21	cps
Bromine	81-2	500	520	527	516	2.69	cps
Cadmium	108-1	97	123	110	110	12.12	cps
Cadmium	106-1	6201	5971	5815	5996	3.25	cps
Cadmium	111-1	490	510	502	501	2.03	cps
Calcium	43-1	8063168	8219145	8080661	8120992	1.05	cps
Calcium	44-1	129289345	132100911	131842595	131077617	1.19	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48113	48170	48588	48290	0.54	cps
Cobalt	59-2	49408	49876	49903	49729	0.56	cps
Copper	63-2	81091	82207	82579	81959	0.94	cps
Dysprosium	156-1	31001	32167	32461	31876	2.42	cps
Dysprosium	156-2	27327	27220	26792	27113	1.04	cps
Erbium	164-1	27377	28105	28182	27888	1.59	cps
Erbium	164-2	19053	19507	19517	19359	1.37	cps
Gadolinium	160-1	30610	31856	32194	31553	2.64	cps
Gadolinium	160-2	23744	23520	23456	23573	0.64	cps
Holmium	165-1	22783887	22153817	22027276	22321660	1.82	cps
Holmium	165-2	14907781	14809739	14834159	14850560	0.34	cps
Indium	115-1	17897062	17089501	17082512	17356358	2.70	cps
Indium	115-2	6332343	6270326	6226068	6276245	0.85	cps
Iron	56-2	42191350	41414231	41915028	41840203	0.94	cps
Iron	57-2	1247942	1237324	1263877	1249714	1.07	cps
Iron	54-2	2337660	2334876	2350287	2340941	0.35	cps
Krypton	83-1	353	433	390	392	10.21	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-09 Instrumnet Name : P7
Client Sample ID : ME29G2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:14:29 DataFile Name : 035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	89503	91827	90877	90736	1.29	cps
Lead	207-1	71504	73098	73343	72648	1.38	cps
Lead	208-1	336438	343615	344329	341461	1.28	cps
Lithium	6-1	1834108	1758350	1747153	1779870	2.66	cps
Magnesium	24-2	31910896	31483563	31750755	31715071	0.68	cps
Manganese	55-2	1678346	1682406	1700018	1686923	0.68	cps
Molybdenum	94-1	32192	33010	32970	32724	1.41	cps
Molybdenum	95-1	7275	7312	6925	7171	2.98	cps
Molybdenum	96-1	13109	13119	13103	13110	0.06	cps
Molybdenum	97-1	4321	4657	4347	4442	4.21	cps
Molybdenum	98-1	11431	11958	12098	11829	2.97	cps
Neodymium	150-1	50156	52471	52694	51774	2.72	cps
Neodymium	150-2	30359	30556	30693	30536	0.55	cps
Nickel	60-2	29409	29586	29252	29416	0.57	cps
Phosphorus	31-2	6441	6211	6508	6387	2.44	cps
Potassium	39-2	338476	337324	344266	340022	1.09	cps
Rhodium	103-1	16589639	16173735	16017848	16260407	1.82	cps
Rhodium	103-2	9659049	9687384	9613098	9653177	0.39	cps
Scandium	45-1	9184173	8783134	8795859	8921055	2.56	cps
Scandium	45-2	841734	839720	828527	836660	0.85	cps
Selenium	82-1	952	862	921	912	5.01	cps
Selenium	77-2	117	127	130	124	5.57	cps
Selenium	78-2	693	683	663	680	2.25	cps
Silicon	28-1	7104516	7087478	7275646	7155880	1.45	cps
Silver	107-1	890	923	897	903	1.95	cps
Silver	109-1	833	877	827	846	3.21	cps
Sodium	23-2	213124	214779	213502	213802	0.41	cps
Strontium	86-1	819921	839732	845155	834936	1.59	cps
Strontium	88-1	7224003	7377108	7402807	7334639	1.32	cps
Sulfur	34-1	292364	292613	290466	291815	0.40	cps
Terbium	159-1	23411765	22490940	22831987	22911564	2.03	cps
Terbium	159-2	14905164	14701527	14698241	14768311	0.80	cps
Thallium	203-1	2030	2154	2147	2110	3.29	cps
Thallium	205-1	4741	4798	4921	4820	1.91	cps
Tin	118-1	5915	6188	6258	6120	2.97	cps
Titanium	47-1	117621	119289	117374	118095	0.88	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-09 Instrumnet Name : P7
Client Sample ID : ME29G2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:14:29 DataFile Name : 035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	51988	54662	53383	53344	2.51	cps
Vanadium	51-2	48377	48946	49494	48939	1.14	cps
Yttrium	89-1	21748515	20599843	20574331	20974229	3.20	cps
Yttrium	89-2	5581185	5642791	5548956	5590977	0.85	cps
Zinc	66-2	42203	42069	41708	41993	0.61	cps
Zirconium	90-1	76264	80311	79433	78669	2.71	cps
Zirconium	91-1	17053	17621	17537	17404	1.76	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV002 Instrumnet Name : P7
Client Sample ID : CCV002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:17:39 DataFile Name : 036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	20317811	20272708	20088838	20226452	0.60	cps
Antimony	121-1	8713751	8827182	8822227	8787720	0.73	cps
Arsenic	75-2	462158	465415	462395	463323	0.39	cps
Barium	135-1	10913367	11174707	11116945	11068340	1.24	cps
Barium	137-1	19135357	19346618	19109101	19197026	0.68	cps
Beryllium	9-1	737125	754767	750563	747485	1.23	cps
Bismuth	209-1	12346281	11940823	11905359	12064154	2.03	cps
Bismuth	209-2	9032574	9064667	9128684	9075308	0.54	cps
Bromine	81-1	14437	14527	15255	14740	3.04	cps
Bromine	81-2	117	143	137	132	10.50	cps
Cadmium	108-1	174121	175366	175264	174917	0.40	cps
Cadmium	106-1	249683	253369	252440	251831	0.76	cps
Cadmium	111-1	2181271	2187454	2195681	2188135	0.33	cps
Calcium	43-1	10493419	10638819	10605928	10579389	0.72	cps
Calcium	44-1	169563764	173244771	171638044	171482193	1.08	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3449419	3449252	3449070	3449247	0.01	cps
Cobalt	59-2	5597245	5558425	5629976	5595216	0.64	cps
Copper	63-2	40679463	40242441	40581559	40501154	0.57	cps
Dysprosium	156-1	600	483	560	548	10.82	cps
Dysprosium	156-2	747	897	797	813	9.39	cps
Erbium	164-1	537	470	480	496	7.26	cps
Erbium	164-2	377	297	343	339	11.86	cps
Gadolinium	160-1	510	403	403	439	14.03	cps
Gadolinium	160-2	1020	1140	1127	1096	6.00	cps
Holmium	165-1	21087108	20826346	20755222	20889559	0.84	cps
Holmium	165-2	14154449	13950475	14172273	14092399	0.87	cps
Indium	115-1	16047221	15783008	15710833	15847021	1.12	cps
Indium	115-2	5636156	5720542	5759455	5705384	1.10	cps
Iron	56-2	802695455	812094068	804243428	806344317	0.62	cps
Iron	57-2	20352389	20405198	20181874	20313154	0.57	cps
Iron	54-2	43683504	44117348	43933121	43911324	0.50	cps
Krypton	83-1	320	353	360	344	6.22	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV002 Instrumnet Name : P7
Client Sample ID : CCV002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:17:39 DataFile Name : 036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	33360693	34086793	33860817	33769434	1.10	cps
Lead	207-1	29823381	30215185	29997750	30012105	0.65	cps
Lead	208-1	134918550	136443059	135933807	135765139	0.57	cps
Lithium	6-1	1691355	1658902	1651006	1667088	1.28	cps
Magnesium	24-2	156008028	156632981	157402228	156681079	0.45	cps
Manganese	55-2	27304306	27405172	27426390	27378623	0.24	cps
Molybdenum	94-1	30868000	30956245	31209871	31011372	0.57	cps
Molybdenum	95-1	44287616	44820179	44342181	44483325	0.66	cps
Molybdenum	96-1	48875379	49324528	48718528	48972811	0.64	cps
Molybdenum	97-1	27680805	28103235	28022602	27935547	0.80	cps
Molybdenum	98-1	71971407	72751372	72092882	72271887	0.58	cps
Neodymium	150-1	797	777	767	780	1.96	cps
Neodymium	150-2	233	243	233	237	2.44	cps
Nickel	60-2	1380594	1382631	1376057	1379761	0.24	cps
Phosphorus	31-2	186212	188300	189829	188113	0.97	cps
Potassium	39-2	99302142	99392539	99786199	99493626	0.26	cps
Rhodium	103-1	14820524	14430657	14260716	14503966	1.98	cps
Rhodium	103-2	8489973	8525379	8521905	8512419	0.23	cps
Scandium	45-1	8459201	8397707	8157199	8338036	1.91	cps
Scandium	45-2	786394	788097	785432	786641	0.17	cps
Selenium	82-1	136418	136977	137368	136921	0.35	cps
Selenium	77-2	14901	14834	14607	14781	1.04	cps
Selenium	78-2	49466	50506	49814	49928	1.06	cps
Silicon	28-1	27238780	27579349	27556818	27458316	0.69	cps
Silver	107-1	11372739	11479530	11274773	11375681	0.90	cps
Silver	109-1	10803888	10973886	10917467	10898413	0.79	cps
Sodium	23-2	252056796	254654310	248145256	251618787	1.30	cps
Strontium	86-1	2701329	2735617	2746403	2727783	0.86	cps
Strontium	88-1	24054527	24294612	24286225	24211788	0.56	cps
Sulfur	34-1	799255	800779	794804	798280	0.39	cps
Terbium	159-1	21725514	21354086	21053861	21377821	1.57	cps
Terbium	159-2	14121562	13935331	14117525	14058139	0.76	cps
Thallium	203-1	8275164	8505904	8471046	8417371	1.48	cps
Thallium	205-1	19915778	20241230	20178177	20111728	0.86	cps
Tin	118-1	7237168	7374191	7402640	7338000	1.21	cps
Titanium	47-1	9738828	10043397	10016464	9932897	1.70	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV002

Instrumnet Name :

P7

Client Sample ID :

CCV002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:17:39

DataFile Name :

036CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	27511971	27728252	27927591	27722605	0.75	cps
Vanadium	51-2	3072012	3083938	3064099	3073350	0.32	cps
Yttrium	89-1	19423686	18839308	18730118	18997704	1.96	cps
Yttrium	89-2	5157838	5079018	5092696	5109851	0.82	cps
Zinc	66-2	6794410	6745052	6676993	6738818	0.87	cps
Zirconium	90-1	15067704	15162827	15082328	15104286	0.34	cps
Zirconium	91-1	3359610	3364303	3359562	3361159	0.08	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB002 Instrumnet Name : P7
Client Sample ID : CCB002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:20:22 DataFile Name : 037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1100	920	1023	1014	8.90	cps
Antimony	121-1	4908	4274	3634	4272	14.91	cps
Arsenic	75-2	37	27	17	27	37.50	cps
Barium	135-1	1357	807	693	952	37.26	cps
Barium	137-1	2257	1603	1273	1711	29.25	cps
Beryllium	9-1	140	190	113	148	26.34	cps
Bismuth	209-1	12611531	12553964	12607119	12590871	0.25	cps
Bismuth	209-2	10118357	10005972	10058335	10060888	0.56	cps
Bromine	81-1	13586	13369	13440	13465	0.82	cps
Bromine	81-2	153	220	213	196	18.77	cps
Cadmium	108-1	47	47	23	39	34.65	cps
Cadmium	106-1	5064	5098	5134	5099	0.69	cps
Cadmium	111-1	343	213	226	260	27.43	cps
Calcium	43-1	2003	1620	1210	1611	24.63	cps
Calcium	44-1	42002	34479	30280	35587	16.69	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1570	1277	1327	1391	11.28	cps
Cobalt	59-2	467	483	463	471	2.27	cps
Copper	63-2	3507	3367	3230	3368	4.11	cps
Dysprosium	156-1	13	27	17	19	36.75	cps
Dysprosium	156-2	7	13	7	9	43.25	cps
Erbium	164-1	63	57	83	68	20.47	cps
Erbium	164-2	53	77	67	66	17.86	cps
Gadolinium	160-1	70	93	90	84	14.94	cps
Gadolinium	160-2	843	797	837	826	3.06	cps
Holmium	165-1	20099608	20020515	20280058	20133394	0.66	cps
Holmium	165-2	14400552	14160149	14225306	14262002	0.87	cps
Indium	115-1	16175294	16157459	16251295	16194683	0.31	cps
Indium	115-2	6044895	6065413	6040816	6050375	0.22	cps
Iron	56-2	56847	53100	49558	53168	6.86	cps
Iron	57-2	2224	2244	2147	2205	2.31	cps
Iron	54-2	5388	5078	4744	5070	6.35	cps
Krypton	83-1	333	360	320	338	6.03	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB002 Instrumnet Name : P7
Client Sample ID : CCB002 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:20:22 DataFile Name : 037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8039	6668	6288	6999	13.16	cps
Lead	207-1	6949	5841	5601	6130	11.72	cps
Lead	208-1	31792	27151	25176	28040	12.11	cps
Lithium	6-1	1726540	1665909	1718076	1703508	1.93	cps
Magnesium	24-2	8079	7148	6588	7272	10.35	cps
Manganese	55-2	1810	1560	1577	1649	8.48	cps
Molybdenum	94-1	4911	3650	2960	3841	25.75	cps
Molybdenum	95-1	5961	4301	3254	4505	30.31	cps
Molybdenum	96-1	6958	4944	3721	5208	31.39	cps
Molybdenum	97-1	3667	2794	2264	2908	24.37	cps
Molybdenum	98-1	9980	6685	5228	7298	33.36	cps
Neodymium	150-1	13	10	10	11	17.30	cps
Neodymium	150-2	7	0	3	3	100.05	cps
Nickel	60-2	430	480	450	453	5.55	cps
Phosphorus	31-2	353	327	343	341	3.95	cps
Potassium	39-2	75194	74163	74497	74618	0.71	cps
Rhodium	103-1	15332751	15259255	15286344	15292783	0.24	cps
Rhodium	103-2	9368469	9342940	9311359	9340923	0.31	cps
Scandium	45-1	8254428	8096084	8090829	8147114	1.14	cps
Scandium	45-2	779730	781206	785951	782296	0.42	cps
Selenium	82-1	590	538	457	528	12.74	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	523	570	583	559	5.64	cps
Silicon	28-1	754607	745249	745103	748320	0.73	cps
Silver	107-1	3174	2437	2231	2614	18.97	cps
Silver	109-1	2870	2130	1733	2245	25.71	cps
Sodium	23-2	51519	50429	48660	50203	2.87	cps
Strontium	86-1	953	883	817	884	7.73	cps
Strontium	88-1	3410	2387	2040	2612	27.27	cps
Sulfur	34-1	236211	234925	234417	235184	0.39	cps
Terbium	159-1	20624468	20819374	20532461	20658768	0.71	cps
Terbium	159-2	14273036	14210434	14229191	14237554	0.23	cps
Thallium	203-1	3034	2560	2334	2643	13.52	cps
Thallium	205-1	7682	6178	5541	6467	17.00	cps
Tin	118-1	3117	3007	2714	2946	7.08	cps
Titanium	47-1	1187	957	740	961	23.24	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB002

Instrumnet Name :

P7

Client Sample ID :

CCB002

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:20:22

DataFile Name :

037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3014	2127	1767	2302	27.87	cps
Vanadium	51-2	187	177	127	163	19.68	cps
Yttrium	89-1	18443985	18681130	18514671	18546595	0.66	cps
Yttrium	89-2	5172184	5197599	5231083	5200289	0.57	cps
Zinc	66-2	967	937	920	941	2.51	cps
Zirconium	90-1	3657	3120	2654	3144	15.97	cps
Zirconium	91-1	813	607	533	651	22.30	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-01 Instrumnet Name : P7
Client Sample ID : ME29D7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:24:11 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1203471	1176810	1165605	1181962	1.65	cps
Antimony	121-1	8739	8963	8893	8865	1.29	cps
Arsenic	75-2	8376	8236	8803	8471	3.49	cps
Barium	135-1	67284	68560	68269	68038	0.98	cps
Barium	137-1	116627	118452	120101	118393	1.47	cps
Beryllium	9-1	443	397	353	398	11.32	cps
Bismuth	209-1	12684039	12676776	12217913	12526243	2.13	cps
Bismuth	209-2	9741244	9758351	9842328	9780641	0.55	cps
Bromine	81-1	14751	15318	15421	15163	2.38	cps
Bromine	81-2	617	607	690	638	7.13	cps
Cadmium	108-1	193	200	197	197	1.69	cps
Cadmium	106-1	5538	5674	5368	5527	2.78	cps
Cadmium	111-1	969	982	1029	993	3.19	cps
Calcium	43-1	12029063	11976395	11991727	11999062	0.23	cps
Calcium	44-1	194152330	196281150	194840457	195091313	0.56	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	92474	92283	91378	92045	0.64	cps
Cobalt	59-2	94160	93345	92462	93322	0.91	cps
Copper	63-2	124358	126028	124257	124881	0.80	cps
Dysprosium	156-1	41023	41759	42126	41636	1.35	cps
Dysprosium	156-2	35709	36009	35181	35633	1.18	cps
Erbium	164-1	36548	36548	36972	36689	0.67	cps
Erbium	164-2	25380	24679	25751	25270	2.15	cps
Gadolinium	160-1	40866	41725	41816	41469	1.26	cps
Gadolinium	160-2	30483	31098	30894	30825	1.02	cps
Holmium	165-1	21135053	21530266	20857038	21174119	1.60	cps
Holmium	165-2	14878976	14811989	14595357	14762107	1.00	cps
Indium	115-1	16684895	16831534	15938712	16485047	2.90	cps
Indium	115-2	6125896	6098842	6180301	6135013	0.68	cps
Iron	56-2	90558959	90042489	89129899	89910449	0.80	cps
Iron	57-2	2516647	2484445	2529803	2510298	0.93	cps
Iron	54-2	5013855	4967592	4866532	4949326	1.52	cps
Krypton	83-1	283	440	437	387	23.15	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-01 Instrumnet Name : P7
Client Sample ID : ME29D7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:24:11 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	134716	136749	136177	135881	0.77	cps
Lead	207-1	108636	110719	110158	109838	0.98	cps
Lead	208-1	508704	515493	513264	512487	0.68	cps
Lithium	6-1	1686051	1740114	1642810	1689659	2.89	cps
Magnesium	24-2	52296061	51879018	51655699	51943593	0.63	cps
Manganese	55-2	3086671	3075651	2984662	3048995	1.84	cps
Molybdenum	94-1	60919	61472	61793	61395	0.72	cps
Molybdenum	95-1	20698	20488	20384	20523	0.78	cps
Molybdenum	96-1	31010	32152	30973	31378	2.14	cps
Molybdenum	97-1	12989	13046	12869	12968	0.70	cps
Molybdenum	98-1	32850	33518	33545	33305	1.18	cps
Neodymium	150-1	69329	70214	69460	69668	0.69	cps
Neodymium	150-2	41942	42257	41822	42007	0.53	cps
Nickel	60-2	52980	52441	52227	52549	0.74	cps
Phosphorus	31-2	10584	10264	10634	10494	1.91	cps
Potassium	39-2	514960	513356	511127	513148	0.38	cps
Rhodium	103-1	15321505	15273571	14965481	15186853	1.27	cps
Rhodium	103-2	9337519	9275304	9290972	9301265	0.35	cps
Scandium	45-1	8611224	8677609	8309209	8532681	2.30	cps
Scandium	45-2	827444	829014	833172	829876	0.36	cps
Selenium	82-1	1007	792	865	888	12.30	cps
Selenium	77-2	133	117	140	130	9.24	cps
Selenium	78-2	677	687	627	663	4.85	cps
Silicon	28-1	8769216	8251135	8491044	8503798	3.05	cps
Silver	107-1	3617	2257	1883	2586	35.29	cps
Silver	109-1	3400	1950	1627	2326	40.61	cps
Sodium	23-2	309983	311814	309238	310345	0.43	cps
Strontium	86-1	1072786	1077387	1085758	1078643	0.61	cps
Strontium	88-1	9285784	9421763	9525264	9410937	1.28	cps
Sulfur	34-1	254976	258471	258952	257466	0.84	cps
Terbium	159-1	22034059	22065511	21376488	21825352	1.78	cps
Terbium	159-2	14370320	14621236	14626419	14539325	1.01	cps
Thallium	203-1	4017	3174	3034	3408	15.61	cps
Thallium	205-1	9483	7299	6558	7780	19.55	cps
Tin	118-1	5358	5641	5581	5527	2.70	cps
Titanium	47-1	141552	144764	143117	143144	1.12	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-01 Instrumnet Name : P7
Client Sample ID : ME29D7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:24:11 DataFile Name : 038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	85871	87642	88065	87193	1.33	cps
Vanadium	51-2	86643	86305	85789	86246	0.50	cps
Yttrium	89-1	20245046	20053302	19617664	19972004	1.61	cps
Yttrium	89-2	5477798	5510972	5622087	5536952	1.36	cps
Zinc	66-2	60602	60268	60358	60409	0.29	cps
Zirconium	90-1	133130	136729	135650	135170	1.37	cps
Zirconium	91-1	29857	30067	29673	29866	0.66	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-02 Instrumnet Name : P7
Client Sample ID : ME29D8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:27:22 DataFile Name : 039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	889271	888504	889024	888933	0.04	cps
Antimony	121-1	5191	5421	5161	5258	2.71	cps
Arsenic	75-2	5604	5488	5634	5576	1.39	cps
Barium	135-1	60121	59470	58914	59502	1.02	cps
Barium	137-1	101616	102583	103003	102401	0.69	cps
Beryllium	9-1	340	297	253	297	14.61	cps
Bismuth	209-1	12769972	12995824	12872076	12879291	0.88	cps
Bismuth	209-2	10010218	10060437	10158150	10076268	0.75	cps
Bromine	81-1	15552	16066	16312	15977	2.43	cps
Bromine	81-2	543	520	510	524	3.26	cps
Cadmium	108-1	147	200	213	187	18.90	cps
Cadmium	106-1	5975	5778	5895	5882	1.68	cps
Cadmium	111-1	667	649	623	647	3.40	cps
Calcium	43-1	11809639	11730428	11924633	11821567	0.83	cps
Calcium	44-1	192340830	191545497	193534497	192473608	0.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	69717	69486	69606	69603	0.17	cps
Cobalt	59-2	58042	56931	57874	57616	1.04	cps
Copper	63-2	107304	109597	108741	108548	1.07	cps
Dysprosium	156-1	41307	42100	42390	41932	1.34	cps
Dysprosium	156-2	34606	33617	35097	34440	2.19	cps
Erbium	164-1	39031	40067	38851	39316	1.67	cps
Erbium	164-2	26432	26726	26662	26606	0.58	cps
Gadolinium	160-1	43233	43257	43210	43233	0.05	cps
Gadolinium	160-2	31465	31395	31515	31459	0.19	cps
Holmium	165-1	21967190	22129989	22155056	22084078	0.46	cps
Holmium	165-2	15125308	15213665	15208957	15182643	0.33	cps
Indium	115-1	17175202	17545877	17302858	17341312	1.09	cps
Indium	115-2	6316136	6309455	6273217	6299603	0.37	cps
Iron	56-2	70073582	70568141	69777852	70139858	0.57	cps
Iron	57-2	2014949	2031708	2015677	2020778	0.47	cps
Iron	54-2	3808285	3869670	3839639	3839198	0.80	cps
Krypton	83-1	377	457	413	416	9.64	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-02 Instrumnet Name : P7
Client Sample ID : ME29D8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:27:22 DataFile Name : 039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	132107	128846	129816	130257	1.29	cps
Lead	207-1	105891	105291	105690	105624	0.29	cps
Lead	208-1	495833	491759	495567	494386	0.46	cps
Lithium	6-1	1699980	1690862	1690444	1693762	0.32	cps
Magnesium	24-2	47218046	46612569	46599044	46809887	0.76	cps
Manganese	55-2	3088962	3116046	3068965	3091324	0.76	cps
Molybdenum	94-1	40539	40034	44309	41627	5.61	cps
Molybdenum	95-1	11618	10871	10871	11120	3.88	cps
Molybdenum	96-1	19209	18161	17938	18436	3.68	cps
Molybdenum	97-1	7319	6952	6792	7021	3.85	cps
Molybdenum	98-1	18342	17637	17768	17916	2.09	cps
Neodymium	150-1	68227	68338	68720	68428	0.38	cps
Neodymium	150-2	40886	40618	41033	40846	0.51	cps
Nickel	60-2	32702	32839	32228	32590	0.98	cps
Phosphorus	31-2	8759	8763	8726	8749	0.23	cps
Potassium	39-2	400825	390076	394403	395101	1.37	cps
Rhodium	103-1	16057658	16006321	15982056	16015345	0.24	cps
Rhodium	103-2	9653101	9709789	9566499	9643130	0.75	cps
Scandium	45-1	8890748	8852756	8968371	8903958	0.66	cps
Scandium	45-2	846619	864225	851648	854164	1.06	cps
Selenium	82-1	975	924	827	909	8.25	cps
Selenium	77-2	147	120	100	122	19.16	cps
Selenium	78-2	640	770	730	713	9.33	cps
Silicon	28-1	7195120	6446582	6364003	6668569	6.87	cps
Silver	107-1	1087	1097	950	1044	7.85	cps
Silver	109-1	930	853	790	858	8.17	cps
Sodium	23-2	270338	269550	271717	270535	0.41	cps
Strontium	86-1	995412	1000208	1005819	1000480	0.52	cps
Strontium	88-1	8732092	8856193	8862417	8816901	0.83	cps
Sulfur	34-1	277598	278182	279075	278285	0.27	cps
Terbium	159-1	22212515	22574930	22318436	22368627	0.83	cps
Terbium	159-2	15024454	14940840	14932371	14965888	0.34	cps
Thallium	203-1	2460	2307	2310	2359	3.71	cps
Thallium	205-1	5948	5781	5635	5788	2.71	cps
Tin	118-1	5861	5738	6005	5868	2.28	cps
Titanium	47-1	140599	140761	169475	150278	11.06	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-02

Instrumnet Name :

P7

Client Sample ID :

ME29D8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:27:22

DataFile Name :

039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	70884	70569	71537	70997	0.70	cps
Vanadium	51-2	77089	77230	77210	77176	0.10	cps
Yttrium	89-1	20799134	21021021	21109149	20976435	0.76	cps
Yttrium	89-2	5776516	5799257	5733136	5769636	0.58	cps
Zinc	66-2	51876	51863	50545	51428	1.49	cps
Zirconium	90-1	90869	92495	96561	93308	3.14	cps
Zirconium	91-1	20574	21202	20935	20904	1.51	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-03 Instrumnet Name : P7
Client Sample ID : ME29D9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:30:30 DataFile Name : 040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	972048	975245	973999	973764	0.17	cps
Antimony	121-1	6421	6705	6858	6662	3.33	cps
Arsenic	75-2	9973	9967	10250	10063	1.61	cps
Barium	135-1	62188	62931	62865	62661	0.66	cps
Barium	137-1	108282	109440	108967	108896	0.54	cps
Beryllium	9-1	343	310	290	314	8.57	cps
Bismuth	209-1	13139843	13055014	13292250	13162369	0.91	cps
Bismuth	209-2	9971383	10151074	10089033	10070497	0.91	cps
Bromine	81-1	16830	16416	17173	16806	2.26	cps
Bromine	81-2	593	550	560	568	4.00	cps
Cadmium	108-1	123	177	140	147	18.60	cps
Cadmium	106-1	5848	5875	5608	5777	2.54	cps
Cadmium	111-1	616	619	600	612	1.68	cps
Calcium	43-1	12749445	12881810	12771841	12801032	0.55	cps
Calcium	44-1	205232417	208878137	205413870	206508141	0.99	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	63272	64983	63570	63941	1.43	cps
Cobalt	59-2	62777	62516	62914	62736	0.32	cps
Copper	63-2	111478	111263	110601	111114	0.41	cps
Dysprosium	156-1	43976	43989	44577	44180	0.78	cps
Dysprosium	156-2	35729	36070	35715	35838	0.56	cps
Erbium	164-1	40024	41147	40756	40642	1.40	cps
Erbium	164-2	27824	28072	27374	27757	1.28	cps
Gadolinium	160-1	44323	45631	45236	45063	1.49	cps
Gadolinium	160-2	32812	32371	32661	32615	0.69	cps
Holmium	165-1	22241316	22301441	22190800	22244519	0.25	cps
Holmium	165-2	15289936	15122182	15205373	15205830	0.55	cps
Indium	115-1	17607391	17388711	17216231	17404111	1.13	cps
Indium	115-2	6274789	6363238	6245047	6294358	0.98	cps
Iron	56-2	55751554	55588456	55463846	55601285	0.26	cps
Iron	57-2	1695477	1687850	1687416	1690248	0.27	cps
Iron	54-2	3084527	3083477	3076464	3081489	0.14	cps
Krypton	83-1	407	473	410	430	8.74	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-03 Instrumnet Name : P7
Client Sample ID : ME29D9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:30:30 DataFile Name : 040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	106382	108579	106298	107086	1.21	cps
Lead	207-1	85211	85530	86070	85604	0.51	cps
Lead	208-1	401226	404378	405091	403565	0.51	cps
Lithium	6-1	1731961	1750089	1727086	1736379	0.70	cps
Magnesium	24-2	36991157	36997689	37472814	37153887	0.74	cps
Manganese	55-2	5044047	4955101	4969123	4989424	0.96	cps
Molybdenum	94-1	41833	43150	43113	42699	1.76	cps
Molybdenum	95-1	7902	8006	7976	7961	0.67	cps
Molybdenum	96-1	15548	15612	15455	15538	0.51	cps
Molybdenum	97-1	4911	4737	4984	4878	2.60	cps
Molybdenum	98-1	12202	12726	12746	12558	2.46	cps
Neodymium	150-1	68556	68904	69858	69106	0.98	cps
Neodymium	150-2	41815	40588	41574	41326	1.57	cps
Nickel	60-2	37487	36030	36454	36657	2.04	cps
Phosphorus	31-2	7415	7709	7248	7457	3.12	cps
Potassium	39-2	386119	381242	379622	382328	0.88	cps
Rhodium	103-1	16466316	16054166	16154945	16225142	1.32	cps
Rhodium	103-2	9593553	9634030	9571043	9599542	0.33	cps
Scandium	45-1	9073406	8985286	9009362	9022685	0.50	cps
Scandium	45-2	852247	844846	845177	847423	0.49	cps
Selenium	82-1	1028	903	876	936	8.64	cps
Selenium	77-2	80	130	123	111	24.43	cps
Selenium	78-2	773	657	670	700	9.12	cps
Silicon	28-1	6796560	6718994	6948758	6821438	1.71	cps
Silver	107-1	1233	1147	1003	1128	10.30	cps
Silver	109-1	973	1003	1127	1034	7.86	cps
Sodium	23-2	251983	252576	251791	252117	0.16	cps
Strontium	86-1	1183107	1206402	1198255	1195921	0.99	cps
Strontium	88-1	10486874	10424186	10401053	10437371	0.43	cps
Sulfur	34-1	318273	312021	314559	314951	1.00	cps
Terbium	159-1	22983760	22751809	22722047	22819205	0.63	cps
Terbium	159-2	14873449	14911585	15010596	14931877	0.47	cps
Thallium	203-1	1793	1763	1777	1778	0.85	cps
Thallium	205-1	4367	4384	4274	4342	1.37	cps
Tin	118-1	4948	5014	5134	5032	1.88	cps
Titanium	47-1	139936	140516	143529	141327	1.36	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-03

Instrumnet Name :

P7

Client Sample ID :

ME29D9

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:30:30

DataFile Name :

040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	67507	69188	67808	68168	1.32	cps
Vanadium	51-2	75739	75937	76168	75948	0.28	cps
Yttrium	89-1	21513292	21202186	21009447	21241641	1.20	cps
Yttrium	89-2	5710737	5678361	5651023	5680040	0.53	cps
Zinc	66-2	58792	58879	57326	58332	1.50	cps
Zirconium	90-1	103414	104149	104454	104006	0.51	cps
Zirconium	91-1	22991	23766	23339	23365	1.66	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-04 Instrumnet Name : P7
Client Sample ID : ME29E0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:33:42 DataFile Name : 041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7578240	7461302	7496273	7511938	0.80	cps
Antimony	121-1	8342	8196	8372	8304	1.14	cps
Arsenic	75-2	16319	15849	16913	16360	3.26	cps
Barium	135-1	445221	443969	447620	445603	0.42	cps
Barium	137-1	767837	781297	777362	775499	0.89	cps
Beryllium	9-1	917	937	933	929	1.15	cps
Bismuth	209-1	13580912	13627614	13449651	13552726	0.68	cps
Bismuth	209-2	10426479	10371889	10629854	10476074	1.30	cps
Bromine	81-1	15118	14994	15685	15266	2.41	cps
Bromine	81-2	373	377	350	367	3.96	cps
Cadmium	108-1	437	337	397	390	12.91	cps
Cadmium	106-1	6478	6218	6151	6283	2.75	cps
Cadmium	111-1	157	282	280	240	29.94	cps
Calcium	43-1	148327	149919	146694	148313	1.09	cps
Calcium	44-1	2333804	2286094	2306653	2308850	1.04	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	221003	222113	220148	221088	0.45	cps
Cobalt	59-2	323788	325032	322784	323868	0.35	cps
Copper	63-2	212418	209858	210362	210879	0.64	cps
Dysprosium	156-1	62230	64668	66565	64488	3.37	cps
Dysprosium	156-2	53019	53060	52441	52840	0.66	cps
Erbium	164-1	43528	44076	43561	43722	0.70	cps
Erbium	164-2	30553	29685	30520	30253	1.63	cps
Gadolinium	160-1	59961	60881	60544	60462	0.77	cps
Gadolinium	160-2	44229	45249	44534	44671	1.17	cps
Holmium	165-1	22118380	22031661	22148156	22099399	0.27	cps
Holmium	165-2	15208347	14932963	15257053	15132787	1.15	cps
Indium	115-1	17552510	17400370	17380711	17444530	0.54	cps
Indium	115-2	6316906	6354359	6313332	6328199	0.36	cps
Iron	56-2	333967448	337152802	337115608	336078619	0.54	cps
Iron	57-2	8322329	8422951	8236888	8327389	1.12	cps
Iron	54-2	18351989	18413039	18573506	18446178	0.62	cps
Krypton	83-1	367	403	417	396	6.55	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-04 Instrumnet Name : P7
Client Sample ID : ME29E0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:33:42 DataFile Name : 041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	412495	421846	420125	418155	1.19	cps
Lead	207-1	344998	349022	348487	347502	0.63	cps
Lead	208-1	1601265	1629697	1624604	1618522	0.94	cps
Lithium	6-1	1820469	1801580	1714122	1778724	3.19	cps
Magnesium	24-2	5950832	5937545	5915293	5934557	0.30	cps
Manganese	55-2	2585495	2617702	2617656	2606951	0.71	cps
Molybdenum	94-1	142657	144188	144713	143853	0.74	cps
Molybdenum	95-1	2054	2190	2110	2118	3.24	cps
Molybdenum	96-1	29126	29450	29523	29366	0.72	cps
Molybdenum	97-1	1410	1283	1390	1361	5.00	cps
Molybdenum	98-1	3580	3404	3350	3445	3.50	cps
Neodymium	150-1	121827	123559	122523	122636	0.71	cps
Neodymium	150-2	72120	72713	73477	72770	0.93	cps
Nickel	60-2	271155	271579	271082	271272	0.10	cps
Phosphorus	31-2	6765	6718	6768	6750	0.41	cps
Potassium	39-2	2372435	2315127	2331755	2339772	1.26	cps
Rhodium	103-1	16302340	16170717	16323306	16265454	0.51	cps
Rhodium	103-2	9792110	9912170	9837622	9847301	0.62	cps
Scandium	45-1	8691188	8758624	8650086	8699966	0.63	cps
Scandium	45-2	838684	827780	834042	833502	0.66	cps
Selenium	82-1	965	894	874	911	5.30	cps
Selenium	77-2	207	237	210	218	7.55	cps
Selenium	78-2	723	693	673	697	3.61	cps
Silicon	28-1	13372303	13339466	13158297	13290022	0.87	cps
Silver	107-1	5718	5845	5881	5815	1.47	cps
Silver	109-1	5191	5394	5431	5339	2.42	cps
Sodium	23-2	334057	336266	334094	334806	0.38	cps
Strontium	86-1	82399	84028	84661	83696	1.39	cps
Strontium	88-1	733099	734817	738150	735355	0.35	cps
Sulfur	34-1	936111	932666	918082	928953	1.03	cps
Terbium	159-1	22591097	22686052	22747302	22674817	0.35	cps
Terbium	159-2	14924823	14973080	14916749	14938217	0.20	cps
Thallium	203-1	2354	2314	2190	2286	3.73	cps
Thallium	205-1	5168	5191	5444	5268	2.91	cps
Tin	118-1	11321	11348	11234	11301	0.52	cps
Titanium	47-1	129895	129108	130586	129863	0.57	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-04

Instrumnet Name :

P7

Client Sample ID :

ME29E0

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:33:42

DataFile Name :

041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	33338	34157	33709	33735	1.22	cps
Vanadium	51-2	226032	224479	223941	224817	0.48	cps
Yttrium	89-1	20360823	20394682	20626937	20460814	0.71	cps
Yttrium	89-2	5564948	5616723	5548728	5576800	0.64	cps
Zinc	66-2	266486	264535	263474	264831	0.58	cps
Zirconium	90-1	378984	389702	384844	384510	1.40	cps
Zirconium	91-1	85494	86549	86640	86228	0.74	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-05 Instrumnet Name : P7
Client Sample ID : ME29E1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:36:50 DataFile Name : 042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	879024	872400	868946	873457	0.59	cps
Antimony	121-1	6475	6435	6421	6444	0.43	cps
Arsenic	75-2	6692	7008	6952	6884	2.45	cps
Barium	135-1	54294	54363	55843	54833	1.60	cps
Barium	137-1	95219	94377	93662	94420	0.83	cps
Beryllium	9-1	323	360	323	336	6.31	cps
Bismuth	209-1	13196389	13032183	13045086	13091220	0.70	cps
Bismuth	209-2	10155632	9926970	9935357	10005986	1.30	cps
Bromine	81-1	16129	16269	16109	16169	0.54	cps
Bromine	81-2	517	520	520	519	0.37	cps
Cadmium	108-1	163	223	130	172	27.46	cps
Cadmium	106-1	5941	5688	5514	5715	3.76	cps
Cadmium	111-1	682	662	773	706	8.40	cps
Calcium	43-1	13830814	13707567	13553374	13697251	1.01	cps
Calcium	44-1	225255103	221870297	220442137	222522512	1.11	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	51548	50708	50310	50855	1.24	cps
Cobalt	59-2	72913	72467	72353	72578	0.41	cps
Copper	63-2	112868	111102	113338	112436	1.05	cps
Dysprosium	156-1	34743	35308	35331	35127	0.95	cps
Dysprosium	156-2	28539	28359	28279	28392	0.47	cps
Erbium	164-1	31976	32391	32150	32172	0.65	cps
Erbium	164-2	21881	21814	22181	21958	0.89	cps
Gadolinium	160-1	35622	36013	35358	35664	0.92	cps
Gadolinium	160-2	26124	26068	26231	26141	0.32	cps
Holmium	165-1	21975902	21783137	21575066	21778035	0.92	cps
Holmium	165-2	14937766	14847274	14858560	14881200	0.33	cps
Indium	115-1	17271132	17036835	16751039	17019669	1.53	cps
Indium	115-2	6138521	6073891	6081552	6097988	0.58	cps
Iron	56-2	64557077	63513261	65034942	64368427	1.21	cps
Iron	57-2	1950630	1916520	1923758	1930303	0.93	cps
Iron	54-2	3583118	3568072	3563950	3571713	0.28	cps
Krypton	83-1	403	437	387	409	6.23	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-05 Instrumnet Name : P7
Client Sample ID : ME29E1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:36:50 DataFile Name : 042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	138052	138197	138736	138329	0.26	cps
Lead	207-1	110445	111217	111032	110898	0.36	cps
Lead	208-1	520145	522168	523081	521798	0.29	cps
Lithium	6-1	1686384	1751418	1698255	1712019	2.02	cps
Magnesium	24-2	28018823	27916387	27716048	27883753	0.55	cps
Manganese	55-2	2646474	2610181	2672228	2642961	1.18	cps
Molybdenum	94-1	46430	45042	46624	46032	1.87	cps
Molybdenum	95-1	16162	16569	16706	16479	1.72	cps
Molybdenum	96-1	24521	24417	23853	24264	1.48	cps
Molybdenum	97-1	10477	10491	9957	10308	2.95	cps
Molybdenum	98-1	26591	26297	26344	26411	0.60	cps
Neodymium	150-1	53196	53568	53806	53523	0.57	cps
Neodymium	150-2	31622	31826	31856	31768	0.40	cps
Nickel	60-2	38720	38472	38279	38490	0.57	cps
Phosphorus	31-2	7499	7655	7565	7573	1.04	cps
Potassium	39-2	416624	421478	419642	419248	0.58	cps
Rhodium	103-1	15713512	15466724	15486024	15555420	0.88	cps
Rhodium	103-2	9398312	9312675	9251198	9320728	0.79	cps
Scandium	45-1	8718922	8604484	8457841	8593749	1.52	cps
Scandium	45-2	809343	811972	812300	811205	0.20	cps
Selenium	82-1	877	849	811	845	3.92	cps
Selenium	77-2	123	150	133	136	9.94	cps
Selenium	78-2	680	567	627	624	9.08	cps
Silicon	28-1	7572896	7400540	7333546	7435661	1.66	cps
Silver	107-1	837	690	750	759	9.72	cps
Silver	109-1	610	647	593	617	4.42	cps
Sodium	23-2	276952	276346	281422	278240	1.00	cps
Strontium	86-1	1674812	1644902	1623493	1647736	1.56	cps
Strontium	88-1	14642646	14530186	14259371	14477401	1.36	cps
Sulfur	34-1	265153	267971	268768	267297	0.71	cps
Terbium	159-1	22438834	22246313	22216796	22300647	0.54	cps
Terbium	159-2	14821831	14689904	14761144	14757626	0.45	cps
Thallium	203-1	2004	1933	2264	2067	8.41	cps
Thallium	205-1	4778	4708	4871	4785	1.71	cps
Tin	118-1	5164	5298	5188	5217	1.37	cps
Titanium	47-1	109402	109775	109211	109463	0.26	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-05 Instrumnet Name : P7
Client Sample ID : ME29E1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:36:50 DataFile Name : 042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	69547	70492	70565	70201	0.81	cps
Vanadium	51-2	56244	56294	56144	56228	0.14	cps
Yttrium	89-1	20433269	20218213	20181387	20277623	0.67	cps
Yttrium	89-2	5509310	5498518	5473576	5493801	0.33	cps
Zinc	66-2	48268	47505	47729	47834	0.82	cps
Zirconium	90-1	101468	99793	99188	100150	1.18	cps
Zirconium	91-1	23223	22911	21723	22619	3.50	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-06 Instrumnet Name : P7
Client Sample ID : ME29E2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:40:00 DataFile Name : 043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	980322	984874	974701	979966	0.52	cps
Antimony	121-1	7849	7389	7662	7633	3.03	cps
Arsenic	75-2	8026	8062	7992	8027	0.44	cps
Barium	135-1	62252	62523	61412	62062	0.93	cps
Barium	137-1	107298	108322	108329	107983	0.55	cps
Beryllium	9-1	373	363	400	379	5.00	cps
Bismuth	209-1	12866041	12800337	12987229	12884536	0.74	cps
Bismuth	209-2	10005556	10129866	10057773	10064399	0.62	cps
Bromine	81-1	16002	16429	15982	16138	1.57	cps
Bromine	81-2	567	630	680	626	9.08	cps
Cadmium	108-1	157	227	147	177	24.67	cps
Cadmium	106-1	6281	5728	5938	5982	4.67	cps
Cadmium	111-1	875	823	784	827	5.54	cps
Calcium	43-1	11611341	11685068	11507384	11601265	0.77	cps
Calcium	44-1	187231057	190039497	187806477	188359011	0.79	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	66281	65304	63841	65142	1.89	cps
Cobalt	59-2	84127	83383	83286	83599	0.55	cps
Copper	63-2	135176	137054	134625	135618	0.94	cps
Dysprosium	156-1	39251	40415	39990	39885	1.48	cps
Dysprosium	156-2	31860	31612	32227	31900	0.97	cps
Erbium	164-1	37203	37233	37159	37198	0.10	cps
Erbium	164-2	25493	25473	25477	25481	0.04	cps
Gadolinium	160-1	40415	40662	40980	40686	0.70	cps
Gadolinium	160-2	29558	30533	29304	29798	2.18	cps
Holmium	165-1	21738244	21583911	21894370	21738841	0.71	cps
Holmium	165-2	14925623	14717208	14863269	14835366	0.72	cps
Indium	115-1	16997058	16635649	16681711	16771473	1.17	cps
Indium	115-2	6173809	6098166	6052040	6108005	1.01	cps
Iron	56-2	81485157	80563627	79949334	80666039	0.96	cps
Iron	57-2	2340398	2271625	2241693	2284572	2.22	cps
Iron	54-2	4443885	4412546	4406202	4420877	0.46	cps
Krypton	83-1	383	403	347	378	7.61	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-06 Instrumnet Name : P7
Client Sample ID : ME29E2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:40:00 DataFile Name : 043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	141587	143801	143727	143038	0.88	cps
Lead	207-1	114312	114394	114064	114257	0.15	cps
Lead	208-1	532765	539624	539051	537147	0.71	cps
Lithium	6-1	1736557	1737200	1716993	1730250	0.66	cps
Magnesium	24-2	38304219	38007224	38224281	38178575	0.40	cps
Manganese	55-2	3019114	3047808	2996796	3021239	0.85	cps
Molybdenum	94-1	56689	57569	57469	57242	0.84	cps
Molybdenum	95-1	23125	22658	22618	22800	1.24	cps
Molybdenum	96-1	31594	32376	32546	32172	1.58	cps
Molybdenum	97-1	13947	14794	14177	14306	3.06	cps
Molybdenum	98-1	36840	36873	36906	36873	0.09	cps
Neodymium	150-1	60305	59793	61075	60391	1.07	cps
Neodymium	150-2	35999	35438	35297	35578	1.04	cps
Nickel	60-2	47615	47492	47452	47520	0.18	cps
Phosphorus	31-2	8446	8469	8539	8485	0.57	cps
Potassium	39-2	482131	481298	478830	480753	0.36	cps
Rhodium	103-1	15492936	15310030	15259378	15354115	0.80	cps
Rhodium	103-2	9457895	9253198	9341204	9350766	1.10	cps
Scandium	45-1	8660876	8518157	8536152	8571728	0.91	cps
Scandium	45-2	823915	816566	814235	818238	0.62	cps
Selenium	82-1	875	884	869	876	0.86	cps
Selenium	77-2	80	123	133	112	25.26	cps
Selenium	78-2	720	600	560	627	13.29	cps
Silicon	28-1	7120821	7237423	6860500	7072915	2.73	cps
Silver	107-1	797	773	690	753	7.44	cps
Silver	109-1	547	667	667	627	11.06	cps
Sodium	23-2	279059	278533	277666	278420	0.25	cps
Strontium	86-1	1349432	1356382	1363768	1356527	0.53	cps
Strontium	88-1	11900806	11906157	12041397	11949453	0.67	cps
Sulfur	34-1	274250	275284	273850	274461	0.27	cps
Terbium	159-1	22191071	21963495	22176914	22110493	0.58	cps
Terbium	159-2	14731626	14658734	14598930	14663097	0.45	cps
Thallium	203-1	2877	2730	2660	2756	4.01	cps
Thallium	205-1	6695	6712	6982	6796	2.37	cps
Tin	118-1	5731	5841	5671	5748	1.50	cps
Titanium	47-1	131690	130954	130841	131162	0.35	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-06

Instrumnet Name :

P7

Client Sample ID :

ME29E2

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:40:00

DataFile Name :

043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	85230	85448	85693	85457	0.27	cps
Vanadium	51-2	71860	72567	72614	72347	0.58	cps
Yttrium	89-1	20302674	20042216	20063132	20136007	0.72	cps
Yttrium	89-2	5491345	5425680	5466957	5461327	0.61	cps
Zinc	66-2	60642	60448	59495	60195	1.02	cps
Zirconium	90-1	115977	117307	118228	117171	0.97	cps
Zirconium	91-1	26133	27061	26297	26497	1.87	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-07 Instrumnet Name : P7
Client Sample ID : ME29E3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:43:09 DataFile Name : 044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	619461	621493	622008	620987	0.22	cps
Antimony	121-1	3954	3847	3724	3842	3.00	cps
Arsenic	75-2	4901	4724	4607	4744	3.11	cps
Barium	135-1	46011	45255	45308	45525	0.93	cps
Barium	137-1	78837	79303	78485	78875	0.52	cps
Beryllium	9-1	233	280	200	238	16.90	cps
Bismuth	209-1	13254226	13021735	13105254	13127072	0.90	cps
Bismuth	209-2	9998314	10197797	10129408	10108506	1.00	cps
Bromine	81-1	16002	16423	15895	16107	1.73	cps
Bromine	81-2	560	640	567	589	7.54	cps
Cadmium	108-1	143	90	107	113	24.08	cps
Cadmium	106-1	6151	5915	5641	5902	4.33	cps
Cadmium	111-1	604	663	560	609	8.49	cps
Calcium	43-1	10431728	10254449	10306496	10330891	0.88	cps
Calcium	44-1	167416171	165826344	165393481	166211999	0.64	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	47317	46662	46823	46934	0.73	cps
Cobalt	59-2	43028	42587	43215	42943	0.75	cps
Copper	63-2	80284	82365	82352	81667	1.47	cps
Dysprosium	156-1	57551	57778	57169	57499	0.54	cps
Dysprosium	156-2	54672	56292	55329	55431	1.47	cps
Erbium	164-1	33470	34543	34763	34259	2.02	cps
Erbium	164-2	23159	23904	23690	23584	1.63	cps
Gadolinium	160-1	45912	46694	45968	46192	0.94	cps
Gadolinium	160-2	33744	34516	34653	34304	1.43	cps
Holmium	165-1	21804336	21638849	21705379	21716188	0.38	cps
Holmium	165-2	14970040	15032319	14765456	14922605	0.94	cps
Indium	115-1	17002862	17055771	16835960	16964864	0.68	cps
Indium	115-2	6063608	6188968	6105413	6119330	1.04	cps
Iron	56-2	53393468	53135758	53159333	53229519	0.27	cps
Iron	57-2	1565142	1540819	1569546	1558503	0.99	cps
Iron	54-2	2964451	2928533	2917214	2936733	0.84	cps
Krypton	83-1	460	387	367	404	12.15	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-07 Instrumnet Name : P7
Client Sample ID : ME29E3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:43:09 DataFile Name : 044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	89123	89257	89683	89354	0.33	cps
Lead	207-1	71584	71862	72244	71896	0.46	cps
Lead	208-1	336864	337914	336604	337127	0.21	cps
Lithium	6-1	1775095	1738443	1762239	1758592	1.06	cps
Magnesium	24-2	37552082	37789010	37897745	37746279	0.47	cps
Manganese	55-2	2115350	2144416	2115273	2125013	0.79	cps
Molybdenum	94-1	33088	33294	33588	33324	0.76	cps
Molybdenum	95-1	9400	9527	9663	9530	1.38	cps
Molybdenum	96-1	15628	15061	15535	15408	1.97	cps
Molybdenum	97-1	5965	6045	6001	6004	0.67	cps
Molybdenum	98-1	14961	15085	15428	15158	1.60	cps
Neodymium	150-1	120076	121105	121252	120811	0.53	cps
Neodymium	150-2	72612	72787	71979	72459	0.59	cps
Nickel	60-2	24964	24036	24253	24418	1.99	cps
Phosphorus	31-2	6752	6571	6555	6626	1.65	cps
Potassium	39-2	304921	299330	303989	302747	0.99	cps
Rhodium	103-1	15804343	15496481	15582925	15627916	1.02	cps
Rhodium	103-2	9334466	9402962	9433630	9390353	0.54	cps
Scandium	45-1	8664183	8563507	8571397	8599696	0.65	cps
Scandium	45-2	821034	819394	816879	819103	0.26	cps
Selenium	82-1	725	853	788	789	8.09	cps
Selenium	77-2	173	183	153	170	8.99	cps
Selenium	78-2	720	603	763	696	11.90	cps
Silicon	28-1	6345899	6338659	6301263	6328607	0.38	cps
Silver	107-1	650	640	687	659	3.73	cps
Silver	109-1	490	517	600	536	10.71	cps
Sodium	23-2	237322	242314	241105	240247	1.08	cps
Strontium	86-1	967837	974017	976597	972817	0.46	cps
Strontium	88-1	8586401	8514336	8474528	8525088	0.67	cps
Sulfur	34-1	277928	277195	276435	277186	0.27	cps
Terbium	159-1	22437463	22181626	22464107	22361066	0.70	cps
Terbium	159-2	14751361	14937441	14626119	14771640	1.06	cps
Thallium	203-1	1630	1540	1640	1603	3.44	cps
Thallium	205-1	3961	3787	3891	3879	2.25	cps
Tin	118-1	5078	5211	5284	5191	2.02	cps
Titanium	47-1	97100	97807	95972	96960	0.95	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :P4976-07

Instrumnet Name :P7

Client Sample ID :ME29E3

Dilution Factor :1

Date & Time Acquired :2024-12-06 14:43:09

DataFile Name :044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	53473	53289	52312	53025	1.18	cps
Vanadium	51-2	50033	50183	49655	49957	0.54	cps
Yttrium	89-1	20515871	19981002	20153070	20216648	1.35	cps
Yttrium	89-2	5535556	5544506	5511967	5530676	0.30	cps
Zinc	66-2	36678	37253	36879	36937	0.79	cps
Zirconium	90-1	74100	75667	75721	75162	1.22	cps
Zirconium	91-1	16596	16970	16946	16838	1.24	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08 Instrumnet Name : P7
Client Sample ID : ME29E4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:46:19 DataFile Name : 045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	997533	993479	987761	992924	0.49	cps
Antimony	121-1	5318	5428	5341	5362	1.08	cps
Arsenic	75-2	26647	26414	26794	26618	0.72	cps
Barium	135-1	69649	70252	70473	70125	0.61	cps
Barium	137-1	121682	121571	121964	121739	0.17	cps
Beryllium	9-1	310	300	320	310	3.23	cps
Bismuth	209-1	13091414	13144651	12950079	13062048	0.77	cps
Bismuth	209-2	10083414	10126453	10144684	10118184	0.31	cps
Bromine	81-1	15098	15799	15608	15502	2.34	cps
Bromine	81-2	553	487	490	510	7.37	cps
Cadmium	108-1	173	147	113	144	20.81	cps
Cadmium	106-1	5905	5788	5961	5885	1.50	cps
Cadmium	111-1	702	646	581	643	9.43	cps
Calcium	43-1	9162719	8992208	8878606	9011178	1.59	cps
Calcium	44-1	146354244	146448311	146135951	146312836	0.11	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	56897	57713	57369	57326	0.72	cps
Cobalt	59-2	74296	74343	74534	74391	0.17	cps
Copper	63-2	125554	125316	127793	126221	1.08	cps
Dysprosium	156-1	43618	44005	43674	43766	0.48	cps
Dysprosium	156-2	34526	34690	35615	34944	1.68	cps
Erbium	164-1	40936	45468	41267	42557	5.94	cps
Erbium	164-2	28112	28255	27574	27980	1.28	cps
Gadolinium	160-1	44771	45246	45647	45222	0.97	cps
Gadolinium	160-2	33156	32421	33500	33026	1.67	cps
Holmium	165-1	21819910	21804869	21584596	21736458	0.61	cps
Holmium	165-2	14836332	15094731	14739874	14890312	1.23	cps
Indium	115-1	16935182	16985455	16928598	16949745	0.18	cps
Indium	115-2	6165280	6100683	6072219	6112728	0.78	cps
Iron	56-2	70504272	70268351	70762177	70511600	0.35	cps
Iron	57-2	1935944	1969026	1982334	1962435	1.22	cps
Iron	54-2	3827378	3887804	3876561	3863914	0.83	cps
Krypton	83-1	383	400	340	374	8.27	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08 Instrumnet Name : P7
Client Sample ID : ME29E4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:46:19 DataFile Name : 045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	105606	103657	105209	104824	0.98	cps
Lead	207-1	82579	84615	84537	83910	1.37	cps
Lead	208-1	393080	394067	397037	394728	0.52	cps
Lithium	6-1	1795131	1732572	1746939	1758214	1.86	cps
Magnesium	24-2	34443329	34161817	34283959	34296368	0.41	cps
Manganese	55-2	3331177	3319863	3342614	3331218	0.34	cps
Molybdenum	94-1	53384	53537	53527	53483	0.16	cps
Molybdenum	95-1	27513	28234	27826	27858	1.30	cps
Molybdenum	96-1	37007	37374	36813	37065	0.77	cps
Molybdenum	97-1	17230	17537	17671	17479	1.29	cps
Molybdenum	98-1	44819	45290	45450	45186	0.73	cps
Neodymium	150-1	65079	65163	64764	65002	0.32	cps
Neodymium	150-2	38726	38292	38990	38670	0.91	cps
Nickel	60-2	38676	38857	37821	38451	1.44	cps
Phosphorus	31-2	8196	8412	8392	8333	1.44	cps
Potassium	39-2	382305	387158	383357	384273	0.66	cps
Rhodium	103-1	15578451	15527571	15463092	15523038	0.37	cps
Rhodium	103-2	9481405	9329378	9374205	9394996	0.83	cps
Scandium	45-1	8628055	8555140	8384408	8522535	1.47	cps
Scandium	45-2	809119	815121	812034	812091	0.37	cps
Selenium	82-1	819	778	812	803	2.75	cps
Selenium	77-2	133	120	110	121	9.67	cps
Selenium	78-2	573	547	643	588	8.49	cps
Silicon	28-1	6114122	6171903	5729120	6005048	4.01	cps
Silver	107-1	890	870	887	882	1.22	cps
Silver	109-1	757	763	780	767	1.57	cps
Sodium	23-2	241973	241395	245421	242929	0.90	cps
Strontium	86-1	855691	852872	856998	855187	0.25	cps
Strontium	88-1	7426477	7392441	7523772	7447563	0.92	cps
Sulfur	34-1	414322	409219	408816	410786	0.75	cps
Terbium	159-1	22374109	21960001	22110480	22148197	0.95	cps
Terbium	159-2	14663935	14782324	14704456	14716905	0.41	cps
Thallium	203-1	2960	2894	2920	2925	1.15	cps
Thallium	205-1	6862	6765	6588	6738	2.06	cps
Tin	118-1	5388	5268	5358	5338	1.17	cps
Titanium	47-1	156824	162254	157113	158731	1.92	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08

Instrumnet Name :

P7

Client Sample ID :

ME29E4

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:46:19

DataFile Name :

045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	89062	88287	89636	88995	0.76	cps
Vanadium	51-2	71846	71706	71622	71725	0.16	cps
Yttrium	89-1	20127231	20126367	19870133	20041244	0.74	cps
Yttrium	89-2	5510858	5510369	5481303	5500844	0.31	cps
Zinc	66-2	56279	56988	55362	56210	1.45	cps
Zirconium	90-1	101262	102263	100910	101478	0.69	cps
Zirconium	91-1	22908	22607	22454	22656	1.02	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-09 Instrumnet Name : P7
Client Sample ID : ME29E4D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:49:28 DataFile Name : 046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1006256	1007383	1001335	1004991	0.32	cps
Antimony	121-1	5361	5364	5378	5368	0.16	cps
Arsenic	75-2	27666	27142	26677	27162	1.82	cps
Barium	135-1	70161	71374	69643	70393	1.26	cps
Barium	137-1	121450	122478	122381	122103	0.47	cps
Beryllium	9-1	323	373	333	343	7.71	cps
Bismuth	209-1	13130748	12844042	12866436	12947076	1.23	cps
Bismuth	209-2	9940623	10135069	9977356	10017683	1.03	cps
Bromine	81-1	15108	15275	15305	15229	0.70	cps
Bromine	81-2	537	433	453	474	11.55	cps
Cadmium	108-1	123	170	127	140	18.59	cps
Cadmium	106-1	6161	5768	5691	5873	4.29	cps
Cadmium	111-1	625	537	623	595	8.48	cps
Calcium	43-1	9025019	9099502	8980010	9034844	0.67	cps
Calcium	44-1	146235584	146033094	146251408	146173362	0.08	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	57961	57201	57278	57480	0.73	cps
Cobalt	59-2	75696	74788	75029	75171	0.63	cps
Copper	63-2	124906	124247	124117	124423	0.34	cps
Dysprosium	156-1	43531	43029	43912	43491	1.02	cps
Dysprosium	156-2	33837	34469	34740	34349	1.35	cps
Erbium	164-1	40659	40091	40251	40334	0.73	cps
Erbium	164-2	28145	27651	27547	27781	1.15	cps
Gadolinium	160-1	44373	44748	44223	44448	0.61	cps
Gadolinium	160-2	33273	33460	32645	33126	1.29	cps
Holmium	165-1	21694361	21559185	21454796	21569447	0.56	cps
Holmium	165-2	15071093	14791763	14631043	14831300	1.50	cps
Indium	115-1	16760496	16834156	16589137	16727930	0.75	cps
Indium	115-2	6116307	6088178	5982794	6062426	1.16	cps
Iron	56-2	70266216	70030026	69888597	70061613	0.27	cps
Iron	57-2	1983944	1960737	1945184	1963288	0.99	cps
Iron	54-2	3877657	3864056	3860283	3867332	0.24	cps
Krypton	83-1	487	423	383	431	12.09	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-09 Instrumnet Name : P7
Client Sample ID : ME29E4D Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:49:28 DataFile Name : 046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	104538	105018	105495	105017	0.46	cps
Lead	207-1	82662	84785	83618	83689	1.27	cps
Lead	208-1	390198	394820	395335	393451	0.72	cps
Lithium	6-1	1793856	1739182	1734972	1756003	1.87	cps
Magnesium	24-2	33661039	33572292	33632579	33621970	0.13	cps
Manganese	55-2	3319306	3274531	3271064	3288300	0.82	cps
Molybdenum	94-1	53688	53019	53310	53339	0.63	cps
Molybdenum	95-1	27686	28484	28271	28147	1.47	cps
Molybdenum	96-1	37341	37785	36843	37323	1.26	cps
Molybdenum	97-1	17664	17421	18095	17726	1.93	cps
Molybdenum	98-1	46169	46918	45698	46262	1.33	cps
Neodymium	150-1	63365	64577	64413	64118	1.03	cps
Neodymium	150-2	37289	38309	38512	38037	1.72	cps
Nickel	60-2	39061	38052	38389	38501	1.33	cps
Phosphorus	31-2	8199	8402	8412	8338	1.44	cps
Potassium	39-2	382250	380437	380230	380972	0.29	cps
Rhodium	103-1	15687055	15464058	15422739	15524617	0.92	cps
Rhodium	103-2	9417384	9317483	9360398	9365088	0.54	cps
Scandium	45-1	8615471	8557453	8501607	8558177	0.67	cps
Scandium	45-2	817053	809876	816237	814389	0.48	cps
Selenium	82-1	753	755	749	752	0.39	cps
Selenium	77-2	110	143	137	130	13.57	cps
Selenium	78-2	633	600	630	621	2.96	cps
Silicon	28-1	5890144	6143306	6026264	6019905	2.10	cps
Silver	107-1	773	900	943	872	10.13	cps
Silver	109-1	740	723	757	740	2.25	cps
Sodium	23-2	240239	239849	240188	240092	0.09	cps
Strontium	86-1	888133	902762	899491	896795	0.86	cps
Strontium	88-1	7911392	7954369	7818475	7894745	0.88	cps
Sulfur	34-1	411054	413788	412296	412379	0.33	cps
Terbium	159-1	22259081	22215500	21795196	22089926	1.16	cps
Terbium	159-2	14664743	14474607	14588583	14575978	0.66	cps
Thallium	203-1	2824	2814	2784	2807	0.74	cps
Thallium	205-1	6695	6505	6595	6598	1.44	cps
Tin	118-1	4918	5231	5294	5148	3.92	cps
Titanium	47-1	154227	154664	154847	154579	0.21	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-09

Instrumnet Name :

P7

Client Sample ID :

ME29E4D

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:49:28

DataFile Name :

046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	88672	88418	88565	88552	0.14	cps
Vanadium	51-2	71502	71288	71415	71401	0.15	cps
Yttrium	89-1	20210518	20085140	19850815	20048824	0.91	cps
Yttrium	89-2	5462556	5446368	5425550	5444824	0.34	cps
Zinc	66-2	56630	57042	56603	56758	0.43	cps
Zirconium	90-1	100065	103456	100087	101203	1.93	cps
Zirconium	91-1	22591	24131	22875	23199	3.53	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08LX5 Instrumnet Name : P7
Client Sample ID : ME29E4L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 14:52:38 DataFile Name : 047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	191476	192373	193509	192453	0.53	cps
Antimony	121-1	1047	1070	1080	1066	1.61	cps
Arsenic	75-2	5134	4944	4924	5001	2.32	cps
Barium	135-1	12989	12913	13563	13155	2.70	cps
Barium	137-1	22464	22615	22878	22653	0.93	cps
Beryllium	9-1	80	87	107	91	15.23	cps
Bismuth	209-1	13134120	12907977	12833969	12958689	1.21	cps
Bismuth	209-2	10383773	10258193	10232948	10291638	0.78	cps
Bromine	81-1	14864	14534	14204	14534	2.27	cps
Bromine	81-2	237	320	313	290	15.97	cps
Cadmium	108-1	50	40	27	39	30.10	cps
Cadmium	106-1	5865	5638	5488	5663	3.35	cps
Cadmium	111-1	141	157	195	164	17.03	cps
Calcium	43-1	1704104	1728376	1742377	1724952	1.12	cps
Calcium	44-1	27161400	27786350	28220304	27722685	1.92	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	12409	11645	12225	12093	3.30	cps
Cobalt	59-2	14490	14484	14177	14384	1.25	cps
Copper	63-2	25615	25756	25175	25515	1.19	cps
Dysprosium	156-1	7936	8616	8303	8285	4.11	cps
Dysprosium	156-2	6835	6502	6455	6597	3.14	cps
Erbium	164-1	7609	7549	7605	7588	0.44	cps
Erbium	164-2	5434	5168	5591	5398	3.97	cps
Gadolinium	160-1	8353	8780	8456	8529	2.61	cps
Gadolinium	160-2	7015	7005	6648	6890	3.03	cps
Holmium	165-1	21559815	20833247	20871850	21088304	1.94	cps
Holmium	165-2	14632930	14551817	14487499	14557415	0.50	cps
Indium	115-1	16988901	16697268	16543652	16743274	1.35	cps
Indium	115-2	6161867	6131308	6145537	6146237	0.25	cps
Iron	56-2	13623630	13372091	13586491	13527404	1.00	cps
Iron	57-2	389668	383220	383363	385417	0.96	cps
Iron	54-2	776654	768135	772332	772374	0.55	cps
Krypton	83-1	317	330	293	313	5.92	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08LX5 Instrumnet Name : P7
Client Sample ID : ME29E4L Dilution Factor : 5
Date & Time Acquired : 2024-12-06 14:52:38 DataFile Name : 047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	22429	22732	22626	22595	0.68	cps
Lead	207-1	18336	18232	18349	18306	0.35	cps
Lead	208-1	85023	85858	85494	85458	0.49	cps
Lithium	6-1	1810087	1796106	1759217	1788470	1.47	cps
Magnesium	24-2	6603252	6567062	6625439	6598584	0.45	cps
Manganese	55-2	639423	640823	639198	639815	0.14	cps
Molybdenum	94-1	10294	10017	10287	10199	1.55	cps
Molybdenum	95-1	5424	5288	5344	5352	1.28	cps
Molybdenum	96-1	7152	7135	7362	7216	1.75	cps
Molybdenum	97-1	3427	3357	3390	3392	1.03	cps
Molybdenum	98-1	8809	8623	8466	8633	1.99	cps
Neodymium	150-1	12075	12199	12606	12293	2.26	cps
Neodymium	150-2	7259	7149	7105	7171	1.10	cps
Nickel	60-2	7835	7719	7882	7812	1.08	cps
Phosphorus	31-2	1887	1837	1847	1857	1.43	cps
Potassium	39-2	136896	135551	134935	135794	0.74	cps
Rhodium	103-1	16172033	15526289	15397667	15698663	2.64	cps
Rhodium	103-2	9464843	9400769	9541988	9469200	0.75	cps
Scandium	45-1	8640640	8391863	8467707	8500070	1.50	cps
Scandium	45-2	807138	798460	807702	804433	0.64	cps
Selenium	82-1	670	582	643	632	7.08	cps
Selenium	77-2	50	13	27	30	61.87	cps
Selenium	78-2	567	550	500	539	6.44	cps
Silicon	28-1	1894037	1875479	1910636	1893384	0.93	cps
Silver	107-1	340	297	330	322	7.04	cps
Silver	109-1	273	243	253	257	5.95	cps
Sodium	23-2	77463	75946	76345	76585	1.03	cps
Strontium	86-1	163424	163317	161204	162648	0.77	cps
Strontium	88-1	1393939	1420363	1412807	1409036	0.97	cps
Sulfur	34-1	303372	304459	303265	303699	0.22	cps
Terbium	159-1	21857385	21371680	21350331	21526465	1.33	cps
Terbium	159-2	14493140	14361100	14397734	14417325	0.47	cps
Thallium	203-1	940	830	890	887	6.21	cps
Thallium	205-1	2347	2124	2040	2170	7.31	cps
Tin	118-1	3157	3014	2990	3054	2.96	cps
Titanium	47-1	29425	29913	29786	29708	0.85	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08LX5

Instrumnet Name :

P7

Client Sample ID :

ME29E4L

Dilution Factor :

5

Date & Time Acquired :

2024-12-06 14:52:38

DataFile Name :

047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	15893	16477	16567	16312	2.24	cps
Vanadium	51-2	14180	13413	13576	13723	2.95	cps
Yttrium	89-1	19851744	19354973	19279234	19495317	1.60	cps
Yttrium	89-2	5353055	5311941	5259710	5308235	0.88	cps
Zinc	66-2	12262	12295	12108	12222	0.82	cps
Zirconium	90-1	18932	19553	20201	19562	3.24	cps
Zirconium	91-1	4404	4271	4391	4355	1.69	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10RE Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:55:49 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	975787	976504	981517	977936	0.32	cps
Antimony	121-1	5191	5064	4978	5078	2.11	cps
Arsenic	75-2	26223	27118	26130	26490	2.06	cps
Barium	135-1	68175	68952	68678	68602	0.57	cps
Barium	137-1	118354	118858	117898	118370	0.41	cps
Beryllium	9-1	327	410	340	359	12.47	cps
Bismuth	209-1	12832825	12957926	12724519	12838423	0.91	cps
Bismuth	209-2	10063788	10044766	9964827	10024460	0.52	cps
Bromine	81-1	14043	15311	15265	14873	4.83	cps
Bromine	81-2	500	487	480	489	2.08	cps
Cadmium	108-1	163	183	127	158	18.22	cps
Cadmium	106-1	6168	5875	5945	5996	2.56	cps
Cadmium	111-1	557	514	774	615	22.69	cps
Calcium	43-1	8868448	8836582	8735407	8813479	0.79	cps
Calcium	44-1	143310328	142913261	140982821	142402137	0.87	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	55840	56365	56234	56146	0.49	cps
Cobalt	59-2	73137	72232	73187	72852	0.74	cps
Copper	63-2	123565	123226	123239	123343	0.16	cps
Dysprosium	156-1	42076	43069	41909	42351	1.48	cps
Dysprosium	156-2	33874	33904	34025	33934	0.23	cps
Erbium	164-1	39402	39743	39459	39535	0.46	cps
Erbium	164-2	27093	27334	27267	27231	0.46	cps
Gadolinium	160-1	43798	44564	43577	43980	1.18	cps
Gadolinium	160-2	32946	31950	31692	32196	2.06	cps
Holmium	165-1	21300328	21306638	21355592	21320853	0.14	cps
Holmium	165-2	14765704	14751902	14714691	14744099	0.18	cps
Indium	115-1	16387460	16533895	16692977	16538111	0.92	cps
Indium	115-2	6093209	5964109	6019250	6025523	1.08	cps
Iron	56-2	68951064	69092936	69497736	69180578	0.41	cps
Iron	57-2	1913752	1939742	1939512	1931002	0.77	cps
Iron	54-2	3817398	3802854	3788432	3802895	0.38	cps
Krypton	83-1	370	403	387	387	4.31	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10RE Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:55:49 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	101926	102089	102220	102078	0.14	cps
Lead	207-1	80855	81680	81392	81309	0.51	cps
Lead	208-1	380150	385191	384033	383124	0.69	cps
Lithium	6-1	1784556	1736439	1748985	1756660	1.42	cps
Magnesium	24-2	33026370	33198349	33386856	33203858	0.54	cps
Manganese	55-2	3294419	3271420	3288553	3284797	0.36	cps
Molybdenum	94-1	51564	53414	52099	52359	1.82	cps
Molybdenum	95-1	27907	27038	26811	27252	2.12	cps
Molybdenum	96-1	36081	36646	36699	36475	0.94	cps
Molybdenum	97-1	16940	17214	17147	17100	0.83	cps
Molybdenum	98-1	44023	44514	44327	44288	0.56	cps
Neodymium	150-1	62012	62414	62919	62448	0.73	cps
Neodymium	150-2	37887	36801	37436	37375	1.46	cps
Nickel	60-2	37774	37787	37527	37696	0.39	cps
Phosphorus	31-2	8249	8169	8269	8229	0.64	cps
Potassium	39-2	374265	372324	373097	373229	0.26	cps
Rhodium	103-1	15025976	15042135	15355770	15141294	1.23	cps
Rhodium	103-2	9329764	9190632	9250847	9257081	0.75	cps
Scandium	45-1	8510141	8428832	8369245	8436073	0.84	cps
Scandium	45-2	817212	805852	811714	811592	0.70	cps
Selenium	82-1	765	721	649	712	8.19	cps
Selenium	77-2	143	133	137	138	3.70	cps
Selenium	78-2	593	633	577	601	4.84	cps
Silicon	28-1	5710695	5835963	5826404	5791021	1.20	cps
Silver	107-1	793	830	883	836	5.42	cps
Silver	109-1	597	730	703	677	10.43	cps
Sodium	23-2	233045	231268	233971	232761	0.59	cps
Strontium	86-1	854146	865462	859836	859815	0.66	cps
Strontium	88-1	7464724	7638630	7649786	7584380	1.37	cps
Sulfur	34-1	409118	405272	405937	406776	0.51	cps
Terbium	159-1	21875937	21964584	21695753	21845425	0.63	cps
Terbium	159-2	14538599	14603399	14433147	14525048	0.59	cps
Thallium	203-1	2924	2667	2927	2839	5.25	cps
Thallium	205-1	6825	6765	6772	6787	0.48	cps
Tin	118-1	5291	5652	5301	5415	3.79	cps
Titanium	47-1	4197681	4257796	4266282	4240586	0.88	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10RE Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:55:49 DataFile Name : 048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	86522	87860	86495	86959	0.90	cps
Vanadium	51-2	71110	70102	71210	70807	0.87	cps
Yttrium	89-1	19761333	19956403	19679660	19799132	0.72	cps
Yttrium	89-2	5451910	5451813	5409591	5437771	0.45	cps
Zinc	66-2	56302	55877	56232	56137	0.41	cps
Zirconium	90-1	99245	98847	100425	99506	0.82	cps
Zirconium	91-1	22481	22310	22749	22513	0.98	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-11 Instrumnet Name : P7
Client Sample ID : ME29E5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:58:59 DataFile Name : 049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1049475	1048284	1051856	1049872	0.17	cps
Antimony	121-1	3827	3844	3984	3885	2.22	cps
Arsenic	75-2	4684	4878	4811	4791	2.05	cps
Barium	135-1	79001	78927	79098	79008	0.11	cps
Barium	137-1	134768	136130	137497	136132	1.00	cps
Beryllium	9-1	373	413	330	372	11.20	cps
Bismuth	209-1	12790805	12670200	12837320	12766108	0.68	cps
Bismuth	209-2	9968594	9882453	10037461	9962836	0.78	cps
Bromine	81-1	15191	15311	15595	15366	1.35	cps
Bromine	81-2	513	437	450	467	8.78	cps
Cadmium	108-1	163	183	210	186	12.62	cps
Cadmium	106-1	6141	6011	5795	5982	2.93	cps
Cadmium	111-1	756	738	785	760	3.11	cps
Calcium	43-1	11960564	12007004	11920107	11962559	0.36	cps
Calcium	44-1	191644017	193864257	194790657	193432977	0.84	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	67122	66482	66599	66734	0.51	cps
Cobalt	59-2	62921	64879	63758	63853	1.54	cps
Copper	63-2	110551	111810	110296	110886	0.73	cps
Dysprosium	156-1	39846	40224	40495	40188	0.81	cps
Dysprosium	156-2	31652	31960	32234	31949	0.91	cps
Erbium	164-1	37527	38660	38700	38296	1.74	cps
Erbium	164-2	26769	26372	26158	26433	1.17	cps
Gadolinium	160-1	41648	41602	41786	41679	0.23	cps
Gadolinium	160-2	29992	30847	30670	30503	1.48	cps
Holmium	165-1	21457502	21349072	21340056	21382210	0.31	cps
Holmium	165-2	14724433	14763702	14838391	14775509	0.39	cps
Indium	115-1	16676710	16720789	16726959	16708153	0.16	cps
Indium	115-2	6109233	6047561	6109363	6088719	0.59	cps
Iron	56-2	82823319	82344334	82668009	82611887	0.30	cps
Iron	57-2	2306510	2353370	2332869	2330916	1.01	cps
Iron	54-2	4568555	4554955	4484169	4535893	1.00	cps
Krypton	83-1	463	373	440	426	10.98	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-11 Instrumnet Name : P7
Client Sample ID : ME29E5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 14:58:59 DataFile Name : 049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	115445	115781	117286	116171	0.84	cps
Lead	207-1	93549	92445	93345	93113	0.63	cps
Lead	208-1	437904	434706	438973	437194	0.51	cps
Lithium	6-1	1757364	1717786	1721429	1732193	1.26	cps
Magnesium	24-2	43152591	43521714	43631094	43435133	0.58	cps
Manganese	55-2	4634046	4548071	4621912	4601343	1.01	cps
Molybdenum	94-1	50045	50828	50617	50497	0.80	cps
Molybdenum	95-1	16353	16586	16836	16592	1.46	cps
Molybdenum	96-1	25088	25382	25572	25348	0.96	cps
Molybdenum	97-1	10100	10571	10110	10260	2.62	cps
Molybdenum	98-1	26611	26568	26948	26709	0.78	cps
Neodymium	150-1	59806	59381	59220	59469	0.51	cps
Neodymium	150-2	35856	35087	35167	35370	1.19	cps
Nickel	60-2	36562	36501	35980	36347	0.88	cps
Phosphorus	31-2	8976	9146	9296	9139	1.75	cps
Potassium	39-2	344876	344066	342179	343707	0.40	cps
Rhodium	103-1	15450548	15383509	15276186	15370081	0.57	cps
Rhodium	103-2	9390084	9244864	9351081	9328676	0.81	cps
Scandium	45-1	8645545	8524660	8583883	8584696	0.70	cps
Scandium	45-2	824768	821037	820889	822231	0.27	cps
Selenium	82-1	665	833	722	740	11.54	cps
Selenium	77-2	127	107	103	112	11.24	cps
Selenium	78-2	547	607	553	569	5.78	cps
Silicon	28-1	6310436	4916015	5965950	5730800	12.67	cps
Silver	107-1	850	967	923	913	6.46	cps
Silver	109-1	803	817	770	797	3.02	cps
Sodium	23-2	250792	246758	252455	250002	1.17	cps
Strontium	86-1	1285800	1290073	1292701	1289525	0.27	cps
Strontium	88-1	11261661	11350652	11487889	11366734	1.00	cps
Sulfur	34-1	297723	299938	297849	298503	0.42	cps
Terbium	159-1	21900121	22115325	22087816	22034421	0.53	cps
Terbium	159-2	14581091	14645102	14725242	14650479	0.49	cps
Thallium	203-1	1030	1107	1023	1053	4.40	cps
Thallium	205-1	2340	2487	2394	2407	3.09	cps
Tin	118-1	4664	4881	4717	4754	2.38	cps
Titanium	47-1	141093	140815	141309	141072	0.18	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-11

Instrumnet Name :

P7

Client Sample ID :

ME29E5

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 14:58:59

DataFile Name :

049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	73510	71863	74299	73224	1.70	cps
Vanadium	51-2	72711	73746	73749	73402	0.82	cps
Yttrium	89-1	19941421	20045672	20076972	20021355	0.35	cps
Yttrium	89-2	5578463	5496888	5500702	5525351	0.83	cps
Zinc	66-2	48729	48689	48686	48701	0.05	cps
Zirconium	90-1	112548	110703	112346	111866	0.90	cps
Zirconium	91-1	25380	25108	24811	25100	1.13	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-12 Instrumnet Name : P7
Client Sample ID : ME29E6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:02:07 DataFile Name : 050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1032496	1033517	1028096	1031370	0.28	cps
Antimony	121-1	7559	7739	7806	7701	1.66	cps
Arsenic	75-2	8789	8936	9070	8932	1.57	cps
Barium	135-1	79242	79929	78086	79086	1.18	cps
Barium	137-1	137366	137103	138827	137765	0.67	cps
Beryllium	9-1	380	320	410	370	12.39	cps
Bismuth	209-1	12922150	12639648	12849766	12803854	1.15	cps
Bismuth	209-2	9979624	9991612	9798539	9923259	1.09	cps
Bromine	81-1	15338	15885	16119	15781	2.54	cps
Bromine	81-2	483	440	457	460	4.75	cps
Cadmium	108-1	240	223	183	216	13.51	cps
Cadmium	106-1	6371	6151	6161	6228	2.00	cps
Cadmium	111-1	954	914	863	910	5.04	cps
Calcium	43-1	13072988	13195803	12912648	13060480	1.09	cps
Calcium	44-1	212038144	212780150	207916624	210911639	1.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	61937	62947	62198	62360	0.84	cps
Cobalt	59-2	72665	71660	72554	72293	0.76	cps
Copper	63-2	147427	147451	148387	147755	0.37	cps
Dysprosium	156-1	40171	39840	40217	40076	0.51	cps
Dysprosium	156-2	33132	32902	33443	33159	0.82	cps
Erbium	164-1	37326	36915	37306	37183	0.62	cps
Erbium	164-2	25216	25223	25149	25196	0.16	cps
Gadolinium	160-1	39262	40488	41314	40355	2.56	cps
Gadolinium	160-2	30256	30223	29955	30145	0.55	cps
Holmium	165-1	22156181	21502416	21580383	21746327	1.64	cps
Holmium	165-2	14829241	14786197	14743362	14786266	0.29	cps
Indium	115-1	17051674	16612133	16670466	16778091	1.42	cps
Indium	115-2	6102549	6127945	6051812	6094102	0.64	cps
Iron	56-2	92384492	92330469	92099715	92271559	0.16	cps
Iron	57-2	2598024	2600447	2576388	2591620	0.51	cps
Iron	54-2	5025614	5068698	5087379	5060564	0.63	cps
Krypton	83-1	447	383	453	428	9.03	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-12 Instrumnet Name : P7
Client Sample ID : ME29E6 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:02:07 DataFile Name : 050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	147126	146199	146833	146719	0.32	cps
Lead	207-1	115963	117422	118178	117188	0.96	cps
Lead	208-1	551046	550560	553155	551587	0.25	cps
Lithium	6-1	1759657	1717658	1716608	1731307	1.42	cps
Magnesium	24-2	41624369	41586612	41277664	41496215	0.46	cps
Manganese	55-2	2770460	2781991	2768170	2773540	0.27	cps
Molybdenum	94-1	58152	58101	57957	58070	0.17	cps
Molybdenum	95-1	17717	17457	16393	17189	4.08	cps
Molybdenum	96-1	27536	27563	27285	27461	0.56	cps
Molybdenum	97-1	10514	11121	10654	10763	2.95	cps
Molybdenum	98-1	27329	27242	26942	27171	0.75	cps
Neodymium	150-1	63626	63773	64105	63835	0.38	cps
Neodymium	150-2	38091	38171	38014	38092	0.21	cps
Nickel	60-2	44472	44021	44553	44349	0.65	cps
Phosphorus	31-2	10784	10754	10690	10743	0.44	cps
Potassium	39-2	449001	447578	458579	451719	1.32	cps
Rhodium	103-1	15721425	15340664	15382052	15481380	1.35	cps
Rhodium	103-2	9332133	9334852	9255356	9307447	0.48	cps
Scandium	45-1	8950237	8584093	8603068	8712466	2.37	cps
Scandium	45-2	817479	820468	817317	818421	0.22	cps
Selenium	82-1	874	811	691	792	11.74	cps
Selenium	77-2	143	117	133	131	10.28	cps
Selenium	78-2	633	637	540	603	9.09	cps
Silicon	28-1	6442889	6367230	8194234	7001451	14.76	cps
Silver	107-1	700	673	767	713	6.74	cps
Silver	109-1	593	457	510	520	13.25	cps
Sodium	23-2	280078	281555	278196	279943	0.60	cps
Strontium	86-1	1783727	1749912	1798465	1777368	1.40	cps
Strontium	88-1	15534673	15619236	15564919	15572943	0.28	cps
Sulfur	34-1	284557	280161	279113	281277	1.03	cps
Terbium	159-1	22144166	22138477	22134064	22138902	0.02	cps
Terbium	159-2	14523821	14671240	14749953	14648338	0.78	cps
Thallium	203-1	2740	2740	2670	2717	1.49	cps
Thallium	205-1	6742	6668	6582	6664	1.20	cps
Tin	118-1	5024	4908	4854	4929	1.76	cps
Titanium	47-1	161411	162134	162775	162107	0.42	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-12

Instrumnet Name :

P7

Client Sample ID :

ME29E6

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:02:07

DataFile Name :

050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	72097	72100	71564	71920	0.43	cps
Vanadium	51-2	87777	87448	86395	87207	0.83	cps
Yttrium	89-1	20655025	20182838	20031082	20289648	1.60	cps
Yttrium	89-2	5479265	5526410	5524422	5510032	0.48	cps
Zinc	66-2	76746	77098	77014	76952	0.24	cps
Zirconium	90-1	131626	136845	129895	132789	2.72	cps
Zirconium	91-1	28992	28995	27840	28609	2.33	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-13 Instrumnet Name : P7
Client Sample ID : ME29E7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:05:17 DataFile Name : 051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1039154	1047028	1037888	1041357	0.48	cps
Antimony	121-1	5464	5378	5338	5393	1.20	cps
Arsenic	75-2	6648	6672	6528	6616	1.16	cps
Barium	135-1	82789	82095	81260	82048	0.93	cps
Barium	137-1	141738	144055	143300	143031	0.83	cps
Beryllium	9-1	367	390	383	380	3.16	cps
Bismuth	209-1	12969976	12709139	12762272	12813796	1.08	cps
Bismuth	209-2	10041374	10111385	10060583	10071114	0.36	cps
Bromine	81-1	15191	15565	15401	15386	1.22	cps
Bromine	81-2	450	430	413	431	4.26	cps
Cadmium	108-1	133	177	153	154	14.04	cps
Cadmium	106-1	6135	6205	5821	6054	3.37	cps
Cadmium	111-1	771	747	802	773	3.53	cps
Calcium	43-1	9632663	9835999	9665730	9711464	1.12	cps
Calcium	44-1	157492398	157753231	157648364	157631331	0.08	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48912	48922	49150	48995	0.27	cps
Cobalt	59-2	65378	65780	65405	65521	0.34	cps
Copper	63-2	157146	159632	156057	157611	1.16	cps
Dysprosium	156-1	64300	65981	65297	65193	1.30	cps
Dysprosium	156-2	51641	51437	52009	51696	0.56	cps
Erbium	164-1	58144	58984	58301	58476	0.76	cps
Erbium	164-2	40706	41134	40188	40676	1.16	cps
Gadolinium	160-1	65237	66021	66637	65965	1.06	cps
Gadolinium	160-2	49032	48193	49052	48759	1.01	cps
Holmium	165-1	21862668	21309384	21406146	21526066	1.37	cps
Holmium	165-2	14991772	14912756	14957115	14953881	0.26	cps
Indium	115-1	16924999	16814496	16717592	16819029	0.62	cps
Indium	115-2	6127690	6063643	6067284	6086206	0.59	cps
Iron	56-2	81927295	81148477	81721447	81599073	0.49	cps
Iron	57-2	2288461	2245986	2266289	2266912	0.94	cps
Iron	54-2	4443930	4470431	4441922	4452095	0.36	cps
Krypton	83-1	343	420	400	388	10.26	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-13 Instrumnet Name : P7
Client Sample ID : ME29E7 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:05:17 DataFile Name : 051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	116810	119244	118991	118348	1.13	cps
Lead	207-1	93838	94532	94294	94221	0.37	cps
Lead	208-1	440389	444156	444240	442929	0.50	cps
Lithium	6-1	1769899	1704683	1767349	1747311	2.11	cps
Magnesium	24-2	28448473	28902692	28821830	28724332	0.84	cps
Manganese	55-2	5979972	5960812	6045657	5995480	0.74	cps
Molybdenum	94-1	43541	45076	44156	44258	1.74	cps
Molybdenum	95-1	13299	13667	13443	13470	1.37	cps
Molybdenum	96-1	21359	21386	21372	21372	0.06	cps
Molybdenum	97-1	8599	8336	8786	8574	2.64	cps
Molybdenum	98-1	21616	21669	22020	21768	1.01	cps
Neodymium	150-1	97528	97954	97558	97680	0.24	cps
Neodymium	150-2	58919	59595	58879	59131	0.68	cps
Nickel	60-2	39880	40819	40481	40393	1.18	cps
Phosphorus	31-2	9393	9470	9490	9451	0.54	cps
Potassium	39-2	397069	397208	397172	397150	0.02	cps
Rhodium	103-1	15840152	15516359	15396983	15584498	1.47	cps
Rhodium	103-2	9392838	9337326	9342326	9357497	0.33	cps
Scandium	45-1	8789483	8711775	8533489	8678249	1.51	cps
Scandium	45-2	818336	811450	818983	816256	0.51	cps
Selenium	82-1	1074	868	851	931	13.36	cps
Selenium	77-2	200	190	170	187	8.18	cps
Selenium	78-2	760	730	673	721	6.10	cps
Silicon	28-1	6188594	5818511	5499237	5835447	5.91	cps
Silver	107-1	490	593	603	562	11.16	cps
Silver	109-1	493	350	473	439	17.69	cps
Sodium	23-2	222401	223293	223975	223223	0.35	cps
Strontium	86-1	1048951	1058021	1050341	1052438	0.46	cps
Strontium	88-1	9177250	9158160	9160727	9165379	0.11	cps
Sulfur	34-1	277331	273510	272296	274379	0.96	cps
Terbium	159-1	22138815	22069546	21809072	22005811	0.79	cps
Terbium	159-2	14822639	14632315	14731908	14728954	0.65	cps
Thallium	203-1	2720	2610	2837	2723	4.16	cps
Thallium	205-1	6558	6615	6205	6459	3.44	cps
Tin	118-1	5526	4644	5038	5069	8.71	cps
Titanium	47-1	117798	119611	119454	118954	0.84	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-13

Instrumnet Name :

P7

Client Sample ID :

ME29E7

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:05:17

DataFile Name :

051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	66984	67617	67785	67462	0.63	cps
Vanadium	51-2	64383	63928	65394	64569	1.16	cps
Yttrium	89-1	20554556	20296283	20183946	20344928	0.93	cps
Yttrium	89-2	5553814	5659581	5618321	5610572	0.95	cps
Zinc	66-2	55402	56122	56516	56013	1.01	cps
Zirconium	90-1	96840	102369	98827	99345	2.82	cps
Zirconium	91-1	22428	21987	21913	22109	1.26	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-14 Instrumnet Name : P7
Client Sample ID : ME29E8 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:08:25 DataFile Name : 052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	978365	959486	971534	969795	0.99	cps
Antimony	121-1	5241	5234	5541	5339	3.28	cps
Arsenic	75-2	6958	6878	6788	6875	1.24	cps
Barium	135-1	69843	71833	71455	71044	1.49	cps
Barium	137-1	126054	124920	122875	124617	1.29	cps
Beryllium	9-1	350	337	293	327	9.07	cps
Bismuth	209-1	12977717	13044836	13025252	13015935	0.27	cps
Bismuth	209-2	10127077	10216382	9991133	10111531	1.12	cps
Bromine	81-1	16563	16706	16713	16661	0.51	cps
Bromine	81-2	700	730	623	684	8.04	cps
Cadmium	108-1	133	173	210	172	22.26	cps
Cadmium	106-1	5968	5918	5825	5903	1.23	cps
Cadmium	111-1	873	732	705	770	11.72	cps
Calcium	43-1	8119010	8145256	8045459	8103242	0.64	cps
Calcium	44-1	130824255	132125765	130432455	131127491	0.68	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	80363	80674	79233	80090	0.95	cps
Cobalt	59-2	65090	64012	64501	64535	0.84	cps
Copper	63-2	125323	127138	125961	126141	0.73	cps
Dysprosium	156-1	40652	40401	40304	40453	0.44	cps
Dysprosium	156-2	32491	32387	33411	32763	1.72	cps
Erbium	164-1	37033	37046	36992	37024	0.08	cps
Erbium	164-2	25794	25089	25410	25431	1.39	cps
Gadolinium	160-1	41351	42273	41521	41715	1.18	cps
Gadolinium	160-2	30877	30393	30236	30502	1.10	cps
Holmium	165-1	21514673	21718666	21581661	21605000	0.48	cps
Holmium	165-2	14734917	14889385	14794146	14806149	0.53	cps
Indium	115-1	16899456	16732507	16595388	16742450	0.91	cps
Indium	115-2	6128441	6021398	5999393	6049744	1.14	cps
Iron	56-2	72219156	72024492	71703304	71982317	0.36	cps
Iron	57-2	1991933	1964754	1968968	1975218	0.74	cps
Iron	54-2	3936288	3952277	3887591	3925385	0.86	cps
Krypton	83-1	343	410	397	383	9.20	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-14

Instrumnet Name :

P7

Client Sample ID :

ME29E8

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:08:25

DataFile Name :

052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	131344	132394	131491	131743	0.43	cps
Lead	207-1	105492	107625	106990	106702	1.03	cps
Lead	208-1	498188	500652	500701	499847	0.29	cps
Lithium	6-1	1767831	1733975	1686780	1729529	2.35	cps
Magnesium	24-2	21908934	21986426	21624586	21839982	0.87	cps
Manganese	55-2	2711029	2660806	2673420	2681751	0.97	cps
Molybdenum	94-1	43638	44170	44404	44071	0.89	cps
Molybdenum	95-1	9430	9723	9590	9581	1.53	cps
Molybdenum	96-1	17377	17781	17954	17704	1.67	cps
Molybdenum	97-1	6215	5985	5735	5978	4.02	cps
Molybdenum	98-1	15925	15308	15375	15536	2.18	cps
Neodymium	150-1	59020	59635	60820	59825	1.53	cps
Neodymium	150-2	35799	35054	34475	35109	1.89	cps
Nickel	60-2	42955	42513	43242	42903	0.86	cps
Phosphorus	31-2	10167	10367	10200	10245	1.05	cps
Potassium	39-2	444375	444656	444601	444544	0.03	cps
Rhodium	103-1	15552836	15449074	15531641	15511183	0.35	cps
Rhodium	103-2	9437894	9376206	9383189	9399096	0.36	cps
Scandium	45-1	8630830	8436484	8399249	8488854	1.46	cps
Scandium	45-2	803637	798874	805046	802519	0.40	cps
Selenium	82-1	762	700	740	734	4.27	cps
Selenium	77-2	120	130	123	124	4.09	cps
Selenium	78-2	623	567	543	578	7.12	cps
Silicon	28-1	9665127	9962284	9566656	9731356	2.12	cps
Silver	107-1	1320	1267	1337	1308	2.80	cps
Silver	109-1	1080	1190	1200	1157	5.76	cps
Sodium	23-2	280673	279570	282544	280929	0.54	cps
Strontium	86-1	790089	793139	794544	792591	0.29	cps
Strontium	88-1	6921801	6953237	6980983	6952007	0.43	cps
Sulfur	34-1	297893	295884	291387	295055	1.13	cps
Terbium	159-1	21926748	22136393	22029421	22030854	0.48	cps
Terbium	159-2	14765050	14597014	14701076	14687713	0.58	cps
Thallium	203-1	1700	1643	1703	1682	2.00	cps
Thallium	205-1	3677	4031	3937	3882	4.72	cps
Tin	118-1	21840	21272	21556	21556	1.32	cps
Titanium	47-1	154025	151998	152575	152866	0.68	cps

LB Number :
Lab Sample ID :
Client Sample ID :
Date & Time Acquired :

LB133800
P4976-14
ME29E8
2024-12-06 15:08:25

Operator :
Instrumnet Name :
Dilution Factor :
DataFile Name :

Jaswal
P7
1
052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	85794	84841	85388	85341	0.56	cps
Vanadium	51-2	83751	85420	86184	85118	1.46	cps
Yttrium	89-1	19817510	19925396	20152010	19964972	0.86	cps
Yttrium	89-2	5480569	5387061	5444183	5437271	0.87	cps
Zinc	66-2	107779	107483	106201	107154	0.78	cps
Zirconium	90-1	105999	107029	105401	106143	0.78	cps
Zirconium	91-1	24070	23542	23669	23760	1.16	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-15 Instrumnet Name : P7
Client Sample ID : ME29E9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:11:37 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1329749	1377377	1334631	1347252	1.94	cps
Antimony	121-1	4821	4794	4931	4849	1.49	cps
Arsenic	75-2	6625	6755	6708	6696	0.98	cps
Barium	135-1	98155	101810	98491	99486	2.03	cps
Barium	137-1	169658	173744	174709	172704	1.55	cps
Beryllium	9-1	343	400	297	347	14.93	cps
Bismuth	209-1	13443553	12925979	13094910	13154814	2.01	cps
Bismuth	209-2	9869363	9962642	10067659	9966555	1.00	cps
Bromine	81-1	15368	15692	15812	15624	1.47	cps
Bromine	81-2	497	570	630	566	11.81	cps
Cadmium	108-1	130	170	143	148	13.78	cps
Cadmium	106-1	6158	5524	5644	5776	5.83	cps
Cadmium	111-1	550	602	678	610	10.56	cps
Calcium	43-1	8232653	8288752	8241042	8254149	0.37	cps
Calcium	44-1	132420271	133730925	135150675	133767290	1.02	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	77344	77340	78630	77771	0.96	cps
Cobalt	59-2	80933	79931	80638	80501	0.64	cps
Copper	63-2	137162	139011	137980	138051	0.67	cps
Dysprosium	156-1	39121	39719	40582	39807	1.84	cps
Dysprosium	156-2	32284	31823	32558	32221	1.15	cps
Erbium	164-1	35582	36451	36056	36030	1.21	cps
Erbium	164-2	24662	25239	24648	24850	1.36	cps
Gadolinium	160-1	39686	40866	40455	40336	1.48	cps
Gadolinium	160-2	29317	29514	30092	29641	1.36	cps
Holmium	165-1	22476859	21805193	21426106	21902719	2.43	cps
Holmium	165-2	14466987	14649248	14948023	14688086	1.65	cps
Indium	115-1	17192619	16532681	16445459	16723586	2.44	cps
Indium	115-2	6007672	5983318	6037334	6009441	0.45	cps
Iron	56-2	91843572	91230909	90614169	91229550	0.67	cps
Iron	57-2	2476978	2467793	2428308	2457693	1.05	cps
Iron	54-2	5043033	4974514	4938627	4985391	1.06	cps
Krypton	83-1	403	370	363	379	5.66	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-15 Instrumnet Name : P7
Client Sample ID : ME29E9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:11:37 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	122466	125233	126885	124861	1.79	cps
Lead	207-1	99085	100934	102862	100960	1.87	cps
Lead	208-1	465665	477519	478914	474033	1.54	cps
Lithium	6-1	1802095	1688248	1674030	1721458	4.08	cps
Magnesium	24-2	26312299	26339405	26322070	26324591	0.05	cps
Manganese	55-2	2563486	2493608	2469974	2509023	1.94	cps
Molybdenum	94-1	43976	45905	45917	45266	2.47	cps
Molybdenum	95-1	8993	9033	8789	8938	1.46	cps
Molybdenum	96-1	16953	17975	17611	17513	2.96	cps
Molybdenum	97-1	5788	5711	5808	5769	0.88	cps
Molybdenum	98-1	14407	14848	14691	14649	1.52	cps
Neodymium	150-1	62521	62555	63281	62786	0.68	cps
Neodymium	150-2	37249	37149	36353	36917	1.33	cps
Nickel	60-2	46686	47147	45780	46537	1.50	cps
Phosphorus	31-2	8019	7819	7752	7863	1.77	cps
Potassium	39-2	399900	400328	401732	400653	0.24	cps
Rhodium	103-1	16139786	15387965	15155862	15561204	3.31	cps
Rhodium	103-2	9208651	9166245	9293464	9222786	0.70	cps
Scandium	45-1	8832197	8314632	8353843	8500224	3.39	cps
Scandium	45-2	795200	801355	792301	796285	0.58	cps
Selenium	82-1	761	709	724	731	3.64	cps
Selenium	77-2	133	160	163	152	10.80	cps
Selenium	78-2	630	573	647	617	6.23	cps
Silicon	28-1	8344419	8413905	8223764	8327363	1.16	cps
Silver	107-1	1157	1000	1157	1104	8.19	cps
Silver	109-1	883	893	890	889	0.57	cps
Sodium	23-2	227450	226461	231308	228406	1.12	cps
Strontium	86-1	740194	754214	749186	747865	0.95	cps
Strontium	88-1	6469144	6606666	6619549	6565120	1.27	cps
Sulfur	34-1	286150	283655	280972	283592	0.91	cps
Terbium	159-1	22862555	21902694	21964771	22243340	2.41	cps
Terbium	159-2	14457670	14667634	14768110	14631138	1.08	cps
Thallium	203-1	1717	1760	1893	1790	5.14	cps
Thallium	205-1	4261	4414	4197	4291	2.60	cps
Tin	118-1	9680	9707	9673	9687	0.18	cps
Titanium	47-1	184553	185303	186559	185471	0.55	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-15 Instrumnet Name : P7
Client Sample ID : ME29E9 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:11:37 DataFile Name : 053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	98146	98907	100206	99086	1.05	cps
Vanadium	51-2	104381	104055	103633	104023	0.36	cps
Yttrium	89-1	20508600	19786813	19628765	19974726	2.35	cps
Yttrium	89-2	5355142	5395522	5325146	5358603	0.66	cps
Zinc	66-2	79993	80435	80747	80391	0.47	cps
Zirconium	90-1	105015	108725	108165	107302	1.86	cps
Zirconium	91-1	24153	24487	24744	24462	1.21	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-16 Instrumnet Name : P7
Client Sample ID : ME29F0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:14:45 DataFile Name : 054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	725648	723923	725743	725105	0.14	cps
Antimony	121-1	3691	3874	3897	3821	2.96	cps
Arsenic	75-2	6848	6995	6762	6868	1.72	cps
Barium	135-1	69877	70865	71203	70648	0.98	cps
Barium	137-1	123292	122485	123232	123003	0.37	cps
Beryllium	9-1	243	287	280	270	8.64	cps
Bismuth	209-1	13155140	12927790	12915199	12999376	1.04	cps
Bismuth	209-2	10141646	10212094	10034776	10129506	0.88	cps
Bromine	81-1	14334	14594	14651	14526	1.16	cps
Bromine	81-2	507	433	497	479	8.30	cps
Cadmium	108-1	140	117	153	137	13.58	cps
Cadmium	106-1	5688	5855	5514	5686	2.99	cps
Cadmium	111-1	487	568	510	522	7.94	cps
Calcium	43-1	6919122	6854013	6789377	6854171	0.95	cps
Calcium	44-1	110971772	111768338	109965028	110901713	0.81	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40631	40685	40932	40749	0.39	cps
Cobalt	59-2	52398	51525	52415	52112	0.98	cps
Copper	63-2	102149	100816	100850	101272	0.75	cps
Dysprosium	156-1	36180	37737	36979	36965	2.11	cps
Dysprosium	156-2	29818	29120	29742	29560	1.30	cps
Erbium	164-1	30881	31519	31873	31424	1.60	cps
Erbium	164-2	22214	21937	21543	21898	1.54	cps
Gadolinium	160-1	38466	38275	38463	38401	0.28	cps
Gadolinium	160-2	28075	28415	29104	28531	1.84	cps
Holmium	165-1	21878910	21505999	21203679	21529529	1.57	cps
Holmium	165-2	14833187	14657616	14692484	14727762	0.63	cps
Indium	115-1	16935961	16590835	16436865	16654553	1.53	cps
Indium	115-2	6116901	6062855	6046880	6075545	0.60	cps
Iron	56-2	59155047	59872079	59366604	59464577	0.62	cps
Iron	57-2	1613516	1636957	1611083	1620519	0.88	cps
Iron	54-2	3212088	3269197	3280105	3253797	1.12	cps
Krypton	83-1	387	460	340	396	15.29	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-16 Instrumnet Name : P7
Client Sample ID : ME29F0 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:14:45 DataFile Name : 054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	98769	101579	99756	100034	1.43	cps
Lead	207-1	79112	79497	79695	79435	0.37	cps
Lead	208-1	371375	373586	373803	372922	0.36	cps
Lithium	6-1	1674298	1651167	1694108	1673191	1.28	cps
Magnesium	24-2	22778255	22780555	22391533	22650114	0.99	cps
Manganese	55-2	1848062	1874616	1875240	1865973	0.83	cps
Molybdenum	94-1	40870	42165	41749	41595	1.59	cps
Molybdenum	95-1	16283	16496	15972	16250	1.62	cps
Molybdenum	96-1	22534	23509	23399	23147	2.31	cps
Molybdenum	97-1	10224	10440	9900	10188	2.67	cps
Molybdenum	98-1	26691	26524	26341	26519	0.66	cps
Neodymium	150-1	55793	56513	56834	56380	0.95	cps
Neodymium	150-2	33553	33510	33570	33544	0.09	cps
Nickel	60-2	29716	30080	29863	29887	0.61	cps
Phosphorus	31-2	6778	6715	6845	6779	0.96	cps
Potassium	39-2	344169	338158	341987	341438	0.89	cps
Rhodium	103-1	15666141	15585960	15456355	15569485	0.68	cps
Rhodium	103-2	9466843	9357959	9181123	9335308	1.54	cps
Scandium	45-1	8458360	8383777	8281503	8374547	1.06	cps
Scandium	45-2	794822	794161	796786	795256	0.17	cps
Selenium	82-1	723	601	769	697	12.47	cps
Selenium	77-2	107	97	100	101	5.04	cps
Selenium	78-2	557	623	547	576	7.24	cps
Silicon	28-1	6817451	6883805	6924361	6875206	0.79	cps
Silver	107-1	563	507	517	529	5.72	cps
Silver	109-1	380	427	450	419	8.51	cps
Sodium	23-2	190139	191698	188017	189951	0.97	cps
Strontium	86-1	710796	716861	717688	715115	0.53	cps
Strontium	88-1	6236743	6249828	6247563	6244712	0.11	cps
Sulfur	34-1	248784	247233	244198	246738	0.95	cps
Terbium	159-1	22422705	21808096	21787855	22006218	1.64	cps
Terbium	159-2	14532515	14677605	14432997	14547706	0.85	cps
Thallium	203-1	1387	1267	1270	1308	5.23	cps
Thallium	205-1	3100	3150	3124	3125	0.80	cps
Tin	118-1	5541	5788	5504	5611	2.75	cps
Titanium	47-1	87056	87619	96813	90496	6.05	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :P4976-16

Instrumnet Name :P7

Client Sample ID :ME29F0

Dilution Factor :1

Date & Time Acquired :2024-12-06 15:14:45

DataFile Name :054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	58126	59542	59067	58912	1.22	cps
Vanadium	51-2	48424	48835	47428	48229	1.50	cps
Yttrium	89-1	20330322	19684486	19505913	19840240	2.19	cps
Yttrium	89-2	5388593	5344317	5361565	5364825	0.42	cps
Zinc	66-2	45181	44797	44740	44906	0.53	cps
Zirconium	90-1	84941	86187	85242	85457	0.76	cps
Zirconium	91-1	18979	19339	21439	19919	6.67	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-17 Instrumnet Name : P7
Client Sample ID : ME29F1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:17:54 DataFile Name : 055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	800331	807108	798861	802100	0.55	cps
Antimony	121-1	4504	4291	4564	4453	3.23	cps
Arsenic	75-2	8016	8226	8059	8100	1.37	cps
Barium	135-1	76159	77188	76863	76736	0.69	cps
Barium	137-1	132029	134970	133782	133594	1.11	cps
Beryllium	9-1	293	323	287	301	6.49	cps
Bismuth	209-1	13144609	13148792	13263612	13185671	0.51	cps
Bismuth	209-2	10140043	10271450	10161375	10190956	0.69	cps
Bromine	81-1	14634	14831	15495	14987	3.01	cps
Bromine	81-2	527	550	433	503	12.27	cps
Cadmium	108-1	127	123	120	123	2.70	cps
Cadmium	106-1	5915	5725	5371	5670	4.86	cps
Cadmium	111-1	648	652	696	665	4.03	cps
Calcium	43-1	7233615	7326456	7220634	7260235	0.79	cps
Calcium	44-1	116478382	117492285	117813892	117261519	0.59	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	44833	45395	45686	45304	0.96	cps
Cobalt	59-2	58811	58781	57707	58433	1.08	cps
Copper	63-2	106808	107744	107043	107198	0.45	cps
Dysprosium	156-1	37012	36925	37433	37123	0.73	cps
Dysprosium	156-2	30777	31552	31185	31171	1.24	cps
Erbium	164-1	29875	31572	31352	30933	2.98	cps
Erbium	164-2	21176	20609	21026	20937	1.40	cps
Gadolinium	160-1	34730	35355	36060	35381	1.88	cps
Gadolinium	160-2	26435	26505	26275	26405	0.45	cps
Holmium	165-1	21802429	21776351	21777590	21785456	0.07	cps
Holmium	165-2	14769116	14866795	14783833	14806581	0.36	cps
Indium	115-1	17126454	16696875	16627320	16816883	1.61	cps
Indium	115-2	6110812	6025751	6068959	6068507	0.70	cps
Iron	56-2	68747181	69474381	69527324	69249628	0.63	cps
Iron	57-2	1895981	1900294	1909689	1901988	0.37	cps
Iron	54-2	3752621	3798047	3726424	3759031	0.96	cps
Krypton	83-1	380	433	427	413	7.03	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-17 Instrumnet Name : P7
Client Sample ID : ME29F1 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:17:54 DataFile Name : 055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	110326	112880	113690	112299	1.56	cps
Lead	207-1	87925	88647	90025	88866	1.20	cps
Lead	208-1	416544	421641	425251	421145	1.04	cps
Lithium	6-1	1669198	1643185	1666381	1659588	0.86	cps
Magnesium	24-2	25145567	25324925	25452050	25307514	0.61	cps
Manganese	55-2	2185827	2158360	2125772	2156653	1.39	cps
Molybdenum	94-1	49409	48366	48273	48683	1.30	cps
Molybdenum	95-1	16990	17427	17103	17173	1.32	cps
Molybdenum	96-1	25652	25790	25352	25598	0.87	cps
Molybdenum	97-1	11044	10991	10477	10837	2.89	cps
Molybdenum	98-1	27255	27917	28141	27771	1.66	cps
Neodymium	150-1	61453	62411	62970	62278	1.23	cps
Neodymium	150-2	36728	37931	36821	37160	1.80	cps
Nickel	60-2	32535	32375	33224	32711	1.38	cps
Phosphorus	31-2	6501	6645	6478	6541	1.38	cps
Potassium	39-2	360618	364721	362152	362497	0.57	cps
Rhodium	103-1	15780903	15485252	15624594	15630250	0.95	cps
Rhodium	103-2	9450088	9453000	9348695	9417261	0.63	cps
Scandium	45-1	8452446	8496870	8273627	8407648	1.41	cps
Scandium	45-2	803981	808486	804015	805494	0.32	cps
Selenium	82-1	793	654	624	690	13.04	cps
Selenium	77-2	117	97	153	122	23.51	cps
Selenium	78-2	697	577	640	638	9.41	cps
Silicon	28-1	7797527	7825271	7763917	7795571	0.39	cps
Silver	107-1	463	583	580	542	12.60	cps
Silver	109-1	383	470	457	437	10.69	cps
Sodium	23-2	207557	204925	206228	206237	0.64	cps
Strontium	86-1	757627	765554	763003	762061	0.53	cps
Strontium	88-1	6523277	6741017	6654844	6639713	1.65	cps
Sulfur	34-1	245172	244390	243866	244476	0.27	cps
Terbium	159-1	22309348	22273540	22152598	22245162	0.37	cps
Terbium	159-2	14879852	14883439	14611885	14791725	1.05	cps
Thallium	203-1	1480	1473	1503	1486	1.06	cps
Thallium	205-1	3410	3417	3347	3392	1.14	cps
Tin	118-1	6735	7085	6708	6843	3.07	cps
Titanium	47-1	99686	101264	102542	101164	1.41	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-17

Instrumnet Name :

P7

Client Sample ID :

ME29F1

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:17:54

DataFile Name :

055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	57590	58146	58735	58157	0.98	cps
Vanadium	51-2	57526	56198	56716	56813	1.18	cps
Yttrium	89-1	20062301	19894146	19756801	19904416	0.77	cps
Yttrium	89-2	5466126	5370857	5393745	5410243	0.92	cps
Zinc	66-2	53044	52378	51833	52418	1.16	cps
Zirconium	90-1	101625	103952	102917	102831	1.13	cps
Zirconium	91-1	22708	23292	23292	23097	1.46	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-18 Instrumnet Name : P7
Client Sample ID : ME29F2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:21:02 DataFile Name : 056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1225212	1227180	1223962	1225451	0.13	cps
Antimony	121-1	5041	5178	5311	5177	2.61	cps
Arsenic	75-2	5671	5504	5801	5659	2.63	cps
Barium	135-1	75948	77047	76524	76506	0.72	cps
Barium	137-1	131892	133039	133469	132800	0.61	cps
Beryllium	9-1	327	390	327	348	10.51	cps
Bismuth	209-1	12827809	13307193	13379181	13171394	2.28	cps
Bismuth	209-2	10245872	10217402	10309640	10257638	0.46	cps
Bromine	81-1	16116	15762	16116	15998	1.28	cps
Bromine	81-2	770	727	747	748	2.90	cps
Cadmium	108-1	143	120	187	150	22.55	cps
Cadmium	106-1	5728	5741	5658	5709	0.78	cps
Cadmium	111-1	915	918	848	894	4.45	cps
Calcium	43-1	9230746	9302662	9124978	9219462	0.97	cps
Calcium	44-1	151081241	150987391	147951914	150006849	1.19	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	68441	69871	70018	69443	1.25	cps
Cobalt	59-2	62730	63433	62533	62899	0.75	cps
Copper	63-2	159541	159601	157670	158937	0.69	cps
Dysprosium	156-1	48289	48222	47737	48083	0.63	cps
Dysprosium	156-2	38847	37767	38509	38375	1.44	cps
Erbium	164-1	43407	43324	43641	43457	0.38	cps
Erbium	164-2	29959	30049	29548	29852	0.89	cps
Gadolinium	160-1	49460	48905	49745	49370	0.86	cps
Gadolinium	160-2	36741	35395	36638	36258	2.07	cps
Holmium	165-1	21499613	22267891	21981966	21916490	1.77	cps
Holmium	165-2	15126662	15208919	15002695	15112759	0.69	cps
Indium	115-1	16397612	17155922	17022421	16858652	2.40	cps
Indium	115-2	6074408	6080794	6097445	6084216	0.20	cps
Iron	56-2	78199306	78513062	78363932	78358767	0.20	cps
Iron	57-2	2147343	2170773	2171034	2163050	0.63	cps
Iron	54-2	4244944	4288469	4276800	4270071	0.53	cps
Krypton	83-1	390	420	403	404	3.72	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-18 Instrumnet Name : P7
Client Sample ID : ME29F2 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:21:02 DataFile Name : 056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	143929	143979	144030	143979	0.04	cps
Lead	207-1	114759	116537	115334	115543	0.79	cps
Lead	208-1	539480	542517	542845	541614	0.34	cps
Lithium	6-1	1555351	1633864	1636596	1608604	2.87	cps
Magnesium	24-2	32648161	31993551	31998069	32213260	1.17	cps
Manganese	55-2	2452006	2407169	2447378	2435517	1.01	cps
Molybdenum	94-1	45460	46661	46514	46211	1.42	cps
Molybdenum	95-1	12826	13039	12529	12798	2.00	cps
Molybdenum	96-1	20695	21012	21049	20918	0.93	cps
Molybdenum	97-1	7829	8006	8182	8006	2.21	cps
Molybdenum	98-1	20274	20438	20751	20488	1.18	cps
Neodymium	150-1	73510	73383	73778	73557	0.27	cps
Neodymium	150-2	42765	43534	43480	43260	0.99	cps
Nickel	60-2	41557	41638	40565	41253	1.45	cps
Phosphorus	31-2	12579	12028	12058	12222	2.53	cps
Potassium	39-2	428586	424716	426874	426726	0.45	cps
Rhodium	103-1	15203286	15717759	15443864	15454969	1.67	cps
Rhodium	103-2	9432841	9474388	9447649	9451626	0.22	cps
Scandium	45-1	8206626	8472219	8359701	8346182	1.60	cps
Scandium	45-2	804706	800410	801814	802310	0.27	cps
Selenium	82-1	1730	1636	1770	1712	4.02	cps
Selenium	77-2	217	263	257	246	10.28	cps
Selenium	78-2	1043	883	910	946	9.07	cps
Silicon	28-1	10444395	10188328	10152478	10261734	1.55	cps
Silver	107-1	700	760	813	758	7.48	cps
Silver	109-1	570	570	593	578	2.33	cps
Sodium	23-2	237613	239121	237214	237983	0.42	cps
Strontium	86-1	936750	945695	942548	941664	0.48	cps
Strontium	88-1	8194151	8253283	8285105	8244180	0.56	cps
Sulfur	34-1	250934	245782	249021	248579	1.05	cps
Terbium	159-1	22001611	22788030	22414105	22401249	1.76	cps
Terbium	159-2	14852382	14772129	14817588	14814033	0.27	cps
Thallium	203-1	1667	1693	1767	1709	3.03	cps
Thallium	205-1	4101	4164	4091	4118	0.97	cps
Tin	118-1	7122	7472	7042	7212	3.17	cps
Titanium	47-1	134966	133752	133335	134018	0.63	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-18

Instrumnet Name :

P7

Client Sample ID :

ME29F2

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:21:02

DataFile Name :

056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	79710	80736	81232	80559	0.96	cps
Vanadium	51-2	88983	89141	89356	89160	0.21	cps
Yttrium	89-1	19863856	20500515	20310156	20224842	1.62	cps
Yttrium	89-2	5558623	5493611	5480863	5511032	0.76	cps
Zinc	66-2	73392	72625	72317	72778	0.76	cps
Zirconium	90-1	104401	103689	104512	104201	0.43	cps
Zirconium	91-1	23602	23359	23385	23449	0.57	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-19 Instrumnet Name : P7
Client Sample ID : ME29F3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:24:12 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	844507	853067	835099	844224	1.06	cps
Antimony	121-1	3824	3701	3737	3754	1.69	cps
Arsenic	75-2	2947	2857	2720	2841	4.02	cps
Barium	135-1	73783	74088	75308	74393	1.08	cps
Barium	137-1	129261	129358	128410	129010	0.40	cps
Beryllium	9-1	287	290	240	272	10.27	cps
Bismuth	209-1	13353832	13396643	13408921	13386465	0.22	cps
Bismuth	209-2	10225664	10222792	10322044	10256833	0.55	cps
Bromine	81-1	15388	15909	15428	15575	1.86	cps
Bromine	81-2	540	483	493	506	5.98	cps
Cadmium	108-1	183	93	170	149	32.63	cps
Cadmium	106-1	5888	5578	5438	5634	4.09	cps
Cadmium	111-1	461	543	502	502	8.12	cps
Calcium	43-1	6479963	6514557	6432320	6475613	0.64	cps
Calcium	44-1	105918072	105099535	104826502	105281370	0.54	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	49190	48758	48802	48917	0.49	cps
Cobalt	59-2	58085	55937	56673	56898	1.92	cps
Copper	63-2	91816	91216	91531	91521	0.33	cps
Dysprosium	156-1	34619	34014	34235	34290	0.89	cps
Dysprosium	156-2	27470	28148	27631	27750	1.28	cps
Erbium	164-1	30089	30974	30046	30370	1.73	cps
Erbium	164-2	20949	20589	20872	20803	0.91	cps
Gadolinium	160-1	33423	34075	34539	34012	1.65	cps
Gadolinium	160-2	25136	25002	25323	25154	0.64	cps
Holmium	165-1	21762511	22002552	21889318	21884794	0.55	cps
Holmium	165-2	15102661	14865232	14915901	14961265	0.84	cps
Indium	115-1	16822275	16636494	17019789	16826186	1.14	cps
Indium	115-2	6023828	6071565	6080116	6058503	0.50	cps
Iron	56-2	66017436	65582182	66561247	66053622	0.74	cps
Iron	57-2	1791782	1790987	1798280	1793683	0.22	cps
Iron	54-2	3617636	3671977	3645476	3645030	0.75	cps
Krypton	83-1	357	297	410	354	16.00	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-19 Instrumnet Name : P7
Client Sample ID : ME29F3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:24:12 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	90740	92414	93076	92077	1.31	cps
Lead	207-1	73240	74777	73367	73795	1.16	cps
Lead	208-1	345691	349451	348761	347968	0.58	cps
Lithium	6-1	1675295	1643410	1650460	1656388	1.01	cps
Magnesium	24-2	19170960	19187395	18974489	19110948	0.62	cps
Manganese	55-2	1989042	2021043	2030056	2013381	1.07	cps
Molybdenum	94-1	44344	43591	46912	44949	3.87	cps
Molybdenum	95-1	8282	8506	8516	8435	1.56	cps
Molybdenum	96-1	16379	16296	16499	16391	0.62	cps
Molybdenum	97-1	5148	5408	5281	5279	2.46	cps
Molybdenum	98-1	13710	13993	14190	13965	1.73	cps
Neodymium	150-1	54130	54883	55278	54764	1.06	cps
Neodymium	150-2	32491	32671	32364	32509	0.47	cps
Nickel	60-2	30294	29746	29713	29918	1.09	cps
Phosphorus	31-2	7665	8242	7989	7965	3.63	cps
Potassium	39-2	324143	329147	327840	327043	0.79	cps
Rhodium	103-1	15685282	15741883	15689371	15705512	0.20	cps
Rhodium	103-2	9398891	9413331	9461001	9424408	0.34	cps
Scandium	45-1	8336074	8357893	8324666	8339544	0.20	cps
Scandium	45-2	794465	797912	793778	795385	0.28	cps
Selenium	82-1	787	868	786	814	5.76	cps
Selenium	77-2	143	133	90	122	23.20	cps
Selenium	78-2	587	607	510	568	8.99	cps
Silicon	28-1	7667713	7794394	7811339	7757815	1.01	cps
Silver	107-1	683	593	680	652	7.82	cps
Silver	109-1	500	510	500	503	1.15	cps
Sodium	23-2	188219	188853	188628	188566	0.17	cps
Strontium	86-1	749402	747996	747243	748214	0.15	cps
Strontium	88-1	6475049	6500614	6548960	6508208	0.58	cps
Sulfur	34-1	253297	250375	245728	249800	1.53	cps
Terbium	159-1	22247346	22598495	22334771	22393537	0.82	cps
Terbium	159-2	14905709	14912242	14639789	14819246	1.05	cps
Thallium	203-1	1120	1090	1160	1123	3.13	cps
Thallium	205-1	2657	2647	2577	2627	1.66	cps
Tin	118-1	5951	6198	6702	6284	6.09	cps
Titanium	47-1	130311	128654	126578	128515	1.46	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-19 Instrumnet Name : P7
Client Sample ID : ME29F3 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:24:12 DataFile Name : 057SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	42772	43524	43250	43182	0.88	cps
Vanadium	51-2	53598	53505	53150	53417	0.44	cps
Yttrium	89-1	20156705	19917799	20000516	20025007	0.61	cps
Yttrium	89-2	5458350	5374248	5417008	5416535	0.78	cps
Zinc	66-2	49505	48789	48087	48794	1.45	cps
Zirconium	90-1	106030	106958	104693	105894	1.08	cps
Zirconium	91-1	23773	23723	23359	23618	0.96	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-20 Instrumnet Name : P7
Client Sample ID : ME29F4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:27:19 DataFile Name : 058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	882665	876289	876488	878481	0.41	cps
Antimony	121-1	6021	5975	5858	5951	1.41	cps
Arsenic	75-2	5941	5688	6105	5911	3.55	cps
Barium	135-1	47843	48037	48098	47993	0.28	cps
Barium	137-1	81787	84831	84573	83730	2.02	cps
Beryllium	9-1	250	320	317	296	13.36	cps
Bismuth	209-1	13364592	13186670	13333999	13295087	0.72	cps
Bismuth	209-2	10238713	10170262	10218421	10209132	0.34	cps
Bromine	81-1	15321	15835	16122	15760	2.57	cps
Bromine	81-2	500	573	570	548	7.56	cps
Cadmium	108-1	203	147	173	174	16.25	cps
Cadmium	106-1	5978	5735	5654	5789	2.91	cps
Cadmium	111-1	748	779	707	745	4.87	cps
Calcium	43-1	9401406	9632487	9525990	9519961	1.21	cps
Calcium	44-1	153170264	157438738	154723981	155110994	1.39	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	56084	56144	56151	56126	0.07	cps
Cobalt	59-2	67849	67826	67273	67649	0.48	cps
Copper	63-2	106915	106116	106881	106637	0.42	cps
Dysprosium	156-1	33470	34282	34729	34160	1.87	cps
Dysprosium	156-2	27951	27256	27834	27681	1.34	cps
Erbium	164-1	31068	31539	31759	31455	1.12	cps
Erbium	164-2	21684	21680	21263	21542	1.12	cps
Gadolinium	160-1	34205	35415	35522	35047	2.09	cps
Gadolinium	160-2	26101	25647	24872	25540	2.43	cps
Holmium	165-1	22104272	21815259	22044091	21987874	0.69	cps
Holmium	165-2	15061352	15080015	14814734	14985367	0.99	cps
Indium	115-1	17235313	16768416	16963964	16989231	1.38	cps
Indium	115-2	6153471	6117485	6026066	6099007	1.08	cps
Iron	56-2	65670386	64756692	64948831	65125303	0.74	cps
Iron	57-2	1873815	1852112	1820981	1848969	1.44	cps
Iron	54-2	3606607	3601799	3578721	3595709	0.41	cps
Krypton	83-1	387	377	400	388	3.02	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-20 Instrumnet Name : P7
Client Sample ID : ME29F4 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:27:19 DataFile Name : 058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	109709	111109	112040	110953	1.06	cps
Lead	207-1	87432	89264	87845	88180	1.09	cps
Lead	208-1	409465	417691	419966	415707	1.33	cps
Lithium	6-1	1711369	1695405	1658956	1688576	1.59	cps
Magnesium	24-2	31092937	30726801	30883116	30900951	0.59	cps
Manganese	55-2	2400220	2381709	2390624	2390851	0.39	cps
Molybdenum	94-1	43227	43976	44280	43828	1.24	cps
Molybdenum	95-1	13967	13963	14491	14140	2.15	cps
Molybdenum	96-1	21489	22060	21860	21803	1.33	cps
Molybdenum	97-1	8796	9030	8759	8862	1.65	cps
Molybdenum	98-1	22541	23235	23322	23033	1.86	cps
Neodymium	150-1	51263	52310	52377	51983	1.20	cps
Neodymium	150-2	30924	30049	30707	30560	1.49	cps
Nickel	60-2	37133	36474	36354	36654	1.14	cps
Phosphorus	31-2	7042	6958	6992	6997	0.60	cps
Potassium	39-2	414118	411649	416362	414043	0.57	cps
Rhodium	103-1	15914332	15520254	15472742	15635776	1.55	cps
Rhodium	103-2	9512250	9366591	9346958	9408600	0.96	cps
Scandium	45-1	8743307	8453315	8421909	8539510	2.07	cps
Scandium	45-2	807814	810373	798214	805467	0.80	cps
Selenium	82-1	862	848	828	846	1.97	cps
Selenium	77-2	120	120	83	108	19.64	cps
Selenium	78-2	633	627	623	628	0.81	cps
Silicon	28-1	7855214	8260441	7826844	7980833	3.04	cps
Silver	107-1	460	553	630	548	15.54	cps
Silver	109-1	397	410	470	426	9.18	cps
Sodium	23-2	225348	226347	226597	226098	0.29	cps
Strontium	86-1	965307	981830	979524	975554	0.92	cps
Strontium	88-1	8418249	8663650	8564090	8548663	1.44	cps
Sulfur	34-1	260358	259124	256579	258687	0.74	cps
Terbium	159-1	22647879	22407421	22698181	22584494	0.69	cps
Terbium	159-2	15039269	15033467	14689923	14920886	1.34	cps
Thallium	203-1	1717	1750	1703	1723	1.39	cps
Thallium	205-1	4187	4231	4217	4212	0.53	cps
Tin	118-1	5548	5361	5368	5426	1.95	cps
Titanium	47-1	98121	99153	102190	99821	2.12	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-20

Instrumnet Name :

P7

Client Sample ID :

ME29F4

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:27:19

DataFile Name :

058SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	68700	68703	68967	68790	0.22	cps
Vanadium	51-2	61193	60842	60280	60772	0.76	cps
Yttrium	89-1	20535906	20068202	20024186	20209431	1.40	cps
Yttrium	89-2	5570018	5460942	5373286	5468082	1.80	cps
Zinc	66-2	50779	51217	50104	50700	1.11	cps
Zirconium	90-1	96384	97147	98622	97384	1.17	cps
Zirconium	91-1	21149	22202	21312	21554	2.63	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-21 Instrumnet Name : P7
Client Sample ID : ME29F5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:30:30 DataFile Name : 059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	851800	856479	862806	857029	0.64	cps
Antimony	121-1	5905	5875	6015	5931	1.24	cps
Arsenic	75-2	6191	6101	6191	6161	0.84	cps
Barium	135-1	48961	50031	50382	49791	1.49	cps
Barium	137-1	86267	85887	84915	85690	0.81	cps
Beryllium	9-1	293	307	327	309	5.43	cps
Bismuth	209-1	13095618	13604701	13159448	13286589	2.09	cps
Bismuth	209-2	10144310	10168951	10285061	10199441	0.74	cps
Bromine	81-1	15505	15872	15762	15713	1.20	cps
Bromine	81-2	510	493	500	501	1.67	cps
Cadmium	108-1	127	107	150	128	16.97	cps
Cadmium	106-1	5968	6025	5745	5912	2.50	cps
Cadmium	111-1	635	705	680	673	5.34	cps
Calcium	43-1	7666938	7768464	7574989	7670130	1.26	cps
Calcium	44-1	124956015	124964105	123399505	124439875	0.72	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	55321	56248	55900	55823	0.84	cps
Cobalt	59-2	66690	67581	67286	67186	0.68	cps
Copper	63-2	117997	117621	117047	117555	0.41	cps
Dysprosium	156-1	40990	41755	41438	41394	0.93	cps
Dysprosium	156-2	36497	37042	36868	36803	0.76	cps
Erbium	164-1	31773	31926	32207	31969	0.69	cps
Erbium	164-2	22278	21830	22211	22106	1.09	cps
Gadolinium	160-1	37300	37520	37330	37383	0.32	cps
Gadolinium	160-2	27694	27881	27794	27790	0.34	cps
Holmium	165-1	21664813	22338747	22049428	22017663	1.54	cps
Holmium	165-2	15036551	14938605	14870970	14948709	0.56	cps
Indium	115-1	16886337	17528651	16917723	17110904	2.12	cps
Indium	115-2	6116387	6103849	6076807	6099014	0.33	cps
Iron	56-2	63773449	63239056	62580052	63197519	0.95	cps
Iron	57-2	1752262	1743821	1757338	1751140	0.39	cps
Iron	54-2	3482590	3481373	3448392	3470785	0.56	cps
Krypton	83-1	330	467	343	380	19.83	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-21 Instrumnet Name : P7
Client Sample ID : ME29F5 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:30:30 DataFile Name : 059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	107668	108387	109190	108415	0.70	cps
Lead	207-1	84977	85949	85745	85557	0.60	cps
Lead	208-1	400513	403757	407606	403959	0.88	cps
Lithium	6-1	1687851	1698973	1632921	1673248	2.11	cps
Magnesium	24-2	25335230	25518090	25231672	25361664	0.57	cps
Manganese	55-2	2021157	2014146	2021009	2018771	0.20	cps
Molybdenum	94-1	40325	41582	42054	41320	2.16	cps
Molybdenum	95-1	18655	18939	18892	18829	0.81	cps
Molybdenum	96-1	25706	25532	26000	25746	0.92	cps
Molybdenum	97-1	11508	11511	11818	11612	1.53	cps
Molybdenum	98-1	30118	30813	31020	30650	1.54	cps
Neodymium	150-1	73122	73859	74458	73813	0.91	cps
Neodymium	150-2	43965	43092	43510	43523	1.00	cps
Nickel	60-2	38733	37199	37888	37940	2.03	cps
Phosphorus	31-2	6888	7105	7025	7006	1.56	cps
Potassium	39-2	427653	425060	425008	425907	0.36	cps
Rhodium	103-1	15555835	16064676	15663404	15761305	1.70	cps
Rhodium	103-2	9530286	9380733	9429244	9446754	0.81	cps
Scandium	45-1	8527533	8729461	8465353	8574115	1.61	cps
Scandium	45-2	801278	802173	804822	802758	0.23	cps
Selenium	82-1	989	715	799	834	16.81	cps
Selenium	77-2	147	113	113	124	15.47	cps
Selenium	78-2	593	680	640	638	6.80	cps
Silicon	28-1	8952518	7545219	7975216	8157651	8.84	cps
Silver	107-1	620	623	650	631	2.61	cps
Silver	109-1	430	407	410	416	3.04	cps
Sodium	23-2	220736	218928	219631	219765	0.41	cps
Strontium	86-1	788329	795460	792265	792018	0.45	cps
Strontium	88-1	6901537	7037263	6911434	6950078	1.09	cps
Sulfur	34-1	258806	256539	254109	256485	0.92	cps
Terbium	159-1	22346751	23032845	22250913	22543503	1.89	cps
Terbium	159-2	15000119	15003668	14801759	14935182	0.77	cps
Thallium	203-1	1610	1620	1573	1601	1.53	cps
Thallium	205-1	3981	3804	3824	3869	2.50	cps
Tin	118-1	5875	5958	6001	5945	1.08	cps
Titanium	47-1	94762	94637	99824	96407	3.07	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-21

Instrumnet Name :

P7

Client Sample ID :

ME29F5

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:30:30

DataFile Name :

059SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	66491	68786	68789	68022	1.95	cps
Vanadium	51-2	55773	56268	55528	55856	0.67	cps
Yttrium	89-1	20035875	20706930	19991306	20244704	1.98	cps
Yttrium	89-2	5405254	5392375	5458529	5418719	0.65	cps
Zinc	66-2	73590	74669	73426	73895	0.91	cps
Zirconium	90-1	82632	82993	83680	83102	0.64	cps
Zirconium	91-1	18251	18729	18659	18546	1.39	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV003 Instrumnet Name : P7
Client Sample ID : CCV003 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:33:38 DataFile Name : 060CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	19509718	19465650	19527000	19500789	0.16	cps
Antimony	121-1	8502518	8663839	8545727	8570695	0.97	cps
Arsenic	75-2	447172	452110	446052	448445	0.72	cps
Barium	135-1	10904984	10960056	10891239	10918759	0.33	cps
Barium	137-1	18859240	18899720	18745116	18834692	0.43	cps
Beryllium	9-1	718434	727107	724560	723367	0.62	cps
Bismuth	209-1	11939657	12087921	11887814	11971798	0.87	cps
Bismuth	209-2	9186937	7722126	9429647	8779570	10.52	cps
Bromine	81-1	13877	14033	14003	13971	0.60	cps
Bromine	81-2	193	130	153	159	20.16	cps
Cadmium	108-1	170020	170620	170597	170412	0.20	cps
Cadmium	106-1	244996	244823	245172	244997	0.07	cps
Cadmium	111-1	2132411	2115847	2134114	2127457	0.47	cps
Calcium	43-1	10204578	10337497	10214736	10252270	0.72	cps
Calcium	44-1	164335541	165908991	164841424	165028652	0.49	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3359920	3397684	3337155	3364919	0.91	cps
Cobalt	59-2	5397765	5518437	5355704	5423969	1.56	cps
Copper	63-2	39599067	40237834	39612841	39816581	0.92	cps
Dysprosium	156-1	497	463	560	507	9.69	cps
Dysprosium	156-2	927	907	847	893	4.66	cps
Erbium	164-1	557	493	530	527	6.04	cps
Erbium	164-2	340	343	357	347	2.54	cps
Gadolinium	160-1	417	393	483	431	10.83	cps
Gadolinium	160-2	1110	1050	1020	1060	4.32	cps
Holmium	165-1	20561713	20618827	20673613	20618051	0.27	cps
Holmium	165-2	14072592	11807145	14411189	13430309	10.54	cps
Indium	115-1	15493162	15200586	15261177	15318308	1.01	cps
Indium	115-2	5571328	4668674	5627198	5289067	10.17	cps
Iron	56-2	779147642	786870575	784188228	783402148	0.50	cps
Iron	57-2	19731070	19801637	19568315	19700341	0.61	cps
Iron	54-2	42562763	42800834	42739689	42701095	0.29	cps
Krypton	83-1	287	287	273	282	2.73	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV003 Instrumnet Name : P7
Client Sample ID : CCV003 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:33:38 DataFile Name : 060CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	33820879	34165357	33825097	33937111	0.58	cps
Lead	207-1	29829971	30141055	29731055	29900693	0.72	cps
Lead	208-1	135134134	136563945	135293342	135663807	0.58	cps
Lithium	6-1	1650149	1608825	1610293	1623089	1.44	cps
Magnesium	24-2	149663114	150121341	148799424	149527960	0.45	cps
Manganese	55-2	26580743	26973436	26610906	26721695	0.82	cps
Molybdenum	94-1	30468937	30485608	30298010	30417518	0.34	cps
Molybdenum	95-1	43460294	43720604	43832203	43671034	0.44	cps
Molybdenum	96-1	47768143	48023466	48269759	48020456	0.52	cps
Molybdenum	97-1	27418577	27426010	27499850	27448146	0.16	cps
Molybdenum	98-1	70922449	70267917	70803386	70664584	0.49	cps
Neodymium	150-1	730	750	727	736	1.72	cps
Neodymium	150-2	233	290	273	266	10.97	cps
Nickel	60-2	1347796	1356334	1337427	1347186	0.70	cps
Phosphorus	31-2	180177	179445	179341	179654	0.25	cps
Potassium	39-2	94823895	96269875	95292999	95462256	0.77	cps
Rhodium	103-1	14019419	14005594	14028894	14017969	0.08	cps
Rhodium	103-2	8500956	6944890	8557293	8001046	11.44	cps
Scandium	45-1	8046446	8016190	7957177	8006605	0.57	cps
Scandium	45-2	760159	634342	771784	722095	10.56	cps
Selenium	82-1	132747	133469	133164	133127	0.27	cps
Selenium	77-2	14094	14494	14627	14405	1.93	cps
Selenium	78-2	48981	49145	48532	48886	0.65	cps
Silicon	28-1	26332647	26252775	26663000	26416141	0.82	cps
Silver	107-1	11198918	11195454	11154219	11182863	0.22	cps
Silver	109-1	10654108	10582979	10675933	10637673	0.46	cps
Sodium	23-2	237911643	240948170	240217376	239692396	0.66	cps
Strontium	86-1	2679873	2661471	2683446	2674930	0.44	cps
Strontium	88-1	23538831	23551831	23423586	23504750	0.30	cps
Sulfur	34-1	762279	764384	760056	762240	0.28	cps
Terbium	159-1	21140686	21098494	20711876	20983685	1.13	cps
Terbium	159-2	14060537	11716660	14241378	13339525	10.56	cps
Thallium	203-1	8464299	8484019	8530287	8492869	0.40	cps
Thallium	205-1	19982478	20355540	20102068	20146696	0.95	cps
Tin	118-1	7185785	7226797	7210235	7207605	0.29	cps
Titanium	47-1	9660153	9573332	9597530	9610338	0.47	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV003

Instrumnet Name :

P7

Client Sample ID :

CCV003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:33:38

DataFile Name :

060CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	27634255	27511765	27589376	27578466	0.22	cps
Vanadium	51-2	2969975	3020759	2994502	2995079	0.85	cps
Yttrium	89-1	18477991	18219392	18404436	18367273	0.73	cps
Yttrium	89-2	5096657	4190250	5149182	4812030	11.20	cps
Zinc	66-2	6532565	6650395	6584418	6589126	0.90	cps
Zirconium	90-1	14751442	14860532	14683590	14765188	0.60	cps
Zirconium	91-1	3274386	3306094	3294105	3291528	0.49	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB003 Instrumnet Name : P7
Client Sample ID : CCB003 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:36:21 DataFile Name : 061CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	773	610	623	669	13.56	cps
Antimony	121-1	4788	4134	3664	4195	13.45	cps
Arsenic	75-2	7	30	17	18	65.83	cps
Barium	135-1	1854	800	637	1097	60.24	cps
Barium	137-1	2731	1347	1110	1729	50.64	cps
Beryllium	9-1	207	157	123	162	25.85	cps
Bismuth	209-1	13130582	12801794	12848621	12926999	1.38	cps
Bismuth	209-2	10192302	10302127	10181251	10225227	0.65	cps
Bromine	81-1	13770	13633	13526	13643	0.89	cps
Bromine	81-2	157	160	200	172	14.00	cps
Cadmium	108-1	67	27	13	36	78.07	cps
Cadmium	106-1	5161	5038	4667	4955	5.18	cps
Cadmium	111-1	519	247	174	313	58.11	cps
Calcium	43-1	1984	1403	1207	1531	26.38	cps
Calcium	44-1	42822	29886	26787	33165	25.65	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1163	1560	1333	1352	14.72	cps
Cobalt	59-2	393	353	390	379	5.86	cps
Copper	63-2	2730	2604	2164	2499	11.90	cps
Dysprosium	156-1	13	3	23	13	75.02	cps
Dysprosium	156-2	3	7	3	4	43.40	cps
Erbium	164-1	67	93	90	83	17.43	cps
Erbium	164-2	80	63	47	63	26.31	cps
Gadolinium	160-1	93	33	53	60	50.92	cps
Gadolinium	160-2	793	880	817	830	5.40	cps
Holmium	165-1	20848555	20330861	20089447	20422954	1.90	cps
Holmium	165-2	14233656	14259791	14316370	14269939	0.30	cps
Indium	115-1	16597328	16086435	15938809	16207524	2.13	cps
Indium	115-2	5899762	5984216	5878519	5920832	0.94	cps
Iron	56-2	48655	42273	36805	42578	13.93	cps
Iron	57-2	1927	1683	1563	1725	10.74	cps
Iron	54-2	4441	4234	4251	4308	2.67	cps
Krypton	83-1	313	247	320	293	13.83	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB003 Instrumnet Name : P7
Client Sample ID : CCB003 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 15:36:21 DataFile Name : 061CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7429	6131	5781	6447	13.46	cps
Lead	207-1	5795	5738	4611	5381	12.41	cps
Lead	208-1	28667	24629	22584	25293	12.24	cps
Lithium	6-1	1713458	1680244	1650588	1681430	1.87	cps
Magnesium	24-2	5178	4501	3460	4380	19.75	cps
Manganese	55-2	1623	1403	1210	1412	14.65	cps
Molybdenum	94-1	3837	3320	2660	3273	18.03	cps
Molybdenum	95-1	4911	4051	3114	4025	22.33	cps
Molybdenum	96-1	5248	4397	3460	4368	20.46	cps
Molybdenum	97-1	2784	2467	1823	2358	20.75	cps
Molybdenum	98-1	8337	6271	4754	6454	27.86	cps
Neodymium	150-1	27	13	10	17	52.93	cps
Neodymium	150-2	0	10	0	3	173.21	cps
Nickel	60-2	440	423	367	410	9.38	cps
Phosphorus	31-2	310	343	307	320	6.34	cps
Potassium	39-2	70107	70686	68604	69799	1.54	cps
Rhodium	103-1	15518745	15196514	15196847	15304035	1.22	cps
Rhodium	103-2	9256408	9238197	9265725	9253443	0.15	cps
Scandium	45-1	8239755	7945391	7914841	8033329	2.23	cps
Scandium	45-2	760167	763123	758199	760496	0.33	cps
Selenium	82-1	741	657	563	654	13.65	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	500	510	527	512	2.63	cps
Silicon	28-1	710695	705476	696468	704213	1.02	cps
Silver	107-1	3559	2007	1630	2399	42.62	cps
Silver	109-1	4080	1920	1497	2499	55.45	cps
Sodium	23-2	45303	43210	42101	43538	3.74	cps
Strontium	86-1	847	747	673	756	11.52	cps
Strontium	88-1	2797	2107	1773	2226	23.45	cps
Sulfur	34-1	231517	233016	231213	231915	0.42	cps
Terbium	159-1	21442582	20623323	20432643	20832850	2.58	cps
Terbium	159-2	14462965	14368592	14183601	14338386	0.99	cps
Thallium	203-1	2750	2120	1873	2248	20.12	cps
Thallium	205-1	6111	5001	4441	5184	16.40	cps
Tin	118-1	4205	2950	2720	3292	24.28	cps
Titanium	47-1	1070	890	703	888	20.65	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB003

Instrumnet Name :

P7

Client Sample ID :

CCB003

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 15:36:21

DataFile Name :

061CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2430	2120	1537	2029	22.36	cps
Vanadium	51-2	100	103	107	103	3.23	cps
Yttrium	89-1	18890464	18428954	18343777	18554398	1.59	cps
Yttrium	89-2	5099168	5067737	5129212	5098706	0.60	cps
Zinc	66-2	1017	1053	1040	1037	1.79	cps
Zirconium	90-1	3407	3027	2660	3031	12.32	cps
Zirconium	91-1	797	577	597	657	18.53	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10 Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 16:46:55 DataFile Name : 062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1137227	1121737	1130143	1129702	0.69	cps
Antimony	121-1	346058	353790	353516	351121	1.25	cps
Arsenic	75-2	32883	32933	32940	32919	0.09	cps
Barium	135-1	1719141	1771920	1812171	1767744	2.64	cps
Barium	137-1	3042649	3052636	3118634	3071306	1.34	cps
Beryllium	9-1	16068	16055	16569	16231	1.80	cps
Bismuth	209-1	12066881	11949335	11885754	11967323	0.77	cps
Bismuth	209-2	9886054	9717477	9722659	9775396	0.98	cps
Bromine	81-1	14654	15278	15155	15029	2.20	cps
Bromine	81-2	500	507	560	522	6.30	cps
Cadmium	108-1	3120	3354	2984	3153	5.94	cps
Cadmium	106-1	9310	8332	8586	8743	5.80	cps
Cadmium	111-1	41886	42583	43456	42642	1.84	cps
Calcium	43-1	8727411	8704069	8691290	8707590	0.21	cps
Calcium	44-1	141706498	141702455	140434495	141281149	0.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	341421	338794	340117	340111	0.39	cps
Cobalt	59-2	1184659	1184633	1175962	1181751	0.42	cps
Copper	63-2	499726	500231	502517	500825	0.30	cps
Dysprosium	156-1	38987	39492	39619	39366	0.85	cps
Dysprosium	156-2	33466	33169	33747	33461	0.86	cps
Erbium	164-1	36417	36979	37166	36854	1.06	cps
Erbium	164-2	26515	26185	26759	26486	1.09	cps
Gadolinium	160-1	40348	40629	41923	40966	2.05	cps
Gadolinium	160-2	31936	31926	31829	31897	0.19	cps
Holmium	165-1	20358311	19762383	19719186	19946627	1.79	cps
Holmium	165-2	14279617	14201916	14301634	14261056	0.37	cps
Indium	115-1	16092287	15689508	15643060	15808285	1.56	cps
Indium	115-2	5914377	5791528	5832995	5846300	1.07	cps
Iron	56-2	68737089	69071561	68465907	68758186	0.44	cps
Iron	57-2	1903157	1912622	1897260	1904346	0.41	cps
Iron	54-2	3795552	3803037	3784797	3794462	0.24	cps
Krypton	83-1	383	420	393	399	4.75	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-10 Instrumnet Name : P7
Client Sample ID : ME29E4S Dilution Factor : 1
Date & Time Acquired : 2024-12-06 16:46:55 DataFile Name : 062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	150820	150933	150826	150860	0.04	cps
Lead	207-1	122903	123199	123549	123217	0.26	cps
Lead	208-1	575402	577498	578196	577032	0.25	cps
Lithium	6-1	1730740	1704565	1649967	1695090	2.43	cps
Magnesium	24-2	32658402	32492585	32349941	32500310	0.47	cps
Manganese	55-2	3771822	3691032	3679904	3714253	1.35	cps
Molybdenum	94-1	49212	48918	49741	49290	0.85	cps
Molybdenum	95-1	25930	26644	25896	26157	1.62	cps
Molybdenum	96-1	33612	33989	35072	34225	2.21	cps
Molybdenum	97-1	16156	16122	16309	16196	0.62	cps
Molybdenum	98-1	41512	42228	42582	42107	1.29	cps
Neodymium	150-1	57929	60375	59826	59377	2.16	cps
Neodymium	150-2	36795	37119	36681	36865	0.62	cps
Nickel	60-2	318950	319379	319859	319396	0.14	cps
Phosphorus	31-2	8176	7985	7965	8042	1.44	cps
Potassium	39-2	374049	371216	389661	378309	2.63	cps
Rhodium	103-1	15016765	14573088	14406463	14665439	2.15	cps
Rhodium	103-2	9000585	8904702	8986830	8964039	0.58	cps
Scandium	45-1	8871170	8417257	8226821	8505083	3.89	cps
Scandium	45-2	791020	781545	794561	789042	0.85	cps
Selenium	82-1	6307	6286	6349	6314	0.50	cps
Selenium	77-2	727	703	697	709	2.22	cps
Selenium	78-2	2430	2527	2517	2491	2.13	cps
Silicon	28-1	6300637	6243909	6139052	6227866	1.32	cps
Silver	107-1	217012	220826	221562	219800	1.11	cps
Silver	109-1	208126	210073	213935	210711	1.40	cps
Sodium	23-2	219039	219590	221032	219887	0.47	cps
Strontium	86-1	807987	804054	815854	809298	0.74	cps
Strontium	88-1	7157121	7195754	7127983	7160286	0.47	cps
Sulfur	34-1	397004	401035	403884	400641	0.86	cps
Terbium	159-1	20774572	20289976	20430296	20498281	1.22	cps
Terbium	159-2	14248063	14189084	14226581	14221243	0.21	cps
Thallium	203-1	165205	169368	169572	168048	1.47	cps
Thallium	205-1	393311	400635	396450	396799	0.93	cps
Tin	118-1	5174	4808	4564	4849	6.34	cps
Titanium	47-1	357554	353630	359613	356932	0.85	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-10

Instrumnet Name :

P7

Client Sample ID :

ME29E4S

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 16:46:55

DataFile Name :

062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	76937	79170	80686	78931	2.39	cps
Vanadium	51-2	689825	688931	691998	690251	0.23	cps
Yttrium	89-1	19422301	18845698	18699600	18989200	2.01	cps
Yttrium	89-2	5356625	5211717	5271284	5279875	1.38	cps
Zinc	66-2	186347	188055	186806	187069	0.47	cps
Zirconium	90-1	92536	93445	93331	93104	0.53	cps
Zirconium	91-1	24526	21132	21165	22274	8.75	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV004 Instrumnet Name : P7
Client Sample ID : CCV004 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:03:37 DataFile Name : 064CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	19342067	19454811	19280909	19359262	0.46	cps
Antimony	121-1	8132387	8146632	8155667	8144896	0.14	cps
Arsenic	75-2	442860	443838	443125	443274	0.11	cps
Barium	135-1	10212425	10276802	10190038	10226421	0.44	cps
Barium	137-1	17698686	17942173	17757665	17799508	0.71	cps
Beryllium	9-1	750430	768350	759294	759358	1.18	cps
Bismuth	209-1	11674970	11127615	10966800	11256462	3.30	cps
Bismuth	209-2	8912614	8922167	9018630	8951137	0.66	cps
Bromine	81-1	13770	13323	13713	13602	1.79	cps
Bromine	81-2	130	87	110	109	19.92	cps
Cadmium	108-1	160486	162492	162552	161843	0.73	cps
Cadmium	106-1	230413	230704	234499	231872	0.98	cps
Cadmium	111-1	2017363	2024878	2007256	2016499	0.44	cps
Calcium	43-1	10096055	10256935	10149330	10167440	0.81	cps
Calcium	44-1	164021014	165856854	164660108	164845992	0.57	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3268998	3325788	3267787	3287524	1.01	cps
Cobalt	59-2	5372078	5264604	5356609	5331097	1.09	cps
Copper	63-2	38602715	38709540	38595447	38635901	0.17	cps
Dysprosium	156-1	450	460	460	457	1.26	cps
Dysprosium	156-2	850	720	860	810	9.64	cps
Erbium	164-1	537	460	467	488	8.71	cps
Erbium	164-2	343	300	337	327	7.14	cps
Gadolinium	160-1	437	517	363	439	17.47	cps
Gadolinium	160-2	1003	1100	1127	1077	6.03	cps
Holmium	165-1	20429550	19243831	19080213	19584532	3.76	cps
Holmium	165-2	13802813	13624650	13754584	13727349	0.67	cps
Indium	115-1	15518258	14489885	14411129	14806424	4.17	cps
Indium	115-2	5464283	5424884	5476630	5455266	0.50	cps
Iron	56-2	772613722	765587429	772558682	770253277	0.52	cps
Iron	57-2	19444769	19199993	19389168	19344643	0.66	cps
Iron	54-2	41787464	41715448	42079159	41860690	0.46	cps
Krypton	83-1	347	300	313	320	7.51	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV004 Instrumnet Name : P7
Client Sample ID : CCV004 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:03:37 DataFile Name : 064CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	31247604	31500403	31382108	31376705	0.40	cps
Lead	207-1	27617899	27671314	27800305	27696506	0.34	cps
Lead	208-1	125145670	125668461	125303577	125372569	0.21	cps
Lithium	6-1	1703472	1604443	1583036	1630317	3.94	cps
Magnesium	24-2	147499694	148020691	147590721	147703702	0.19	cps
Manganese	55-2	26422395	26308175	26460515	26397028	0.30	cps
Molybdenum	94-1	28918112	29394560	29015567	29109413	0.86	cps
Molybdenum	95-1	41648778	42004770	41641565	41765038	0.50	cps
Molybdenum	96-1	45785786	46255238	45751486	45930837	0.61	cps
Molybdenum	97-1	26054985	26111785	26105518	26090763	0.12	cps
Molybdenum	98-1	67235386	67440319	66912754	67196153	0.40	cps
Neodymium	150-1	713	620	650	661	7.21	cps
Neodymium	150-2	240	213	223	226	5.97	cps
Nickel	60-2	1323407	1312682	1315169	1317086	0.43	cps
Phosphorus	31-2	180791	181138	178885	180271	0.67	cps
Potassium	39-2	94646355	94654435	94450085	94583625	0.12	cps
Rhodium	103-1	14395093	13408275	13243159	13682176	4.55	cps
Rhodium	103-2	8168145	8223394	8121019	8170853	0.63	cps
Scandium	45-1	8614294	7983383	7798651	8132109	5.26	cps
Scandium	45-2	754895	748303	752277	751825	0.44	cps
Selenium	82-1	126595	127789	127554	127313	0.50	cps
Selenium	77-2	14267	14170	14174	14204	0.39	cps
Selenium	78-2	47570	48255	48526	48117	1.02	cps
Silicon	28-1	26685798	27066598	26599125	26783840	0.93	cps
Silver	107-1	10617627	10771771	10576871	10655423	0.96	cps
Silver	109-1	10075832	10273938	10094700	10148156	1.08	cps
Sodium	23-2	239516396	237995523	239582830	239031583	0.38	cps
Strontium	86-1	2552954	2605191	2576103	2578083	1.02	cps
Strontium	88-1	22309659	22511379	22293421	22371486	0.54	cps
Sulfur	34-1	780523	768704	765244	771490	1.04	cps
Terbium	159-1	21000384	19577032	19326884	19968100	4.52	cps
Terbium	159-2	13515796	13510708	13560862	13529122	0.20	cps
Thallium	203-1	7915572	7983267	7932855	7943898	0.44	cps
Thallium	205-1	18871067	18988834	18744708	18868203	0.65	cps
Tin	118-1	6744331	6850276	6804023	6799543	0.78	cps
Titanium	47-1	9650703	9672394	9491101	9604733	1.03	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV004 Instrumnet Name : P7
Client Sample ID : CCV004 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:03:37 DataFile Name : 064CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	25332018	25764806	25707960	25601595	0.92	cps
Vanadium	51-2	2899059	2882341	2899982	2893794	0.34	cps
Yttrium	89-1	18768639	17503701	17397902	17890081	4.26	cps
Yttrium	89-2	5008871	4965019	4989879	4987923	0.44	cps
Zinc	66-2	6401436	6450794	6428997	6427076	0.38	cps
Zirconium	90-1	14056194	14164497	14208982	14143225	0.56	cps
Zirconium	91-1	3172094	3166662	3210118	3182958	0.74	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB004 Instrumnet Name : P7
Client Sample ID : CCB004 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:06:18 DataFile Name : 065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2350	2114	1583	2016	19.48	cps
Antimony	121-1	4718	4204	3464	4128	15.27	cps
Arsenic	75-2	60	57	27	48	38.42	cps
Barium	135-1	1847	1577	1427	1617	13.17	cps
Barium	137-1	3370	2827	2500	2899	15.16	cps
Beryllium	9-1	217	150	153	173	21.67	cps
Bismuth	209-1	12099098	11849312	12051251	11999887	1.10	cps
Bismuth	209-2	9949218	9915627	9695936	9853594	1.40	cps
Bromine	81-1	13306	12829	12716	12950	2.42	cps
Bromine	81-2	167	207	203	192	11.55	cps
Cadmium	108-1	63	20	30	38	60.06	cps
Cadmium	106-1	4451	4501	4347	4433	1.76	cps
Cadmium	111-1	478	432	367	426	13.04	cps
Calcium	43-1	2664	2317	2140	2374	11.22	cps
Calcium	44-1	50604	46207	43145	46652	8.04	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1830	1643	1587	1687	7.55	cps
Cobalt	59-2	790	730	730	750	4.62	cps
Copper	63-2	5494	4964	4137	4865	14.06	cps
Dysprosium	156-1	20	20	3	14	66.64	cps
Dysprosium	156-2	7	13	3	8	65.47	cps
Erbium	164-1	83	83	93	87	6.66	cps
Erbium	164-2	43	33	40	39	13.09	cps
Gadolinium	160-1	60	43	73	59	25.53	cps
Gadolinium	160-2	770	733	837	780	6.72	cps
Holmium	165-1	19112106	18870273	18929044	18970474	0.66	cps
Holmium	165-2	13993862	13892085	13744404	13876784	0.90	cps
Indium	115-1	15341878	15494844	15303780	15380167	0.66	cps
Indium	115-2	5913050	5857493	5891989	5887511	0.48	cps
Iron	56-2	105984	92466	80725	93058	13.58	cps
Iron	57-2	3477	2960	2750	3063	12.21	cps
Iron	54-2	7802	7315	6358	7158	10.26	cps
Krypton	83-1	280	333	380	331	15.11	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB004 Instrumnet Name : P7
Client Sample ID : CCB004 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:06:18 DataFile Name : 065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7052	6218	5961	6410	8.89	cps
Lead	207-1	6221	5478	4901	5533	11.96	cps
Lead	208-1	28616	24842	22901	25453	11.42	cps
Lithium	6-1	1620589	1633253	1636231	1630024	0.51	cps
Magnesium	24-2	15374	12996	11491	13287	14.74	cps
Manganese	55-2	3204	2870	2487	2854	12.57	cps
Molybdenum	94-1	6702	5728	5128	5852	13.57	cps
Molybdenum	95-1	8433	7509	6695	7545	11.52	cps
Molybdenum	96-1	9767	7859	7455	8360	14.77	cps
Molybdenum	97-1	5334	4634	4187	4719	12.25	cps
Molybdenum	98-1	13877	12008	10951	12279	12.07	cps
Neodymium	150-1	7	13	3	8	65.47	cps
Neodymium	150-2	0	7	7	4	86.60	cps
Nickel	60-2	620	550	473	548	13.39	cps
Phosphorus	31-2	320	327	253	300	13.52	cps
Potassium	39-2	72964	70536	69672	71057	2.40	cps
Rhodium	103-1	14551893	14423516	14392707	14456039	0.58	cps
Rhodium	103-2	9045061	9123768	9018042	9062291	0.61	cps
Scandium	45-1	7753568	7822993	7934544	7837035	1.17	cps
Scandium	45-2	767253	755764	759427	760815	0.77	cps
Selenium	82-1	724	582	524	610	16.88	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	470	520	570	520	9.62	cps
Silicon	28-1	764435	758365	752183	758328	0.81	cps
Silver	107-1	3557	3044	2440	3014	18.55	cps
Silver	109-1	3380	2810	2374	2855	17.69	cps
Sodium	23-2	49603	46162	42666	46144	7.52	cps
Strontium	86-1	1087	1063	863	1004	12.22	cps
Strontium	88-1	4637	4021	3757	4138	10.92	cps
Sulfur	34-1	225688	227474	229099	227420	0.75	cps
Terbium	159-1	19393806	19597949	19588561	19526772	0.59	cps
Terbium	159-2	13819552	13691437	13694629	13735206	0.53	cps
Thallium	203-1	3507	3407	3120	3345	6.00	cps
Thallium	205-1	8836	7569	6862	7756	12.90	cps
Tin	118-1	3634	3467	2954	3352	10.58	cps
Titanium	47-1	1970	1690	1400	1687	16.90	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCB004

Instrumnet Name :

P7

Client Sample ID :

CCB004

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:06:18

DataFile Name :

065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4838	3684	3724	4082	16.04	cps
Vanadium	51-2	320	303	223	282	18.31	cps
Yttrium	89-1	17594863	17703907	17594145	17630972	0.36	cps
Yttrium	89-2	5099787	5085670	5082230	5089229	0.18	cps
Zinc	66-2	1660	1490	1420	1523	8.10	cps
Zirconium	90-1	5234	4374	3961	4523	14.37	cps
Zirconium	91-1	993	1033	860	962	9.43	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03A Instrumnet Name : P7
Client Sample ID : ME29F8A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:21:52 DataFile Name : 066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	856935	855451	855387	855924	0.10	cps
Antimony	121-1	4861	4804	4961	4875	1.63	cps
Arsenic	75-2	5328	5094	5084	5169	2.66	cps
Barium	135-1	61201	62071	61780	61684	0.72	cps
Barium	137-1	105068	107385	107345	106599	1.24	cps
Beryllium	9-1	287	303	327	306	6.58	cps
Bismuth	209-1	12243429	12164781	12322244	12243484	0.64	cps
Bismuth	209-2	9912672	9877729	9905554	9898652	0.19	cps
Bromine	81-1	14851	15185	15625	15220	2.55	cps
Bromine	81-2	500	483	480	488	2.20	cps
Cadmium	108-1	107	113	153	124	20.28	cps
Cadmium	106-1	4751	4767	4741	4753	0.28	cps
Cadmium	111-1	652	788	676	706	10.24	cps
Calcium	43-1	9004433	8925600	8928734	8952922	0.50	cps
Calcium	44-1	146152954	145540358	142726771	144806695	1.26	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	63292	63088	63570	63317	0.38	cps
Cobalt	59-2	57911	58400	57982	58097	0.45	cps
Copper	63-2	113433	112797	112284	112838	0.51	cps
Dysprosium	156-1	31743	32842	32608	32397	1.79	cps
Dysprosium	156-2	27313	26999	27393	27235	0.76	cps
Erbium	164-1	29498	30229	29825	29851	1.23	cps
Erbium	164-2	21023	21149	21296	21156	0.65	cps
Gadolinium	160-1	32461	32832	32858	32717	0.68	cps
Gadolinium	160-2	25233	25700	25794	25576	1.18	cps
Holmium	165-1	20252130	20063578	20477913	20264540	1.02	cps
Holmium	165-2	14686936	14438831	14490568	14538778	0.90	cps
Indium	115-1	16097319	15908017	15988020	15997785	0.59	cps
Indium	115-2	6014250	5969897	5951880	5978675	0.54	cps
Iron	56-2	46240291	45801569	46109486	46050449	0.49	cps
Iron	57-2	1355796	1354016	1329718	1346510	1.08	cps
Iron	54-2	2535824	2498644	2515759	2516742	0.74	cps
Krypton	83-1	353	370	410	378	7.71	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4977-03A Instrumnet Name : P7
Client Sample ID : ME29F8A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:21:52 DataFile Name : 066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	314038	317822	321122	317661	1.12	cps
Lead	207-1	269673	270684	271008	270455	0.26	cps
Lead	208-1	1226978	1240372	1248043	1238464	0.86	cps
Lithium	6-1	1688376	1649774	1698115	1678755	1.52	cps
Magnesium	24-2	33444374	32865802	33156123	33155433	0.87	cps
Manganese	55-2	1967637	1954485	1936494	1952872	0.80	cps
Molybdenum	94-1	35242	35617	34958	35272	0.94	cps
Molybdenum	95-1	7982	8102	8176	8087	1.21	cps
Molybdenum	96-1	13930	14337	14110	14126	1.44	cps
Molybdenum	97-1	4707	4848	4864	4806	1.79	cps
Molybdenum	98-1	12979	12606	13123	12902	2.07	cps
Neodymium	150-1	50554	51457	50738	50916	0.94	cps
Neodymium	150-2	31078	31622	31094	31265	0.99	cps
Nickel	60-2	38723	38697	38476	38632	0.35	cps
Phosphorus	31-2	6508	6065	6545	6372	4.19	cps
Potassium	39-2	353322	355990	353516	354276	0.42	cps
Rhodium	103-1	14808787	14632056	14902934	14781259	0.93	cps
Rhodium	103-2	9220915	9006480	9151805	9126400	1.20	cps
Scandium	45-1	8548946	8340586	8379335	8422956	1.32	cps
Scandium	45-2	793576	795681	797594	795617	0.25	cps
Selenium	82-1	1041	926	880	949	8.70	cps
Selenium	77-2	103	137	130	123	14.30	cps
Selenium	78-2	570	690	607	622	9.88	cps
Silicon	28-1	8644762	7957804	8381495	8328020	4.16	cps
Silver	107-1	2007	1690	1360	1686	19.19	cps
Silver	109-1	1873	1403	1290	1522	20.32	cps
Sodium	23-2	226982	228440	229356	228259	0.52	cps
Strontium	86-1	887834	896522	896720	893692	0.57	cps
Strontium	88-1	7871014	7878278	7949488	7899593	0.55	cps
Sulfur	34-1	270617	274492	275157	273422	0.90	cps
Terbium	159-1	20700121	20468826	20927529	20698826	1.11	cps
Terbium	159-2	14423534	14238430	14550898	14404287	1.09	cps
Thallium	203-1	6338	4994	4237	5190	20.50	cps
Thallium	205-1	14898	11295	9984	12059	21.10	cps
Tin	118-1	4717	4944	4888	4850	2.43	cps
Titanium	47-1	106707	108810	109018	108178	1.18	cps

LB Number :LB133800

Operator :Jaswal

Lab Sample ID :P4977-03A

Instrumnet Name :P7

Client Sample ID :ME29F8A

Dilution Factor :1

Date & Time Acquired :2024-12-06 17:21:52

DataFile Name :066SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	70673	72969	73280	72307	1.97	cps
Vanadium	51-2	61840	61491	61374	61568	0.39	cps
Yttrium	89-1	19196599	19089201	19259085	19181628	0.45	cps
Yttrium	89-2	5435136	5391267	5314811	5380404	1.13	cps
Zinc	66-2	50141	49568	49779	49829	0.58	cps
Zirconium	90-1	82282	83590	83584	83152	0.91	cps
Zirconium	91-1	18402	18181	18508	18364	0.91	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08ARE Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:25:01 DataFile Name : 067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	990413	1014693	992130	999079	1.36	cps
Antimony	121-1	5131	5521	5318	5323	3.67	cps
Arsenic	75-2	115592	115051	114201	114948	0.61	cps
Barium	135-1	68862	69536	70394	69598	1.10	cps
Barium	137-1	119367	122192	121281	120946	1.19	cps
Beryllium	9-1	390	327	317	344	11.55	cps
Bismuth	209-1	12644705	12720045	12682084	12682278	0.30	cps
Bismuth	209-2	9994734	9948677	10016420	9986610	0.35	cps
Bromine	81-1	14884	14767	15315	14989	1.92	cps
Bromine	81-2	563	527	487	526	7.30	cps
Cadmium	108-1	103	147	163	138	22.48	cps
Cadmium	106-1	6021	5578	5161	5587	7.70	cps
Cadmium	111-1	648	602	621	624	3.69	cps
Calcium	43-1	8636339	8753278	8620292	8669970	0.84	cps
Calcium	44-1	140670635	140621221	141368971	140886942	0.30	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	56248	57536	57636	57140	1.35	cps
Cobalt	59-2	72892	72514	72280	72562	0.43	cps
Copper	63-2	124808	122288	122264	123120	1.19	cps
Dysprosium	156-1	41685	41749	42357	41930	0.88	cps
Dysprosium	156-2	34005	33864	33229	33699	1.23	cps
Erbium	164-1	39255	39700	40050	39668	1.01	cps
Erbium	164-2	28028	27774	27561	27788	0.84	cps
Gadolinium	160-1	42521	43129	42788	42813	0.71	cps
Gadolinium	160-2	32468	32845	32281	32531	0.88	cps
Holmium	165-1	20900692	20899358	21001497	20933849	0.28	cps
Holmium	165-2	14751464	14412429	14618175	14594023	1.17	cps
Indium	115-1	16665761	16312111	16248689	16408853	1.37	cps
Indium	115-2	6033192	6029322	5990819	6017778	0.39	cps
Iron	56-2	67906756	68820232	68726421	68484470	0.73	cps
Iron	57-2	1875769	1888233	1910877	1891626	0.94	cps
Iron	54-2	3712109	3791916	3724021	3742682	1.15	cps
Krypton	83-1	427	400	350	392	9.92	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08ARE Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:25:01 DataFile Name : 067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	326430	331356	329038	328941	0.75	cps
Lead	207-1	274855	282922	279585	279121	1.45	cps
Lead	208-1	1268460	1293346	1285795	1282534	0.99	cps
Lithium	6-1	1687026	1698748	1653631	1679802	1.39	cps
Magnesium	24-2	32343070	32752966	33161276	32752438	1.25	cps
Manganese	55-2	3221027	3263186	3227140	3237118	0.70	cps
Molybdenum	94-1	51333	55882	51557	52924	4.84	cps
Molybdenum	95-1	26898	27199	26714	26937	0.91	cps
Molybdenum	96-1	35607	36168	36171	35982	0.90	cps
Molybdenum	97-1	17197	16716	16650	16854	1.77	cps
Molybdenum	98-1	43488	42899	44417	43602	1.76	cps
Neodymium	150-1	61855	61734	62578	62056	0.74	cps
Neodymium	150-2	36818	37008	36935	36920	0.26	cps
Nickel	60-2	37998	37941	37884	37941	0.15	cps
Phosphorus	31-2	8149	8179	7999	8109	1.19	cps
Potassium	39-2	400556	401221	407964	403247	1.02	cps
Rhodium	103-1	15148511	14993676	15069190	15070459	0.51	cps
Rhodium	103-2	9317272	9247759	9156665	9240565	0.87	cps
Scandium	45-1	8531639	8443771	8310554	8428655	1.32	cps
Scandium	45-2	801429	797165	795315	797970	0.39	cps
Selenium	82-1	868	840	848	852	1.75	cps
Selenium	77-2	103	87	157	116	31.64	cps
Selenium	78-2	563	590	640	598	6.51	cps
Silicon	28-1	8819291	9761384	7563230	8714635	12.65	cps
Silver	107-1	920	917	910	916	0.56	cps
Silver	109-1	837	847	860	848	1.38	cps
Sodium	23-2	234967	234717	233531	234405	0.33	cps
Strontium	86-1	816619	821522	825891	821344	0.56	cps
Strontium	88-1	7212009	7206876	7224321	7214402	0.12	cps
Sulfur	34-1	402646	398254	394422	398441	1.03	cps
Terbium	159-1	21545049	21440874	21536861	21507595	0.27	cps
Terbium	159-2	14337666	14415553	14390429	14381216	0.28	cps
Thallium	203-1	3407	3507	3497	3471	1.59	cps
Thallium	205-1	8419	8613	8356	8463	1.58	cps
Tin	118-1	4831	4744	4798	4791	0.91	cps
Titanium	47-1	166988	160022	159859	162290	2.51	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08ARE

Instrumnet Name :

P7

Client Sample ID :

ME29E4A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:25:01

DataFile Name :

067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	83902	85344	87375	85540	2.04	cps
Vanadium	51-2	71950	71629	70638	71406	0.96	cps
Yttrium	89-1	19734728	19626874	19610980	19657527	0.34	cps
Yttrium	89-2	5443825	5374704	5422730	5413753	0.65	cps
Zinc	66-2	54168	54723	54690	54527	0.57	cps
Zirconium	90-1	107348	100884	98926	102386	4.30	cps
Zirconium	91-1	22137	22918	22614	22556	1.75	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08A Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:35:27 DataFile Name : 068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1010359	996443	1004423	1003742	0.70	cps
Antimony	121-1	5081	5094	5271	5149	2.06	cps
Arsenic	75-2	76412	76606	76064	76361	0.36	cps
Barium	135-1	68876	68183	69569	68876	1.01	cps
Barium	137-1	118391	118166	119594	118717	0.65	cps
Beryllium	9-1	410	340	350	367	10.33	cps
Bismuth	209-1	12433713	12141304	12419727	12331581	1.34	cps
Bismuth	209-2	9871090	9826989	9931403	9876494	0.53	cps
Bromine	81-1	14414	14818	15111	14781	2.37	cps
Bromine	81-2	500	517	537	518	3.55	cps
Cadmium	108-1	157	177	113	149	21.74	cps
Cadmium	106-1	5071	5248	4717	5012	5.39	cps
Cadmium	111-1	619	546	608	591	6.66	cps
Calcium	43-1	8834070	8766368	8792303	8797580	0.39	cps
Calcium	44-1	143791838	142524615	142525278	142947243	0.51	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	58058	56957	58279	57765	1.23	cps
Cobalt	59-2	72923	73402	72192	72839	0.84	cps
Copper	63-2	122335	123901	124315	123517	0.85	cps
Dysprosium	156-1	41347	40829	42327	41501	1.83	cps
Dysprosium	156-2	34118	34105	33918	34047	0.33	cps
Erbium	164-1	38376	39288	39255	38973	1.33	cps
Erbium	164-2	27480	27707	27821	27670	0.63	cps
Gadolinium	160-1	42554	42554	43581	42897	1.38	cps
Gadolinium	160-2	32488	32812	33012	32770	0.81	cps
Holmium	165-1	20481421	20459441	20524350	20488404	0.16	cps
Holmium	165-2	14414735	14337129	14413667	14388511	0.31	cps
Indium	115-1	15923235	16073452	15924752	15973813	0.54	cps
Indium	115-2	6024443	5876038	5914833	5938438	1.30	cps
Iron	56-2	69739351	68640824	68746327	69042167	0.88	cps
Iron	57-2	1907626	1914971	1902690	1908429	0.32	cps
Iron	54-2	3910076	3752910	3776870	3813285	2.22	cps
Krypton	83-1	363	493	473	443	15.79	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : P4976-08A Instrumnet Name : P7
Client Sample ID : ME29E4A Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:35:27 DataFile Name : 068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	266056	266454	267078	266529	0.19	cps
Lead	207-1	225545	224291	224141	224659	0.34	cps
Lead	208-1	1036178	1037504	1040780	1038154	0.23	cps
Lithium	6-1	1683127	1670452	1676034	1676537	0.38	cps
Magnesium	24-2	33395445	33343636	33439063	33392715	0.14	cps
Manganese	55-2	3320745	3261948	3218968	3267220	1.56	cps
Molybdenum	94-1	51321	51182	52079	51528	0.94	cps
Molybdenum	95-1	26380	27065	26898	26781	1.33	cps
Molybdenum	96-1	35717	36155	35814	35895	0.64	cps
Molybdenum	97-1	16940	16816	16473	16743	1.45	cps
Molybdenum	98-1	43307	42782	43916	43335	1.31	cps
Neodymium	150-1	61969	61962	62933	62288	0.90	cps
Neodymium	150-2	38011	37881	38726	38206	1.19	cps
Nickel	60-2	38235	38275	38409	38307	0.24	cps
Phosphorus	31-2	8236	8216	8026	8159	1.42	cps
Potassium	39-2	394056	396017	415083	401719	2.89	cps
Rhodium	103-1	14758538	14728624	14768047	14751736	0.14	cps
Rhodium	103-2	9118206	8950353	9043254	9037271	0.93	cps
Scandium	45-1	8426632	8379952	8291341	8365975	0.82	cps
Scandium	45-2	794551	791413	791060	792341	0.24	cps
Selenium	82-1	911	746	759	805	11.38	cps
Selenium	77-2	140	140	157	146	6.61	cps
Selenium	78-2	607	623	663	631	4.61	cps
Silicon	28-1	7372862	8023904	7340426	7579064	5.09	cps
Silver	107-1	827	817	823	822	0.62	cps
Silver	109-1	650	647	720	672	6.16	cps
Sodium	23-2	231422	230846	232215	231495	0.30	cps
Strontium	86-1	813964	822624	818702	818430	0.53	cps
Strontium	88-1	7161583	7158177	7145328	7155029	0.12	cps
Sulfur	34-1	408094	403386	402105	404528	0.78	cps
Terbium	159-1	21040943	20786777	20851746	20893155	0.63	cps
Terbium	159-2	14523746	14273806	14320711	14372754	0.92	cps
Thallium	203-1	3647	3547	3267	3487	5.65	cps
Thallium	205-1	8983	7602	7556	8047	10.08	cps
Tin	118-1	4814	4441	4684	4646	4.08	cps
Titanium	47-1	167220	160371	160205	162598	2.46	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

P4976-08A

Instrumnet Name :

P7

Client Sample ID :

ME29E4A

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:35:27

DataFile Name :

068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	82694	84050	85566	84104	1.71	cps
Vanadium	51-2	71016	70822	71854	71230	0.77	cps
Yttrium	89-1	19377959	19070291	19152356	19200202	0.83	cps
Yttrium	89-2	5415899	5316701	5337519	5356707	0.98	cps
Zinc	66-2	53522	52900	54700	53707	1.70	cps
Zirconium	90-1	95585	98130	97645	97120	1.39	cps
Zirconium	91-1	21422	21696	22330	21816	2.13	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV005 Instrumnet Name : P7
Client Sample ID : CCV005 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:47:03 DataFile Name : 071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	19640206	19987996	19929030	19852411	0.94	cps
Antimony	121-1	8302889	8446468	8377192	8375516	0.86	cps
Arsenic	75-2	444619	444934	443167	444240	0.21	cps
Barium	135-1	10421383	10660797	10473746	10518642	1.20	cps
Barium	137-1	18011046	18506807	18469404	18329086	1.51	cps
Beryllium	9-1	745971	766292	758685	756983	1.36	cps
Bismuth	209-1	11519816	11360792	11316046	11398885	0.94	cps
Bismuth	209-2	9104126	9136052	9079797	9106658	0.31	cps
Bromine	81-1	13723	14427	13910	14020	2.60	cps
Bromine	81-2	120	163	147	143	15.25	cps
Cadmium	108-1	168061	165647	167875	167194	0.80	cps
Cadmium	106-1	235553	240781	238893	238409	1.11	cps
Cadmium	111-1	2076514	2078226	2081033	2078591	0.11	cps
Calcium	43-1	10031973	10086775	10226380	10115042	0.99	cps
Calcium	44-1	162013014	164548994	164589364	163717124	0.90	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3341317	3377613	3397336	3372089	0.84	cps
Cobalt	59-2	5461203	5420261	5476655	5452706	0.53	cps
Copper	63-2	39233100	39248498	39255117	39245572	0.03	cps
Dysprosium	156-1	437	490	437	454	6.78	cps
Dysprosium	156-2	870	897	883	883	1.51	cps
Erbium	164-1	470	527	530	509	6.63	cps
Erbium	164-2	330	377	340	349	7.04	cps
Gadolinium	160-1	427	390	383	400	5.83	cps
Gadolinium	160-2	1093	1100	1087	1093	0.61	cps
Holmium	165-1	19873673	19768826	19643411	19761970	0.58	cps
Holmium	165-2	13906935	14041863	14053987	14000928	0.58	cps
Indium	115-1	15020558	14994392	14802702	14939217	0.80	cps
Indium	115-2	5586619	5585282	5613982	5595294	0.29	cps
Iron	56-2	786212122	774680495	779345908	780079508	0.74	cps
Iron	57-2	19573053	19399350	19750467	19574290	0.90	cps
Iron	54-2	42564331	42581138	42784761	42643410	0.29	cps
Krypton	83-1	323	297	300	307	4.74	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCV005 Instrumnet Name : P7
Client Sample ID : CCV005 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:47:03 DataFile Name : 071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	32525135	32806779	32368968	32566961	0.68	cps
Lead	207-1	28622846	28998784	28607882	28743171	0.77	cps
Lead	208-1	130191474	131646676	130055722	130631291	0.68	cps
Lithium	6-1	1629942	1589936	1588897	1602925	1.46	cps
Magnesium	24-2	149312861	147607028	148642604	148520831	0.58	cps
Manganese	55-2	26704665	26736438	26904939	26782014	0.40	cps
Molybdenum	94-1	29106181	29715230	29622478	29481297	1.11	cps
Molybdenum	95-1	41958335	42535934	42578683	42357651	0.82	cps
Molybdenum	96-1	46241138	47156189	46857624	46751650	1.00	cps
Molybdenum	97-1	26526829	26927215	26896807	26783617	0.83	cps
Molybdenum	98-1	68133776	69211581	69098002	68814453	0.86	cps
Neodymium	150-1	803	763	757	774	3.26	cps
Neodymium	150-2	253	257	230	247	5.89	cps
Nickel	60-2	1338614	1349691	1348793	1345699	0.46	cps
Phosphorus	31-2	181010	180714	180913	180879	0.08	cps
Potassium	39-2	96459149	96331242	95749409	96179933	0.39	cps
Rhodium	103-1	13643939	13533529	13604270	13593913	0.41	cps
Rhodium	103-2	8285381	8355385	8355543	8332103	0.49	cps
Scandium	45-1	7944999	7847097	7903335	7898477	0.62	cps
Scandium	45-2	756858	760278	755784	757640	0.31	cps
Selenium	82-1	127555	129688	128728	128657	0.83	cps
Selenium	77-2	14440	14958	15091	14830	2.32	cps
Selenium	78-2	49289	49031	48553	48957	0.76	cps
Silicon	28-1	27568803	27834511	27910610	27771308	0.65	cps
Silver	107-1	10838359	11082969	10901612	10940980	1.16	cps
Silver	109-1	10391396	10428485	10394224	10404702	0.20	cps
Sodium	23-2	241513250	240411950	240149750	240691650	0.30	cps
Strontium	86-1	2595931	2608731	2599991	2601551	0.25	cps
Strontium	88-1	22555883	22754449	22831227	22713853	0.63	cps
Sulfur	34-1	751746	755729	758396	755290	0.44	cps
Terbium	159-1	20312526	19886307	19879773	20026202	1.24	cps
Terbium	159-2	13822989	13835945	13801846	13820260	0.12	cps
Thallium	203-1	8169883	8238307	8109871	8172687	0.79	cps
Thallium	205-1	19472894	19614928	19334550	19474124	0.72	cps
Tin	118-1	7048159	6987298	6972508	7002655	0.57	cps
Titanium	47-1	9653324	9649385	9650745	9651152	0.02	cps

LB Number :

LB133800

Operator :

Jaswal

Lab Sample ID :

CCV005

Instrumnet Name :

P7

Client Sample ID :

CCV005

Dilution Factor :

1

Date & Time Acquired :

2024-12-06 17:47:03

DataFile Name :

071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	26385955	26736197	26596273	26572808	0.66	cps
Vanadium	51-2	2988451	3000290	3019528	3002756	0.52	cps
Yttrium	89-1	17779124	17772212	17643426	17731587	0.43	cps
Yttrium	89-2	4961236	5012050	5003720	4992335	0.55	cps
Zinc	66-2	6514019	6522088	6564547	6533552	0.42	cps
Zirconium	90-1	14237588	14487139	14388012	14370913	0.87	cps
Zirconium	91-1	3199270	3213445	3210713	3207809	0.23	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB005 Instrumnet Name : P7
Client Sample ID : CCB005 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:49:44 DataFile Name : 072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1860	1973	1843	1892	3.74	cps
Antimony	121-1	5848	4704	4464	5005	14.77	cps
Arsenic	75-2	20	53	30	34	49.66	cps
Barium	135-1	1750	1200	1040	1330	28.00	cps
Barium	137-1	3077	2087	2003	2389	25.00	cps
Beryllium	9-1	287	203	217	236	19.00	cps
Bismuth	209-1	12364201	12400310	12500103	12421538	0.57	cps
Bismuth	209-2	10128305	10064225	10139273	10110601	0.40	cps
Bromine	81-1	14010	14077	13867	13984	0.77	cps
Bromine	81-2	153	217	220	197	19.10	cps
Cadmium	108-1	63	33	40	46	34.58	cps
Cadmium	106-1	4871	4738	4931	4846	2.04	cps
Cadmium	111-1	447	334	317	366	19.33	cps
Calcium	43-1	2457	2027	1813	2099	15.61	cps
Calcium	44-1	47150	38686	35629	40488	14.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1793	1830	1587	1737	7.55	cps
Cobalt	59-2	823	750	730	768	6.40	cps
Copper	63-2	4928	4904	4714	4849	2.41	cps
Dysprosium	156-1	10	7	7	8	24.71	cps
Dysprosium	156-2	10	7	3	7	50.03	cps
Erbium	164-1	70	80	70	73	7.87	cps
Erbium	164-2	53	70	63	62	13.48	cps
Gadolinium	160-1	70	107	103	93	21.72	cps
Gadolinium	160-2	850	917	900	889	3.90	cps
Holmium	165-1	19338975	19756493	19778701	19624723	1.26	cps
Holmium	165-2	14081990	14076881	14307315	14155396	0.93	cps
Indium	115-1	15632534	15892006	15772561	15765700	0.82	cps
Indium	115-2	6061870	5966585	5938640	5989032	1.08	cps
Iron	56-2	91932	88166	84895	88331	3.99	cps
Iron	57-2	3080	3037	2907	3008	3.00	cps
Iron	54-2	7135	6825	6742	6901	3.01	cps
Krypton	83-1	360	313	337	337	6.93	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB005 Instrumnet Name : P7
Client Sample ID : CCB005 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:49:44 DataFile Name : 072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7175	5661	4864	5900	19.90	cps
Lead	207-1	6141	4928	4354	5141	17.75	cps
Lead	208-1	28435	22421	19449	23435	19.54	cps
Lithium	6-1	1655302	1645842	1675584	1658909	0.92	cps
Magnesium	24-2	12809	12218	11624	12217	4.85	cps
Manganese	55-2	2857	2884	2634	2791	4.92	cps
Molybdenum	94-1	6198	4864	4077	5046	21.24	cps
Molybdenum	95-1	7852	5971	4898	6240	23.97	cps
Molybdenum	96-1	8949	6155	5848	6984	24.47	cps
Molybdenum	97-1	5038	3794	3187	4006	23.55	cps
Molybdenum	98-1	13056	9527	8216	10266	24.39	cps
Neodymium	150-1	13	23	10	16	44.60	cps
Neodymium	150-2	10	7	0	6	91.64	cps
Nickel	60-2	600	613	553	589	5.35	cps
Phosphorus	31-2	350	283	310	314	10.67	cps
Potassium	39-2	73670	73141	72739	73183	0.64	cps
Rhodium	103-1	14865738	14932269	14733185	14843731	0.68	cps
Rhodium	103-2	9241583	9291498	9194124	9242402	0.53	cps
Scandium	45-1	7884627	7979922	8031648	7965399	0.94	cps
Scandium	45-2	766626	769125	772620	769457	0.39	cps
Selenium	82-1	577	621	540	579	7.03	cps
Selenium	77-2	3	3	13	7	86.65	cps
Selenium	78-2	520	527	460	502	7.31	cps
Silicon	28-1	749355	737365	733975	740232	1.09	cps
Silver	107-1	3550	2984	2440	2991	18.56	cps
Silver	109-1	3340	2857	2327	2841	17.84	cps
Sodium	23-2	51382	48747	47463	49197	4.06	cps
Strontium	86-1	1037	873	840	917	11.48	cps
Strontium	88-1	4204	3297	2790	3430	20.88	cps
Sulfur	34-1	231178	232272	231676	231709	0.24	cps
Terbium	159-1	20173933	20233926	20339321	20249060	0.41	cps
Terbium	159-2	14347919	14032484	14025086	14135163	1.30	cps
Thallium	203-1	4247	3574	3467	3763	11.24	cps
Thallium	205-1	10010	8726	8119	8952	10.79	cps
Tin	118-1	3547	3227	3000	3258	8.43	cps
Titanium	47-1	1830	1220	1093	1381	28.52	cps

LB Number : LB133800 Operator : Jaswal
Lab Sample ID : CCB005 Instrumnet Name : P7
Client Sample ID : CCB005 Dilution Factor : 1
Date & Time Acquired : 2024-12-06 17:49:44 DataFile Name : 072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	4321	2897	2490	3236	29.70	cps
Vanadium	51-2	280	260	263	268	4.00	cps
Yttrium	89-1	17936846	18032718	18179713	18049759	0.68	cps
Yttrium	89-2	5136124	5130207	5104352	5123561	0.33	cps
Zinc	66-2	1570	1447	1470	1496	4.38	cps
Zirconium	90-1	4878	3954	3594	4142	15.99	cps
Zirconium	91-1	1147	927	820	964	17.27	cps

Prep Standard - Chemical Standard Summary

Order ID : P4977
Test : Metals CLP MS FULL

Prepbatch ID : PB165402,
Sequence ID/Qc Batch ID: LB133800,

Standard ID :
MP83014,MP83016,MP83032,MP83033,MP83034,MP83035,MP83036,MP83037,MP83038,MP83039,MP83041,MP83042,MP83043,MP83044,MP83047,MP83048,MP83049,MP83050,MP83105,MP83122,MP83465,MP83531,

Chemical ID :
M5288,M5289,M5294,M5304,M5390,M5476,M5497,M5498,M5513,M5515,M5519,M5658,M5698,M5739,M5751,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5816,M5817,M5818,M5819,M5820,M5873,M5874,M5961,M5962,M5976,M5978,M5981,M5982,M5983,M5993,M5999,M6021,M6023,M6025,M6028,M6030,M6033,M6055,M6095,M6111,M6115,M6116,M6121,M6126,W3112,

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP83014	11/02/2024	12/13/2024	Sarabjit Jaswal	None	None	Mohan Bera 11/04/2024

FROM 25.00000ml of M6095 + 4925.00000ml of W3112 + 50.00000ml of M6115 = Final Quantity: 5000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2902	S8 ICPMS	MP83016	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIP ETTE_3 (A)	Mohan Bera 11/04/2024

FROM 1.00000ml of M6033 + 2.50000ml of M5288 + 2.50000ml of M5515 + 5.00000ml of M5498 + 5.00000ml of M5769 + 5.00000ml of M5806 + 79.00000ml of MP83014 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3947	S7(SFAM,6020,200.8)	MP83032	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.40000ml of M5513 + 1.00000ml of M5799 + 1.00000ml of M5818 + 1.00000ml of M5981 + 1.00000ml of M5983 + 1.90000ml of M6033 + 10.00000ml of M6115 + 2.00000ml of M5815 + 2.00000ml of M5817 + 2.50000ml of M5476 + 4.00000ml of M5390 + 4.90000ml of M5515 + 4.90000ml of M5519 + 5.00000ml of M6095 + 50.00000ml of M5304 + 832.80000ml of W3112 + 9.00000ml of M5698 + 9.00000ml of M5819 + 9.00000ml of M5976 + 9.00000ml of M5978 + 9.90000ml of M5498 + 9.90000ml of M5751 + 9.90000ml of M5769 + 9.90000ml of M5806 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3948	S6(SFAM,6020,200.8)	MP83033	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 48.50000ml of W3112 + 50.00000ml of MP83032 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3954	S4(SFAM,6020,200.8)	MP83034	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 86.00000ml of W3112 + 12.50000ml of MP83032 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3949	S5(SFAM,6020,200.8)	MP83035	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 73.50000ml of W3112 + 25.00000ml of MP83032 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3951	S3(SFAM, 6020,200.8)	MP83036	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 48.50000ml of W3112 + 10.00000ml of MP83033 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3955	S2CONC(SFAM,6020,200.8)	MP83037	11/02/2024	12/06/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.05000ml of M5698 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5961 + 0.05000ml of M5981 + 0.05000ml of M5982 + 0.05000ml of M5983 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.10000ml of M5658 + 0.10000ml of M5751 + 0.10000ml of M5802 + 0.10000ml of M6033 + 0.25000ml of M5515 + 0.25000ml of M5799 + 0.25000ml of M5819 + 0.25000ml of M5962 + 0.25000ml of M5976 + 0.25000ml of M5978 + 0.25000ml of M6021 + 0.50000ml of M5390 + 0.50000ml of M5818 + 1.25000ml of M5815 + 1.25000ml of M5817 + 2.50000ml of M5498 + 2.50000ml of M5519 + 2.50000ml of M5769 + 2.50000ml of M5806 + 2.50000ml of M6095 + 226.25000ml of W3112 + 5.00000ml of M6115 = Final Quantity: 250.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3956	S2(SFAM,6020,200.8)	MP83038	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 88.50000ml of W3112 + 0.50000ml of MP83037 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3957	S1(SFAM,6020,200.8)	MP83039	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.50000ml of M6095 + 1.00000ml of M6115 + 88.50000ml of W3112 + 10.00000ml of MP83038 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3958	ICV(SFAM)	MP83041	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 2.00000ml of M5294 + 98.00000ml of MP83014 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3961	CCV	MP83042	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.20000ml of M5513 + 0.50000ml of M5799 + 0.50000ml of M5818 + 0.50000ml of M5981 + 0.50000ml of M5983 + 1.00000ml of M5815 + 1.00000ml of M5817 + 1.25000ml of M5476 + 10.00000ml of M6115 + 12.45000ml of M5515 + 12.45000ml of M5519 + 2.00000ml of M5390 + 24.95000ml of M5498 + 24.95000ml of M5769 + 24.95000ml of M5806 + 25.00000ml of M5304 + 4.50000ml of M5698 + 4.50000ml of M5751 + 4.50000ml of M5819 + 4.95000ml of M6033 + 5.00000ml of M5976 + 5.00000ml of M5978 + 5.00000ml of M6095 + 823.45000ml of W3112 = Final Quantity: 1000.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1142	ICSA ICPMS	MP83043	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 10.00000ml of M5873 + 90.00000ml of MP83014 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1143	ICSAB ICPMS	MP83044	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP83014 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
870	ICPMS SPIKE SOL.B	MP83047	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.45000ml of M5962 + 5.00000ml of M5993 + 5.00000ml of M5999 + 39.55000ml of MP83014 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3962	MG 10PPM FOR TUNE	MP83048	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 0.01000ml of M5769 + 9.99000ml of MP83014 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3894	TUNE 200PPB	MP83049	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 2.00000ml of M6055 + 2.00000ml of MP83048 + 98.00000ml of MP83014 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3903	ISS 3PPM	MP83050	11/02/2024	12/13/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 11/04/2024

FROM 5.00000ml of M6115 + 75.00000ml of M5739 + 30.00000ml of MP83014 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
170	1:1HCL	MP83105	11/07/2024	12/06/2024	Janvi Patel	None	None	Sarabjit Jaswal
								11/07/2024

FROM 1000.00000ml of M6111 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
169	1:1HNO3	MP83122	11/07/2024	12/06/2024	Janvi Patel	None	None	Sarabjit Jaswal
								11/07/2024

FROM 1000.00000ml of M6116 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3964	CONC.LCSS SPIKE	MP83465	12/05/2024	12/06/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 12/10/2024

FROM 0.02500ml of M5476 + 0.25000ml of M5698 + 0.25000ml of M5798 + 0.25000ml of M5800 + 0.25000ml of M5801 + 0.25000ml of M5961 + 0.25000ml of M5981 + 0.25000ml of M5983 + 0.25000ml of M6023 + 0.25000ml of M6025 + 0.25000ml of M6028 + 0.25000ml of M6030 + 0.50000ml of M5289 + 0.50000ml of M5658 + 0.50000ml of M5751 + 0.50000ml of M5802 + 0.50000ml of M5978 + 1.25000ml of M5799 + 1.25000ml of M5819 + 1.25000ml of M5962 + 1.25000ml of M5976 + 1.25000ml of M6021 + 12.50000ml of M5497 + 12.50000ml of M5519 + 12.50000ml of M5768 + 12.50000ml of M5806 + 158.47500ml of W3112 + 2.50000ml of M5390 + 2.50000ml of M5818 + 2.50000ml of M6121 + 5.00000ml of M5515 + 5.00000ml of M6126 + 6.25000ml of M5816 + 6.25000ml of M5820 = Final Quantity: 250.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1028	PB 10PPM	MP83531	12/06/2024	12/13/2024	Sarabjit Jaswal	None	None	Mohan Bera 12/10/2024

FROM 0.10000ml of M5513 + 9.90000ml of MP83014 = Final Quantity: 10.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

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	01/01/2025	12/13/2023 / bin	02/20/2020 / bin	M5294

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	08/07/2024 / jaswal	04/01/2022 / jaswal	M5304

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 #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/09/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

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 #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	122023	12/20/2026	03/06/2024 / jaswal	02/09/2024 / jaswal	M5818

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	CP-MS ICSA-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

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	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961

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 #
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	CGT11-1 / 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.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	031524	03/15/2027	07/01/2024 / Jaswal	06/11/2024 / Jaswal	M5982

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-SPK-4 / SOIL/WATER SPIKE SOLN 4, 125mL	V2-MEB742036	03/12/2029	10/04/2024 / Jaswal	02/22/2024 / Jaswal	M5993

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 / TI, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	06/12/2027	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	01/25/2019 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055

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)		03/17/2029	10/26/2024 / Janvi	10/21/2024 / Janvi	M6095

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22F0762009	05/09/2027	11/04/2024 / Eman	09/29/2024 / Janvi	M6111

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	05/04/2025	11/02/2024 / Janvi	09/29/2024 / Eman	M6115

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	05/03/2025	11/04/2024 / Janvi	09/29/2024 / Eman	M6116

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	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



Refine your results. Redefine your industry.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

Certificate of Analysis

R: 02/22/24 M5991 M5992 M5993 M5994 M5995

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).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: CLPP-SPK-4
Lot Number: V2-MEB742036
Matrix: 3% (v/v) HNO₃
Value / Analyte(s):
100 µg/mL ea:
Antimony,
50 µg/mL ea:
Cadmium, Thallium,
40 µg/mL ea:
Arsenic,
20 µg/mL ea:
Lead,
10 µg/mL ea:
Selenium

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	50.00 ± 0.22 µg/mL	Lead, Pb	20.00 ± 0.09 µg/mL
Selenium, Se	10.00 ± 0.04 µg/mL	Thallium, Tl	50.00 ± 0.22 µg/mL

Density: 1.016 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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (z) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (z) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; Info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 12, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57048
070124
Cadmium (Cd)

Solvent: 24002546 Nitric Acid

Lot #

2% 40.0 Nitric Acid
(mL)

Expiration Date: 070127

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test Number: 6UTB

SE-05 Balance Uncertainty

Weight shown below was diluted to (mL): 2000.07 0.100 Flask Uncertainty

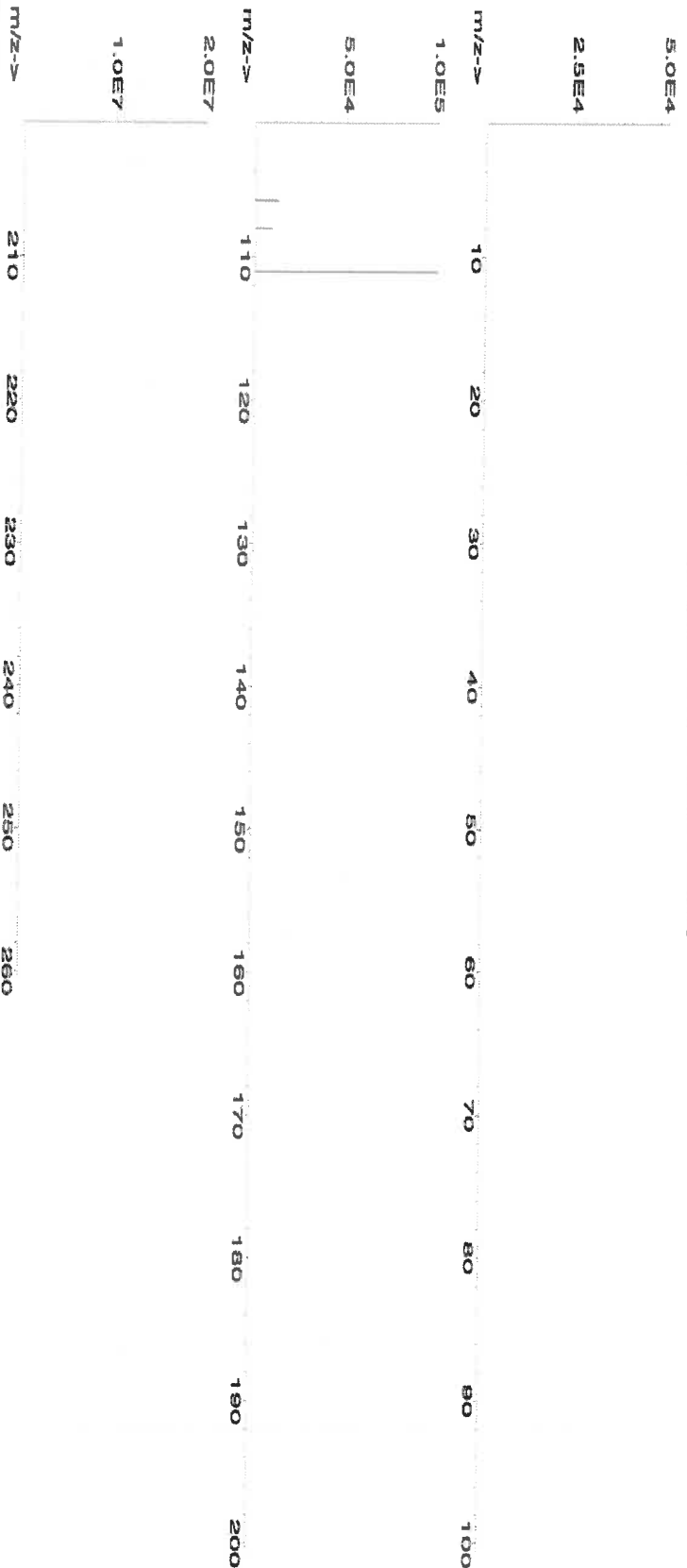
<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
	070124
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas
	070124

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	(Solvent Safety Info. On Attached pg.)	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	SRM

1. Cadmium nitrate tetrahydrate (Cd)	INO24	CDM09221A1	1000	99.999	0.10	36.5	5.4797	5.4804	1000.1	2.0	10022-68-1	0.01 mg/m3	or-rat 60.2mg/kg	3108

[1] Spectrum No.1 [12.514 sec]:\$8148.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.2	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	Ba	<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	Cd	<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	Pr	<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 certified (+/-) 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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: 57182 Lot #
Lot Number: 110923 Solvent: 24002546 Nitric Acid
Description: Lead (Pb)

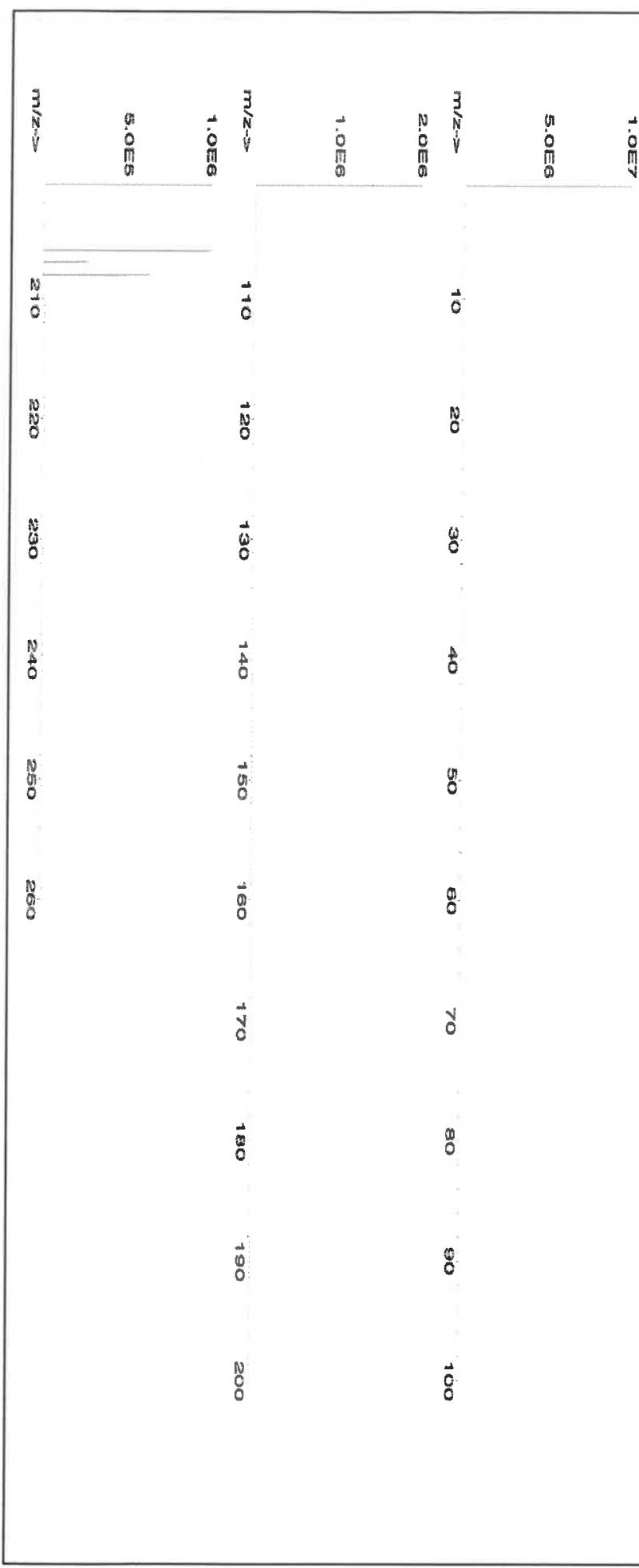
Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas
110923	

Compound	SDS Information									
	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)

1. Lead(II) nitrate (Pb) IN029 PED12016A1 10000 99.999 0.10 62.5 32.0006 32.0040 10001.1 20.0 10099-74-8 0.05 mg/m3 Inverse rat 83 mg/kg 3128

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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

Physical Characterization:

(T)= Target analyte

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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **58119**
Lot Number: **071122**
Description: **Potassium (K)**

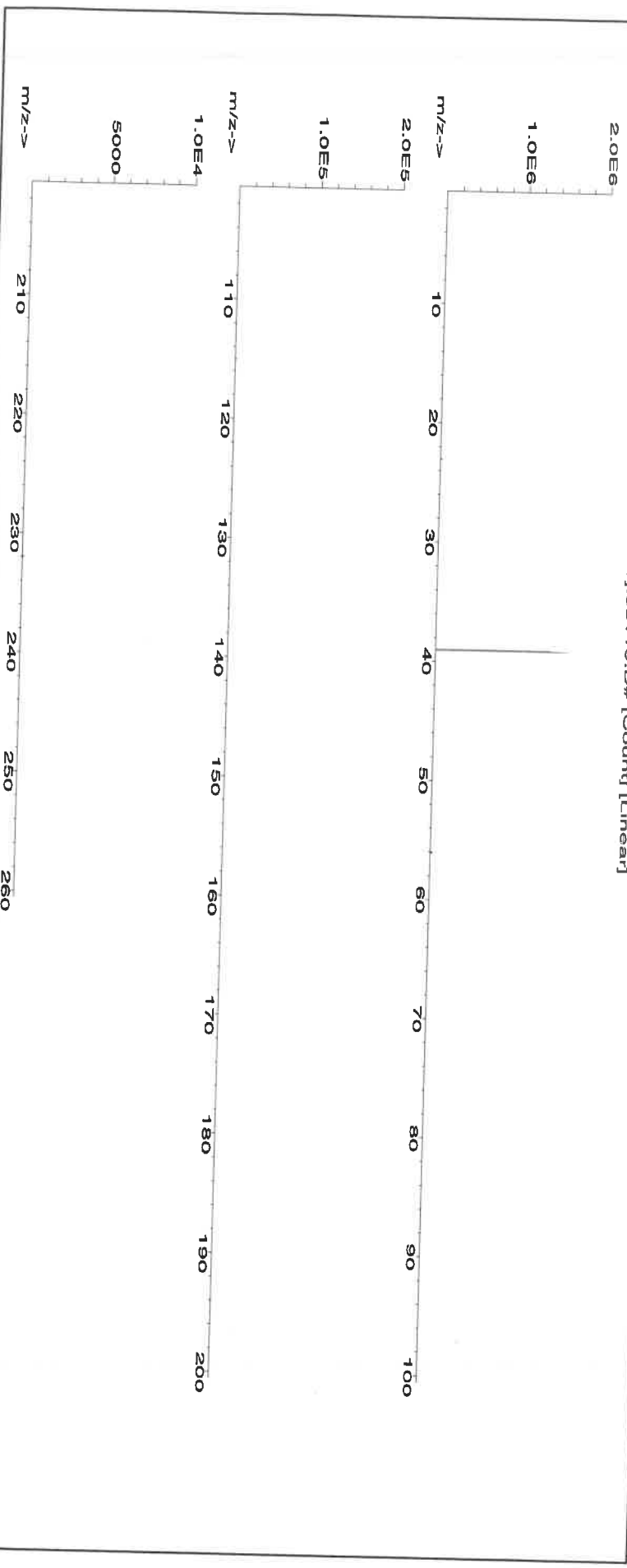
Solvent: 20510011 Nitric Acid
Lot #

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): **10000**
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry
	071122
Reviewed By:	Pedro L. Rentas
	071122

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034 KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	10000.2	20.0	7757-79-1	5 mg/m3	or-rat 3015 mg/kg	3141a

[1] Spectrum No. 1 [35.763 sec]:58119.D# [Count] [Linear]





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	Pt	<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	<0.02	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 certified (+/-) 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).



M5289 R: 07/12/22
Certified Reference Material CRM

(34)



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58113
Lot Number: 070622
Description: Aluminum (Al)

Lot #
Solvent: 20370011 Nitric Acid

Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 40.0 Nitric Acid
(mL)

Weight shown below was diluted to (mL): 2000.02 0.058 Balance Uncertainty
Flask Uncertainty

Formulated By:	Lawrence Barry
070622	
Reviewed By:	Pedro L. Renteria
070622	

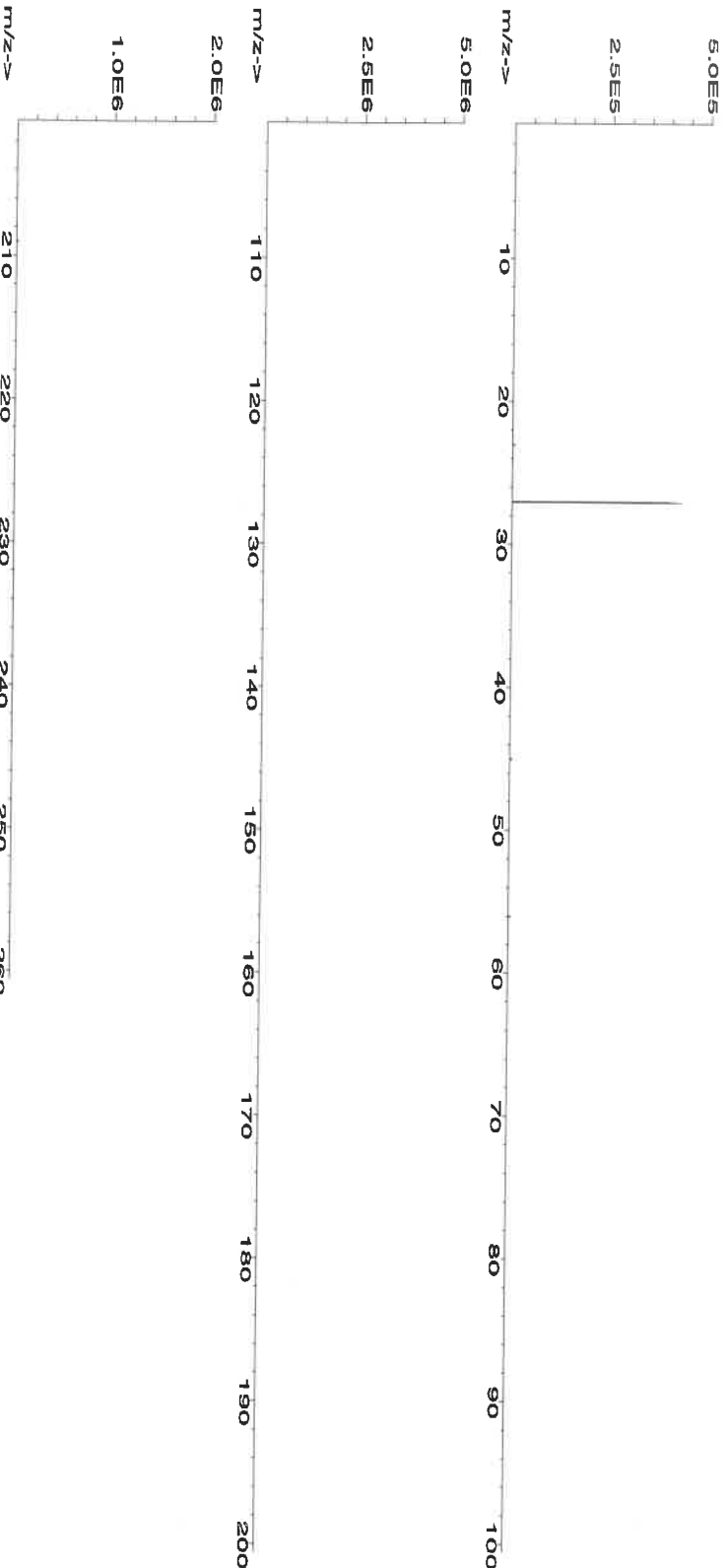
Compound

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)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

SDS Information

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 or-tal 3671 mg/kg 3101a

[1] Spectrum No. 1 [15.014 sec]:58113.D# [Count] [Linear]





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	Pt	<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	Ru	<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	Sr	<0.02	S	<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	Ta	<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	Ti	<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 certified (+/-) 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).



R: 4/20/21

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

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
M15292
M15293
M15294
M15295

(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.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

- 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



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).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020CAL-1
Lot Number: S2-MEB711244
Matrix: 5% (v/v) HNO₃
tr. HF
Value / Analyte(s): 20 µg/mL ea:
Silver, Aluminum,
Arsenic, Barium,
Beryllium, Calcium,
Cadmium, Cobalt,
Chromium, Copper,
Iron, Potassium,
Magnesium, Manganese,
Sodium, Nickel,
Lead, Antimony,
Selenium, Thallium,
Vanadium, Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	20.01 ± 0.08 µg/mL	Antimony, Sb	20.01 ± 0.12 µg/mL
Arsenic, As	20.01 ± 0.18 µg/mL	Barium, Ba	20.01 ± 0.11 µg/mL
Beryllium, Be	20.01 ± 0.14 µg/mL	Cadmium, Cd	20.01 ± 0.11 µg/mL
Calcium, Ca	20.01 ± 0.10 µg/mL	Chromium, Cr	20.01 ± 0.16 µg/mL
Cobalt, Co	20.01 ± 0.11 µg/mL	Copper, Cu	20.01 ± 0.10 µg/mL
Iron, Fe	20.01 ± 0.09 µg/mL	Lead, Pb	20.01 ± 0.11 µg/mL
Magnesium, Mg	19.99 ± 0.10 µg/mL	Manganese, Mn	20.01 ± 0.10 µg/mL
Nickel, Ni	20.01 ± 0.11 µg/mL	Potassium, K	20.01 ± 0.10 µg/mL
Selenium, Se	20.02 ± 0.14 µg/mL	Silver, Ag	20.02 ± 0.09 µg/mL
Sodium, Na	20.01 ± 0.10 µg/mL	Thallium, Tl	20.01 ± 0.13 µg/mL
Vanadium, V	20.01 ± 0.11 µg/mL	Zinc, Zn	20.01 ± 0.11 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
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
Fe	Calculated		See Sec. 4.2
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
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = 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.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

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

October 20, 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

- **October 20, 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





R-09/18/22 **(RTH)**

Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: 57056
Lot Number: 072122
Description: Barium (Ba)

Solvent: 20510011 Nitric Acid

Lot #

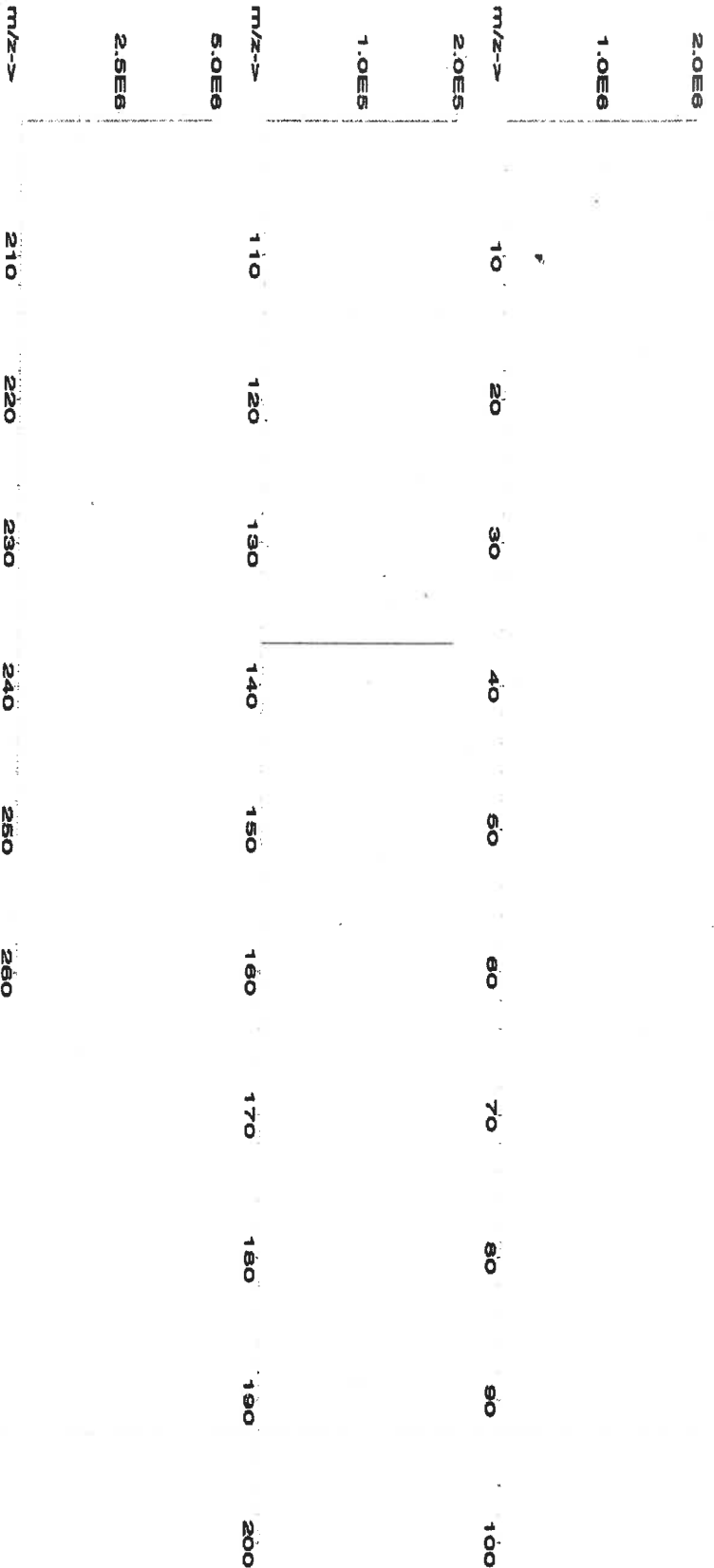
Expiration Date: 072125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

2% 40.0 (mL) Nitric Acid

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	<i>Pedro L. Renteria</i>
	072122

SDS Information									
Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
1. Barium nitrate (Ba)	IN023 BA022019A1	1000	99.899	0.10	52.3	3.82417	3.82426	1000.0	2.0
									10022-31-8
									0.5 mg/m3
									or 1st 355 mg/kg 31044

[1] Spectrum No. 1 [12.514 sec]:58156.D# [Count] [Linear]





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	<0.02	Tb	<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
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Tl	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.02	Th	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<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
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
																W	<0.02
																U	<0.02
																V	<0.02
																Yb	<0.02
																Y	<0.02
																Zn	<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 certified (+/-) 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).



15497-15498 R203/17/23(2)

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58120
031523
Calcium (Ca)

Solvent: 21110221 Nitric Acid

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

031526
Ambient (20 °C)
10000
6UTB
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

2%
60.0
Nitric Acid
(mL)

Weight shown below was diluted to (mL): 3000.41

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito 031523
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas 031523

SDS Information

(Solvent Safety Info. On Attached pg.)
NIST
SRM

Expanded
Uncertainty

Actual
Conc. (µg/mL)

Actual
Weight (g)

Target
Weight (g)

Assay
(%)

Purity
(%)

Nominal
Conc. (µg/mL)

Lot
Number

RM#

Compound

10000

99.999

0.10

39.9

75.1990

75.2093

10001.4

20.0

471-34-1

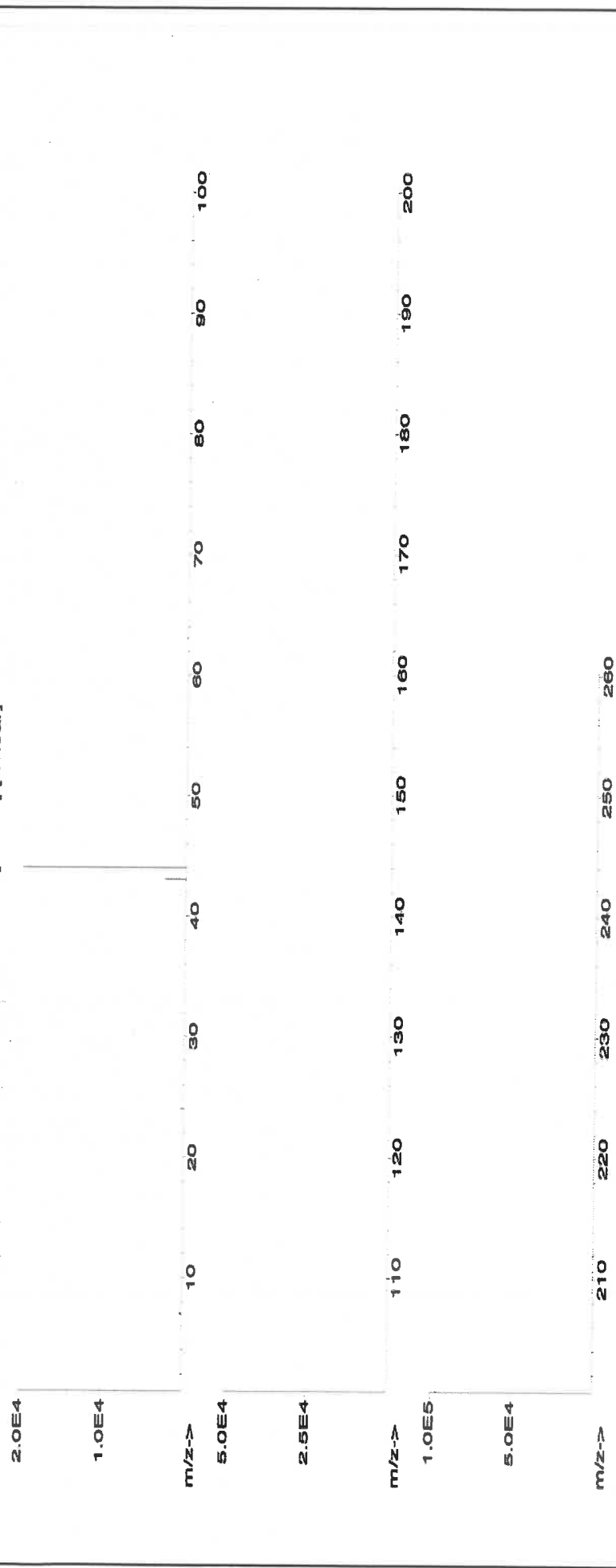
5 mg/m3

or:rat >2000mg/kg

3109a

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 or:rat >2000mg/kg 3109a

[1] Spectrum No.1 [12.514 sec]:58120.D# [Count] [Linear]





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	Pt	<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	Tc	<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	Ti	<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	<0.2	Fe	<0.02	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	Tl	<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 certified (+/-) 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).



15497-15498 R: 03/17/23 (2)

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58120
031523
Calcium (Ca)

Solvent: 21110221 Nitric Acid

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

031526
Ambient (20 °C)
10000
6UTB
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

2%
60.0
Nitric Acid
(mL)

Weight shown below was diluted to (mL): 3000.41

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito 031523
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas 031523

SDS Information

(Solvent Safety Info. On Attached pg.)
NIST
SRM

Expanded
Uncertainty

Actual
Conc. (µg/mL)

Actual
Weight (g)

Target
Weight (g)

Assay
(%)

Purity
(%)

Nominal
Conc. (µg/mL)

Lot
Number

RM#

Compound

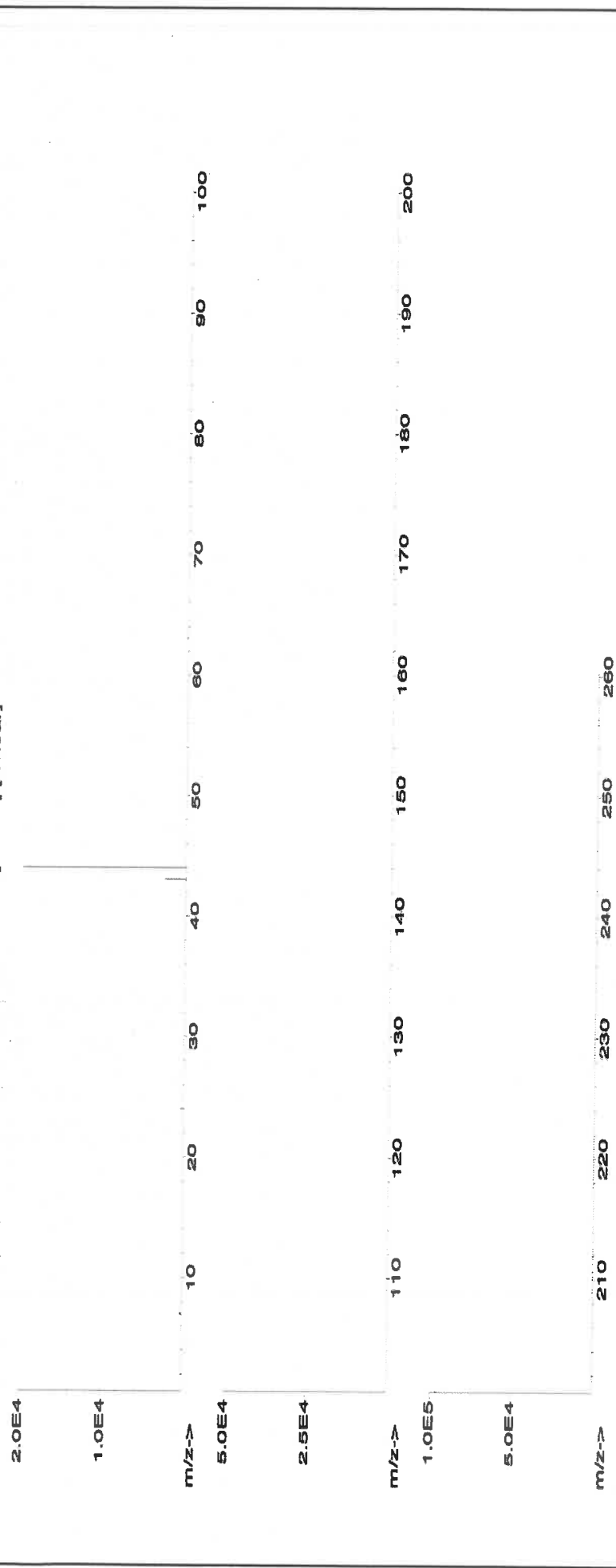
Expanded
Uncertainty

Actual
Conc. (µg/mL)

Actual
Weight (g)

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	or:rat >2000mg/kg	3109a

[1] Spectrum No.1 [12.514 sec]:58120.D# [Count] [Linear]





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	Pt	<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	Tc	<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	Ti	<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	<0.2	Fe	<0.02	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	Tl	<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 certified (+/-) 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).

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57182
061522
Lead (Pb)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

061525
Ambient (20 °C)
10000
6UTB

Weight shown below was diluted to (mL):

2000.02

5E-05 Balance Uncertainty

0.058 Flask Uncertainty

Solvent:

20510011 Nitric Acid

2% 40.0 Nitric Acid

(mL)

Lot #

20510011

Nitric Acid

Formulated By:

Giovanni Esposito

Reviewed By:

Pedro L. Rentas

061522

061522

Expanded

Uncertainty

+/- (µg/mL)

20.0

10098-74-8

0.05 mg/m3

intrins-raf 88 mg/kg

3128

NIST

SRM

LD50

OSHA PEL (TWA)

(Solvent Safety Info. On Attached pg.)

SDS Information

Compound

RM#

Lot

Number

Nominal

Conc. (µg/mL)

Purity (%)

Uncertainty

Assay

Target

Weight (g)

Actual

Weight (g)

Conc. (µg/mL)

Actual

Conc. (µg/mL)

Expanded

Uncertainty

+/- (µg/mL)

20.0

10098-74-8

0.05 mg/m3

intrins-raf 88 mg/kg

3128

NIST

SRM

LD50

OSHA PEL (TWA)

(Solvent Safety Info. On Attached pg.)

SDS Information

1. Lead(II) nitrate (Pb)

IN029

PBD12201641

10000

99.999

0.10

82.5

32.0006

32.0041

10001.1

20.0

10098-74-8

0.05 mg/m3

intrins-raf 88 mg/kg

3128

NIST

SRM

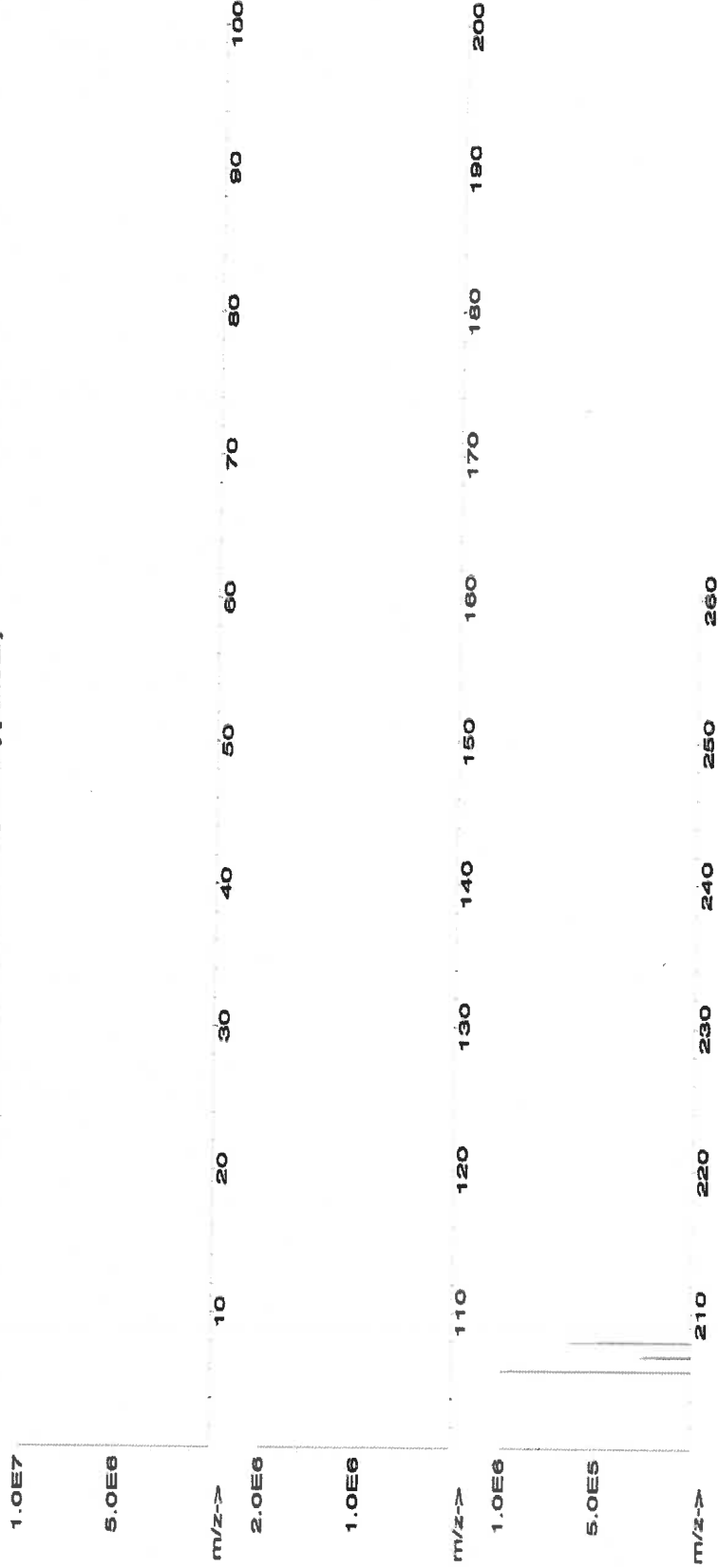
LD50

OSHA PEL (TWA)

(Solvent Safety Info. On Attached pg.)

SDS Information

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





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	<0.02	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	Pr	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

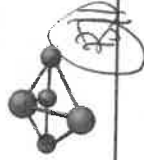
Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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- * 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).



Certified Reference Material CRM



MS54-MS55 R:03/17/22

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58126
092122
Iron (Fe)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

092125
Ambient (20 °C)
10000
6UTB

Weight shown below was diluted to (mL):

5000.1

Solvent: 20510011 Nitric Acid

7.0% 350.0 Nitric Acid
(mL)

5E-05 Balance Uncertainty
0.12 Flask Uncertainty

Formulated By:	Giovanni Esposito	092122
Reviewed By:	Pedro L. Rentas	092122

Expanded
Uncertainty

SDS Information

(Solvent Safety Info. On Attached pg.)

LD50

CAS#

OSHA PEL (TWA)

SRM

5 mg/m3

7439-88-6

20.0

10001.5

50.0111

50.0034

100.0

0.10

99.985

10000

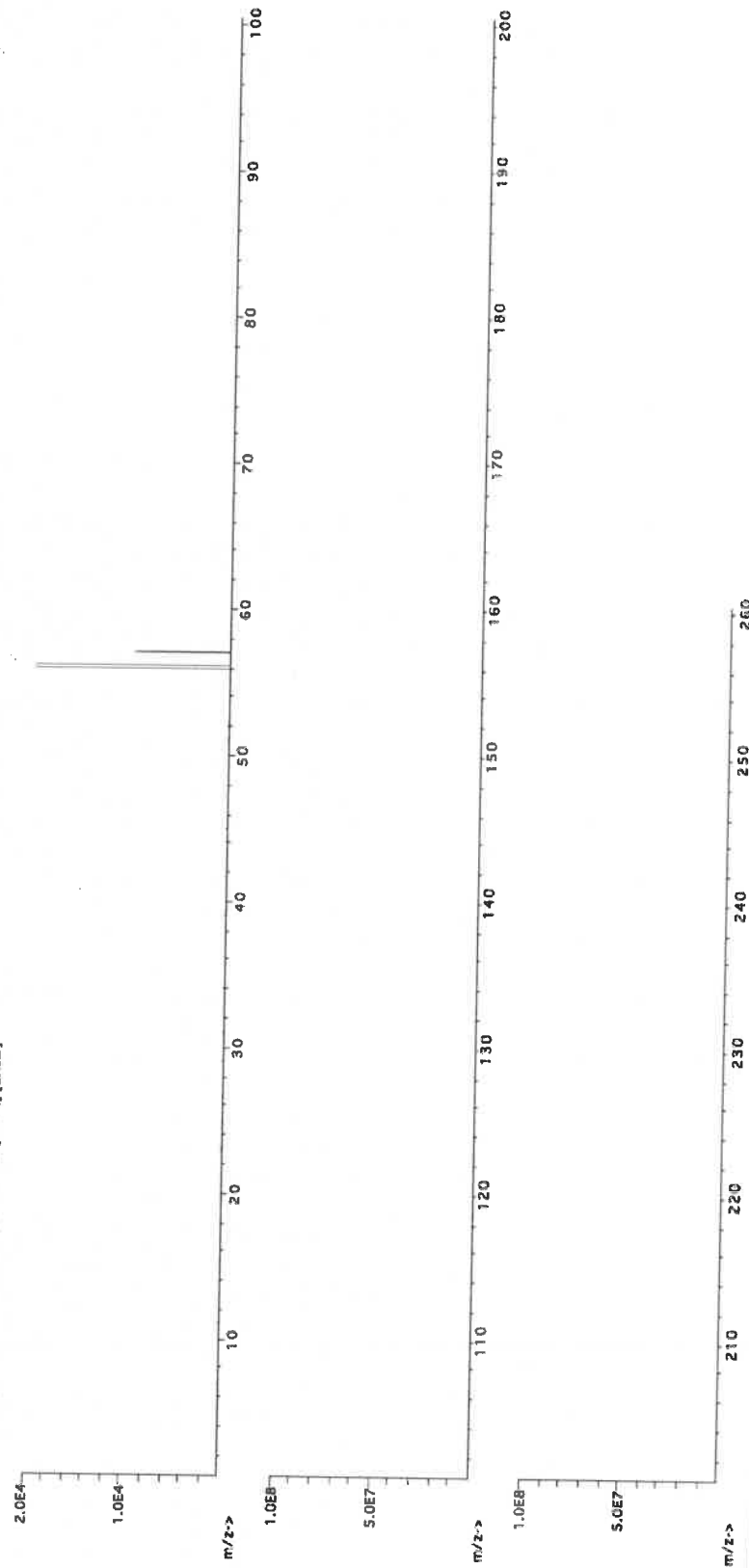
2224912-500

IN346

Iron (Fe)

ori-rat 7500mg/kg 3126a

[1] Spectrum No.1 [30.763 sec]:58126.D# [Count] [Linear]





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	La	<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	<0.02	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	<0.05	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:

Ben P. Galt

- * 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 certified (+/-) 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).



Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: **58119**
Lot Number: **120822**
Description: **Potassium (K)**

Solvent: 20510011 Nitric Acid

Lot #

Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 60.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 3000.4

5E-05 Balance Uncertainty
0.06 Flask Uncertainty

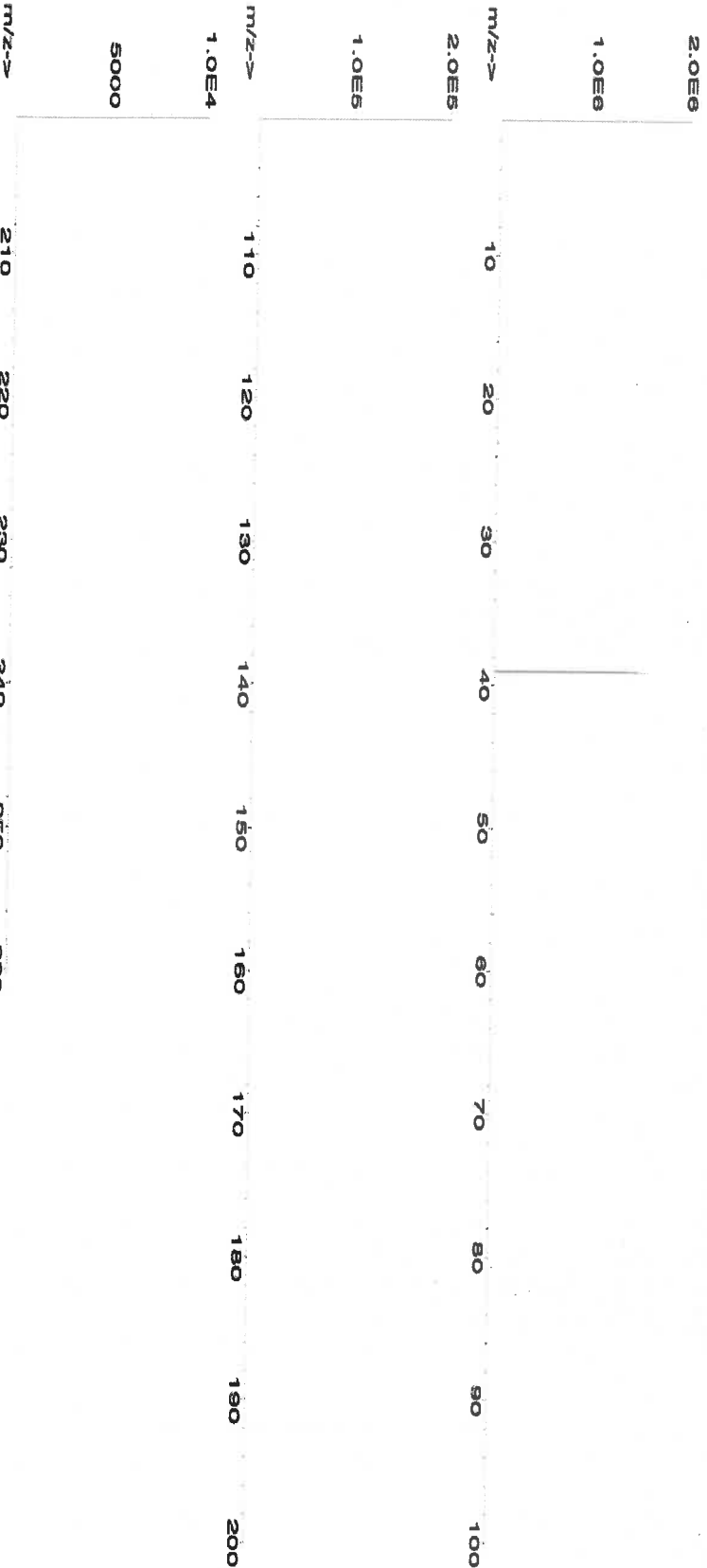
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Rentas
	120822

Compound

SDS Information											
Expanded										(Solvent Safety Info. On Attached pg.)	
Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Uncertainty	CAS#	OSHA PEL (TWA)	LD50
RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)		SRM
											NIST

1. Potassium nitrate (K) IN034 KD022021A1 10000 99.989 0.10 37.6 79.7990 79.8075 10001.1 20.0 7757-79-1 5 mg/m3 or/air 3015 mg/kg 3141a

[1] Spectrum No.1 [35.763 sec]:58119.D# [Count] [Linear]





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	Pt	<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	Pb	<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			Nd	<0.02	K		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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 58024
Lot Number: 060523
Description: Chromium (Cr)

Lot #
21110221
Solvent: Nitric Acid

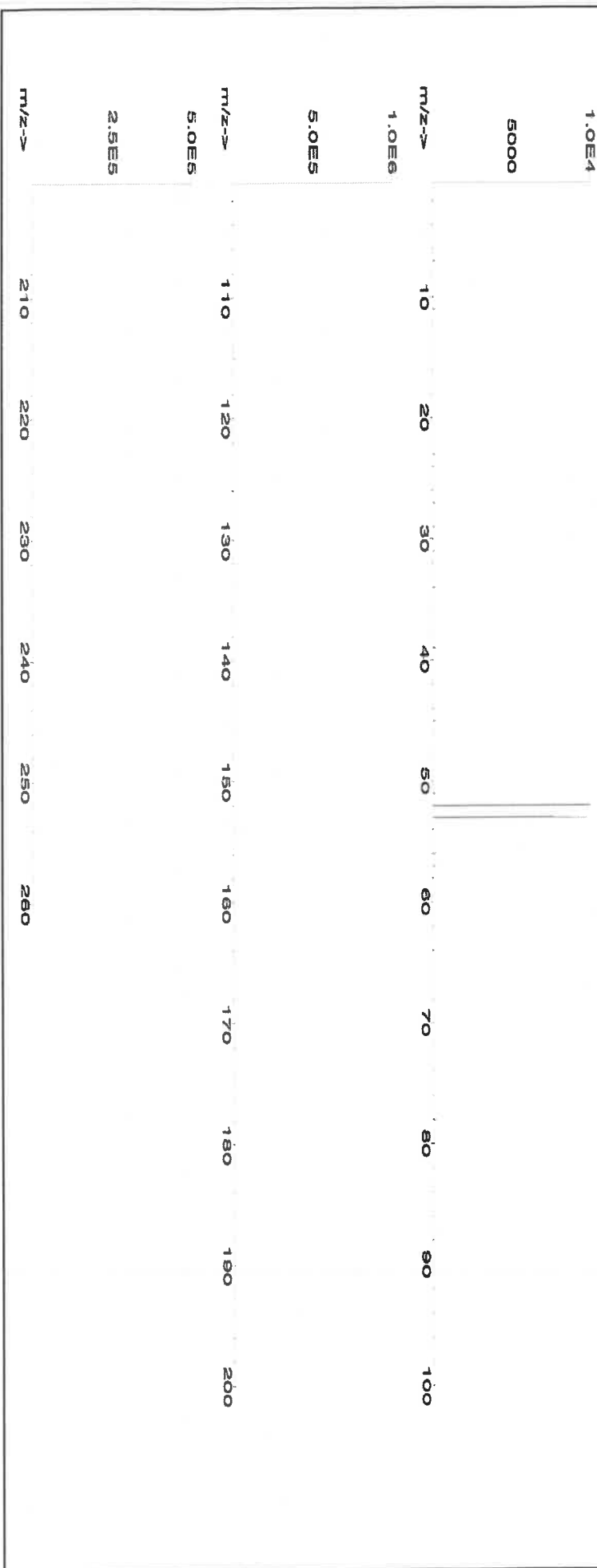
Formulated By:	Lawrence Barry
	060523
Reviewed By:	Pedro L. Ruelas
	060523

Expiration Date: 060526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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 or rat 3250 mg/kg 3112a

[1] Spectrum No.1 [31.393 sec]:57024.D# [Count] [Linear]





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:

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 certified (+/-) 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).



M5648 R:10123123



CERTIFIED WEIGHT REPORT:

Part Number: **58025**
Lot Number: **102623**
Description: **Manganese (Mn)**

Lot # **2402546**
Solvent: **Nitric Acid**

Expiration Date: **102626**

2.0% **60.0** **Nitric Acid**
(mL)

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6UTB**

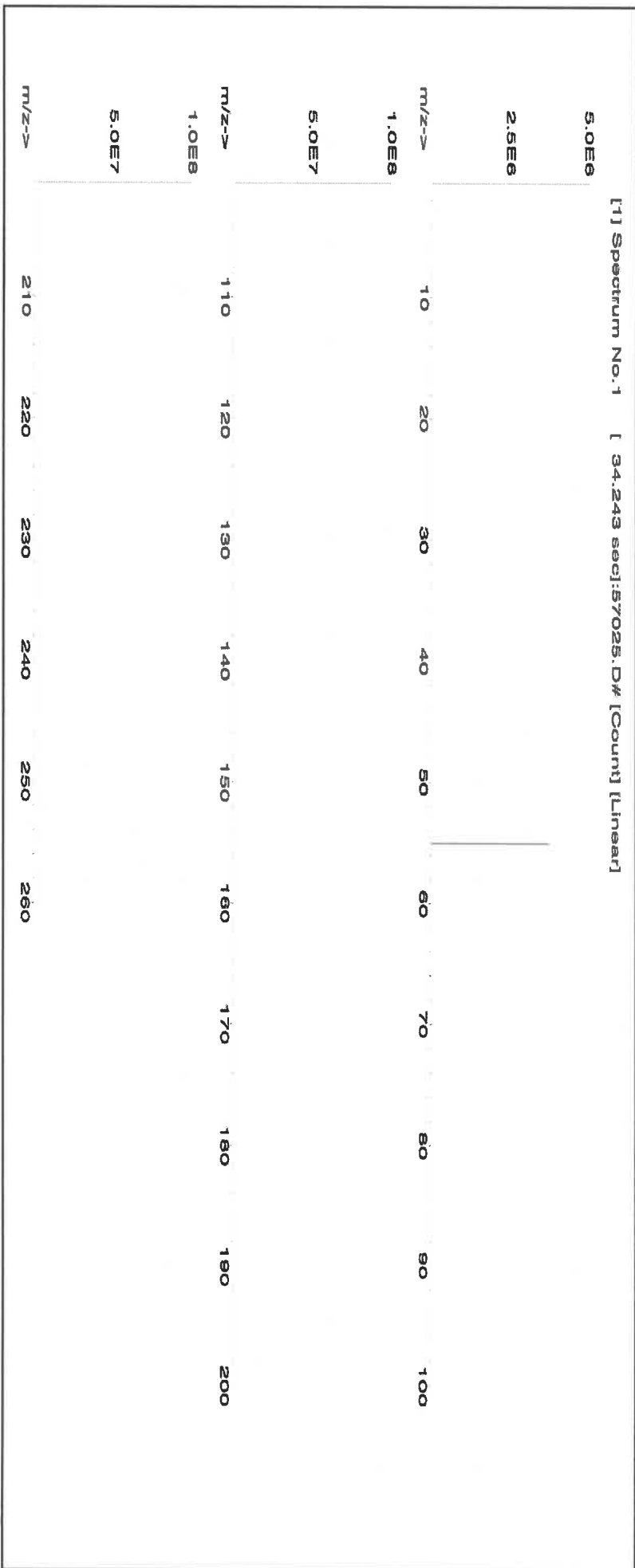
5E-05 **Balance Uncertainty**

Volume shown below was diluted to (mL): **3000.41** **0.058** **Flask Uncertainty**

Formulated By:		Benson Chan	102623
Reviewed By:		Pedro L. Ruelas	102623

SDS Information									
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)
1. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	1000.0	2.1
						5 mg/m3	or-rel >300mg/kg	3132	

[1] Spectrum No.1 [34.243 sec]:57025.D# [Count] [Linear]





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	Pt	<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).
- * Standards are certified (+/-) 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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: **58029**
Lot Number: **071723**
Description: **Copper (Cu)**

Lot #: **2110221**
Solvent: **Nitric Acid**

2.0%

40.0 (mL)
Nitric Acid

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Ruelas	071723

Expiration Date: **071726**
Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6UTB**

Volume shown below was diluted to (mL): **2000.02**
Balance Uncertainty: **5E-05**
Flask Uncertainty: **0.058**

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Copper(II) nitrate trihydrate (Cu) 58129 022723 0.1000 200.0 0.084 1000 10000.5 1000.0 2.2 10031-43-3 1 mg/m3 or rat 794 mg/kg 3114

[1] Spectrum No. 1 [33.422 sec]:58029.D# [Count] [Linear]

1.0E6	m/z-->	10	20	30	40	50	60	70	80	90	100
5.0E5	m/z-->	110	120	130	140	150	160	170	180	190	200
2.5E7	m/z-->	210	220	230	240	250	260				



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	Bu	<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	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	La	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	Pb	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02			Nd	<0.02	K	<0.2	Sc	<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 certified (+/-) 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).



M5768 M5769
Certified Reference Material CRM
R: 1/13/24



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Solvent: 24002546 Nitric Acid

Lot #

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

2% 40.0 (mL) Nitric Acid

M5768 M5769

R: 1/13/24

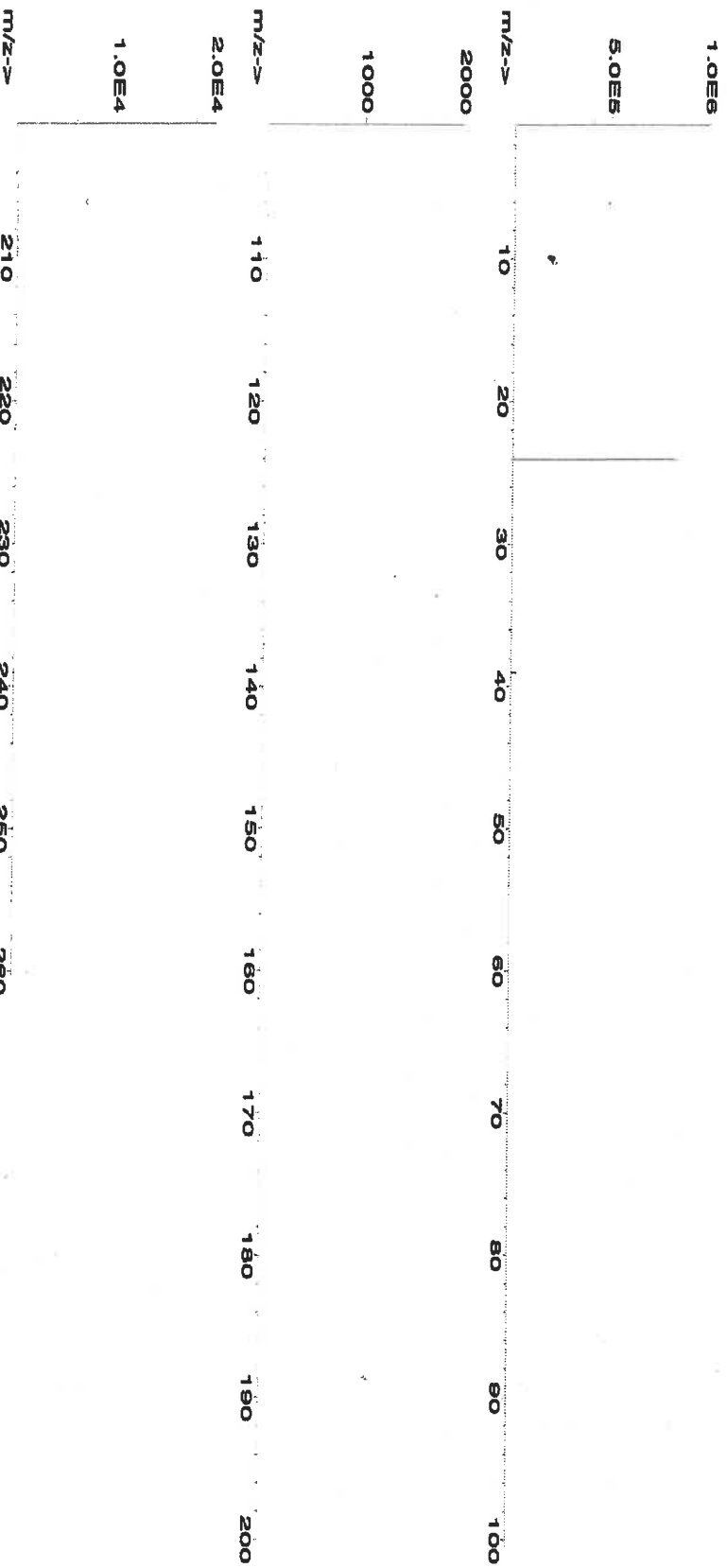
Formulated By: <i>Lawrence Barry</i>		091823
Reviewed By: <i>Pedro L. Rentas</i>		091823

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	Uncertainty +/- (µg/mL)	(Solvent Safety Info. On Attached pg.)	SRM

1. Magnesium nitrate hexahydrate (Mg) IN030 M500222A1 10000 99.999 0.10 8.51 234.9118 234.9126 10000.0 20.0 13446-18-9 NA or-rat 5440 mg/kg 3131a

[1] Spectrum No. 1 [19.923 sec]: 58112.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



M5768 M5769
Certified Reference Material CRM
R: 1/13/24



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Solvent: 24002546 Nitric Acid

Lot #

Expiration Date: 091826

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 10000

NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 2000.02

2% 40.0 (mL) Nitric Acid

M5768 M5769
BP R: 1/13/24

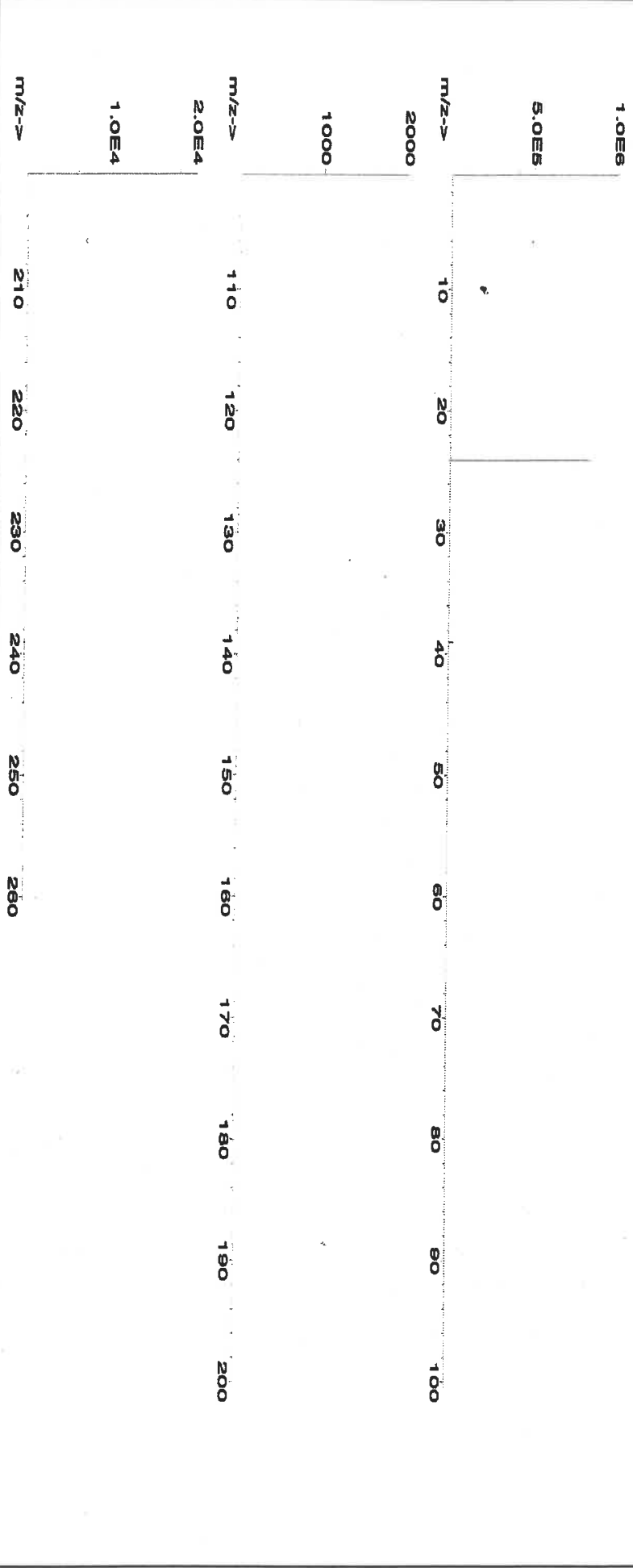
Formulated By: <i>Lawrence Barry</i>		091823
Reviewed By: <i>Pedro L. Rentas</i>		091823

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	Uncertainty +/- (µg/mL)	(Solvent Safety Info. On Attached pg.)	SRM

1. Magnesium nitrate hexahydrate (Mg) IN030 M500222A1 10000 99.999 0.10 8.51 234.9118 234.9126 10000.0 20.0 13446-18-9 NA or-rat 5440 mg/kg 3131a

[1] Spectrum No. 1 [19.923 sec]: 58112.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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- * Standards are certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57004
Lot Number: 102523
Description: Beryllium (Be)

Lot # 24002546
Solvent: Nitric Acid

Expiration Date:

102526

2.0%

40.0 (mL)

Nitric Acid

Recommended Storage:
Nominal Concentration (µg/mL):

Ambient (20 °C)

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL):

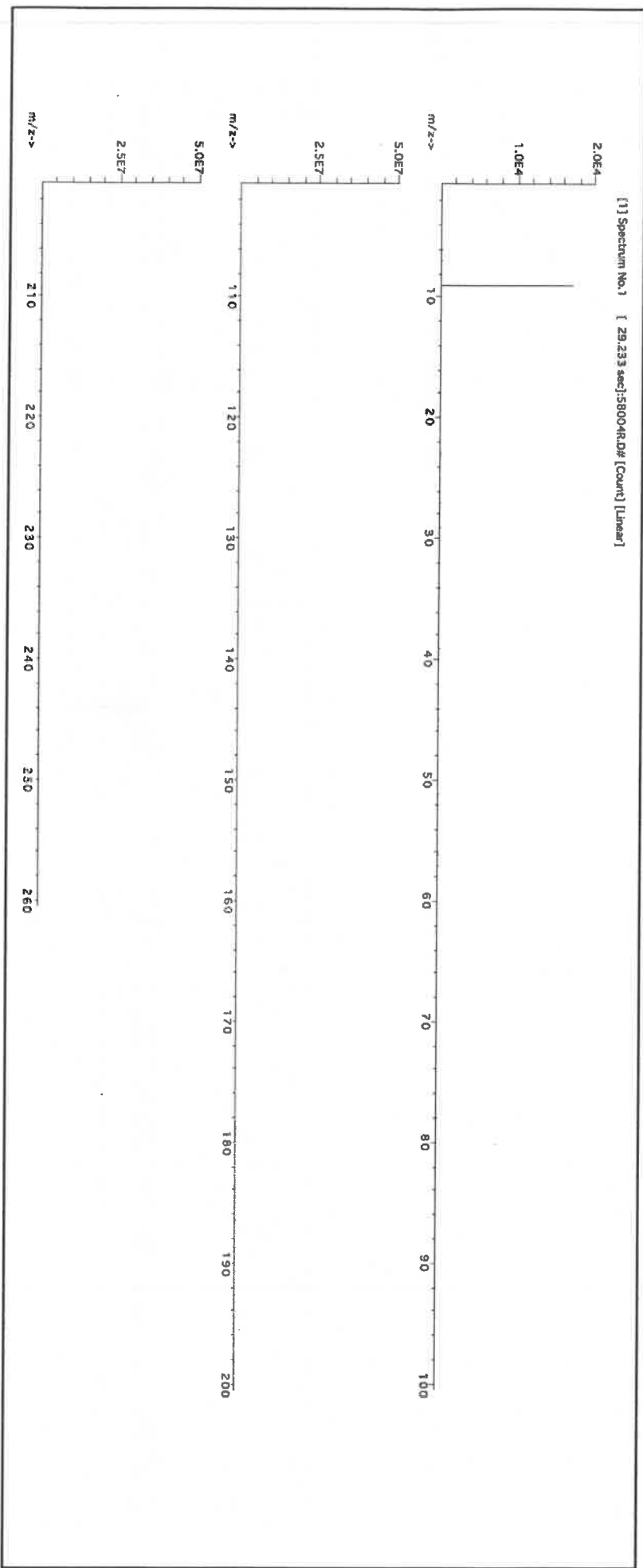
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

SDS Information

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)	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	0.2µg/m3	intrinsc-rat 3.16mg/kg	NA





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	Tc	<0.02	U	<0.02
As	<0.02	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Ti	<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	<0.02	Hg	<0.2	P	<0.2	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	Ta	<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	Tl	<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 certified (+/-) 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).



Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

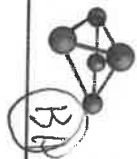
Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

Solvents: 21110221 Nitric Acid
22D0562008 Hydrochloric acid

Lot #

R-02509124

M599



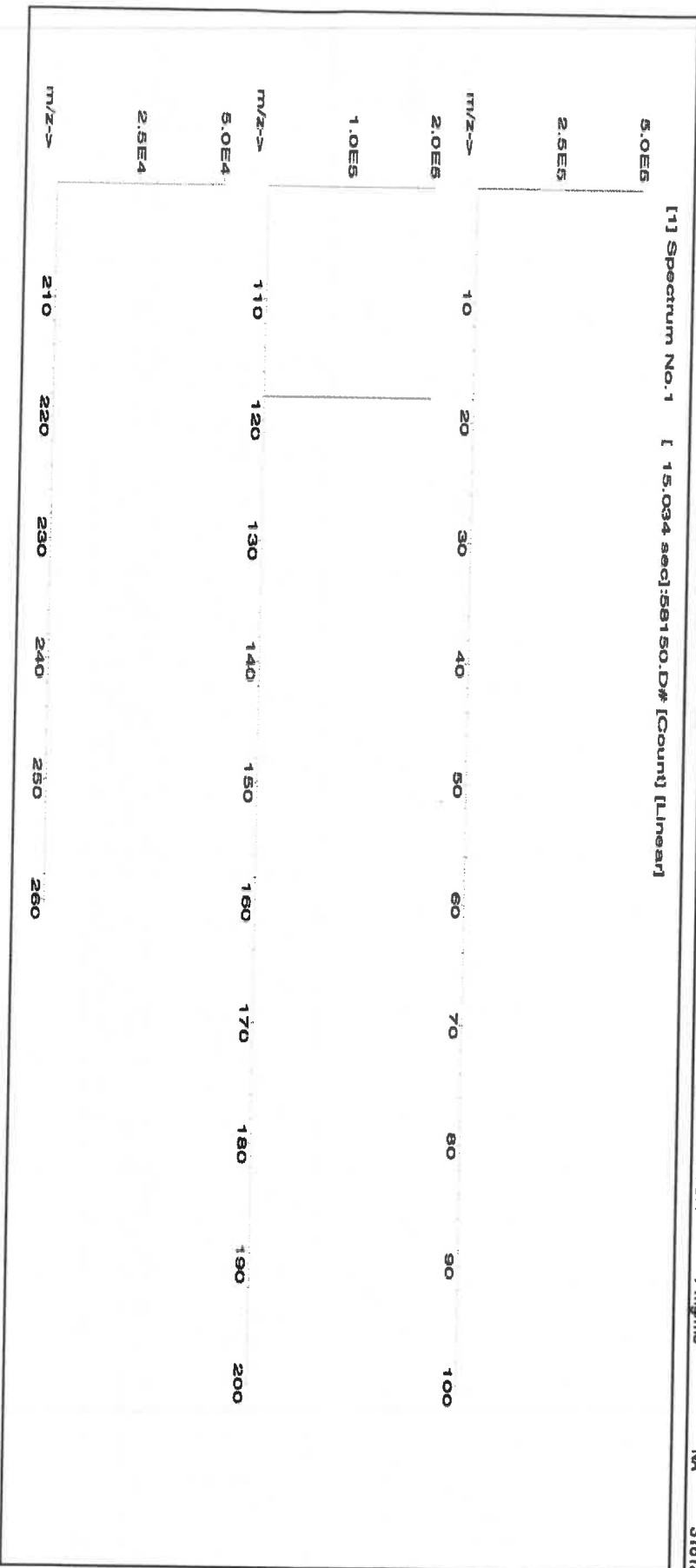
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By: Benson Chan	
071123	
Reviewed By: Pedro L. Rientas	
071123	

SDS Information												
Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	Solvent Safety Info. On Attached pg.		
										RM#	Number	Conc. (µg/mL)
NIST												

1. Ammonium hexafluoroantimonate(V) (Sn) IN010 SMD042023A1 1000 99.999 0.10 44.2 1.13107 1.13286 1001.6 2.0 16919-24-7 7 mg/m3 NA 3161a

[1] Spectrum No. 1 [15.034 sec]:56150.D# [Count] [Linear]





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	Ti	<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	Ta	<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 certified (+/-) 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).



R: 02/09/24 115800 (54)

CERTIFIED WEIGHT REPORT:

Part Number: 57027
Lot Number: 091923
Description: Cobalt (Co)

Expiration Date: 091926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Lot # 24002546
Solvent: Nitric Acid

2.0% Nitric Acid
40.0 (mL)

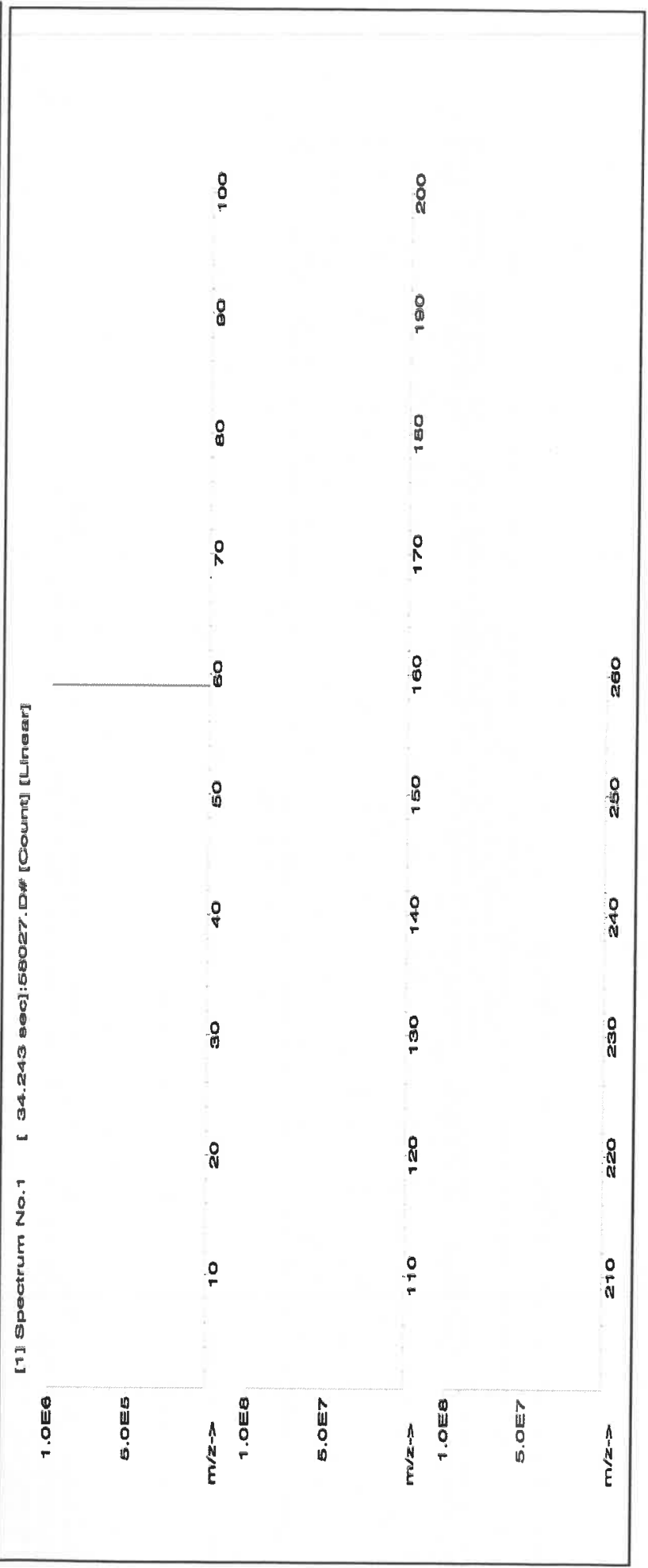
Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas

SDS Information

Expanded Uncertainty +/- (µg/mL)
Final Conc. (µg/mL)
Initial Conc. (µg/mL)
Nominal Conc. (µg/mL)
Pipette (mL)
Initial Vol. (mL)
Dilution Factor
Part Number
Lot Number

(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	<0.02	Os	<0.01	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	<0.2	Na	<0.02	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	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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57033
111323
Arsenic (As)

Lot #
Solvent:

24002546
Nitric Acid

2.0%

80.0

Nitric Acid

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):

111326
Ambient (20 °C)
1000

NIST Test Number:
Volume shown below was diluted to (mL):

6UTB
4000.0

5E-05
Balance Uncertainty
0.06
Flask Uncertainty

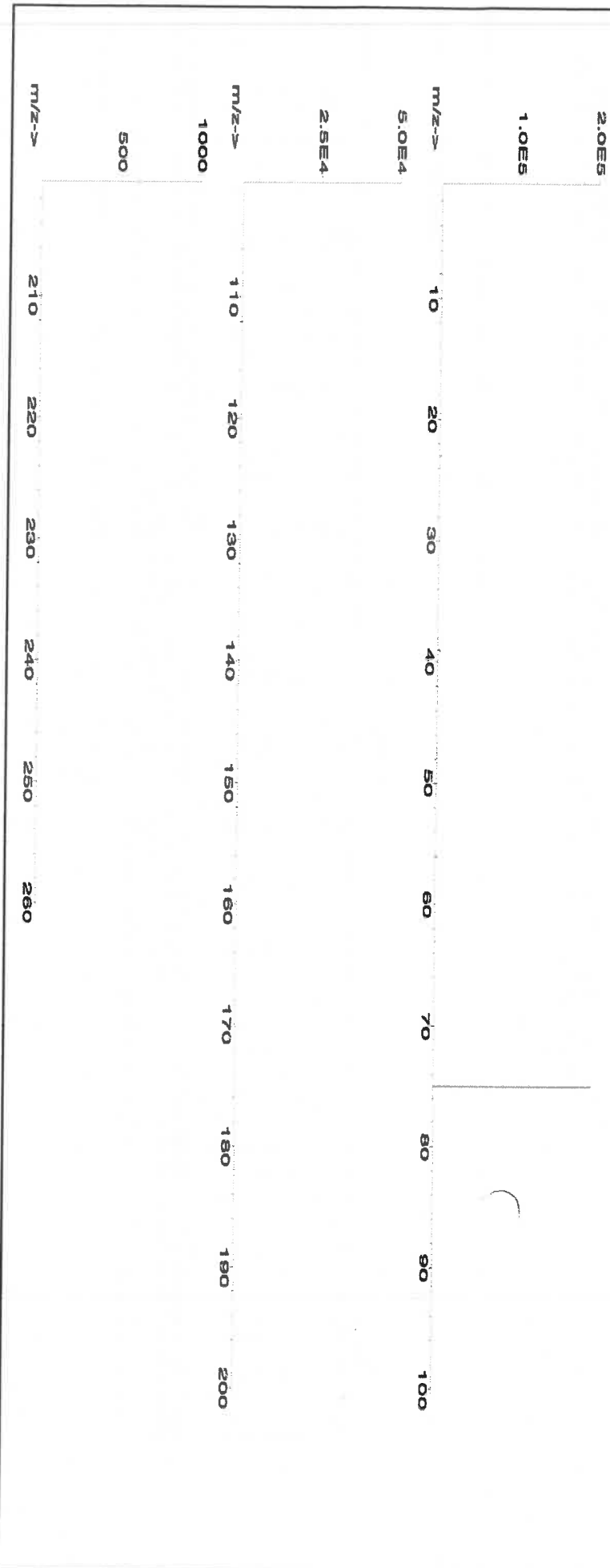
Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rendas	111323

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)	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	or-rat 500 mg/kg	3103a

[1] Spectrum No.1 [34.433 sec]:57033.D# [Count] [Linear]





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	Pt	<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	Tl	<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	Su	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Solvent: 21110221 Nitric Acid

Lot #

R102109124 M5815

Expiration Date: 041726
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

2% 40.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 2000.02 0.058 Balance Uncertainty Flask Uncertainty

Formulated By: Lawrence Barry	041723
Reviewed By: Pedro L. Rentas	041723

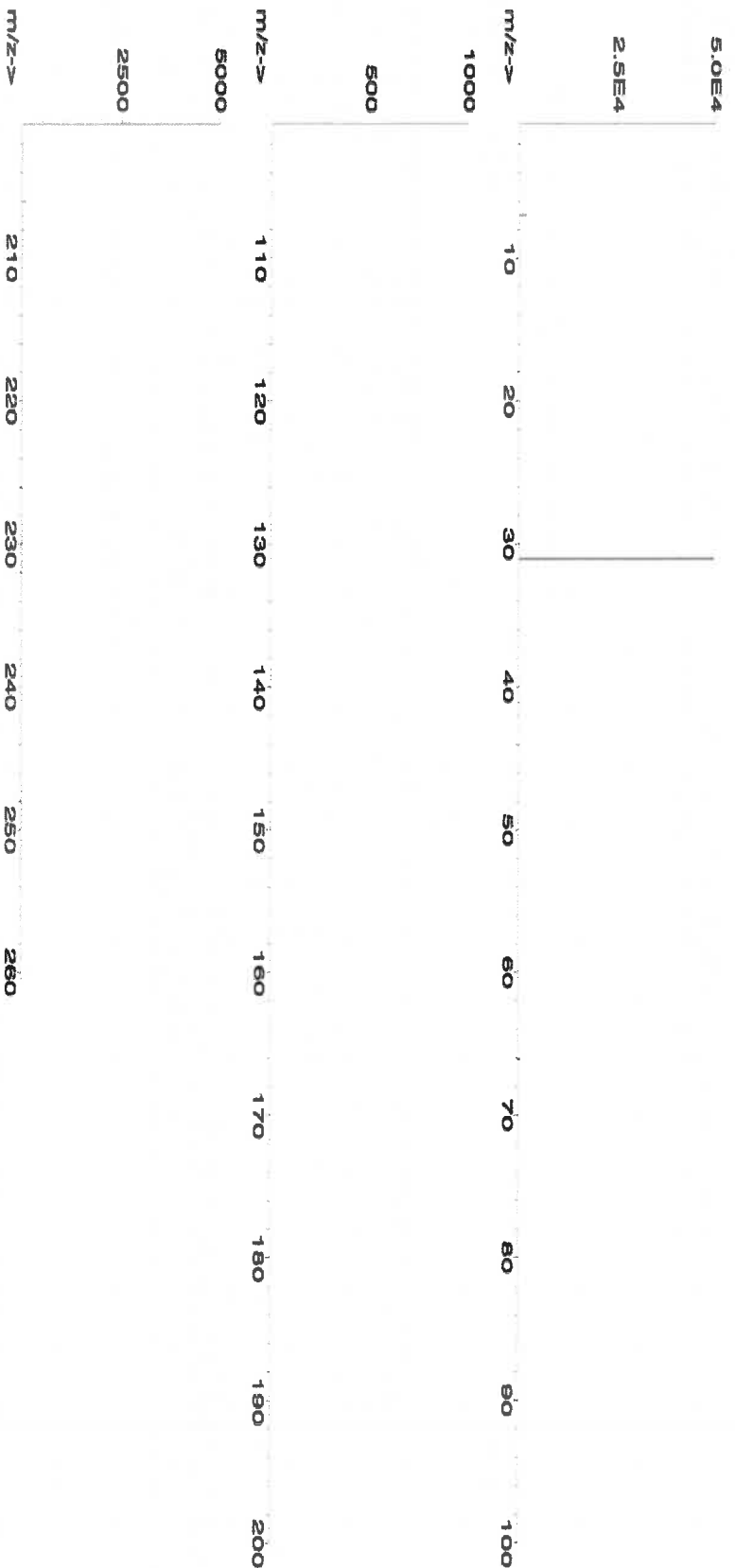
Compound									
RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)

1. Ammonium dihydrogen phosphate (P) IN008 PVR2019A1 10000 99.999 0.10 27.5 72.7287 72.7289 10000.0 20.0 7722-76-1 5 mg/m3 or-hal->2000mg/kg 3186

SDS Information

Expanded Uncertainty (Solvent Safety Info. On Attached pg.)
CAS# OSHA PEL (TWA) **LD50** **NIST SRM**

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





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	Pt	<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:

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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57016
122923
Sulfur (S)

Lot #

ASTM Type 1 Water

Formulated By:	Benson Chan
122923	
Reviewed By:	Pedro L. Rentas
122923	

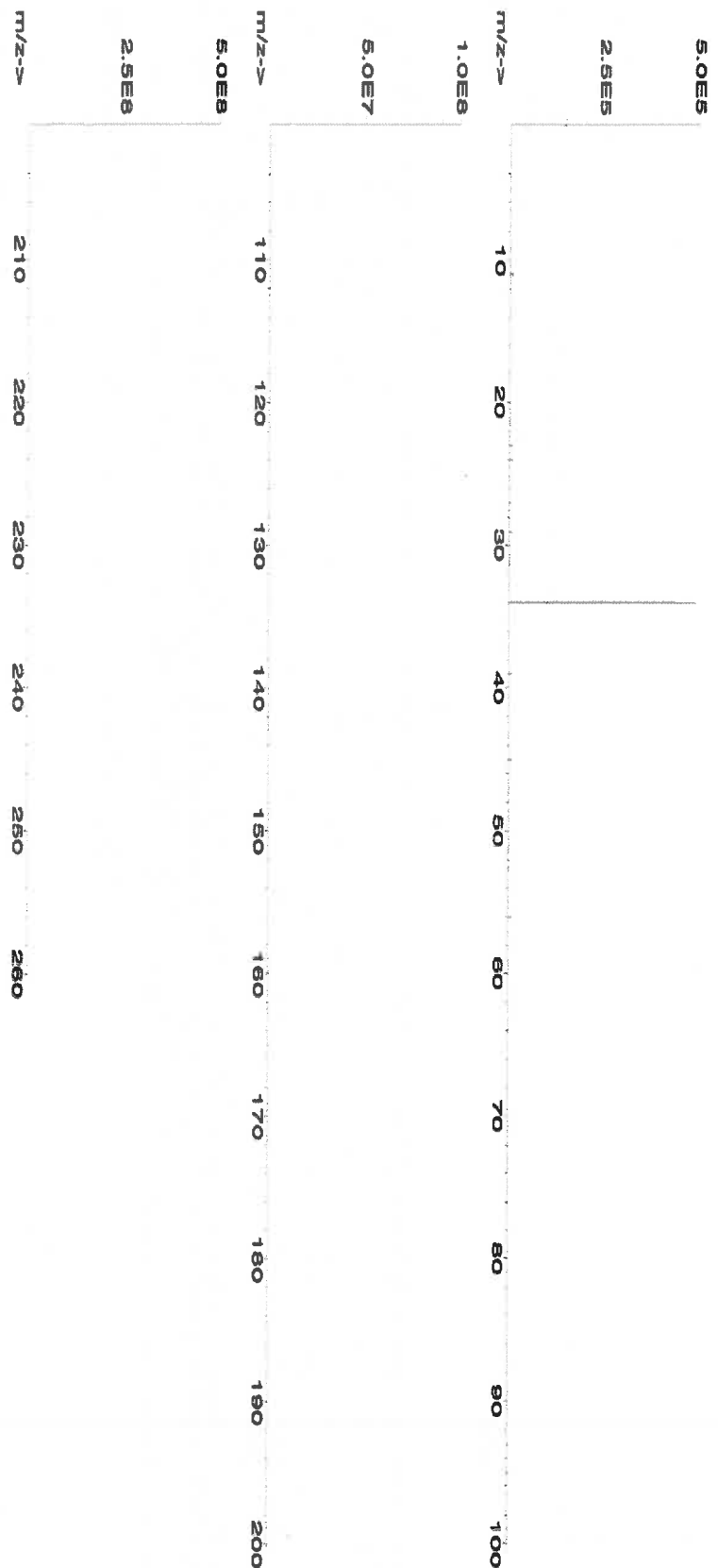
Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6L7B
Weight shown below was diluted to (mL): 4000.0
SE-05 Balance Uncertainty
0.06 Flask Uncertainty

Compound

RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium sulfate (S) IN117 SLBR225V 1000 99.9 0.10 24.3 16.4979 16.4980 1000.0 2.0 7783-20-2 NA 0.01-0.1 4250mg/kg 3181

[1] Spectrum No. 1 [33.603 sec]:57016.D# [Count] [Linear]





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	La	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Ba	<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	Ru	<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	S	<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	Ta	<0.02	Ti	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: **57116**
Lot Number: **071123**
Description: **Sulfur (S)**

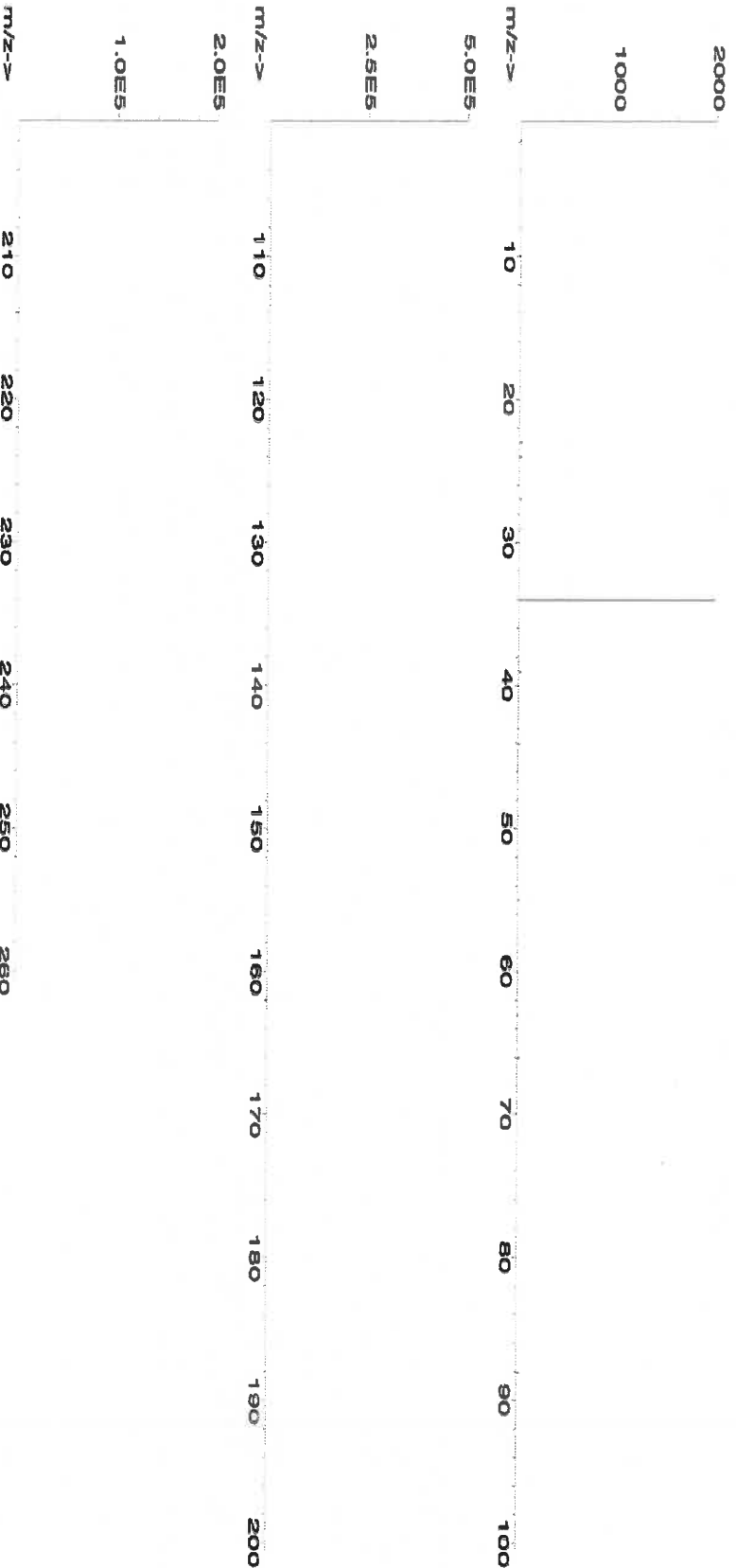
Lot #
Solvent: 071123
ASTM Type 1 Water

Formulated By:	Lawrence Barry
Reviewed By:	
Pedro L. Rentas	
071123	

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

SDS Information									
Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
Ammonium sulfate (S)	IN117 SLBR725V	10000	99.9	0.10	24.3	82.4675	82.4692	10000.1	20.0
						7763-20-2	NA	oralal 4250mg/kg	3181

[1] Spectrum No. 1 [24.004 sec]:58116.D# [Count] [Linear]





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	Pt	<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

Physical Characterization:

(T)= Target analyte

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).



CERTIFIED WEIGHT REPORT:

Part Number: **57014**
Lot Number: **122023**
Description: **Silicon (Si)**

Solvent: **24002546 Nitric Acid**

Lot #

R: 02/09/24 M5818

Expiration Date: **122026**

2% 40.0 (mL) Nitric Acid

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6UTB**

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): **1999.48 0.058 Flask Uncertainty**

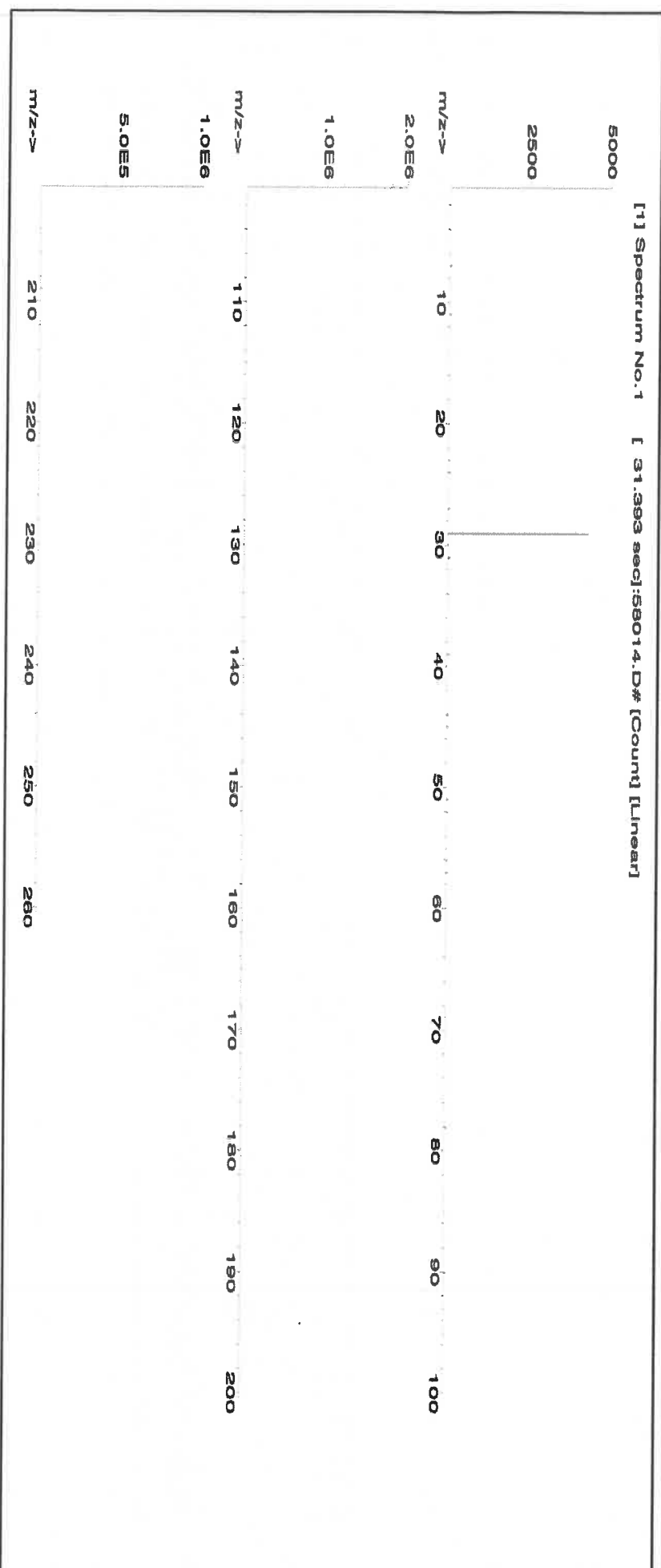
<i>Aleah O Brady</i>	
Formulated By:	Aleah O Brady
Reviewed By:	<i>Pedro L. Rentas</i>
	Pedro L. Rentas
	122023

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium hexafluorosilicate (Si) IN009 S1D08022A1 1000 99.999 0.10 14.4 13.8854 13.8855 1000.0 2.0 18919-19-0 2.5 mg/m3 off-mus 70 mg/kg NA

[1] Spectrum No. 1 [31.393 sec; 158014.D# [Count] [Linear]





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	Pt	<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	Bu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Ru	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

Solvent: 24002546 Nitric Acid

Lot # R: 02109124 MS819

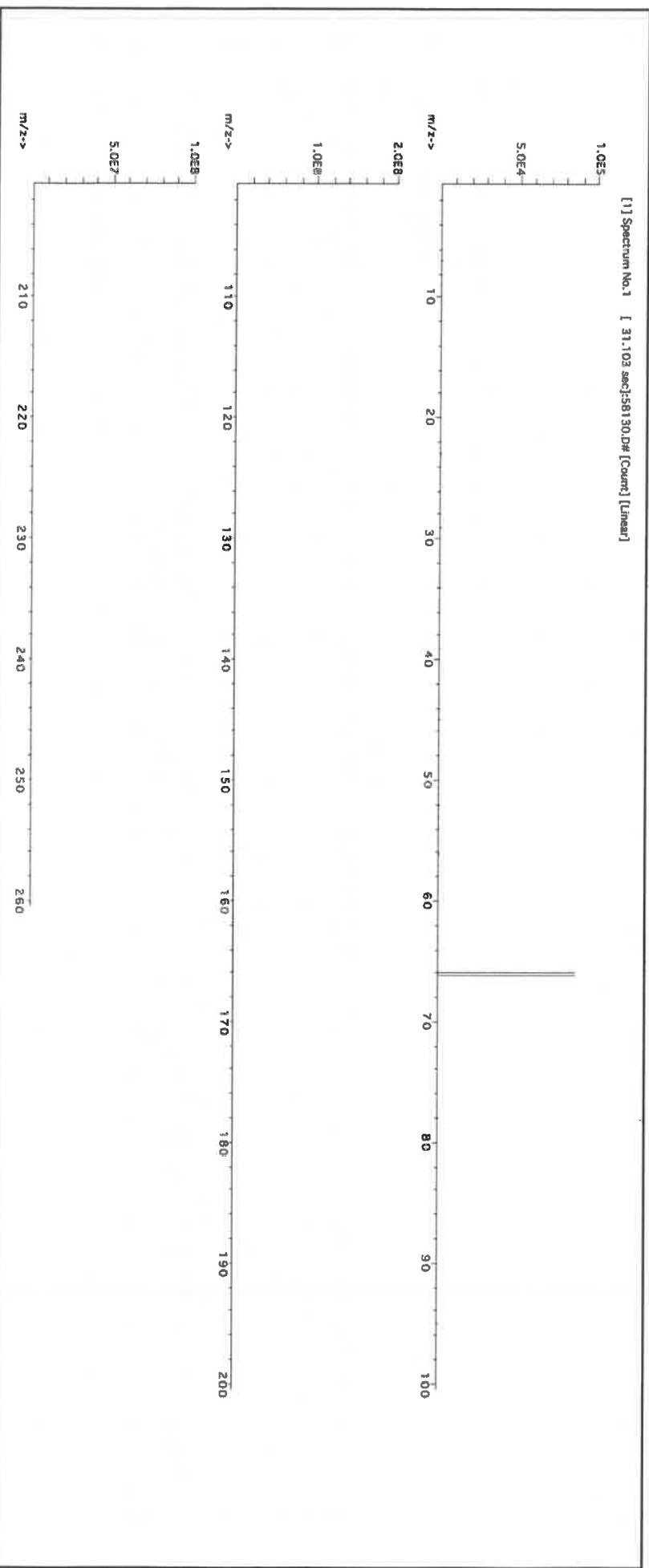
Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

2% 60.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 3000.4
5E-05 Balance Uncertainty
0.06 Flask Uncertainty

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Reintas
111623	

SDS Information									
Expanded					(Solvent Safety Info. On Attached pg.)				
Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE03021A1	1000	99.999	0.10	24.3	12.3475	12.3502	1000.2
									2.0
									10196-16-6
									1 mg/mL
									on-rat 1190mg/kg
									3168
									NIST SRM





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	Bu	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

Part Number: 57015
Lot Number: 091123
Description: Phosphorous (P)

Solvent: 24002546 Nitric Acid

Lot #

R: 02109124 M5820

Formulated By: Lawrence Barry 091123

Reviewed By: Pedro L. Rentas 091123

2% 40.0 (mL) Nitric Acid

Expiration Date: 091126

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test Number: 6LJB

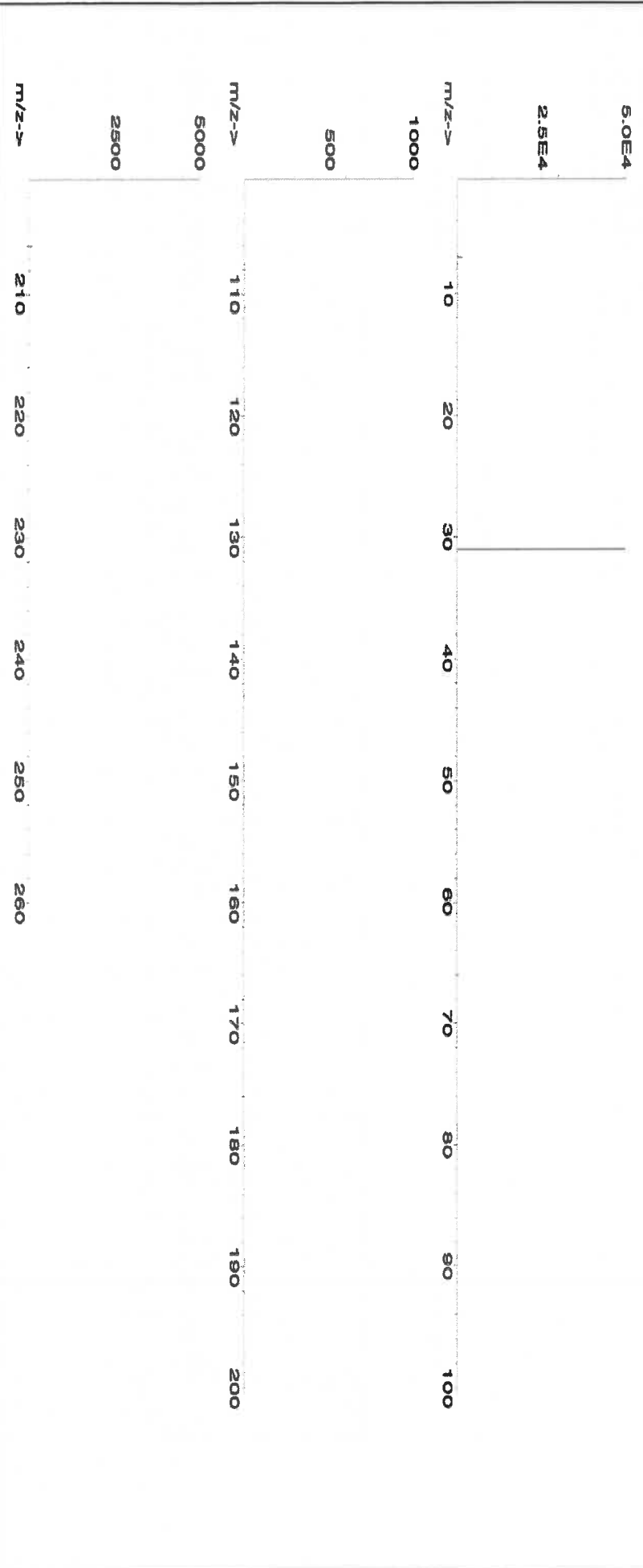
Weight shown below was diluted to (mL): 2000.02 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Ammonium dihydrogen phosphate (P) IN008 PVO62019A1 1000 99.999 0.10 27.5 7.2729 7.2730 1000.0 2.0 7722-76-1 5 mg/m3 xH-rat >2000mg/kg 3186

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

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	Tc	<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	Sa	<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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

MS961 R-1 6/11/24

Lot #

Part Number: 57028

Lot Number: 041124

Description: Nickel (NI)

Solvent: 24002546 Nitric Acid

2% 5.0 (mL) Nitric Acid

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 5E-05 Balance Uncertainty 0.002 Flask Uncertainty

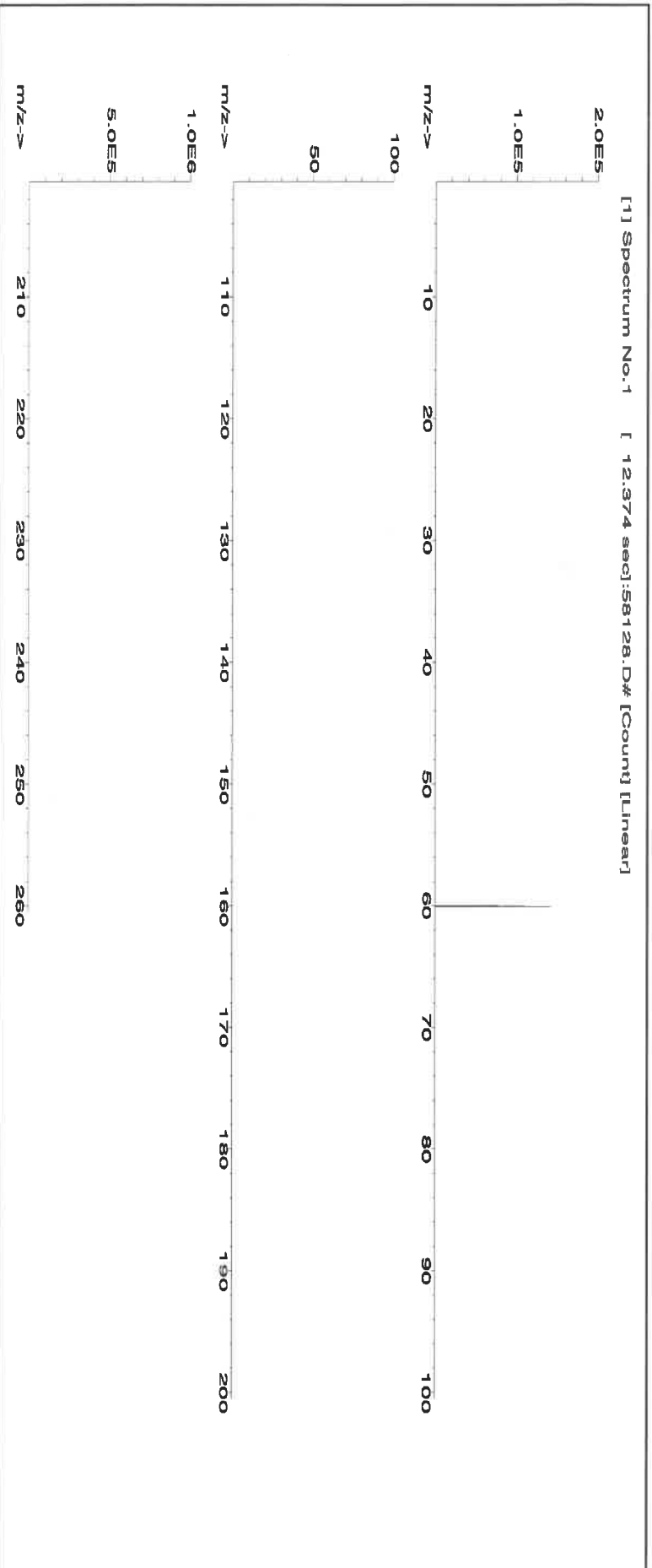
Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

SDS Information

Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded			NIST	
									Weight (g)	Weight (g)	Conc. (µg/mL)		Uncertainty
RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	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 or-rat 1620 mg/kg 3136

[1] Spectrum No.1 [12.374 sec]:58128.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Ba	<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
Bc	<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 certified (+/-) 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).



M5962 **R10614124**



CERTIFIED WEIGHT REPORT:

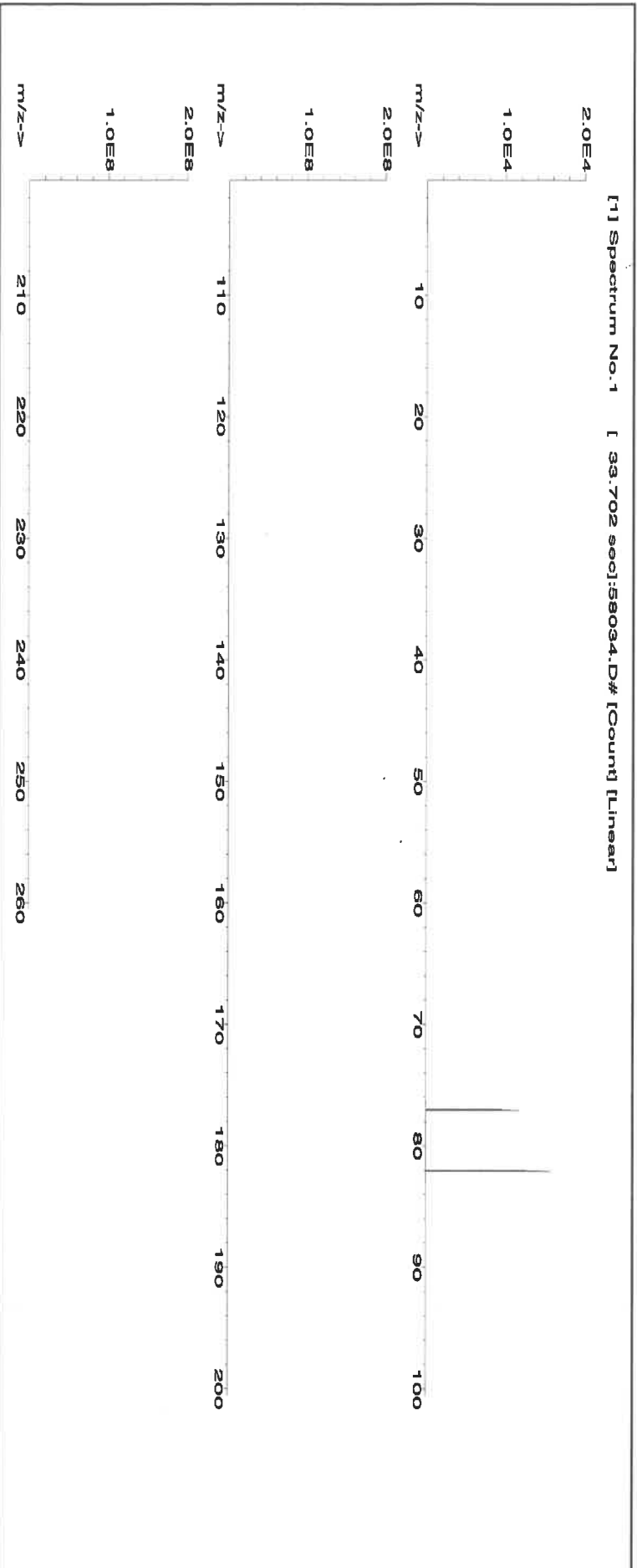
Part Number: 57034
Lot Number: 060624
Description: Selenium (Se)
Expiration Date: 060627
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6LUTB
Volume shown below was diluted to (mL): 2000.07

Lot # 24002546
Solvent: Nitric Acid

2.0% **40.0 (mL)** **Nitric Acid**

Formulated By:	Benson Chan
	060624
Reviewed By:	Pedro L. Rantas
	060624

SDS Information									
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)
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	or-tral 6700 mg/kg	31.49





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	Pt	<0.02	Se	T	Tb	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	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	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sn	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02		<0.02	Ti	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 certified (+/-) 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).

Certificate of Analysis

M5976, M5977

R: 02/22/24

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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.

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i^2 (u_{char i}^2))]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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	<	0.000590	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	Ti	<	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,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.569.6798; 540.585.3030, Fax: 540.585.3012; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Certificate of Analysis

MS978, MS979



Refine your results. Redefine your industry.

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).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution

Catalog Number: CGT1

Lot Number: T2-T1719972

Matrix: 2% (v/v) HNO₃

Value / Analyte(s): tr. HF

Starting Material: 1 000 µg/mL ea.

Starting Material: Titanium

Starting Material: Ti Metal

Starting Material Lot#: 2094

Starting Material Purity: 99.9975%

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:

$X_{CRM/RM} = \sum (X_i / U_i^2)$ where X_i = mean of Assay Method A with $U_{A,HR}$ = the standard uncertainty of characterization Method A with

$U_{A,HR}$ = the standard uncertainty of characterization Method A with $U_{A,HR}$ = the standard uncertainty of characterization Method A with

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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 UHPA-filtered Clean Room. An UHPA-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
M 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	<	0.000986			
O B	<	0.008929	M Ge	<	0.002146	M Os	<	0.000269	O Sr	<	0.000986			
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 Th	<	0.001341			
O Ca	<	0.000676	M In	<	0.002683	M Pr	<	0.000268	M Tl	<	0.053663			
M Cd	<	0.000268	M Ir	<	0.000269	M Pt	<	0.000536	S Tl	<				
M Co	<	0.000268	M K	<	0.001172	M Rb	<	0.000268	M Ti	<	0.000268			
M Cr	<	0.000752	O Li	<	0.000268	M Re	<	0.000268	M Tm	<	0.000268			
M Cs	<	0.000268	M Lu	<	0.000268	M Rh	<	0.000268	M U	<	0.000268			
O Cu	<	0.010890	O Mg	<	0.005445	I S	<	0.006976	M Y	<	0.002146			
M Dy	<	0.000268	O Mn	<	0.003267	M Sb	<	0.004900	M Yb	<	0.000536			
M Er	<	0.000268	M Mo	<	0.000774	O Sc	<							

6.0 INTENDED USE

M - Checked by ICP-MS
O - Checked by ICP-OES
I - Spectral Interference
n - Not Checked For
s - Solution Standard Element

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

- 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: 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); K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in P10 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 crystaline 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,
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	14N17N2, 36Ar12C,
ICP-OES 334.941 nm	0.0038 / 0.00028 µg/mL	1	48Ca, 196X=2
ICP-OES 336.121 nm	0.0053 / 0.00034 µg/mL	1	W, Mo, Co
			Nb, Ta, Cr, U
			Ce, Ar, Ni
			Ru
			(where X = Zr, Mo,

HAZARDOUS INFORMATION

HF Note: This standard should not be prepared or stored in glass.

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.

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: 800.868.6786; 540.565.3030; Fax: 540.565.3030; Email: info@inorganicventures.com; <http://www.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 Kozlikowski
Manager, Quality Control

TD978L

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Paul R. Gaines



MS981

R:6/11/24



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57092
060724
Uranium (U)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

060727
Ambient (20 °C)
1000
6UTB

Volume shown below was diluted to (mL): 2000.07

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Lot # Solvent:
24002546 Nitric Acid

2.0% Nitric Acid
40.0 (mL)

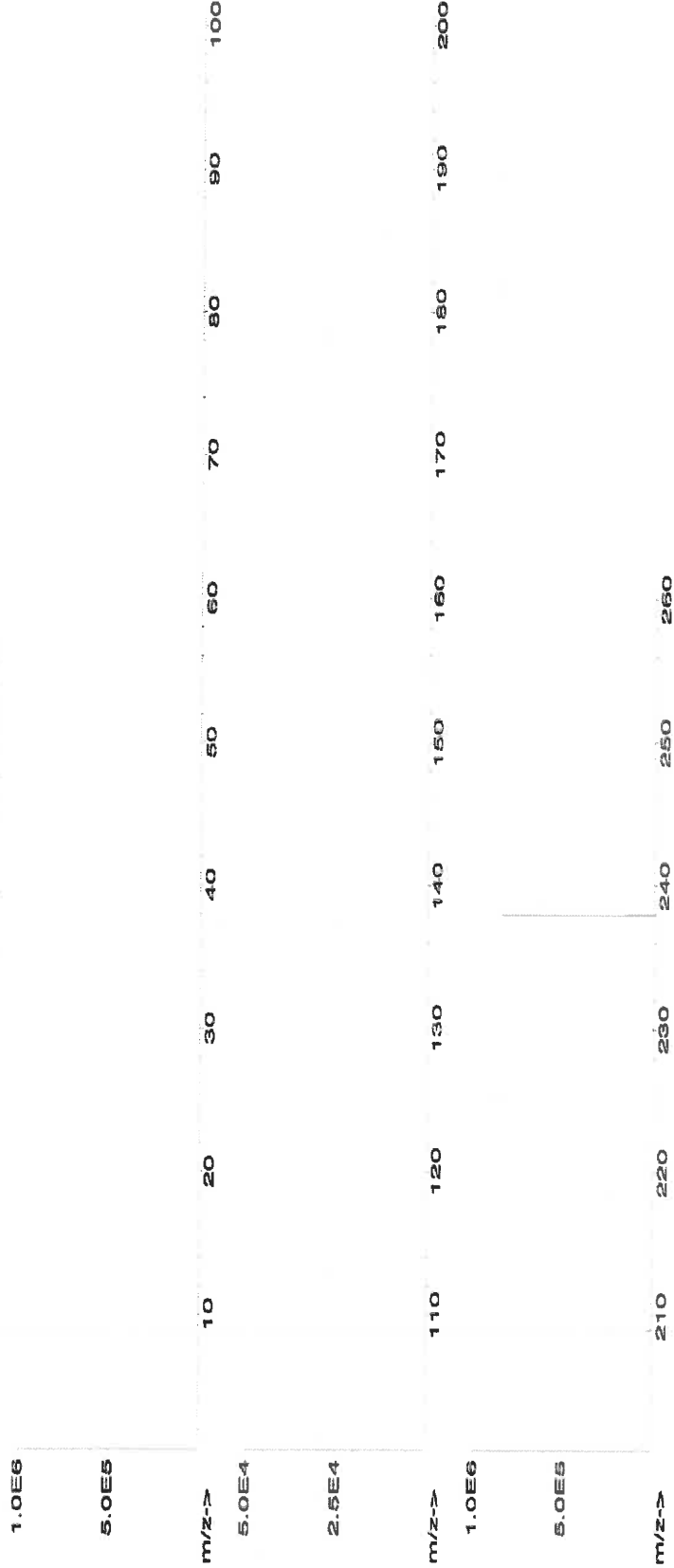
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas

SDS Information

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)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Uranyl nitrate hexahydrate (U) 58192 041524 0.1000 200.0 0.084 1000 10001.5 1000.0 2.2 13620-83-7 0.05 mg/m3 orl-rat 1040 mg/kg 3164

[1] Spectrum No.1 [23.264 sec]:57092.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<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	<0.02	Os	<0.01	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	<0.02	Hg	<0.2	P	<0.2	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	<0.02	Sc	<0.2	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 certified (+/-) 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).

7236 673 3.67



Certified Reference Material CRM



45982 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57038
031524
Strontium (Sr)

Solvent: 24002546 Nitric Acid

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

031527
Ambient (20 °C)
1000
6UTB
5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Weight shown below was diluted to (mL): 2000.07

Formulated By:	Benson Chan	031524
Reviewed By:	Pedro L. Rentas	031524

SDS Information

Expanded

Uncertainty

(Solvent Safety Info. On Attached pg.)

+/- (µg/mL)

LD50

CAS#

OSHA PEL (TWA)

Actual

Conc. (µg/mL)

Actual

Weight (g)

Target

Weight (g)

Assay

(%)

Purity (%)

(%)

Nominal

Conc. (µg/mL)

Lot

Number

RM#

1000

89.997

0.10

41.2

4.85470

4.85502

1000.1

2.0

10042-76-9

NA

orl-rat >2000mg/kg 3153a

1. Strontium nitrate (Sr)

IN017 SR2022018A1

[1] Spectrum No.1 [14.495 sec]:58136.D# [Count] [Linear]

5.0E6

2.5E6

m/z-->

1.0E6

5.0E5

m/z-->

5.0E6

2.5E6

m/z-->



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	Pt	<0.02	Se	<0.2	Tb	<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
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Ti	<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
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.2	Ru	<0.02	Sr	T	Tm	<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
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
																W	<0.02
																U	<0.02
																V	<0.02
																Yb	<0.02
																Y	<0.02
																Zn	<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 certified (+/-) 0.5% of the stated value, unless otherwise stated.
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2024 JUN 7 10:01 AM



145983

R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57040
071423
Zirconium (Zr)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

071426
Ambient (20 °C)
1000
6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Lot # Solvent:
21110221 Nitric Acid

2.0% Nitric Acid
40.0 (mL)

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Rentas

Expanded
Uncertainty
+/- (µg/mL)

Final
Conc. (µg/mL)

Nominal
Conc. (µg/mL)

Initial
Vol. (mL)

Dilution
Factor

Part
Number

Lot
Number

Compound

1. Zirconyl chloride octahydrate (Zr)

NIST
SRM

LD50

CAS# OSHA PEL (TWA)

13520-92-8

2.2

1000.0

10000.3

1000

0.084

200.0

0.1000

58140

070621

NA

NA

NA

[1] Spectrum No.1 [41.153 sec]:57040.D# [Count] [Linear]

1.OE6

5.OE5

m/z-->

1.OE8

5.OE7

m/z-->

1.OE8

5.OE7

m/z-->



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)																			
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	<0.02	Os	<0.01	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	<0.2	Fe	<0.02	Hg	<0.2	P	<0.2	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	<0.02	Sc	<0.2	Ta	<0.02	Ti	<0.02	Zr	<0.02
										(T) = Target analyte									
										T									

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

[Signature]

- * 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 certified (+/-) 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).



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).



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, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{tts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{tts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{tts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{tts} = 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

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





Certified Reference Material CRM
R: 01/03/24 M6033



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

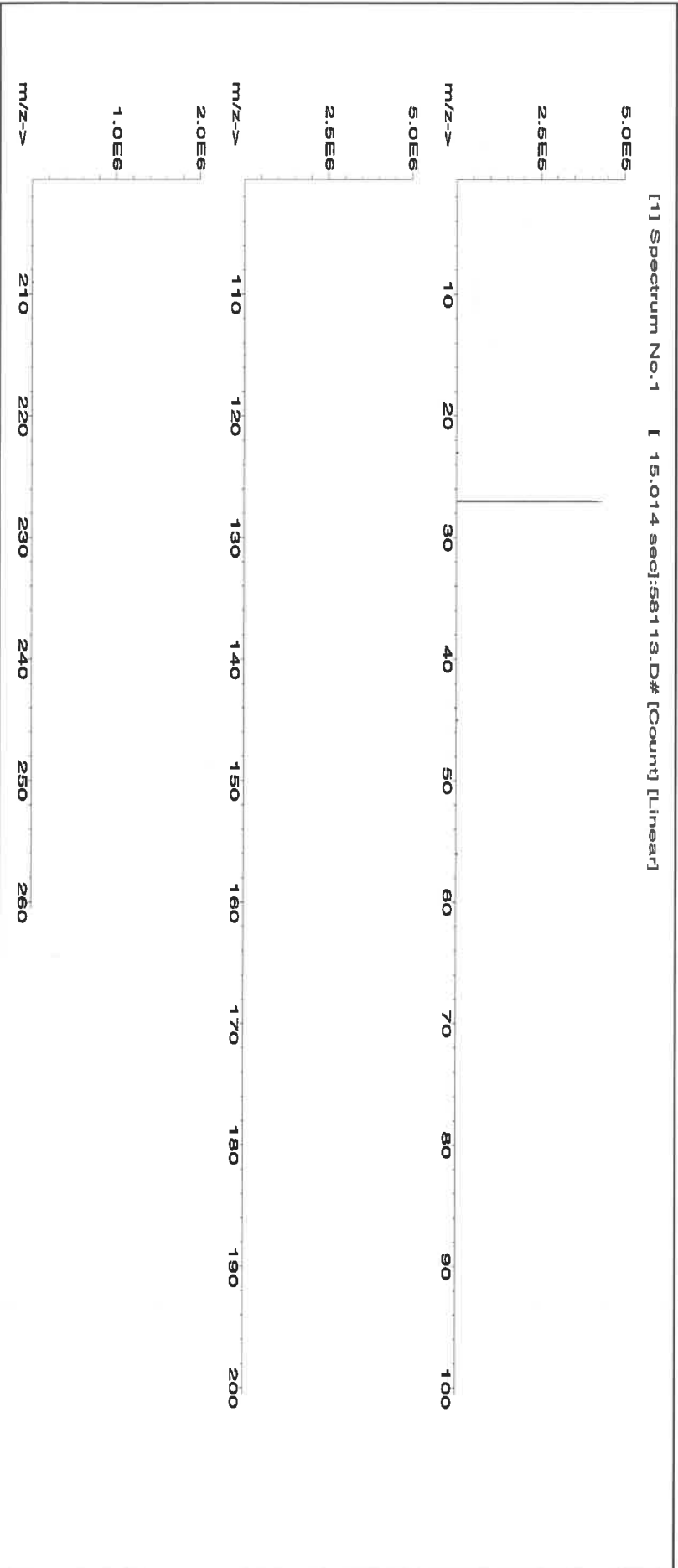
CERTIFIED WEIGHT REPORT:

Part Number: 58113
Lot Number: 011623
Description: Aluminum (Al)
Expiration Date: 011626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6LUTB
Weight shown below was diluted to (mL): 2000.02
Solvent: 20510011 Nitric Acid
Lot #
2% 40.0 (mL) Nitric Acid
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	<i>Pedro L. Rentas</i>
	Pedro L. Rentas
	011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Aluminum nitrate nonahydrate (Al) IN022 ALUM12021A1 10000 99.999 0.10 7.30 273.9779 274.0078 10001.1 20.0 7784-27-2 2 mg/m3 or rat 3671 mg/kg 3101a



18/19/24, M6055

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030

F: 540-585-3012

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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).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: IV-STOCK-12

Lot Number: U2-MEB734294

Matrix: 5% (v/v) HNO₃

Value / Analyte(s): 10 µg/mL ea:

Barium,	Beryllium,
Bismuth,	Cerium,
Cobalt,	Indium,
Lithium,	Nickel,
Lead,	Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	10.01 ± 0.04 µg/mL	Beryllium, Be	10.01 ± 0.05 µg/mL
Bismuth, Bi	10.01 ± 0.06 µg/mL	Cerium, Ce	10.01 ± 0.04 µg/mL
Cobalt, Co	10.01 ± 0.05 µg/mL	Indium, In	10.01 ± 0.04 µg/mL
Lead, Pb	10.00 ± 0.04 µg/mL	Lithium, Li	10.01 ± 0.04 µg/mL
Nickel, Ni	10.01 ± 0.04 µg/mL	Uranium, U	10.01 ± 0.05 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	180815
Ce	ICP Assay	3110	160830
Ce	EDTA	928	928
Ce	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Calculated		See Sec. 4.2
Li	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
U	ICP Assay	traceable to 3164	R2-U689597
U	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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 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

- June 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



Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**



M6094
M6095

metdig
10/21/24

Material No.: 9530-33
Batch No.: 24D1562005
Manufactured Date: 2024-03-18
Retest Date: 2029-03-17
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.192
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	2.2 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	31.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	< 0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	3 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.2 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	0.2 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 1.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.0 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.4 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantorsm**



Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Receive date
9/29/24
Met diag.

 avantor™



Material No.: 9530-33
Batch No.: 22F0762009
Manufactured Date: 2022-05-10
Retest Date: 2027-05-09
Revision No.: 0

M6109
M6110
M6111

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.6 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	0.8 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	14.9 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	1.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	0.7 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**

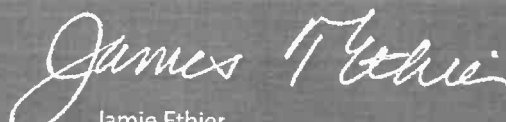


Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™



Receive:
9/29/24
met dig

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.6 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	< 0.2 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

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Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

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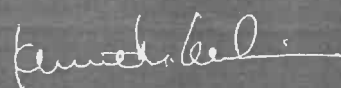


Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Ken Koehnlein
Sr. Manager, Quality Assurance

Nitric Acid 69%
CMOS

avantor™



Receive:
9/29/24
met dig

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.6 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	< 0.2 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

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Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantor™**

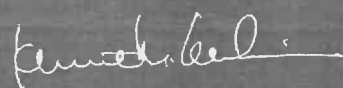


Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Ken Koehnlein
Sr. Manager, Quality Assurance

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™



R → 16/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS – Free Chlorine (as Cl ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33

Batch No.: 0000275677

Test	Specification	Result
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	≤ 4.0 ppb	< 0.2
Heavy Metals (as Pb)	≤ 100 ppb	< 50
Trace Impurities – Iron (Fe)	≤ 15.0 ppb	< 1
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.3
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

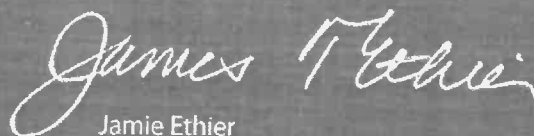
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%
CMOS



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**TM



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



CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

Solvent: 24002546 Nitric Acid

Lot #

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

<i>Aleah O Brady</i>	
Formulated By:	Aleah O Brady
Reviewed By:	Pedro L. Rentas
	122223

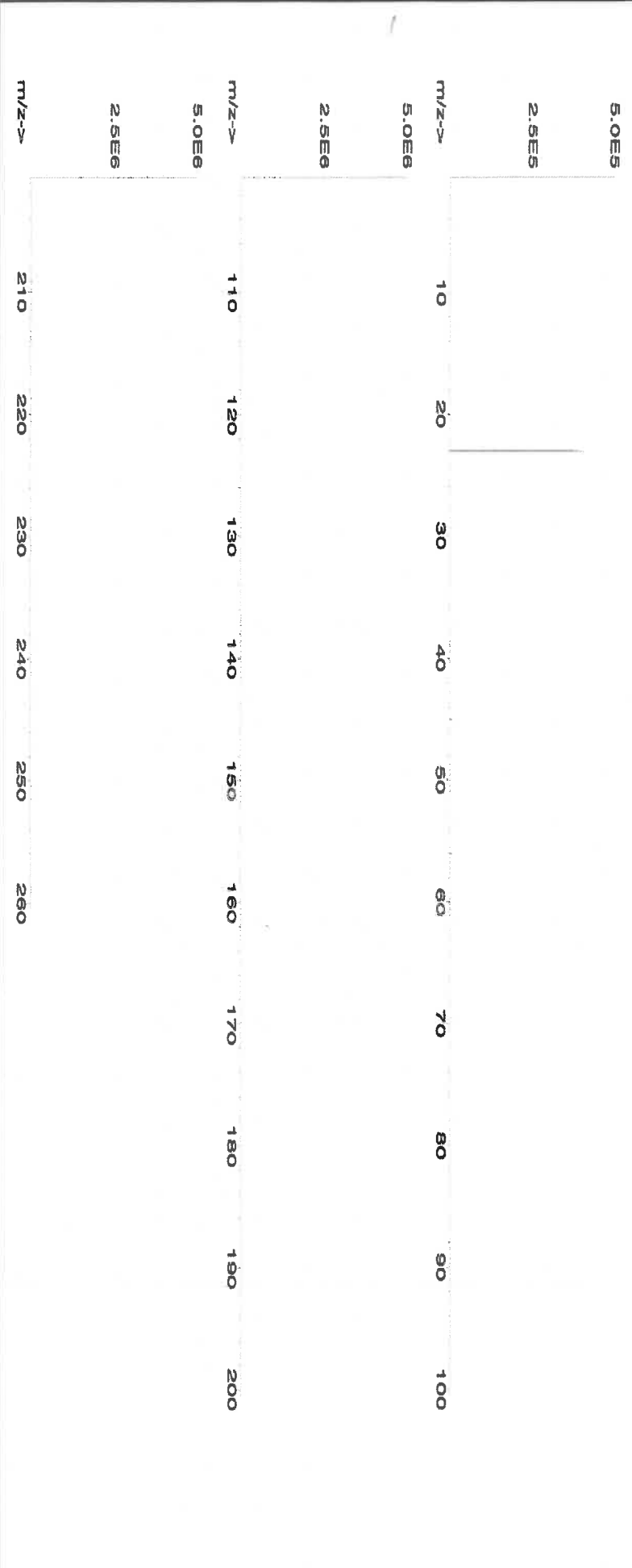
Expanded

SDS Information

Compound	Lot	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Sodium nitrate (Na) IN036 NAV01201511 10000 99.999 0.10 26.9 111.5406 111.5479 10000.7 20.0 7631-99-4 5 mg/m3 or-trat 3430 mg/kg 3152a

[1] Spectrum No.1 [8.935 sec]:58111.D# [Count] [Linear]





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	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<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	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	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.02	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	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	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	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 certified (+/-) 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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A: 4/11/22
Certificate of Analysis
M5738 M5739 M5740 M5741 M5742
M5743

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).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020ISS
Lot Number: S2-MEB709511
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 µg/mL ea:
Bismuth, Holmium,
Indium, 6-Lithium,
Rhodium, Scandium,
Terbium, Yttrium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
6-Lithium, Li6	10.00 ± 0.03 µg/mL	Bismuth, Bi	10.00 ± 0.05 µg/mL
Holmium, Ho	10.00 ± 0.05 µg/mL	Indium, In	10.00 ± 0.04 µg/mL
Rhodium, Rh	10.00 ± 0.07 µg/mL	Scandium, Sc	10.00 ± 0.04 µg/mL
Terbium, Tb	10.00 ± 0.04 µg/mL	Yttrium, Y	10.00 ± 0.04 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Bi	ICP Assay	3106	180815
Bi	Calculated		See Sec. 4.2
Ho	ICP Assay	3123a	090408
Ho	EDTA	928	928
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li6	Gravimetric		See Sec. 4.2
Rh	ICP Assay	3144	070619
Sc	ICP Assay	3148a	100701
Sc	EDTA	928	928
Tb	ICP Assay	3157a	100518
Tb	EDTA	928	928
Tb	Calculated		See Sec. 4.2
Y	ICP Assay	3167a	120314
Y	EDTA	928	928
Y	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:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

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:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i^2)(u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Lithium Li6	95.6 ± 0.3
Lithium Li7	4.4 ± 0.1

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 03, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 03, 2026**

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____
- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





**QATS LABORATORY INORGANIC REFERENCE MATERIAL
 INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (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 an 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-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

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 the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, 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

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS 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-0803, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, 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 1% v/v HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS 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-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 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.



**QATS LABORATORY INORGANIC REFERENCE MATERIAL
 INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (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 an 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-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

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 the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

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 2700 Chandler Avenue - Building C
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This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS 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-0803, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, 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 1% v/v HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS 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-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 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.



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57051
120523
Antimony (Sb)

Lot #
Solvent:

24002546
Nitric Acid

2.0%
60.0
Nitric Acid
(mL)

Expiration Date:

120526

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6U7B

Volume shown below was diluted to (mL):

3000.41

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

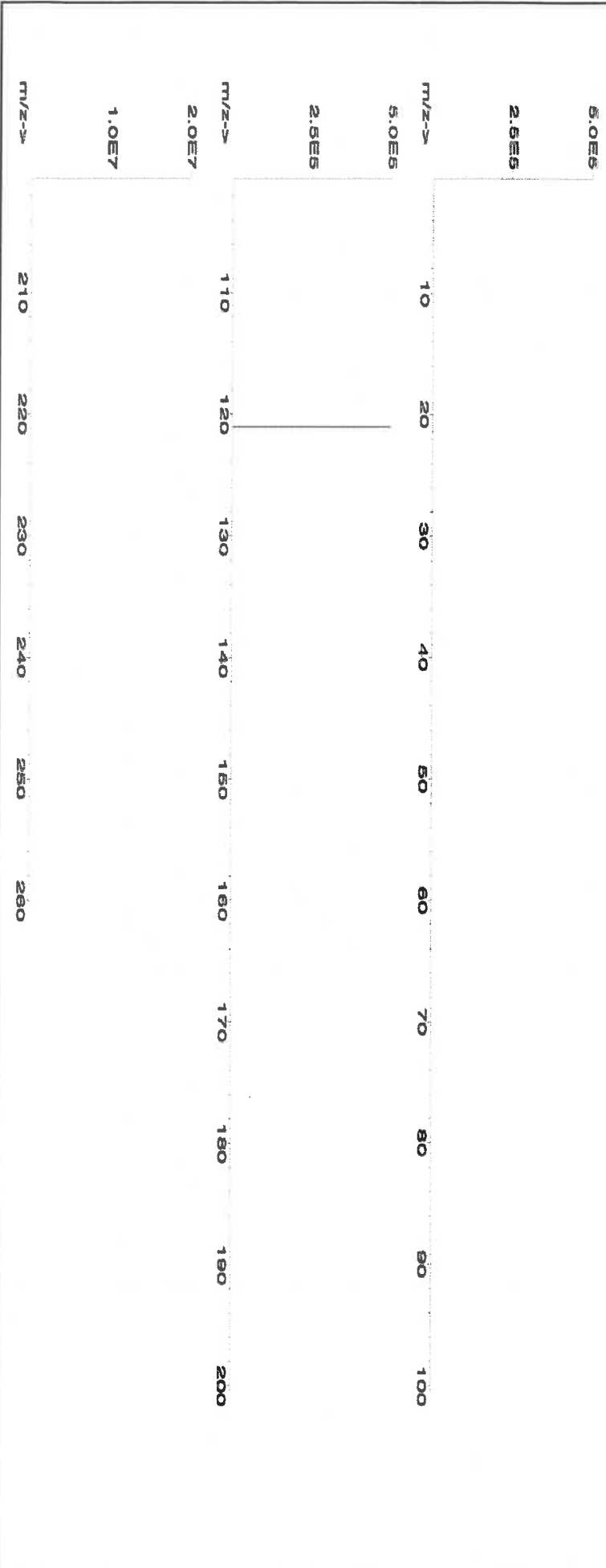
Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Renteria	120523

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)	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 or-rel 7000 mg/kg 3102a

[1] Spectrum No.1 [17.964 sec]:58051.D# [Count] [Linear]





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	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 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).



M6030



CERTIFIED WEIGHT REPORT:

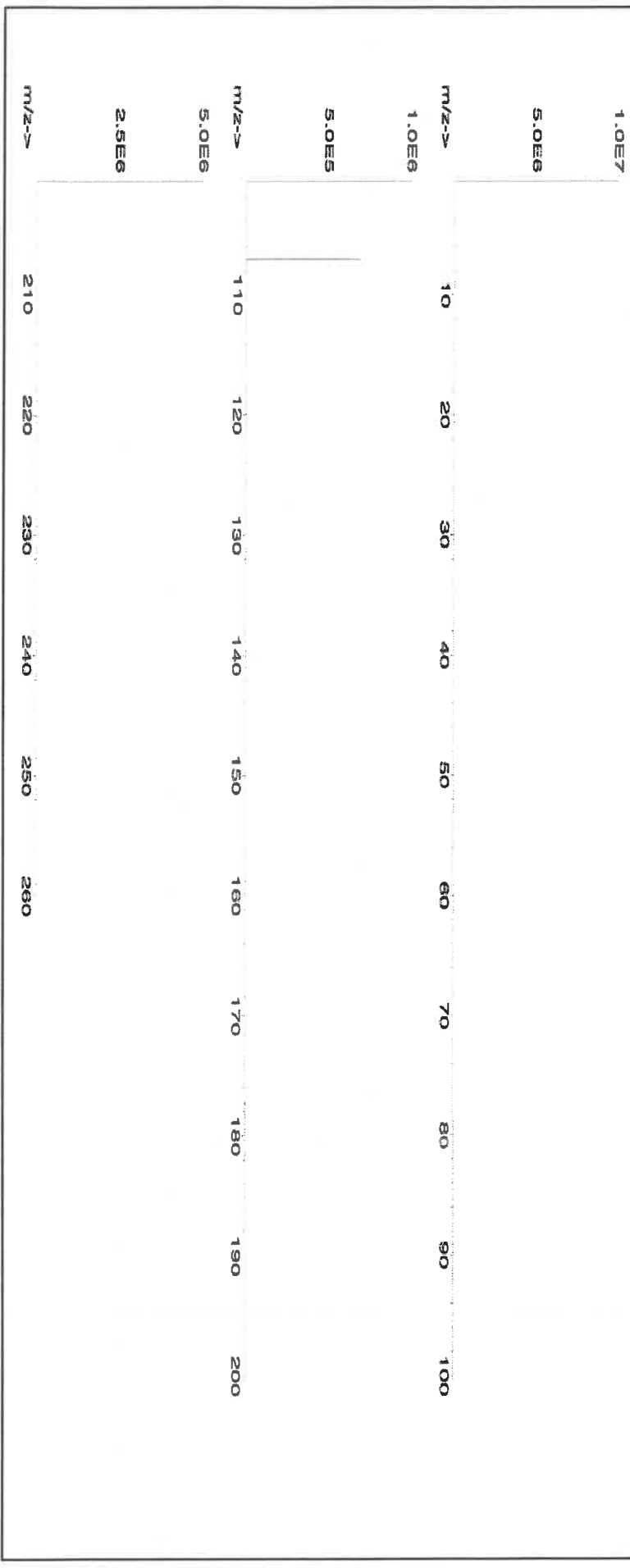
Part Number: **57047**
Lot Number: **122823**
Description: **Silver (Ag)**
Solvent: 24002546 Nitric Acid
Lot #

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.30 0.058 Balance Uncertainty
5E-05 Flask Uncertainty

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Rentas
	122823

SDS Information									
Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9996	0.10	63.7	6.27992	6.27998	1000.0
							2.0	7761-88-8	10 µg/mL
									NA
									3151

[1] Spectrum No. 1 [14.044 sec]:58147.D# [Count] [Linear]





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	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 meghom 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 certified (+/-) 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).



CERTIFIED WEIGHT REPORT:

R: 03/16/23 MS473 MS474 MS475 MS476

Lot #

Part Number:

56138

Solvent: 20510011

Nitric Acid

Lot Number:

082922

Description:

Strontium (Sr)

2% 20.0

Nitric Acid

Expiration Date:

082925

(mL)

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

10000

NIST Test Number:

6UTB

Weight shown below was diluted to (mL):

1000.12

0.058 Balance Uncertainty
Flask Uncertainty

SDS Information

Compound

RM#

Lot

Number

Nominal

Purity

Uncertainty

Assay

Target

Actual

Actual

Conc. (µg/mL)

Expanded

Uncertainty

CAS#

OSHA PEL (TWA)

LD50

NIST

SRM

or-rat >2000mg/kg

3153a

1. Strontium nitrate (Sr)

IN017

SF2022018A1

10000

99.997

0.10

41.2

24.2756

24.2758

10000.1

20.0

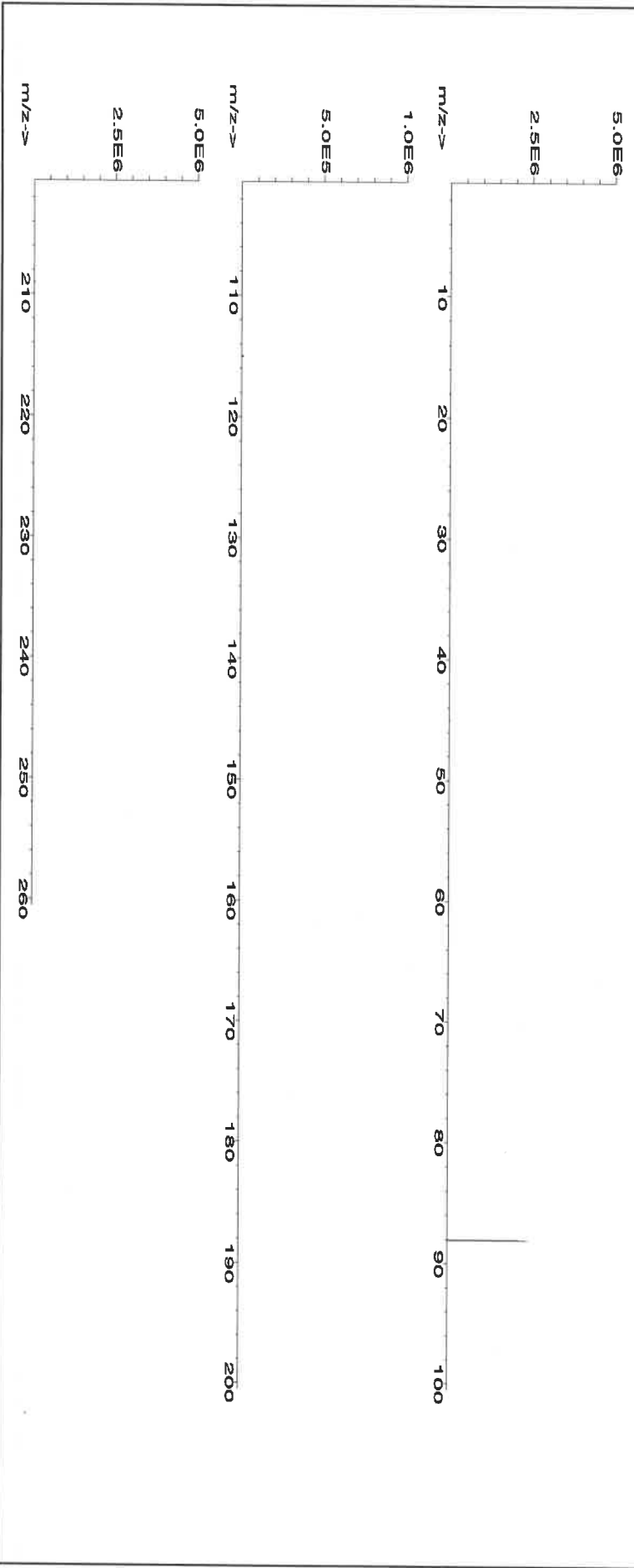
10042-76-9

NA

or-rat >2000mg/kg

3153a

[1] Spectrum No. 1 [14.495 sec]:56138.D# [Count] [Linear]





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:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (TI)

Lot #

Solvent: 24002546 Nitric Acid

2% 40.0 Nitric Acid (mL)

Expiration Date:

062727

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Weight shown below was diluted to (mL): 2000.1

5E-05 Balance Uncertainty
0.10 Flask Uncertainty

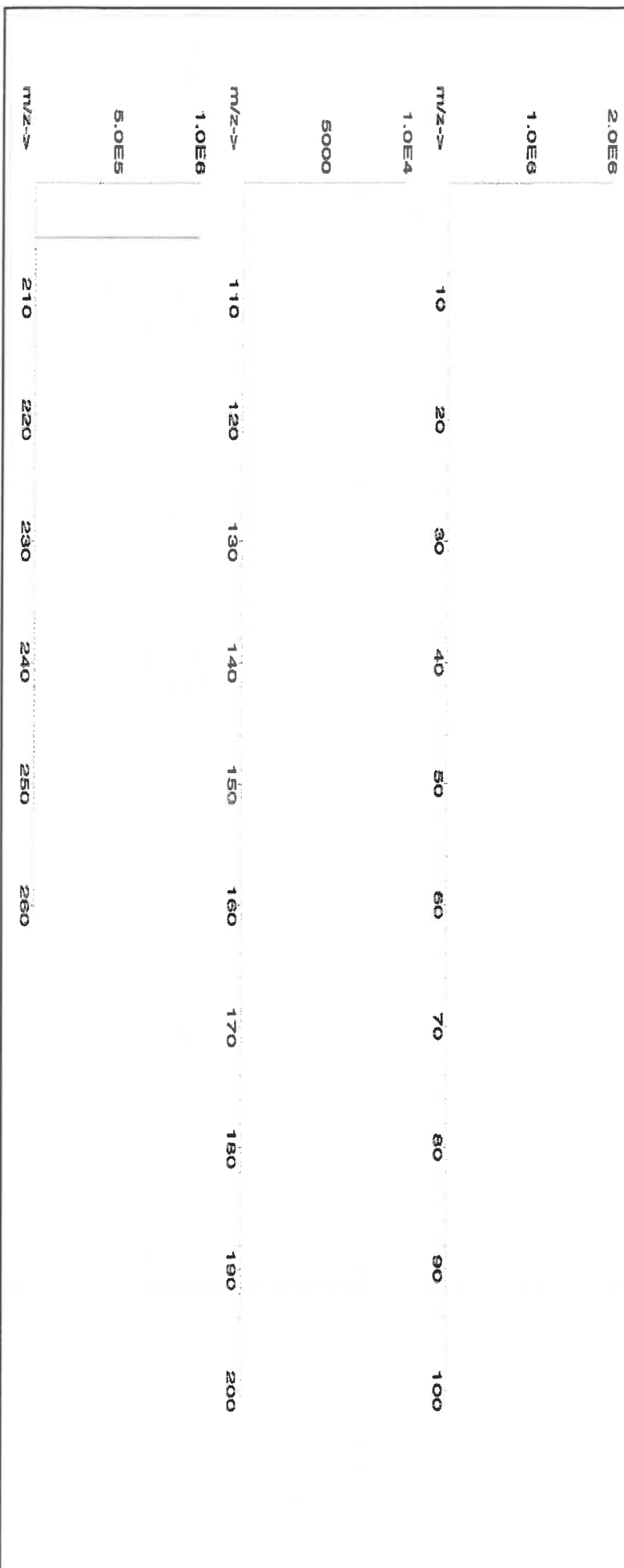
<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
	062724
Reviewed By:	<i>Pedro L. Rendas</i>
	Pedro L. Rendas
	062724

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM

1. Thallium nitrate (TI) 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

[1] Spectrum No.1 [14.044 sec]:57081.D# [Count] [Linear]





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	Pt	<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	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	Tm	<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	Sn	<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	Ti	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Se	<0.02	Ta	<0.02			Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M6021



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
<https://absolutestandards.com>

CERTIFIED WEIGHT REPORT:

Part Number: **57023**
Lot Number: **062424**
Description: **Vanadium (V)**

Lot # **24002546**
Solvent: **Nitric Acid**

Aleah O'Brady	
Formulated By:	Aleah O'Brady
	062424
Reviewed By:	Pedro L. Rantas
	062424

Expiration Date: **062427**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test Number: **6UTB**

Volume shown below was diluted to (mL): **2000.3**
0.06 Balance Uncertainty
0.06 Flask Uncertainty

Volume shown below was diluted to (mL): **2000.3**

Compound		Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	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	or-at 58.1mg/kg	3165

[1] Spectrum No.1 [34.243 sec]:58023.D# [Count] [Linear]

[1] Spectrum No.1 [34.243 sec]:58023.D# [Count] [Linear]										
2.0E6										
1.0E6										
m/z-->	10	20	30	40	50	60	70	80	90	100
2.0E7										
1.0E7										
m/z-->	110	120	130	140	150	160	170	180	190	200
5.0E8										
2.5E8										
m/z-->	210	220	230	240	250	260				



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	Pt	<0.02	Se	<0.2
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<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
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ti	<0.02
														Tb	<0.02
														Te	<0.02
														Tl	<0.02
														Tm	<0.02
														Sn	<0.02
														Ti	<0.02
														W	<0.02
														U	<0.02
														V	T
														Yb	<0.02
														Y	<0.02
														Zn	<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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SOP ID : M200.8-Trace Elements-22, MSFAM01.1-Metals ICPMS-2

SDG No : ME29F6

Start Digest Date: 12/05/2024 Time : 13:05 Temp : 96 °C

Matrix : SOIL

End Digest Date: 12/05/2024 Time : 13:45 Temp : 96 °C

Pipette ID: ICP A

Digestion tube ID: M6054

Balance ID : M SC-2

Block thermometer ID: MET-DIG. #2

Filter paper ID : N/A

Dig Technician Signature: jpp

pH Strip ID : N/A

Supervisor Signature: [Signature]

Hood ID : #3

Temp : 1. 96°C 2. N/A

Block ID: 1. HOT BLOCK #2 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	1.00	MP83465
Spike Sol. B	1.00	MP83047
Spike Sol 1	0.05	M5978
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	4.00	MP83122
1.4 HCL SOLN	10.00	MP83105
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#2 CELL #34 :96

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/5/24 14:00	jpp Met Dig	[Signature] Metals Lab
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P4977-01	ME29F6	N/A	1.08	500	Brown	Yellow	Medium	N/A	N/A	1
P4977-02	ME29F7	N/A	1.20	500	Brown	Yellow	Medium	N/A	N/A	2
P4977-03	ME29F8	N/A	1.09	500	Brown	Yellow	Medium	N/A	N/A	3
P4977-04	ME29F8D	N/A	1.40	500	Brown	Yellow	Medium	N/A	N/A	4
P4977-05	ME29F8S	N/A	1.38	500	Brown	Yellow	Medium	N/A	MP83047,M5978	5
P4977-06	ME29F9	N/A	1.26	500	Brown	Yellow	Medium	N/A	N/A	6
P4977-07	ME29G0	N/A	1.15	500	Brown	Yellow	Medium	N/A	N/A	7
P4977-08	ME29G1	N/A	1.40	500	Brown	Yellow	Medium	N/A	N/A	8
P4977-09	ME29G2	N/A	1.12	500	Brown	Yellow	Medium	N/A	N/A	9
PB165402BL	PBS402	N/A	1.00	500	Colorless	Colorless	Fine	N/A	N/A	10
PB165402BS	LCS402	N/A	1.00	500	Colorless	Colorless	Fine	N/A	MP83465	11

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB133800

Review By	Sarabjit Jaswal	Review On	12/9/2024 5:55:17 PM
Supervise By	Mohan Bera	Supervise On	12/10/2024 1:29:32 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83014,MP83039,MP83038,MP83036,MP83034,MP83035,MP83033,MP83032,MP83016		
ICV Standard	MP83041		
CCV Standard	MP83042		
ICSA Standard	MP83043,MP83044		
CRI Standard			
LCS Standard	MP83465		
Chk Standard	MP83050,MP83049		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE001	TUNE	12/06/24 10:31		Jaswal	OK
2	S00	S0	CAL1	12/06/24 11:34		Jaswal	OK
3	S01	S01	CAL2	12/06/24 11:37		Jaswal	OK
4	S02	S02	CAL3	12/06/24 11:41		Jaswal	OK
5	S03	S03	CAL4	12/06/24 11:44		Jaswal	OK
6	S04	S04	CAL5	12/06/24 11:47		Jaswal	OK
7	S05	S05	CAL6	12/06/24 11:50		Jaswal	OK
8	S06	S06	CAL7	12/06/24 11:52		Jaswal	OK
9	S07	S07	CAL8	12/06/24 11:55		Jaswal	OK
10	S08	S08	CAL9	12/06/24 11:58		Jaswal	OK
11	ICV001	ICV001	ICV	12/06/24 12:43	Inst. paused for calibration review	Jaswal	OK
12	ICB001	ICB001	ICB	12/06/24 13:03	Inst. paused for review	Jaswal	OK
13	ICSA001	ICSA001	ICSA	12/06/24 13:06		Jaswal	OK
14	ICSAB001	ICSAB001	ICSAB	12/06/24 13:09		Jaswal	OK
15	CCV001	CCV001	CCV	12/06/24 13:19	Inst. paused for review	Jaswal	OK
16	CCB001	CCB001	CCB	12/06/24 13:22		Jaswal	OK
17	PB165402BL	PBS402	MB	12/06/24 13:25		Jaswal	OK
18	PB165402BS	LCS402	LCS	12/06/24 13:36		Jaswal	OK

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB133800

Review By	Sarabjit Jaswal	Review On	12/9/2024 5:55:17 PM
Supervise By	Mohan Bera	Supervise On	12/10/2024 1:29:32 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83014,MP83039,MP83038,MP83036,MP83034,MP83035,MP83033,MP83032,MP83016		
ICV Standard	MP83041		
CCV Standard	MP83042		
ICSA Standard	MP83043,MP83044		
CRI Standard			
LCS Standard	MP83465		
Chk Standard	MP83050,MP83049		

19	PB165403BL	PBS403	MB	12/06/24 13:39		Jaswal	OK
20	PB165403BS	LCS403	LCS	12/06/24 13:42		Jaswal	OK
21	P4977-01	ME29F6	SAM	12/06/24 13:46		Jaswal	OK
22	P4977-02	ME29F7	SAM	12/06/24 13:49		Jaswal	OK
23	P4977-03	ME29F8	SAM	12/06/24 13:52		Jaswal	OK
24	P4977-04	ME29F8D	DUP	12/06/24 13:55		Jaswal	OK
25	P4977-03L	ME29F8L	SD	12/06/24 13:58		Jaswal	OK
26	P4977-05	ME29F8S	MS	12/06/24 14:01	MS Fail For Pb	Jaswal	OK
27	P4977-06	ME29F9	SAM	12/06/24 14:04		Jaswal	OK
28	P4977-07	ME29G0	SAM	12/06/24 14:08		Jaswal	OK
29	P4977-08	ME29G1	SAM	12/06/24 14:11		Jaswal	OK
30	P4977-09	ME29G2	SAM	12/06/24 14:14		Jaswal	OK
31	CCV002	CCV002	CCV	12/06/24 14:17		Jaswal	OK
32	CCB002	CCB002	CCB	12/06/24 14:20		Jaswal	OK
33	P4976-01	ME29D7	SAM	12/06/24 14:24		Jaswal	OK
34	P4976-02	ME29D8	SAM	12/06/24 14:27		Jaswal	OK
35	P4976-03	ME29D9	SAM	12/06/24 14:30		Jaswal	OK
36	P4976-04	ME29E0	SAM	12/06/24 14:33		Jaswal	OK
37	P4976-05	ME29E1	SAM	12/06/24 14:36		Jaswal	OK
38	P4976-06	ME29E2	SAM	12/06/24 14:40		Jaswal	OK

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB133800

Review By	Sarabjit Jaswal	Review On	12/9/2024 5:55:17 PM
Supervise By	Mohan Bera	Supervise On	12/10/2024 1:29:32 AM
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ICV Standard	MP83041		
CCV Standard	MP83042		
ICSA Standard	MP83043,MP83044		
CRI Standard			
LCS Standard	MP83465		
Chk Standard	MP83050,MP83049		

39	P4976-07	ME29E3	SAM	12/06/24 14:43		Jaswal	OK
40	P4976-08	ME29E4	SAM	12/06/24 14:46		Jaswal	OK
41	P4976-09	ME29E4D	DUP	12/06/24 14:49		Jaswal	OK
42	P4976-08L	ME29E4L	SD	12/06/24 14:52		Jaswal	OK
43	P4976-10RE	ME29E4S	MS	12/06/24 14:55	Not Use	Jaswal	Not Ok
44	P4976-11	ME29E5	SAM	12/06/24 14:58		Jaswal	OK
45	P4976-12	ME29E6	SAM	12/06/24 15:02		Jaswal	OK
46	P4976-13	ME29E7	SAM	12/06/24 15:05		Jaswal	OK
47	P4976-14	ME29E8	SAM	12/06/24 15:08		Jaswal	OK
48	P4976-15	ME29E9	SAM	12/06/24 15:11		Jaswal	OK
49	P4976-16	ME29F0	SAM	12/06/24 15:14		Jaswal	OK
50	P4976-17	ME29F1	SAM	12/06/24 15:17		Jaswal	OK
51	P4976-18	ME29F2	SAM	12/06/24 15:21		Jaswal	OK
52	P4976-19	ME29F3	SAM	12/06/24 15:24		Jaswal	OK
53	P4976-20	ME29F4	SAM	12/06/24 15:27		Jaswal	OK
54	P4976-21	ME29F5	SAM	12/06/24 15:30		Jaswal	OK
55	CCV003	CCV003	CCV	12/06/24 15:33		Jaswal	OK
56	CCB003	CCB003	CCB	12/06/24 15:36		Jaswal	OK
57	P4976-10	ME29E4S	MS	12/06/24 16:46	MS Fail For As,Pb	Jaswal	OK
58	CCV004	CCV004	CCV	12/06/24 17:03		Jaswal	OK

Instrument ID: P7

Daily Analysis Runlog For Sequence/QC Batch ID # LB133800

Review By	Sarabjit Jaswal	Review On	12/9/2024 5:55:17 PM
Supervise By	Mohan Bera	Supervise On	12/10/2024 1:29:32 AM
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ICV Standard	MP83041		
CCV Standard	MP83042		
ICSA Standard	MP83043,MP83044		
CRI Standard			
LCS Standard	MP83465		
Chk Standard	MP83050,MP83049		

59	CCB004	CCB004	CCB	12/06/24 17:06		Jaswal	OK
60	P4977-03A	ME29F8A	PS	12/06/24 17:21	PS For Pb(0.013ML MP83531-10ML SAMPLE)	Jaswal	OK
61	P4976-08ARE	ME29E4A	PS	12/06/24 17:25	Not Use	Jaswal	Not Ok
62	P4976-08A	ME29E4A	PS	12/06/24 17:35	PS For As,Pb(0.054ML MP83532,0.013ML MP83531-10ML SAMPLE)	Jaswal	OK
63	CCV005	CCV005	CCV	12/06/24 17:47		Jaswal	OK
64	CCB005	CCB005	CCB	12/06/24 17:49		Jaswal	OK