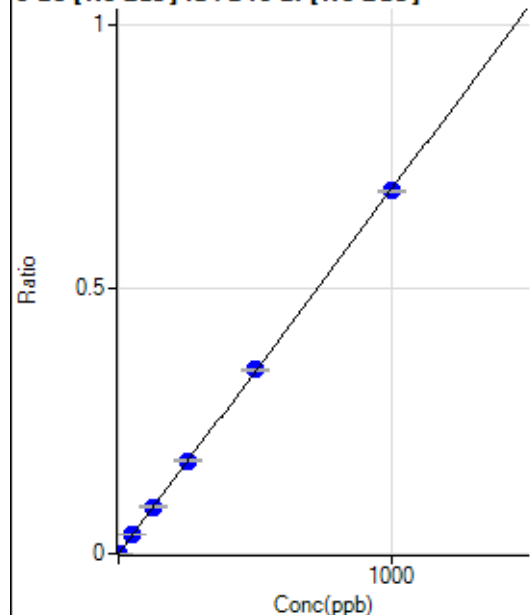


Calibration for 006CALS.d

Batch Folder: D:\ICP-MS Data\P7120118 MS.b\
 Analysis File: P7120118 MS.batch.bin
 DA Date-Time: 2018-12-01 23:12:20
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2018-12-01 13:31:02
2			
3	006CALS.d	S02	2018-12-01 13:39:24
4	007CALS.d	S03	2018-12-01 13:43:18
5	008CALS.d	S04	2018-12-01 13:47:30
6	009CALS.d	S05	2018-12-01 13:51:17
7	010CALS.d	S06	2018-12-01 13:55:02
8	011CALS.d	S07	2018-12-01 13:58:46
9	012CALS.d	S08	2018-12-01 14:02:32

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.08	0.0000	P	26.9
2	☐	0.100					
3	☐	1.000	0.932	3769.08	0.0006	P	3.4
4	☐	50.000	52.160	211459.63	0.0359	P	0.3
5	☐	125.000	129.120	516862.91	0.0889	P	0.6
6	☐	250.000	255.682	974017.29	0.1760	P	0.4
7	☐	500.000	504.565	1863910.52	0.3473	P	0.6
8	☐	1000.000	995.674	3689700.78	0.6854	P	0.5
9	☐			594.47	0.0001	P	5.0

$$y = 6.8837\text{E-}004 * x + 4.0722\text{E-}006$$

$$R = 1.0000$$

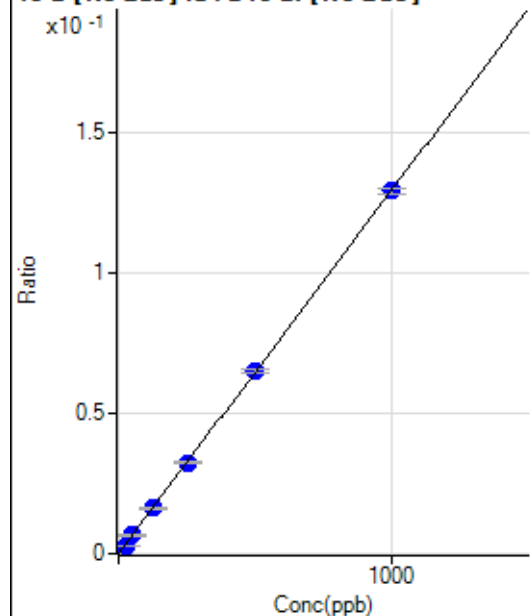
$$DL = 0.004776$$

$$BEC = 0.005916$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	405.58	0.0001	P	2.9
2	☐	2.500					
3	☐	25.000	22.911	17649.79	0.0030	P	1.7
4	☐	50.000	50.086	38449.71	0.0065	P	1.4
5	☐	125.000	124.067	93455.77	0.0161	P	3.0
6	☐	250.000	250.043	178882.04	0.0323	P	2.0
7	☐	500.000	502.465	348208.48	0.0649	P	1.6
8	☐	1000.000	998.921	694137.27	0.1289	P	1.3
9	☐			15258.30	0.0029	P	8.3

$$y = 1.2900\text{E-}004 * x + 6.8552\text{E-}005$$

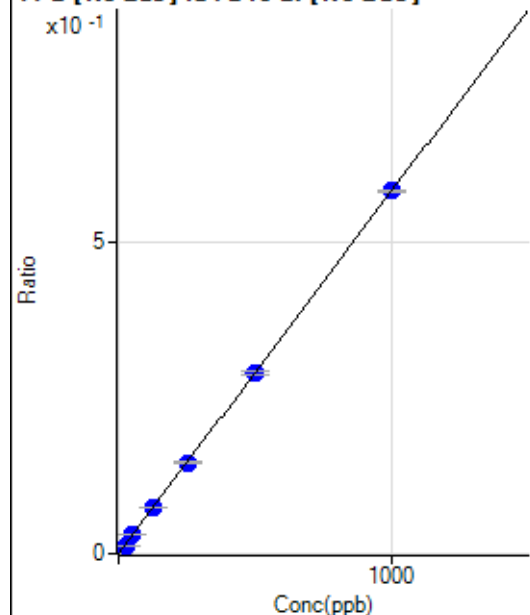
$$R = 1.0000$$

$$DL = 0.04551$$

$$BEC = 0.5314$$

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	1769.61	0.0003	P	5.1
2	☐	2.500					
3	☐	25.000	23.107	80293.84	0.0138	P	0.4
4	☐	50.000	50.170	173825.63	0.0295	P	0.5
5	☐	125.000	126.064	428666.37	0.0737	P	1.2
6	☐	250.000	251.111	810999.38	0.1466	P	1.3
7	☐	500.000	497.890	1557735.26	0.2903	P	1.6
8	☐	1000.000	1000.683	3139185.31	0.5831	P	0.3
9	☐			68035.02	0.0131	P	6.8

$$y = 5.8242\text{E-}004 * x + 2.9914\text{E-}004$$

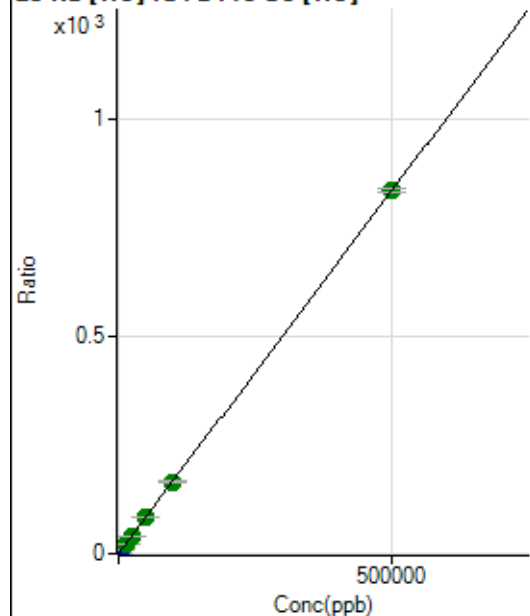
$$R = 1.0000$$

$$DL = 0.07801$$

$$BEC = 0.5136$$

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	9608.99	0.0265	P	1.8
2	☐	50.000					
3	☐	500.000	456.746	288110.69	0.7899	P	0.4
4	☐	5000.000	4983.159	3032680.21	8.3553	P	0.5
5	☐	12500.000	12265.021	7130779.85	20.5262	A	0.2
6	☐	25000.000	24917.576	13396599.26	41.6736	A	1.0
7	☐	50000.000	49918.561	26183280.27	83.4602	A	2.1
8	☐	100000.00	99068.561	54890879.00	165.6094	A	0.9
9	☐	500000.00	500204.63	313376429.2	836.0673	A	1.0

$$y = 0.0017 * x + 0.0265$$

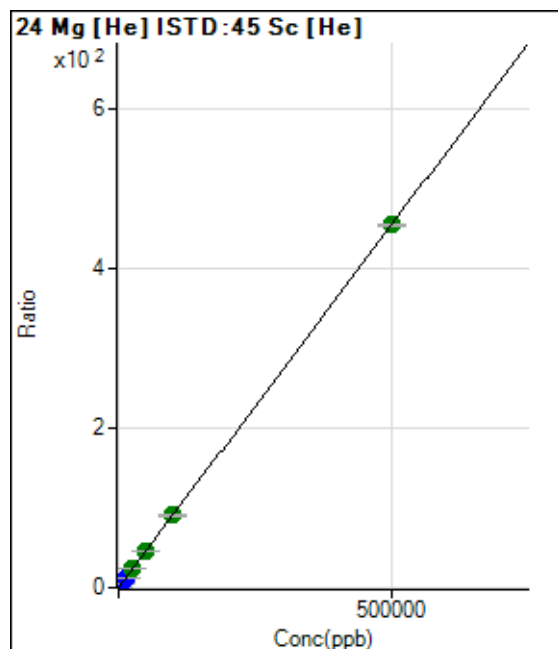
$$R = 1.0000$$

$$DL = 0.8343$$

$$BEC = 15.83$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.78	0.0003	P	32.6
2	☐	50.000					
3	☐	500.000	463.059	153761.20	0.4215	P	0.6
4	☐	5000.000	5105.779	1686019.80	4.6451	P	0.4
5	☐	12500.000	12519.224	3956637.76	11.3893	P	0.1
6	☐	25000.000	25475.580	7450165.27	23.1761	A	1.2
7	☐	50000.000	50641.241	14453193.55	46.0699	A	2.1
8	☐	100000.00	99759.410	30079980.88	90.7540	A	1.0
9	☐	500000.00	499958.71	170490319.0	454.8258	A	0.6

$$y = 9.0973\text{E-}004 * x + 2.8296\text{E-}004$$

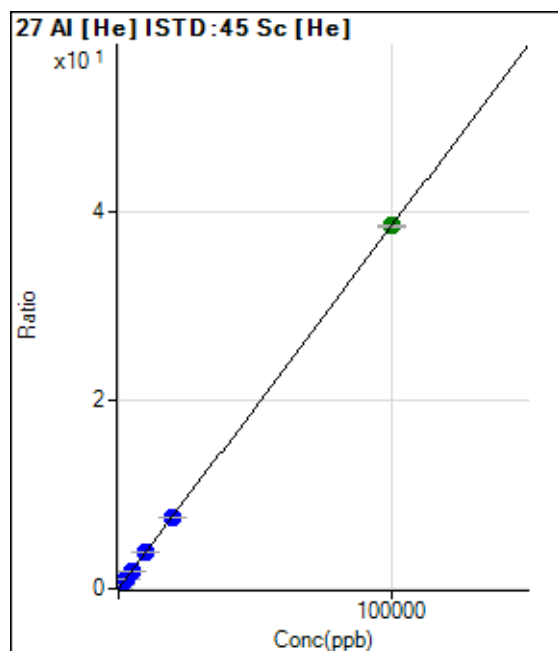
$$R = 1.0000$$

$$DL = 0.3042$$

$$BEC = 0.311$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0001	P	75.9
2	☐	2.000					
3	☐	20.000	18.599	2644.78	0.0073	P	1.7
4	☐	1000.000	1003.280	139901.00	0.3854	P	0.6
5	☐	2500.000	2473.315	330052.46	0.9501	P	0.8
6	☐	5000.000	5008.778	618475.74	1.9239	P	0.6
7	☐	10000.000	9961.834	1200471.55	3.8263	P	1.6
8	☐	20000.000	19708.738	2509135.95	7.5699	P	0.5
9	☐	100000.00	100062.26	14406333.31	38.4322	A	0.6

$$y = 3.8408\text{E-}004 * x + 1.0762\text{E-}004$$

$$R = 1.0000$$

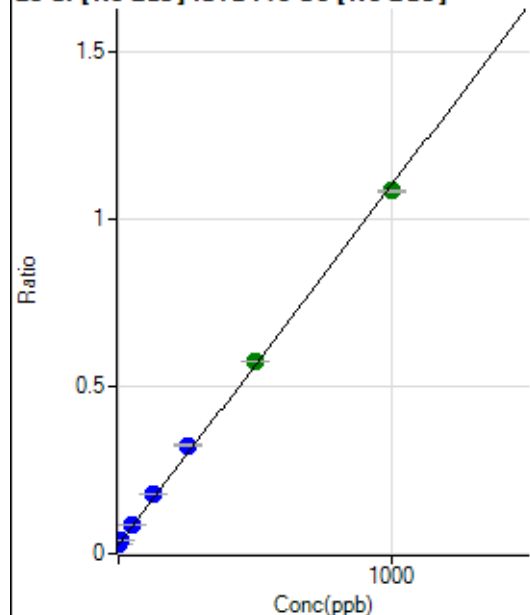
$$DL = 0.6376$$

$$BEC = 0.2802$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	241640.55	0.0266	P	0.8
2	☐	1.000					
3	☐	10.000	10.976	339879.50	0.0384	P	3.1
4	☐	50.000	56.240	776774.74	0.0870	P	0.3
5	☐	125.000	139.863	1539925.68	0.1768	P	0.7
6	☐	250.000	277.170	2653747.30	0.3243	P	0.5
7	☐	500.000	512.365	4524519.37	0.5768	A	0.2
8	☐	1000.000	984.845	8631166.34	1.0841	A	0.6
9	☐			609294.70	0.0726	P	1.1

$$y = 0.0011 * x + 0.0266$$

$$R = 0.9994$$

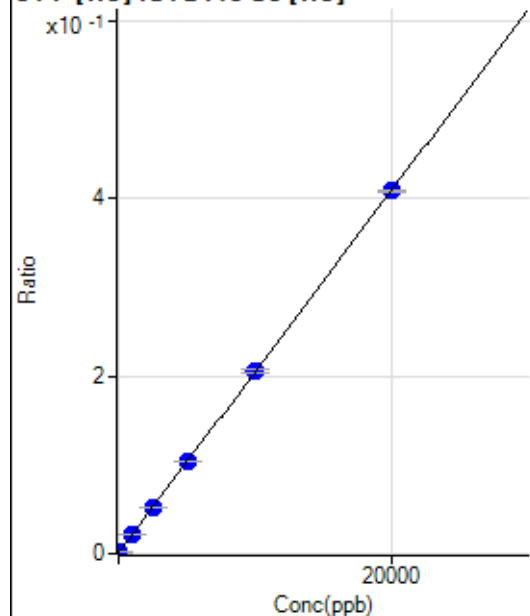
$$DL = 0.6163$$

$$BEC = 24.81$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-24.378	150.01	0.0004	P	20.9
2	☐	0.000					
3	☐	0.000	24.378	513.92	0.0014	P	9.3
4	☐	1000.000	998.028	7727.32	0.0213	P	2.2
5	☐	2500.000	2507.666	18106.13	0.0521	P	1.3
6	☐	5000.000	5048.941	33435.82	0.1040	P	1.6
7	☐	10000.000	10022.613	64495.55	0.2056	P	1.7
8	☐	20000.000	19975.598	135502.21	0.4088	P	0.7
9	☐			222.24	0.0006	P	33.6

$$y = 2.0420E-005 * x + 9.1141E-004$$

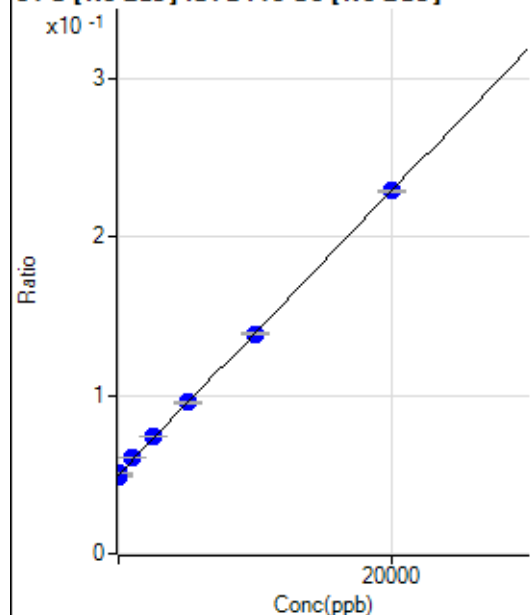
$$R = 1.0000$$

$$DL = 15.93$$

$$BEC = 44.63$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-96.966	444551.61	0.0490	P	0.6
2	☐	0.000					
3	☐	0.000	96.966	448892.81	0.0508	P	0.3
4	☐	1000.000	1181.794	539727.80	0.0605	P	0.7
5	☐	2500.000	2713.372	646213.74	0.0742	P	0.4
6	☐	5000.000	5092.893	781787.67	0.0955	P	1.0
7	☐	10000.000	9929.083	1089291.83	0.1389	P	0.3
8	☐	20000.000	19976.474	1822502.84	0.2289	P	0.4
9	☐			372542.96	0.0444	P	1.4

$$y = 8.9622\text{E-}006 * x + 0.0499$$

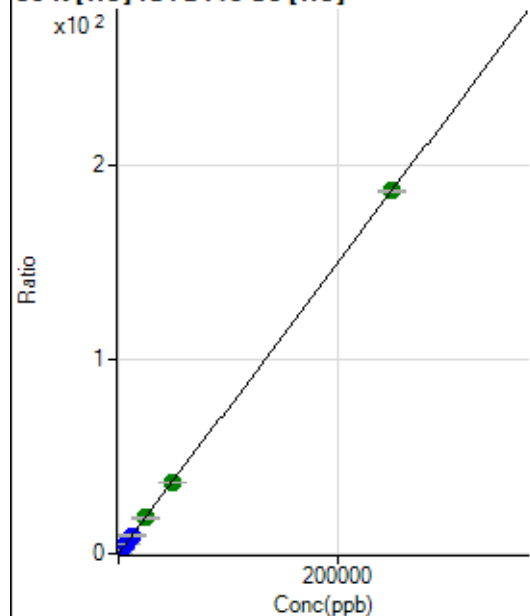
$$R = 0.9999$$

$$DL = 69.74$$

$$BEC = 5566$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18078.38	0.0498	P	3.0
2	☐	50.000					
3	☐	500.000	472.549	146976.37	0.4029	P	1.5
4	☐	2500.000	2524.598	702891.61	1.9365	P	0.1
5	☐	6250.000	6207.079	1628816.76	4.6887	P	0.4
6	☐	12500.000	12518.388	3023487.61	9.4054	P	0.9
7	☐	25000.000	24601.207	5783974.44	18.4356	A	1.7
8	☐	50000.000	48939.467	12139781.43	36.6248	A	0.4
9	☐	250000.00	250251.94	70123580.73	187.0763	A	0.7

$$y = 7.4735\text{E-}004 * x + 0.0498$$

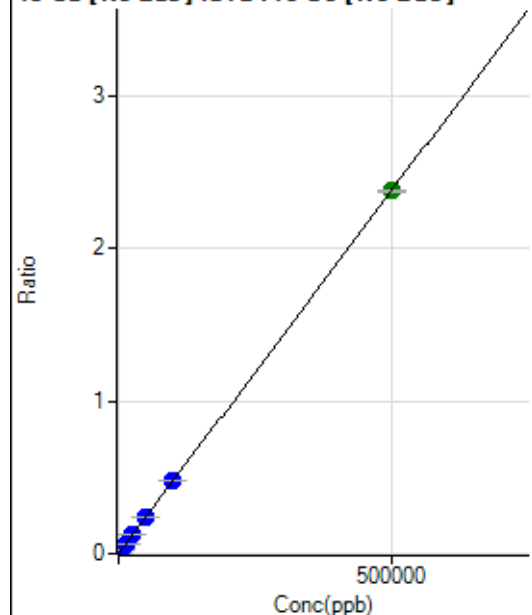
$$R = 1.0000$$

$$DL = 6.056$$

$$BEC = 66.61$$

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	102.78	0.0000	P	9.5
2	☐	50.000					
3	☐	500.000	471.658	19933.55	0.0023	P	1.2
4	☐	5000.000	5035.175	213750.18	0.0239	P	0.7
5	☐	12500.000	12637.289	523312.79	0.0601	P	0.8
6	☐	25000.000	25223.040	981454.44	0.1199	P	0.4
7	☐	50000.000	50314.555	1876393.79	0.2392	P	0.1
8	☐	100000.00	100487.73	3803477.08	0.4777	P	0.6
9	☐	500000.00	499856.09	19929759.65	2.3764	A	0.3

$$y = 4.7541\text{E-}006 * x + 1.1334\text{E-}005$$

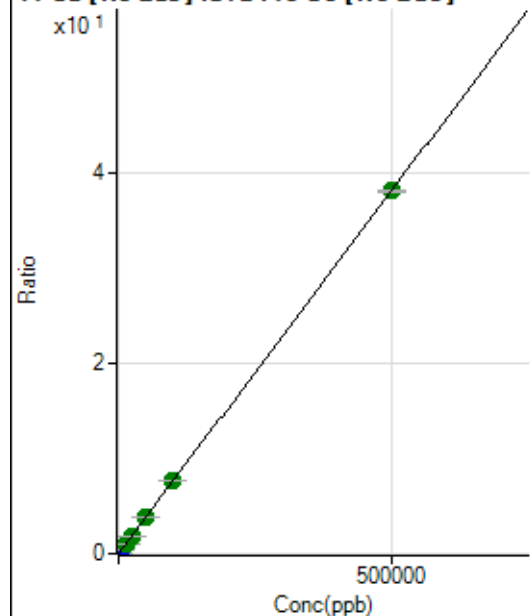
$$R = 1.0000$$

$$DL = 0.6826$$

$$BEC = 2.384$$

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	9126.32	0.0010	P	1.8
2	☐	50.000					
3	☐	500.000	460.082	319405.89	0.0361	P	0.9
4	☐	5000.000	5011.733	3422052.20	0.3834	P	0.3
5	☐	12500.000	12439.656	8275206.69	0.9502	A	0.7
6	☐	25000.000	24928.792	15575383.86	1.9032	A	0.4
7	☐	50000.000	49732.846	29774401.36	3.7958	A	0.3
8	☐	100000.00	100244.52	60904281.22	7.6500	A	0.6
9	☐	500000.00	499982.80	319962473.8	38.1516	A	0.3

$$y = 7.6304\text{E-}005 * x + 0.0010$$

$$R = 1.0000$$

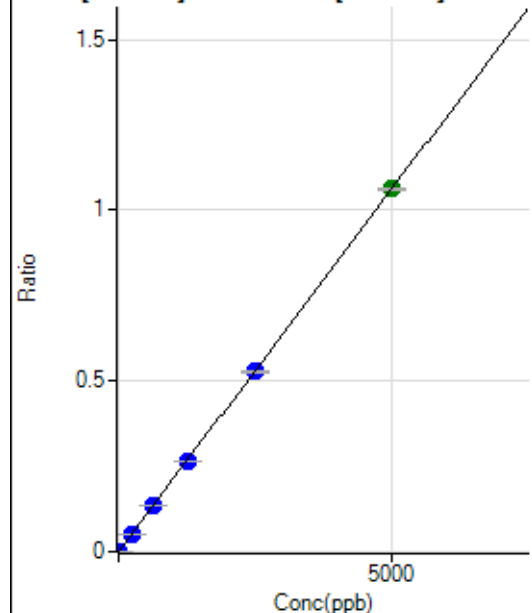
$$DL = 0.7242$$

$$BEC = 13.19$$

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	111.12	0.0000	P	15.4
2	☐	0.500					
3	☐	5.000	4.903	9311.64	0.0011	P	2.8
4	☐	250.000	250.146	473909.40	0.0531	P	1.2
5	☐	625.000	627.953	1160742.29	0.1333	P	0.1
6	☐	1250.000	1254.365	2178714.42	0.2662	P	0.2
7	☐	2500.000	2484.350	4135782.86	0.5273	P	0.5
8	☐	5000.000	5006.358	8458915.38	1.0625	A	0.3
9	☐			6490.59	0.0008	P	2.2

$$y = 2.1222\text{E-}004 * x + 1.2248\text{E-}005$$

$$R = 1.0000$$

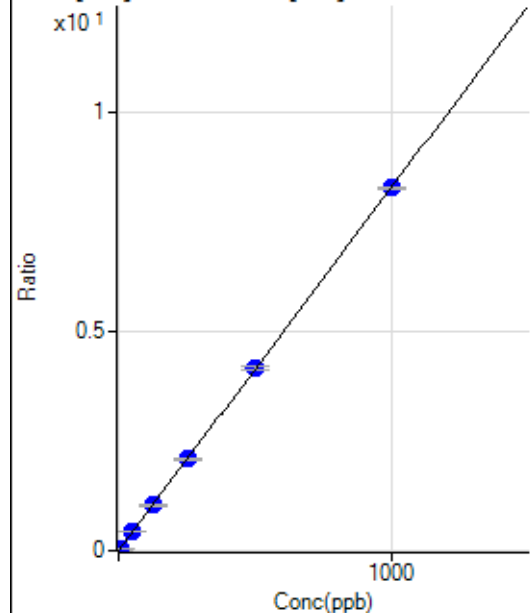
$$DL = 0.02658$$

$$BEC = 0.05771$$

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	3.33	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	4.934	14903.26	0.0409	P	0.7
4	☐	50.000	50.988	153226.65	0.4222	P	0.2
5	☐	125.000	124.462	357978.07	1.0305	P	0.2
6	☐	250.000	252.398	671740.30	2.0897	P	1.2
7	☐	500.000	501.900	1303707.58	4.1554	P	1.7
8	☐	1000.000	998.469	2740003.95	8.2666	P	0.6
9	☐			1122.28	0.0030	P	6.8

$$y = 0.0083 * x + 9.1635\text{E-}006$$

$$R = 1.0000$$

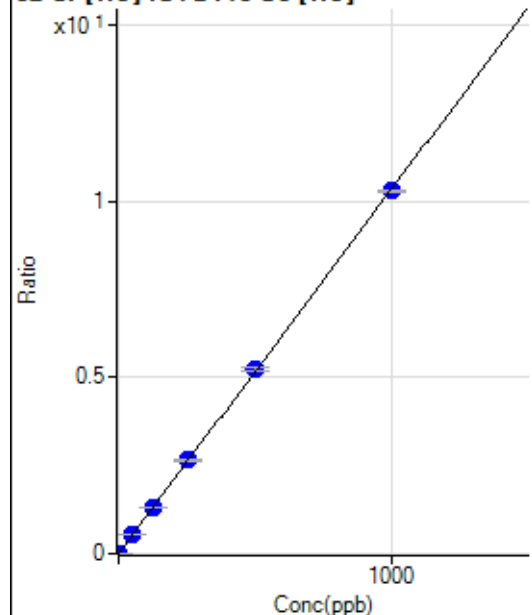
$$DL = 0.005751$$

$$BEC = 0.001107$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1004.49	0.0028	P	2.2
2	☐	0.200					
3	☐	2.000	1.904	8179.03	0.0224	P	2.1
4	☐	50.000	51.752	194969.09	0.5372	P	0.7
5	☐	125.000	126.589	455068.38	1.3099	P	0.4
6	☐	250.000	255.976	850566.70	2.6460	P	1.2
7	☐	500.000	505.292	1637820.64	5.2204	P	1.8
8	☐	1000.000	995.574	3408427.00	10.2830	P	0.5
9	☐			127505.30	0.3401	P	0.5

$$y = 0.0103 * x + 0.0028$$

$$R = 1.0000$$

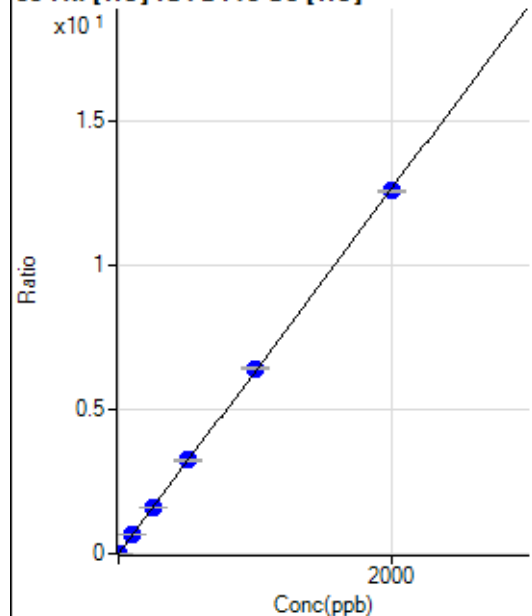
$$DL = 0.01761$$

$$BEC = 0.2678$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0002	P	16.5
2	☐	0.100					
3	☐	1.000	0.946	2244.66	0.0062	P	1.0
4	☐	100.000	101.873	234084.21	0.6449	P	0.3
5	☐	250.000	251.606	553271.39	1.5926	P	0.3
6	☐	500.000	511.792	1041279.41	3.2393	P	1.6
7	☐	1000.000	1015.131	2015838.01	6.4250	P	1.5
8	☐	2000.000	1989.192	4173039.45	12.5899	P	0.6
9	☐			31002.84	0.0827	P	0.8

$$y = 0.0063 * x + 1.6826E-004$$

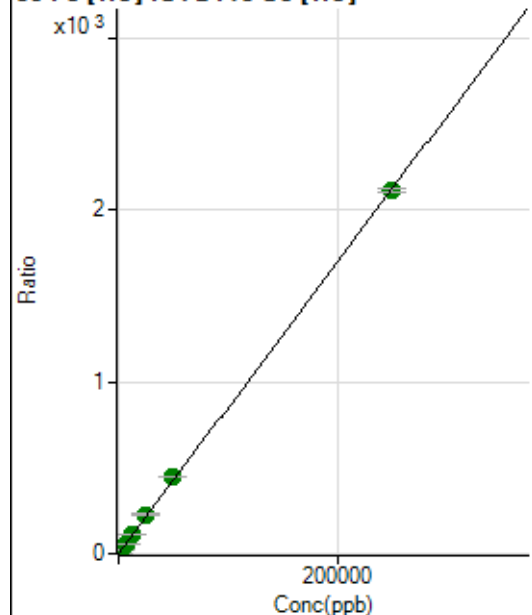
$$R = 0.9999$$

$$DL = 0.01312$$

$$BEC = 0.02658$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4263.70	0.0117	P	4.4
2	☐	5.000					
3	☐	50.000	53.536	169725.48	0.4653	P	0.1
4	☐	2500.000	2743.178	8439780.11	23.2525	A	0.3
5	☐	6250.000	6769.035	19927140.95	57.3603	A	0.4
6	☐	12500.000	13696.048	37304173.98	116.0473	A	1.2
7	☐	25000.000	26946.142	71627442.80	228.3047	A	1.8
8	☐	50000.000	52771.882	148195205.1	447.1054	A	0.7
9	☐	250000.00	249175.79	791279047.3	2,111.077	A	1.0

$$y = 0.0085 * x + 0.0117$$

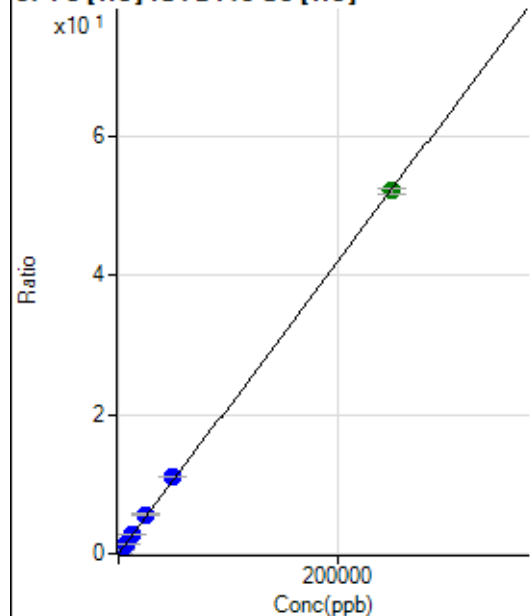
$$R = 0.9999$$

$$DL = 0.1814$$

$$BEC = 1.386$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	114.82	0.0003	P	28.4
2	☐	5.000					
3	☐	50.000	54.819	4293.34	0.0118	P	4.1
4	☐	2500.000	2731.453	207264.06	0.5710	P	0.7
5	☐	6250.000	6715.878	487600.54	1.4036	P	0.4
6	☐	12500.000	13615.660	914669.25	2.8453	P	0.5
7	☐	25000.000	26926.934	1765309.20	5.6266	P	1.7
8	☐	50000.000	52935.983	3666466.31	11.0612	P	0.2
9	☐	250000.00	249150.36	19512452.05	52.0598	A	1.2

$$y = 2.0895E-004 * x + 3.1666E-004$$

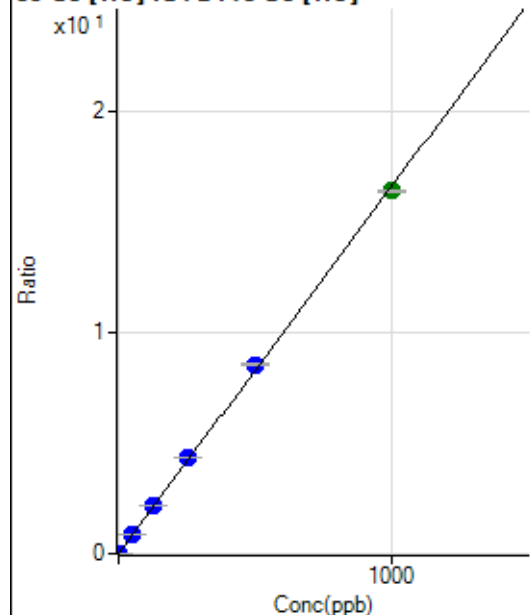
$$R = 0.9999$$

$$DL = 1.293$$

$$BEC = 1.516$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	62.22	0.0002	P	19.7
2	☐	0.100					
3	☐	1.000	0.962	5889.05	0.0161	P	3.3
4	☐	50.000	53.441	322035.10	0.8872	P	0.5
5	☐	125.000	130.439	752230.22	2.1653	P	0.2
6	☐	250.000	262.624	1401380.31	4.3595	P	1.1
7	☐	500.000	515.134	2682766.28	8.5509	P	1.6
8	☐	1000.000	988.425	5438257.56	16.4070	A	0.5
9	☐			73803.31	0.1969	P	0.8

$$y = 0.0166 * x + 1.7155E-004$$

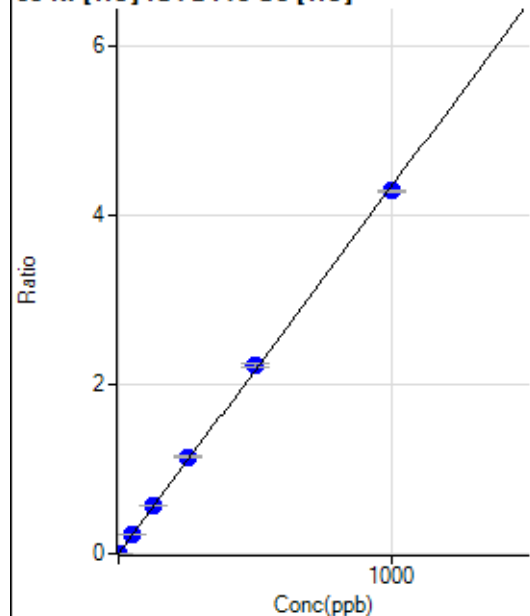
$$R = 0.9997$$

$$DL = 0.006124$$

$$BEC = 0.01034$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.44	0.0002	P	13.8
2	☐	0.100					
3	☐	1.000	1.026	1690.13	0.0046	P	4.5
4	☐	50.000	54.143	85439.13	0.2354	P	0.7
5	☐	125.000	132.341	199797.71	0.5751	P	0.2
6	☐	250.000	263.444	367964.56	1.1447	P	1.3
7	☐	500.000	514.881	701843.36	2.2370	P	1.7
8	☐	1000.000	988.074	1422878.66	4.2928	P	0.6
9	☐			46751.09	0.1247	P	0.7

$$y = 0.0043 * x + 1.7758E-004$$

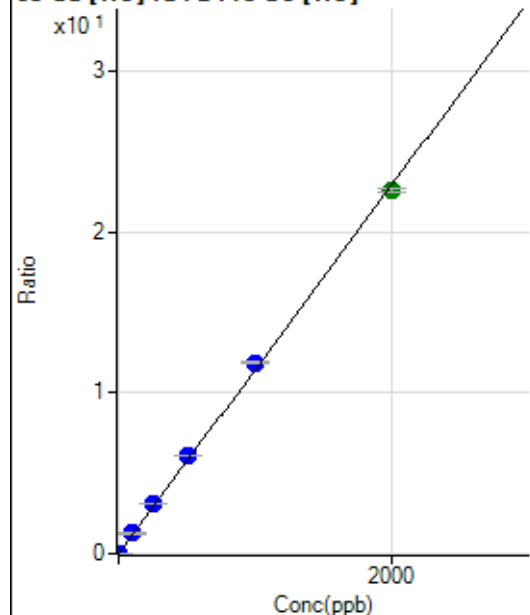
$$R = 0.9997$$

$$DL = 0.01692$$

$$BEC = 0.04088$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.12	0.0009	P	18.6
2	☐	0.200					
3	☐	2.000	1.973	8584.87	0.0235	P	2.3
4	☐	100.000	109.769	456702.07	1.2583	P	0.6
5	☐	250.000	268.498	1068715.72	3.0764	P	0.3
6	☐	500.000	531.469	1957176.85	6.0885	P	1.2
7	☐	1000.000	1037.844	3730007.93	11.8886	P	1.5
8	☐	2000.000	1970.410	7480779.61	22.5704	A	1.1
9	☐			19529.93	0.0521	P	0.8

$$y = 0.0115 * x + 9.4038E-004$$

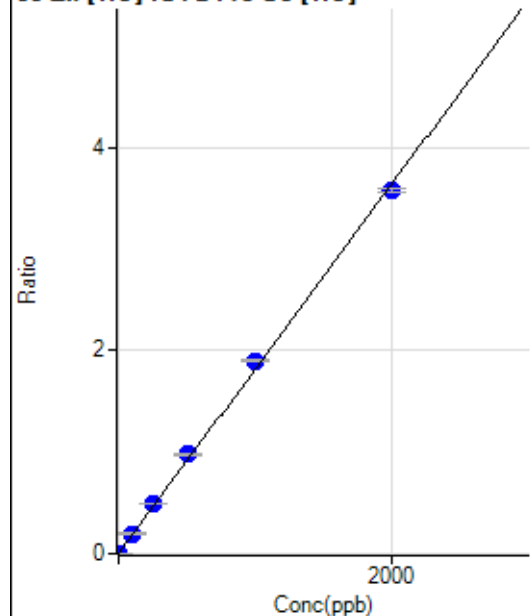
$$R = 0.9996$$

$$DL = 0.04571$$

$$BEC = 0.0821$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	473.35	0.0013	P	17.2
2	☐	0.200					
3	☐	2.000	2.116	1880.15	0.0052	P	5.1
4	☐	100.000	108.509	72113.60	0.1987	P	0.5
5	☐	250.000	265.570	168271.96	0.4844	P	0.3
6	☐	500.000	537.419	314670.21	0.9789	P	0.9
7	☐	1000.000	1046.241	597519.92	1.9044	P	1.4
8	☐	2000.000	1965.153	1185234.02	3.5759	P	0.9
9	☐			11201.10	0.0299	P	1.4

$$y = 0.0018 * x + 0.0013$$

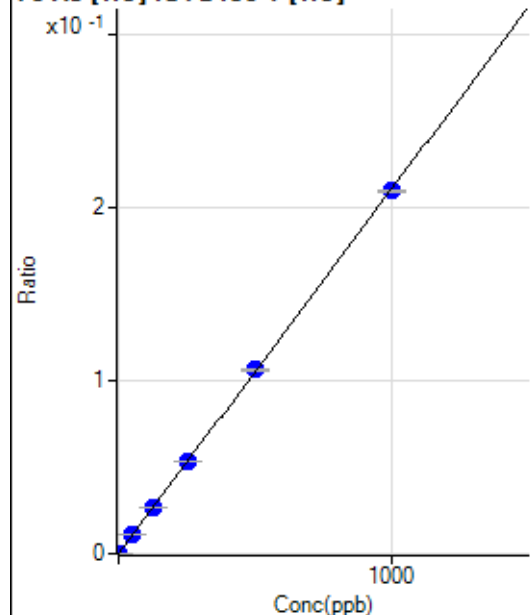
$$R = 0.9994$$

$$DL = 0.3707$$

$$BEC = 0.7171$$

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	3.70	0.0000	P	99.7
2	☐	0.100					
3	☐	1.000	0.955	387.66	0.0002	P	14.3
4	☐	50.000	52.151	20990.49	0.0110	P	2.1
5	☐	125.000	128.299	49647.85	0.0270	P	0.8
6	☐	250.000	253.625	92425.56	0.0533	P	1.5
7	☐	500.000	505.972	179395.85	0.1064	P	1.2
8	☐	1000.000	995.588	368155.81	0.2094	P	0.6
9	☐			769.17	0.0004	P	6.4

$$y = 2.1034\text{E-}004 * x + 1.9530\text{E-}006$$

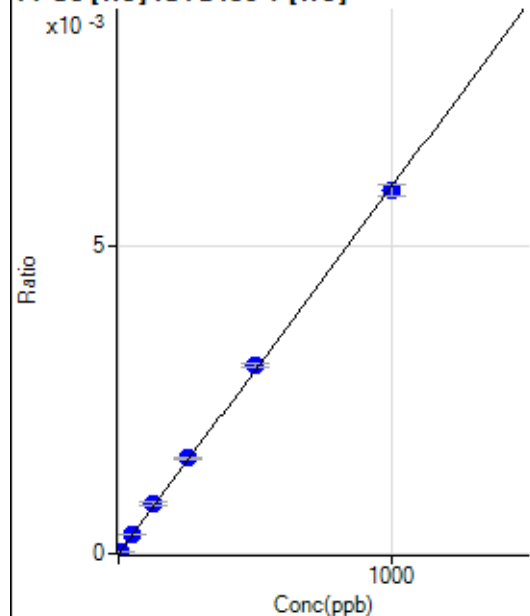
$$R = 1.0000$$

$$DL = 0.02776$$

$$BEC = 0.009285$$

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	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	5.769	65.56	0.0000	P	24.0
4	☐	50.000	51.891	591.13	0.0003	P	1.0
5	☐	125.000	134.349	1471.21	0.0008	P	8.3
6	☐	250.000	260.801	2690.30	0.0016	P	2.0
7	☐	500.000	514.669	5167.67	0.0031	P	2.3
8	☐	1000.000	988.698	10352.72	0.0059	P	3.0
9	☐			10.00	0.0000	P	2.5

$$y = 5.9545\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

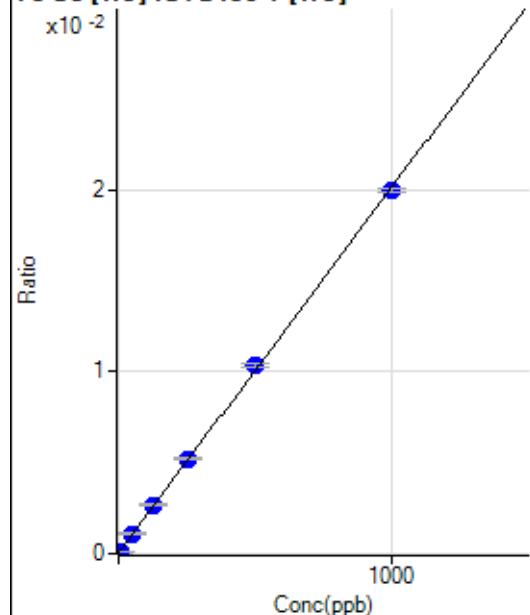
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.31	0.0000	P	25.2
2	☐	0.500					
3	☐	5.000	4.696	256.18	0.0001	P	5.2
4	☐	50.000	52.757	2103.25	0.0011	P	2.8
5	☐	125.000	131.747	4941.01	0.0027	P	2.9
6	☐	250.000	257.869	9041.16	0.0052	P	1.3
7	☐	500.000	511.984	17396.30	0.0103	P	2.2
8	☐	1000.000	991.061	35062.06	0.0199	P	1.1
9	☐			97.53	0.0001	P	1.7

$$y = 2.0083\text{E-}005 * x + 3.9796\text{E-}005$$

$$R = 0.9998$$

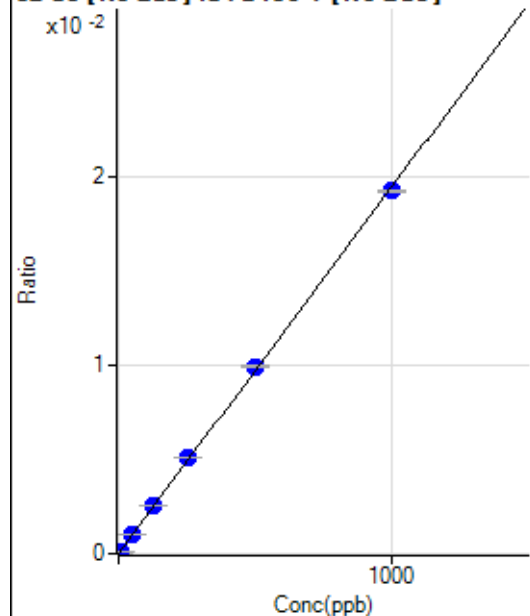
$$DL = 1.5$$

$$BEC = 1.982$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.78	0.0000	P	44.9
2	☐	0.500					
3	☐	5.000	4.925	1428.57	0.0001	P	1.9
4	☐	50.000	52.533	14331.81	0.0010	P	0.1
5	☐	125.000	131.263	35070.16	0.0026	P	0.2
6	☐	250.000	262.787	66039.76	0.0051	P	0.8
7	☐	500.000	511.172	124496.65	0.0099	P	0.3
8	☐	1000.000	990.308	244738.97	0.0193	P	0.4
9	☐			292.15	0.0000	P	9.9

$$y = 1.9438\text{E-}005 * x + 7.5370\text{E-}006$$

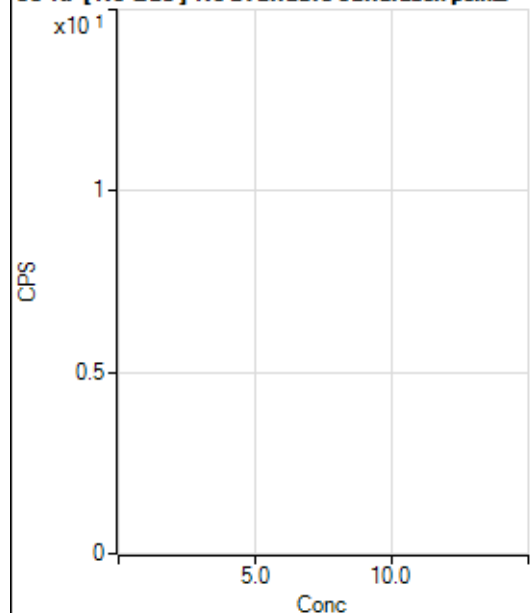
$$R = 0.9998$$

$$DL = 0.5228$$

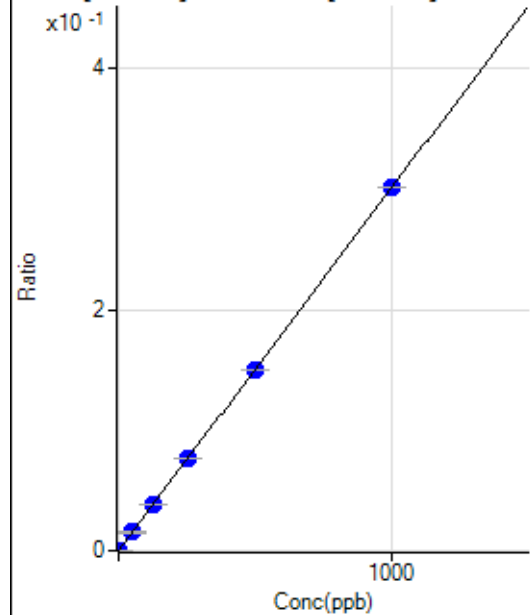
$$BEC = 0.3877$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			638.92		P	7.8
2	☐						
3	☐			674.47		P	6.4
4	☐			675.58		P	3.2
5	☐			670.03		P	6.0
6	☐			650.02		P	8.1
7	☐			594.47		P	6.2
8	☐			577.80		P	16.1
9	☐			736.70		P	4.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1088.97	0.0001	P	10.1
2	☐	0.100					
3	☐	1.000	0.876	4703.73	0.0003	P	1.2
4	☐	50.000	50.307	211754.66	0.0152	P	1.1
5	☐	125.000	125.686	518801.77	0.0379	P	0.7
6	☐	250.000	253.005	982785.86	0.0761	P	0.6
7	☐	500.000	498.256	1876081.84	0.1498	P	0.1
8	☐	1000.000	1000.020	3821360.20	0.3007	P	0.1
9	☐			18735.11	0.0014	P	1.2

$$y = 3.0059\text{E-}004 * x + 7.6872\text{E-}005$$

$$R = 1.0000$$

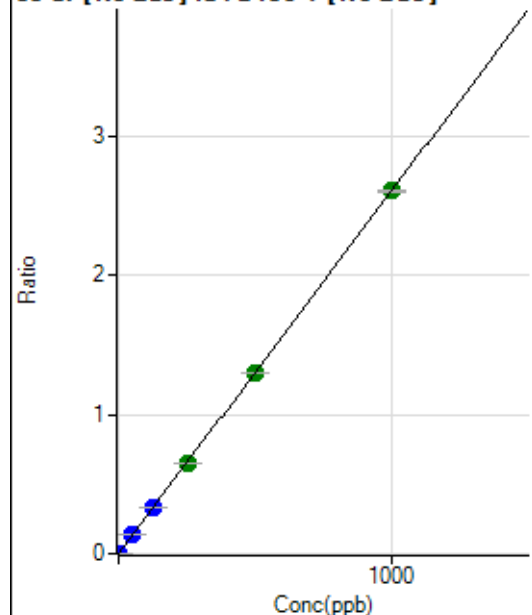
$$DL = 0.07777$$

$$BEC = 0.2557$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	108.34	0.0000	P	13.3
2	☐	0.100					
3	☐	1.000	0.911	32877.48	0.0024	P	2.3
4	☐	50.000	50.753	1839970.33	0.1321	P	0.3
5	☐	125.000	127.191	4535693.94	0.3310	P	0.4
6	☐	250.000	249.961	8396588.04	0.6504	A	0.2
7	☐	500.000	499.115	16259702.97	1.2987	A	0.4
8	☐	1000.000	1000.141	33072837.89	2.6024	A	0.7
9	☐			154597.30	0.0118	P	0.8

$$y = 0.0026 * x + 7.6471E-006$$

$$R = 1.0000$$

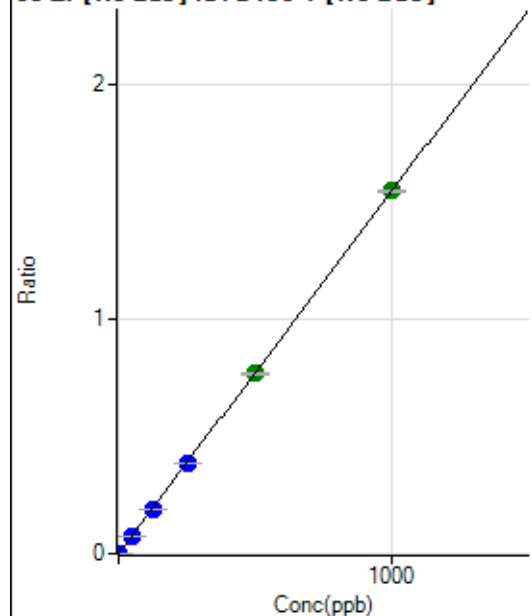
$$DL = 0.001177$$

$$BEC = 0.002939$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1072.31	0.0001	P	6.1
2	☐	0.100					
3	☐	1.000	0.914	20565.42	0.0015	P	2.3
4	☐	50.000	49.511	1066484.63	0.0766	P	0.6
5	☐	125.000	124.147	2628944.57	0.1918	P	0.5
6	☐	250.000	250.316	4992339.30	0.3867	P	0.1
7	☐	500.000	496.658	9605407.68	0.7672	A	0.3
8	☐	1000.000	1001.723	19664696.79	1.5473	A	0.7
9	☐			10101.20	0.0008	P	1.7

$$y = 0.0015 * x + 7.5691E-005$$

$$R = 1.0000$$

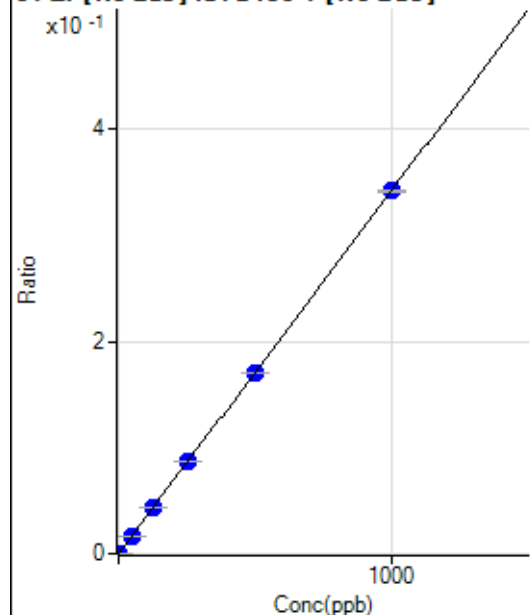
$$DL = 0.008921$$

$$BEC = 0.049$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	219.45	0.0000	P	15.2
2	☐	0.100					
3	☐	1.000	0.904	4487.00	0.0003	P	2.7
4	☐	50.000	50.112	238849.17	0.0171	P	0.7
5	☐	125.000	126.367	592150.06	0.0432	P	0.4
6	☐	250.000	252.111	1112666.21	0.0862	P	0.1
7	☐	500.000	498.993	2135630.45	0.1706	P	0.4
8	☐	1000.000	999.799	4343405.44	0.3418	P	0.2
9	☐			2208.60	0.0002	P	2.0

$$y = 3.4181\text{E-}004 * x + 1.5487\text{E-}005$$

$$R = 1.0000$$

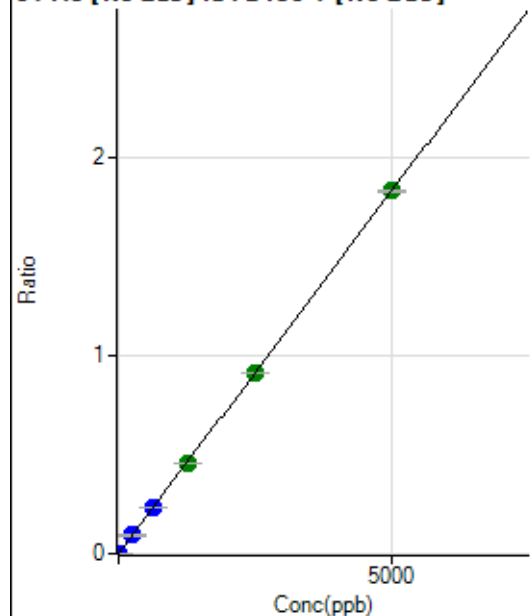
$$DL = 0.0206$$

$$BEC = 0.04531$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	333.35	0.0000	P	22.8
2	☐	0.500					
3	☐	5.000	4.723	24282.51	0.0018	P	1.7
4	☐	250.000	252.709	1291484.96	0.0927	P	0.9
5	☐	625.000	634.706	3190261.29	0.2328	P	0.8
6	☐	1250.000	1246.772	5903090.45	0.4573	A	0.1
7	☐	2500.000	2492.526	11444788.97	0.9141	A	0.2
8	☐	5000.000	5003.196	23318734.38	1.8349	A	0.9
9	☐			29639.92	0.0023	P	1.5

$$y = 3.6674\text{E-}004 * x + 2.3526\text{E-}005$$

$$R = 1.0000$$

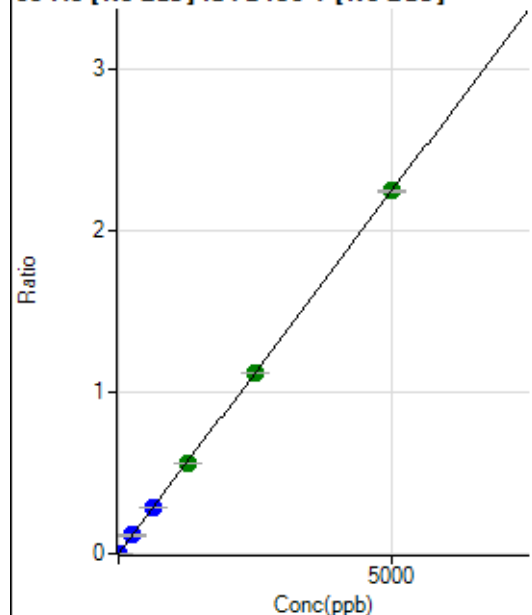
$$DL = 0.04392$$

$$BEC = 0.06415$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	0.2
2	☐	0.500					
3	☐	5.000	4.787	29812.31	0.0022	P	1.4
4	☐	250.000	252.144	1579270.49	0.1134	P	0.9
5	☐	625.000	631.396	3890064.71	0.2839	P	0.7
6	☐	1250.000	1248.230	7244474.73	0.5612	A	0.2
7	☐	2500.000	2491.138	14021514.90	1.1199	A	0.4
8	☐	5000.000	5003.967	28589436.75	2.2496	A	0.9
9	☐			46401.39	0.0035	P	2.7

$$y = 4.4957\text{E-}004 * x + 2.9412\text{E-}006$$

$$R = 1.0000$$

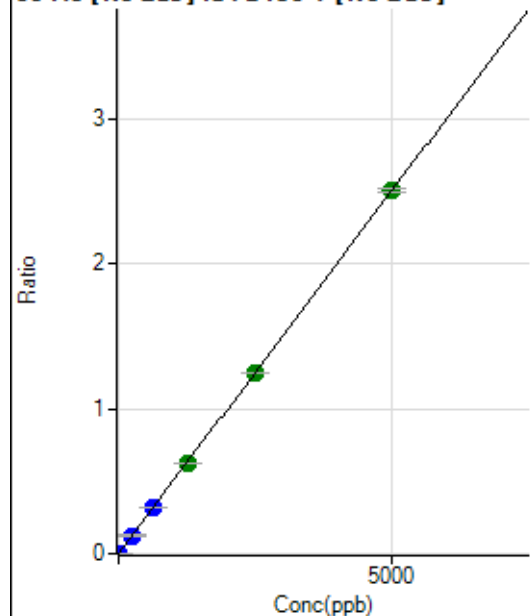
$$DL = 4.049\text{E-}05$$

$$BEC = 0.006542$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.89	0.0000	P	34.5
2	☐	0.500					
3	☐	5.000	4.800	33359.45	0.0024	P	0.8
4	☐	250.000	251.232	1750418.59	0.1256	P	0.8
5	☐	625.000	628.188	4305117.72	0.3141	P	0.3
6	☐	1250.000	1247.454	8053146.97	0.6238	A	0.3
7	☐	2500.000	2493.937	15613773.09	1.2471	A	0.4
8	☐	5000.000	5003.208	31795162.86	2.5019	A	1.0
9	☐			57762.15	0.0044	P	2.4

$$y = 5.0006\text{E-}004 * x + 1.1563\text{E-}005$$

$$R = 1.0000$$

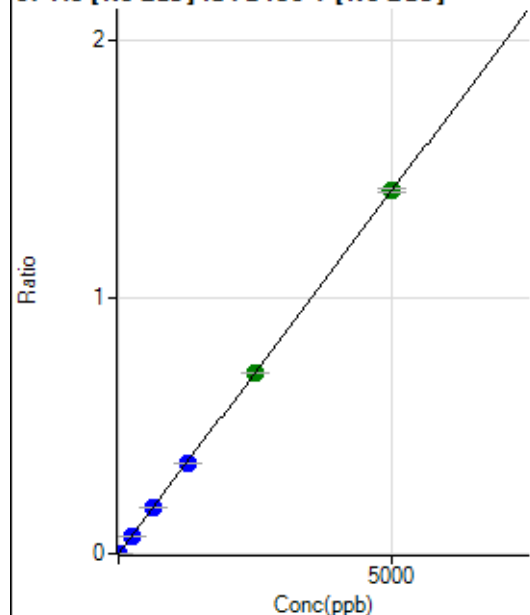
$$DL = 0.0239$$

$$BEC = 0.02312$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	22.8
2	☐	0.500					
3	☐	5.000	4.855	19035.60	0.0014	P	0.8
4	☐	250.000	249.820	983786.81	0.0706	P	0.7
5	☐	625.000	625.483	2422852.53	0.1768	P	0.3
6	☐	1250.000	1255.588	4581479.53	0.3549	P	0.5
7	☐	2500.000	2492.502	8820160.79	0.7045	A	0.5
8	☐	5000.000	5002.301	17968618.98	1.4139	A	1.0
9	☐			28348.45	0.0022	P	2.7

$$y = 2.8265E-004 * x + 3.9211E-006$$

$$R = 1.0000$$

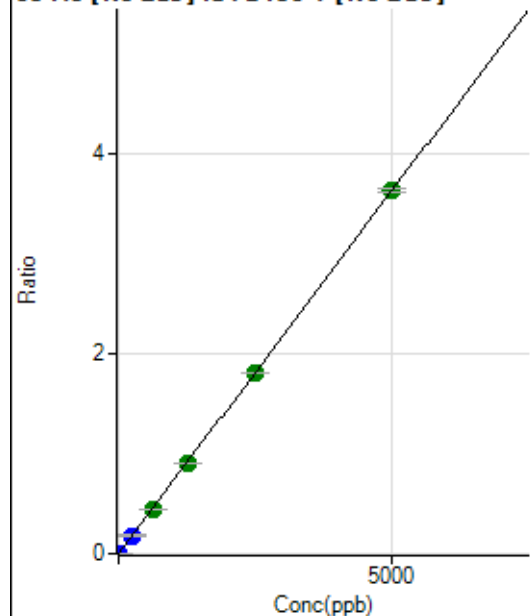
$$DL = 0.009496$$

$$BEC = 0.01387$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.11	0.0000	P	11.2
2	☐	0.500					
3	☐	5.000	4.859	48812.20	0.0035	P	0.4
4	☐	250.000	250.959	2534755.70	0.1819	P	1.1
5	☐	625.000	618.043	6140431.60	0.4481	A	0.4
6	☐	1250.000	1246.633	11667331.34	0.9038	A	0.3
7	☐	2500.000	2493.792	22634854.85	1.8079	A	0.3
8	☐	5000.000	5004.767	46109676.03	3.6283	A	1.0
9	☐			71800.77	0.0055	P	2.0

$$y = 7.2497E-004 * x + 6.0781E-006$$

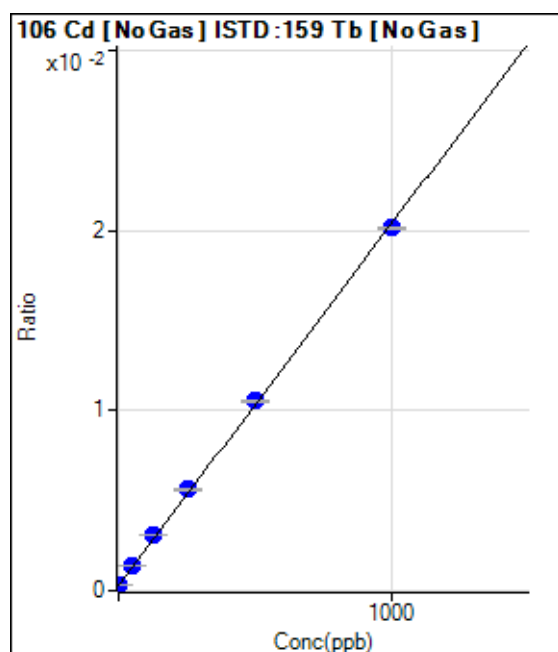
$$R = 1.0000$$

$$DL = 0.002808$$

$$BEC = 0.008384$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5376.27	0.0003	P	6.6
2	☐	0.100					
3	☐	1.000	2.263	6015.40	0.0003	P	3.6
4	☐	50.000	55.798	25932.96	0.0014	P	3.5
5	☐	125.000	138.822	56287.44	0.0031	P	0.9
6	☐	250.000	266.602	100871.20	0.0056	P	1.3
7	☐	500.000	509.977	185290.00	0.0105	P	1.4
8	☐	1000.000	988.842	361630.29	0.0201	P	0.5
9	☐			5298.42	0.0003	P	2.4

$$y = 2.0068\text{E-}005 * x + 2.8383\text{E-}004$$

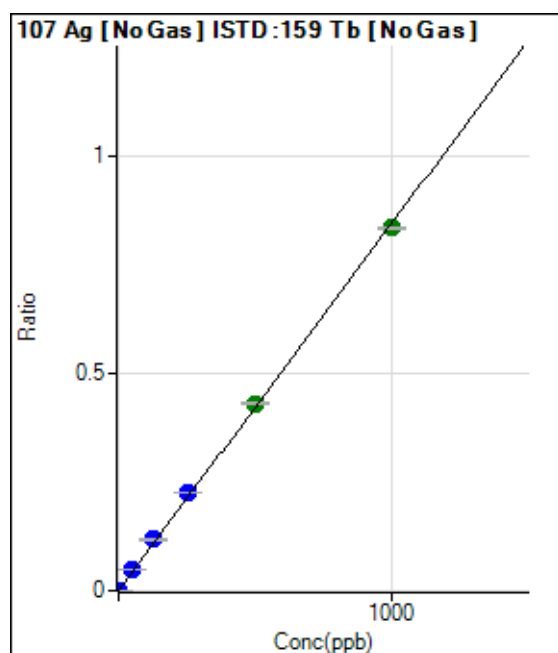
$$R = 0.9997$$

$$DL = 2.808$$

$$BEC = 14.14$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.23	0.0000	P	22.7
2	☐	0.100					
3	☐	1.000	0.732	11421.71	0.0006	P	3.6
4	☐	50.000	56.276	876686.39	0.0474	P	0.4
5	☐	125.000	139.448	2155366.61	0.1176	P	1.0
6	☐	250.000	267.039	4030301.61	0.2251	P	0.4
7	☐	500.000	509.989	7573217.53	0.4299	A	0.7
8	☐	1000.000	988.626	14971646.34	0.8334	A	0.3
9	☐			1641.83	0.0001	P	6.5

$$y = 8.4293\text{E-}004 * x + 7.7709\text{E-}006$$

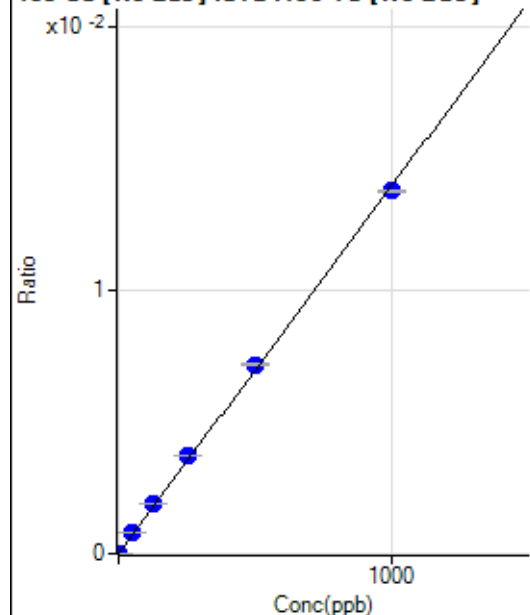
$$R = 0.9997$$

$$DL = 0.006281$$

$$BEC = 0.009219$$

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	6.95	0.0000	P	69.1
2	☐	0.100					
3	☐	1.000	0.992	259.73	0.0000	P	14.4
4	☐	50.000	55.529	14333.87	0.0008	P	0.7
5	☐	125.000	137.048	35093.68	0.0019	P	1.0
6	☐	250.000	266.403	66605.72	0.0037	P	0.7
7	☐	500.000	514.042	126453.17	0.0072	P	0.7
8	☐	1000.000	987.096	247629.70	0.0138	P	0.7
9	☐			129.17	0.0000	P	22.5

$$y = 1.3963\text{E-}005 * x + 3.6654\text{E-}007$$

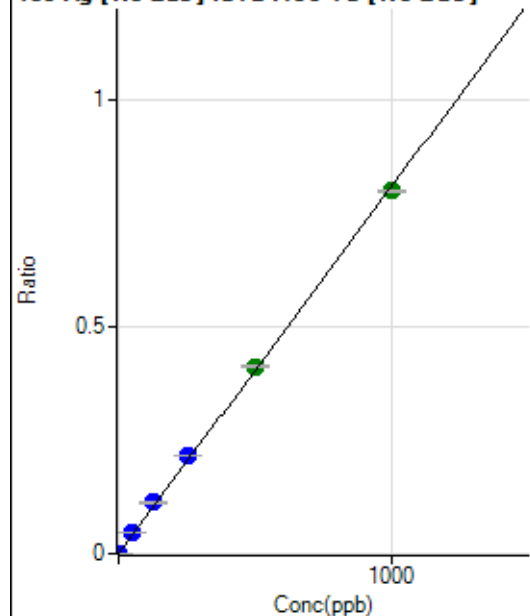
$$R = 0.9997$$

$$DL = 0.05441$$

$$BEC = 0.02625$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0000	P	37.6
2	☐	0.100					
3	☐	1.000	0.726	10785.06	0.0006	P	2.0
4	☐	50.000	56.748	848756.53	0.0459	P	0.9
5	☐	125.000	139.318	2067515.06	0.1128	P	0.7
6	☐	250.000	267.743	3879866.32	0.2167	P	0.6
7	☐	500.000	510.263	7275457.02	0.4130	A	0.2
8	☐	1000.000	988.306	14370399.80	0.7999	A	0.5
9	☐			1527.93	0.0001	P	5.5

$$y = 8.0935\text{E-}004 * x + 2.9320\text{E-}006$$

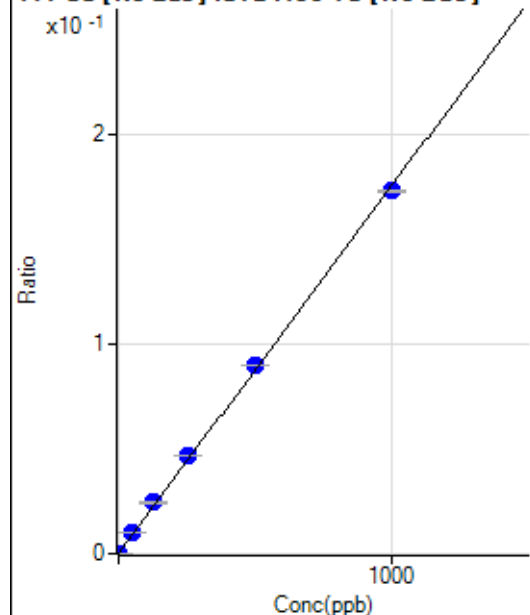
$$R = 0.9997$$

$$DL = 0.004091$$

$$BEC = 0.003623$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1619.13	0.0001	P	6.4
2	☐	0.100					
3	☐	1.000	1.051	4928.81	0.0003	P	1.6
4	☐	50.000	56.162	183552.25	0.0099	P	0.8
5	☐	125.000	138.257	446084.77	0.0243	P	0.9
6	☐	250.000	267.964	842812.57	0.0471	P	0.5
7	☐	500.000	513.506	1587829.19	0.0901	P	0.5
8	☐	1000.000	986.791	3110316.03	0.1731	P	0.2
9	☐			2683.90	0.0001	P	2.2

$$y = 1.7535\text{E-}004 * x + 8.5478\text{E-}005$$

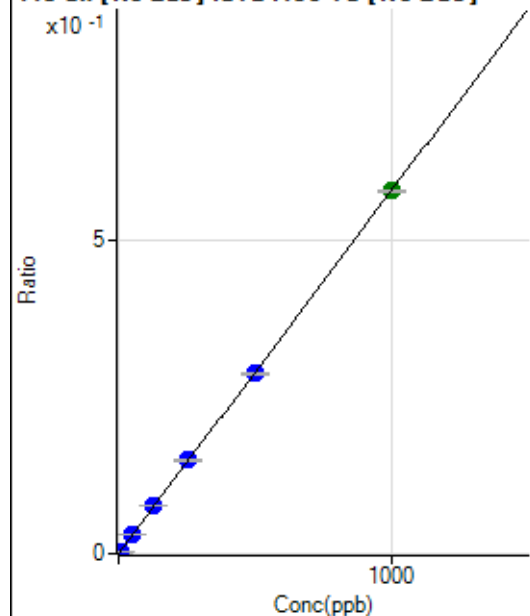
$$R = 0.9996$$

$$DL = 0.09336$$

$$BEC = 0.4875$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	917.02	0.0000	P	27.7
2	☐	0.500					
3	☐	5.000	4.929	52922.44	0.0029	P	0.8
4	☐	50.000	52.573	562204.35	0.0304	P	1.1
5	☐	125.000	131.554	1394657.32	0.0761	P	0.5
6	☐	250.000	256.947	2659072.65	0.1485	P	0.5
7	☐	500.000	496.452	5054481.71	0.2869	P	1.0
8	☐	1000.000	999.090	10372329.57	0.5773	A	0.3
9	☐			24318.95	0.0013	P	0.9

$$y = 5.7782\text{E-}004 * x + 4.8401\text{E-}005$$

$$R = 0.9999$$

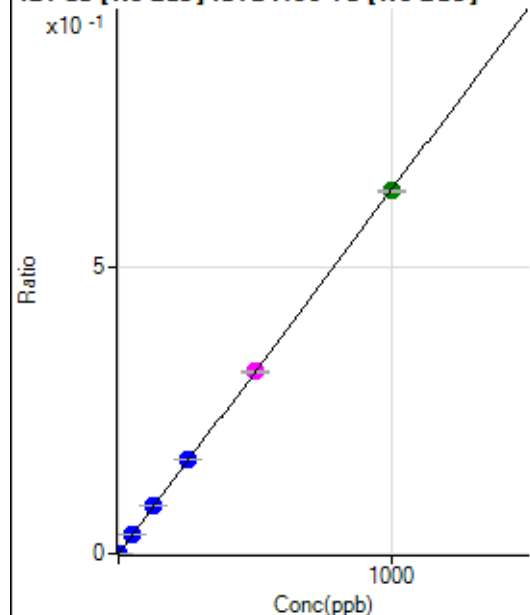
$$DL = 0.06973$$

$$BEC = 0.08377$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.23	0.0000	P	40.8
2	☐	0.200					
3	☐	2.000	1.861	21606.30	0.0012	P	2.7
4	☐	50.000	52.837	619140.26	0.0335	P	0.4
5	☐	125.000	131.166	1525068.96	0.0832	P	0.9
6	☐	250.000	257.139	2919409.77	0.1631	P	0.3
7	☐	500.000	500.390	5589916.36	0.3173	M	0.5
8	☐	1000.000	997.108	11359203.90	0.6323	A	0.4
9	☐			15222.71	0.0008	P	2.5

$$y = 6.3411\text{E-}004 * x + 2.4943\text{E-}006$$

$$R = 1.0000$$

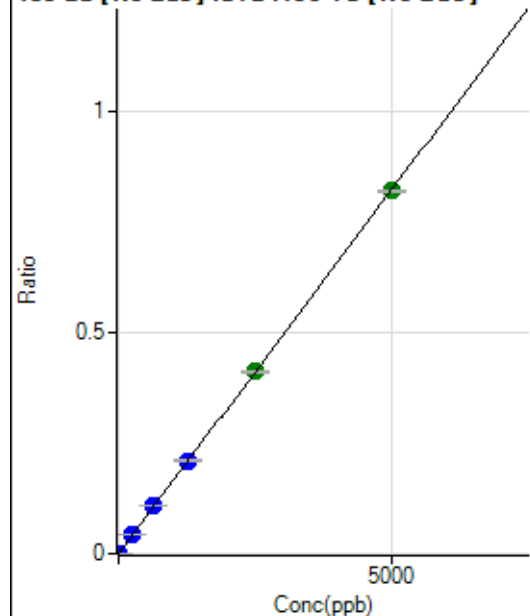
$$DL = 0.00482$$

$$BEC = 0.003933$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.45	0.0000	P	65.4
2	☐	1.000					
3	☐	10.000	9.699	29209.04	0.0016	P	1.5
4	☐	250.000	262.523	799138.75	0.0432	P	0.5
5	☐	625.000	650.849	1965902.76	0.1072	P	0.8
6	☐	1250.000	1280.562	3776993.40	0.2110	P	0.4
7	☐	2500.000	2501.565	7259729.50	0.4121	A	0.5
8	☐	5000.000	4987.720	14761219.43	0.8217	A	0.6
9	☐			2705.95	0.0001	P	10.4

$$y = 1.6474\text{E-}004 * x + 1.0264\text{E-}006$$

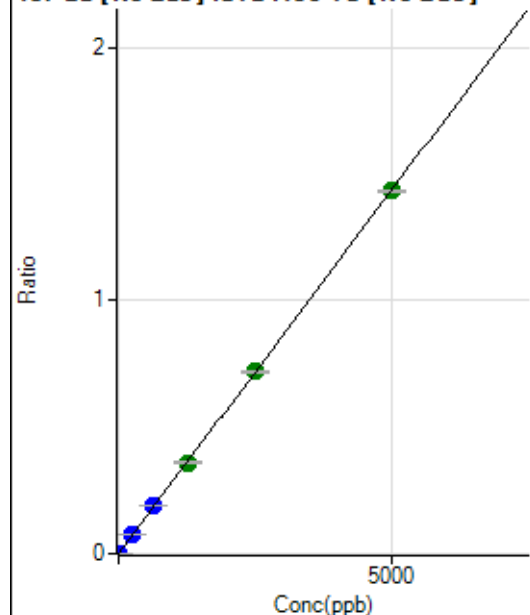
$$R = 1.0000$$

$$DL = 0.01222$$

$$BEC = 0.00623$$

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	19.45	0.0000	P	24.7
2	☐	1.000					
3	☐	10.000	9.765	51284.41	0.0028	P	0.2
4	☐	250.000	261.871	1390521.52	0.0753	P	1.0
5	☐	625.000	652.756	3439352.90	0.1876	P	0.9
6	☐	1250.000	1255.926	6461728.75	0.3609	A	0.6
7	☐	2500.000	2505.357	12682953.76	0.7199	A	0.6
8	☐	5000.000	4991.778	25770092.76	1.4345	A	0.8
9	☐			4789.91	0.0003	P	7.9

$$y = 2.8736E-004 * x + 1.0266E-006$$

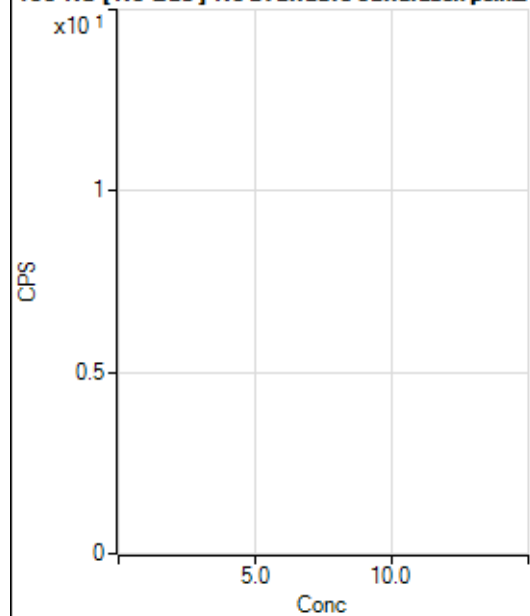
$$R = 1.0000$$

$$DL = 0.002643$$

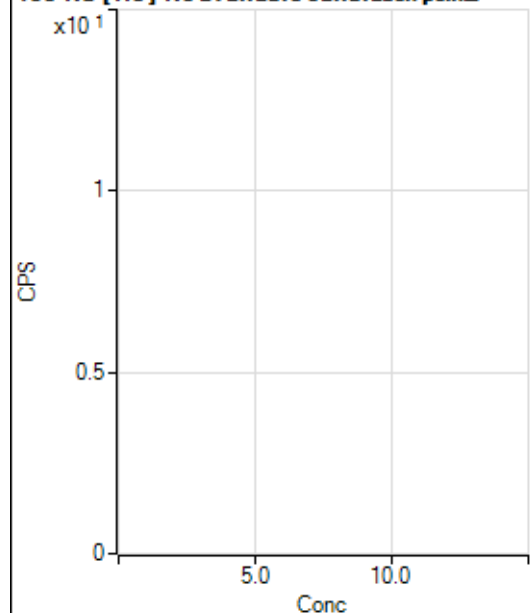
$$BEC = 0.003572$$

Weight: <None>

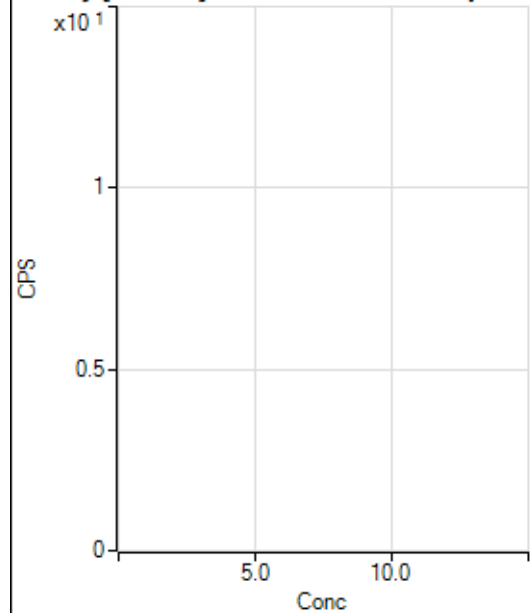
Min Conc: 0

150 Nd [No Gas] No available calibration points

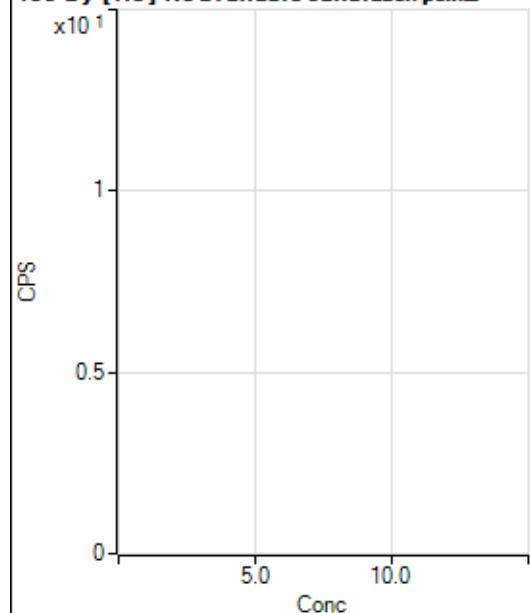
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			4.45		P	86.6
4	☐			71.11		P	35.5
5	☐			157.79		P	23.3
6	☐			368.91		P	19.3
7	☐			593.37		P	3.0
8	☐			1211.21		P	10.5
9	☐			288.90		P	1.3

150 Nd [He] No available calibration points

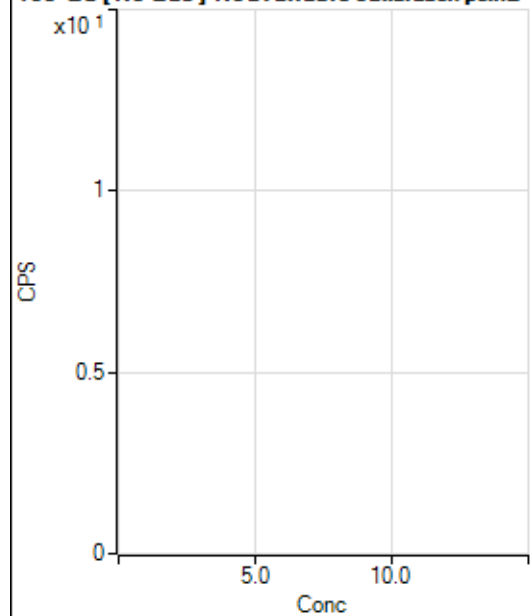
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.
4	☐			4.44		P	43.4
5	☐			15.56		P	75.3
6	☐			28.89		P	24.0
7	☐			64.44		P	15.8
8	☐			105.56		P	6.6
9	☐			137.78		P	19.7

156 Dy [No Gas] No available calibration points

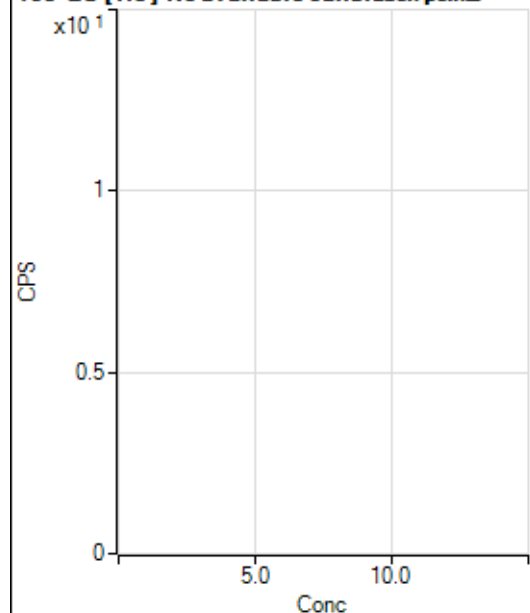
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			5.55		P	86.6
4	☐			11.11		P	114.
5	☐			47.22		P	27.0
6	☐			97.23		P	51.7
7	☐			122.23		P	15.7
8	☐			283.35		P	10.6
9	☐			255.57		P	10.0

156 Dy [He] No available calibration points

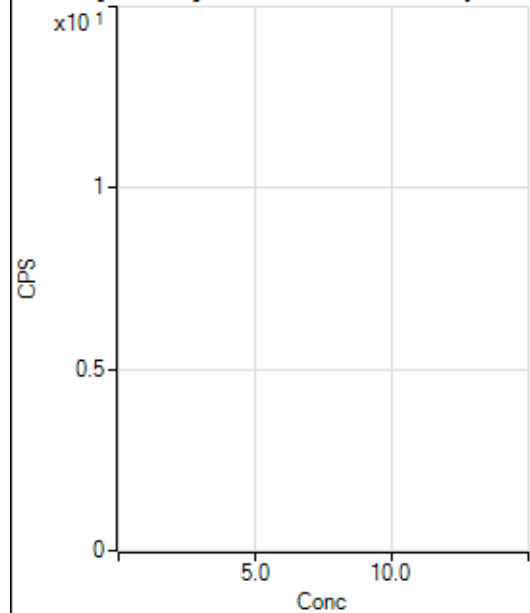
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			5.56		P	91.6
4	☐			15.56		P	81.1
5	☐			40.00		P	52.0
6	☐			63.33		P	39.7
7	☐			95.56		P	26.2
8	☐			242.23		P	13.9
9	☐			103.34		P	26.4

160 Gd [No Gas] Noavailable calibration poin_

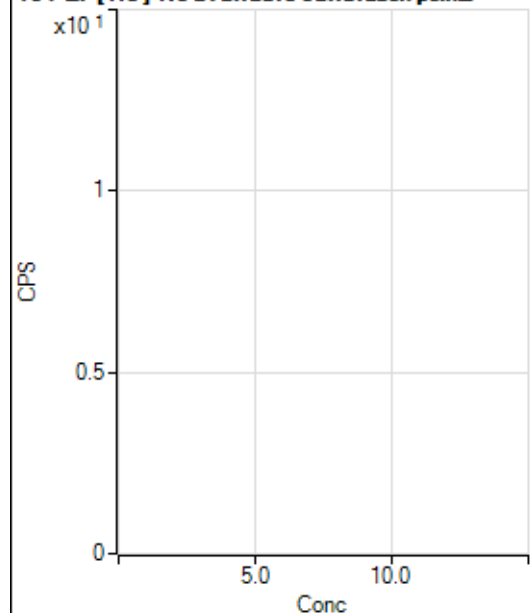
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			122.23		P	35.0
2	☐						
3	☐			58.33		P	49.5
4	☐			72.23		P	17.6
5	☐			88.89		P	44.3
6	☐			97.23		P	35.7
7	☐			113.89		P	25.7
8	☐			161.12		P	16.6
9	☐			150.01		P	14.7

160 Gd [He] No available calibration points

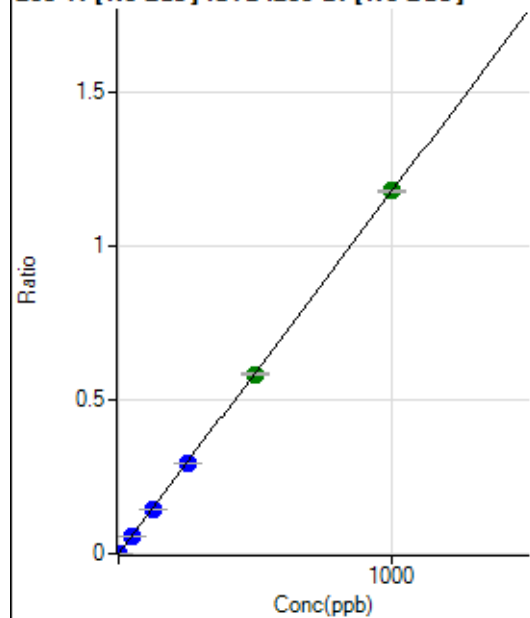
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			246.67		P	1.4
2	☐						
3	☐			228.90		P	2.2
4	☐			244.45		P	2.1
5	☐			203.34		P	22.8
6	☐			232.23		P	12.2
7	☐			223.34		P	13.0
8	☐			242.23		P	13.5
9	☐			266.67		P	11.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	37.8
2	☐						
3	☐			58.34		P	37.8
4	☐			61.12		P	41.7
5	☐			58.33		P	65.5
6	☐			58.34		P	65.5
7	☐			47.22		P	50.9
8	☐			127.78		P	18.8
9	☐			91.67		P	9.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			27.78		P	18.3
2	☐						
3	☐			31.11		P	6.2
4	☐			25.55		P	27.1
5	☐			23.33		P	37.8
6	☐			28.89		P	24.0
7	☐			32.22		P	6.0
8	☐			26.67		P	54.5
9	☐			56.67		P	23.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	177.79	0.0000	P	11.9
2	☐	0.100					
3	☐	1.000	0.891	13140.30	0.0011	P	3.9
4	☐	50.000	48.931	718833.33	0.0575	P	0.3
5	☐	125.000	123.457	1788878.34	0.1451	P	1.3
6	☐	250.000	249.480	3527779.51	0.2932	P	0.4
7	☐	500.000	495.611	6842824.37	0.5824	A	0.6
8	☐	1000.000	1002.571	13738623.05	1.1781	A	0.5
9	☐			13574.06	0.0013	P	0.6

$$y = 0.0012 * x + 1.3605E-005$$

$$R = 1.0000$$

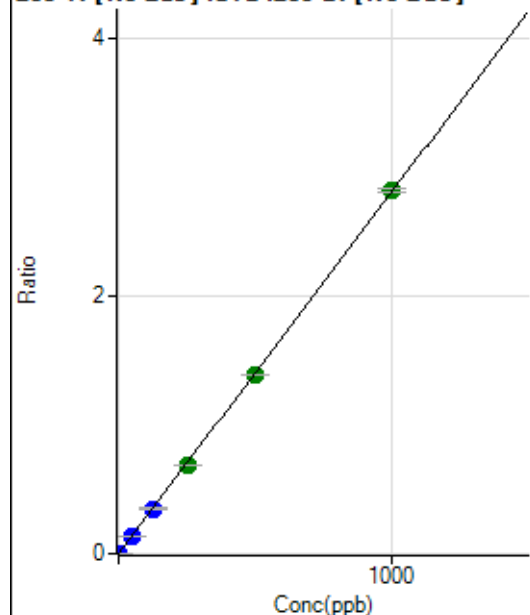
$$DL = 0.00412$$

$$BEC = 0.01158$$

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	422.25	0.0000	P	23.4
2	☐	0.100					
3	☐	1.000	0.899	31677.64	0.0026	P	1.0
4	☐	50.000	49.379	1733332.98	0.1387	P	0.1
5	☐	125.000	124.340	4304903.57	0.3491	P	1.4
6	☐	250.000	245.975	8310631.35	0.6906	A	0.9
7	☐	500.000	494.928	16327698.98	1.3896	A	0.5
8	☐	1000.000	1003.656	32861716.70	2.8180	A	1.0
9	☐			32735.74	0.0031	P	1.3

$$y = 0.0028 * x + 3.2302E-005$$

$$R = 1.0000$$

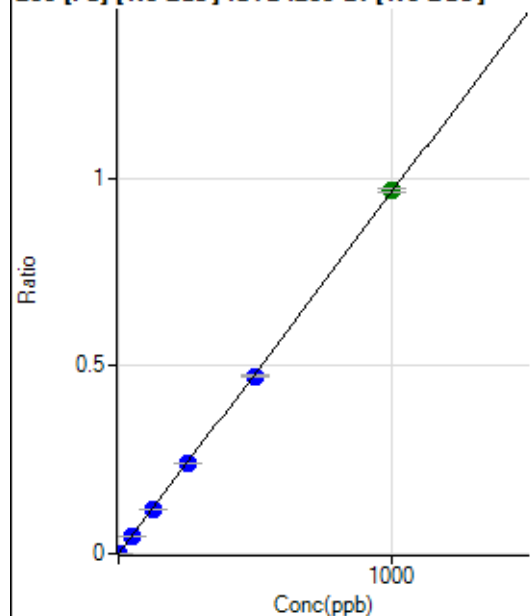
$$DL = 0.008065$$

$$BEC = 0.01151$$

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	346.31	0.0000	P	8.0
2	☐	0.100					
3	☐	1.000	0.888	10895.48	0.0009	P	2.3
4	☐	50.000	49.269	592141.18	0.0474	P	0.2
5	☐	125.000	124.014	1469820.30	0.1192	P	0.9
6	☐	250.000	248.761	2877015.46	0.2391	P	0.5
7	☐	500.000	491.779	5553412.85	0.4726	P	0.7
8	☐	1000.000	1004.580	11258396.43	0.9654	A	0.9
9	☐			56754.19	0.0054	P	1.1

$$y = 9.6100E-004 * x + 2.6499E-005$$

$$R = 0.9999$$

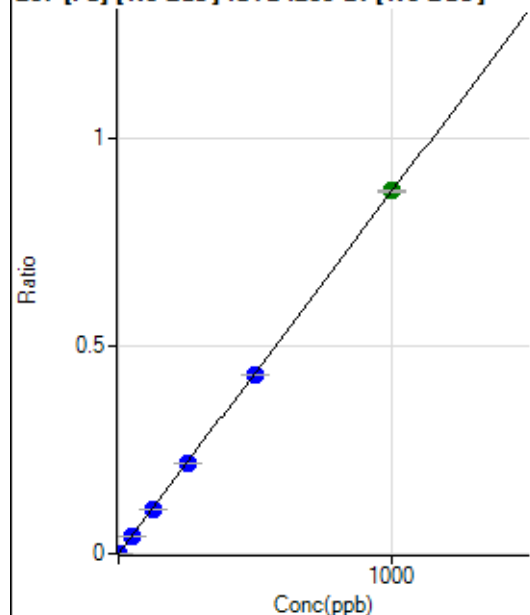
$$DL = 0.006617$$

$$BEC = 0.02757$$

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	292.60	0.0000	P	7.9
2	☐	0.100					
3	☐	1.000	0.854	9472.15	0.0008	P	3.5
4	☐	50.000	49.139	534076.99	0.0427	P	0.1
5	☐	125.000	124.196	1331142.23	0.1080	P	0.7
6	☐	250.000	249.578	2610281.77	0.2169	P	0.3
7	☐	500.000	494.739	5052357.18	0.4300	P	0.6
8	☐	1000.000	1002.880	10164106.94	0.8716	A	0.9
9	☐			48421.79	0.0046	P	1.7

$$y = 8.6906E-004 * x + 2.2392E-005$$

$$R = 1.0000$$

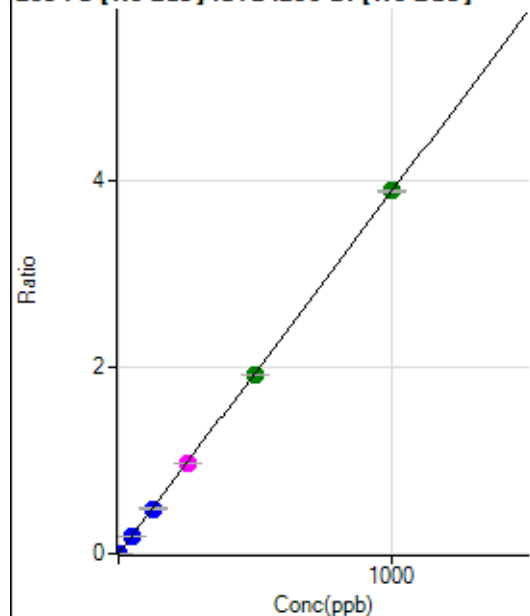
$$DL = 0.006071$$

$$BEC = 0.02577$$

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	1359.32	0.0001	P	4.0
2	☐	0.100					
3	☐	1.000	0.882	43707.11	0.0035	P	0.9
4	☐	50.000	49.484	2401832.05	0.1922	P	0.3
5	☐	125.000	124.514	5959928.37	0.4834	P	0.7
6	☐	250.000	249.696	11662839.61	0.9692	M	0.5
7	☐	500.000	494.600	22556406.75	1.9197	A	0.2
8	☐	1000.000	1002.863	45390983.77	3.8923	A	0.8
9	☐			224187.11	0.0215	P	0.8

$$y = 0.0039 * x + 1.0402E-004$$

$$R = 1.0000$$

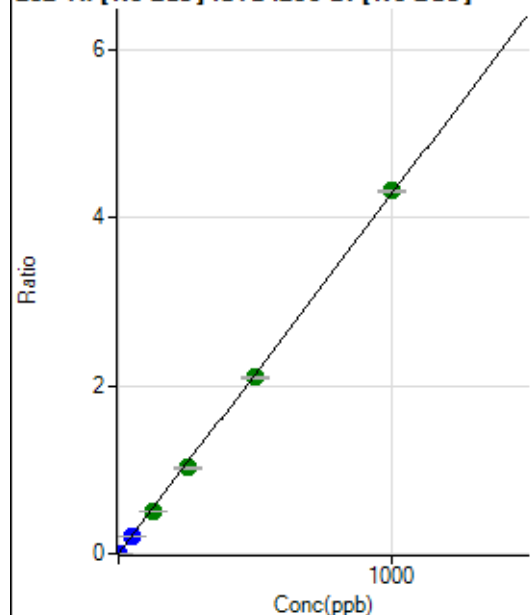
$$DL = 0.003212$$

$$BEC = 0.0268$$

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	137.04	0.0000	P	18.4
2	☐	0.100					
3	☐	1.000	0.825	43926.07	0.0035	P	1.2
4	☐	50.000	46.287	2479072.39	0.1983	P	0.6
5	☐	125.000	116.698	6165480.00	0.5000	A	0.9
6	☐	250.000	238.245	12283753.75	1.0208	A	0.4
7	☐	500.000	490.445	24691013.28	2.1014	A	0.7
8	☐	1000.000	1008.940	50413252.05	4.3230	A	0.8
9	☐			7895.21	0.0008	P	9.9

$$y = 0.0043 * x + 1.0487E-005$$

$$R = 0.9998$$

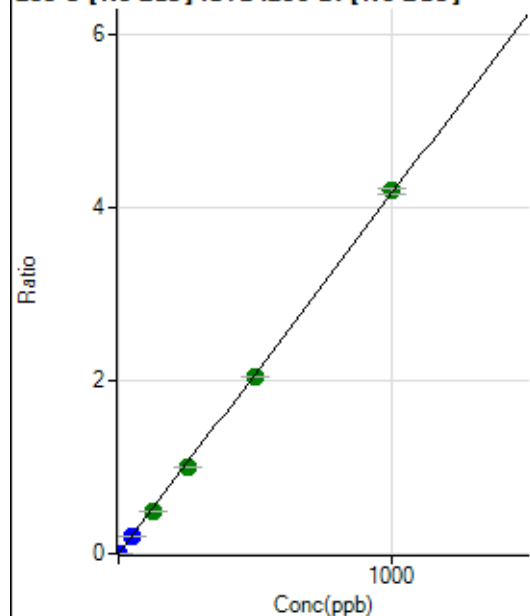
$$DL = 0.001349$$

$$BEC = 0.002448$$

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	38.89	0.0000	P	32.6
2	☐	0.100					
3	☐	1.000	0.842	43412.31	0.0035	P	0.9
4	☐	50.000	46.762	2431975.99	0.1946	P	0.7
5	☐	125.000	117.009	6003013.59	0.4869	A	0.9
6	☐	250.000	238.687	11950673.71	0.9931	A	0.2
7	☐	500.000	491.458	24026590.82	2.0449	A	0.6
8	☐	1000.000	1008.260	48921191.37	4.1952	A	1.2
9	☐			4395.38	0.0004	P	4.1

$$y = 0.0042 * x + 2.9748E-006$$

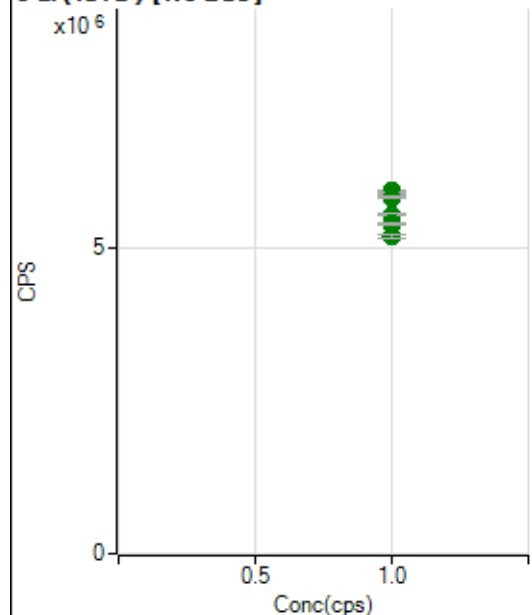
$$R = 0.9999$$

$$DL = 0.0006988$$

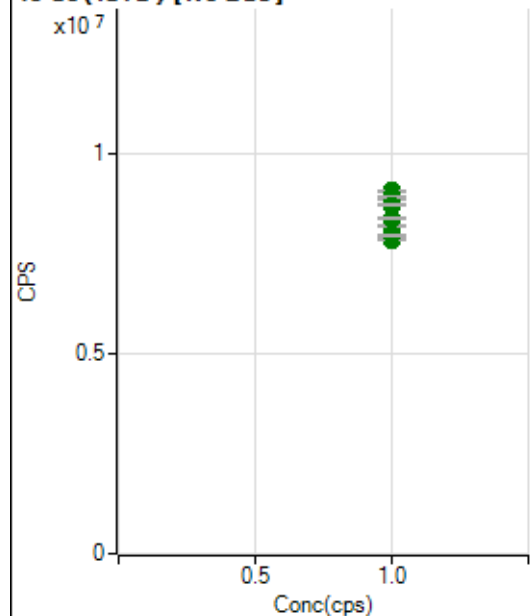
$$BEC = 0.000715$$

Weight: <None>

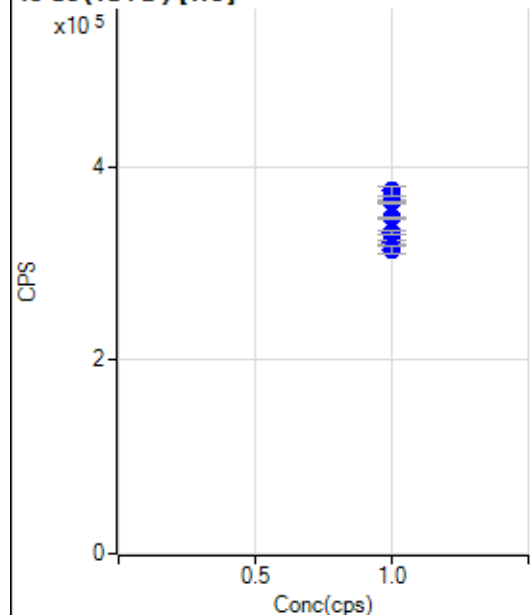
Min Conc: 0

6 Li (ISTD) [No Gas]

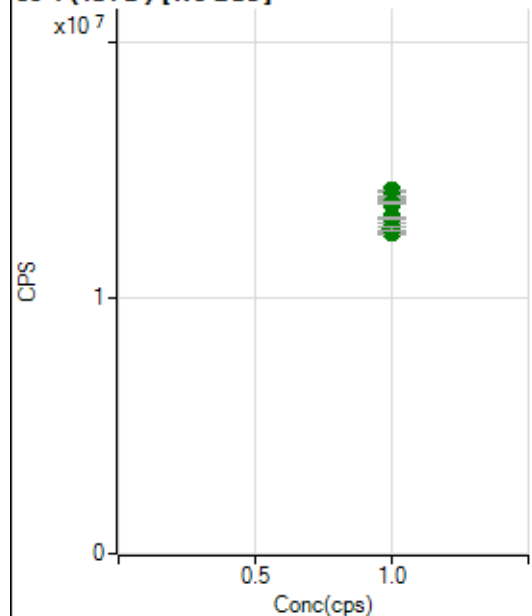
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5916080.40		A	0.3
2	☐	1.000					
3	☐	1.000		5836632.27		A	0.6
4	☐	1.000		5888730.95		A	0.5
5	☐	1.000		5814977.76		A	0.7
6	☐	1.000		5533892.56		A	0.4
7	☐	1.000		5366436.38		A	0.4
8	☐	1.000		5383427.84		A	0.8
9	☐	1.000		5175791.80		A	0.8

45 Sc (ISTD) [No Gas]

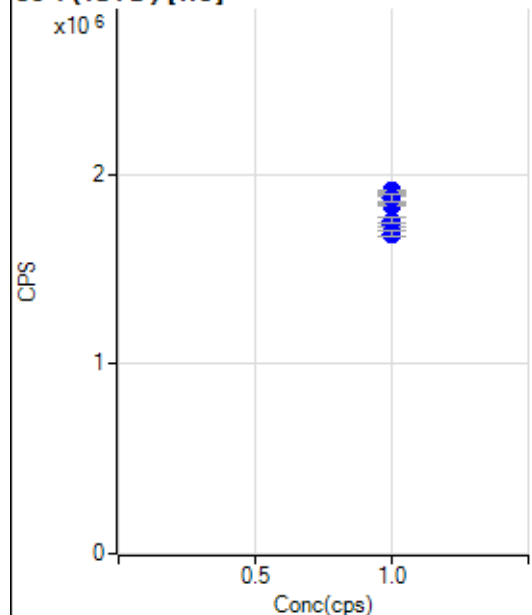
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9069844.65		A	0.3
2	☐	1.000					
3	☐	1.000		8844881.62		A	0.3
4	☐	1.000		8925139.96		A	0.6
5	☐	1.000		8709100.89		A	0.6
6	☐	1.000		8183927.27		A	0.3
7	☐	1.000		7844102.26		A	0.6
8	☐	1.000		7961590.63		A	0.9
9	☐	1.000		8386507.91		A	0.8

45 Sc (ISTD) [He]

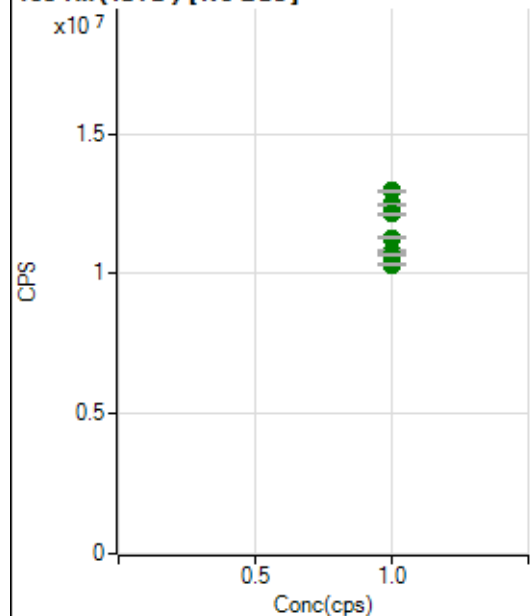
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		363144.32		P	1.0
2	☐	1.000					
3	☐	1.000		364758.63		P	0.3
4	☐	1.000		362961.64		P	0.5
5	☐	1.000		347399.23		P	0.5
6	☐	1.000		321479.10		P	0.9
7	☐	1.000		313819.56		P	2.3
8	☐	1.000		331475.86		P	1.4
9	☐	1.000		374884.02		P	2.4

89 Y (ISTD) [No Gas]

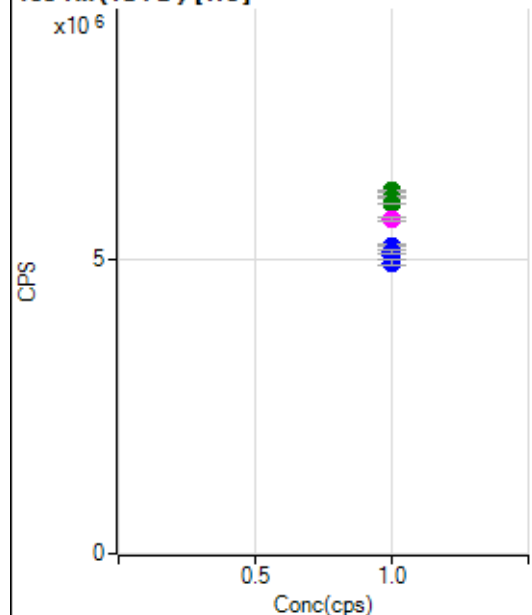
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14167679.51		A	0.2
2	☐	1.000					
3	☐	1.000		13832632.15		A	0.2
4	☐	1.000		13932089.65		A	0.8
5	☐	1.000		13704476.32		A	0.5
6	☐	1.000		12909559.11		A	0.2
7	☐	1.000		12519934.54		A	0.5
8	☐	1.000		12709228.14		A	1.1
9	☐	1.000		13113971.61		A	0.8

89 Y (ISTD) [He]

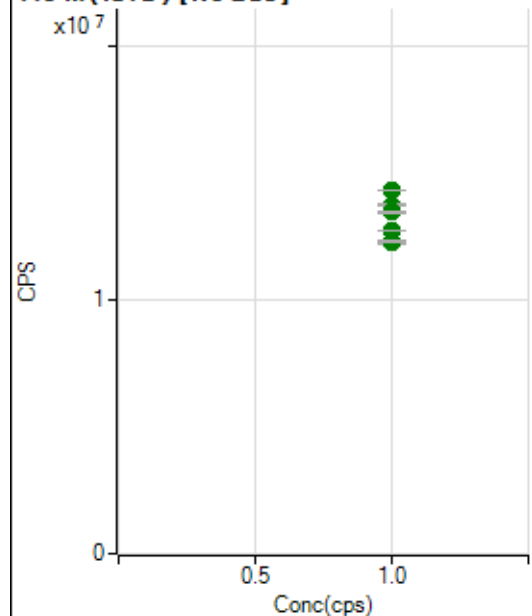
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1894205.39		P	0.6
2	☐	1.000					
3	☐	1.000		1909947.11		P	0.5
4	☐	1.000		1913111.60		P	0.3
5	☐	1.000		1839642.77		P	0.6
6	☐	1.000		1732608.45		P	1.0
7	☐	1.000		1685811.54		P	2.0
8	☐	1.000		1758112.84		P	1.3
9	☐	1.000		1875518.91		P	2.5

103 Rh (ISTD) [No Gas]

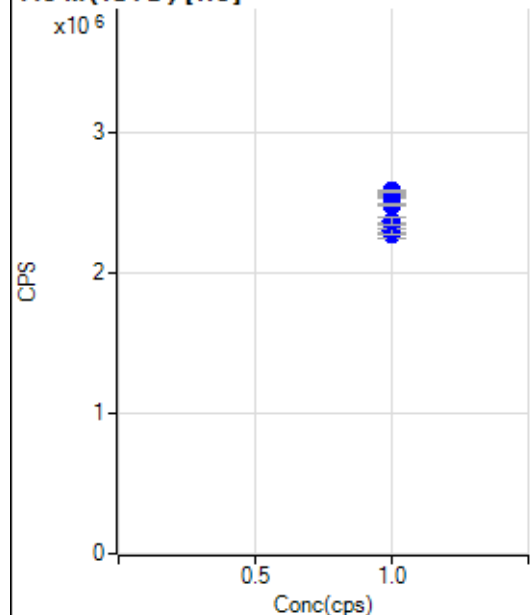
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12952537.09		A	0.2
2	☐	1.000					
3	☐	1.000		12441965.82		A	0.3
4	☐	1.000		12471049.50		A	0.3
5	☐	1.000		12123811.30		A	0.3
6	☐	1.000		11290276.38		A	0.4
7	☐	1.000		10792645.55		A	0.7
8	☐	1.000		10674349.02		A	1.1
9	☐	1.000		10329076.27		A	0.6

103 Rh (ISTD) [He]

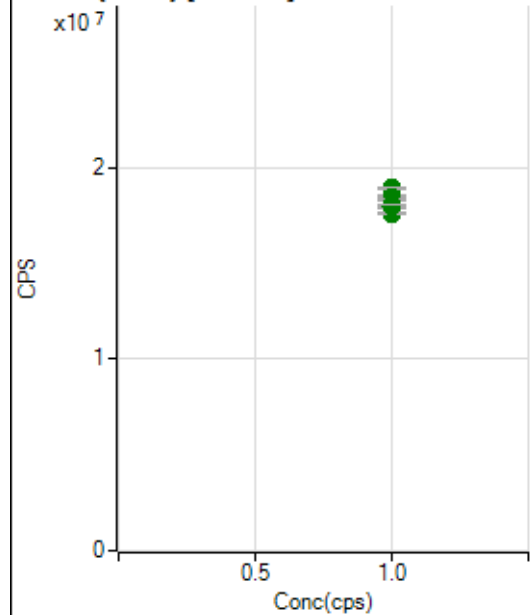
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6156912.75		A	0.7
2	☐	1.000					
3	☐	1.000		6045303.52		A	0.3
4	☐	1.000		5936338.87		A	0.3
5	☐	1.000		5681708.66		M	1.0
6	☐	1.000		5234557.63		P	0.8
7	☐	1.000		5056044.23		P	1.9
8	☐	1.000		5111684.40		P	1.2
9	☐	1.000		4940533.47		P	2.4

115 In (ISTD) [No Gas]

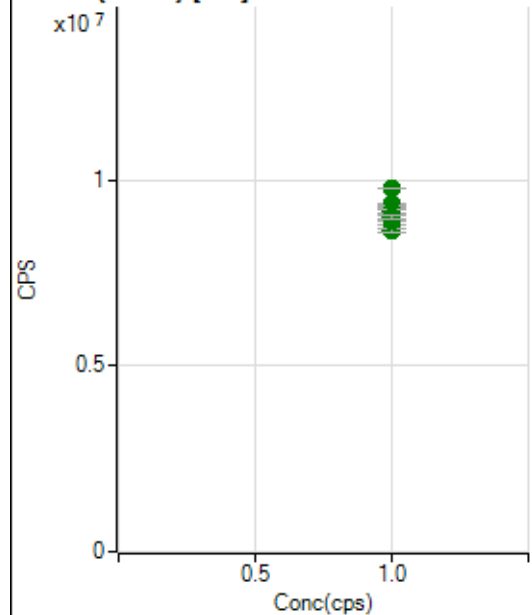
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14290689.43		A	0.1
2	☐	1.000					
3	☐	1.000		13705167.10		A	0.3
4	☐	1.000		13725885.13		A	0.8
5	☐	1.000		13460725.20		A	0.9
6	☐	1.000		12747897.73		A	0.2
7	☐	1.000		12281666.05		A	0.6
8	☐	1.000		12271081.30		A	1.5
9	☐	1.000		12283150.34		A	0.5

115 In (ISTD) [He]

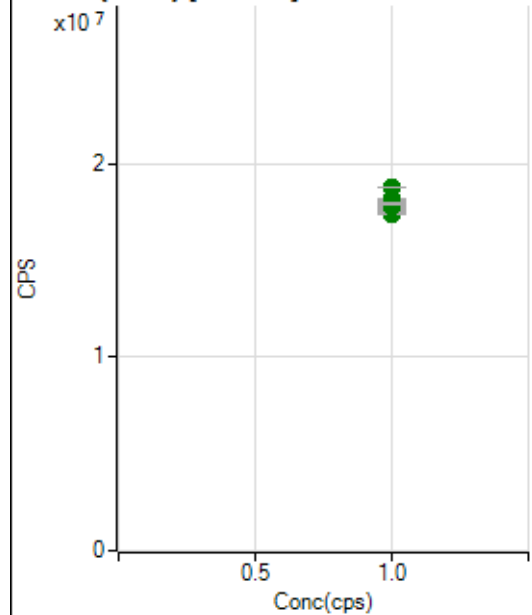
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2546096.42		P	0.6
2	☐	1.000					
3	☐	1.000		2563639.92		P	0.3
4	☐	1.000		2587653.19		P	0.7
5	☐	1.000		2486669.20		P	0.5
6	☐	1.000		2345964.15		P	0.6
7	☐	1.000		2270435.15		P	2.3
8	☐	1.000		2301366.64		P	1.7
9	☐	1.000		2368757.95		P	2.5

159 Tb (ISTD) [No Gas]

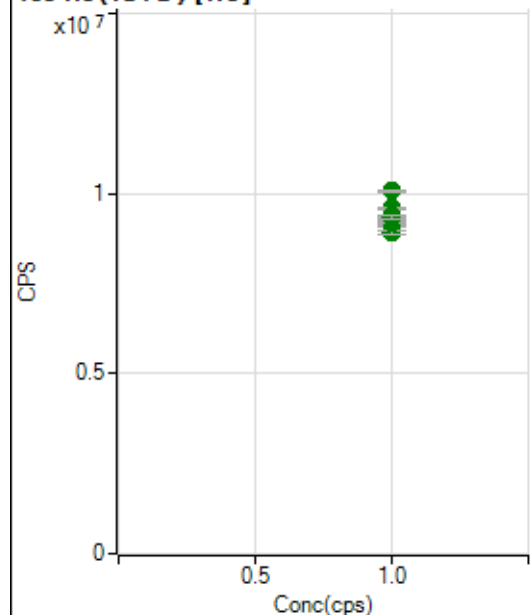
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18940858.19		A	0.2
2	☐	1.000					
3	☐	1.000		18270143.89		A	0.1
4	☐	1.000		18478213.61		A	0.5
5	☐	1.000		18335862.92		A	0.5
6	☐	1.000		17904302.93		A	0.4
7	☐	1.000		17616781.96		A	0.5
8	☐	1.000		17965784.73		A	0.7
9	☐	1.000		18090523.48		A	0.1

159 Tb (ISTD) [He]

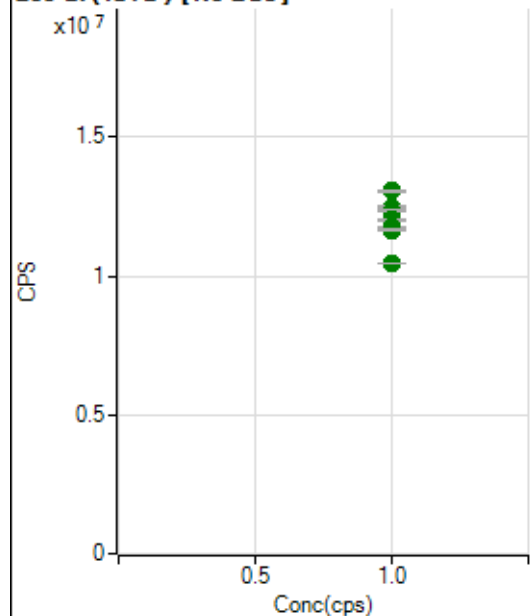
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9756488.32		A	0.2
2	☐	1.000					
3	☐	1.000		9344788.89		A	0.1
4	☐	1.000		9297713.61		A	0.5
5	☐	1.000		9154190.35		A	0.6
6	☐	1.000		8792551.46		A	0.6
7	☐	1.000		8635954.18		A	1.6
8	☐	1.000		8920176.74		A	0.8
9	☐	1.000		9013799.59		A	1.1

165 Ho (ISTD) [No Gas]

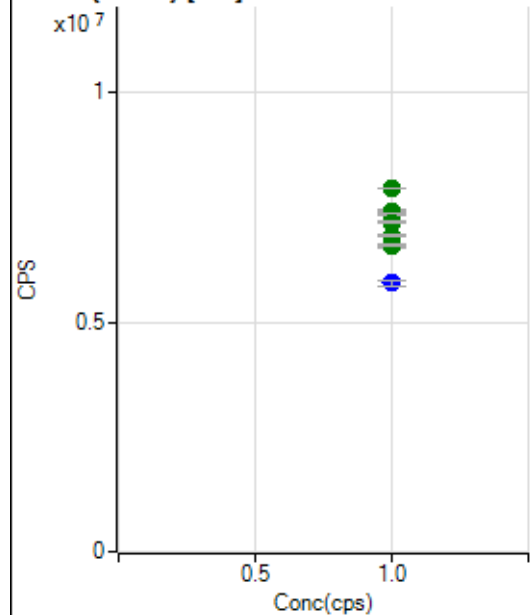
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18769154.24		A	0.1
2	☐	1.000					
3	☐	1.000		17866650.23		A	0.5
4	☐	1.000		18210826.27		A	0.4
5	☐	1.000		18080135.82		A	0.3
6	☐	1.000		17634618.28		A	0.7
7	☐	1.000		17444243.44		A	0.4
8	☐	1.000		17765503.18		A	1.0
9	☐	1.000		17949474.71		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10073857.28		A	0.4
2	☐	1.000					
3	☐	1.000		9588305.55		A	0.2
4	☐	1.000		9568269.09		A	0.5
5	☐	1.000		9386804.72		A	0.6
6	☐	1.000		9090635.35		A	0.5
7	☐	1.000		8912252.64		A	1.3
8	☐	1.000		9206120.63		A	0.6
9	☐	1.000		9328631.60		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13068301.19		A	0.2
2	☐	1.000					
3	☐	1.000		12387081.48		A	0.3
4	☐	1.000		12499501.20		A	0.9
5	☐	1.000		12330647.87		A	0.6
6	☐	1.000		12033262.88		A	0.5
7	☐	1.000		11749976.77		A	0.6
8	☐	1.000		11662183.44		A	1.0
9	☐	1.000		10446732.62		A	0.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7895402.73		A	0.1
2	☐	1.000					
3	☐	1.000		7425374.61		A	0.1
4	☐	1.000		7362938.15		A	0.6
5	☐	1.000		7174471.84		A	0.4
6	☐	1.000		6871578.72		A	0.4
7	☐	1.000		6648002.75		A	1.6
8	☐	1.000		6666745.18		A	0.6
9	☐	1.000		5838167.00		P	2.0

US EPA Tune Check Sample Report

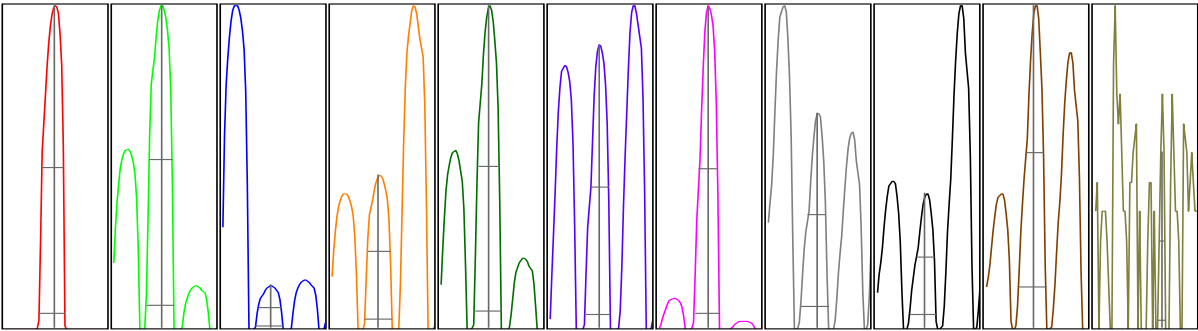
Batch Folder D:\ICP-MS Data\P7120118 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	16552	0.61	5.00	
24	135072	0.58	5.00	
25	17812	0.55	5.00	
26	20517	0.58	5.00	
59	102951	0.42	5.00	
113	13520	0.31	5.00	
115	160467	0.65	5.00	
206	42339	0.67	5.00	
207	39949	0.74	5.00	
208	92546	0.70	5.00	
220	0	51.62		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	16474	16680	16628	16537	16441
24	134381	136020	135680	135071	134208
25	17803	17964	17776	17822	17697
26	20422	20682	20529	20567	20385
59	102323	103401	103312	102817	102904
113	13481	13587	13509	13531	13490
115	159706	162039	160577	160660	159353
206	41882	42445	42334	42654	42378
207	39564	40295	39778	40185	39924
208	91621	93302	92229	92899	92679
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	28340	9.00	8.9 - 9.1		0.742	0.900	
24	216096	23.95	23.9 - 24.1		0.807	0.900	
25	28799	24.95	24.9 - 25.1		0.787	0.900	
26	32890	25.90	25.9 - 26.1		0.787	0.900	
59	176194	58.95	58.9 - 59.1		0.783	0.900	
113	25473	113.00	112.9 - 113.1		0.735	0.900	
115	304217	115.00	114.9 - 115.1		0.733	0.900	
206	79224	206.00	205.9 - 206.1		0.791	0.900	
207	71970	206.95	206.9 - 207.1		0.765	0.900	
208	172529	207.95	207.9 - 208.1		0.790	0.900	
220	0	220.50	-		0.195		

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	5.9	V	Deflect	14.0	V
Extract 2	-100.0	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	24801	0.48	
89	32051	0.48	
205	37916	0.38	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	24906	24920	24753	24796	24628
89	32058	32186	32136	32087	31788
205	37999	38036	37905	37968	37674

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	7.1	V	Deflect	1.8	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			