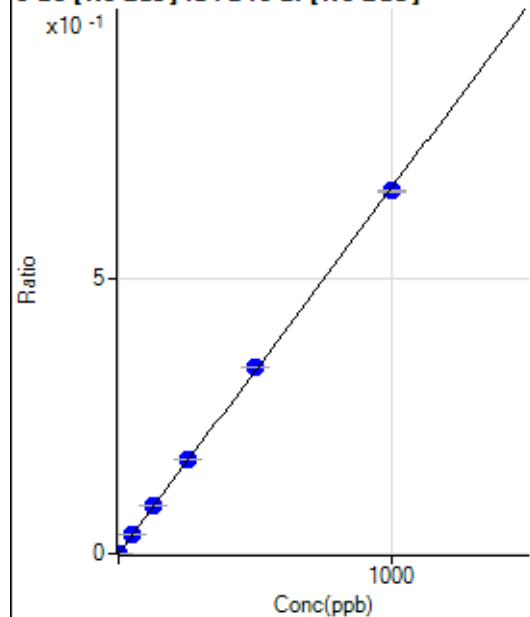


Batch Folder: D:\ICP-MS Data\P7121719-MS1 .b\
Analysis File: P7121719-MS1 .batch.bin
DA Date-Time: 2019-12-18 03:19:16
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-12-17 14:22:04
2	004CALS.d	S02	2019-12-17 14:29:17
3	005CALS.d	S03	2019-12-17 14:34:06
4	006CALS.d	S04	2019-12-17 14:38:18
5	007CALS.d	S05	2019-12-17 14:42:09
6	008CALS.d	S06	2019-12-17 14:45:58
7	009CALS.d	S07	2019-12-17 14:49:44
8	010CALS.d	S08	2019-12-17 14:53:33

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	74.08	0.0000	P	26.1
2	☐	1.000	1.031	2926.28	0.0007	P	1.2
3	☐	50.000	51.693	143265.64	0.0345	P	1.0
4	☐	125.000	129.366	341979.89	0.0862	P	0.3
5	☐	250.000	257.808	632991.41	0.1718	P	0.3
6	☐	500.000	510.672	1208239.60	0.3403	P	0.2
7	☐	1000.000	992.081	2346427.40	0.6612	P	0.4
8	☐			2100.20	0.0006	P	0.9

$$y = 6.6644\text{E-}004 * x + 1.8148\text{E-}005$$

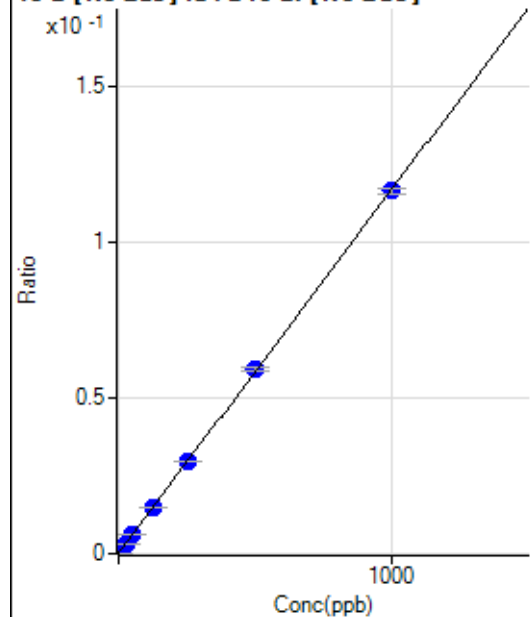
$$R = 0.9999$$

$$DL = 0.02128$$

$$BEC = 0.02723$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	525.03	0.0001	P	15.5
2	☐	25.000	23.176	11741.12	0.0028	P	2.9
3	☐	50.000	50.953	25221.76	0.0061	P	2.9
4	☐	125.000	125.685	58608.72	0.0148	P	1.3
5	☐	250.000	252.661	108957.45	0.0296	P	1.0
6	☐	500.000	504.555	209230.38	0.0589	P	2.0
7	☐	1000.000	996.970	412876.68	0.1163	P	1.9
8	☐			9773.02	0.0027	P	9.2

$$y = 1.1656\text{E-}004 * x + 1.2869\text{E-}004$$

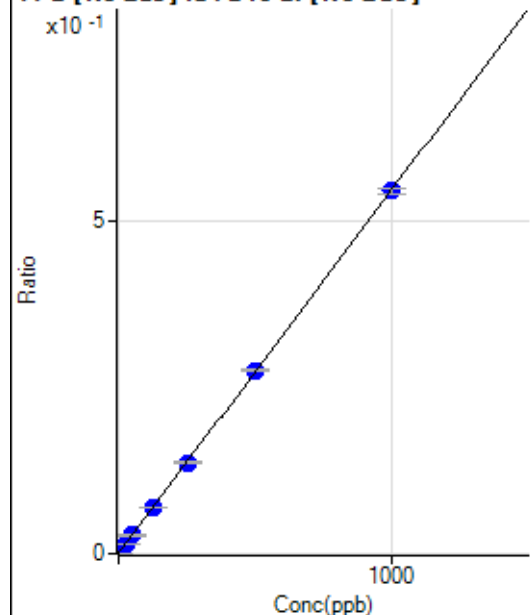
$$R = 1.0000$$

$$DL = 0.5138$$

$$BEC = 1.104$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2594.77	0.0006	P	4.8
2	☐	25.000	23.842	56523.09	0.0136	P	1.5
3	☐	50.000	49.168	113967.29	0.0274	P	0.6
4	☐	125.000	124.985	272507.03	0.0687	P	1.2
5	☐	250.000	249.671	503286.57	0.1366	P	2.2
6	☐	500.000	504.456	977744.27	0.2754	P	2.0
7	☐	1000.000	997.927	1931544.31	0.5442	P	1.7
8	☐			45884.79	0.0127	P	9.5

$$y = 5.4474\text{E-}004 * x + 6.3613\text{E-}004$$

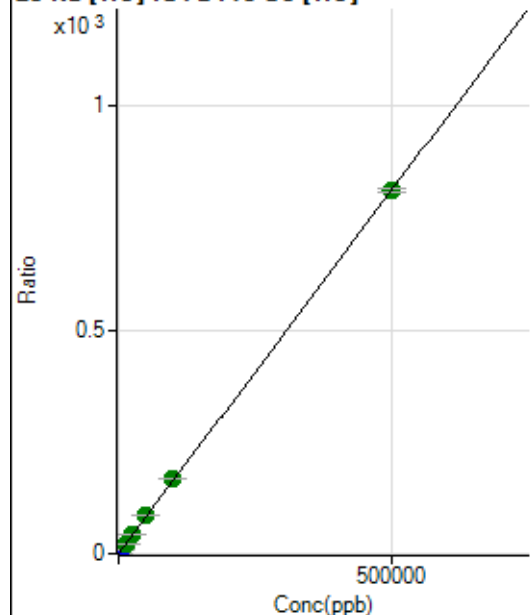
$$R = 1.0000$$

$$DL = 0.1672$$

$$BEC = 1.168$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8878.01	0.0281	P	1.2
2	☐	500.000	482.060	263679.22	0.8111	P	1.1
3	☐	5000.000	5083.233	2639276.01	8.2839	P	0.3
4	☐	12500.000	12934.564	6290552.14	21.0353	A	1.0
5	☐	25000.000	26136.319	11920982.82	42.4764	A	0.3
6	☐	50000.000	51963.161	23602556.61	84.4221	A	0.2
7	☐	100000.00	102021.62	47235442.03	165.7225	A	0.1
8	☐	500000.00	499330.86	256091325.1	810.9966	A	1.2

$$y = 0.0016 * x + 0.0281$$

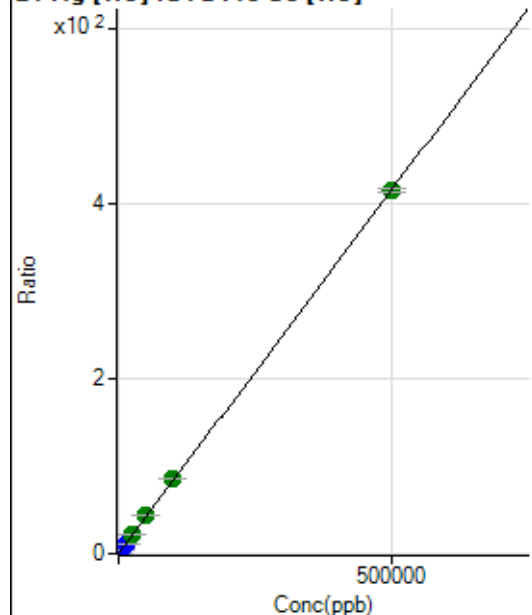
$$R = 1.0000$$

$$DL = 0.6063$$

$$BEC = 17.33$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	155.56	0.0005	P	18.9
2	☐	500.000	504.669	136484.12	0.4198	P	2.4
3	☐	5000.000	5217.048	1381174.85	4.3352	P	0.3
4	☐	12500.000	13215.548	3283756.39	10.9808	P	0.5
5	☐	25000.000	26515.527	6182965.50	22.0313	A	0.7
6	☐	50000.000	52619.876	12223845.76	43.7205	A	1.0
7	☐	100000.00	102927.29	24374440.82	85.5193	A	0.6
8	☐	500000.00	499056.71	130924701.5	414.6496	A	1.2

$$y = 8.3087E-004 * x + 4.9331E-004$$

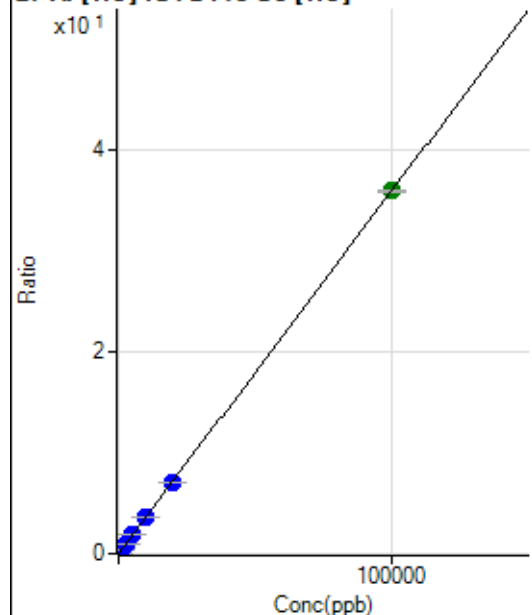
$$R = 1.0000$$

$$DL = 0.3369$$

$$BEC = 0.5937$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0001	P	75.3
2	☐	20.000	20.189	2380.84	0.0073	P	7.4
3	☐	1000.000	994.808	113621.33	0.3566	P	1.6
4	☐	2500.000	2514.332	269517.61	0.9013	P	0.3
5	☐	5000.000	5055.695	508571.49	1.8121	P	0.5
6	☐	10000.000	9991.265	1001237.36	3.5811	P	0.9
7	☐	20000.000	19660.208	2008526.09	7.0467	P	0.3
8	☐	100000.00	100065.74	11325350.51	35.8655	A	0.2

$$y = 3.5842E-004 * x + 8.8087E-005$$

$$R = 1.0000$$

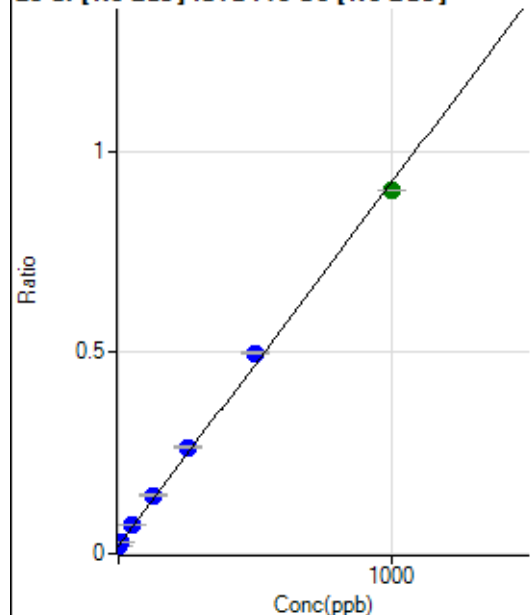
$$DL = 0.5553$$

$$BEC = 0.2458$$

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	161456.86	0.0197	P	0.3
2	☐	10.000	10.840	246857.70	0.0295	P	0.5
3	☐	50.000	56.426	584522.08	0.0706	P	0.8
4	☐	125.000	139.628	1149290.91	0.1456	P	0.6
5	☐	250.000	271.343	1953044.36	0.2644	P	0.6
6	☐	500.000	530.150	3584200.47	0.4977	P	0.9
7	☐	1000.000	977.431	6574062.26	0.9010	A	0.2
8	☐			559860.38	0.0743	P	1.2

$$y = 9.0168\text{E-}004 * x + 0.0197$$

$$R = 0.9990$$

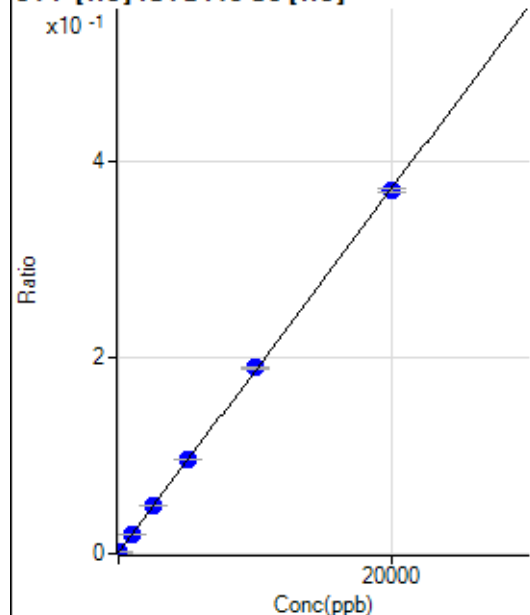
$$DL = 0.1977$$

$$BEC = 21.87$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-27.992	211.12	0.0007	P	24.3
2	☐	0.000	27.992	555.59	0.0017	P	12.2
3	☐	1000.000	1002.588	6304.38	0.0198	P	6.6
4	☐	2500.000	2571.513	14618.79	0.0489	P	3.2
5	☐	5000.000	5109.622	26930.71	0.0960	P	0.7
6	☐	10000.000	10165.330	53045.36	0.1897	P	1.1
7	☐	20000.000	19880.861	105435.04	0.3699	P	1.1
8	☐			311.13	0.0010	P	10.6

$$y = 1.8547\text{E-}005 * x + 0.0012$$

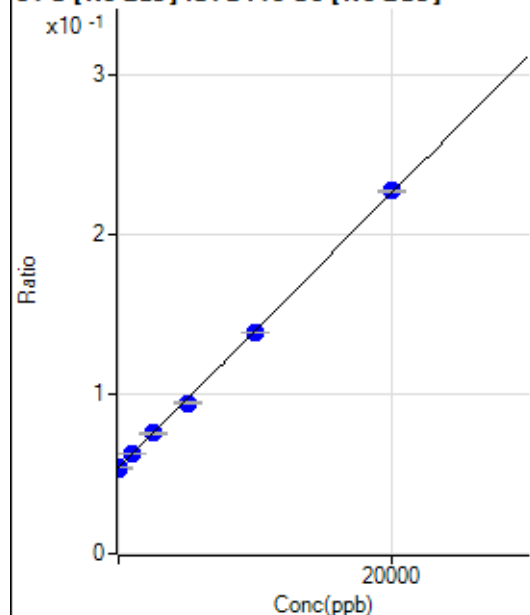
$$R = 0.9999$$

$$DL = 29.96$$

$$BEC = 64.11$$

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	-86.582	432370.64	0.0528	P	0.8
2	☐	0.000	86.582	454487.93	0.0543	P	0.8
3	☐	1000.000	1002.767	514976.97	0.0622	P	0.3
4	☐	2500.000	2550.923	596145.44	0.0755	P	1.3
5	☐	5000.000	4741.394	697367.90	0.0944	P	1.0
6	☐	10000.000	9848.098	996458.93	0.1384	P	0.6
7	☐	20000.000	20134.099	1655877.71	0.2270	P	0.6
8	☐			387197.93	0.0514	P	0.5

$$y = 8.6125\text{E-}006 * x + 0.0536$$

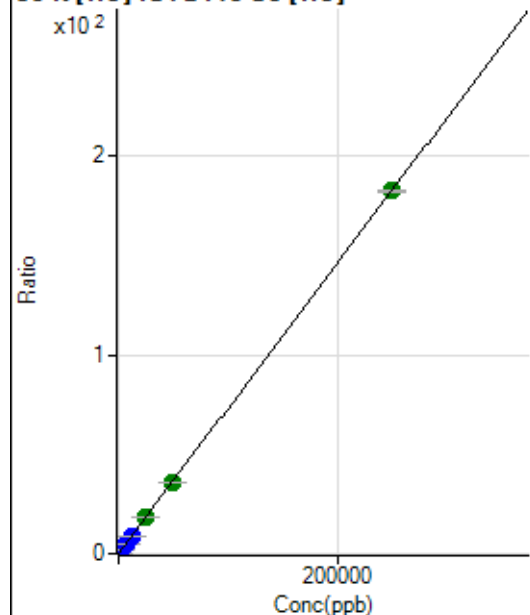
R = 0.9998

DL = 152.7

BEC = 6219

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16128.75	0.0511	P	2.2
2	☐	500.000	473.728	129013.07	0.3968	P	0.8
3	☐	2500.000	2492.600	595753.14	1.8700	P	0.9
4	☐	6250.000	6253.665	1379909.29	4.6145	P	0.3
5	☐	12500.000	12495.391	2573282.26	9.1691	P	0.4
6	☐	25000.000	24888.452	5091495.99	18.2123	A	0.6
7	☐	50000.000	49369.972	10282770.89	36.0765	A	0.8
8	☐	250000.00	250137.42	57653033.93	182.5770	A	0.3

$$y = 7.2970\text{E-}004 * x + 0.0511$$

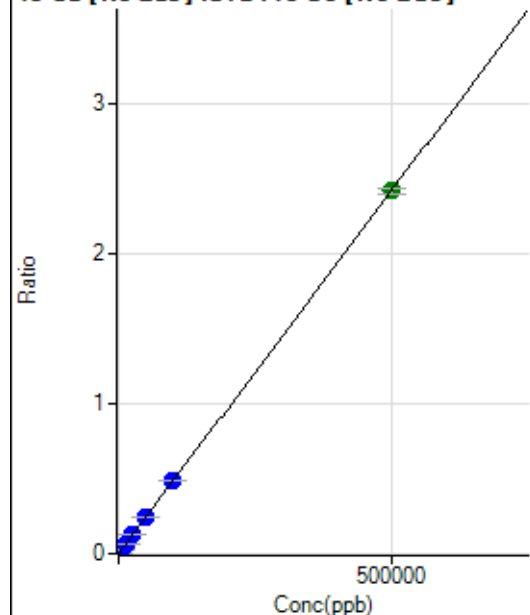
R = 1.0000

DL = 4.678

BEC = 70.08

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	241.68	0.0000	P	7.0
2	☐	500.000	464.488	19018.49	0.0023	P	2.6
3	☐	5000.000	5014.756	200757.43	0.0242	P	0.3
4	☐	12500.000	12701.348	484332.14	0.0614	P	0.2
5	☐	25000.000	25473.893	908950.05	0.1230	P	0.9
6	☐	50000.000	50666.629	1762156.05	0.2447	P	0.3
7	☐	100000.00	100306.45	3534404.42	0.4844	P	0.3
8	☐	500000.00	499843.20	18179496.59	2.4139	A	1.3

$$y = 4.8293E-006 * x + 2.9525E-005$$

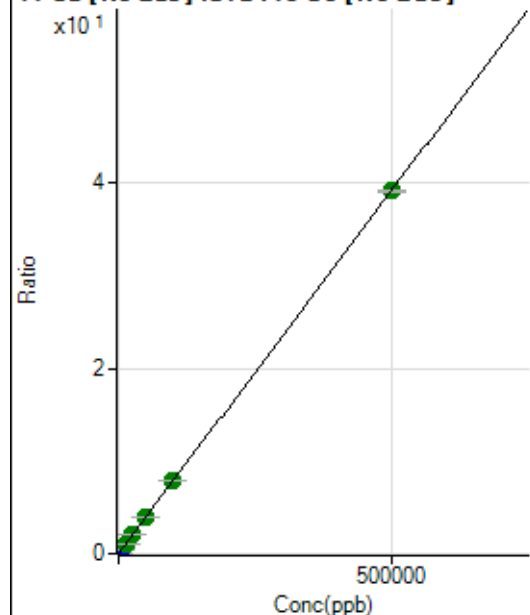
$$R = 1.0000$$

$$DL = 1.283$$

$$BEC = 6.114$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7516.11	0.0009	P	2.2
2	☐	500.000	465.843	313160.32	0.0374	P	0.6
3	☐	5000.000	5001.987	3252602.31	0.3929	P	0.3
4	☐	12500.000	12577.738	7785711.11	0.9865	A	1.0
5	☐	25000.000	25362.365	14687910.57	1.9882	A	0.2
6	☐	50000.000	50498.679	28499882.58	3.9578	A	0.3
7	☐	100000.00	101094.12	57798881.16	7.9223	A	0.5
8	☐	500000.00	499711.26	294913789.9	39.1565	A	0.7

$$y = 7.8356E-005 * x + 9.1811E-004$$

$$R = 1.0000$$

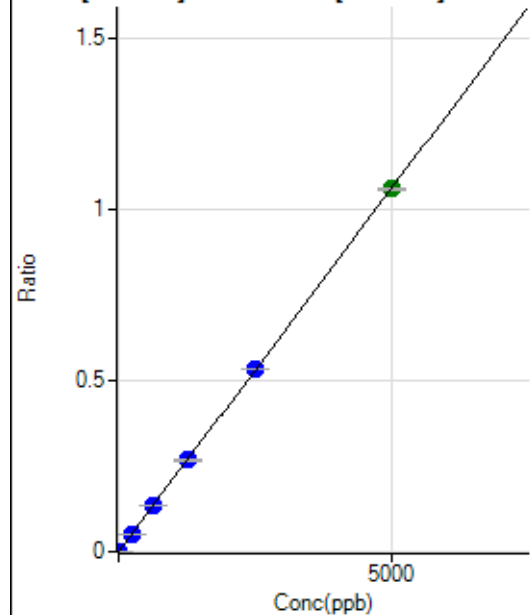
$$DL = 0.7722$$

$$BEC = 11.72$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.90	0.0000	P	37.4
2	☐	5.000	4.990	8950.32	0.0011	P	3.8
3	☐	250.000	246.251	432572.85	0.0522	P	0.4
4	☐	625.000	626.494	1048974.18	0.1329	P	0.9
5	☐	1250.000	1259.845	1974295.45	0.2673	P	0.5
6	☐	2500.000	2507.705	3830627.43	0.5320	P	0.2
7	☐	5000.000	4993.687	7728257.99	1.0593	A	0.8
8	☐			7966.34	0.0011	P	4.2

$$y = 2.1213\text{E-}004 * x + 1.0846\text{E-}005$$

$$R = 1.0000$$

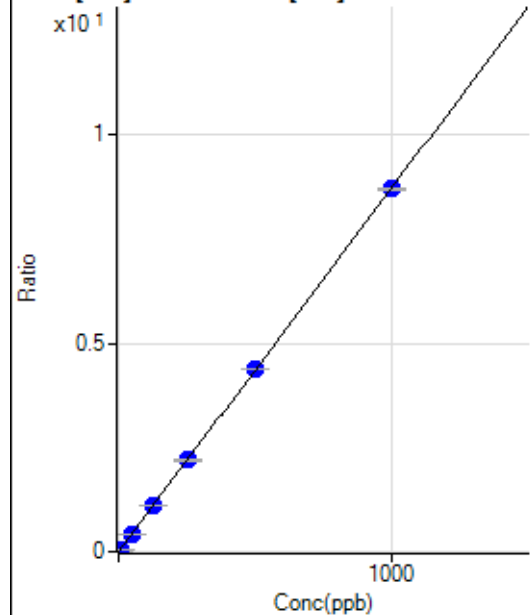
$$DL = 0.05743$$

$$BEC = 0.05113$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	4.920	13938.96	0.0429	P	1.7
3	☐	50.000	49.946	138651.35	0.4352	P	0.2
4	☐	125.000	125.543	327115.03	1.0939	P	0.6
5	☐	250.000	251.701	615481.65	2.1931	P	0.5
6	☐	500.000	502.709	1224573.10	4.3801	P	0.1
7	☐	1000.000	998.155	2478913.70	8.6969	P	0.7
8	☐			2612.50	0.0083	P	2.4

$$y = 0.0087 * x + 7.0457\text{E-}006$$

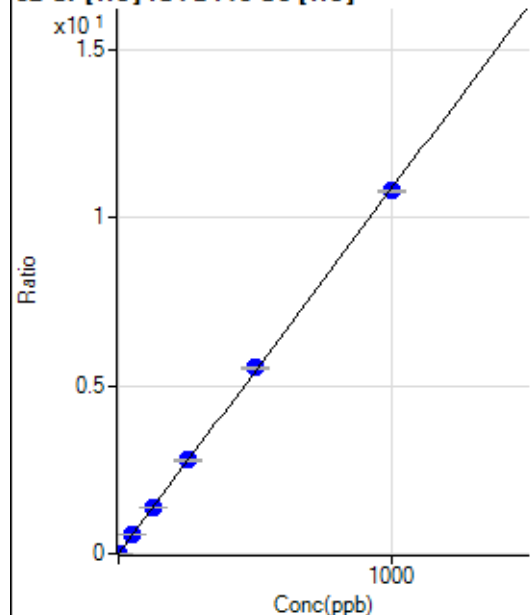
$$R = 1.0000$$

$$DL = 0.002101$$

$$BEC = 0.0008086$$

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	1126.73	0.0036	P	3.1
2	☐	2.000	1.866	7758.83	0.0239	P	1.0
3	☐	50.000	50.811	177157.82	0.5561	P	0.6
4	☐	125.000	128.452	418739.02	1.4003	P	0.5
5	☐	250.000	256.112	782560.16	2.7884	P	1.0
6	☐	500.000	508.249	1546025.34	5.5300	P	0.2
7	☐	1000.000	993.876	3081276.62	10.8105	P	0.3
8	☐			95087.68	0.3011	P	0.7

$$y = 0.0109 * x + 0.0036$$

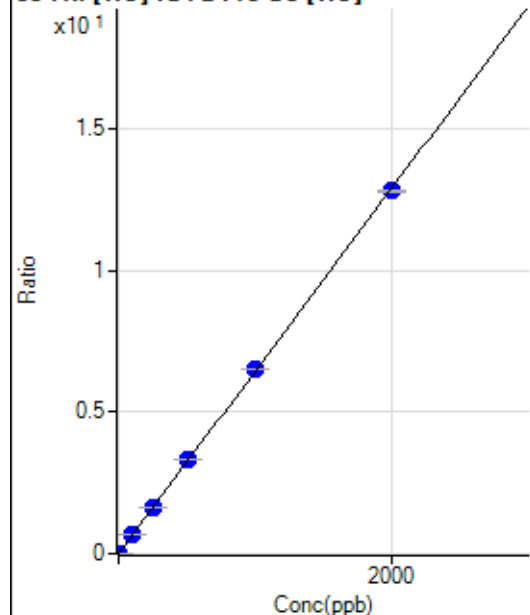
$$R = 0.9999$$

$$DL = 0.03048$$

$$BEC = 0.3285$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	28.89	0.0001	P	29.5
2	☐	1.000	1.037	2202.42	0.0068	P	0.5
3	☐	100.000	101.246	207889.65	0.6525	P	0.9
4	☐	250.000	256.260	493835.03	1.6514	P	0.4
5	☐	500.000	515.651	932560.88	3.3229	P	0.4
6	☐	1000.000	1015.172	1828932.84	6.5418	P	0.1
7	☐	2000.000	1987.656	3650647.03	12.8085	P	0.8
8	☐			16753.04	0.0531	P	1.6

$$y = 0.0064 * x + 9.1686E-005$$

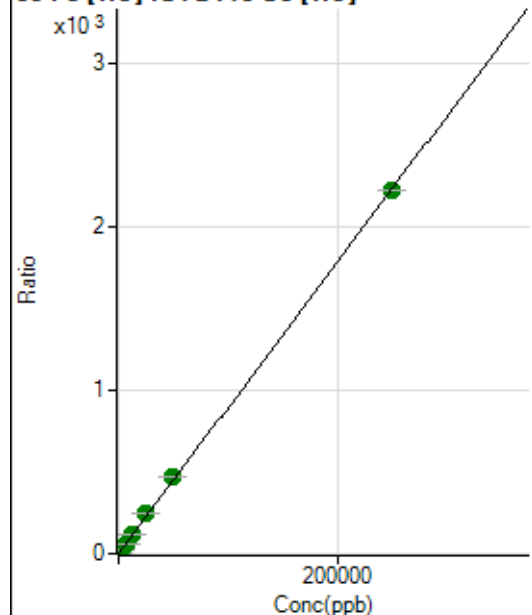
$$R = 0.9999$$

$$DL = 0.01261$$

$$BEC = 0.01423$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2715.15	0.0086	P	3.8
2	☐	50.000	52.967	155983.21	0.4798	P	1.5
3	☐	2500.000	2673.049	7578762.96	23.7876	A	0.7
4	☐	6250.000	6812.691	18125692.07	60.6132	A	0.9
5	☐	12500.000	13749.518	34329508.87	122.3221	A	0.2
6	☐	25000.000	27168.448	67570622.35	241.6946	A	0.2
7	☐	50000.000	53062.615	134543728.0	472.0449	A	0.3
8	☐	250000.00	249092.35	699719823.0	2,215.893	A	0.1

$$y = 0.0089 * x + 0.0086$$

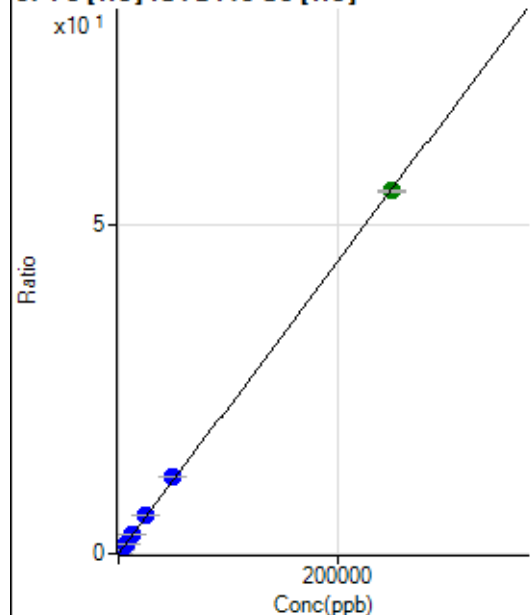
$$R = 0.9999$$

$$DL = 0.1101$$

$$BEC = 0.9675$$

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	146.30	0.0005	P	32.7
2	☐	50.000	53.490	4011.77	0.0123	P	1.7
3	☐	2500.000	2658.817	188220.29	0.5908	P	0.8
4	☐	6250.000	6736.699	447395.77	1.4961	P	0.4
5	☐	12500.000	13604.522	847778.69	3.0209	P	0.9
6	☐	25000.000	26833.213	1665667.01	5.9578	P	0.4
7	☐	50000.000	52932.752	3349751.55	11.7523	P	0.4
8	☐	250000.00	249161.14	17467660.11	55.3179	A	0.2

$$y = 2.2201E-004 * x + 4.6335E-004$$

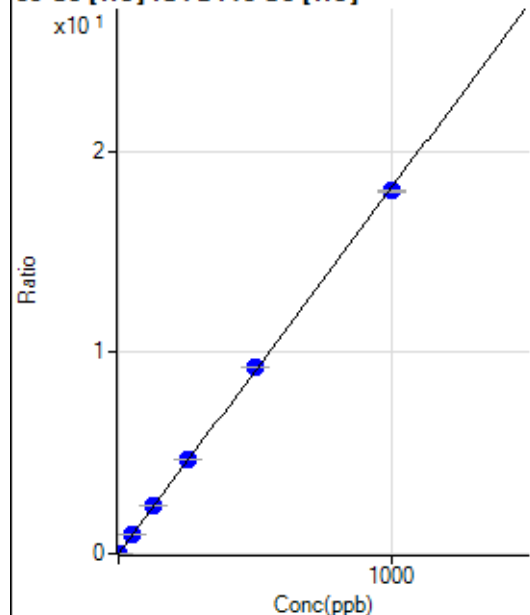
$$R = 0.9999$$

$$DL = 2.048$$

$$BEC = 2.087$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	57.78	0.0002	P	54.1
2	☐	1.000	0.987	5892.38	0.0181	P	2.1
3	☐	50.000	52.432	303640.81	0.9530	P	0.7
4	☐	125.000	130.864	711220.22	2.3783	P	0.5
5	☐	250.000	259.121	1321600.88	4.7091	P	0.2
6	☐	500.000	510.644	2594372.12	9.2800	P	0.5
7	☐	1000.000	991.543	5135943.22	18.0193	P	0.8
8	☐			13969.06	0.0442	P	1.3

$$y = 0.0182 * x + 1.8300E-004$$

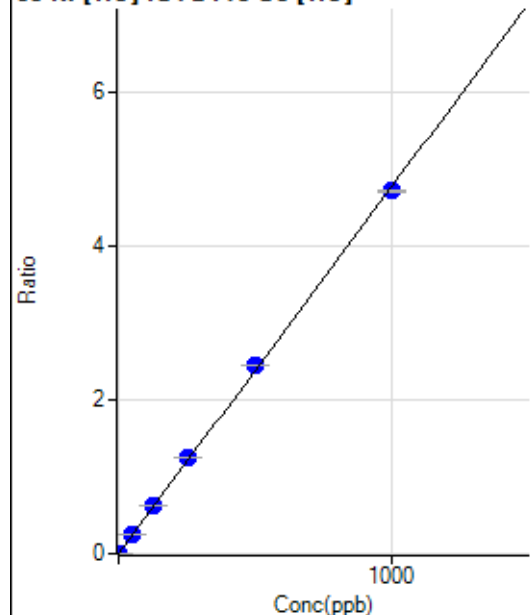
$$R = 0.9999$$

$$DL = 0.01636$$

$$BEC = 0.01007$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	34.45	0.0001	P	49.1
2	☐	1.000	1.002	1587.89	0.0049	P	0.8
3	☐	50.000	52.832	80225.99	0.2518	P	0.6
4	☐	125.000	132.511	188812.17	0.6314	P	0.4
5	☐	250.000	262.005	350332.61	1.2483	P	0.6
6	☐	500.000	512.699	682867.18	2.4426	P	0.5
7	☐	1000.000	989.569	1343717.14	4.7144	P	0.7
8	☐			29576.67	0.0937	P	2.3

$$y = 0.0048 * x + 1.0935E-004$$

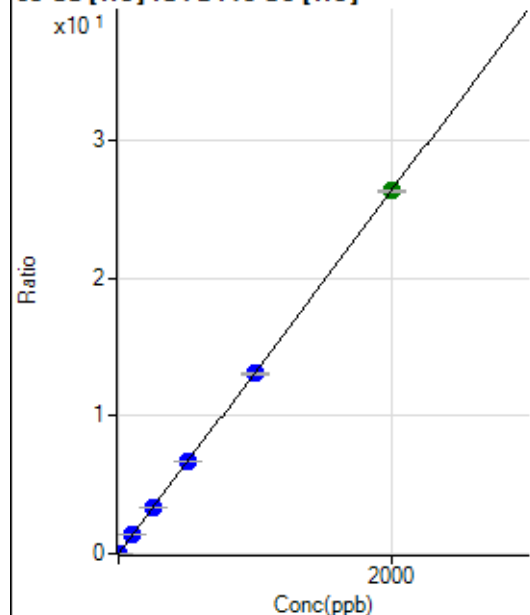
$$R = 0.9998$$

$$DL = 0.03381$$

$$BEC = 0.02295$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	632.24	0.0020	P	6.7
2	☐	2.000	1.998	9205.26	0.0283	P	4.3
3	☐	100.000	102.301	429729.22	1.3488	P	0.7
4	☐	250.000	256.551	1010635.94	3.3795	P	0.8
5	☐	500.000	511.375	1889959.05	6.7343	P	0.4
6	☐	1000.000	993.482	3657110.57	13.0814	P	0.6
7	☐	2000.000	1999.481	7503429.82	26.3255	A	0.7
8	☐			18313.91	0.0580	P	1.7

$$y = 0.0132 * x + 0.0020$$

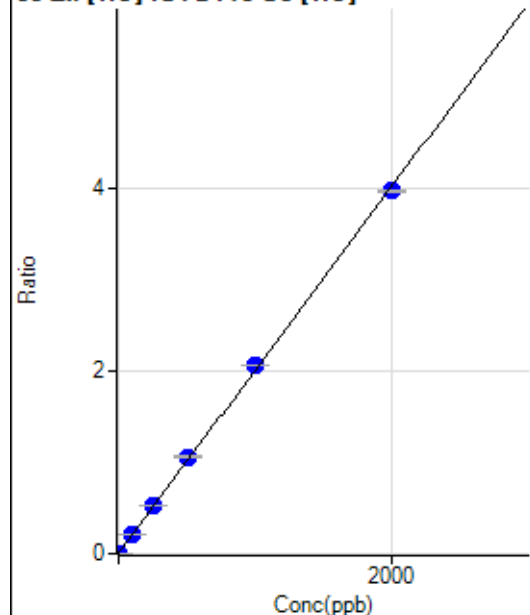
$$R = 1.0000$$

$$DL = 0.03071$$

$$BEC = 0.1522$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	998.94	0.0032	P	1.0
2	☐	2.000	1.638	2095.74	0.0064	P	1.8
3	☐	100.000	104.694	67802.10	0.2128	P	0.8
4	☐	250.000	263.080	158487.62	0.5300	P	0.8
5	☐	500.000	527.709	297458.46	1.0599	P	1.4
6	☐	1000.000	1026.990	575827.28	2.0597	P	0.4
7	☐	2000.000	1977.709	1129680.15	3.9635	P	0.5
8	☐			18458.52	0.0585	P	1.3

$$y = 0.0020 * x + 0.0032$$

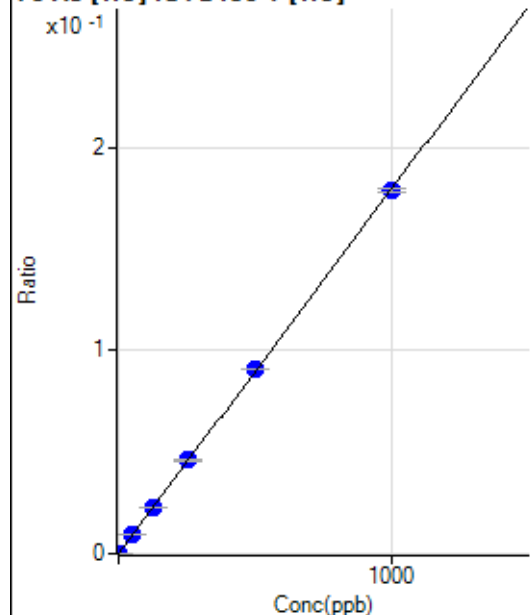
$$R = 0.9997$$

$$DL = 0.04578$$

$$BEC = 1.581$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.64	0.0000	P	45.0
2	☐	1.000	0.938	358.03	0.0002	P	7.0
3	☐	50.000	51.782	18873.43	0.0093	P	0.5
4	☐	125.000	127.909	44296.17	0.0230	P	0.7
5	☐	250.000	256.794	83827.36	0.0461	P	1.0
6	☐	500.000	505.538	165797.13	0.0908	P	0.5
7	☐	1000.000	995.080	329627.21	0.1786	P	1.0
8	☐			407.42	0.0002	P	10.4

$$y = 1.7951\text{E-}004 * x + 4.3109\text{E-}006$$

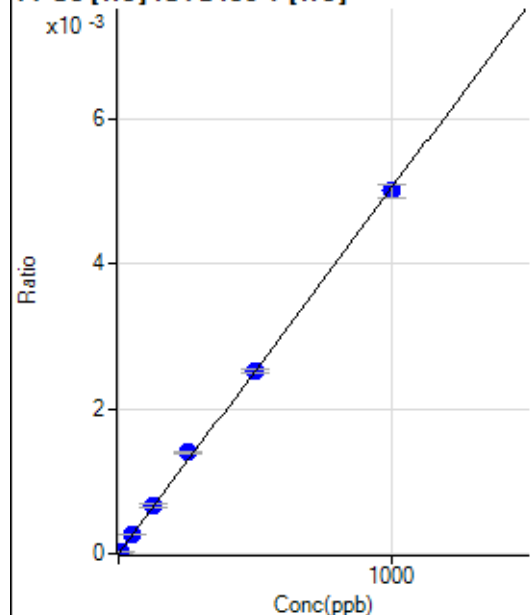
$$R = 1.0000$$

$$DL = 0.03239$$

$$BEC = 0.02402$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	5.834	62.22	0.0000	P	27.0
3	☐	50.000	50.937	523.35	0.0003	P	2.9
4	☐	125.000	131.944	1286.75	0.0007	P	5.7
5	☐	250.000	277.173	2546.94	0.0014	P	2.1
6	☐	500.000	499.663	4611.93	0.0025	P	2.3
7	☐	1000.000	992.456	9249.73	0.0050	P	3.6
8	☐			14.44	0.0000	P	12.4

$$y = 5.0510\text{E-}006 * x + 5.5510\text{E-}007$$

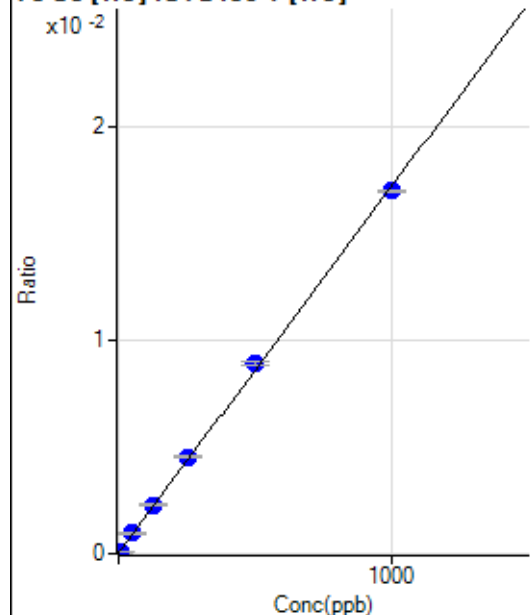
$$R = 0.9996$$

$$DL = 0.5711$$

$$BEC = 0.1099$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.85	0.0000	P	16.8
2	☐	5.000	5.481	248.77	0.0001	P	12.7
3	☐	50.000	54.162	1941.50	0.0010	P	3.1
4	☐	125.000	131.990	4424.78	0.0023	P	2.8
5	☐	250.000	261.299	8211.03	0.0045	P	2.1
6	☐	500.000	515.570	16229.52	0.0089	P	2.0
7	☐	1000.000	988.306	31382.74	0.0170	P	0.5
8	☐			102.47	0.0001	P	8.1

$$y = 1.7181\text{E-}005 * x + 2.5840\text{E-}005$$

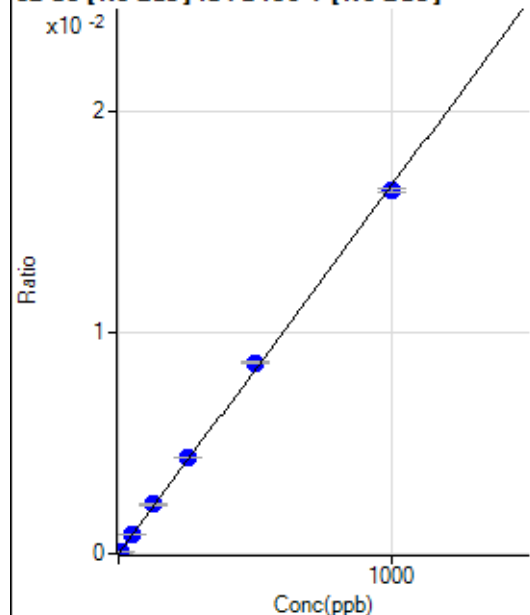
$$R = 0.9997$$

$$DL = 0.7561$$

$$BEC = 1.504$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-66.44	0.0000	P	-135.
2	☐	5.000	5.617	1507.46	0.0001	P	3.4
3	☐	50.000	53.340	14977.52	0.0009	P	1.1
4	☐	125.000	133.878	36426.72	0.0022	P	1.8
5	☐	250.000	262.637	68515.92	0.0044	P	0.5
6	☐	500.000	519.367	131887.34	0.0087	P	0.5
7	☐	1000.000	985.877	255478.00	0.0164	P	1.2
8	☐			302.44	0.0000	P	23.4

$$y = 1.6679\text{E-}005 * x - 3.9663\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.9632$$

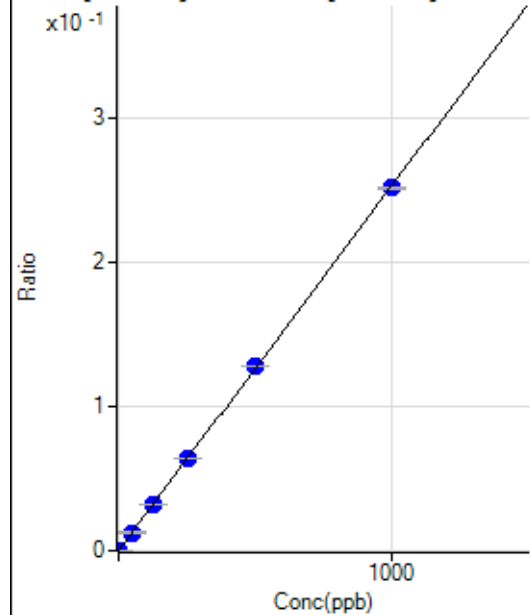
$$BEC = -0.2378$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1046.72		P	10.7
2	☐			1010.05		P	3.6
3	☐			926.71		P	5.9
4	☐			931.15		P	6.6
5	☐			858.93		P	5.2
6	☐			901.15		P	1.8
7	☐			928.93		P	3.6
8	☐			970.05		P	6.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1514.04	0.0001	P	8.8
2	☐	1.000	1.001	5768.07	0.0003	P	2.9
3	☐	50.000	49.736	213607.33	0.0126	P	1.2
4	☐	125.000	126.449	522562.59	0.0320	P	0.6
5	☐	250.000	253.081	1000425.34	0.0639	P	0.7
6	☐	500.000	506.874	1948143.38	0.1279	P	0.6
7	☐	1000.000	995.625	3903038.80	0.2511	P	0.9
8	☐			21066.24	0.0014	P	1.2

$$y = 2.5214\text{E-}004 * x + 9.0816\text{E-}005$$

$$R = 1.0000$$

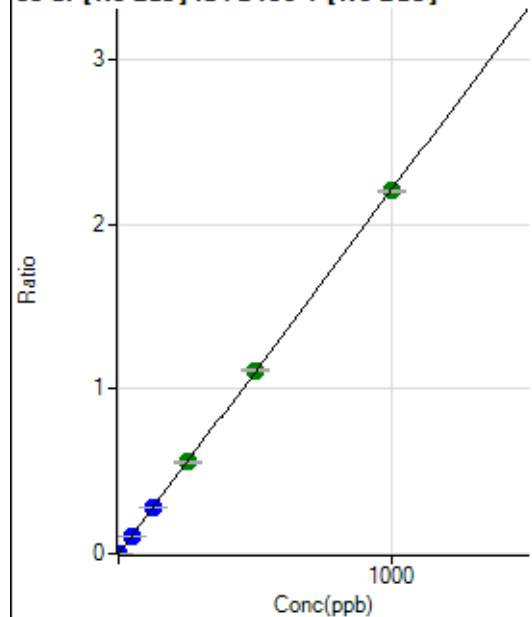
$$DL = 0.09516$$

$$BEC = 0.3602$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.89	0.0000	P	21.1
2	☐	1.000	0.975	36269.17	0.0022	P	1.0
3	☐	50.000	49.685	1853689.10	0.1096	P	0.9
4	☐	125.000	125.887	4538878.27	0.2777	P	0.3
5	☐	250.000	251.736	8694419.47	0.5554	A	0.7
6	☐	500.000	504.228	16944018.78	1.1124	A	0.5
7	☐	1000.000	997.357	34196694.17	2.2002	A	0.2
8	☐			169021.53	0.0110	P	0.8

$$y = 0.0022 * x + 6.8296E-006$$

$$R = 1.0000$$

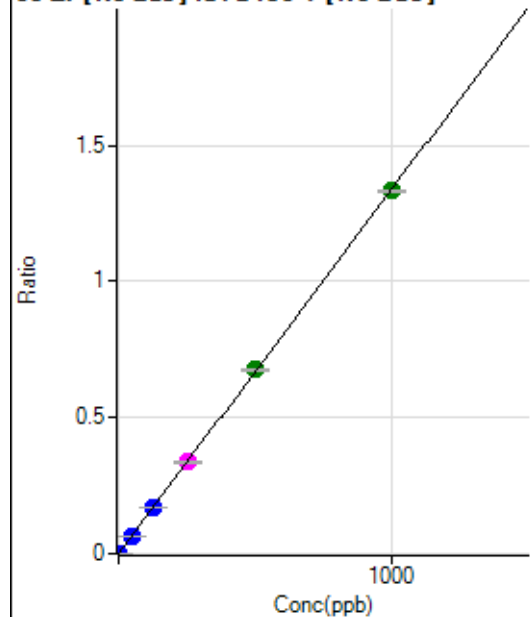
$$DL = 0.001958$$

$$BEC = 0.003096$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	975.07	0.0001	P	7.6
2	☐	1.000	0.840	19850.63	0.0012	P	3.3
3	☐	50.000	49.311	1115543.21	0.0660	P	0.7
4	☐	125.000	125.349	2738984.33	0.1676	P	1.0
5	☐	250.000	251.667	5267036.62	0.3364	M	1.0
6	☐	500.000	506.388	10310320.28	0.6769	A	1.3
7	☐	1000.000	996.380	20697665.57	1.3318	A	0.7
8	☐			19238.60	0.0012	P	1.8

$$y = 0.0013 * x + 5.8457E-005$$

$$R = 1.0000$$

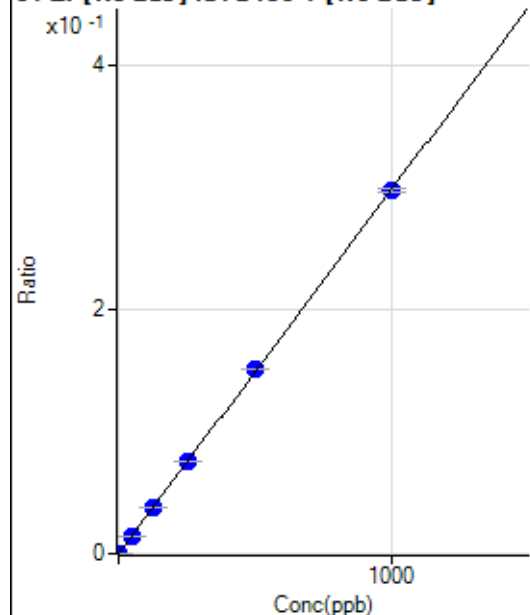
$$DL = 0.01001$$

$$BEC = 0.04374$$

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	194.45	0.0000	P	30.5
2	☐	1.000	0.811	4264.70	0.0003	P	5.2
3	☐	50.000	49.290	249019.32	0.0147	P	1.3
4	☐	125.000	125.269	611321.97	0.0374	P	1.4
5	☐	250.000	253.096	1183029.30	0.0756	P	0.9
6	☐	500.000	505.435	2298450.01	0.1509	P	0.2
7	☐	1000.000	996.511	4623284.00	0.2975	P	0.9
8	☐			4295.25	0.0003	P	3.5

$$y = 2.9851\text{E-}004 * x + 1.1668\text{E-}005$$

$$R = 1.0000$$

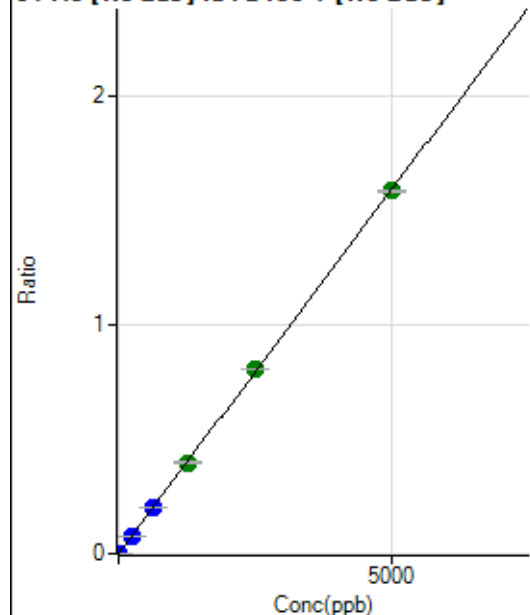
$$DL = 0.03573$$

$$BEC = 0.03909$$

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	380.58	0.0000	P	2.5
2	☐	5.000	4.817	26110.78	0.0016	P	1.5
3	☐	250.000	248.828	1337736.33	0.0791	P	1.0
4	☐	625.000	629.795	3271626.42	0.2002	P	0.5
5	☐	1250.000	1251.678	6228311.12	0.3978	A	0.6
6	☐	2500.000	2528.735	12242338.73	0.8037	A	0.2
7	☐	5000.000	4984.673	24621345.86	1.5842	A	0.6
8	☐			34849.10	0.0023	P	2.1

$$y = 3.1782\text{E-}004 * x + 2.2823\text{E-}005$$

$$R = 1.0000$$

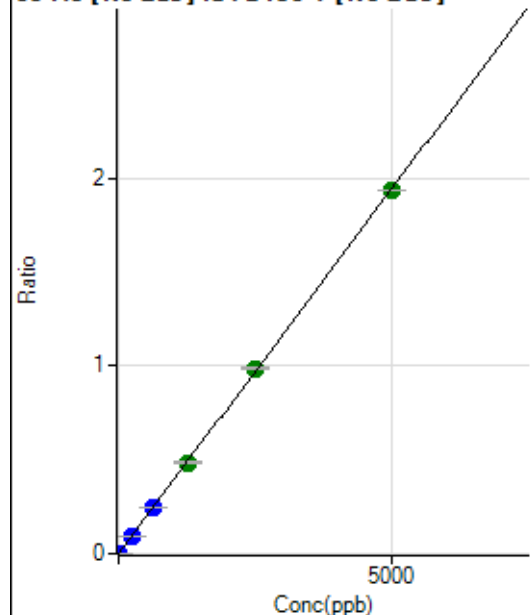
$$DL = 0.00549$$

$$BEC = 0.07181$$

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	97.23	0.0000	P	9.9
2	☐	5.000	5.056	33080.95	0.0020	P	1.3
3	☐	250.000	248.989	1634743.50	0.0967	P	0.2
4	☐	625.000	626.884	3977463.46	0.2434	P	0.6
5	☐	1250.000	1250.669	7601385.15	0.4855	A	0.5
6	☐	2500.000	2545.537	15053006.94	0.9882	A	0.4
7	☐	5000.000	4976.879	30029119.42	1.9321	A	0.1
8	☐			49548.27	0.0032	P	1.8

$$y = 3.8822\text{E-}004 * x + 5.8304\text{E-}006$$

$$R = 0.9999$$

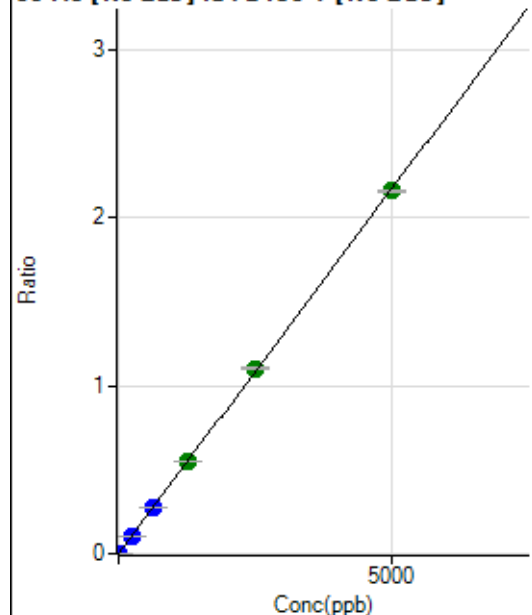
$$DL = 0.004444$$

$$BEC = 0.01502$$

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	175.01	0.0000	P	17.0
2	☐	5.000	5.007	36659.40	0.0022	P	1.9
3	☐	250.000	247.442	1814437.65	0.1073	P	0.3
4	☐	625.000	630.802	4469976.19	0.2735	P	0.3
5	☐	1250.000	1259.651	8550327.97	0.5462	A	1.0
6	☐	2500.000	2537.181	16756313.39	1.1001	A	0.8
7	☐	5000.000	4978.399	33546824.71	2.1585	A	0.6
8	☐			59235.22	0.0038	P	1.9

$$y = 4.3357\text{E-}004 * x + 1.0494\text{E-}005$$

$$R = 1.0000$$

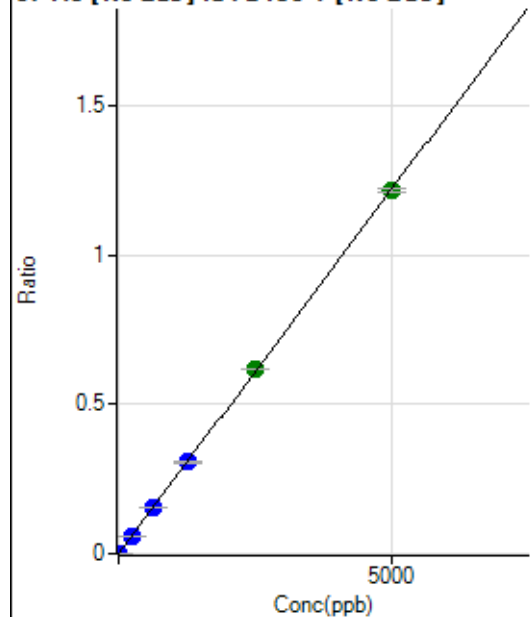
$$DL = 0.01236$$

$$BEC = 0.0242$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.23	0.0000	P	27.0
2	☐	5.000	4.998	20590.51	0.0012	P	1.4
3	☐	250.000	248.723	1027470.31	0.0608	P	0.3
4	☐	625.000	629.738	2514025.23	0.1538	P	0.5
5	☐	1250.000	1259.970	4818268.47	0.3078	P	1.3
6	☐	2500.000	2533.491	9426308.46	0.6188	A	0.8
7	☐	5000.000	4980.234	18906260.32	1.2165	A	1.1
8	☐			31293.55	0.0020	P	3.1

$$y = 2.4426\text{E-}004 * x + 4.3352\text{E-}006$$

$$R = 1.0000$$

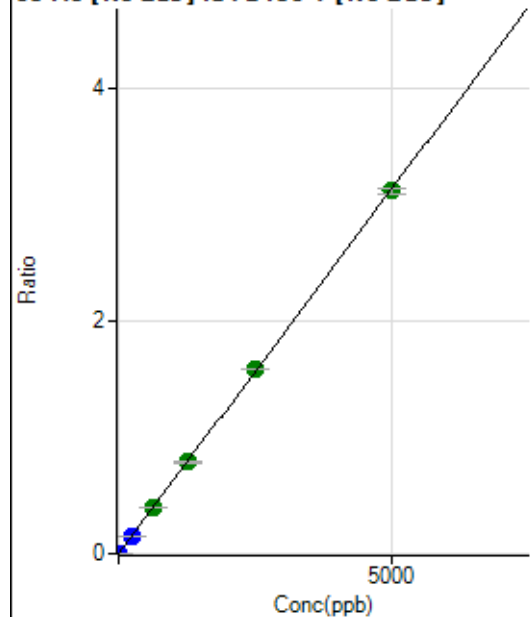
$$DL = 0.0144$$

$$BEC = 0.01775$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0000	P	21.9
2	☐	5.000	5.043	53303.47	0.0032	P	1.6
3	☐	250.000	248.404	2635986.71	0.1559	P	0.3
4	☐	625.000	626.055	6420250.06	0.3928	A	0.7
5	☐	1250.000	1259.444	12372085.08	0.7903	A	1.0
6	☐	2500.000	2538.171	24259619.64	1.5926	A	0.6
7	☐	5000.000	4978.502	48549771.57	3.1239	A	1.2
8	☐			78857.38	0.0051	P	0.5

$$y = 6.2747\text{E-}004 * x + 7.3294\text{E-}006$$

$$R = 1.0000$$

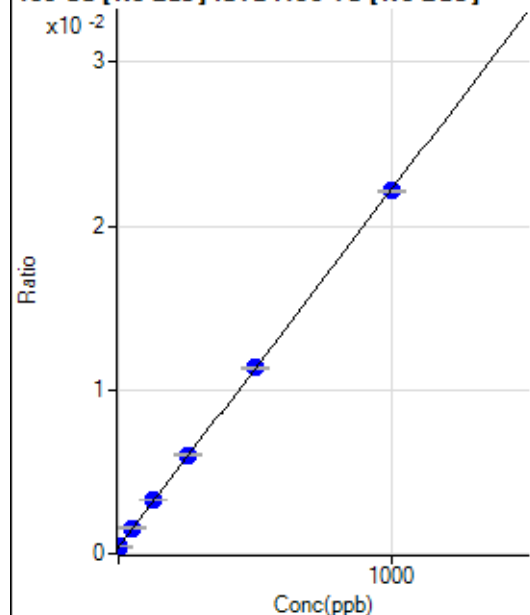
$$DL = 0.007658$$

$$BEC = 0.01168$$

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	7769.12	0.0004	P	0.4
2	☐	1.000	2.451	8719.74	0.0005	P	4.2
3	☐	50.000	53.778	30815.24	0.0016	P	1.9
4	☐	125.000	132.310	63398.71	0.0033	P	3.1
5	☐	250.000	258.549	115476.56	0.0060	P	1.9
6	☐	500.000	500.994	214122.45	0.0113	P	1.5
7	☐	1000.000	996.262	419349.45	0.0221	P	0.5
8	☐			7988.73	0.0005	P	5.5

$$y = 2.1825\text{E-}005 * x + 4.0026\text{E-}004$$

$$R = 1.0000$$

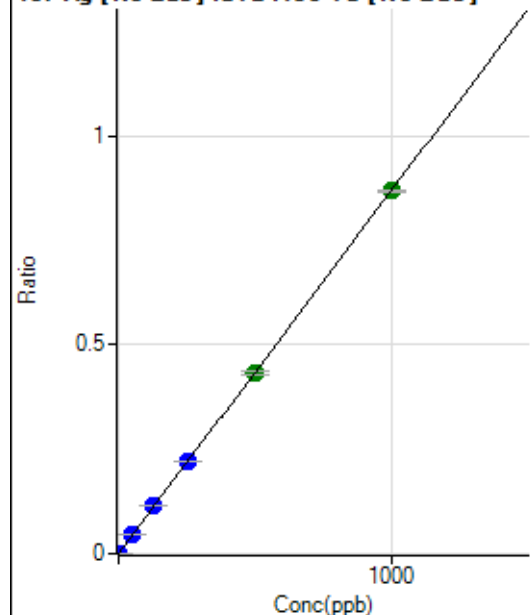
$$DL = 0.2459$$

$$BEC = 18.34$$

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	144.45	0.0000	P	17.4
2	☐	1.000	1.063	17925.84	0.0009	P	0.6
3	☐	50.000	53.769	916179.73	0.0468	P	1.9
4	☐	125.000	133.190	2235340.96	0.1159	P	0.8
5	☐	250.000	254.010	4224181.21	0.2210	P	0.8
6	☐	500.000	497.934	8184910.68	0.4333	A	1.5
7	☐	1000.000	998.818	16459536.65	0.8692	A	0.6
8	☐			10448.78	0.0006	P	1.9

$$y = 8.7018\text{E-}004 * x + 7.4403\text{E-}006$$

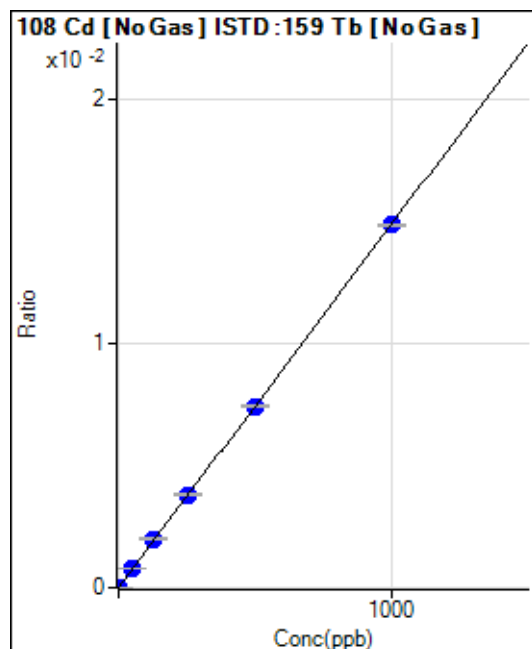
$$R = 1.0000$$

$$DL = 0.004461$$

$$BEC = 0.00855$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	37.50	0.0000	P	40.2
2	☐	1.000	0.935	304.18	0.0000	P	11.4
3	☐	50.000	53.850	15708.95	0.0008	P	0.6
4	☐	125.000	133.705	38361.79	0.0020	P	2.1
5	☐	250.000	255.364	72573.75	0.0038	P	1.1
6	☐	500.000	498.225	139934.19	0.0074	P	0.9
7	☐	1000.000	998.266	281038.00	0.0148	P	0.5
8	☐			256.95	0.0000	P	6.6

$$y = 1.4864E-005 * x + 1.9329E-006$$

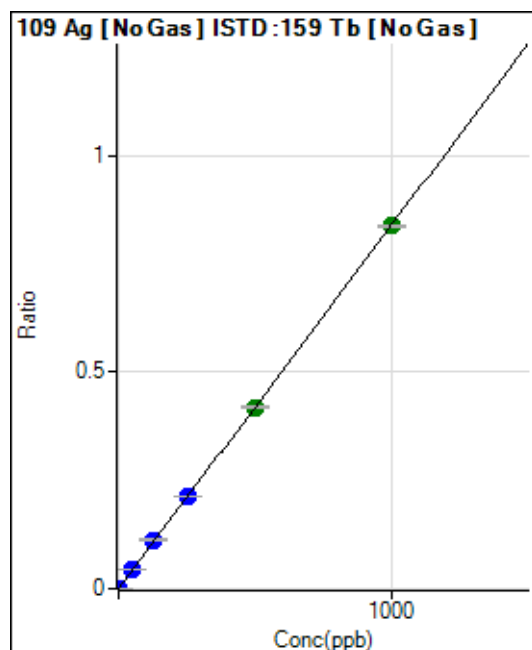
$$R = 1.0000$$

$$DL = 0.1567$$

$$BEC = 0.13$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44.45	0.0000	P	38.6
2	☐	1.000	1.079	17466.99	0.0009	P	0.4
3	☐	50.000	53.789	884583.47	0.0452	P	0.4
4	☐	125.000	133.916	2169110.27	0.1125	P	1.7
5	☐	250.000	254.182	4079976.91	0.2135	P	1.0
6	☐	500.000	499.380	7923344.53	0.4195	A	1.2
7	☐	1000.000	997.960	15873940.81	0.8382	A	0.4
8	☐			10115.12	0.0006	P	1.6

$$y = 8.3994E-004 * x + 2.2863E-006$$

$$R = 1.0000$$

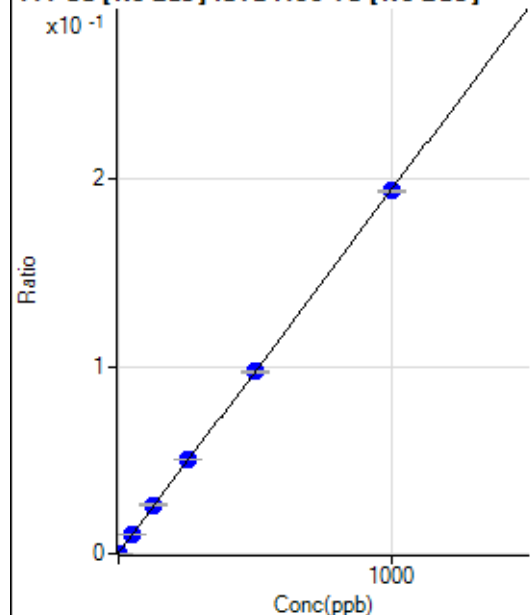
$$DL = 0.00315$$

$$BEC = 0.002722$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5434.35	0.0003	P	0.7
2	☐	1.000	1.085	9423.36	0.0005	P	2.3
3	☐	50.000	53.255	207640.51	0.0106	P	0.3
4	☐	125.000	133.007	502717.27	0.0261	P	1.7
5	☐	250.000	257.249	958554.94	0.0502	P	0.5
6	☐	500.000	500.101	1837019.15	0.0972	P	0.6
7	☐	1000.000	996.974	3665937.76	0.1936	P	0.5
8	☐			8383.46	0.0005	P	5.1

$$y = 1.9389\text{E-}004 * x + 2.7997\text{E-}004$$

$$R = 1.0000$$

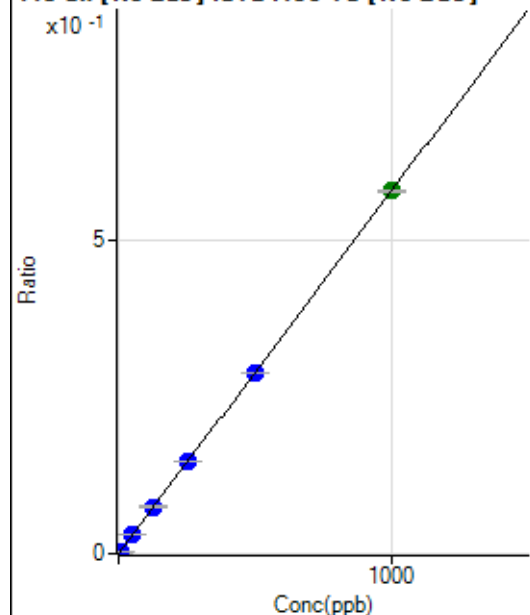
$$DL = 0.02981$$

$$BEC = 1.444$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD:159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1336.24	0.0001	P	11.2
2	☐	5.000	5.286	60002.50	0.0031	P	0.8
3	☐	50.000	51.420	582868.64	0.0298	P	0.8
4	☐	125.000	128.996	1438204.12	0.0746	P	2.0
5	☐	250.000	253.226	2796783.98	0.1463	P	0.3
6	☐	500.000	497.427	5429325.17	0.2874	P	0.3
7	☐	1000.000	999.908	10939178.46	0.5777	A	0.7
8	☐			13376.30	0.0008	P	3.6

$$y = 5.7765\text{E-}004 * x + 6.8873\text{E-}005$$

$$R = 1.0000$$

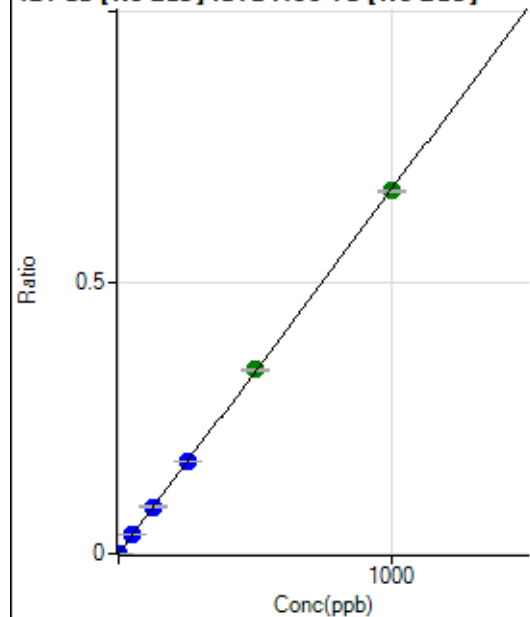
$$DL = 0.04016$$

$$BEC = 0.1192$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	286.13	0.0000	P	39.0
2	☐	2.000	1.944	25398.77	0.0013	P	1.6
3	☐	50.000	50.971	671236.34	0.0343	P	0.7
4	☐	125.000	128.314	1663860.75	0.0863	P	2.3
5	☐	250.000	254.171	3266209.53	0.1709	P	0.1
6	☐	500.000	504.893	6413016.16	0.3395	A	0.3
7	☐	1000.000	996.048	12682766.95	0.6697	A	0.4
8	☐			21728.76	0.0012	P	5.1

$$y = 6.7235E-004 * x + 1.4737E-005$$

$$R = 1.0000$$

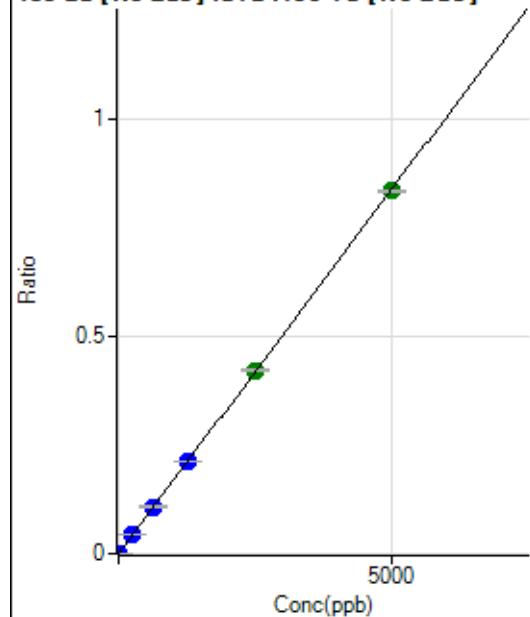
$$DL = 0.02564$$

$$BEC = 0.02192$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.44	0.0000	P	89.4
2	☐	10.000	10.240	32992.97	0.0017	P	1.6
3	☐	250.000	255.897	839459.90	0.0429	P	0.7
4	☐	625.000	643.601	2079499.92	0.1078	P	2.1
5	☐	1250.000	1269.736	4065753.43	0.2128	P	0.7
6	☐	2500.000	2519.807	7975741.41	0.4222	A	0.7
7	☐	5000.000	4982.542	15810550.01	0.8349	A	0.4
8	☐			14138.34	0.0008	P	2.9

$$y = 1.6756E-004 * x + 1.0025E-006$$

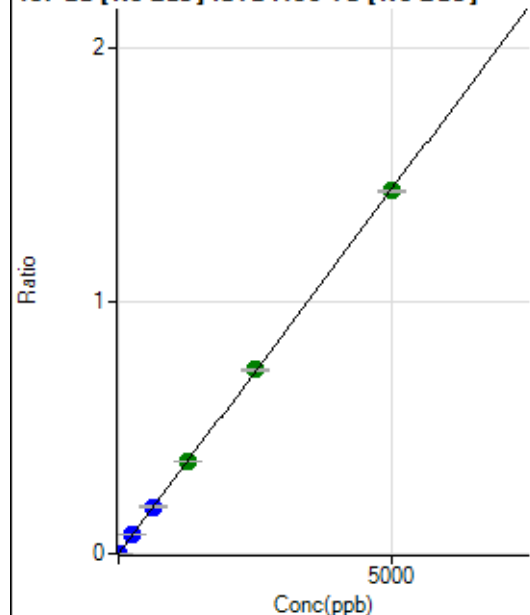
$$R = 1.0000$$

$$DL = 0.01605$$

$$BEC = 0.005983$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	73.6
2	☐	10.000	10.144	56281.77	0.0029	P	0.4
3	☐	250.000	258.271	1458857.36	0.0745	P	0.5
4	☐	625.000	642.166	3572632.85	0.1853	P	2.1
5	☐	1250.000	1267.577	6988772.03	0.3657	A	0.5
6	☐	2500.000	2525.933	13766530.17	0.7288	A	0.5
7	☐	5000.000	4980.079	27209914.50	1.4368	A	0.3
8	☐			23857.41	0.0013	P	2.7

$$y = 2.8851E-004 * x + 1.8560E-006$$

$$R = 1.0000$$

$$DL = 0.01421$$

$$BEC = 0.006433$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			4.45		P	86.6
2	☐			4.44		P	173.2
3	☐			88.89		P	35.4
4	☐			228.90		P	17.6
5	☐			431.13		P	3.2
6	☐			760.05		P	11.0
7	☐			1513.47		P	7.6
8	☐			193.34		P	26.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			4.44		P	43.4
3	☐			21.11		P	63.8
4	☐			15.55		P	68.9
5	☐			31.11		P	12.4
6	☐			66.67		P	13.2
7	☐			103.33		P	27.6
8	☐			55.56		P	44.2

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	32.7
2	☐			16.67		P	100.0
3	☐			63.89		P	39.8
4	☐			52.78		P	18.2
5	☐			111.12		P	15.6
6	☐			161.12		P	24.4
7	☐			275.02		P	29.8
8	☐			83.34		P	50.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	28.4
2	☐			24.45		P	15.8
3	☐			46.67		P	7.1
4	☐			57.78		P	6.7
5	☐			80.00		P	29.2
6	☐			160.00		P	20.5
7	☐			290.01		P	5.0
8	☐			45.56		P	36.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			150.01		P	22.2
2	☐			155.56		P	6.2
3	☐			147.23		P	19.9
4	☐			152.79		P	13.7
5	☐			155.56		P	22.3
6	☐			155.56		P	24.7
7	☐			202.79		P	41.4
8	☐			186.12		P	14.4

160 Gd [He] No available calibration points

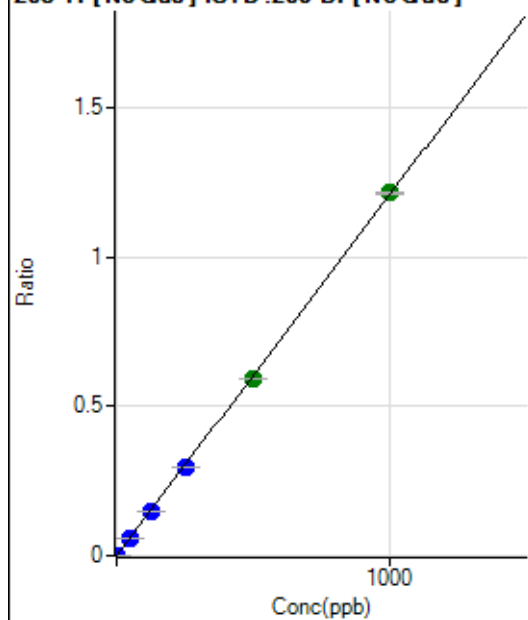
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			300.01		P	21.1
2	☐			296.68		P	19.8
3	☐			294.45		P	14.1
4	☐			293.34		P	23.9
5	☐			245.56		P	13.6
6	☐			280.01		P	9.7
7	☐			292.23		P	10.6
8	☐			326.68		P	11.2

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	14.3
2	☐			116.67		P	50.0
3	☐			91.67		P	32.8
4	☐			97.23		P	60.2
5	☐			130.56		P	26.6
6	☐			133.34		P	27.2
7	☐			122.23		P	21.9
8	☐			161.12		P	34.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			65.56		P	12.8
2	☐			93.34		P	15.6
3	☐			58.89		P	17.3
4	☐			80.00		P	11.0
5	☐			65.55		P	35.7
6	☐			71.11		P	7.2
7	☐			68.89		P	7.4
8	☐			76.67		P	37.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	627.82	0.0001	P	4.9
2	☐	1.000	0.886	13757.64	0.0011	P	4.6
3	☐	50.000	47.725	718548.86	0.0577	P	1.0
4	☐	125.000	123.730	1837114.30	0.1495	P	0.6
5	☐	250.000	247.502	3632178.42	0.2990	P	0.4
6	☐	500.000	488.818	7072220.30	0.5905	A	0.1
7	☐	1000.000	1006.488	14088291.81	1.2158	A	0.3
8	☐			13193.16	0.0013	P	3.3

$$y = 0.0012 * x + 5.0575E-005$$

$$R = 0.9999$$

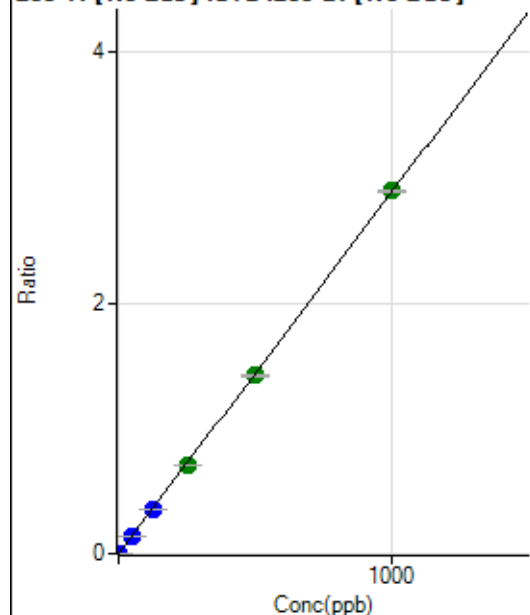
$$DL = 0.006192$$

$$BEC = 0.04187$$

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	1033.42	0.0001	P	2.1
2	☐	1.000	0.913	33265.05	0.0027	P	1.4
3	☐	50.000	48.482	1738616.99	0.1396	P	0.5
4	☐	125.000	123.818	4379499.14	0.3564	P	0.6
5	☐	250.000	246.042	8602268.68	0.7081	A	0.6
6	☐	500.000	492.872	16988308.71	1.4184	A	0.3
7	☐	1000.000	1004.777	33507369.50	2.8916	A	0.5
8	☐			30366.18	0.0031	P	6.2

$$y = 0.0029 * x + 8.3210E-005$$

$$R = 1.0000$$

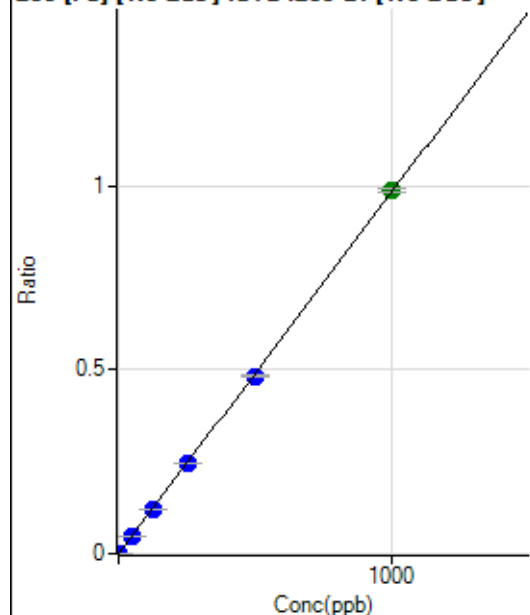
$$DL = 0.001836$$

$$BEC = 0.02892$$

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	1229.72	0.0001	P	5.2
2	☐	1.000	0.921	12315.25	0.0010	P	1.7
3	☐	50.000	48.366	592681.68	0.0476	P	0.4
4	☐	125.000	124.195	1499702.51	0.1220	P	0.5
5	☐	250.000	249.889	2981712.97	0.2455	P	0.9
6	☐	500.000	491.785	5784484.50	0.4830	P	1.2
7	☐	1000.000	1004.318	11428421.44	0.9862	A	1.0
8	☐			47316.08	0.0048	P	2.0

$$y = 9.8190E-004 * x + 9.9070E-005$$

$$R = 1.0000$$

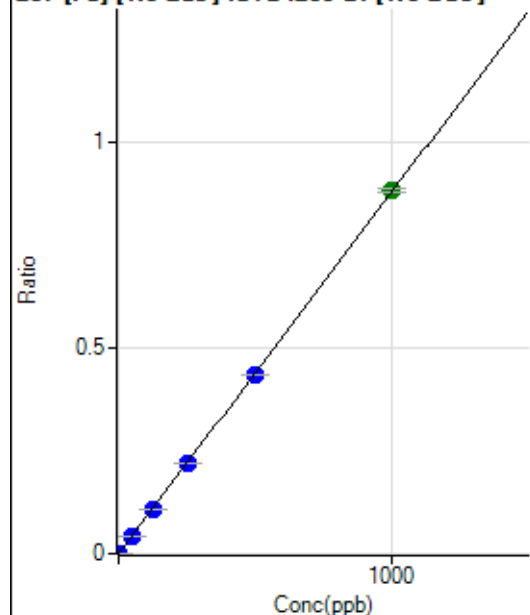
$$DL = 0.01569$$

$$BEC = 0.1009$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1127.86	0.0001	P	3.2
2	☐	1.000	0.925	11073.42	0.0009	P	2.5
3	☐	50.000	48.411	530211.39	0.0426	P	0.6
4	☐	125.000	122.963	1327105.08	0.1080	P	0.8
5	☐	250.000	248.919	2654534.06	0.2185	P	1.0
6	☐	500.000	493.102	5183778.30	0.4328	P	0.3
7	☐	1000.000	1004.054	10211616.66	0.8812	A	1.0
8	☐			43152.07	0.0044	P	0.9

$$y = 8.7757E-004 * x + 9.0808E-005$$

$$R = 1.0000$$

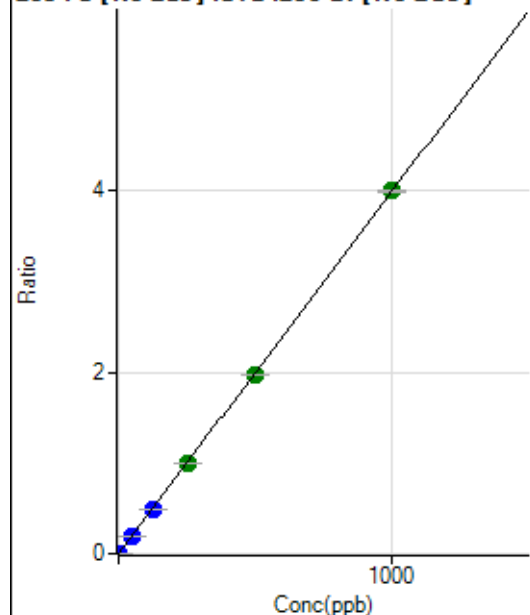
$$DL = 0.00994$$

$$BEC = 0.1035$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4365.19	0.0004	P	4.0
2	☐	1.000	0.921	49340.43	0.0040	P	0.5
3	☐	50.000	48.379	2405671.52	0.1932	P	0.3
4	☐	125.000	123.671	6060994.26	0.4932	P	0.2
5	☐	250.000	248.749	12046884.73	0.9917	A	0.5
6	☐	500.000	494.663	23615961.70	1.9718	A	0.3
7	☐	1000.000	1003.228	46336927.31	3.9987	A	0.9
8	☐			193343.47	0.0197	P	0.6

$$y = 0.0040 * x + 3.5164E-004$$

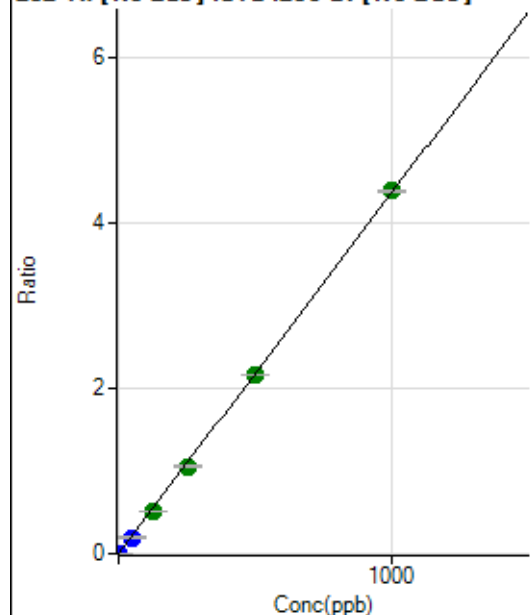
$$R = 1.0000$$

$$DL = 0.01052$$

$$BEC = 0.08823$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2891.16	0.0002	P	7.3
2	☐	1.000	0.784	44853.23	0.0037	P	1.0
3	☐	50.000	45.167	2457432.81	0.1973	P	0.6
4	☐	125.000	118.216	6341766.75	0.5161	A	0.7
5	☐	250.000	241.935	12827314.29	1.0560	A	0.4
6	☐	500.000	495.753	25911696.41	2.1635	A	0.9
7	☐	1000.000	1005.230	50832761.78	4.3867	A	0.4
8	☐			15492.89	0.0016	P	2.2

$$y = 0.0044 * x + 2.3286E-004$$

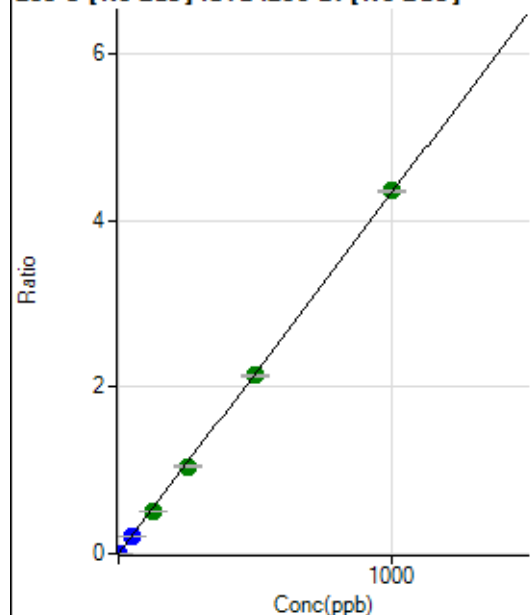
$$R = 0.9999$$

$$DL = 0.01166$$

$$BEC = 0.05336$$

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	2475.37	0.0002	P	2.0
2	☐	1.000	0.840	47052.73	0.0038	P	1.4
3	☐	50.000	45.912	2475853.64	0.1988	P	1.6
4	☐	125.000	118.531	6303356.39	0.5130	A	0.4
5	☐	250.000	242.499	12745927.97	1.0493	A	0.5
6	☐	500.000	493.656	25579573.84	2.1358	A	0.6
7	☐	1000.000	1006.060	50435290.36	4.3525	A	0.4
8	☐			35410.10	0.0036	P	0.8

$$y = 0.0043 * x + 1.9932E-004$$

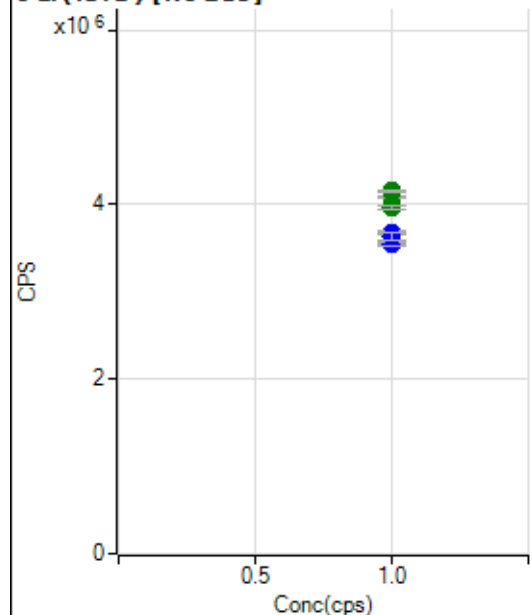
$$R = 0.9999$$

$$DL = 0.00277$$

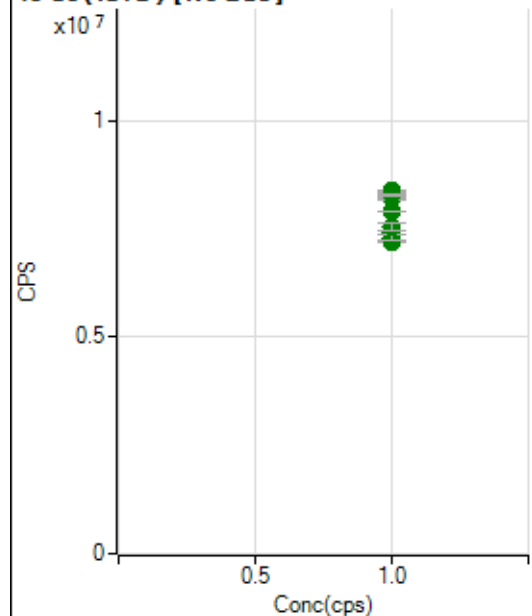
$$BEC = 0.04608$$

Weight: <None>

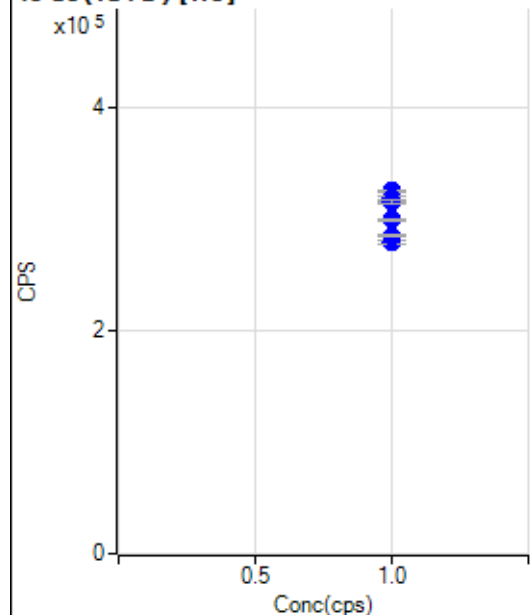
Min Conc: 0

6 Li (ISTD) [No Gas]

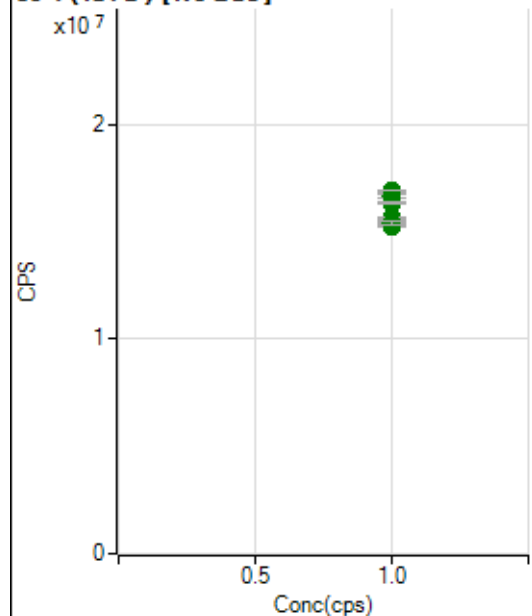
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4079493.13		A	0.4
2	☐	1.000		4148933.62		A	0.8
3	☐	1.000		4156460.91		A	0.2
4	☐	1.000		3965739.56		A	0.9
5	☐	1.000		3683795.47		P	1.0
6	☐	1.000		3550010.81		P	0.3
7	☐	1.000		3548881.44		P	0.8
8	☐	1.000		3629780.40		P	2.3

45 Sc (ISTD) [No Gas]

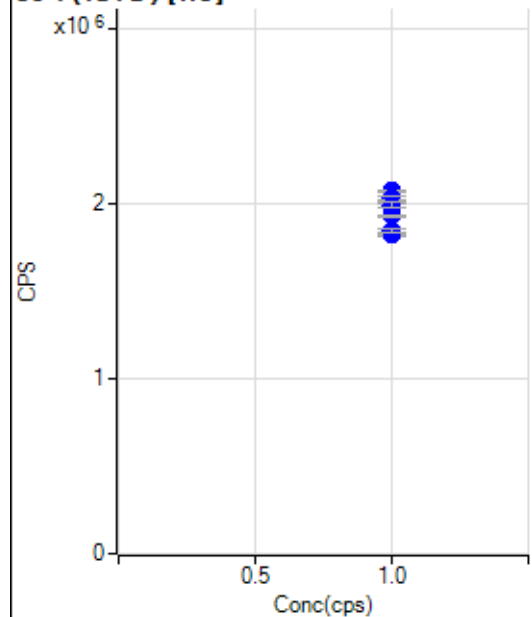
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8186279.52		A	0.6
2	☐	1.000		8368944.46		A	0.5
3	☐	1.000		8279513.29		A	0.8
4	☐	1.000		7892322.14		A	0.4
5	☐	1.000		7387397.21		A	1.2
6	☐	1.000		7200928.11		A	0.2
7	☐	1.000		7296115.70		A	1.5
8	☐	1.000		7532397.65		A	2.2

45 Sc (ISTD) [He]

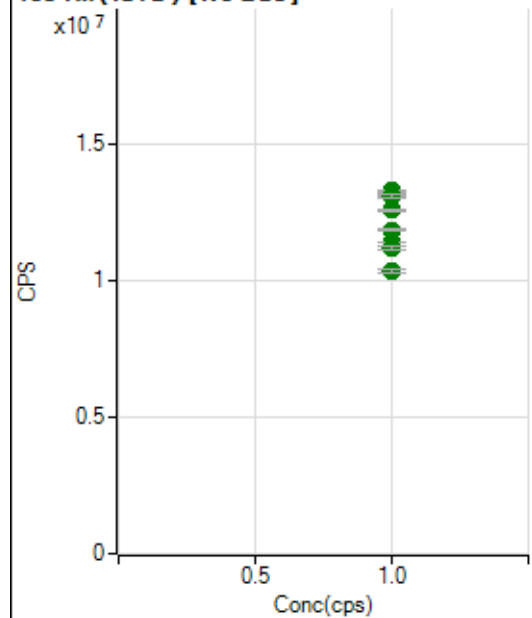
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		315419.46		P	0.6
2	☐	1.000		325115.03		P	0.6
3	☐	1.000		318600.81		P	0.8
4	☐	1.000		299040.39		P	0.5
5	☐	1.000		280647.39		P	0.4
6	☐	1.000		279574.17		P	1.0
7	☐	1.000		285026.58		P	0.8
8	☐	1.000		315773.57		P	1.1

89 Y (ISTD) [No Gas]

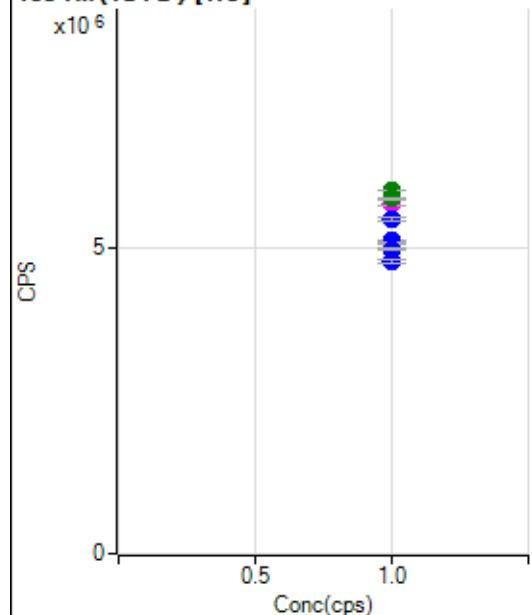
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16675645.03		A	0.6
2	☐	1.000		16805438.22		A	0.7
3	☐	1.000		16910997.66		A	0.1
4	☐	1.000		16343391.56		A	0.4
5	☐	1.000		15655541.43		A	0.4
6	☐	1.000		15232465.88		A	0.2
7	☐	1.000		15542270.18		A	1.5
8	☐	1.000		15424445.46		A	1.2

89 Y(ISTD) [He]

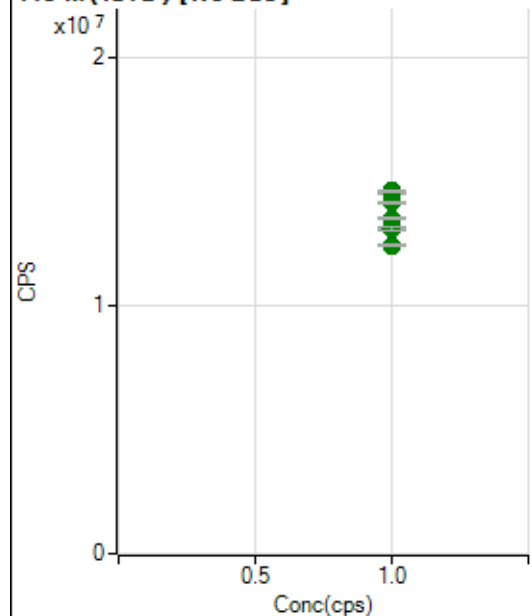
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2007567.14		P	0.5
2	☐	1.000		2072920.98		P	0.6
3	☐	1.000		2029578.61		P	1.0
4	☐	1.000		1928975.65		P	1.0
5	☐	1.000		1818406.64		P	0.5
6	☐	1.000		1826921.22		P	0.5
7	☐	1.000		1845422.20		P	1.0
8	☐	1.000		1990736.06		P	1.7

103 Rh(ISTD) [No Gas]

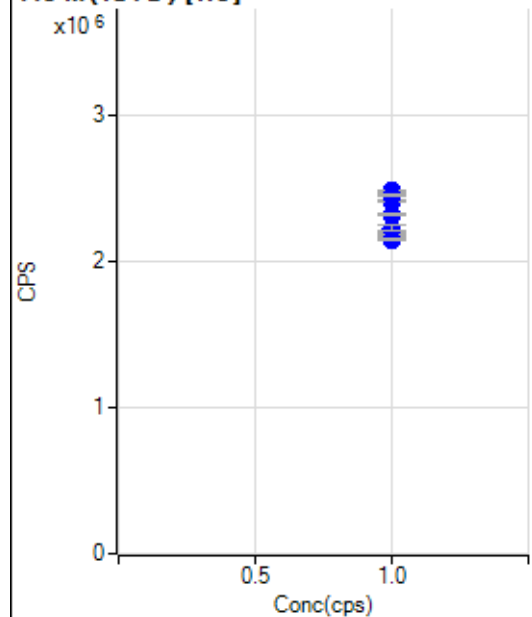
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13139782.24		A	0.7
2	☐	1.000		13310655.51		A	0.6
3	☐	1.000		13126716.01		A	1.2
4	☐	1.000		12609692.90		A	0.5
5	☐	1.000		11867424.31		A	0.4
6	☐	1.000		11428498.17		A	0.3
7	☐	1.000		11242971.69		A	1.2
8	☐	1.000		10392815.69		A	1.1

103 Rh (ISTD) [He]

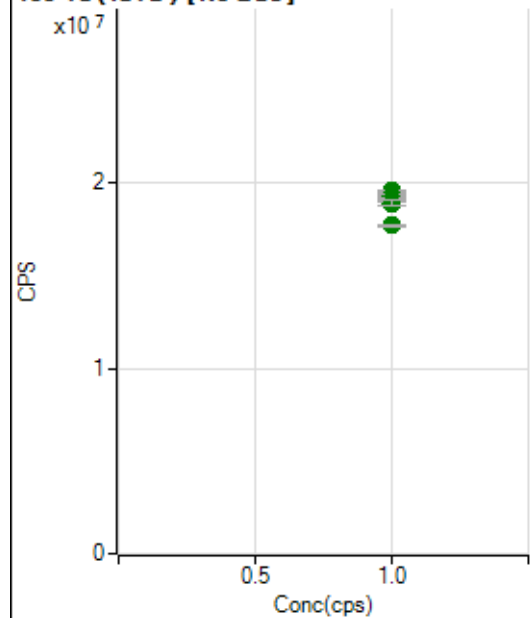
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5711992.83		M	1.7
2	☐	1.000		5917761.79		A	0.2
3	☐	1.000		5791870.47		A	0.7
4	☐	1.000		5454703.32		P	1.0
5	☐	1.000		5111156.97		P	0.3
6	☐	1.000		5055236.63		P	0.7
7	☐	1.000		4968292.35		P	1.0
8	☐	1.000		4772331.32		P	1.4

115 In (ISTD) [No Gas]

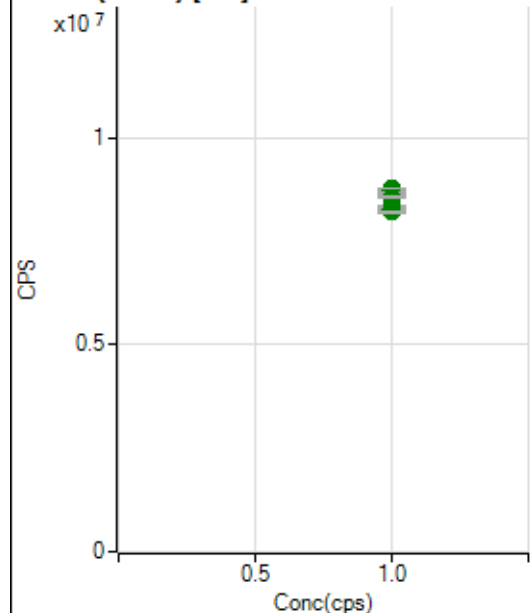
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14513841.99		A	0.5
2	☐	1.000		14628166.09		A	0.4
3	☐	1.000		14592229.19		A	0.4
4	☐	1.000		14150802.93		A	0.4
5	☐	1.000		13517576.22		A	0.6
6	☐	1.000		13141522.33		A	0.4
7	☐	1.000		13079195.09		A	1.1
8	☐	1.000		12426438.91		A	0.8

115 In (ISTD) [He]

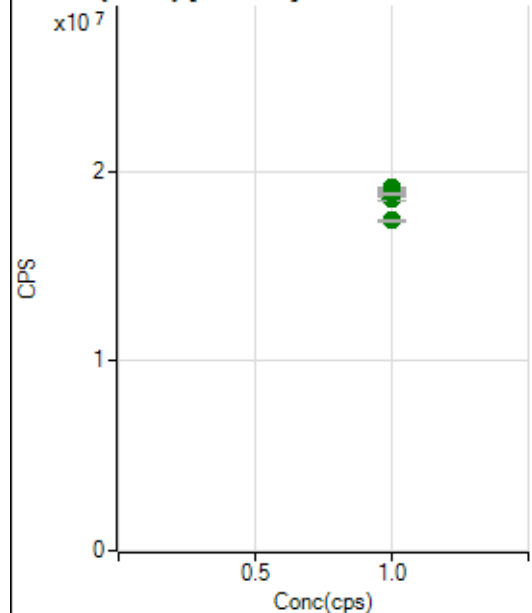
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2416837.54		P	0.3
2	☐	1.000		2487816.46		P	0.7
3	☐	1.000		2458269.28		P	0.4
4	☐	1.000		2325995.12		P	0.6
5	☐	1.000		2206944.39		P	0.5
6	☐	1.000		2182706.24		P	1.1
7	☐	1.000		2154769.72		P	0.7
8	☐	1.000		2231787.51		P	1.5

159 Tb (ISTD) [No Gas]

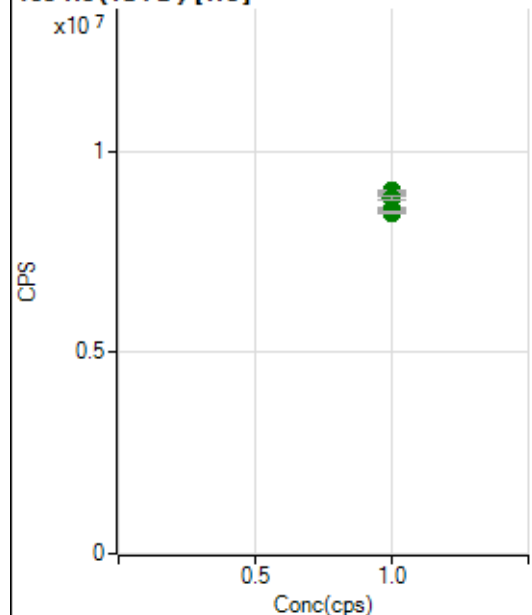
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19410663.05		A	0.6
2	☐	1.000		19218466.52		A	0.6
3	☐	1.000		19578146.10		A	0.2
4	☐	1.000		19286077.91		A	1.1
5	☐	1.000		19110797.63		A	0.8
6	☐	1.000		18890961.38		A	0.9
7	☐	1.000		18937555.41		A	1.1
8	☐	1.000		17708163.90		A	0.7

159 Tb (ISTD) [He]

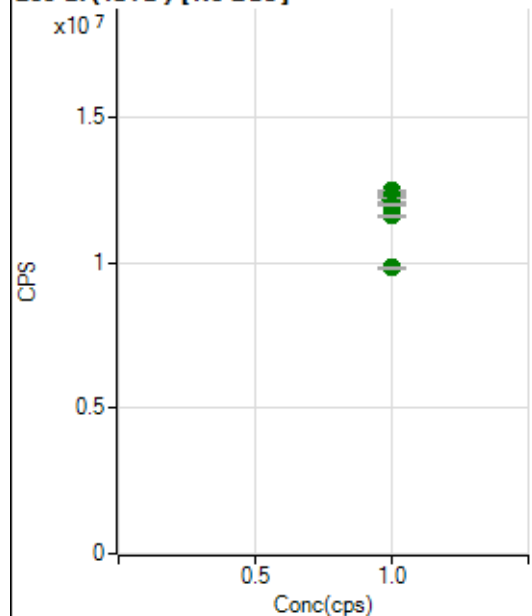
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8673876.74		A	1.3
2	☐	1.000		8756481.88		A	0.5
3	☐	1.000		8726153.34		A	1.0
4	☐	1.000		8552519.74		A	0.6
5	☐	1.000		8301028.28		A	1.0
6	☐	1.000		8238558.49		A	1.1
7	☐	1.000		8249674.32		A	1.0
8	☐	1.000		8200026.13		A	0.4

165 Ho (ISTD) [No Gas]

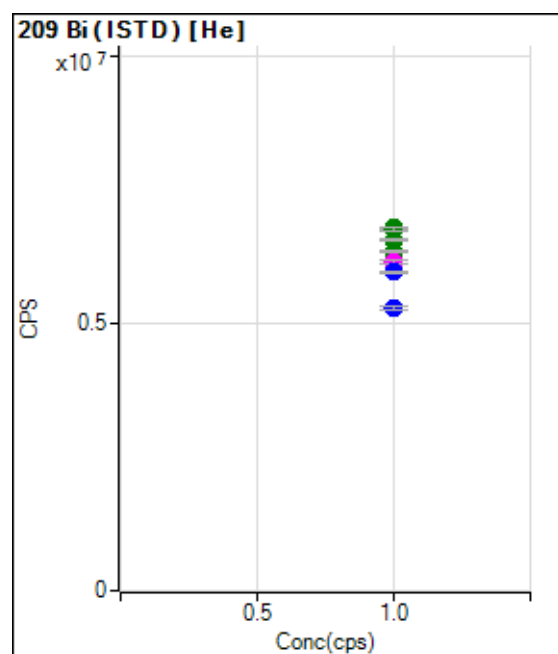
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18965918.48		A	0.6
2	☐	1.000		18975028.55		A	0.6
3	☐	1.000		19141225.26		A	0.2
4	☐	1.000		19049312.23		A	0.6
5	☐	1.000		18771692.95		A	0.5
6	☐	1.000		18603875.24		A	1.0
7	☐	1.000		18829362.57		A	0.6
8	☐	1.000		17423817.93		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8916517.78		A	1.0
2	☐	1.000		9020058.55		A	0.4
3	☐	1.000		9014828.48		A	0.7
4	☐	1.000		8831696.81		A	1.3
5	☐	1.000		8549047.30		A	1.4
6	☐	1.000		8549539.67		A	1.4
7	☐	1.000		8531427.72		A	0.7
8	☐	1.000		8473538.00		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12417440.37		A	1.1
2	☐	1.000		12272810.23		A	0.2
3	☐	1.000		12453896.20		A	0.8
4	☐	1.000		12288006.62		A	0.4
5	☐	1.000		12147607.87		A	0.9
6	☐	1.000		11976779.54		A	0.5
7	☐	1.000		11587752.33		A	0.4
8	☐	1.000		9812396.31		A	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6764538.44		A	1.1
2	☐	1.000		6798362.96		A	0.5
3	☐	1.000		6774372.68		A	1.5
4	☐	1.000		6572443.65		A	0.9
5	☐	1.000		6344453.10		A	0.6
6	☐	1.000		6167780.32		M	1.5
7	☐	1.000		5963683.31		P	0.5
8	☐	1.000		5297482.74		P	0.8

US EPA Tune Check Sample Report

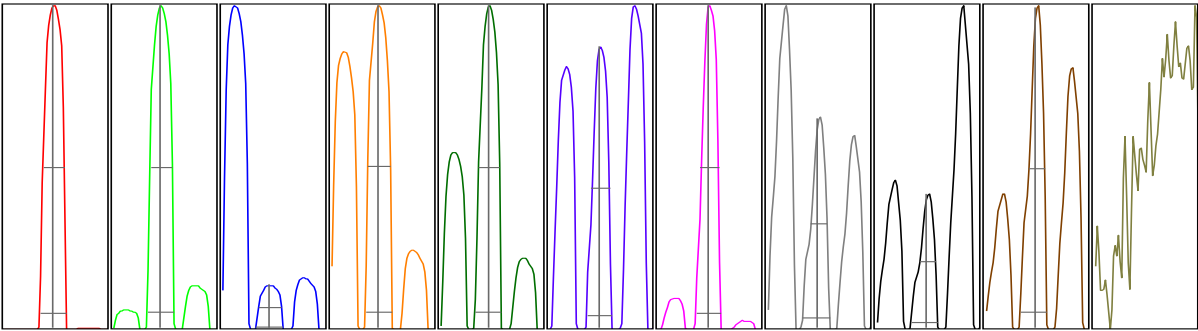
Batch Folder D:\ICP-MS Data\P7121719-MS1 .b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	12985	0.67	5.00	
24	1155396	0.49	5.00	
25	160033	0.60	5.00	
26	183947	0.80	5.00	
59	112342	0.55	5.00	
113	16459	0.53	5.00	
115	191403	0.31	5.00	
206	47451	0.40	5.00	
207	43029	0.60	5.00	
208	101881	0.59	5.00	
220	111	3.28		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	12849	12969	13001	13025	13083
24	1146790	1152427	1159003	1158644	1160117
25	158661	159510	160234	160792	160970
26	181888	183022	184653	184655	185515
59	111315	112859	112427	112350	112760
113	16311	16510	16535	16461	16477
115	192106	191391	191860	190937	190719
206	47146	47492	47656	47445	47516
207	42740	42978	43382	43181	42862
208	101195	101352	102657	102143	102055
220	117	112	109	107	110

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	21584	8.95	8.9 - 9.1		0.779	0.900	
24	1876491	23.90	23.9 - 24.1		0.783	0.900	
25	255621	24.90	24.9 - 25.1		0.786	0.900	
26	297928	25.90	25.9 - 26.1		0.783	0.900	
59	194068	58.95	58.9 - 59.1		0.769	0.900	
113	32365	113.00	112.9 - 113.1		0.728	0.900	
115	381070	115.00	114.9 - 115.1		0.727	0.900	
206	95329	206.00	205.9 - 206.1		0.783	0.900	
207	87255	207.00	206.9 - 207.1		0.776	0.900	
208	207705	208.00	207.9 - 208.1		0.773	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.3	V	Deflect	13.0	V
Extract 2	-120.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	26550	0.42	
89	371550	0.62	
205	40363	0.72	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	26513	26490	26655	26677	26415
89	372335	374249	371976	371274	367916
205	40319	40627	40290	40640	39939

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.2	V	Deflect	1.8	V
Extract 2	-110.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			