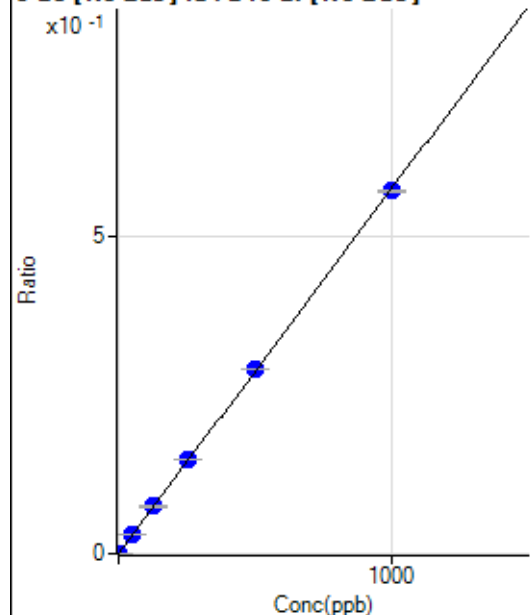


Batch Folder: D:\ICP-MS Data\P7021420TEST.b\
Analysis File: P7021420TEST.batch.bin
DA Date-Time: 2020-02-14 18:26:10
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-02-14 16:23:02
2	004CAL.S.d	S02	2020-02-14 16:26:44
3	005CAL.S.d	S03	2020-02-14 16:31:56
4	006CAL.S.d	S04	2020-02-14 16:36:21
5	007CAL.S.d	S05	2020-02-14 16:40:15
6	008CAL.S.d	S06	2020-02-14 16:44:06
7	009CAL.S.d	S07	2020-02-14 16:47:56
8	010CAL.S.d	S08	2020-02-14 16:51:51

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	216.67	0.0000	P	25.9
2	☐	1.000	1.055	4311.85	0.0006	P	4.0
3	☐	50.000	52.792	205893.84	0.0304	P	0.6
4	☐	125.000	129.510	485484.30	0.0746	P	1.9
5	☐	250.000	258.182	937738.39	0.1487	P	1.8
6	☐	500.000	505.630	1817103.44	0.2911	P	0.8
7	☐	1000.000	994.436	3436531.70	0.5726	P	0.3
8	☐			514.84	0.0001	P	12.7

$$y = 5.7576\text{E-}004 * x + 2.8842\text{E-}005$$

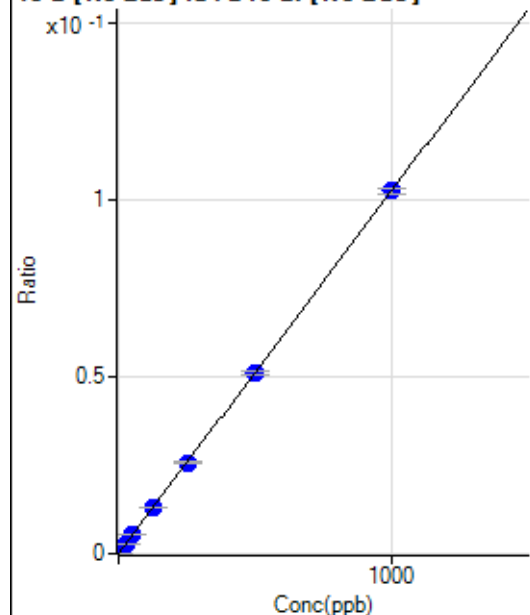
$$R = 0.9999$$

$$DL = 0.0389$$

$$BEC = 0.05009$$

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	316.68	0.0000	P	6.9
2	☐	25.000	26.434	18662.28	0.0028	P	1.9
3	☐	50.000	51.606	36088.65	0.0053	P	4.0
4	☐	125.000	126.757	84863.65	0.0130	P	0.5
5	☐	250.000	251.049	162602.13	0.0258	P	2.3
6	☐	500.000	498.645	319334.22	0.0512	P	1.5
7	☐	1000.000	1000.080	615739.91	0.1026	P	1.6
8	☐			13564.94	0.0024	P	12.0

$$y = 1.0253\text{E-}004 * x + 4.2173\text{E-}005$$

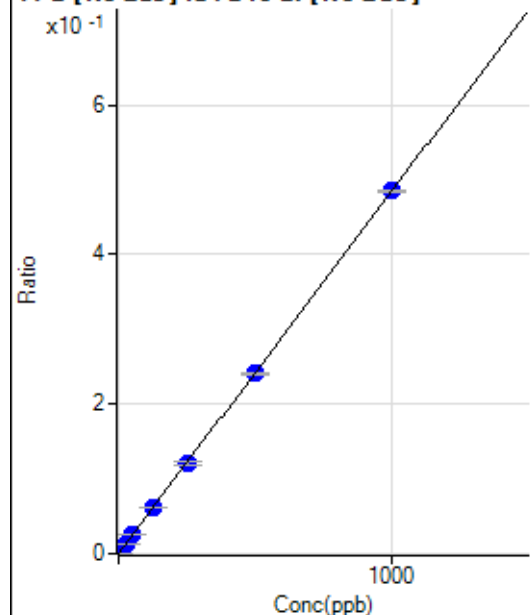
$$R = 1.0000$$

$$DL = 0.08562$$

$$BEC = 0.4113$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1639.05	0.0002	P	5.2
2	☐	25.000	26.460	88303.76	0.0130	P	1.3
3	☐	50.000	51.508	170180.85	0.0251	P	1.7
4	☐	125.000	125.260	396016.61	0.0608	P	1.0
5	☐	250.000	249.108	761759.61	0.1208	P	2.3
6	☐	500.000	496.692	1501672.30	0.2406	P	1.3
7	☐	1000.000	1001.733	2911327.62	0.4850	P	0.7
8	☐			64338.84	0.0116	P	11.4

$$y = 4.8399\text{E-}004 * x + 2.1822\text{E-}004$$

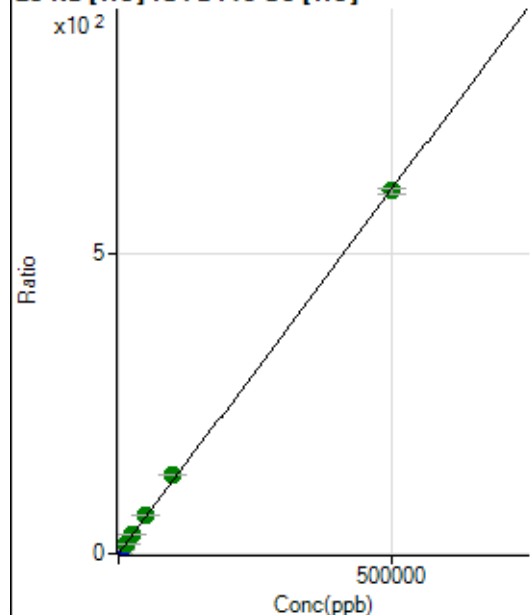
$$R = 1.0000$$

$$DL = 0.07068$$

$$BEC = 0.4509$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30829.62	0.0479	P	1.1
2	☐	500.000	580.526	486914.63	0.7537	P	1.3
3	☐	5000.000	5540.095	4210171.45	6.7842	P	0.6
4	☐	12500.000	13580.634	10042639.63	16.5607	A	1.5
5	☐	25000.000	27001.092	19493119.36	32.8789	A	1.4
6	☐	50000.000	53721.981	39121870.32	65.3691	A	0.0
7	☐	100000.00	107617.46	77810795.49	130.9014	A	0.6
8	☐	500000.00	497971.75	350027896.7	605.5383	A	1.4

$$y = 0.0012 * x + 0.0479$$

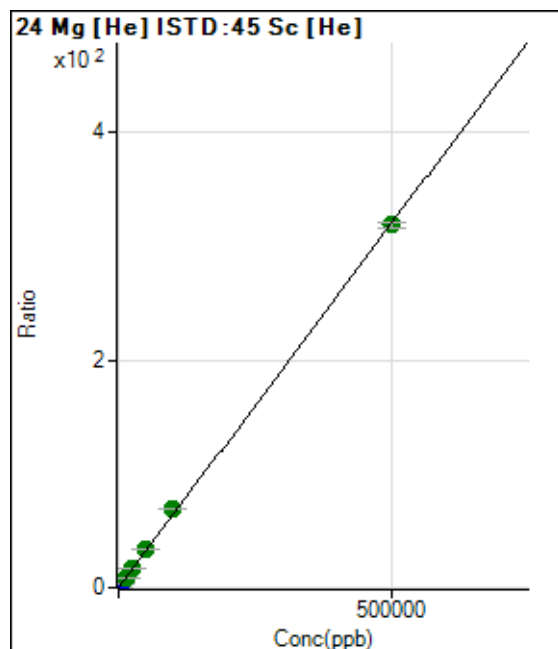
$$R = 0.9999$$

$$DL = 1.249$$

$$BEC = 39.37$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	291.68	0.0005	P	29.0
2	☐	500.000	580.293	240332.29	0.3721	P	2.8
3	☐	5000.000	5550.000	2206219.19	3.5551	P	0.6
4	☐	12500.000	13733.788	5334628.77	8.7965	A	1.0
5	☐	25000.000	27154.707	10311338.16	17.3922	A	1.5
6	☐	50000.000	53962.706	20684781.54	34.5620	A	0.3
7	☐	100000.00	107497.03	40925348.83	68.8491	A	0.5
8	☐	500000.00	497960.16	184350462.4	318.9291	A	1.6

$$y = 6.4047\text{E-}004 * x + 4.5367\text{E-}004$$

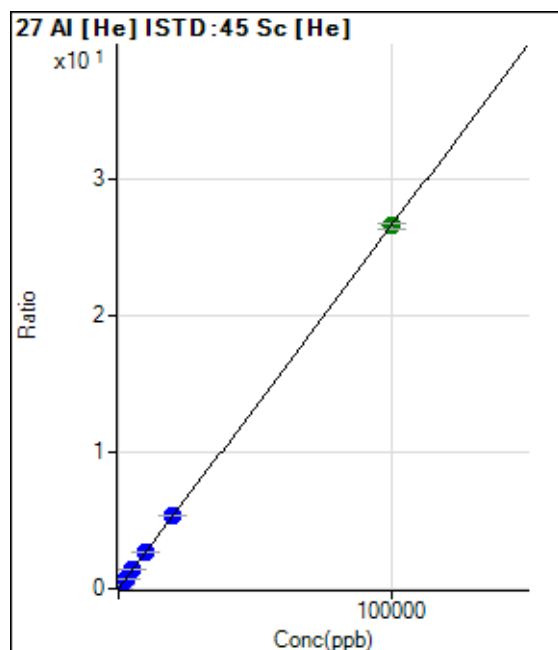
$$R = 0.9999$$

$$DL = 0.6158$$

$$BEC = 0.7083$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.79	0.0002	P	4.5
2	☐	20.000	23.252	4114.64	0.0064	P	1.7
3	☐	1000.000	1039.291	171257.27	0.2760	P	0.3
4	☐	2500.000	2567.434	413217.56	0.6815	P	2.1
5	☐	5000.000	5117.276	805148.56	1.3580	P	1.4
6	☐	10000.000	10158.403	1613316.23	2.6957	P	0.2
7	☐	20000.000	20171.387	3181652.48	5.3525	P	0.6
8	☐	100000.00	99941.939	15329378.12	26.5191	A	1.3

$$y = 2.6534\text{E-}004 * x + 1.9847\text{E-}004$$

$$R = 1.0000$$

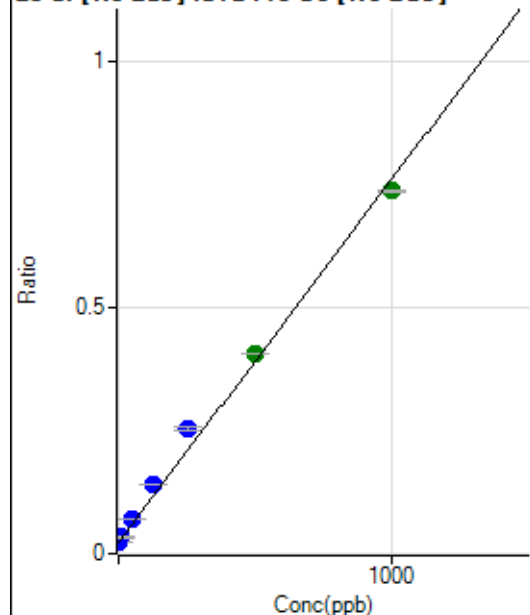
$$DL = 0.1013$$

$$BEC = 0.748$$

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	422277.74	0.0225	P	0.0
2	☐	10.000	14.679	568328.06	0.0333	P	0.8
3	☐	50.000	66.097	1208095.72	0.0712	P	0.5
4	☐	125.000	159.211	2266860.16	0.1399	P	0.6
5	☐	250.000	312.827	4007981.99	0.2531	P	3.8
6	☐	500.000	520.400	6564139.82	0.4061	A	0.9
7	☐	1000.000	968.966	11823309.73	0.7368	A	0.2
8	☐			872141.22	0.0573	P	2.1

$$y = 7.3714\text{E-}004 * x + 0.0225$$

$$R = 0.9973$$

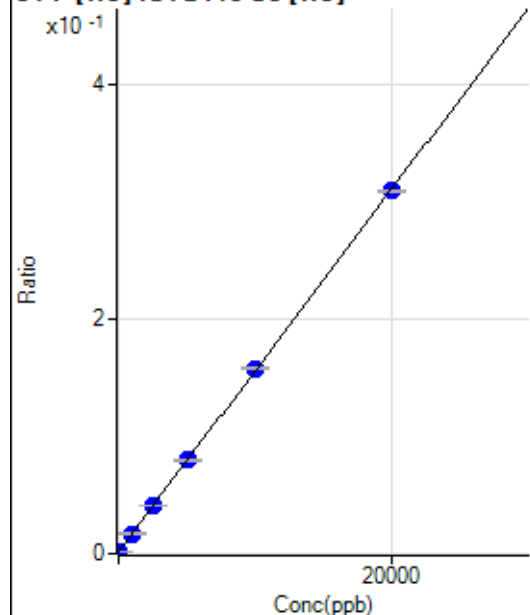
$$DL = 0.03466$$

$$BEC = 30.53$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-34.014	758.39	0.0012	P	12.3
2	☐	0.000	34.014	1439.02	0.0022	P	4.4
3	☐	1000.000	999.991	10629.19	0.0171	P	1.7
4	☐	2500.000	2525.980	24665.59	0.0407	P	1.0
5	☐	5000.000	5058.454	47270.36	0.0797	P	2.6
6	☐	10000.000	10125.189	94496.70	0.1579	P	0.7
7	☐	20000.000	19919.545	183678.48	0.3090	P	0.8
8	☐			725.05	0.0013	P	11.5

$$y = 1.5427\text{E-}005 * x + 0.0017$$

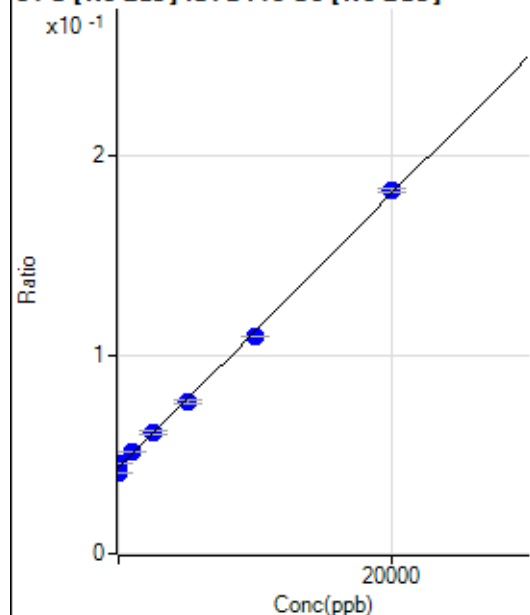
$$R = 1.0000$$

$$DL = 23.65$$

$$BEC = 110.3$$

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	-353.357	764687.20	0.0407	P	0.6
2	☐	0.000	353.357	778171.31	0.0456	P	0.5
3	☐	1000.000	1179.335	870568.22	0.0513	P	1.5
4	☐	2500.000	2600.490	990884.86	0.0611	P	2.4
5	☐	5000.000	4865.869	1216034.93	0.0768	P	2.5
6	☐	10000.000	9622.072	1771451.41	0.1096	P	0.5
7	☐	20000.000	20200.969	2930407.86	0.1826	P	0.9
8	☐			551214.30	0.0362	P	1.4

$$y = 6.9024\text{E-}006 * x + 0.0432$$

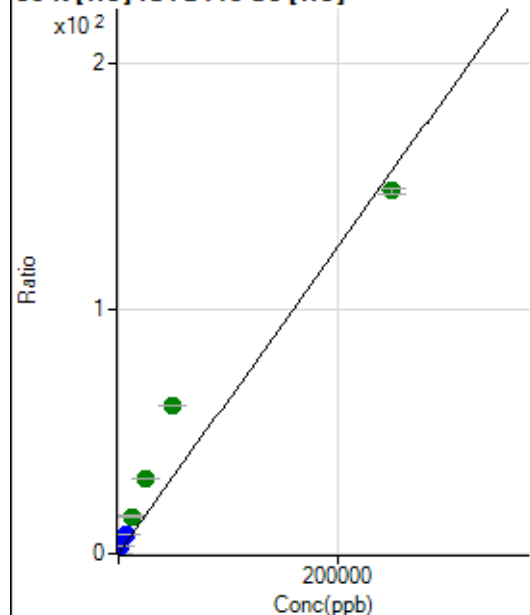
R = 0.9992

DL = 100.5

BEC = 6257

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	34109.47	0.0530	P	2.0
2	☐	500.000	531.523	248241.62	0.3843	P	1.2
3	☐	2500.000	4960.913	1951946.05	3.1452	P	0.9
4	☐	6250.000	12239.336	4658374.76	7.6821	P	1.8
5	☐	12500.000	24351.710	9030655.76	15.2320	A	1.5
6	☐	25000.000	48667.936	18187036.69	30.3890	A	0.7
7	☐	50000.000	96828.530	35908245.25	60.4087	A	0.4
8	☐	250000.00	237500.50	85601341.50	148.0933	A	1.7

$$y = 6.2333\text{E-}004 * x + 0.0530$$

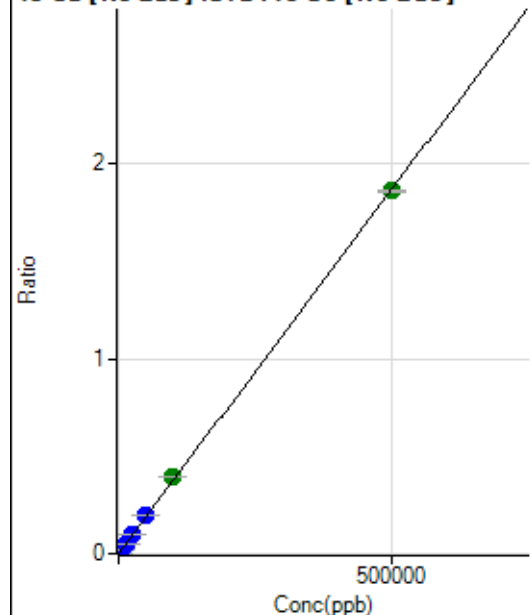
R = 0.9771

DL = 5.036

BEC = 84.97

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	558.37	0.0000	P	10.8
2	☐	500.000	558.037	36017.16	0.0021	P	1.9
3	☐	5000.000	5392.593	341772.36	0.0202	P	1.4
4	☐	12500.000	13480.125	815666.07	0.0503	P	1.4
5	☐	25000.000	27085.942	1600947.57	0.1011	P	3.4
6	☐	50000.000	53050.388	3199703.76	0.1980	P	0.0
7	☐	100000.00	105701.41	6328876.18	0.3944	A	1.0
8	☐	500000.00	498421.89	28287566.26	1.8597	A	0.8

$$y = 3.7311\text{E-}006 * x + 2.9755\text{E-}005$$

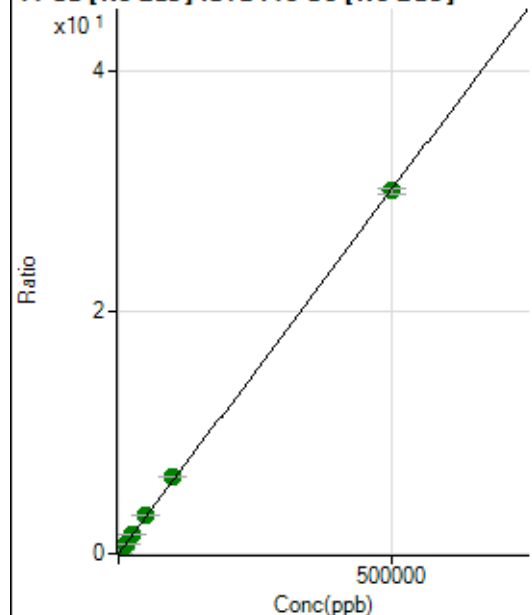
R = 0.9999

DL = 2.589

BEC = 7.975

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	25469.16	0.0014	P	3.2
2	☐	500.000	561.037	599615.58	0.0352	P	0.7
3	☐	5000.000	5293.355	5432145.09	0.3203	A	0.5
4	☐	12500.000	13289.233	12998105.76	0.8020	A	1.4
5	☐	25000.000	26660.814	25461606.30	1.6075	A	2.7
6	☐	50000.000	52550.269	51191654.27	3.1673	A	0.3
7	☐	100000.00	105486.71	101997838.3	6.3564	A	0.9
8	☐	500000.00	498541.86	456834971.3	30.0361	A	1.8

$$y = 6.0245\text{E-}005 * x + 0.0014$$

R = 0.9999

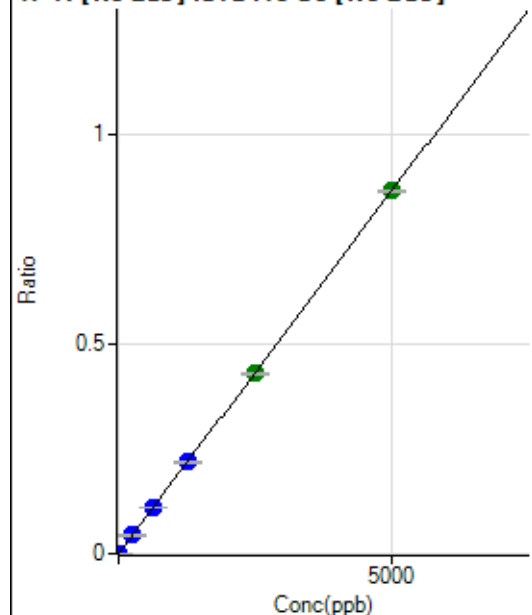
DL = 2.188

BEC = 22.53

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	336.13	0.0000	P	40.7
2	☐	5.000	5.484	16498.84	0.0010	P	1.5
3	☐	250.000	252.927	743037.89	0.0438	P	1.1
4	☐	625.000	633.433	1777752.49	0.1097	P	0.9
5	☐	1250.000	1264.425	3467332.59	0.2189	P	3.1
6	☐	2500.000	2482.146	6945929.67	0.4298	A	0.7
7	☐	5000.000	5004.120	13902652.91	0.8664	A	0.8
8	☐			3033.75	0.0002	P	3.9

$$y = 1.7313\text{E-}004 * x + 1.7893\text{E-}005$$

$$R = 1.0000$$

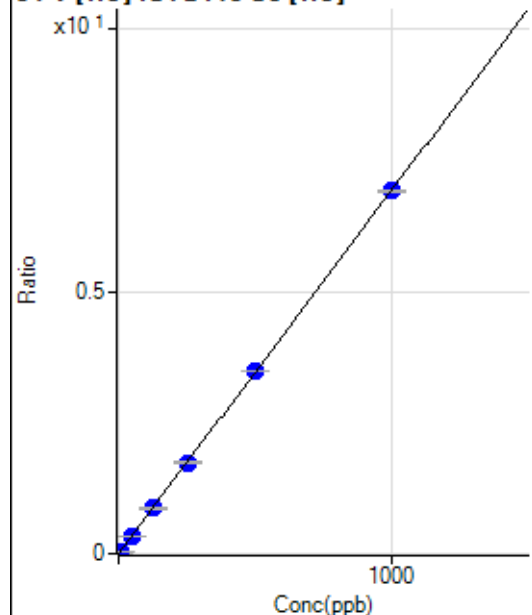
$$DL = 0.1261$$

$$BEC = 0.1033$$

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	31.11	0.0000	P	12.1
2	☐	5.000	5.429	24328.04	0.0377	P	1.0
3	☐	50.000	50.035	215133.23	0.3467	P	0.9
4	☐	125.000	125.186	525902.44	0.8673	P	2.1
5	☐	250.000	250.480	1028796.88	1.7353	P	1.4
6	☐	500.000	501.467	2079068.49	3.4740	P	0.2
7	☐	1000.000	999.119	4114274.04	6.9215	P	0.6
8	☐			1175.62	0.0020	P	3.1

$$y = 0.0069 * x + 4.8296\text{E-}005$$

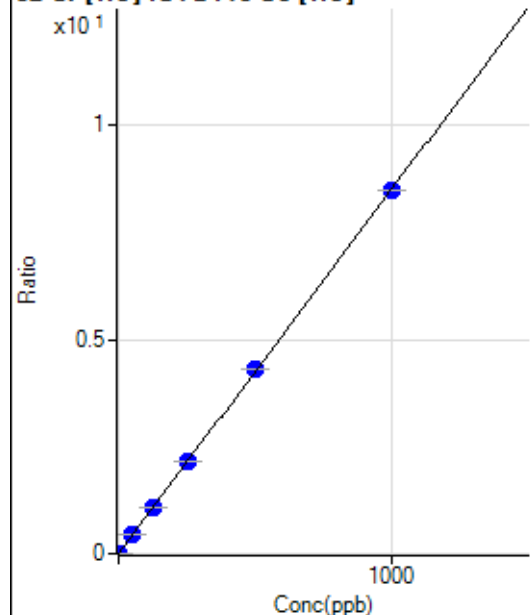
$$R = 1.0000$$

$$DL = 0.002523$$

$$BEC = 0.006972$$

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	2090.18	0.0032	P	3.5
2	☐	2.000	2.141	13855.58	0.0215	P	3.3
3	☐	50.000	50.991	271076.86	0.4368	P	0.9
4	☐	125.000	127.650	660192.33	1.0887	P	1.5
5	☐	250.000	253.523	1280035.54	2.1590	P	1.3
6	☐	500.000	505.574	2574711.97	4.3022	P	0.5
7	☐	1000.000	995.951	5035981.83	8.4720	P	0.2
8	☐			78514.46	0.1358	P	1.6

$$y = 0.0085 * x + 0.0032$$

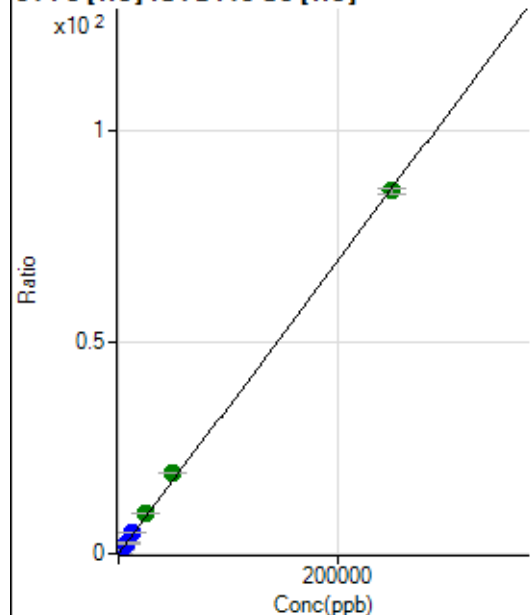
$$R = 1.0000$$

$$DL = 0.03996$$

$$BEC = 0.3817$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	921.00	0.0014	P	4.7
2	☐	50.000	64.525	15307.36	0.0237	P	3.0
3	☐	2500.000	2891.329	620209.88	0.9994	P	1.1
4	☐	6250.000	7232.835	1514767.43	2.4979	P	1.6
5	☐	12500.000	14399.221	2947480.00	4.9714	P	1.2
6	☐	25000.000	27841.817	5752177.18	9.6112	A	0.4
7	☐	50000.000	54880.224	11260533.47	18.9437	A	0.5
8	☐	250000.00	248616.32	49601050.14	85.8128	A	1.8

$$y = 3.4516E-004 * x + 0.0014$$

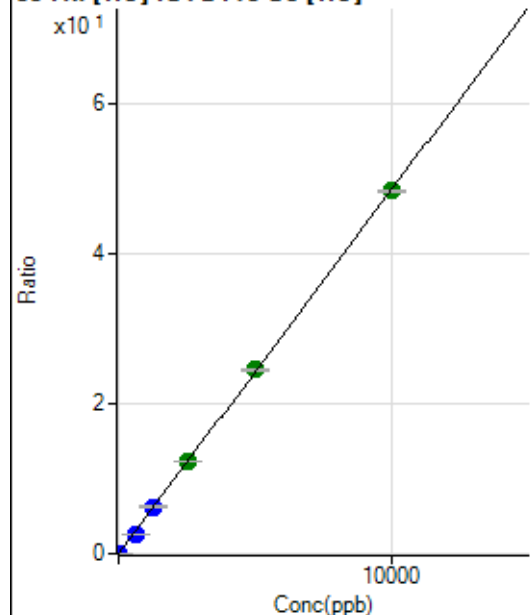
$$R = 0.9998$$

$$DL = 0.5781$$

$$BEC = 4.142$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	81.11	0.0001	P	6.4
2	☐	1.000	1.135	3642.73	0.0056	P	1.8
3	☐	625.000	511.272	1541359.98	2.4837	P	0.2
4	☐	1250.000	1283.965	3782221.05	6.2372	P	2.0
5	☐	2500.000	2538.695	7311765.10	12.3323	A	1.0
6	☐	5000.000	5050.206	14682304.23	24.5325	A	0.6
7	☐	10000.000	9968.086	28782904.29	48.4220	A	0.7
8	☐			23052.74	0.0399	P	1.5

$$y = 0.0049 * x + 1.2596E-004$$

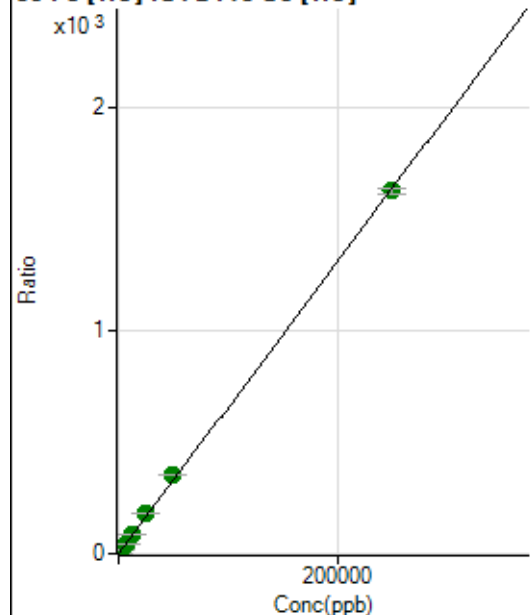
$$R = 0.9999$$

$$DL = 0.004997$$

$$BEC = 0.02593$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7550.29	0.0117	P	2.5
2	☐	50.000	60.849	264616.62	0.4097	P	1.5
3	☐	2500.000	2723.471	11060019.34	17.8219	A	0.3
4	☐	6250.000	6888.780	27325786.26	45.0611	A	1.6
5	☐	12500.000	13768.377	53389825.27	90.0505	A	1.1
6	☐	25000.000	27233.902	106594346.8	178.1087	A	0.1
7	☐	50000.000	53871.160	209415130.6	352.3039	A	0.7
8	☐	250000.00	248920.75	940908391.4	1,627.836	A	1.9

$$y = 0.0065 * x + 0.0117$$

$$R = 0.9999$$

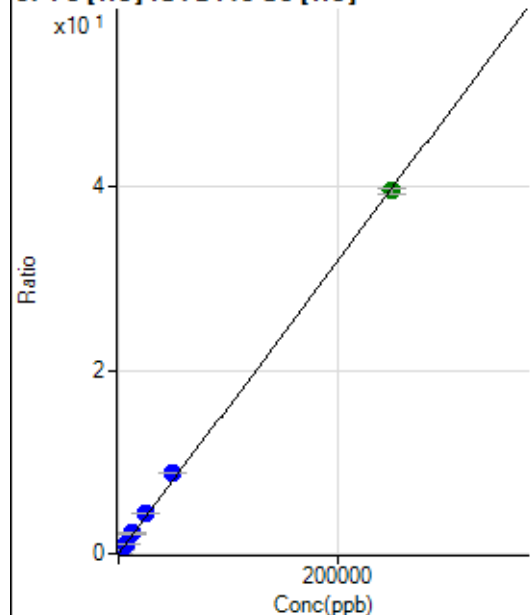
$$DL = 0.134$$

$$BEC = 1.793$$

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	414.83	0.0006	P	3.1
2	☐	50.000	61.752	6768.43	0.0105	P	3.6
3	☐	2500.000	2787.513	275939.35	0.4446	P	0.5
4	☐	6250.000	6990.139	675601.01	1.1140	P	1.1
5	☐	12500.000	13906.561	1313606.32	2.2157	P	1.6
6	☐	25000.000	27319.586	2604683.91	4.3521	P	0.7
7	☐	50000.000	55156.025	5222475.87	8.7859	P	0.9
8	☐	250000.00	248645.12	22892749.82	39.6050	A	1.6

$$y = 1.5928\text{E-}004 * x + 6.4428\text{E-}004$$

$$R = 0.9998$$

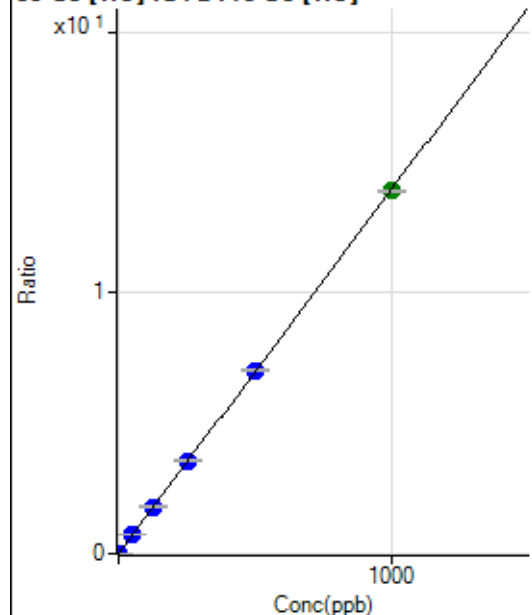
$$DL = 0.3737$$

$$BEC = 4.045$$

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	307.79	0.0005	P	4.3
2	☐	1.000	1.080	10040.23	0.0155	P	1.8
3	☐	50.000	51.709	448130.06	0.7221	P	0.7
4	☐	125.000	128.813	1090371.37	1.7981	P	1.7
5	☐	250.000	255.840	2117030.85	3.5708	P	1.4
6	☐	500.000	503.463	4205140.63	7.0264	P	0.7
7	☐	1000.000	996.246	8264371.75	13.9033	A	0.9
8	☐			13647.62	0.0236	P	1.9

$$y = 0.0140 * x + 4.7807\text{E-}004$$

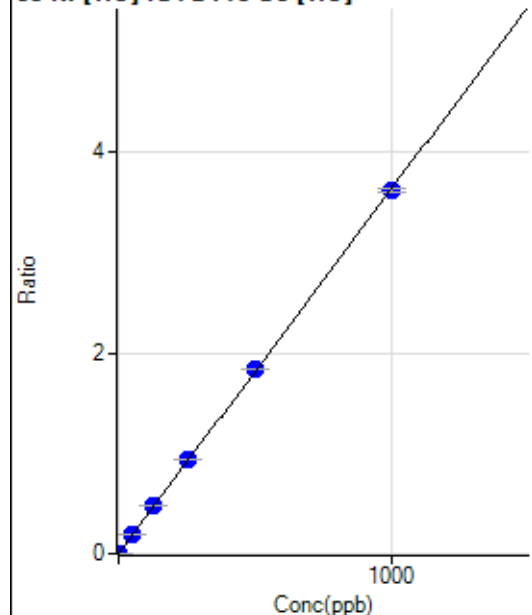
$$R = 1.0000$$

$$DL = 0.004456$$

$$BEC = 0.03426$$

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	86.67	0.0001	P	26.1
2	☐	1.000	1.216	2945.90	0.0046	P	1.9
3	☐	50.000	52.791	119249.32	0.1922	P	0.2
4	☐	125.000	131.413	289950.22	0.4781	P	1.7
5	☐	250.000	258.185	556873.42	0.9393	P	1.4
6	☐	500.000	504.997	1099456.93	1.8371	P	0.5
7	☐	1000.000	994.514	2150374.27	3.6177	P	1.2
8	☐			22261.58	0.0385	P	2.6

$$y = 0.0036 * x + 1.3442E-004$$

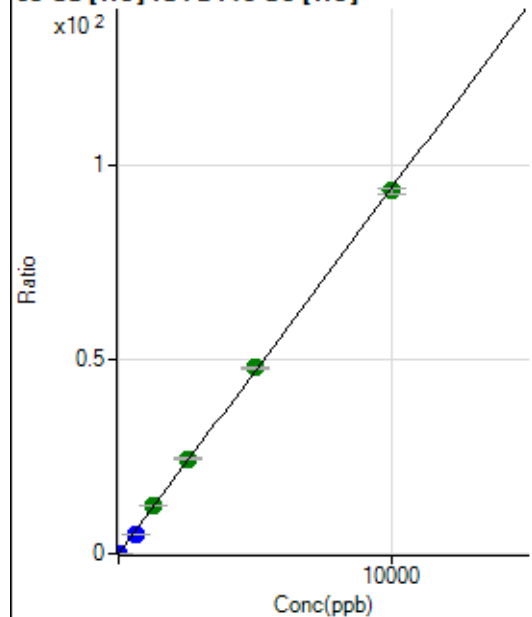
$$R = 0.9999$$

$$DL = 0.02897$$

$$BEC = 0.03696$$

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	1402.32	0.0022	P	3.6
2	☐	2.000	2.301	15363.82	0.0238	P	3.1
3	☐	625.000	534.812	3118624.71	5.0254	P	0.2
4	☐	1250.000	1317.292	7504649.20	12.3748	A	1.0
5	☐	2500.000	2602.114	14490960.06	24.4426	A	1.8
6	☐	5000.000	5088.562	28605938.74	47.7965	A	0.5
7	☐	10000.000	9927.416	55425892.51	93.2455	A	1.3
8	☐			15615.21	0.0270	P	2.4

$$y = 0.0094 * x + 0.0022$$

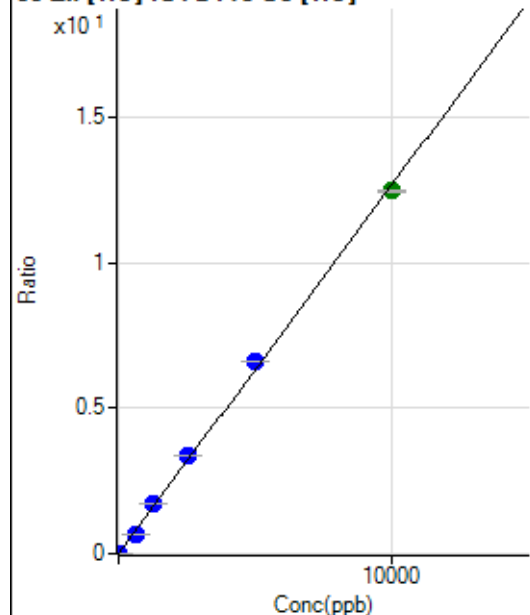
$$R = 0.9998$$

$$DL = 0.02491$$

$$BEC = 0.2318$$

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	324.45	0.0005	P	14.8
2	☐	2.000	2.509	2376.91	0.0037	P	1.9
3	☐	625.000	543.318	427033.47	0.6881	P	0.5
4	☐	1250.000	1349.176	1035797.66	1.7080	P	1.4
5	☐	2500.000	2666.651	2001235.33	3.3754	P	1.3
6	☐	5000.000	5201.356	3940002.06	6.5834	P	0.0
7	☐	10000.000	9850.367	7410707.53	12.4672	A	0.8
8	☐			17685.37	0.0306	P	1.2

$$y = 0.0013 * x + 5.0419E-004$$

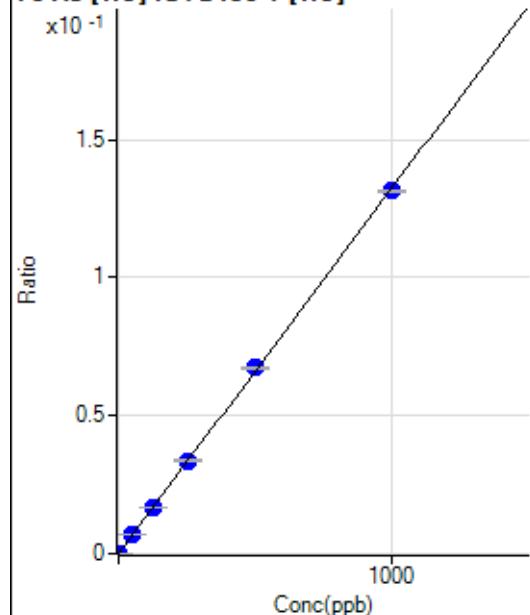
$$R = 0.9994$$

$$DL = 0.1771$$

$$BEC = 0.3984$$

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	38.89	0.0000	P	10.2
2	☐	1.000	1.064	604.96	0.0002	P	1.5
3	☐	50.000	52.300	27023.33	0.0069	P	1.8
4	☐	125.000	127.063	65376.84	0.0168	P	1.9
5	☐	250.000	255.000	128194.33	0.0337	P	2.1
6	☐	500.000	509.016	257574.42	0.0673	P	0.5
7	☐	1000.000	993.869	501978.58	0.1314	P	0.7
8	☐			237.66	0.0001	P	3.3

$$y = 1.3224E-004 * x + 9.6626E-006$$

$$R = 0.9999$$

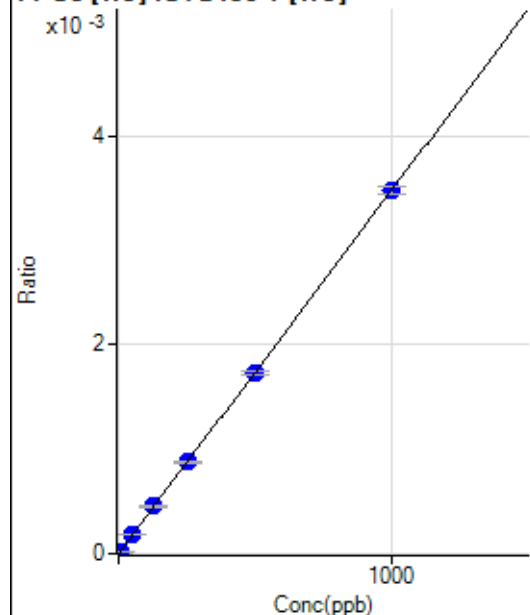
$$DL = 0.0223$$

$$BEC = 0.07307$$

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	1.11	0.0000	P	173.
2	☐	5.000	5.465	77.78	0.0000	P	20.6
3	☐	50.000	52.478	713.36	0.0002	P	2.8
4	☐	125.000	130.699	1767.91	0.0005	P	6.5
5	☐	250.000	253.647	3354.89	0.0009	P	2.3
6	☐	500.000	498.390	6634.96	0.0017	P	2.0
7	☐	1000.000	999.055	13277.38	0.0035	P	2.1
8	☐			4.44	0.0000	P	42.4

$$y = 3.4793\text{E-}006 * x + 2.7586\text{E-}007$$

$$R = 1.0000$$

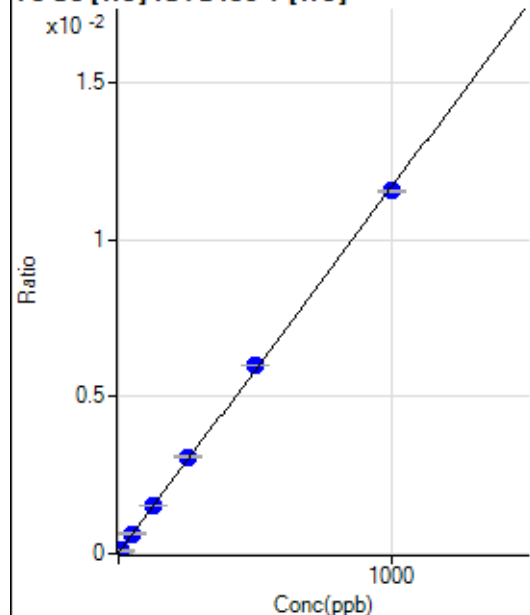
$$DL = 0.412$$

$$BEC = 0.07929$$

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	100.62	0.0000	P	12.5
2	☐	5.000	5.842	374.70	0.0001	P	2.8
3	☐	50.000	52.839	2501.47	0.0006	P	4.7
4	☐	125.000	128.827	5940.76	0.0015	P	1.5
5	☐	250.000	262.973	11749.28	0.0031	P	3.6
6	☐	500.000	512.321	22956.51	0.0060	P	0.1
7	☐	1000.000	989.972	44189.33	0.0116	P	0.2
8	☐			111.11	0.0000	P	10.3

$$y = 1.1663\text{E-}005 * x + 2.4988\text{E-}005$$

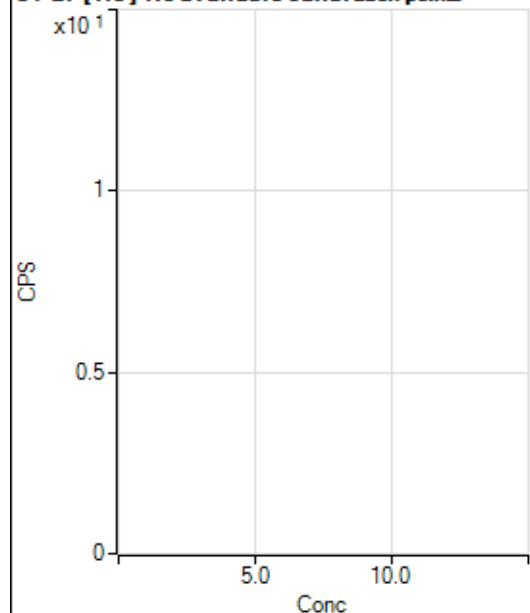
$$R = 0.9998$$

$$DL = 0.8024$$

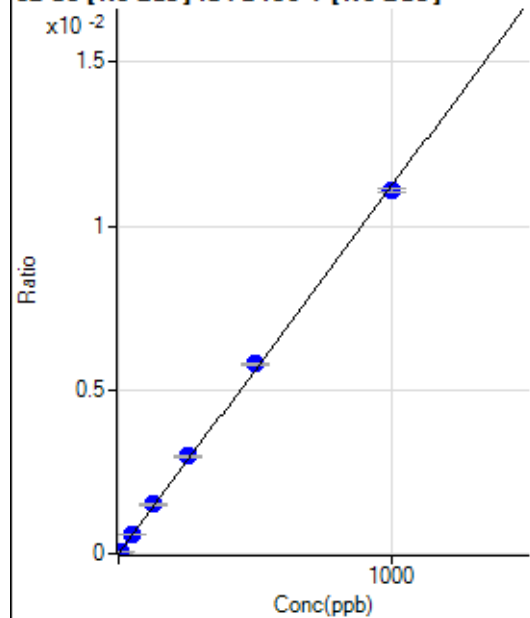
$$BEC = 2.142$$

Weight: <None>

Min Conc: 0

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53.39		P	39.0
2	☐			70.07		P	24.8
3	☐			73.41		P	47.9
4	☐			46.71		P	32.7
5	☐			86.76		P	63.5
6	☐			53.39		P	57.3
7	☐			63.40		P	36.5
8	☐			43.38		P	13.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	33.65	0.0000	P	186.
2	☐	5.000	6.096	2425.92	0.0001	P	3.3
3	☐	50.000	53.284	21204.88	0.0006	P	0.1
4	☐	125.000	133.887	51380.87	0.0015	P	1.2
5	☐	250.000	264.218	100759.83	0.0030	P	2.4
6	☐	500.000	516.155	199942.07	0.0058	P	0.8
7	☐	1000.000	987.088	378158.83	0.0111	P	0.9
8	☐			402.00	0.0000	P	8.1

$$y = 1.1216E-005 * x + 8.8265E-007$$

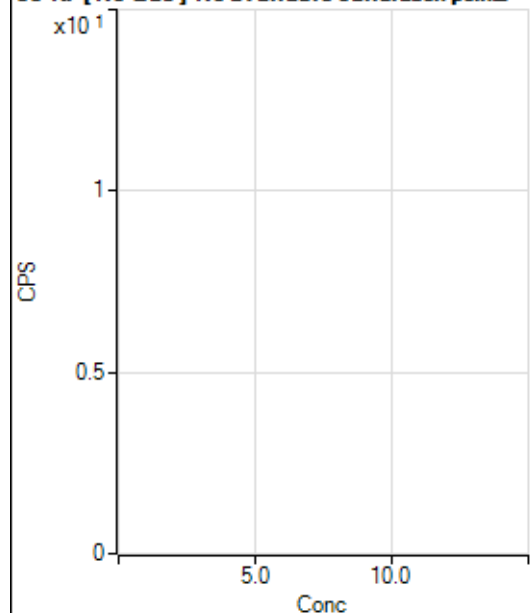
$$R = 0.9997$$

$$DL = 0.4395$$

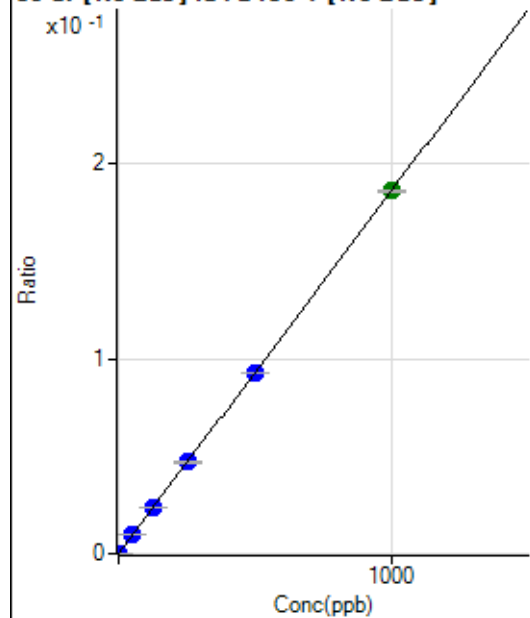
$$BEC = 0.0787$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			751.15		P	1.8
2	☐			682.25		P	1.7
3	☐			687.80		P	7.9
4	☐			672.25		P	2.8
5	☐			661.14		P	6.2
6	☐			680.03		P	4.4
7	☐			741.14		P	12.0
8	☐			740.03		P	4.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1108.42	0.0000	P	1.8
2	☐	1.000	1.067	7963.66	0.0002	P	1.8
3	☐	50.000	50.789	336199.60	0.0095	P	0.6
4	☐	125.000	128.096	816911.10	0.0239	P	0.8
5	☐	250.000	252.187	1597914.56	0.0470	P	1.5
6	☐	500.000	498.317	3206333.92	0.0928	P	0.8
7	☐	1000.000	999.868	6362205.18	0.1863	A	0.8
8	☐			12864.65	0.0004	P	1.0

$$y = 1.8627E-004 * x + 2.8691E-005$$

$$R = 1.0000$$

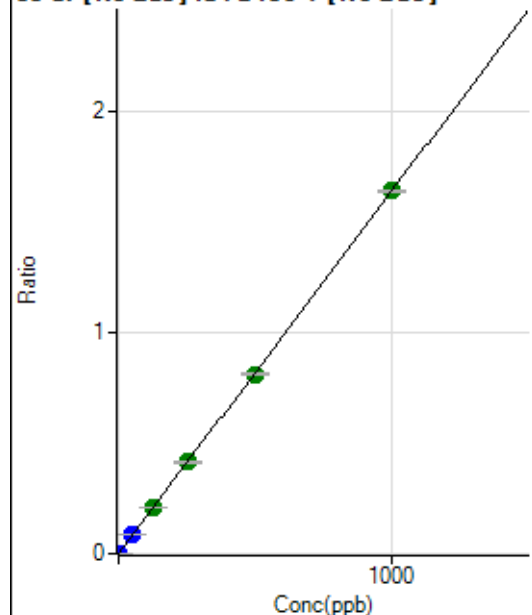
$$DL = 0.008511$$

$$BEC = 0.154$$

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	513.92	0.0000	P	12.9
2	☐	1.000	1.055	60910.98	0.0017	P	0.1
3	☐	50.000	50.635	2935718.91	0.0829	P	0.3
4	☐	125.000	126.079	7054765.95	0.2063	A	0.8
5	☐	250.000	252.148	14024525.31	0.4126	A	1.9
6	☐	500.000	495.855	28017790.56	0.8113	A	0.2
7	☐	1000.000	1001.369	55965837.36	1.6384	A	0.5
8	☐			106155.62	0.0033	P	2.9

$$y = 0.0016 * x + 1.3296E-005$$

$$R = 1.0000$$

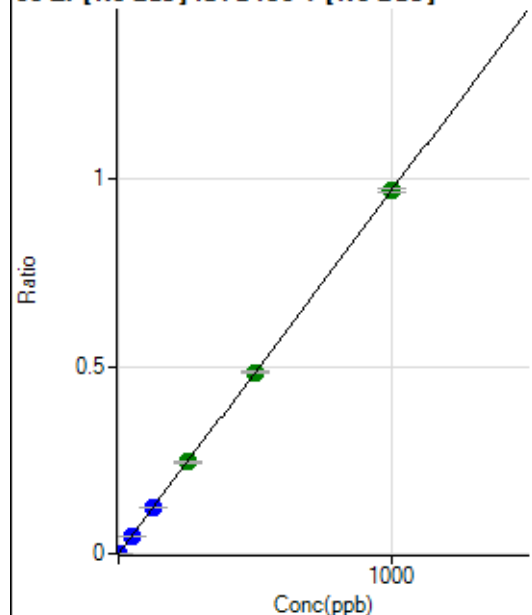
$$DL = 0.003148$$

$$BEC = 0.008126$$

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	1669.61	0.0000	P	2.6
2	☐	1.000	0.757	27174.00	0.0008	P	4.2
3	☐	50.000	48.963	1680866.07	0.0474	P	0.7
4	☐	125.000	126.257	4181289.24	0.1223	P	0.4
5	☐	250.000	252.259	8302230.91	0.2443	A	2.5
6	☐	500.000	499.201	16690031.97	0.4833	A	1.0
7	☐	1000.000	999.730	33056948.31	0.9679	A	0.9
8	☐			10148.44	0.0003	P	4.6

$$y = 9.6808E-004 * x + 4.3222E-005$$

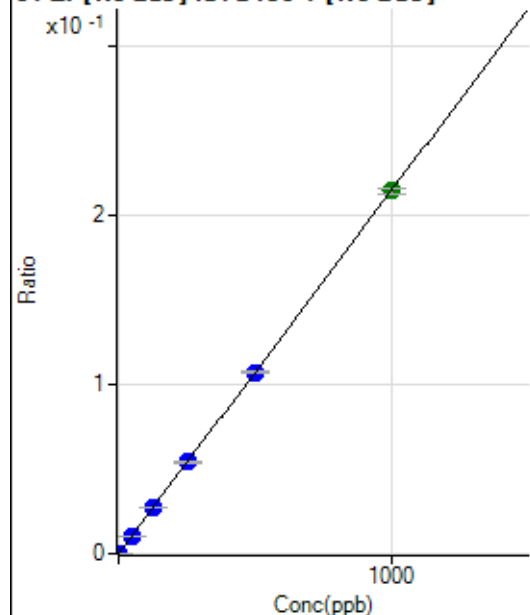
$$R = 1.0000$$

$$DL = 0.003437$$

$$BEC = 0.04465$$

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	302.79	0.0000	P	5.4
2	☐	1.000	0.797	6265.54	0.0002	P	3.9
3	☐	50.000	49.673	378071.60	0.0107	P	0.4
4	☐	125.000	127.556	936659.03	0.0274	P	1.0
5	☐	250.000	252.292	1841263.21	0.0542	P	2.1
6	☐	500.000	500.211	3708369.75	0.1074	P	1.0
7	☐	1000.000	999.019	7324847.30	0.2145	A	1.3
8	☐			2244.72	0.0001	P	8.1

$$y = 2.1467\text{E-}004 * x + 7.8403\text{E-}006$$

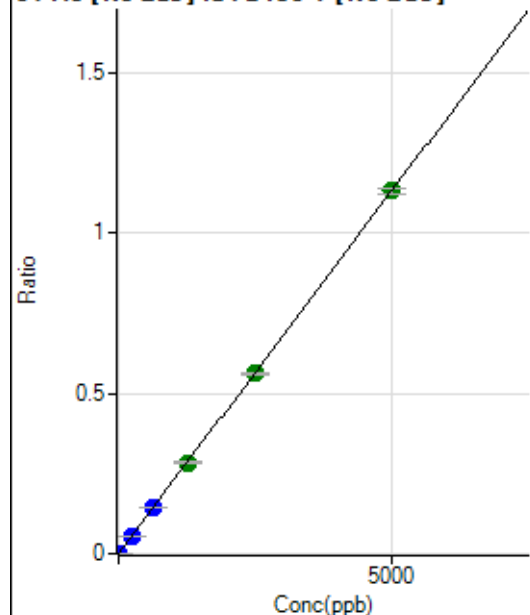
$$R = 1.0000$$

$$DL = 0.005959$$

$$BEC = 0.03652$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	747.27	0.0000	P	8.5
2	☐	5.000	5.019	40383.28	0.0012	P	2.6
3	☐	250.000	250.480	2004642.84	0.0566	P	0.6
4	☐	625.000	633.201	4890360.79	0.1430	P	0.8
5	☐	1250.000	1256.807	9647955.77	0.2838	A	2.1
6	☐	2500.000	2486.192	19388033.24	0.5614	A	0.9
7	☐	5000.000	5004.153	38594137.67	1.1300	A	1.7
8	☐			20195.64	0.0006	P	1.8

$$y = 2.2582\text{E-}004 * x + 1.9354\text{E-}005$$

$$R = 1.0000$$

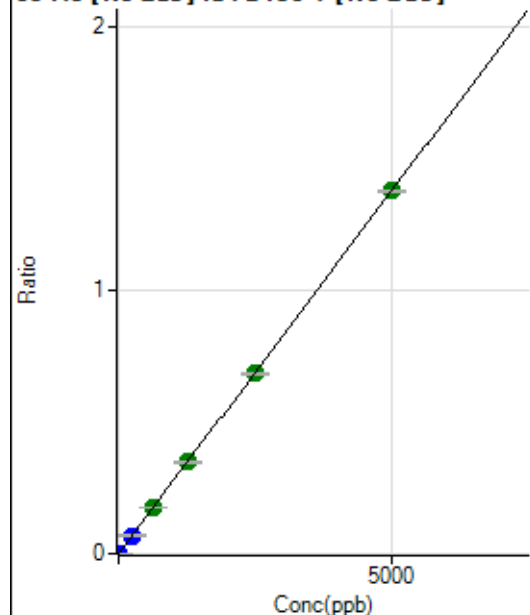
$$DL = 0.02185$$

$$BEC = 0.08571$$

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	355.57	0.0000	P	14.3
2	☐	5.000	5.446	52837.97	0.0015	P	0.7
3	☐	250.000	251.419	2452440.09	0.0692	P	0.5
4	☐	625.000	631.069	5941126.13	0.1737	A	1.1
5	☐	1250.000	1261.336	11803697.84	0.3472	A	1.8
6	☐	2500.000	2489.167	23662864.07	0.6852	A	0.9
7	☐	5000.000	5001.752	47028813.90	1.3769	A	0.8
8	☐			27296.65	0.0008	P	0.8

$$y = 2.7528\text{E-}004 * x + 9.2108\text{E-}006$$

$$R = 1.0000$$

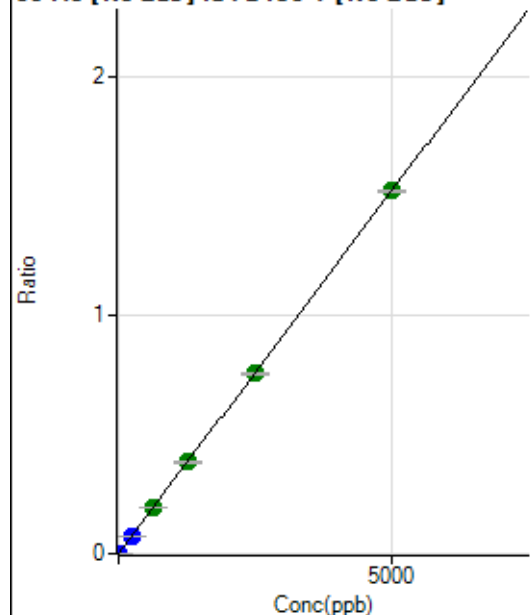
$$DL = 0.01438$$

$$BEC = 0.03346$$

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	594.48	0.0000	P	12.0
2	☐	5.000	5.356	57648.11	0.0016	P	2.0
3	☐	250.000	249.282	2688691.25	0.0759	P	0.3
4	☐	625.000	630.674	6564869.24	0.1920	A	0.2
5	☐	1250.000	1264.565	13083184.23	0.3849	A	2.6
6	☐	2500.000	2486.205	26131885.30	0.7567	A	1.0
7	☐	5000.000	5002.583	52007251.16	1.5226	A	0.7
8	☐			53080.68	0.0017	P	0.8

$$y = 3.0437\text{E-}004 * x + 1.5402\text{E-}005$$

$$R = 1.0000$$

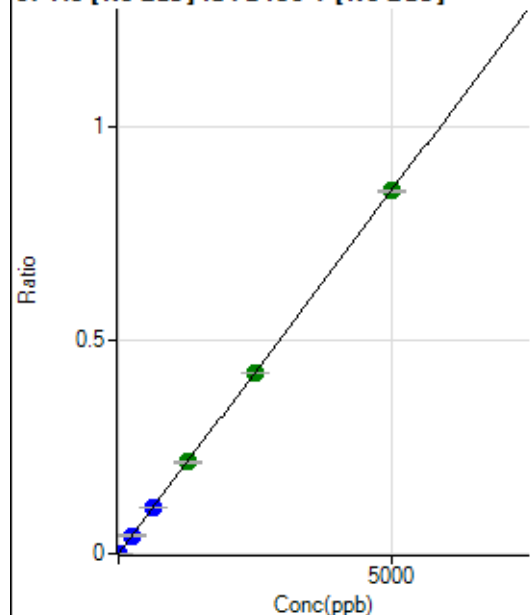
$$DL = 0.01816$$

$$BEC = 0.0506$$

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	266.68	0.0000	P	4.4
2	☐	5.000	5.504	32975.52	0.0009	P	2.7
3	☐	250.000	250.401	1506623.60	0.0425	P	1.5
4	☐	625.000	634.951	3687266.18	0.1078	P	0.8
5	☐	1250.000	1262.708	7288744.87	0.2144	A	2.5
6	☐	2500.000	2498.169	14649931.23	0.4242	A	0.1
7	☐	5000.000	4996.474	28979447.87	0.8485	A	0.8
8	☐			16988.50	0.0005	P	1.2

$$y = 1.6981E-004 * x + 6.9048E-006$$

$$R = 1.0000$$

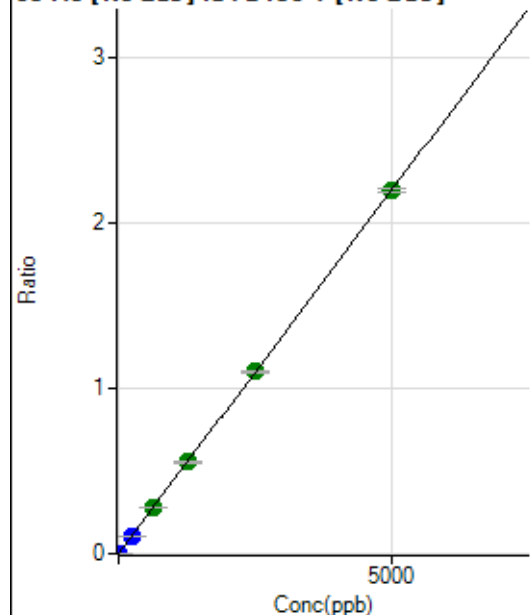
$$DL = 0.005362$$

$$BEC = 0.04066$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	580.60	0.0000	P	25.2
2	☐	5.000	5.515	85403.00	0.0024	P	1.0
3	☐	250.000	248.860	3874398.83	0.1094	P	1.0
4	☐	625.000	630.417	9472550.12	0.2770	A	0.9
5	☐	1250.000	1258.589	18795795.04	0.5530	A	3.3
6	☐	2500.000	2507.629	38048772.73	1.1018	A	0.6
7	☐	5000.000	4993.417	74935221.81	2.1940	A	1.2
8	☐			42121.77	0.0013	P	2.1

$$y = 4.3938E-004 * x + 1.5050E-005$$

$$R = 1.0000$$

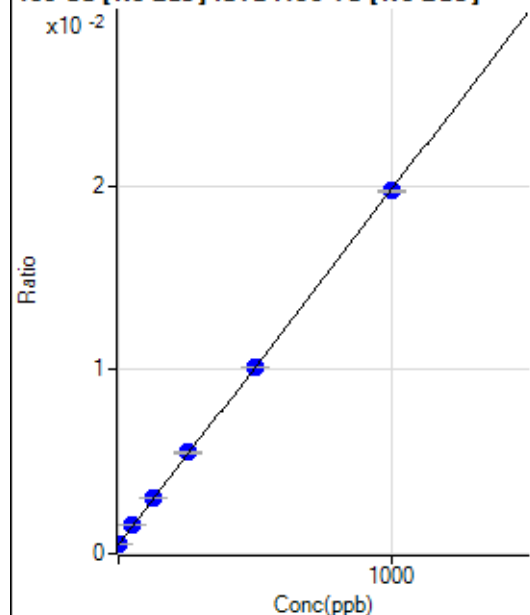
$$DL = 0.02589$$

$$BEC = 0.03425$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16257.15	0.0005	P	0.6
2	☐	1.000	2.988	16682.69	0.0005	P	2.4
3	☐	50.000	54.456	47489.27	0.0015	P	2.3
4	☐	125.000	132.301	93142.53	0.0030	P	0.4
5	☐	250.000	259.925	168571.32	0.0055	P	2.4
6	☐	500.000	500.292	313718.32	0.0101	P	0.7
7	☐	1000.000	996.236	595881.24	0.0197	P	0.7
8	☐			15158.78	0.0006	P	1.7

$$y = 1.9294\text{E-}005 * x + 4.9183\text{E-}004$$

$$R = 0.9999$$

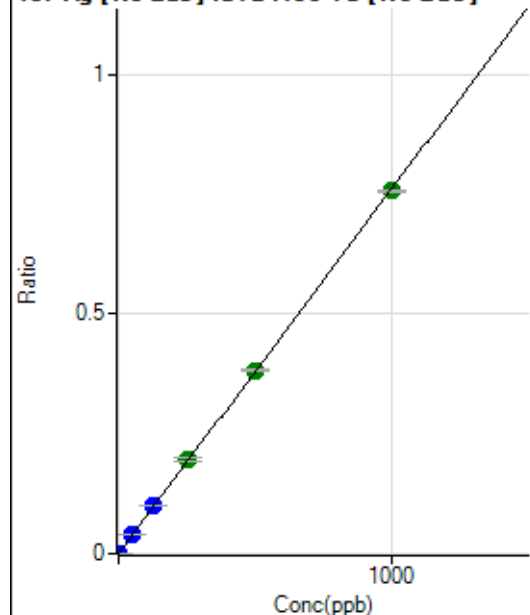
$$DL = 0.436$$

$$BEC = 25.49$$

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	336.13	0.0000	P	15.9
2	☐	1.000	1.604	37333.71	0.0012	P	1.9
3	☐	50.000	54.692	1280529.89	0.0416	P	0.5
4	☐	125.000	132.813	3089279.02	0.1010	P	1.2
5	☐	250.000	259.642	6041741.93	0.1974	A	3.5
6	☐	500.000	501.863	11799361.20	0.3816	A	0.8
7	☐	1000.000	995.446	22875543.22	0.7568	A	0.8
8	☐			5145.59	0.0002	P	1.8

$$y = 7.6025\text{E-}004 * x + 1.0168\text{E-}005$$

$$R = 0.9999$$

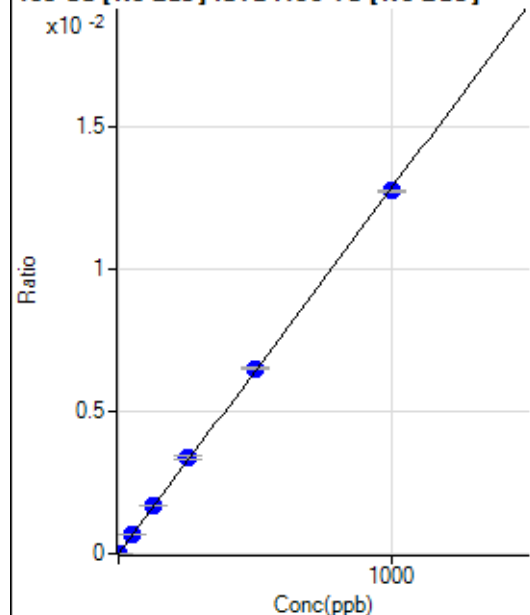
$$DL = 0.00637$$

$$BEC = 0.01337$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	36.4
2	☐	1.000	1.188	508.35	0.0000	P	4.6
3	☐	50.000	53.662	21221.80	0.0007	P	1.9
4	☐	125.000	132.921	52162.90	0.0017	P	1.5
5	☐	250.000	261.467	102606.45	0.0034	P	3.6
6	☐	500.000	506.211	200682.06	0.0065	P	0.9
7	☐	1000.000	992.854	384680.89	0.0127	P	0.9
8	☐			140.28	0.0000	P	2.4

$$y = 1.2817\text{E-}005 * x + 1.5130\text{E-}006$$

R = 0.9999

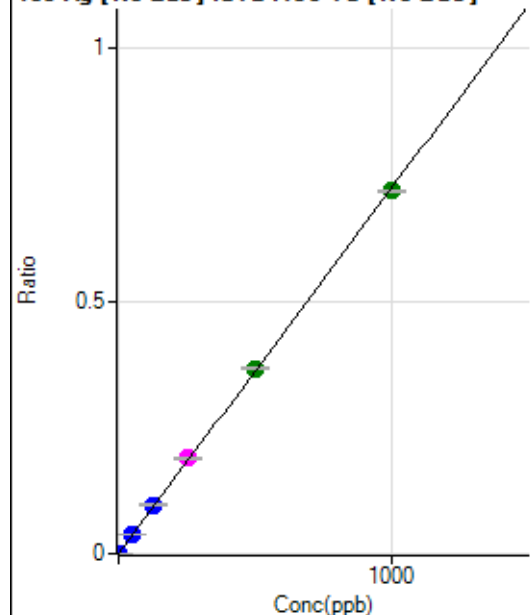
DL = 0.1289

BEC = 0.118

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	72.22	0.0000	P	29.0
2	☐	1.000	1.596	35069.74	0.0012	P	2.9
3	☐	50.000	54.910	1221612.70	0.0397	P	1.0
4	☐	125.000	133.425	2949279.04	0.0964	P	1.8
5	☐	250.000	260.974	5771439.84	0.1886	M	3.3
6	☐	500.000	506.148	11309818.57	0.3657	A	0.9
7	☐	1000.000	992.883	21685421.84	0.7174	A	0.7
8	☐			4776.01	0.0002	P	5.0

$$y = 7.2255\text{E-}004 * x + 2.1848\text{E-}006$$

R = 0.9999

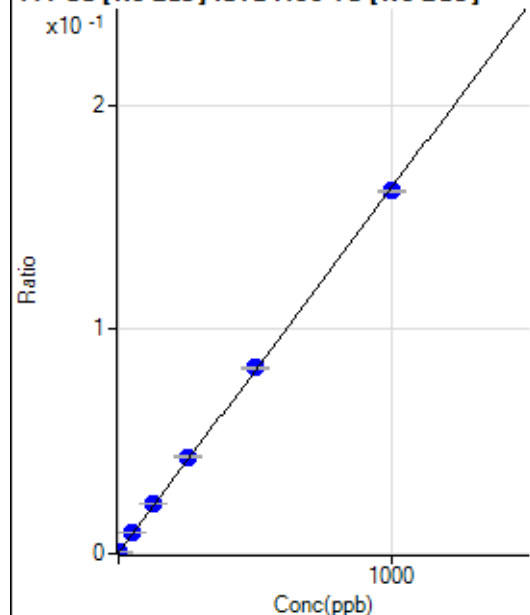
DL = 0.002633

BEC = 0.003024

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11511.68	0.0003	P	0.4
2	☐	1.000	1.286	16932.98	0.0006	P	1.4
3	☐	50.000	54.400	283352.22	0.0092	P	1.1
4	☐	125.000	134.182	678841.22	0.0222	P	0.9
5	☐	250.000	262.706	1319478.43	0.0431	P	3.0
6	☐	500.000	506.942	2562537.68	0.0829	P	0.9
7	☐	1000.000	991.985	4891153.59	0.1618	P	0.7
8	☐			11479.67	0.0004	P	0.9

$$y = 1.6277E-004 * x + 3.4826E-004$$

$$R = 0.9999$$

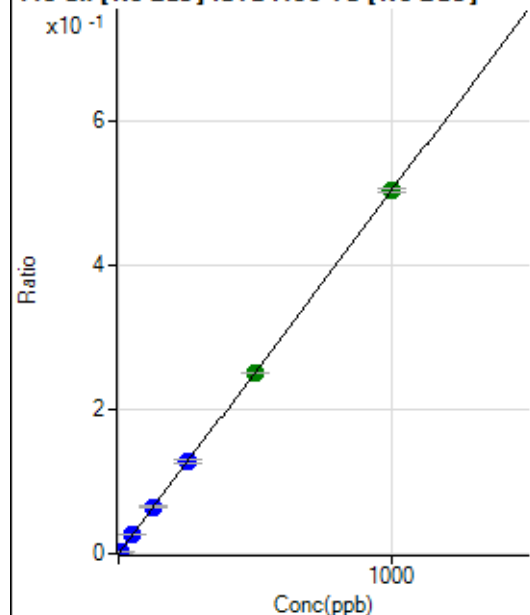
$$DL = 0.02688$$

$$BEC = 2.14$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1680.73	0.0001	P	2.6
2	☐	5.000	5.491	85505.02	0.0028	P	0.4
3	☐	50.000	51.302	796986.70	0.0259	P	0.9
4	☐	125.000	128.701	1984210.46	0.0649	P	1.8
5	☐	250.000	253.942	3915225.39	0.1279	P	3.6
6	☐	500.000	497.525	7749707.64	0.2506	A	0.3
7	☐	1000.000	999.722	15219539.23	0.5035	A	1.0
8	☐			12547.80	0.0005	P	2.4

$$y = 5.0357E-004 * x + 5.0846E-005$$

$$R = 1.0000$$

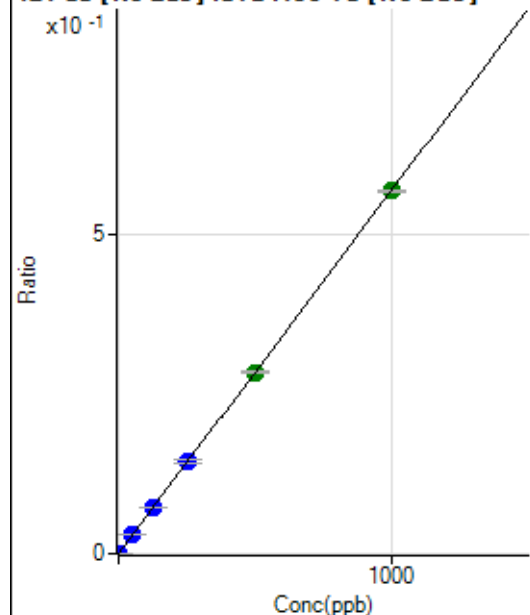
$$DL = 0.007896$$

$$BEC = 0.101$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	23.9
2	☐	2.000	2.068	35830.08	0.0012	P	0.3
3	☐	50.000	50.968	892665.79	0.0290	P	1.1
4	☐	125.000	127.867	2224974.07	0.0727	P	1.7
5	☐	250.000	254.552	4431783.56	0.1448	P	2.9
6	☐	500.000	499.299	8782209.22	0.2840	A	1.1
7	☐	1000.000	998.805	17172648.48	0.5681	A	0.2
8	☐			20571.41	0.0007	P	5.7

$$y = 5.6878\text{E-}004 * x + 3.7812\text{E-}006$$

$$R = 1.0000$$

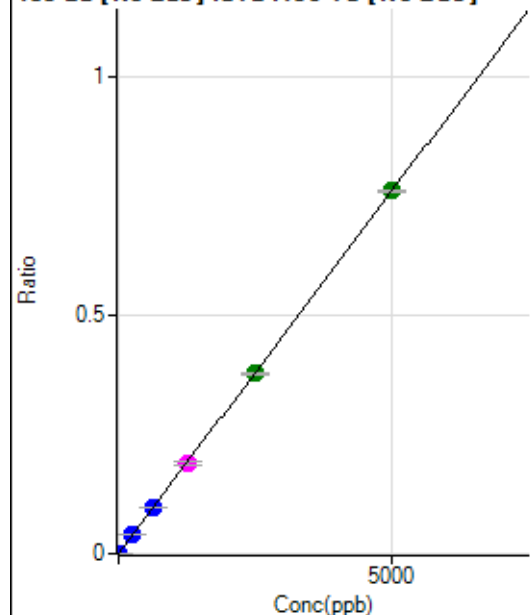
$$DL = 0.004773$$

$$BEC = 0.006648$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.34	0.0000	P	15.4
2	☐	10.000	10.771	49737.52	0.0016	P	2.6
3	☐	250.000	255.989	1196461.99	0.0389	P	1.0
4	☐	625.000	634.219	2945099.33	0.0963	P	1.6
5	☐	1250.000	1250.324	5808988.15	0.1898	M	3.1
6	☐	2500.000	2482.406	11652438.02	0.3768	A	1.0
7	☐	5000.000	5007.263	22975651.21	0.7601	A	0.7
8	☐			38496.06	0.0014	P	2.8

$$y = 1.5179\text{E-}004 * x + 3.2775\text{E-}006$$

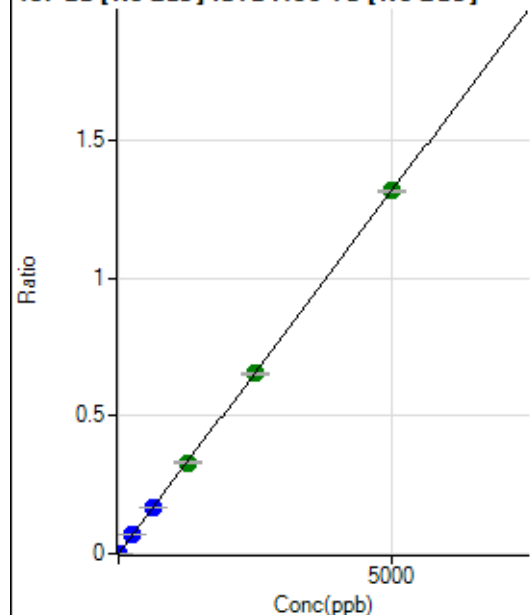
$$R = 1.0000$$

$$DL = 0.009961$$

$$BEC = 0.02159$$

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	144.45	0.0000	P	48.4
2	☐	10.000	10.918	87246.99	0.0029	P	1.8
3	☐	250.000	255.627	2068431.62	0.0672	P	1.4
4	☐	625.000	636.709	5118912.40	0.1673	P	1.6
5	☐	1250.000	1250.960	10063148.75	0.3288	A	2.7
6	☐	2500.000	2490.169	20237516.25	0.6544	A	1.1
7	☐	5000.000	5002.929	39743285.26	1.3148	A	0.7
8	☐			67347.29	0.0024	P	1.2

$$y = 2.6280E-004 * x + 4.3709E-006$$

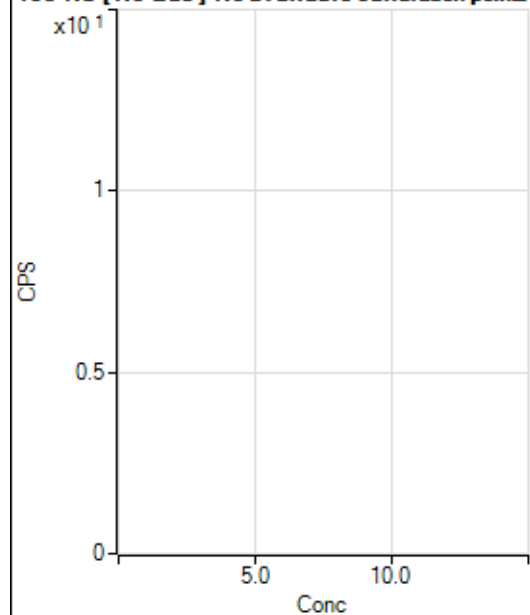
$$R = 1.0000$$

$$DL = 0.02417$$

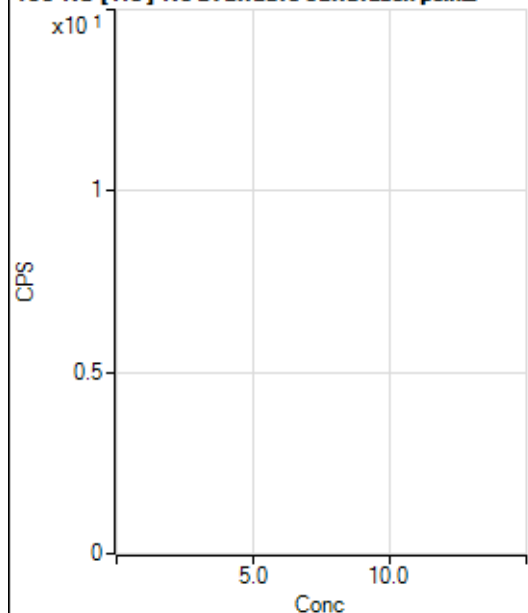
$$BEC = 0.01663$$

Weight: <None>

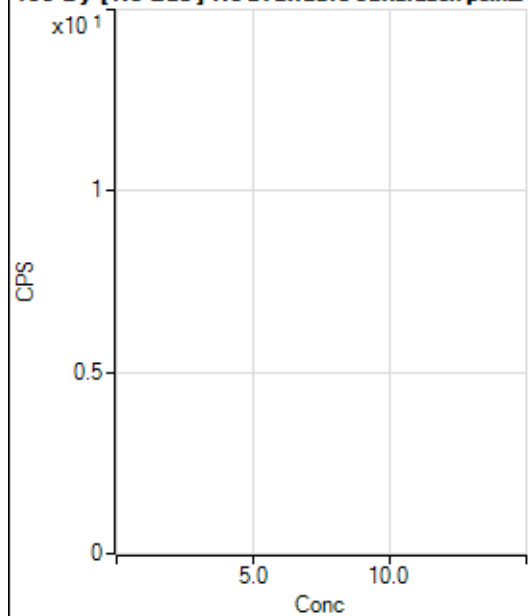
Min Conc: 0

150 Nd [No Gas] No available calibration points

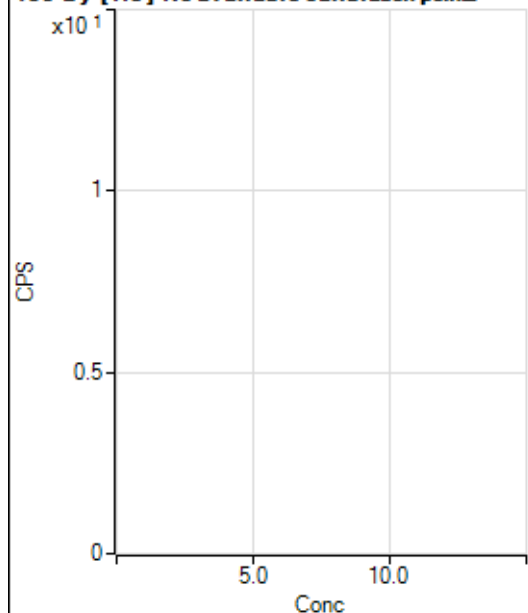
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6.67		P	100.
2	☐			24.44		P	41.7
3	☐			173.34		P	16.8
4	☐			297.79		P	30.2
5	☐			628.93		P	11.4
6	☐			1228.99		P	7.2
7	☐			2220.25		P	5.3
8	☐			204.45		P	18.0

150 Nd [He] No available calibration points

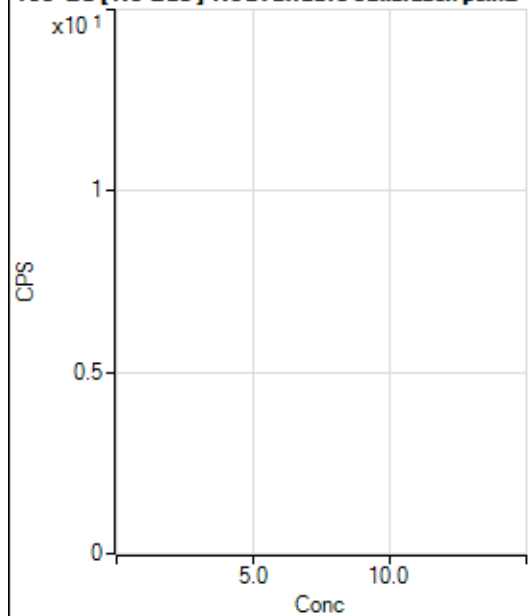
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	21.6
2	☐			4.45		P	86.6
3	☐			10.00		P	33.3
4	☐			36.67		P	24.0
5	☐			57.78		P	27.3
6	☐			74.44		P	15.7
7	☐			147.78		P	15.8
8	☐			66.67		P	22.9

156 Dy [No Gas] No available calibration points

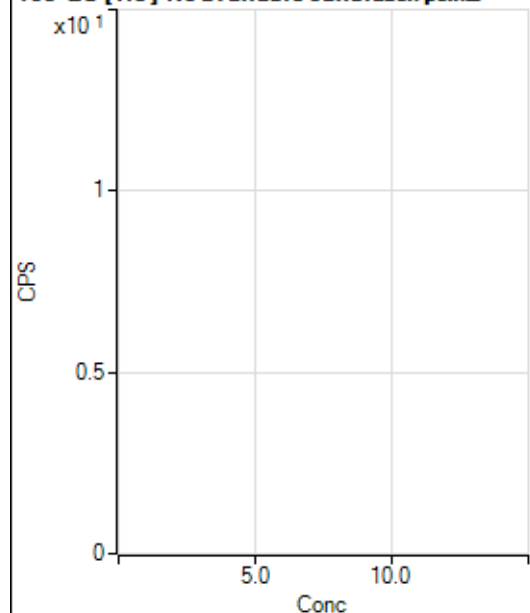
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	12.5
2	☐			33.34		P	66.1
3	☐			63.89		P	82.8
4	☐			113.90		P	15.2
5	☐			222.24		P	14.2
6	☐			363.91		P	8.7
7	☐			688.94		P	11.2
8	☐			1166.77		P	8.9

156 Dy [He] No available calibration points

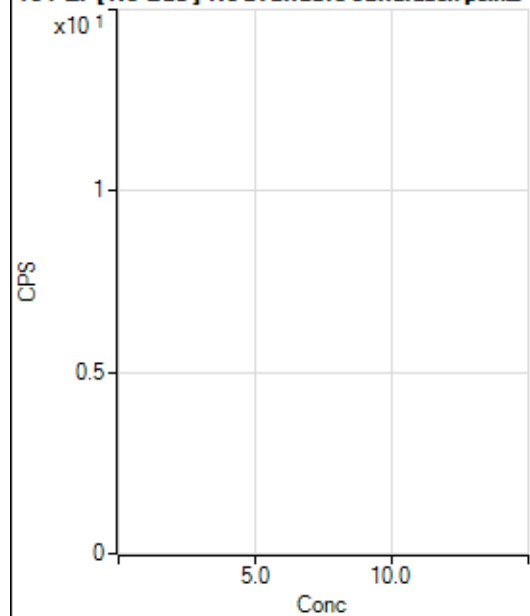
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			28.89		P	17.6
2	☐			31.11		P	27.0
3	☐			46.67		P	7.1
4	☐			88.89		P	22.6
5	☐			152.23		P	12.1
6	☐			284.45		P	13.0
7	☐			532.24		P	4.2
8	☐			550.02		P	1.6

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

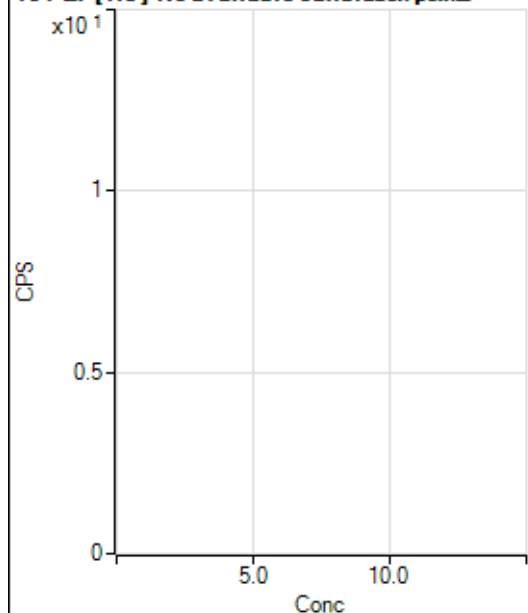
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			227.79		P	60.4
2	☐			241.68		P	24.1
3	☐			244.46		P	12.0
4	☐			250.01		P	12.0
5	☐			363.91		P	21.6
6	☐			391.69		P	12.9
7	☐			575.04		P	7.7
8	☐			1475.14		P	4.0

160 Gd [He] No available calibration points

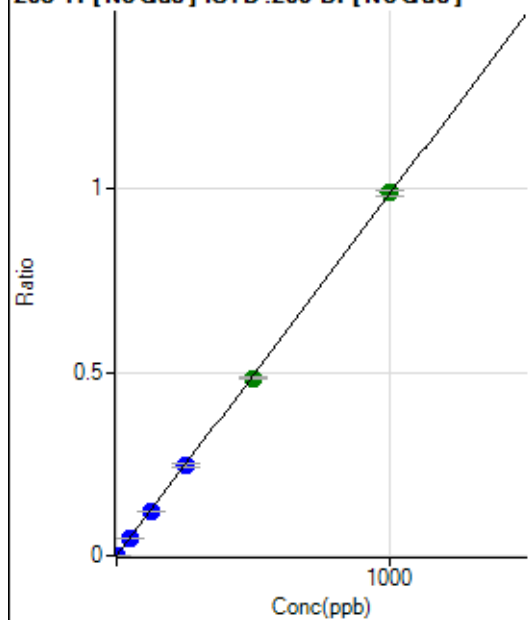
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			414.46		P	5.7
2	☐			448.90		P	5.6
3	☐			442.24		P	9.3
4	☐			432.24		P	12.1
5	☐			453.35		P	12.1
6	☐			494.46		P	11.8
7	☐			525.57		P	4.0
8	☐			981.16		P	3.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	19.5
2	☐			169.45		P	15.8
3	☐			147.23		P	22.9
4	☐			166.68		P	18.0
5	☐			177.79		P	21.7
6	☐			202.79		P	25.1
7	☐			236.12		P	20.1
8	☐			305.57		P	10.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			71.11		P	17.7
2	☐			80.00		P	12.5
3	☐			93.34		P	18.9
4	☐			93.34		P	22.3
5	☐			88.89		P	31.2
6	☐			102.22		P	26.4
7	☐			112.22		P	32.7
8	☐			144.45		P	9.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1347.35	0.0001	P	9.6
2	☐	1.000	0.997	19167.31	0.0010	P	1.8
3	☐	50.000	49.356	893613.56	0.0487	P	0.4
4	☐	125.000	123.511	2202163.74	0.1216	P	1.0
5	☐	250.000	249.855	4403338.60	0.2460	P	3.1
6	☐	500.000	492.193	8624523.89	0.4846	A	0.1
7	☐	1000.000	1004.158	16709777.46	0.9885	A	1.5
8	☐			4726.07	0.0003	P	5.1

$$y = 9.8438E-004 * x + 6.8442E-005$$

$$R = 1.0000$$

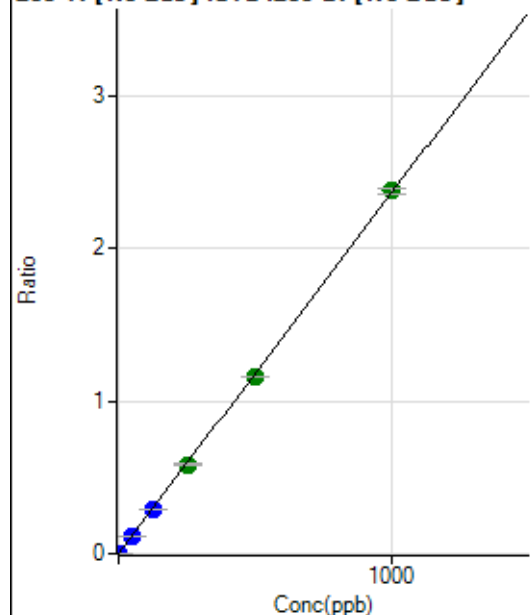
$$DL = 0.02004$$

$$BEC = 0.06953$$

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	3022.69	0.0002	P	7.0
2	☐	1.000	1.006	46206.14	0.0025	P	0.8
3	☐	50.000	49.083	2132992.67	0.1161	P	0.0
4	☐	125.000	123.967	5305260.19	0.2931	P	1.7
5	☐	250.000	247.170	10456699.10	0.5842	A	2.8
6	☐	500.000	489.759	20600198.55	1.1574	A	0.1
7	☐	1000.000	1006.003	40184019.65	2.3773	A	1.3
8	☐			11027.26	0.0008	P	6.1

$$y = 0.0024 * x + 1.5352E-004$$

R = 0.9999

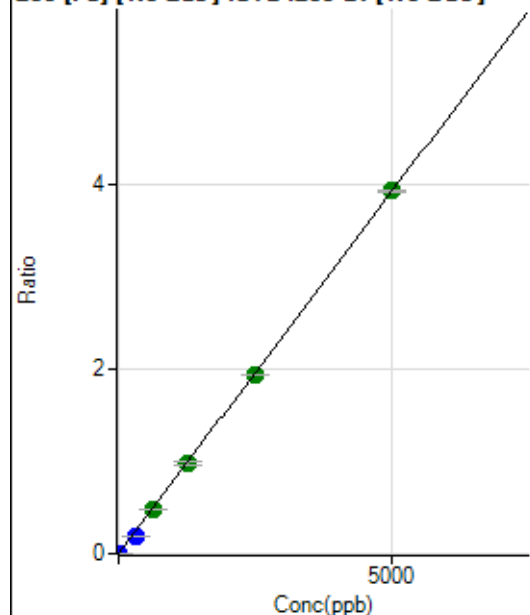
DL = 0.01356

BEC = 0.06497

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1377.89	0.0001	P	3.6
2	☐	1.000	1.016	15787.51	0.0009	P	3.2
3	☐	321.500	249.010	3579478.73	0.1949	P	0.5
4	☐	625.000	620.021	8782472.82	0.4852	A	1.3
5	☐	1250.000	1251.301	17523872.15	0.9791	A	3.0
6	☐	2500.000	2478.026	34507767.67	1.9388	A	0.6
7	☐	5000.000	5015.945	66340685.28	3.9245	A	0.7
8	☐			55229.65	0.0039	P	2.1

$$y = 7.8239E-004 * x + 6.9955E-005$$

R = 0.9999

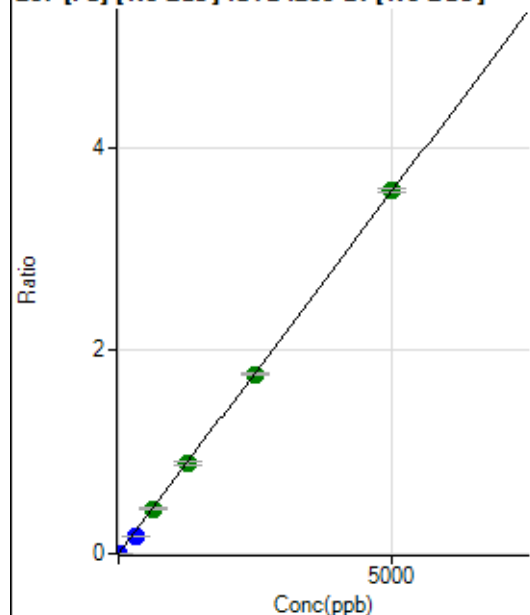
DL = 0.009623

BEC = 0.08941

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	1263.06	0.0001	P	8.8
2	☐	1.000	1.000	14178.27	0.0008	P	1.7
3	☐	321.500	248.684	3254974.32	0.1772	P	0.5
4	☐	625.000	620.664	8004538.60	0.4422	A	1.8
5	☐	1250.000	1245.260	15878407.07	0.8872	A	3.2
6	☐	2500.000	2484.380	31500352.33	1.7699	A	0.7
7	☐	5000.000	5014.219	60382134.68	3.5721	A	1.0
8	☐			49830.91	0.0035	P	1.2

$$y = 7.1238\text{E-}004 * x + 6.4096\text{E-}005$$

$$R = 0.9999$$

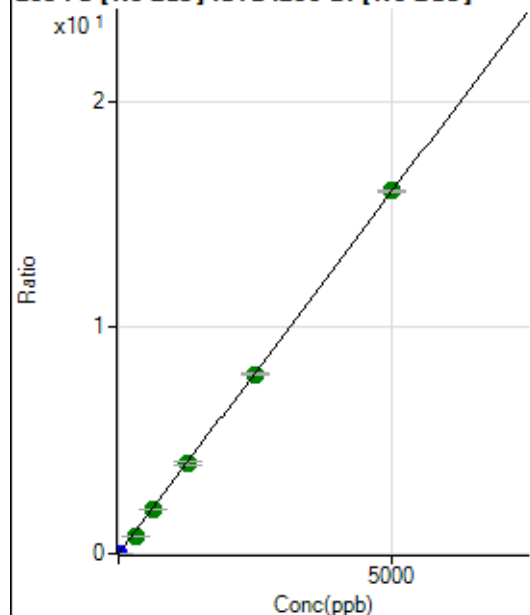
$$DL = 0.02366$$

$$BEC = 0.08998$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5182.01	0.0003	P	3.0
2	☐	1.000	1.006	63620.13	0.0035	P	0.7
3	☐	321.500	246.605	14501849.17	0.7896	A	0.5
4	☐	625.000	618.227	35823956.53	1.9791	A	1.5
5	☐	1250.000	1246.205	71400569.42	3.9890	A	2.7
6	☐	2500.000	2481.815	141387107.7	7.9439	A	0.4
7	☐	5000.000	5015.704	271389124.1	16.0542	A	0.6
8	☐			223947.38	0.0157	P	1.2

$$y = 0.0032 * x + 2.6306\text{E-}004$$

$$R = 0.9999$$

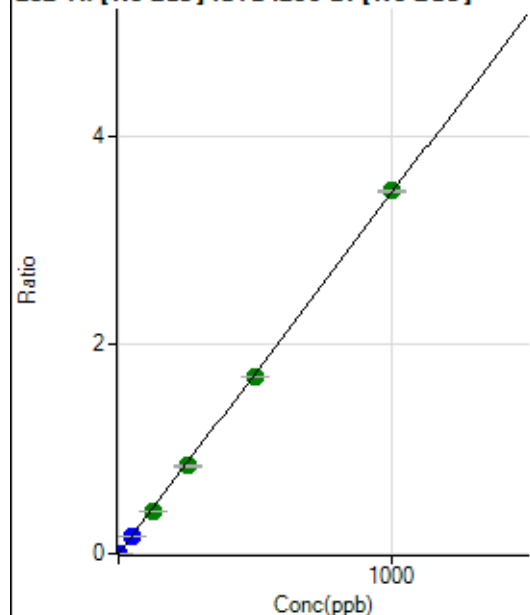
$$DL = 0.007465$$

$$BEC = 0.08219$$

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	2150.25	0.0001	P	3.0
2	☐	1.000	0.707	46546.30	0.0025	P	2.8
3	☐	50.000	46.135	2926708.92	0.1594	P	0.7
4	☐	125.000	118.261	7391083.32	0.4083	A	1.6
5	☐	250.000	243.774	15061867.12	0.8415	A	3.2
6	☐	500.000	491.835	30216415.95	1.6978	A	0.7
7	☐	1000.000	1006.675	58742609.18	3.4748	A	0.2
8	☐			16279.10	0.0011	P	3.3

$$y = 0.0035 * x + 1.0915E-004$$

$$R = 0.9999$$

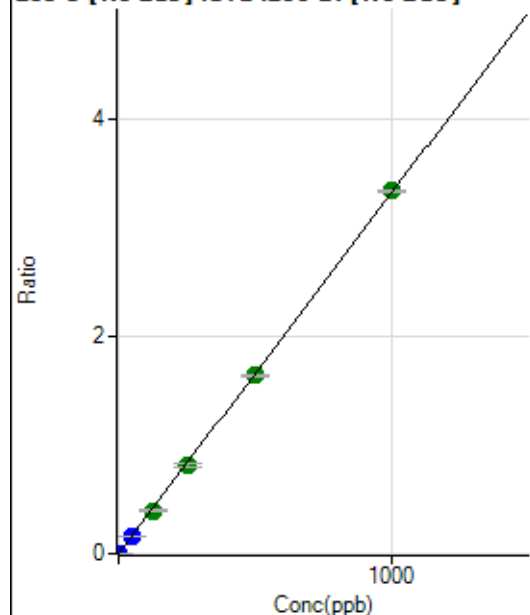
$$DL = 0.002835$$

$$BEC = 0.03162$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2467.01	0.0001	P	4.7
2	☐	1.000	0.971	61078.02	0.0033	P	2.5
3	☐	50.000	47.678	2906111.24	0.1582	P	0.8
4	☐	125.000	118.603	7121176.85	0.3934	A	2.2
5	☐	250.000	244.368	14505441.90	0.8105	A	3.4
6	☐	500.000	493.119	29106043.71	1.6354	A	0.5
7	☐	1000.000	1005.764	56384171.05	3.3353	A	0.3
8	☐			8097.36	0.0006	P	0.9

$$y = 0.0033 * x + 1.2528E-004$$

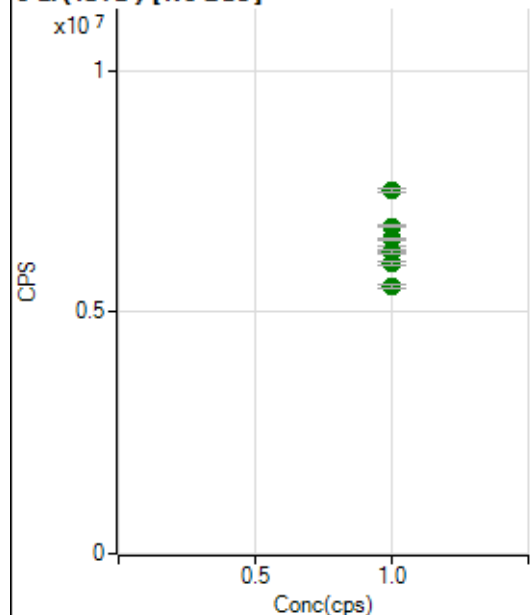
$$R = 0.9999$$

$$DL = 0.005327$$

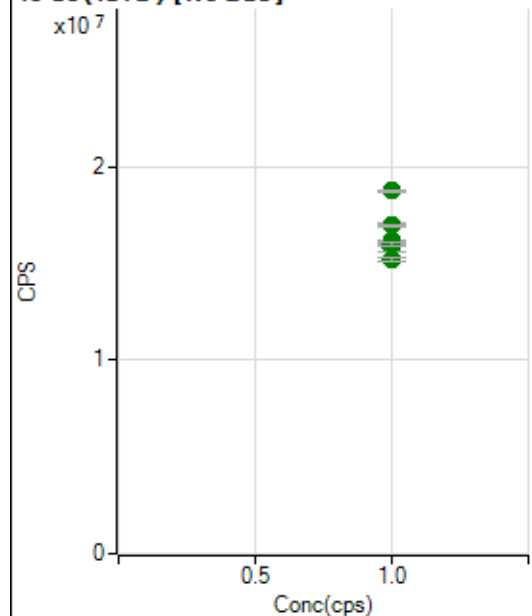
$$BEC = 0.03778$$

Weight: <None>

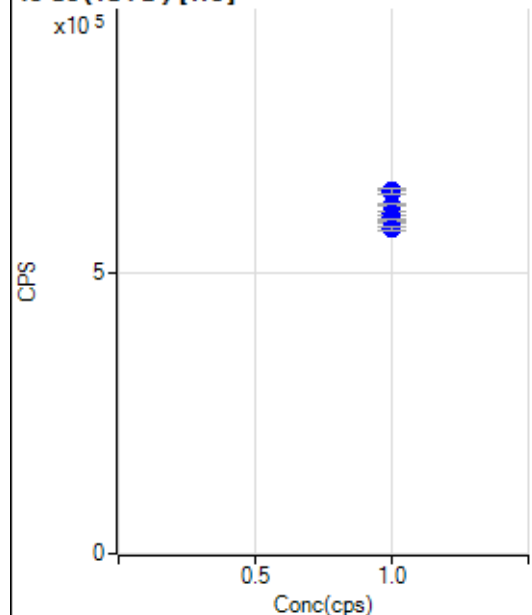
Min Conc: 0

6 Li (ISTD) [No Gas]

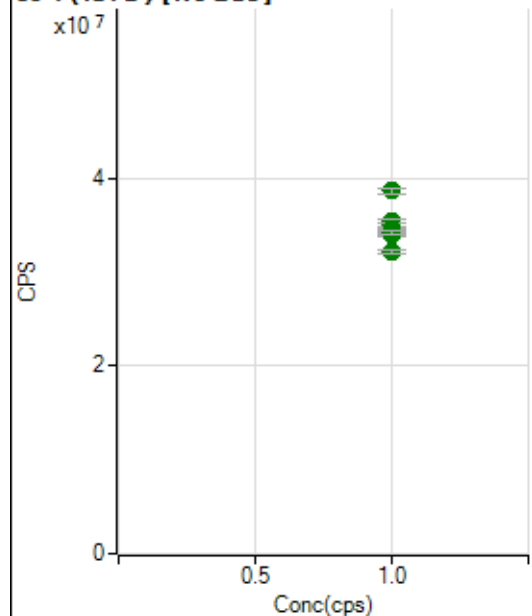
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7509338.71		A	1.0
2	☐	1.000		6780119.55		A	0.8
3	☐	1.000		6767605.73		A	0.6
4	☐	1.000		6508630.87		A	0.5
5	☐	1.000		6308257.33		A	1.6
6	☐	1.000		6241577.69		A	1.4
7	☐	1.000		6001925.05		A	1.2
8	☐	1.000		5543354.92		A	1.2

45 Sc (ISTD) [No Gas]

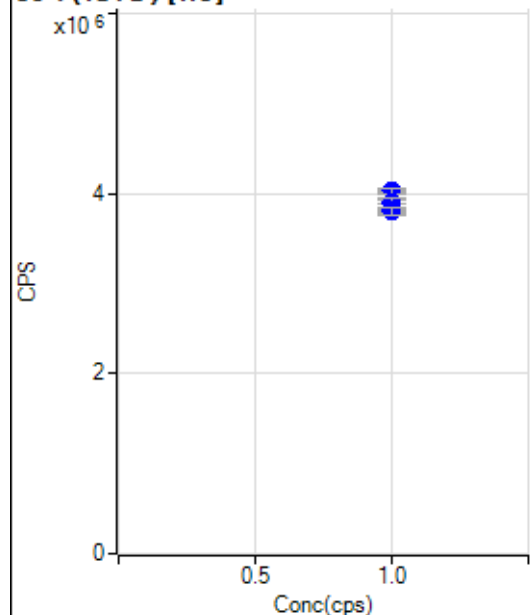
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18766460.32		A	0.4
2	☐	1.000		17055651.77		A	0.4
3	☐	1.000		16962127.98		A	0.6
4	☐	1.000		16207850.89		A	0.2
5	☐	1.000		15845851.05		A	2.5
6	☐	1.000		16162949.49		A	0.7
7	☐	1.000		16047631.96		A	1.4
8	☐	1.000		15211893.92		A	1.5

45 Sc (ISTD) [He]

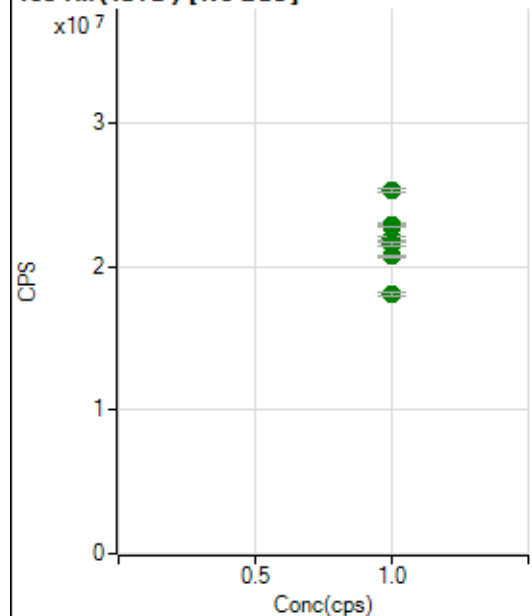
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		644009.31		P	1.1
2	☐	1.000		646081.14		P	1.9
3	☐	1.000		620577.17		P	0.7
4	☐	1.000		606504.37		P	1.5
5	☐	1.000		592938.36		P	1.1
6	☐	1.000		598476.74		P	1.0
7	☐	1.000		594427.20		P	0.4
8	☐	1.000		578123.37		P	1.5

89 Y (ISTD) [No Gas]

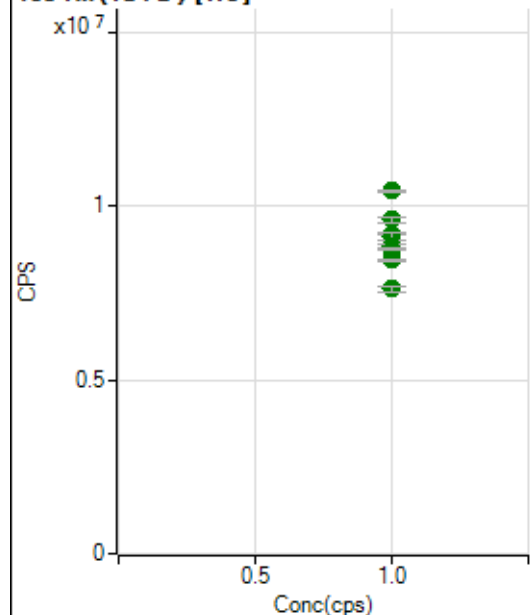
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		38637109.98		A	1.3
2	☐	1.000		35025983.37		A	0.7
3	☐	1.000		35429883.92		A	0.8
4	☐	1.000		34196797.54		A	0.5
5	☐	1.000		34000655.88		A	1.8
6	☐	1.000		34533847.82		A	0.8
7	☐	1.000		34157347.27		A	1.3
8	☐	1.000		32165458.13		A	1.4

89 Y (ISTD) [He]

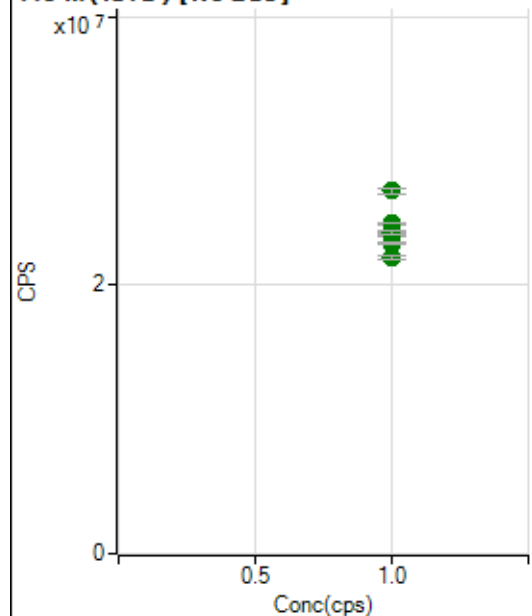
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4026631.89		P	0.7
2	☐	1.000		4024513.55		P	1.3
3	☐	1.000		3901677.27		P	0.8
4	☐	1.000		3889649.07		P	2.5
5	☐	1.000		3801165.57		P	1.4
6	☐	1.000		3826031.58		P	1.0
7	☐	1.000		3819023.66		P	0.8
8	☐	1.000		3797699.46		P	1.9

103 Rh (ISTD) [No Gas]

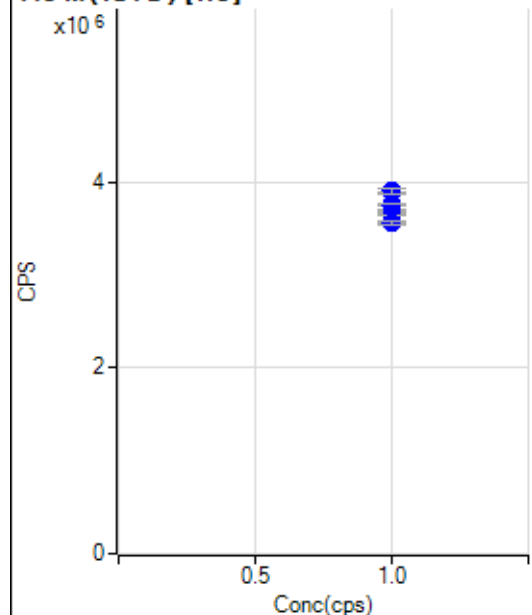
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		25280105.60		A	0.9
2	☐	1.000		22961155.20		A	0.8
3	☐	1.000		22765340.09		A	0.1
4	☐	1.000		21984284.52		A	0.9
5	☐	1.000		21573249.61		A	1.5
6	☐	1.000		21581518.36		A	0.8
7	☐	1.000		20741223.73		A	0.8
8	☐	1.000		18129596.41		A	1.6

103 Rh (ISTD) [He]

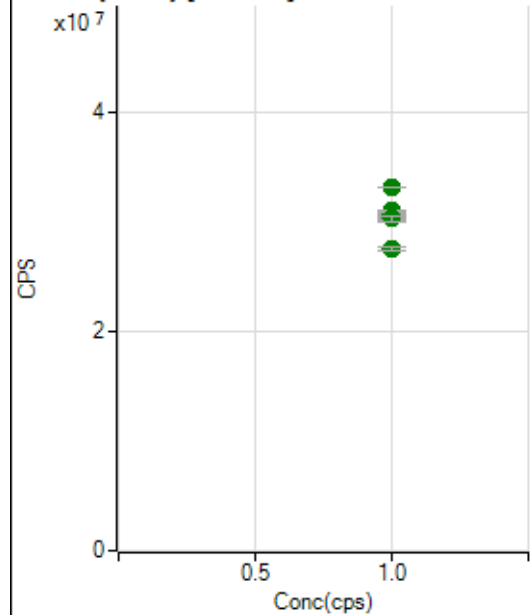
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10427229.64		A	0.7
2	☐	1.000		9603741.87		A	1.6
3	☐	1.000		9177085.00		A	0.3
4	☐	1.000		9115986.32		A	2.4
5	☐	1.000		8854128.55		A	1.2
6	☐	1.000		8756245.56		A	0.6
7	☐	1.000		8431467.86		A	0.4
8	☐	1.000		7605741.62		A	1.8

115 In (ISTD) [No Gas]

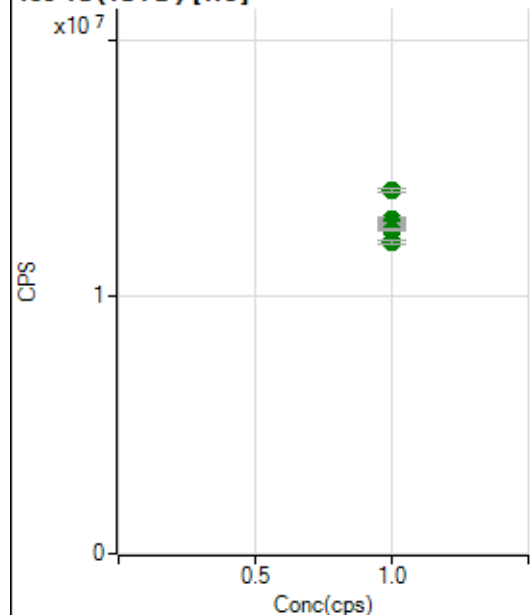
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27015944.95		A	1.4
2	☐	1.000		24575686.91		A	0.9
3	☐	1.000		24648305.97		A	0.2
4	☐	1.000		23937918.43		A	0.5
5	☐	1.000		23829810.03		A	1.5
6	☐	1.000		23910768.74		A	1.1
7	☐	1.000		23091363.93		A	0.7
8	☐	1.000		22009724.29		A	1.4

115 In (ISTD) [He]

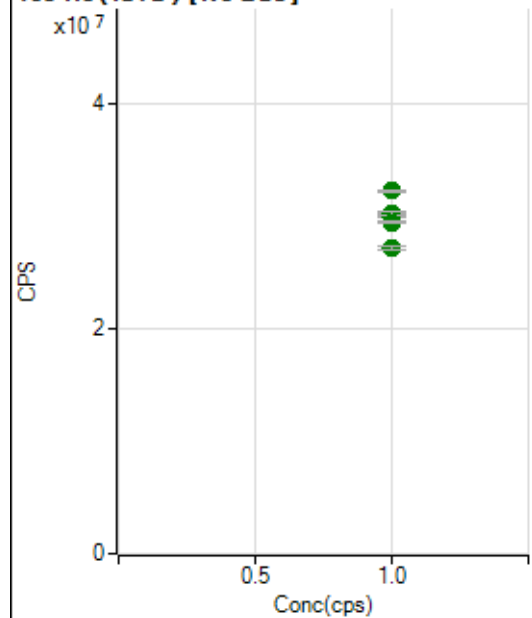
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3886808.58		P	0.6
2	☐	1.000		3908337.31		P	1.9
3	☐	1.000		3765403.75		P	0.4
4	☐	1.000		3743633.65		P	2.0
5	☐	1.000		3675432.48		P	0.8
6	☐	1.000		3649026.72		P	0.2
7	☐	1.000		3563329.81		P	0.4
8	☐	1.000		3563902.73		P	1.4

159 Tb (ISTD) [No Gas]

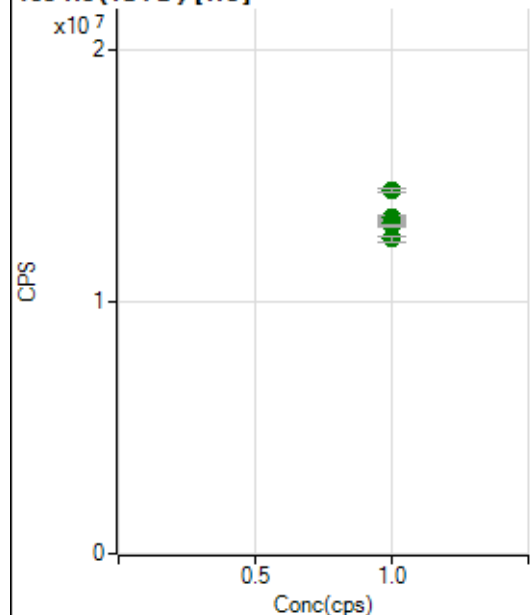
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		33054565.90		A	0.1
2	☐	1.000		30367310.94		A	1.5
3	☐	1.000		30790347.32		A	0.7
4	☐	1.000		30594737.60		A	0.9
5	☐	1.000		30622662.04		A	2.4
6	☐	1.000		30926286.48		A	1.0
7	☐	1.000		30228558.99		A	1.2
8	☐	1.000		27558419.31		A	1.5

159 Tb (ISTD) [He]

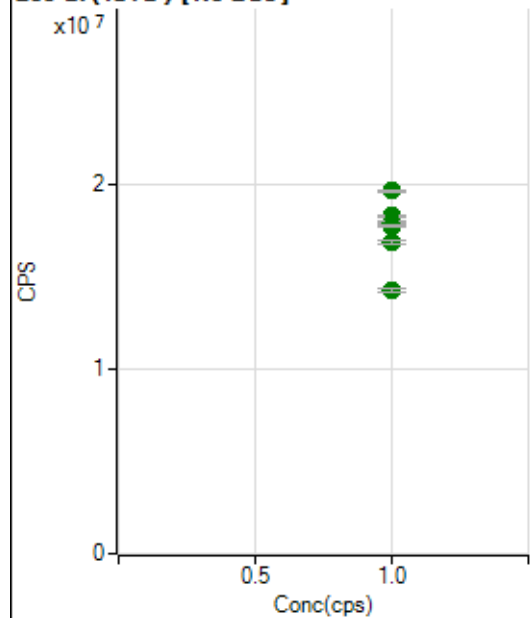
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14111932.57		A	1.0
2	☐	1.000		12948163.14		A	0.3
3	☐	1.000		12747024.95		A	0.8
4	☐	1.000		12999957.03		A	1.7
5	☐	1.000		12876505.92		A	1.7
6	☐	1.000		12833948.98		A	0.7
7	☐	1.000		12581943.42		A	0.4
8	☐	1.000		12118993.02		A	1.8

165 Ho (ISTD) [No Gas]

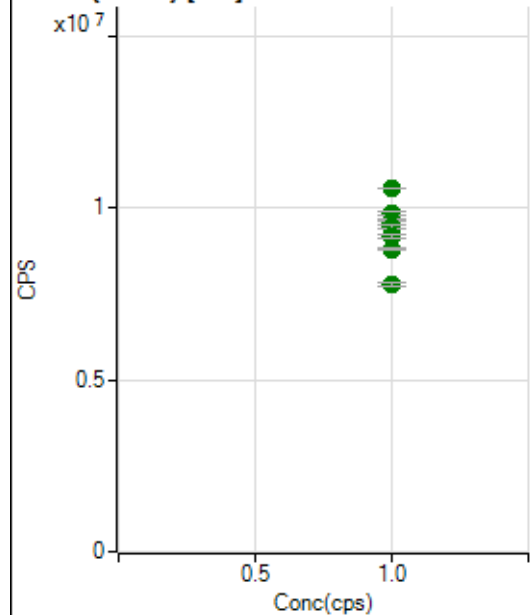
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		32305600.37		A	0.8
2	☐	1.000		29611521.84		A	0.5
3	☐	1.000		30030995.81		A	0.8
4	☐	1.000		30010648.59		A	0.6
5	☐	1.000		29961785.39		A	2.1
6	☐	1.000		30382006.58		A	1.1
7	☐	1.000		29530130.52		A	1.0
8	☐	1.000		27222684.98		A	1.1

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14385731.45		A	1.0
2	☐	1.000		13255442.58		A	1.1
3	☐	1.000		13090366.47		A	1.3
4	☐	1.000		13353545.91		A	1.5
5	☐	1.000		13217730.78		A	1.2
6	☐	1.000		13137191.75		A	1.1
7	☐	1.000		13007542.31		A	0.8
8	☐	1.000		12471689.40		A	1.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19696181.65		A	0.9
2	☐	1.000		18260264.86		A	0.2
3	☐	1.000		18366708.34		A	0.5
4	☐	1.000		18103962.65		A	1.3
5	☐	1.000		17906035.71		A	2.1
6	☐	1.000		17798192.65		A	0.5
7	☐	1.000		16905223.50		A	1.6
8	☐	1.000		14268018.95		A	1.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10541223.18		A	0.1
2	☐	1.000		9818023.39		A	1.3
3	☐	1.000		9555364.51		A	1.2
4	☐	1.000		9633941.10		A	1.0
5	☐	1.000		9438870.55		A	1.5
6	☐	1.000		9173585.07		A	1.1
7	☐	1.000		8799136.67		A	0.7
8	☐	1.000		7785553.36		A	1.4

US EPA Tune Check Sample Report

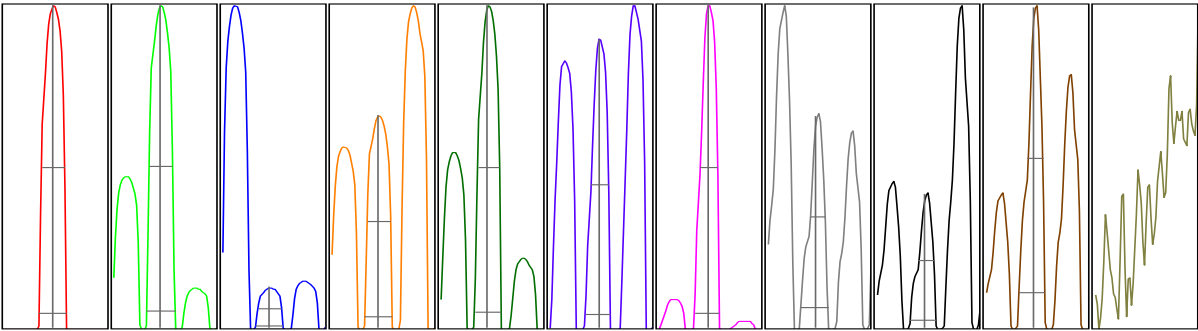
Batch Folder D:\ICP-MS Data\P7021420TEST.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	21616	0.50	5.00	
24	341159	0.50	5.00	
25	44142	0.39	5.00	
26	51418	0.54	5.00	
59	204624	0.29	5.00	
113	24088	0.94	5.00	
115	287194	0.62	5.00	
206	58363	0.43	5.00	
207	54467	0.83	5.00	
208	126180	0.47	5.00	
220	80	2.56		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	21435	21608	21722	21668	21645
24	339093	341355	343319	342156	339870
25	43898	44266	44269	44260	44017
26	50939	51509	51661	51534	51447
59	203839	204874	204702	205396	204308
113	23768	24002	24238	24358	24071
115	284989	288052	288268	289037	285623
206	57958	58332	58562	58587	58376
207	53746	54810	54816	54651	54312
208	125146	126532	126379	126622	126222
220	83	78	81	78	80

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	34137	8.95	8.9 - 9.1		0.788	0.900	
24	531856	23.90	23.9 - 24.1		0.827	0.900	
25	68288	24.90	24.9 - 25.1		0.790	0.900	
26	79925	25.90	25.9 - 26.1		0.789	0.900	
59	342710	58.90	58.9 - 59.1		0.779	0.900	
113	46345	113.00	112.9 - 113.1		0.726	0.900	
115	555686	115.00	114.9 - 115.1		0.723	0.900	
206	119245	205.95	205.9 - 206.1		0.780	0.900	
207	109866	206.95	206.9 - 207.1		0.737	0.900	
208	263400	207.95	207.9 - 208.1		0.745	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.3	V	Deflect	12.8	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	45977	0.57	
89	42892	0.46	
205	46979	0.45	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	45945	45646	45945	46385	45968
89	42845	42677	42917	43209	42811
205	47099	46806	46867	47297	46826

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	6.6	V	Deflect	2.2	V
Extract 2	-150.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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			