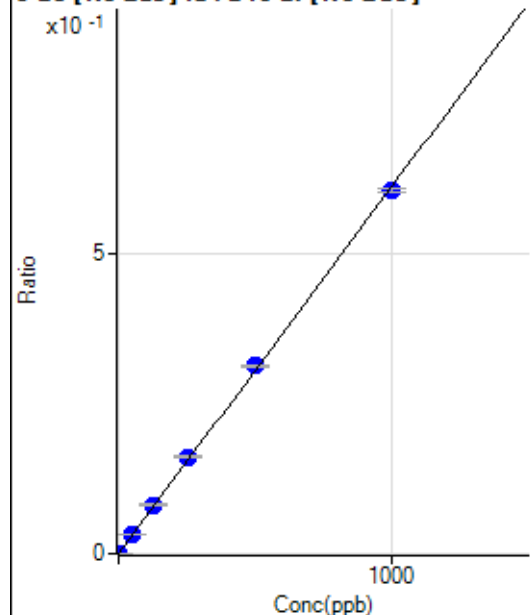


Calibration for 003CALB.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7040620 MS.b\
 Analysis File: P7040620 MS.batch.bin
 DA Date-Time: 2020-04-06 16:37:24
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-04-06 12:29:14
2	004CALS.d	S02	2020-04-06 12:32:47
3	006CALS.d	S03	2020-04-06 12:41:34
4	007CALS.d	S04	2020-04-06 12:45:49
5	008CALS.d	S05	2020-04-06 12:49:35
6	009CALS.d	S06	2020-04-06 12:53:11
7	010CALS.d	S07	2020-04-06 12:56:43
8	011CALS.d	S08	2020-04-06 13:00:14

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	15.1
2	☐	1.000	1.043	3404.17	0.0007	P	1.6
3	☐	50.000	52.988	170125.42	0.0323	P	0.6
4	☐	125.000	133.653	425051.16	0.0815	P	1.3
5	☐	250.000	263.923	825917.81	0.1609	P	2.0
6	☐	500.000	511.822	1569775.74	0.3120	P	0.8
7	☐	1000.000	989.377	3069953.54	0.6031	P	1.0
8	☐			635.22	0.0001	P	10.0

$$y = 6.0960\text{E-}004 * x + 1.4529\text{E-}005$$

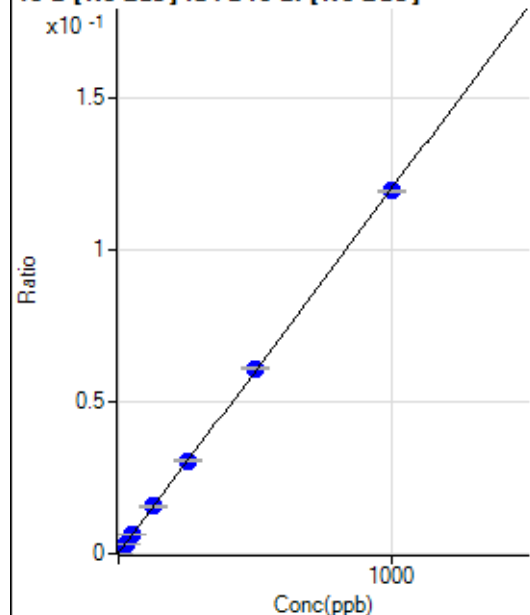
$$R = 0.9998$$

$$DL = 0.01077$$

$$BEC = 0.02383$$

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	494.48	0.0001	P	6.6
2	☐	25.000	23.768	15438.96	0.0030	P	1.0
3	☐	50.000	51.519	33073.12	0.0063	P	1.5
4	☐	125.000	129.307	81486.34	0.0156	P	1.8
5	☐	250.000	254.815	157501.17	0.0307	P	3.7
6	☐	500.000	507.611	307086.43	0.0610	P	0.5
7	☐	1000.000	994.407	608186.30	0.1195	P	0.5
8	☐			13320.29	0.0029	P	7.8

$$y = 1.2005\text{E-}004 * x + 9.7077\text{E-}005$$

$$R = 0.9999$$

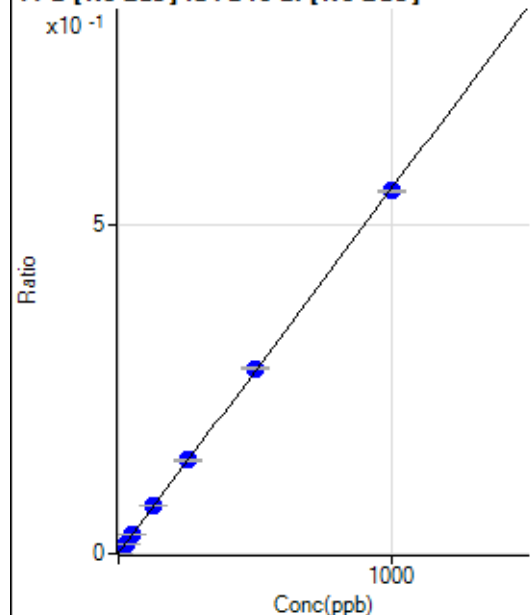
$$DL = 0.1595$$

$$BEC = 0.8086$$

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	2355.84	0.0005	P	4.1
2	☐	25.000	24.306	73044.20	0.0140	P	0.5
3	☐	50.000	51.684	153529.77	0.0292	P	0.8
4	☐	125.000	128.909	375840.27	0.0720	P	0.7
5	☐	250.000	256.143	732473.12	0.1427	P	2.3
6	☐	500.000	507.859	1421111.26	0.2825	P	1.1
7	☐	1000.000	993.979	2811991.06	0.5524	P	0.5
8	☐			60723.73	0.0134	P	7.5

$$y = 5.5531\text{E-}004 * x + 4.6239\text{E-}004$$

$$R = 0.9999$$

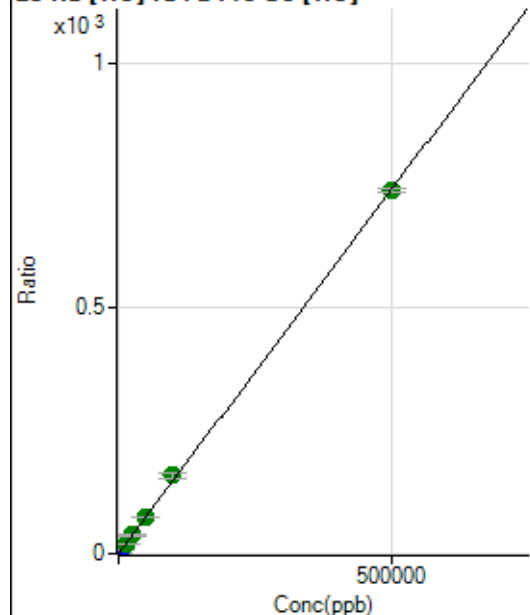
$$DL = 0.1036$$

$$BEC = 0.8327$$

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	9798.02	0.0245	P	10.1
2	☐	500.000	494.030	281998.39	0.7579	P	3.4
3	☐	5000.000	5264.654	2849602.62	7.8398	P	0.4
4	☐	12500.000	13094.211	7085190.17	19.4627	A	0.6
5	☐	25000.000	25152.431	13715880.00	37.3629	A	5.2
6	☐	50000.000	51439.127	27021536.71	76.3851	A	0.1
7	☐	100000.00	107431.82	54898160.26	159.5055	A	8.6
8	☐	500000.00	498344.60	255924580.7	739.8096	A	1.2

$$y = 0.0015 * x + 0.0245$$

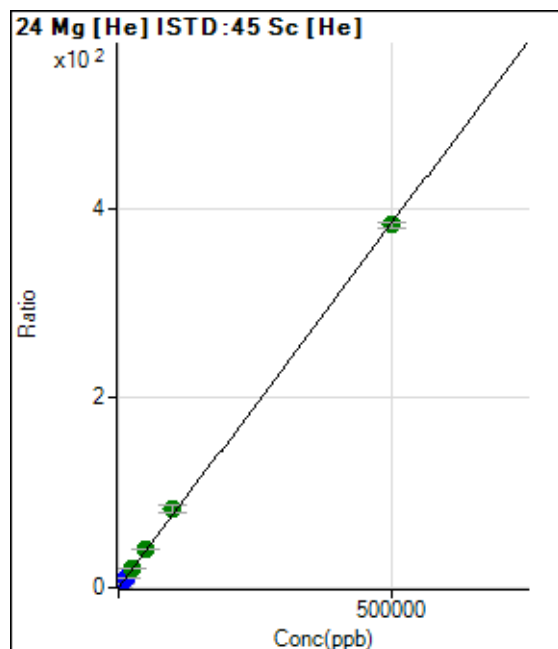
$$R = 0.9999$$

$$DL = 4.996$$

$$BEC = 16.53$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	230.57	0.0006	P	20.5
2	☐	500.000	511.536	146561.63	0.3940	P	4.1
3	☐	5000.000	5499.447	1537507.65	4.2300	P	0.4
4	☐	12500.000	13548.577	3793188.50	10.4202	P	1.3
5	☐	25000.000	25834.923	7295966.57	19.8690	A	4.0
6	☐	50000.000	52377.494	14249961.08	40.2817	A	0.3
7	☐	100000.00	108783.95	28793434.67	83.6614	A	8.7
8	☐	500000.00	497932.49	132474590.4	382.9378	A	1.5

$$y = 7.6905\text{E-}004 * x + 5.7875\text{E-}004$$

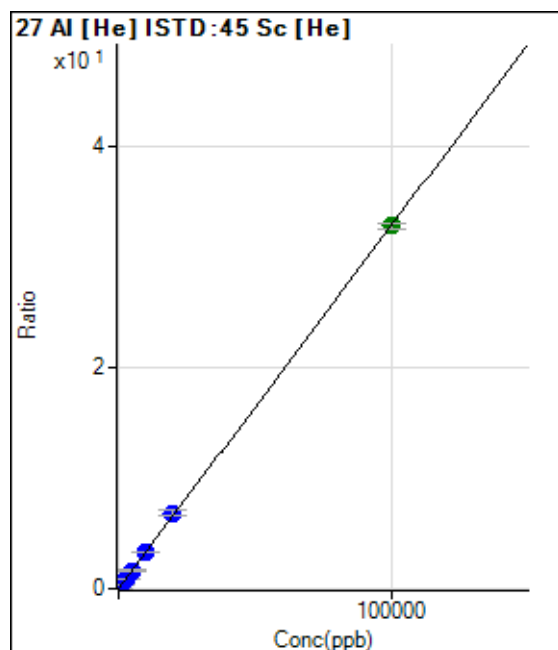
$$R = 0.9998$$

$$DL = 0.4632$$

$$BEC = 0.7525$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.56	0.0001	P	51.9
2	☐	20.000	19.509	2411.42	0.0065	P	8.7
3	☐	1000.000	1041.570	124493.01	0.3425	P	1.0
4	☐	2500.000	2588.433	309810.32	0.8511	P	1.5
5	☐	5000.000	4928.272	594894.82	1.6204	P	4.7
6	☐	10000.000	10043.995	1168166.19	3.3023	P	0.8
7	☐	20000.000	20821.786	2355078.70	6.8457	P	9.4
8	☐	100000.00	99832.203	11354605.63	32.8221	A	1.7

$$y = 3.2877\text{E-}004 * x + 7.5069\text{E-}005$$

$$R = 1.0000$$

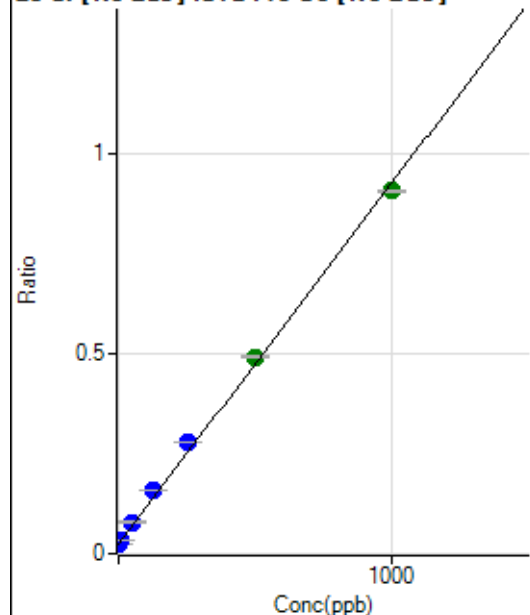
$$DL = 0.3558$$

$$BEC = 0.2283$$

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	234069.86	0.0237	P	0.9
2	☐	10.000	9.841	325872.26	0.0325	P	1.0
3	☐	50.000	61.480	775276.37	0.0791	P	1.2
4	☐	125.000	148.306	1554713.71	0.1573	P	0.4
5	☐	250.000	282.851	2766313.60	0.2786	P	1.3
6	☐	500.000	518.363	4781402.93	0.4908	A	0.8
7	☐	1000.000	979.120	9350832.15	0.9061	A	0.8
8	☐			406033.85	0.0443	P	1.1

$$y = 9.0125E-004 * x + 0.0237$$

R = 0.9990

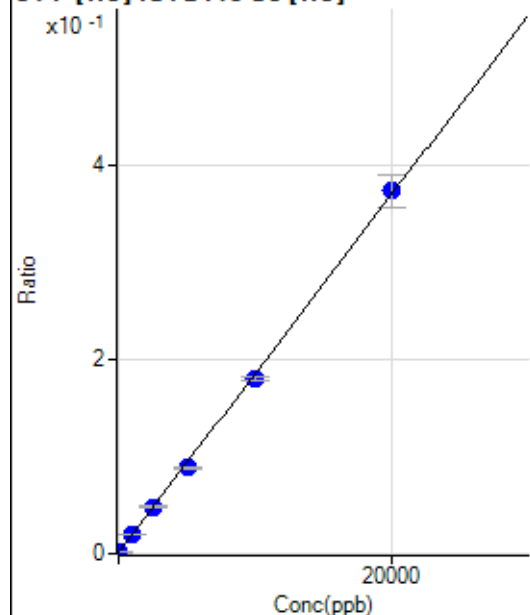
DL = 0.7481

BEC = 26.25

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-27.451	244.46	0.0006	P	19.7
2	☐	0.000	27.451	605.59	0.0016	P	10.8
3	☐	1000.000	1004.042	7127.01	0.0196	P	6.4
4	☐	2500.000	2553.422	17527.73	0.0481	P	2.2
5	☐	5000.000	4737.491	32458.52	0.0884	P	3.4
6	☐	10000.000	9711.715	63667.78	0.1800	P	1.5
7	☐	20000.000	20202.890	128427.48	0.3732	P	8.9
8	☐			330.57	0.0010	P	17.9

$$y = 1.8418E-005 * x + 0.0011$$

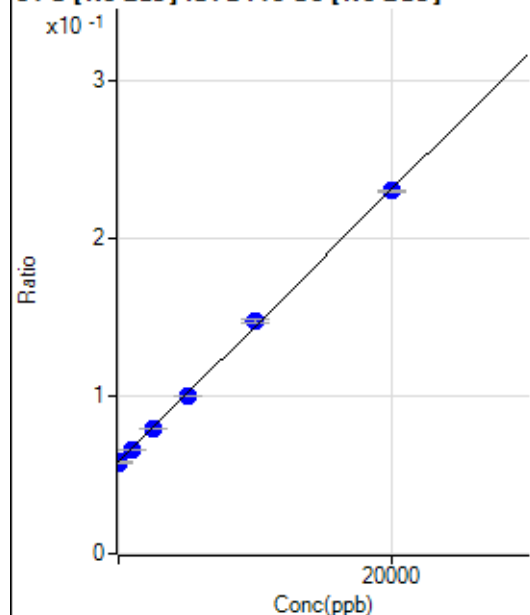
R = 0.9997

DL = 24.19

BEC = 60.79

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	58.017	578777.36	0.0585	P	1.1
2	☐	0.000	-58.017	576029.78	0.0575	P	1.2
3	☐	1000.000	912.908	646002.19	0.0659	P	0.3
4	☐	2500.000	2434.361	780916.47	0.0790	P	0.6
5	☐	5000.000	4862.037	992874.06	0.1000	P	0.8
6	☐	10000.000	10310.804	1432237.54	0.1470	P	1.3
7	☐	20000.000	19891.648	2371150.79	0.2298	P	0.6
8	☐			497355.28	0.0543	P	1.0

$$y = 8.6351\text{E-}006 * x + 0.0580$$

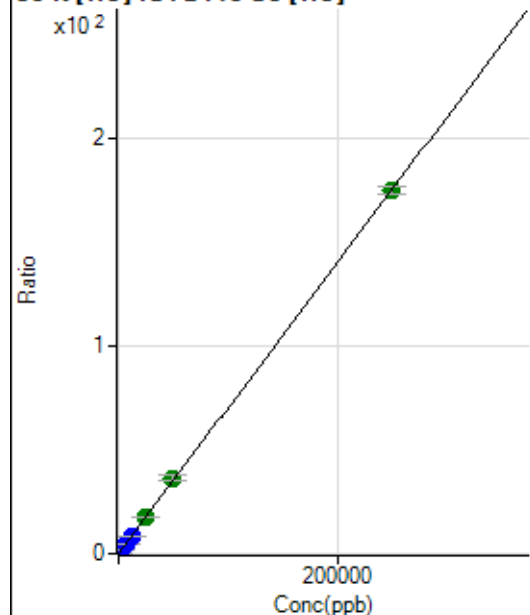
R = 0.9998

DL = 230.9

BEC = 6717

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18895.95	0.0472	P	4.2
2	☐	500.000	484.078	143713.65	0.3863	P	3.7
3	☐	2500.000	2541.574	664137.16	1.8272	P	0.7
4	☐	6250.000	6334.971	1632241.31	4.4839	P	1.2
5	☐	12500.000	12175.723	3147911.98	8.5744	P	4.8
6	☐	25000.000	24912.291	6188516.24	17.4942	A	0.7
7	☐	50000.000	51944.835	12538633.27	36.4261	A	8.3
8	☐	250000.00	249633.51	60494153.44	174.8748	A	2.2

$$y = 7.0034\text{E-}004 * x + 0.0472$$

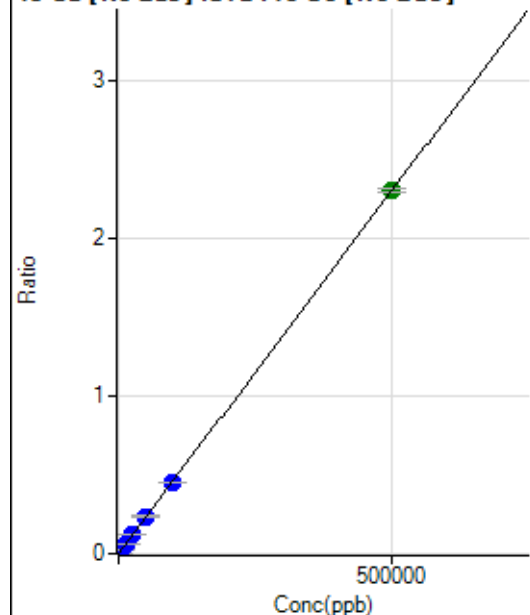
R = 1.0000

DL = 8.448

BEC = 67.46

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	280.57	0.0000	P	13.1
2	☐	500.000	486.269	22707.05	0.0023	P	1.7
3	☐	5000.000	5269.557	238120.49	0.0243	P	0.8
4	☐	12500.000	13122.694	597187.94	0.0604	P	1.6
5	☐	25000.000	25635.727	1172092.50	0.1180	P	1.1
6	☐	50000.000	51484.390	2308702.61	0.2370	P	1.1
7	☐	100000.00	97772.959	4644664.25	0.4501	P	0.3
8	☐	500000.00	500246.93	21081683.46	2.3026	A	1.0

$$y = 4.6029\text{E-}006 * x + 2.8334\text{E-}005$$

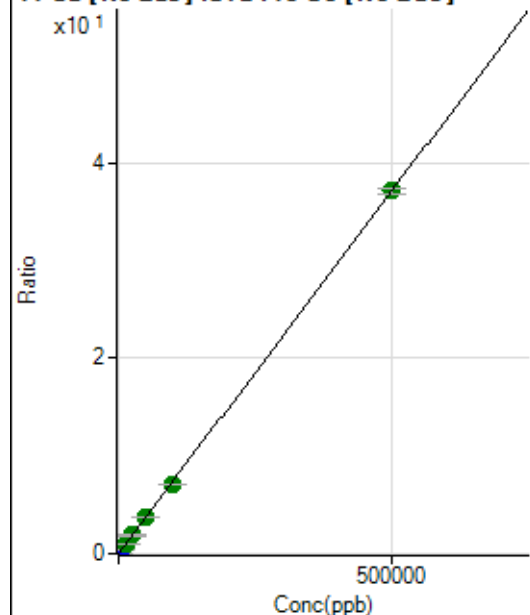
$$R = 1.0000$$

$$DL = 2.421$$

$$BEC = 6.156$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6293.25	0.0006	P	6.4
2	☐	500.000	486.220	367727.12	0.0367	P	1.1
3	☐	5000.000	5231.398	3811669.62	0.3887	P	0.2
4	☐	12500.000	12875.962	9445923.30	0.9558	A	0.6
5	☐	25000.000	25236.366	18596828.37	1.8728	A	1.0
6	☐	50000.000	50537.271	36524053.60	3.7497	A	1.8
7	☐	100000.00	95751.186	73309366.92	7.1038	A	1.1
8	☐	500000.00	500772.51	340104807.6	37.1497	A	1.6

$$y = 7.4183\text{E-}005 * x + 6.3627\text{E-}004$$

$$R = 1.0000$$

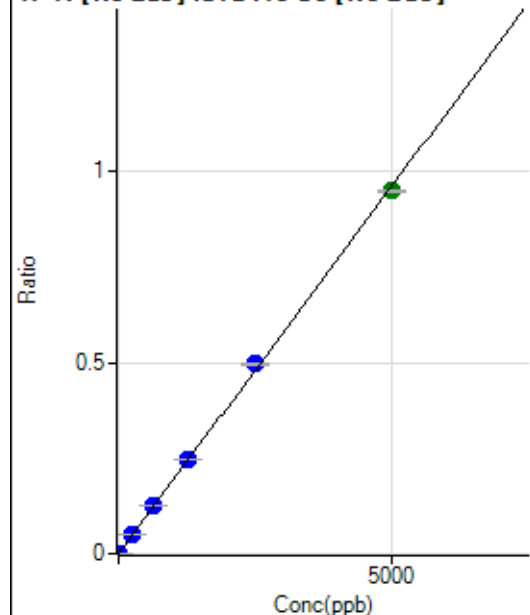
$$DL = 1.641$$

$$BEC = 8.577$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	138.90	0.0000	P	21.2
2	☐	5.000	5.171	10106.67	0.0010	P	2.8
3	☐	250.000	265.376	500610.23	0.0511	P	0.7
4	☐	625.000	662.791	1259928.01	0.1275	P	0.9
5	☐	1250.000	1290.094	2464166.35	0.2481	P	1.0
6	☐	2500.000	2585.782	4844660.05	0.4973	P	1.2
7	☐	5000.000	4941.593	9808509.16	0.9505	A	0.8
8	☐			5201.10	0.0006	P	3.9

$$y = 1.9233\text{E-}004 * x + 1.4044\text{E-}005$$

$$R = 0.9997$$

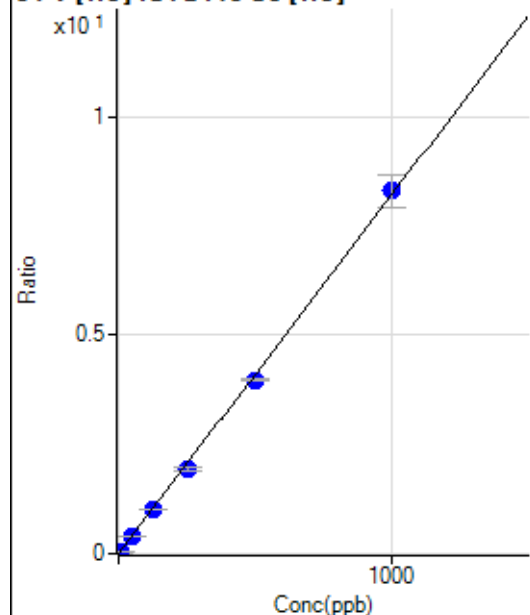
$$DL = 0.04647$$

$$BEC = 0.07302$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7.78	0.0000	P	94.8
2	☐	5.000	4.793	14631.86	0.0393	P	2.9
3	☐	50.000	48.923	145813.10	0.4012	P	1.0
4	☐	125.000	122.619	366021.67	1.0055	P	0.8
5	☐	250.000	237.028	713614.12	1.9436	P	4.4
6	☐	500.000	484.033	1403999.42	3.9689	P	0.6
7	☐	1000.000	1011.579	2853571.21	8.2946	P	9.4
8	☐			1253.41	0.0036	P	4.3

$$y = 0.0082 * x + 1.8874\text{E-}005$$

$$R = 0.9997$$

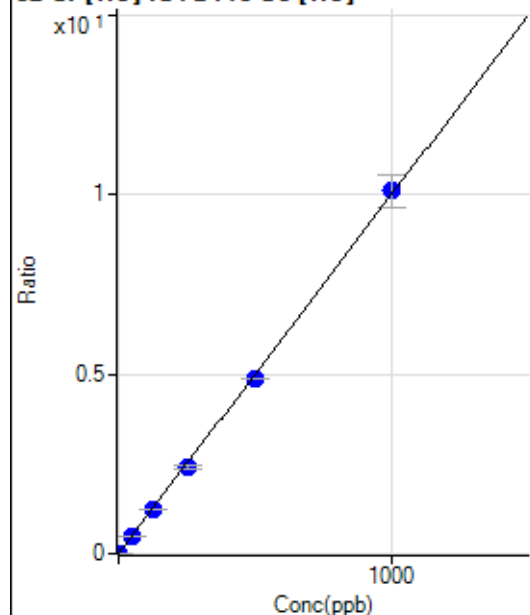
$$DL = 0.006548$$

$$BEC = 0.002302$$

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	1120.06	0.0028	P	5.3
2	☐	2.000	1.839	7894.46	0.0212	P	1.0
3	☐	50.000	49.638	181556.69	0.4995	P	1.4
4	☐	125.000	123.906	452368.49	1.2427	P	1.1
5	☐	250.000	238.743	878186.87	2.3918	P	4.4
6	☐	500.000	485.225	1718606.14	4.8582	P	0.2
7	☐	1000.000	1010.357	3479696.96	10.1130	P	9.1
8	☐			90795.19	0.2625	P	2.3

$$y = 0.0100 * x + 0.0028$$

$$R = 0.9998$$

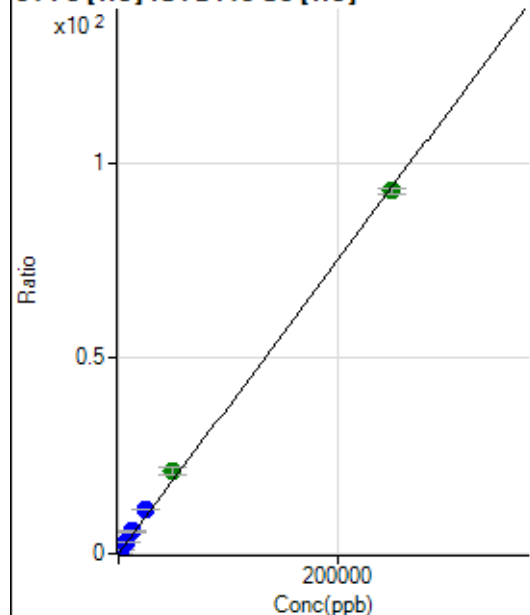
$$DL = 0.04404$$

$$BEC = 0.2796$$

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	420.45	0.0011	P	6.2
2	☐	50.000	64.496	9372.77	0.0252	P	4.6
3	☐	2500.000	3170.090	431804.40	1.1880	P	1.3
4	☐	6250.000	7897.194	1076799.08	2.9580	P	0.9
5	☐	12500.000	15156.234	2084011.72	5.6759	P	4.4
6	☐	25000.000	30741.910	4072211.71	11.5116	P	0.7
7	☐	50000.000	57056.221	7351449.78	21.3644	A	9.0
8	☐	250000.00	247833.86	32099286.28	92.7966	A	1.9

$$y = 3.7443E-004 * x + 0.0011$$

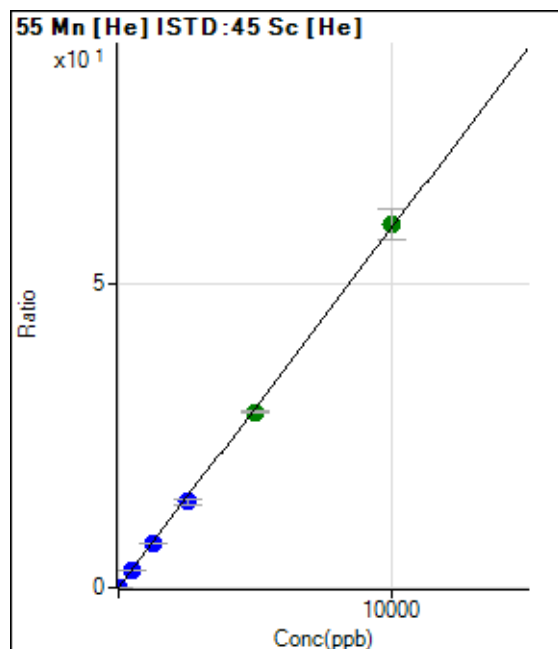
$$R = 0.9994$$

$$DL = 0.5209$$

$$BEC = 2.806$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0001	P	20.8
2	☐	1.000	1.004	2239.10	0.0060	P	5.7
3	☐	500.000	496.389	1065329.89	2.9310	P	1.1
4	☐	1250.000	1236.179	2657056.47	7.2991	P	1.2
5	☐	2500.000	2381.028	5161427.77	14.0588	P	4.8
6	☐	5000.000	4888.029	10209709.01	28.8613	A	0.3
7	☐	10000.000	10087.637	20500658.72	59.5622	A	8.5
8	☐			23304.20	0.0674	P	3.3

$$y = 0.0059 * x + 9.1118E-005$$

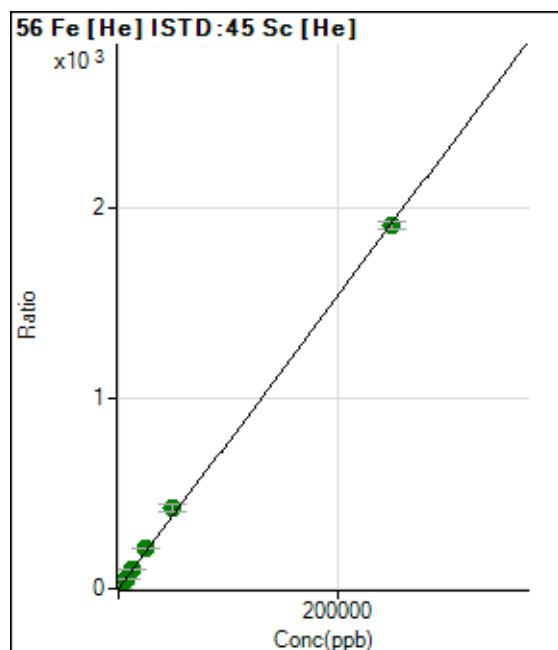
$$R = 0.9998$$

$$DL = 0.009613$$

$$BEC = 0.01543$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3302.32	0.0082	P	7.5
2	☐	50.000	54.947	159565.27	0.4289	P	3.6
3	☐	2500.000	2749.173	7652508.62	21.0534	A	1.4
4	☐	6250.000	6846.038	19080732.60	52.4153	A	1.1
5	☐	12500.000	13319.166	37433421.21	101.9678	A	5.0
6	☐	25000.000	27196.220	73649492.39	208.1980	A	0.9
7	☐	50000.000	55765.827	146884269.9	426.9011	A	9.1
8	☐	250000.00	248568.86	658168399.9	1,902.827	A	2.2

$$y = 0.0077 * x + 0.0082$$

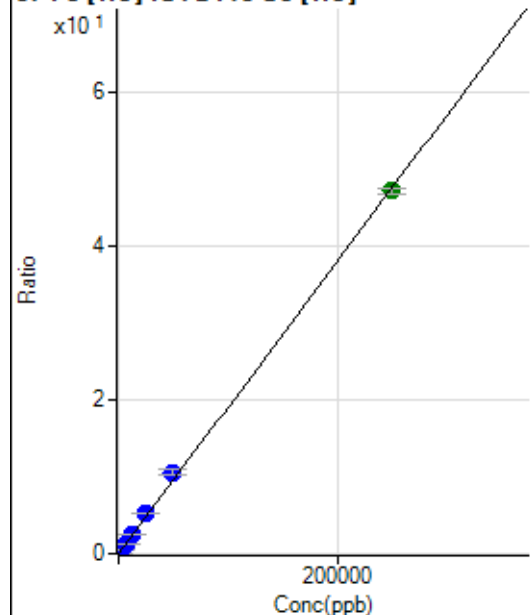
$$R = 0.9997$$

$$DL = 0.2429$$

$$BEC = 1.077$$

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	0.0004	P	29.0
2	☐	50.000	58.705	4291.48	0.0115	P	4.1
3	☐	2500.000	2777.735	192151.98	0.5287	P	1.7
4	☐	6250.000	6976.128	483114.26	1.3271	P	1.2
5	☐	12500.000	13498.378	942655.05	2.5676	P	4.8
6	☐	25000.000	27263.294	1834335.33	5.1855	P	1.1
7	☐	50000.000	55976.266	3662669.27	10.6463	P	9.3
8	☐	250000.00	248507.56	16348766.80	47.2633	A	1.7

$$y = 1.9019\text{E-}004 * x + 3.6778\text{E-}004$$

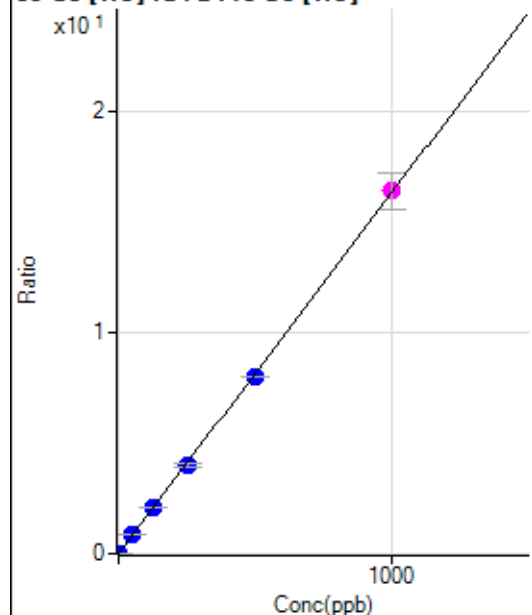
$$R = 0.9997$$

$$DL = 1.681$$

$$BEC = 1.934$$

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	87.78	0.0002	P	21.6
2	☐	1.000	0.976	6004.65	0.0161	P	5.7
3	☐	50.000	50.958	302341.89	0.8318	P	0.5
4	☐	125.000	127.741	758926.84	2.0848	P	1.1
5	☐	250.000	243.229	1457301.97	3.9694	P	4.8
6	☐	500.000	490.732	2832943.81	8.0084	P	0.7
7	☐	1000.000	1005.936	5645209.50	16.4159	M	10.1
8	☐			11004.26	0.0318	P	3.3

$$y = 0.0163 * x + 2.2059\text{E-}004$$

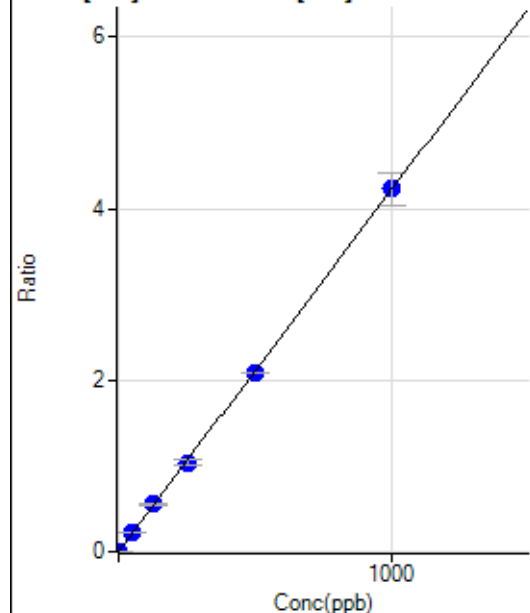
$$R = 0.9999$$

$$DL = 0.008742$$

$$BEC = 0.01352$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.55	0.0001	P	33.1
2	☐	1.000	1.078	1741.25	0.0047	P	5.4
3	☐	50.000	52.705	80835.89	0.2224	P	0.9
4	☐	125.000	130.360	200175.12	0.5499	P	0.9
5	☐	250.000	246.699	382009.93	1.0405	P	4.7
6	☐	500.000	494.885	738317.28	2.0871	P	0.6
7	☐	1000.000	1002.578	1454683.80	4.2281	P	9.2
8	☐			24136.76	0.0698	P	0.8

$$y = 0.0042 * x + 1.3735E-004$$

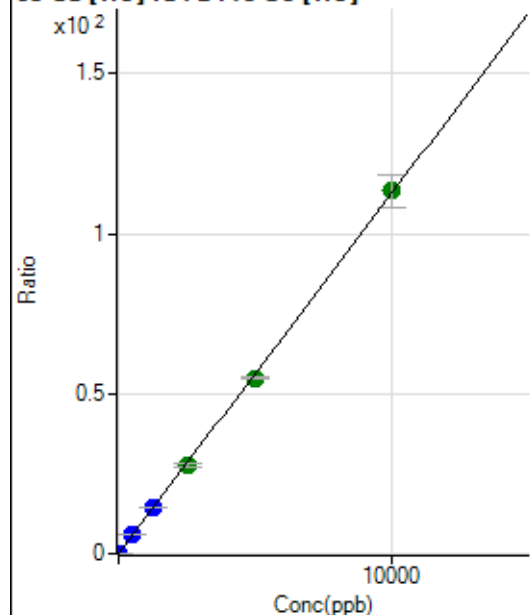
$$R = 1.0000$$

$$DL = 0.0323$$

$$BEC = 0.03257$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	741.14	0.0019	P	5.9
2	☐	2.000	2.014	9115.20	0.0245	P	4.3
3	☐	500.000	516.248	2111333.91	5.8088	P	1.0
4	☐	1250.000	1267.983	5192626.83	14.2645	P	1.3
5	☐	2500.000	2433.896	10052861.31	27.3790	A	4.4
6	☐	5000.000	4876.824	19405793.32	54.8578	A	1.3
7	☐	10000.000	10075.054	38995851.36	113.3290	A	9.0
8	☐			20249.78	0.0585	P	0.7

$$y = 0.0112 * x + 0.0019$$

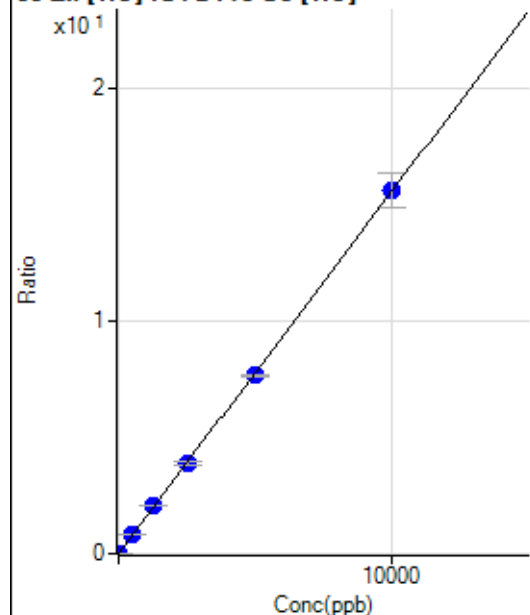
$$R = 0.9998$$

$$DL = 0.02928$$

$$BEC = 0.1648$$

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	1140.06	0.0029	P	11.4
2	☐	2.000	2.148	2303.56	0.0062	P	6.2
3	☐	500.000	534.170	302314.68	0.8317	P	0.7
4	☐	1250.000	1309.931	740943.77	2.0354	P	1.3
5	☐	2500.000	2485.098	1416927.93	3.8589	P	4.2
6	☐	5000.000	4929.251	2706658.36	7.6514	P	0.6
7	☐	10000.000	10029.900	5354745.62	15.5658	P	9.5
8	☐			25577.05	0.0739	P	0.4

$$y = 0.0016 * x + 0.0029$$

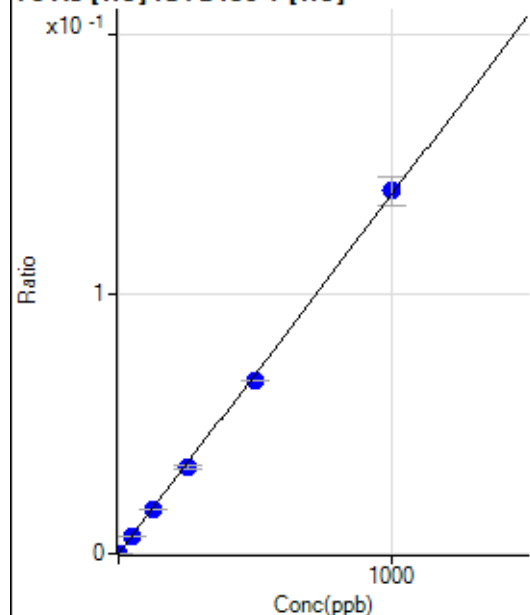
$$R = 0.9999$$

$$DL = 0.627$$

$$BEC = 1.841$$

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	10.49	0.0000	P	30.7
2	☐	1.000	1.028	383.34	0.0001	P	5.1
3	☐	50.000	50.561	17862.28	0.0070	P	0.4
4	☐	125.000	123.554	43882.03	0.0171	P	0.5
5	☐	250.000	239.631	85306.35	0.0331	P	3.9
6	☐	500.000	483.552	167221.63	0.0668	P	0.5
7	☐	1000.000	1010.969	334846.31	0.1396	P	7.8
8	☐			201.24	0.0001	P	6.6

$$y = 1.3808E-004 * x + 3.8121E-006$$

$$R = 0.9997$$

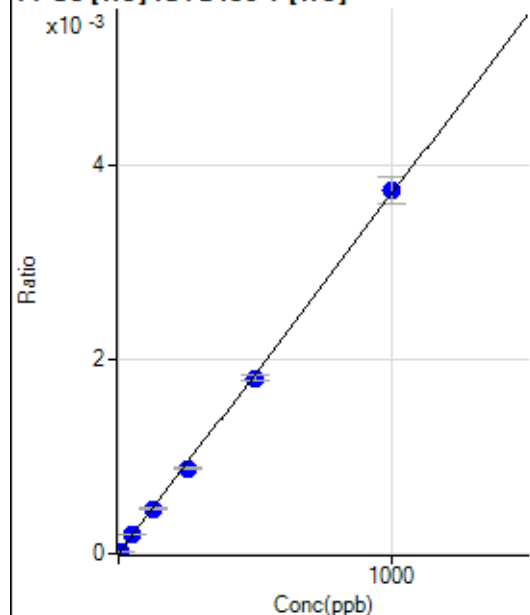
$$DL = 0.02546$$

$$BEC = 0.02761$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.770	46.67	0.0000	P	28.1
3	☐	50.000	55.117	523.35	0.0002	P	2.3
4	☐	125.000	124.986	1193.40	0.0005	P	2.8
5	☐	250.000	237.027	2270.21	0.0009	P	1.0
6	☐	500.000	488.732	4544.12	0.0018	P	3.1
7	☐	1000.000	1008.624	8984.03	0.0037	P	7.5
8	☐			4.44	0.0000	P	114.

$$y = 3.7129\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

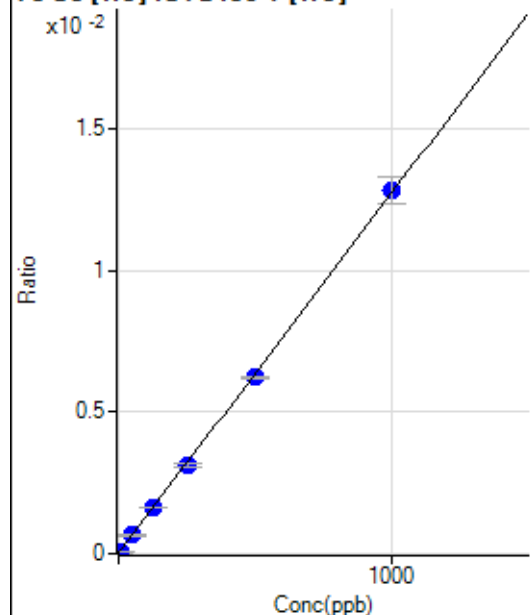
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	51.24	0.0000	P	17.2
2	☐	5.000	5.170	220.99	0.0001	P	13.1
3	☐	50.000	50.902	1703.82	0.0007	P	6.2
4	☐	125.000	126.797	4196.95	0.0016	P	3.1
5	☐	250.000	243.425	8033.15	0.0031	P	4.0
6	☐	500.000	489.452	15644.32	0.0062	P	1.3
7	☐	1000.000	1006.647	30775.84	0.0128	P	7.4
8	☐			46.30	0.0000	P	21.1

$$y = 1.2725\text{E-}005 * x + 1.8517\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.7498$$

$$BEC = 1.455$$

Weight: <None>

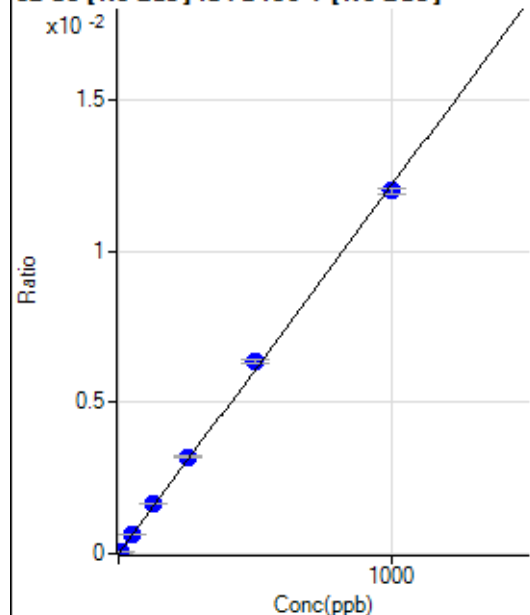
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46726.94		P	0.8
2	☐			46817.80		P	1.5
3	☐			47543.89		P	1.2
4	☐			46914.56		P	0.7
5	☐			47052.01		P	1.6
6	☐			48093.40		P	1.3
7	☐			48424.84		P	0.5
8	☐			45307.87		P	1.3

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.71		P	75.3
2	☐			33.37		P	96.4
3	☐			76.75		P	27.2
4	☐			40.04		P	43.3
5	☐			63.40		P	48.2
6	☐			53.39		P	39.0
7	☐			36.70		P	56.8
8	☐			66.74		P	70.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.91	0.0000	P	102.
2	☐	5.000	5.359	1454.77	0.0001	P	2.0
3	☐	50.000	54.259	14277.63	0.0007	P	1.5
4	☐	125.000	134.721	35848.06	0.0016	P	0.1
5	☐	250.000	262.943	70038.00	0.0032	P	1.8
6	☐	500.000	520.002	136429.35	0.0063	P	2.0
7	☐	1000.000	985.334	267701.47	0.0120	P	1.4
8	☐			256.68	0.0000	P	8.1

$$y = 1.2182\text{E-}005 * x + 1.2752\text{E-}006$$

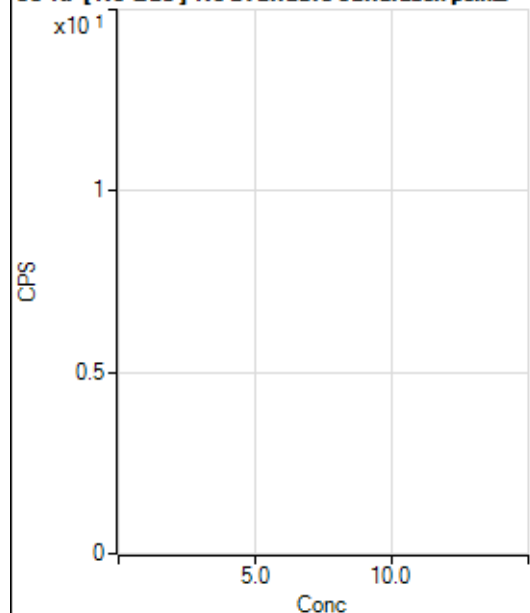
$$R = 0.9996$$

$$DL = 0.3222$$

$$BEC = 0.1047$$

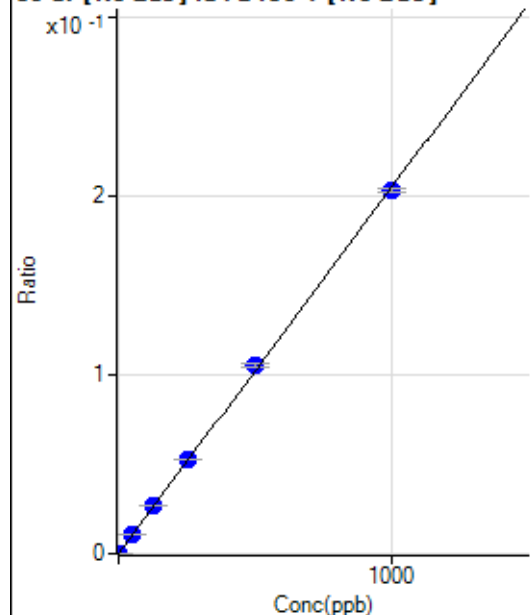
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			386.68		P	5.7
2	☐			395.57		P	9.1
3	☐			368.90		P	14.1
4	☐			371.12		P	11.2
5	☐			365.57		P	7.4
6	☐			416.68		P	4.2
7	☐			412.24		P	7.7
8	☐			476.68		P	5.6

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	538.92	0.0000	P	5.5
2	☐	1.000	0.980	4937.18	0.0002	P	2.3
3	☐	50.000	52.580	232251.59	0.0108	P	0.8
4	☐	125.000	130.837	584220.15	0.0268	P	1.0
5	☐	250.000	256.964	1148570.51	0.0525	P	1.3
6	☐	500.000	512.915	2258018.78	0.1049	P	1.9
7	☐	1000.000	990.943	4517406.01	0.2026	P	1.1
8	☐			10195.67	0.0005	P	3.1

$$y = 2.0439\text{E-}004 * x + 2.5524\text{E-}005$$

R = 0.9998

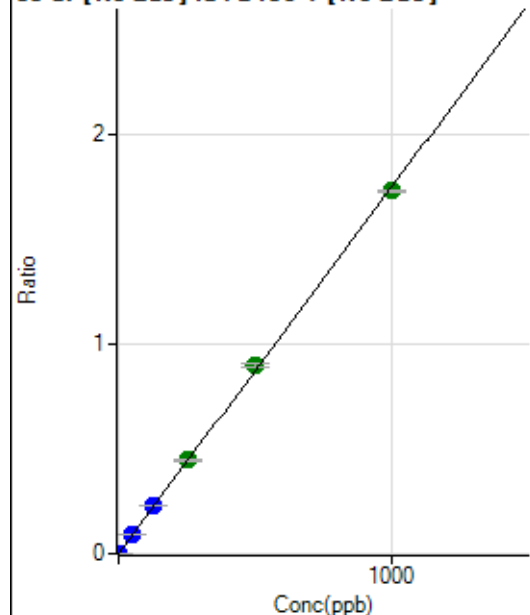
DL = 0.0206

BEC = 0.1249

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	191.68	0.0000	P	26.9
2	☐	1.000	0.993	38110.17	0.0017	P	3.7
3	☐	50.000	52.845	1990275.72	0.0923	P	0.9
4	☐	125.000	130.996	4994186.14	0.2288	P	0.2
5	☐	250.000	255.147	9741613.06	0.4457	A	1.2
6	☐	500.000	514.816	19363436.89	0.8992	A	1.8
7	☐	1000.000	990.414	38579737.67	1.7299	A	0.6
8	☐			82604.87	0.0041	P	0.7

$$y = 0.0017 * x + 9.0919\text{E-}006$$

R = 0.9998

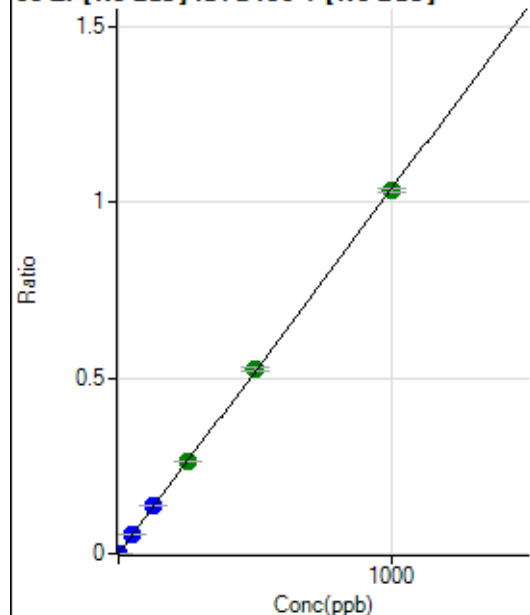
DL = 0.004203

BEC = 0.005205

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	1230.67	0.0001	P	11.6
2	☐	1.000	0.767	18654.56	0.0009	P	3.0
3	☐	50.000	51.378	1150361.06	0.0534	P	0.7
4	☐	125.000	130.369	2952974.98	0.1353	P	0.9
5	☐	250.000	253.277	5744181.03	0.2628	A	1.8
6	☐	500.000	507.506	11337968.57	0.5265	A	1.8
7	☐	1000.000	994.688	23013264.23	1.0319	A	1.1
8	☐			10459.85	0.0005	P	7.2

$$y = 0.0010 * x + 5.8276E-005$$

$$R = 0.9999$$

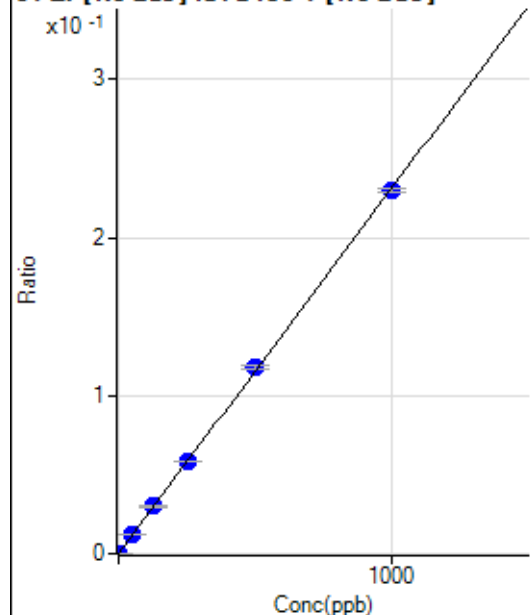
$$DL = 0.01962$$

$$BEC = 0.05618$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.90	0.0000	P	18.5
2	☐	1.000	0.794	4278.58	0.0002	P	4.2
3	☐	50.000	51.312	255676.41	0.0119	P	1.3
4	☐	125.000	129.595	653310.93	0.0299	P	1.5
5	☐	250.000	253.536	1279811.83	0.0585	P	1.0
6	☐	500.000	509.913	2535424.75	0.1177	P	1.7
7	☐	1000.000	993.520	5115708.53	0.2294	P	1.1
8	☐			2308.62	0.0001	P	7.5

$$y = 2.3088E-004 * x + 1.2487E-005$$

$$R = 0.9999$$

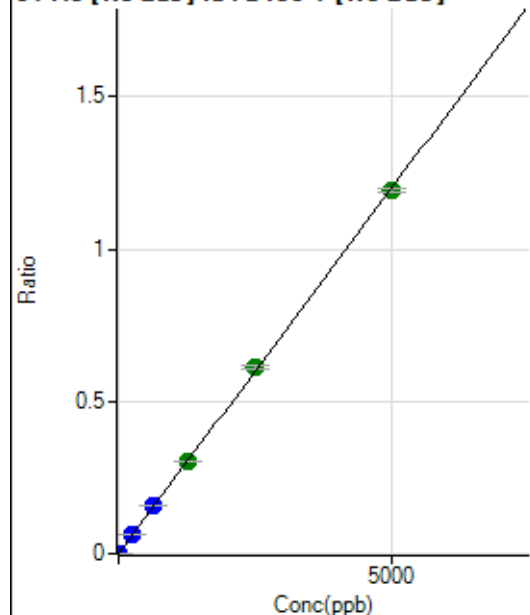
$$DL = 0.03006$$

$$BEC = 0.05408$$

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	388.91	0.0000	P	10.8
2	☐	5.000	4.650	24783.60	0.0011	P	0.8
3	☐	250.000	259.009	1340215.08	0.0622	P	0.4
4	☐	625.000	651.628	3412624.82	0.1564	P	1.3
5	☐	1250.000	1262.255	6619875.37	0.3029	A	1.5
6	☐	2500.000	2554.300	13197677.73	0.6128	A	1.3
7	☐	5000.000	4966.008	26571177.85	1.1915	A	0.9
8	☐			27596.97	0.0014	P	1.6

$$y = 2.3992E-004 * x + 1.8433E-005$$

$$R = 0.9999$$

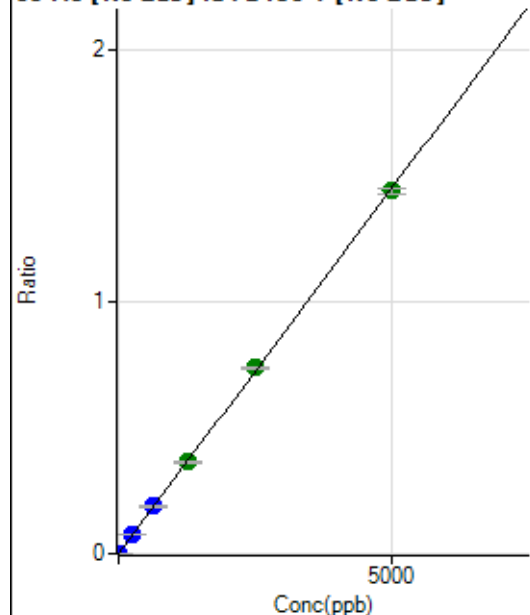
$$DL = 0.02497$$

$$BEC = 0.07683$$

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	30.55	0.0000	P	69.2
2	☐	5.000	5.175	32808.06	0.0015	P	1.0
3	☐	250.000	258.922	1617858.42	0.0750	P	0.4
4	☐	625.000	646.932	4091882.34	0.1875	P	1.3
5	☐	1250.000	1258.032	7968819.19	0.3646	A	2.0
6	☐	2500.000	2548.091	15901520.32	0.7384	A	1.6
7	☐	5000.000	4970.759	32125220.86	1.4405	A	1.4
8	☐			40135.16	0.0020	P	2.7

$$y = 2.8980E-004 * x + 1.4522E-006$$

$$R = 0.9999$$

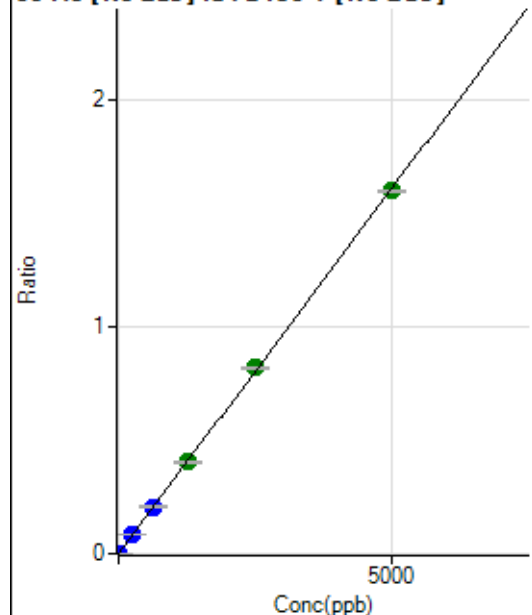
$$DL = 0.01041$$

$$BEC = 0.005011$$

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	144.45	0.0000	P	22.1
2	☐	5.000	5.113	36044.02	0.0016	P	1.6
3	☐	250.000	259.670	1798711.45	0.0834	P	0.3
4	☐	625.000	644.222	4517063.82	0.2070	P	1.3
5	☐	1250.000	1258.227	8835293.86	0.4042	A	1.3
6	☐	2500.000	2544.265	17600237.72	0.8173	A	1.9
7	☐	5000.000	4972.924	35627439.34	1.5975	A	0.7
8	☐			57801.34	0.0029	P	0.8

$$y = 3.2124\text{E-}004 * x + 6.8452\text{E-}006$$

$$R = 0.9999$$

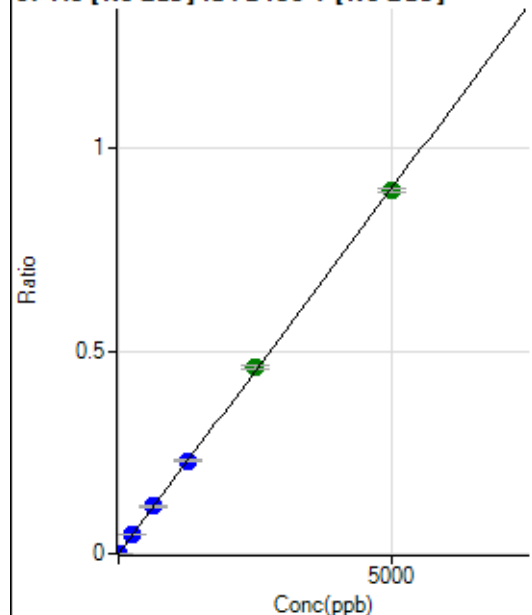
$$DL = 0.01411$$

$$BEC = 0.02131$$

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	30.56	0.0000	P	32.5
2	☐	5.000	5.210	20562.85	0.0009	P	1.8
3	☐	250.000	260.596	1012993.75	0.0470	P	0.9
4	☐	625.000	649.342	2555214.36	0.1171	P	1.4
5	☐	1250.000	1267.488	4994885.40	0.2285	P	1.8
6	☐	2500.000	2551.251	9905240.15	0.4600	A	1.6
7	☐	5000.000	4966.430	19968782.74	0.8954	A	1.0
8	☐			24716.79	0.0012	P	0.7

$$y = 1.8029\text{E-}004 * x + 1.4501\text{E-}006$$

$$R = 0.9999$$

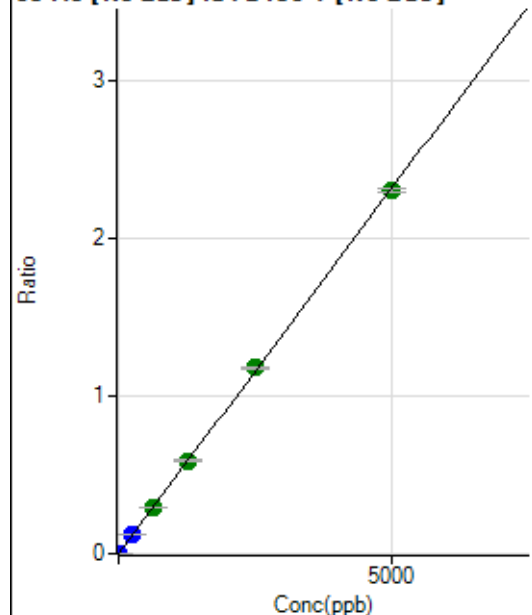
$$DL = 0.00784$$

$$BEC = 0.008043$$

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	55.56	0.0000	P	44.3
2	☐	5.000	5.125	51981.92	0.0024	P	0.8
3	☐	250.000	260.457	2603207.46	0.1207	P	0.8
4	☐	625.000	640.361	6479048.06	0.2969	A	1.4
5	☐	1250.000	1266.844	12835765.65	0.5873	A	2.2
6	☐	2500.000	2551.461	25471270.88	1.1828	A	1.2
7	☐	5000.000	4967.615	51355987.61	2.3028	A	1.0
8	☐			62507.81	0.0031	P	2.0

$$y = 4.6357E-004 * x + 2.6385E-006$$

$$R = 0.9999$$

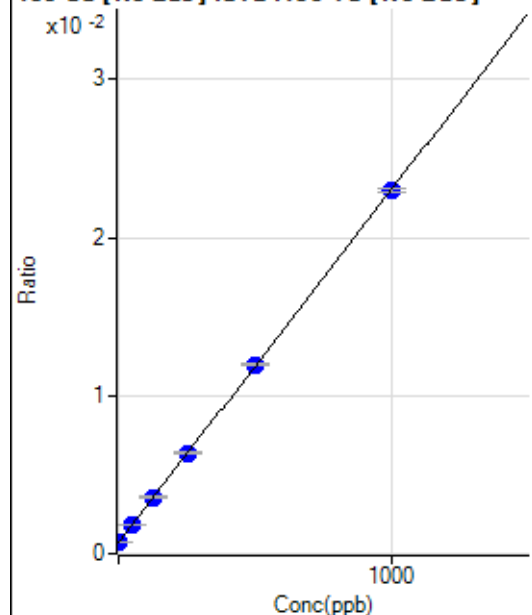
$$DL = 0.007565$$

$$BEC = 0.005692$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13081.54	0.0007	P	3.1
2	☐	1.000	-1.100	12917.53	0.0007	P	2.3
3	☐	50.000	50.399	35030.60	0.0018	P	1.2
4	☐	125.000	128.566	68985.75	0.0036	P	1.0
5	☐	250.000	253.655	123348.33	0.0064	P	3.2
6	☐	500.000	504.880	229814.29	0.0120	P	0.6
7	☐	1000.000	996.183	451728.60	0.0230	P	1.0
8	☐			11343.96	0.0007	P	3.3

$$y = 2.2333E-005 * x + 7.0769E-004$$

$$R = 1.0000$$

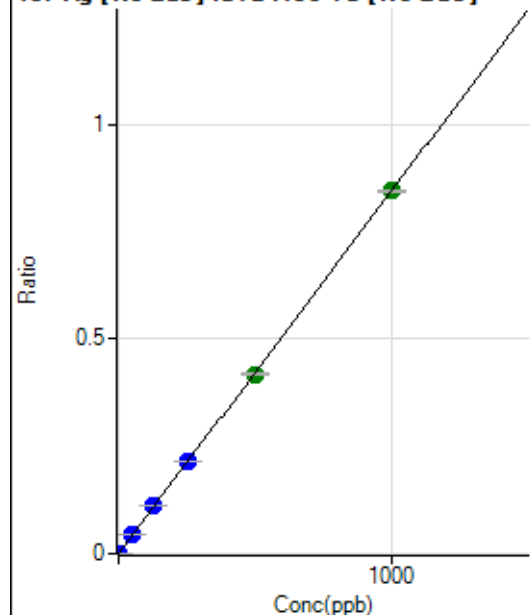
$$DL = 2.962$$

$$BEC = 31.69$$

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	230.57	0.0000	P	23.2
2	☐	1.000	0.856	13904.71	0.0007	P	2.0
3	☐	50.000	53.326	860756.94	0.0450	P	1.1
4	☐	125.000	131.971	2148389.42	0.1115	P	1.3
5	☐	250.000	254.203	4155905.74	0.2147	P	1.6
6	☐	500.000	495.186	8019876.92	0.4182	A	0.9
7	☐	1000.000	1000.319	16623454.02	0.8448	A	0.5
8	☐			4856.61	0.0003	P	6.5

$$y = 8.4448\text{E-}004 * x + 1.2499\text{E-}005$$

$$R = 1.0000$$

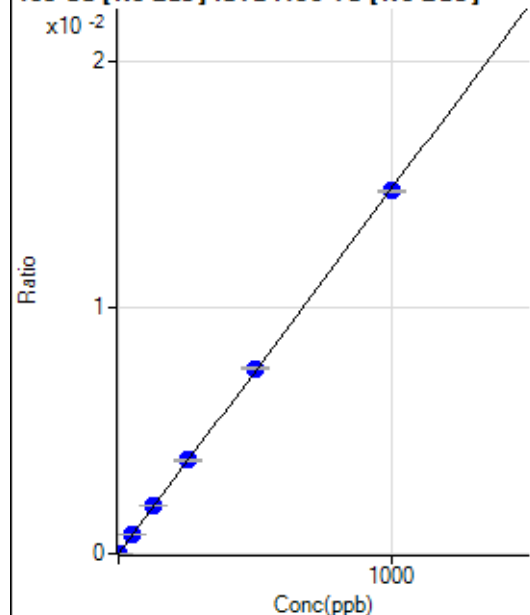
$$DL = 0.0103$$

$$BEC = 0.0148$$

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	25.00	0.0000	P	16.2
2	☐	1.000	0.965	295.84	0.0000	P	9.0
3	☐	50.000	52.750	14951.19	0.0008	P	1.2
4	☐	125.000	132.647	37884.24	0.0020	P	1.7
5	☐	250.000	255.681	73308.00	0.0038	P	2.7
6	☐	500.000	506.760	143922.63	0.0075	P	1.4
7	☐	1000.000	994.106	289684.71	0.0147	P	0.5
8	☐			170.84	0.0000	P	14.3

$$y = 1.4807\text{E-}005 * x + 1.3514\text{E-}006$$

$$R = 0.9999$$

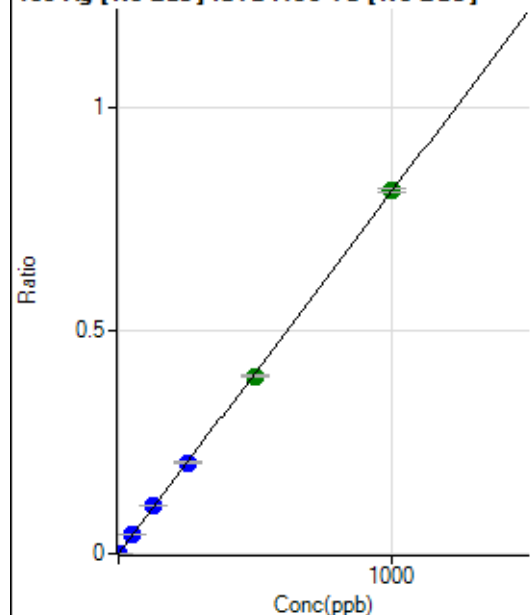
$$DL = 0.04427$$

$$BEC = 0.09127$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	48.3
2	☐	1.000	0.833	12789.56	0.0007	P	1.8
3	☐	50.000	53.000	819366.75	0.0429	P	0.5
4	☐	125.000	131.204	2046015.43	0.1061	P	0.8
5	☐	250.000	251.026	3931207.64	0.2031	P	2.2
6	☐	500.000	491.354	7623323.52	0.3975	A	0.8
7	☐	1000.000	1003.141	15969699.66	0.8116	A	0.9
8	☐			4520.38	0.0003	P	8.4

$$y = 8.0901\text{E-}004 * x + 2.4107\text{E-}006$$

$$R = 0.9999$$

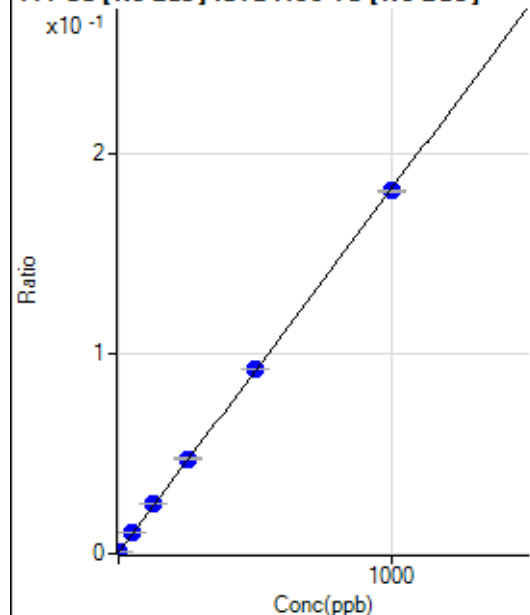
$$DL = 0.004316$$

$$BEC = 0.00298$$

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	9177.08	0.0005	P	3.0
2	☐	1.000	0.840	12273.18	0.0006	P	2.6
3	☐	50.000	53.311	194517.62	0.0102	P	1.1
4	☐	125.000	132.754	474351.62	0.0246	P	0.5
5	☐	250.000	256.911	912928.55	0.0472	P	2.0
6	☐	500.000	505.509	1770381.73	0.0923	P	0.4
7	☐	1000.000	994.383	3563895.21	0.1811	P	0.7
8	☐			9171.28	0.0005	P	3.3

$$y = 1.8163\text{E-}004 * x + 4.9646\text{E-}004$$

$$R = 0.9999$$

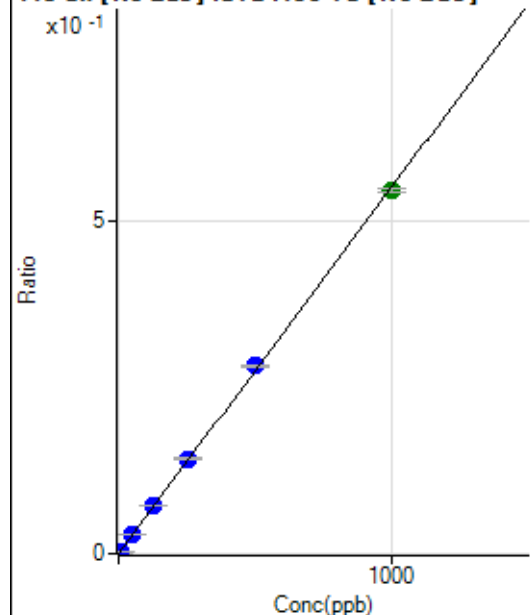
$$DL = 0.2464$$

$$BEC = 2.733$$

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	922.29	0.0000	P	10.6
2	☐	5.000	5.198	54989.23	0.0029	P	0.3
3	☐	50.000	52.502	552614.57	0.0289	P	1.2
4	☐	125.000	131.687	1396720.57	0.0725	P	0.5
5	☐	250.000	258.817	2756004.03	0.1424	P	1.8
6	☐	500.000	512.860	5409322.08	0.2821	P	0.9
7	☐	1000.000	990.404	10717628.54	0.5447	A	0.9
8	☐			15108.77	0.0009	P	1.3

$$y = 5.4988\text{E-}004 * x + 4.9867\text{E-}005$$

$$R = 0.9998$$

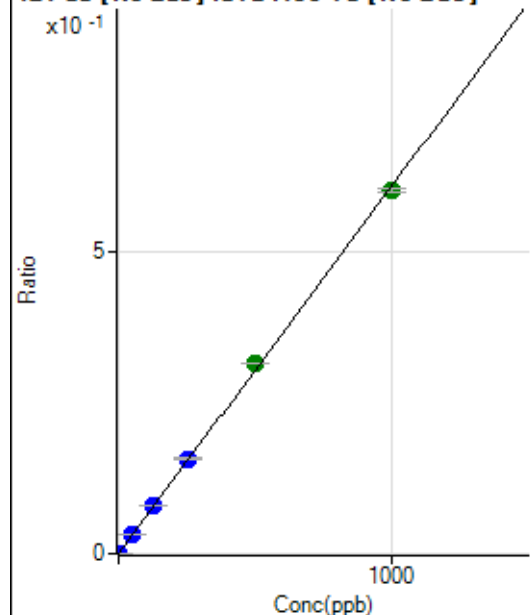
$$DL = 0.02883$$

$$BEC = 0.09069$$

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	72.23	0.0000	P	27.7
2	☐	2.000	1.984	22866.65	0.0012	P	0.4
3	☐	50.000	52.230	606468.77	0.0317	P	0.6
4	☐	125.000	130.697	1530710.62	0.0794	P	0.7
5	☐	250.000	258.354	3038743.77	0.1570	P	1.9
6	☐	500.000	518.196	6038181.56	0.3149	A	0.8
7	☐	1000.000	987.990	11812423.35	0.6003	A	1.0
8	☐			17692.41	0.0011	P	6.9

$$y = 6.0758\text{E-}004 * x + 3.9159\text{E-}006$$

$$R = 0.9997$$

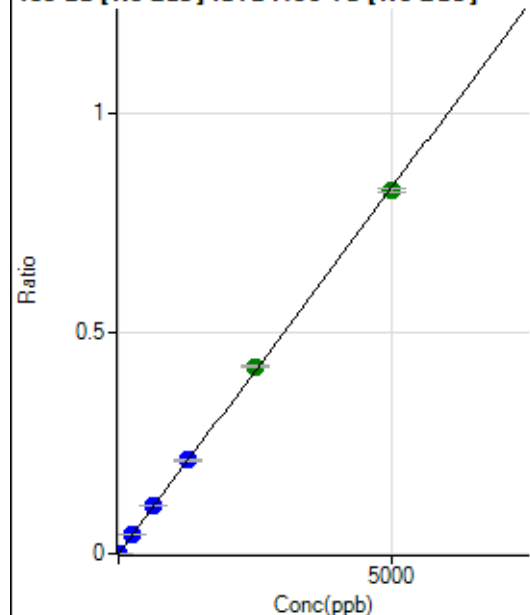
$$DL = 0.005347$$

$$BEC = 0.006445$$

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	58.34	0.0000	P	24.8
2	☐	10.000	10.228	32129.74	0.0017	P	2.0
3	☐	250.000	262.660	832402.22	0.0436	P	1.0
4	☐	625.000	653.810	2089943.82	0.1084	P	0.9
5	☐	1250.000	1281.188	4112906.30	0.2125	P	2.0
6	☐	2500.000	2557.438	8133399.14	0.4241	A	0.5
7	☐	5000.000	4959.249	16183237.34	0.8224	A	1.2
8	☐			29769.07	0.0018	P	2.6

$$y = 1.6583E-004 * x + 3.1557E-006$$

$$R = 0.9999$$

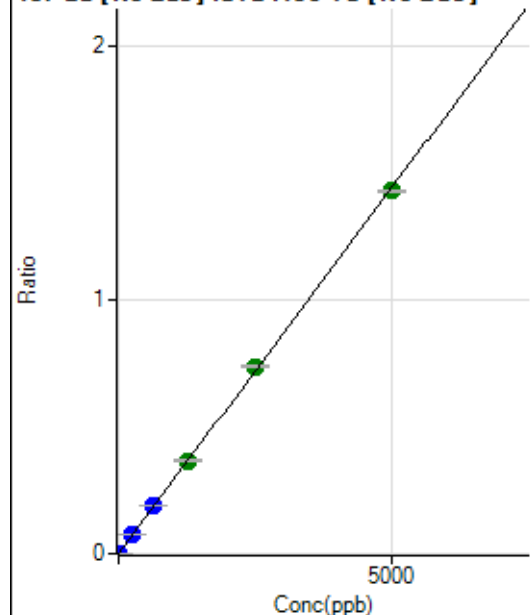
$$DL = 0.01414$$

$$BEC = 0.01903$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	22.7
2	☐	10.000	10.267	55874.75	0.0030	P	2.2
3	☐	250.000	264.658	1454292.84	0.0761	P	0.4
4	☐	625.000	654.896	3629947.78	0.1883	P	1.1
5	☐	1250.000	1269.614	7067546.08	0.3651	A	1.7
6	☐	2500.000	2557.554	14104014.72	0.7354	A	0.5
7	☐	5000.000	4961.849	28077454.45	1.4268	A	0.8
8	☐			52438.96	0.0031	P	1.3

$$y = 2.8756E-004 * x + 2.8488E-006$$

$$R = 0.9999$$

$$DL = 0.006743$$

$$BEC = 0.009907$$

Weight: <None>

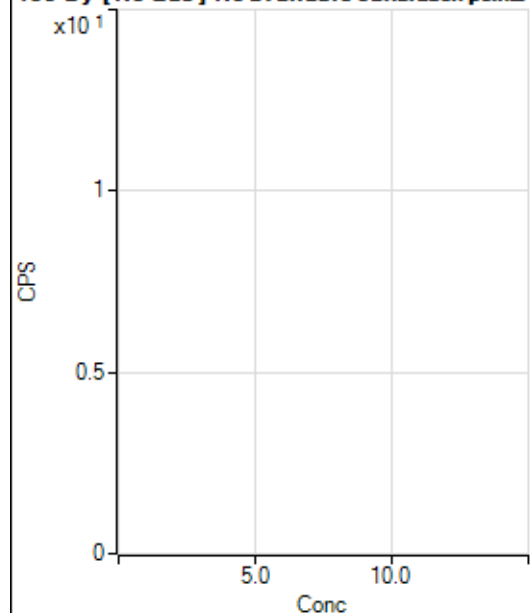
Min Conc: 0

150 Nd [No Gas] No available calibration points

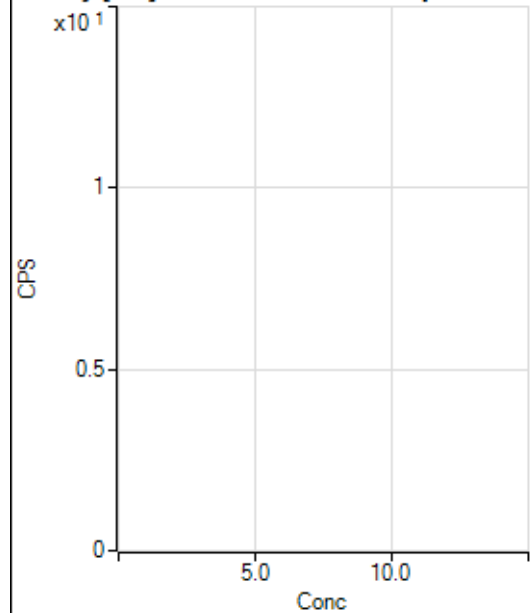
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			6.67		P	0.0
3	☐			102.23		P	21.0
4	☐			286.68		P	8.4
5	☐			528.92		P	12.0
6	☐			1097.86		P	4.9
7	☐			2186.92		P	6.2
8	☐			166.67		P	6.9

150 Nd [He] No available calibration points

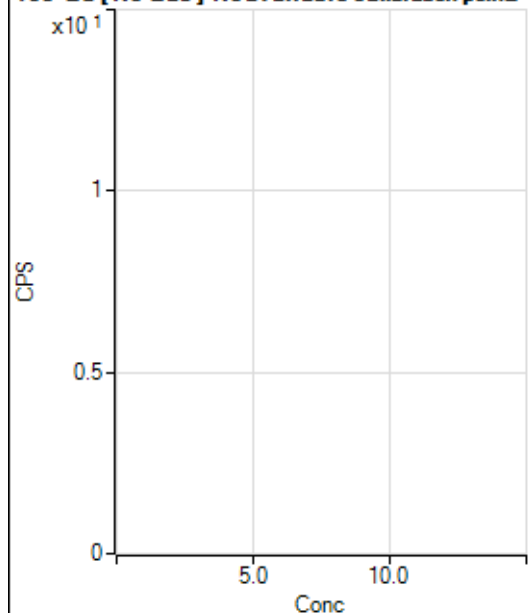
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			1.11		P	173.
3	☐			10.00		P	88.2
4	☐			23.33		P	57.2
5	☐			33.33		P	43.6
6	☐			77.78		P	6.5
7	☐			135.56		P	28.5
8	☐			56.67		P	11.8

156 Dy [No Gas] No available calibration points

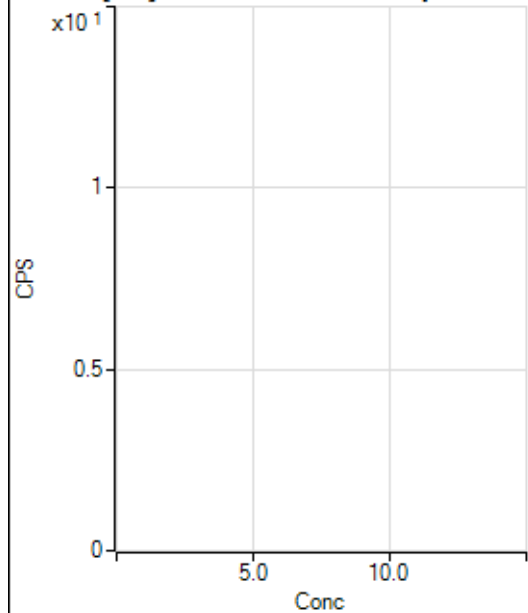
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	25.0
2	☐			27.78		P	121.
3	☐			50.00		P	0.0
4	☐			113.90		P	37.5
5	☐			130.56		P	25.8
6	☐			269.46		P	23.2
7	☐			500.03		P	22.0
8	☐			925.08		P	17.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	20.0
2	☐			16.67		P	40.0
3	☐			34.45		P	39.1
4	☐			60.00		P	5.5
5	☐			105.56		P	4.8
6	☐			163.34		P	21.3
7	☐			344.45		P	10.4
8	☐			424.46		P	6.3

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

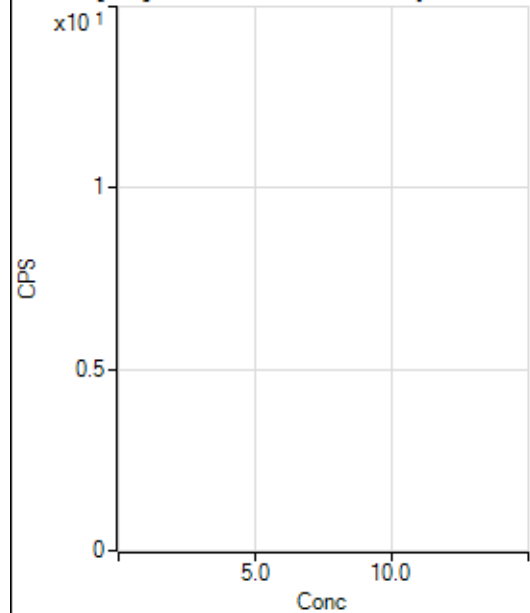
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			119.45		P	8.1
2	☐			169.46		P	41.2
3	☐			138.90		P	21.1
4	☐			155.56		P	13.5
5	☐			158.34		P	5.3
6	☐			255.57		P	13.2
7	☐			375.02		P	21.9
8	☐			1016.75		P	3.3

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			266.67		P	8.7
2	☐			251.12		P	20.6
3	☐			277.79		P	3.9
4	☐			276.67		P	10.5
5	☐			284.45		P	3.8
6	☐			305.57		P	8.8
7	☐			324.45		P	14.4
8	☐			671.14		P	8.5

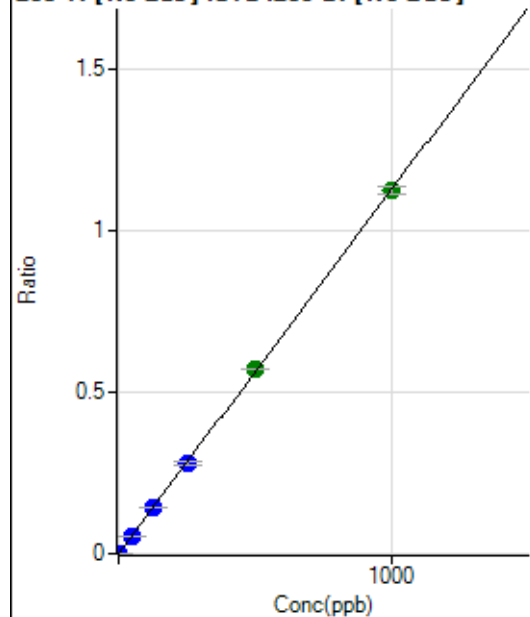
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			102.78		P	18.7
2	☐			100.01		P	38.2
3	☐			83.34		P	10.0
4	☐			108.34		P	46.8
5	☐			77.78		P	52.9
6	☐			155.56		P	25.3
7	☐			108.34		P	7.7
8	☐			197.23		P	14.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43.33		P	15.4
2	☐			32.22		P	26.0
3	☐			58.89		P	11.8
4	☐			36.67		P	32.8
5	☐			56.67		P	21.2
6	☐			46.67		P	14.3
7	☐			60.00		P	30.9
8	☐			85.56		P	24.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0000	P	13.2
2	☐	1.000	0.948	12606.49	0.0011	P	4.5
3	☐	50.000	50.024	646978.70	0.0564	P	0.3
4	☐	125.000	125.353	1613751.84	0.1413	P	0.9
5	☐	250.000	248.521	3179672.66	0.2801	P	3.0
6	☐	500.000	507.235	6207575.01	0.5716	A	1.0
7	☐	1000.000	996.707	12304845.94	1.1232	A	2.3
8	☐			4031.37	0.0005	P	3.1

$$y = 0.0011 * x + 1.8736E-005$$

$$R = 1.0000$$

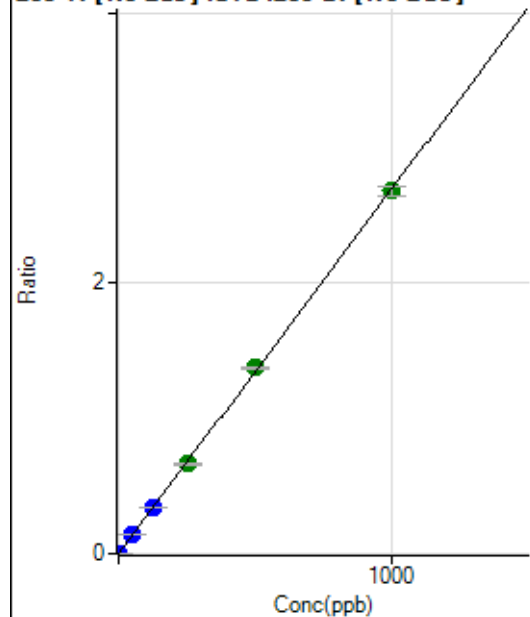
$$DL = 0.006559$$

$$BEC = 0.01663$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	502.81	0.0000	P	12.1
2	☐	1.000	0.936	29767.74	0.0026	P	1.7
3	☐	50.000	50.603	1564283.07	0.1363	P	0.5
4	☐	125.000	125.628	3865560.55	0.3384	P	1.2
5	☐	250.000	247.021	7554855.46	0.6654	A	2.4
6	☐	500.000	509.441	14902189.91	1.3723	A	0.6
7	☐	1000.000	995.916	29386818.71	2.6826	A	2.8
8	☐			9790.17	0.0012	P	0.9

$$y = 0.0027 * x + 4.4543E-005$$

$$R = 0.9999$$

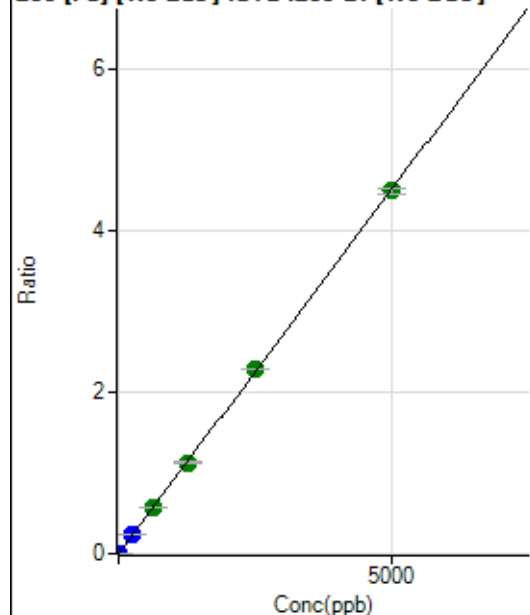
$$DL = 0.005983$$

$$BEC = 0.01654$$

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	642.63	0.0001	P	3.9
2	☐	1.000	0.918	10259.77	0.0009	P	3.3
3	☐	250.000	252.305	2608970.95	0.2274	P	0.1
4	☐	625.000	628.240	6466629.48	0.5662	A	0.6
5	☐	1250.000	1246.168	12752496.93	1.1230	A	1.5
6	☐	2500.000	2535.292	24809277.87	2.2846	A	0.6
7	☐	5000.000	4982.792	49191336.29	4.4900	A	1.4
8	☐			47111.80	0.0056	P	1.5

$$y = 9.0108\text{E-}004 * x + 5.6929\text{E-}005$$

$$R = 1.0000$$

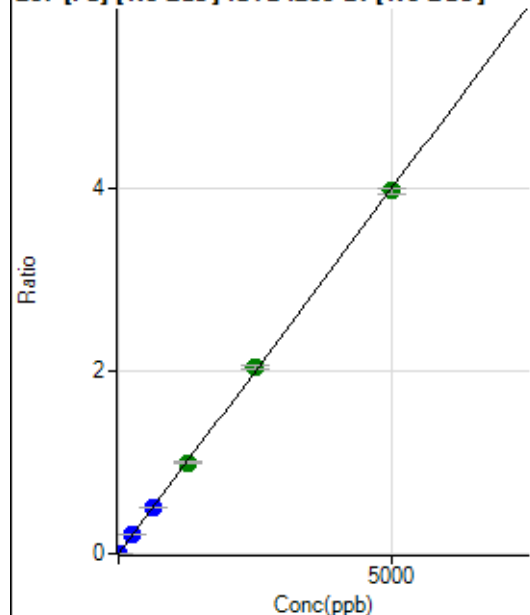
$$DL = 0.007465$$

$$BEC = 0.06318$$

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	500.03	0.0000	P	6.5
2	☐	1.000	0.940	9220.11	0.0008	P	2.2
3	☐	250.000	252.211	2310164.01	0.2014	P	0.7
4	☐	625.000	624.383	5693131.78	0.4984	P	1.0
5	☐	1250.000	1249.390	11322620.39	0.9973	A	3.3
6	☐	2500.000	2559.796	22187427.11	2.0433	A	1.9
7	☐	5000.000	4970.221	43465775.97	3.9673	A	1.7
8	☐			40768.97	0.0048	P	1.0

$$y = 7.9821\text{E-}004 * x + 4.4322\text{E-}005$$

$$R = 0.9999$$

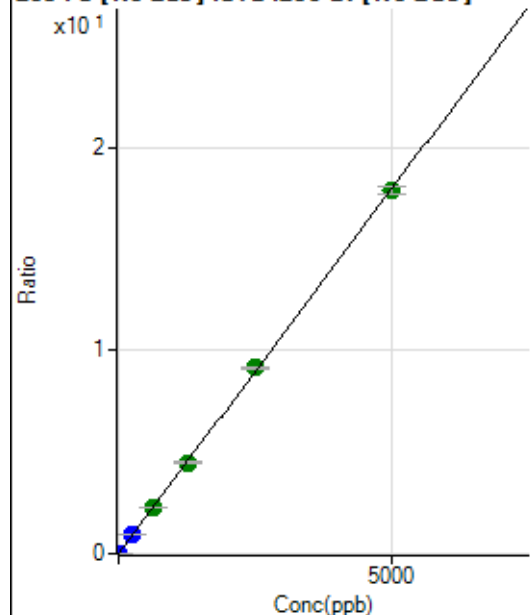
$$DL = 0.01076$$

$$BEC = 0.05553$$

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	2448.32	0.0002	P	3.6
2	☐	1.000	0.939	41609.95	0.0036	P	1.8
3	☐	250.000	251.739	10370158.41	0.9039	P	0.7
4	☐	625.000	629.444	25811141.78	2.2598	A	0.9
5	☐	1250.000	1250.036	50952759.59	4.4876	A	2.0
6	☐	2500.000	2547.036	99288987.63	9.1435	A	1.2
7	☐	5000.000	4975.831	195684755.3	17.8623	A	2.0
8	☐			184121.23	0.0218	P	1.4

$$y = 0.0036 * x + 2.1706E-004$$

$$R = 0.9999$$

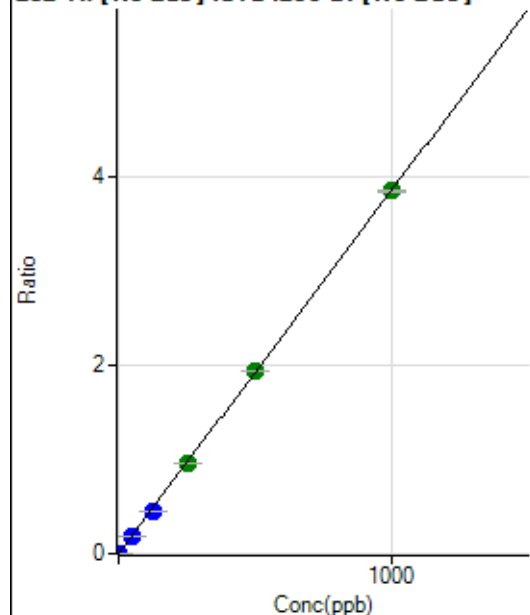
$$DL = 0.006484$$

$$BEC = 0.06047$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2496.62	0.0002	P	7.4
2	☐	1.000	0.674	32757.52	0.0028	P	1.0
3	☐	50.000	45.335	2010982.89	0.1753	P	0.4
4	☐	125.000	116.892	5158104.72	0.4516	P	1.2
5	☐	250.000	248.431	10895914.25	0.9595	A	1.3
6	☐	500.000	505.015	21180131.14	1.9503	A	0.2
7	☐	1000.000	999.132	42274632.43	3.8583	A	0.3
8	☐			28612.74	0.0034	P	4.6

$$y = 0.0039 * x + 2.2104E-004$$

$$R = 0.9999$$

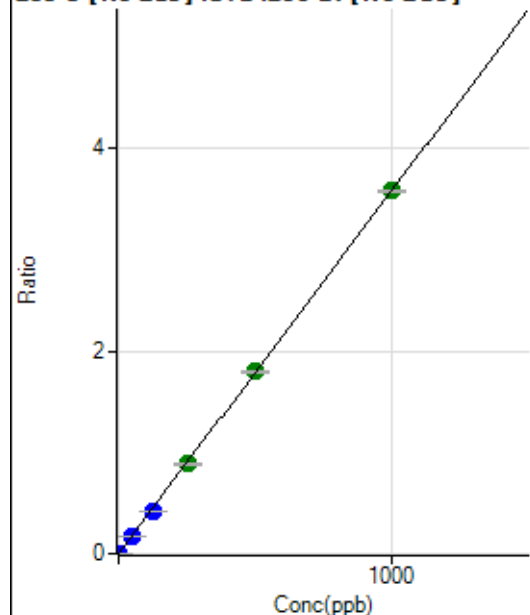
$$DL = 0.01266$$

$$BEC = 0.05724$$

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	80.56	0.0000	P	24.7
2	☐	1.000	0.843	35052.91	0.0030	P	2.4
3	☐	50.000	46.832	1921982.28	0.1675	P	0.4
4	☐	125.000	117.622	4805667.03	0.4207	P	1.4
5	☐	250.000	248.155	10078969.15	0.8877	A	2.1
6	☐	500.000	502.274	19510742.97	1.7966	A	0.8
7	☐	1000.000	1000.405	39206464.42	3.5784	A	0.5
8	☐			7616.65	0.0009	P	4.5

$$y = 0.0036 * x + 7.1218E-006$$

$$R = 1.0000$$

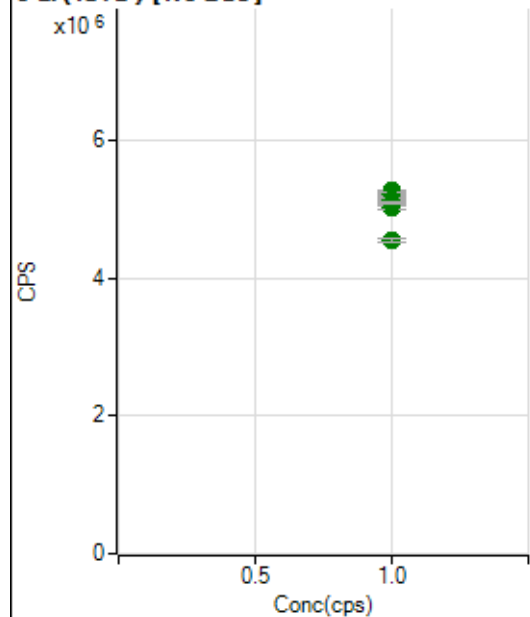
$$DL = 0.001478$$

$$BEC = 0.001991$$

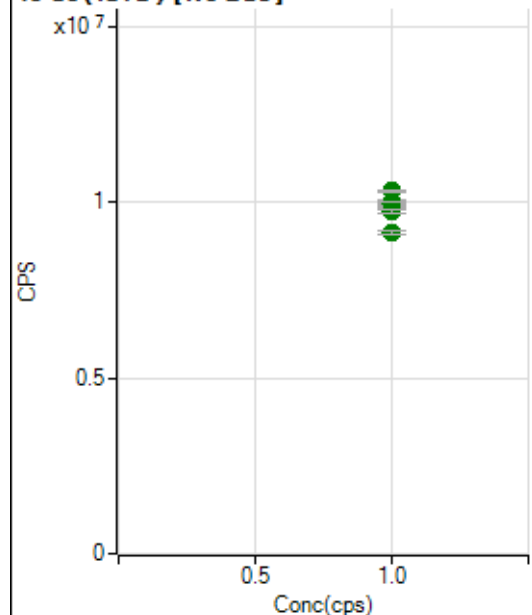
Weight: <None>

Min Conc: 0

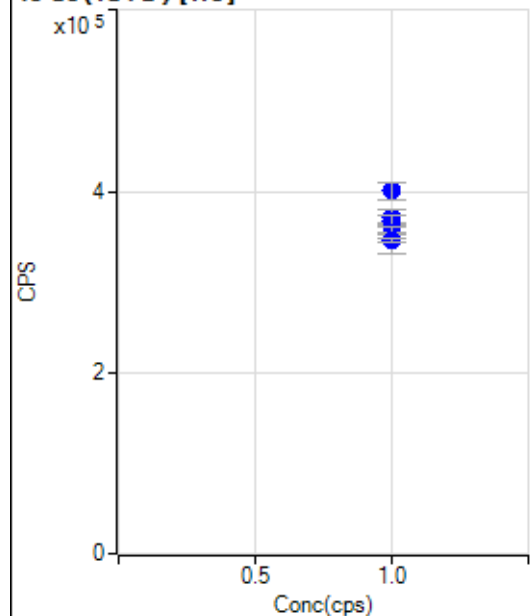
6 Li (ISTD) [No Gas]



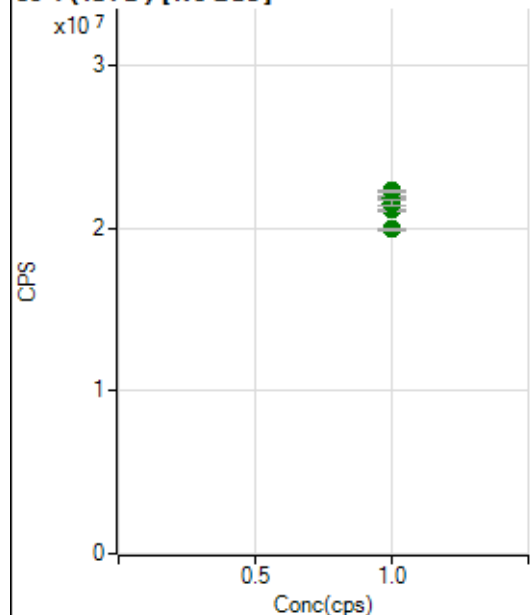
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5096300.34		A	1.5
2	☐	1.000		5232589.47		A	0.7
3	☐	1.000		5264394.43		A	0.4
4	☐	1.000		5216402.01		A	0.9
5	☐	1.000		5134076.17		A	1.5
6	☐	1.000		5031223.71		A	1.2
7	☐	1.000		5090174.68		A	0.7
8	☐	1.000		4548463.16		A	1.3

45 Sc (ISTD) [No Gas]

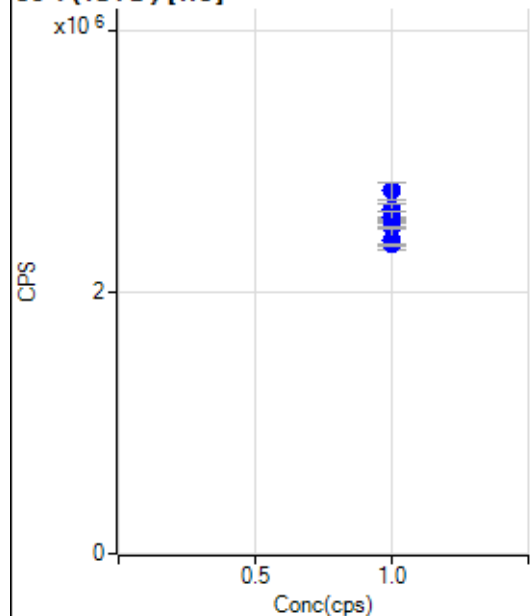
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9894437.63		A	1.2
2	☐	1.000		10018770.96		A	0.7
3	☐	1.000		9805592.91		A	0.9
4	☐	1.000		9882647.63		A	0.6
5	☐	1.000		9930907.21		A	1.2
6	☐	1.000		9742131.17		A	1.5
7	☐	1.000		10319960.89		A	0.3
8	☐	1.000		9156096.60		A	1.3

45 Sc (ISTD) [He]

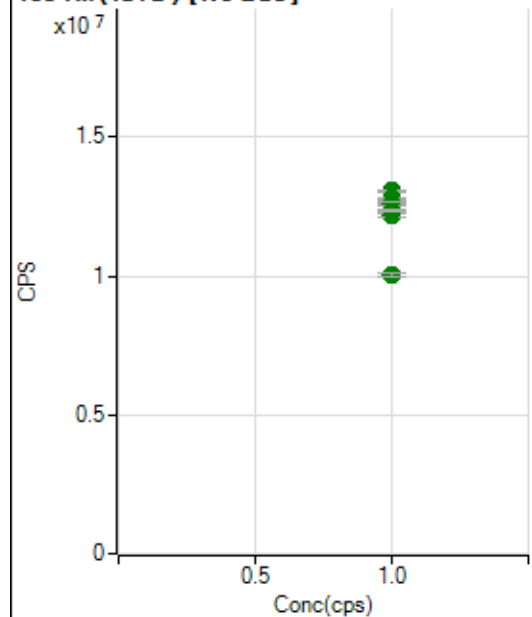
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		400475.36		P	4.7
2	☐	1.000		372399.20		P	4.0
3	☐	1.000		363482.20		P	0.6
4	☐	1.000		364052.72		P	0.9
5	☐	1.000		367576.20		P	3.8
6	☐	1.000		353754.26		P	0.5
7	☐	1.000		345791.93		P	8.2
8	☐	1.000		345976.52		P	1.7

89 Y (ISTD) [No Gas]

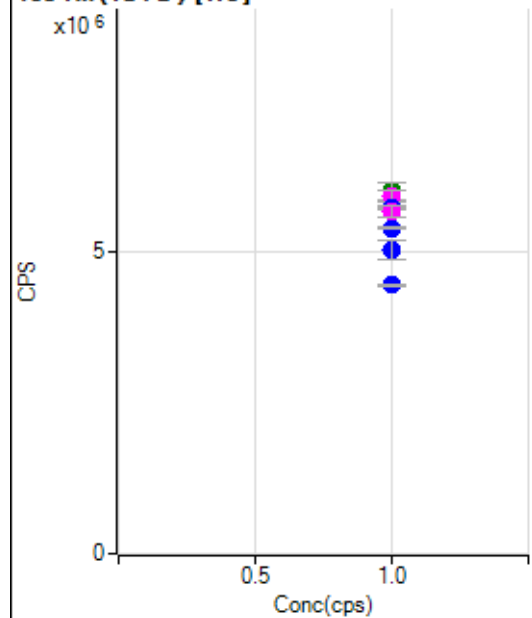
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21112488.57		A	0.9
2	☐	1.000		21855289.95		A	0.9
3	☐	1.000		21561542.18		A	1.3
4	☐	1.000		21826786.20		A	0.5
5	☐	1.000		21860983.29		A	1.4
6	☐	1.000		21537658.99		A	1.5
7	☐	1.000		22302303.83		A	0.8
8	☐	1.000		19945867.62		A	0.5

89 Y (ISTD) [He]

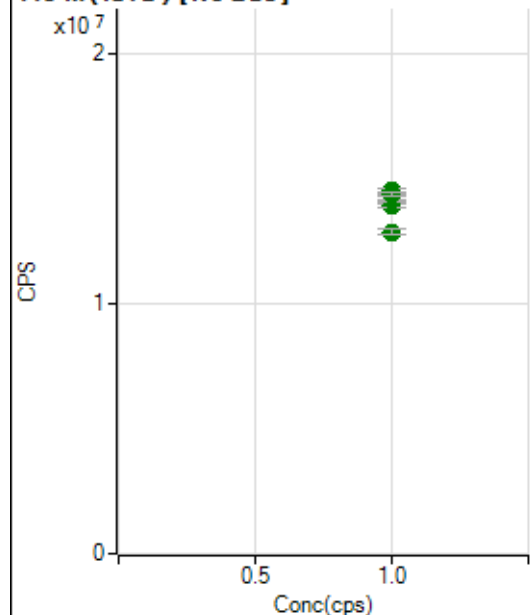
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2778106.47		P	4.5
2	☐	1.000		2630747.01		P	4.1
3	☐	1.000		2557150.85		P	0.7
4	☐	1.000		2571612.83		P	0.2
5	☐	1.000		2580240.40		P	3.5
6	☐	1.000		2504355.95		P	0.3
7	☐	1.000		2407268.61		P	6.9
8	☐	1.000		2364939.70		P	0.4

103 Rh (ISTD) [No Gas]

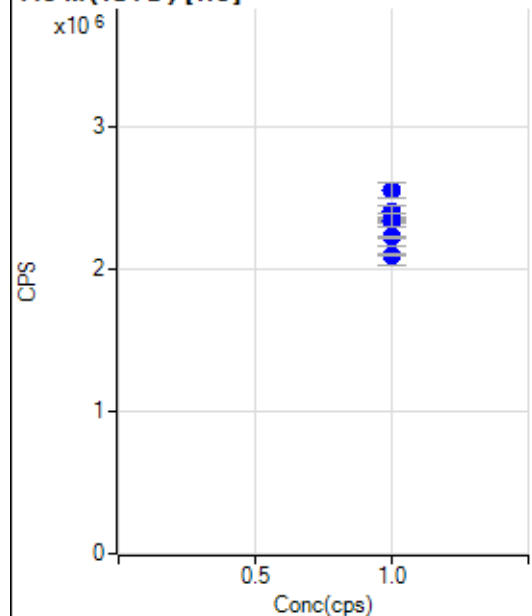
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12655139.12		A	1.2
2	☐	1.000		13066968.56		A	0.5
3	☐	1.000		12751807.03		A	0.9
4	☐	1.000		12784882.86		A	0.6
5	☐	1.000		12590149.67		A	1.2
6	☐	1.000		12188255.93		A	0.7
7	☐	1.000		12355368.29		A	0.5
8	☐	1.000		10015930.68		A	1.3

103 Rh (ISTD) [He]

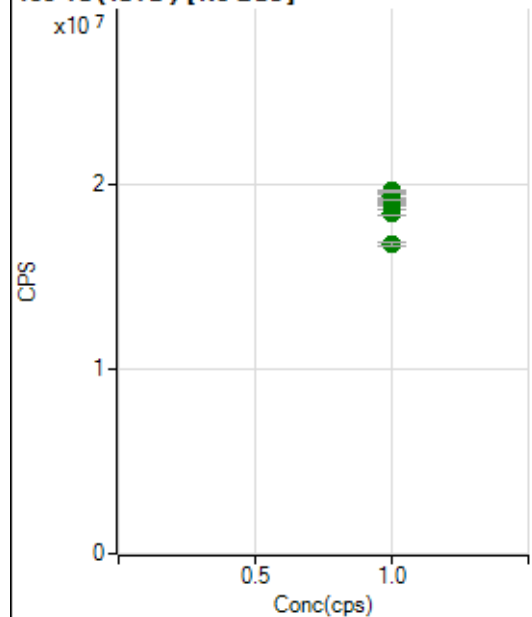
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5989879.49		A	4.9
2	☐	1.000		5893475.95		M	3.2
3	☐	1.000		5711014.85		P	0.6
4	☐	1.000		5722566.23		P	0.3
5	☐	1.000		5650807.83		M	3.7
6	☐	1.000		5380964.30		P	0.8
7	☐	1.000		5003089.02		P	6.4
8	☐	1.000		4441327.89		P	0.6

115 In (ISTD) [No Gas]

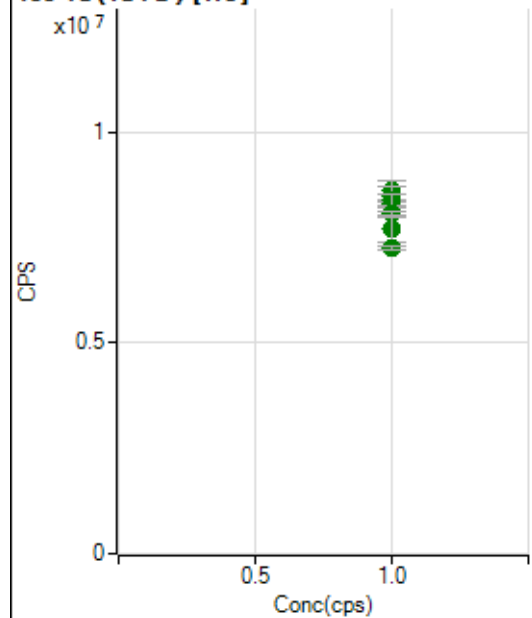
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13958681.49		A	0.9
2	☐	1.000		14528277.93		A	1.3
3	☐	1.000		14401180.05		A	1.6
4	☐	1.000		14426506.01		A	0.5
5	☐	1.000		14392212.59		A	0.8
6	☐	1.000		14145502.28		A	0.8
7	☐	1.000		14396773.32		A	1.4
8	☐	1.000		12883630.41		A	1.7

115 In (ISTD) [He]

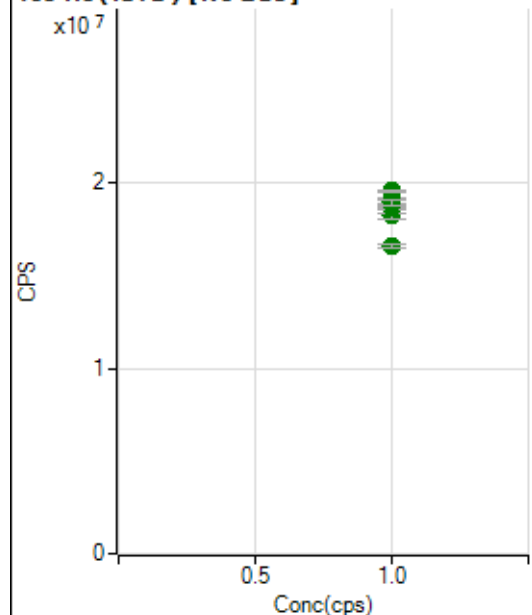
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2549140.29		P	4.2
2	☐	1.000		2407074.45		P	3.2
3	☐	1.000		2336068.20		P	0.7
4	☐	1.000		2343815.73		P	1.1
5	☐	1.000		2338942.01		P	4.0
6	☐	1.000		2224829.27		P	0.3
7	☐	1.000		2090308.33		P	6.7
8	☐	1.000		2100351.61		P	0.7

159 Tb (ISTD) [No Gas]

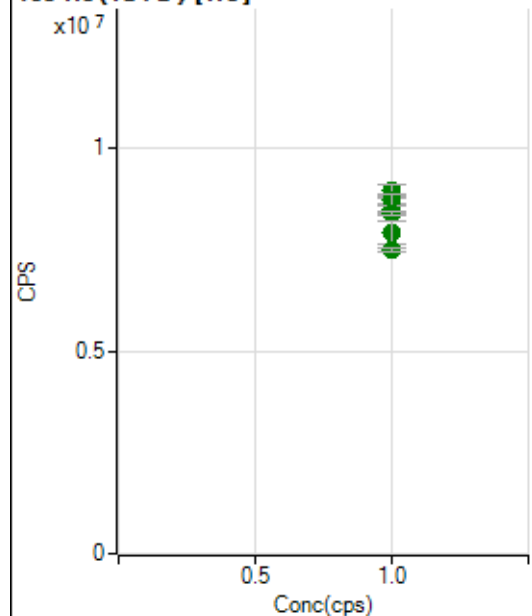
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18487712.36		A	1.4
2	☐	1.000		18908175.83		A	0.7
3	☐	1.000		19108635.13		A	0.3
4	☐	1.000		19275378.32		A	0.2
5	☐	1.000		19361197.49		A	1.3
6	☐	1.000		19177791.66		A	0.4
7	☐	1.000		19678530.95		A	0.6
8	☐	1.000		16791489.89		A	1.0

159 Tb (ISTD) [He]

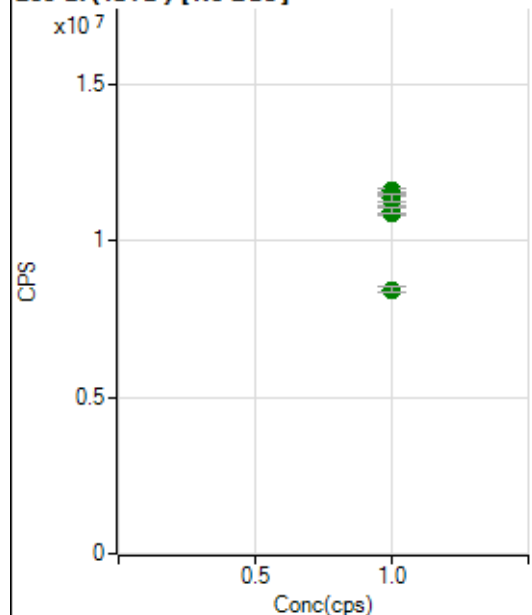
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8602035.56		A	5.4
2	☐	1.000		8481942.79		A	5.6
3	☐	1.000		8278576.96		A	1.6
4	☐	1.000		8368488.28		A	0.6
5	☐	1.000		8377495.08		A	3.2
6	☐	1.000		8068101.20		A	0.9
7	☐	1.000		7685830.93		A	7.4
8	☐	1.000		7238796.70		A	1.2

165 Ho (ISTD) [No Gas]

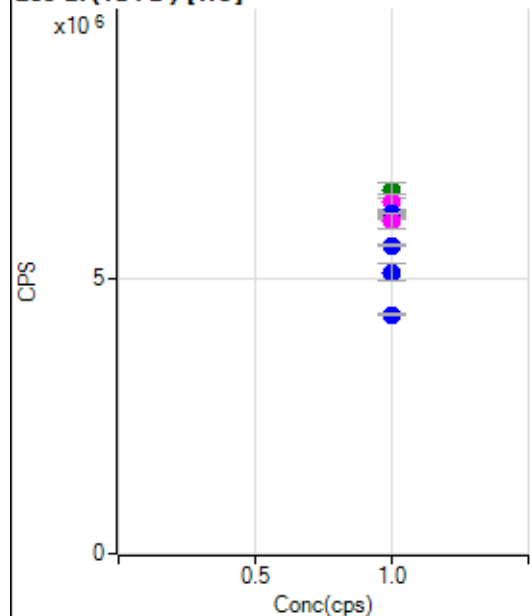
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18226386.95		A	1.8
2	☐	1.000		18619465.83		A	0.4
3	☐	1.000		18836432.36		A	0.7
4	☐	1.000		19072179.99		A	0.3
5	☐	1.000		18977130.00		A	1.6
6	☐	1.000		18917519.30		A	1.5
7	☐	1.000		19554864.57		A	0.3
8	☐	1.000		16594018.36		A	1.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8946312.65		A	3.7
2	☐	1.000		8641173.62		A	4.6
3	☐	1.000		8498219.59		A	2.1
4	☐	1.000		8613240.91		A	0.5
5	☐	1.000		8718030.50		A	3.3
6	☐	1.000		8379961.06		A	0.9
7	☐	1.000		7919151.69		A	7.4
8	☐	1.000		7499238.78		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11282237.47		A	2.3
2	☐	1.000		11602335.38		A	1.1
3	☐	1.000		11472903.30		A	0.5
4	☐	1.000		11422150.25		A	0.2
5	☐	1.000		11357606.91		A	2.2
6	☐	1.000		10859842.41		A	0.9
7	☐	1.000		10956952.68		A	1.6
8	☐	1.000		8450842.02		A	1.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6582148.10		A	4.4
2	☐	1.000		6398070.67		M	4.2
3	☐	1.000		6164566.37		P	1.2
4	☐	1.000		6091197.27		P	0.5
5	☐	1.000		6050500.33		M	4.7
6	☐	1.000		5593789.40		P	0.8
7	☐	1.000		5109627.77		P	6.1
8	☐	1.000		4341686.46		P	0.5

US EPA Tune Check Sample Report

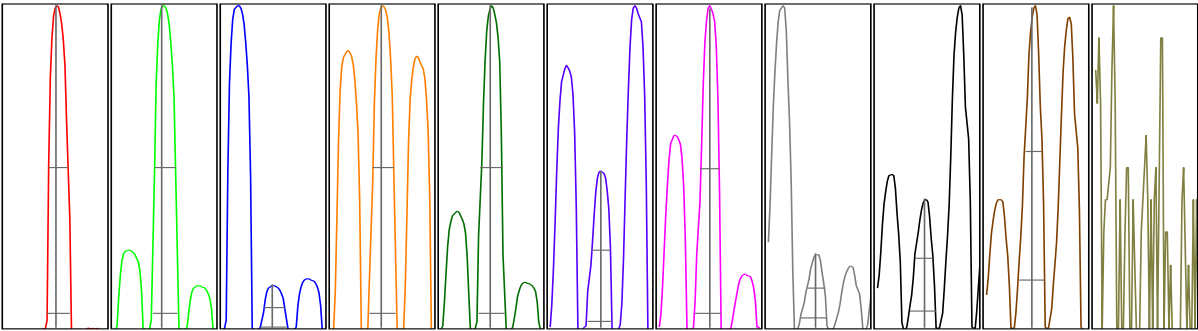
Batch Folder D:\ICP-MS Data\1\DATA\P7040620 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	17067	0.84	5.00	
24	210820	1.16	5.00	
25	27839	1.02	5.00	
26	32648	1.14	5.00	
59	107952	0.97	5.00	
113	20499	1.74	5.00	
115	68840	4.02	5.00	
206	27464	1.67	5.00	
207	24359	1.82	5.00	
208	57645	1.58	5.00	
220	0	60.01		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	17206	17147	17106	16834	17041
24	214291	212181	210347	208259	209023
25	28239	28027	27718	27560	27652
26	33176	32878	32504	32259	32423
59	108869	109069	107882	106562	107379
113	21026	20713	20295	20212	20248
115	72559	70677	68343	66794	65830
206	27935	27991	27187	27158	27051
207	24699	24957	23938	24100	24101
208	58642	58640	57050	57030	56862
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	30990	9.05	8.9 - 9.1		0.691	0.900	
24	345723	23.95	23.9 - 24.1		0.743	0.900	
25	46578	25.00	24.9 - 25.1		0.754	0.900	
26	54045	26.00	25.9 - 26.1		0.780	0.900	
59	183035	59.00	58.9 - 59.1		0.784	0.900	
113	36810	113.05	112.9 - 113.1		0.739	0.900	
115	124400	115.05	114.9 - 115.1		0.768	0.900	
206	51788	205.95	205.9 - 206.1		0.755	0.900	
207	43317	206.95	206.9 - 207.1		0.755	0.900	
208	107265	207.90	207.9 - 208.1		0.765	0.900	
220	0	220.35	-		0.300		

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	11.8	V
Extract 2	-115.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	25364	2.10	
89	74459	2.30	
205	67064	1.59	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	24958	24778	25368	25590	26123
89	73086	72549	74483	75409	76767
205	66185	65961	67037	67558	68577

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	7.7	V	Deflect	0.6	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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			