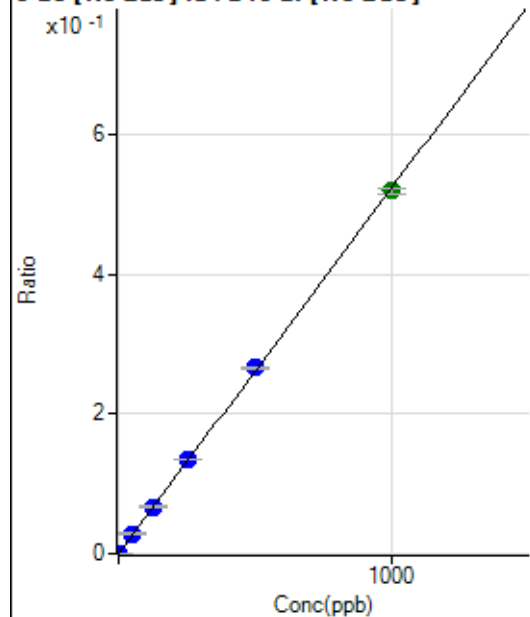


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8032222-MS.b\
Analysis File: P8032222-MS.batch.bin
DA Date-Time: 2022-03-22 17:25:59
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2022-03-22 14:45:41
2	006CALS.d	S02	2022-03-22 14:54:56
3	007CALS.d	S03	2022-03-22 14:58:00
4	008CALS.d	S04	2022-03-22 15:01:06
5	009CALS.d	S05	2022-03-22 15:04:09
6	010CALS.d	S06	2022-03-22 15:07:15
7	011CALS.d	S07	2022-03-22 15:10:19
8	012CALS.d	S08	2022-03-22 15:13:25

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.99	0.0000	P	17.1
2	☐	1.000	1.081	1872.42	0.0006	P	4.9
3	☐	50.000	54.636	87191.47	0.0286	P	7.0
4	☐	125.000	128.752	214797.25	0.0674	P	2.3
5	☐	250.000	258.077	451640.91	0.1352	P	1.4
6	☐	500.000	509.100	862575.03	0.2666	P	1.4
7	☐	1000.000	992.730	1749874.24	0.5199	A	1.3
8	☐			599.25	0.0002	P	21.1

$$y = 5.2373\text{E-}004 * x + 8.5897\text{E-}006$$

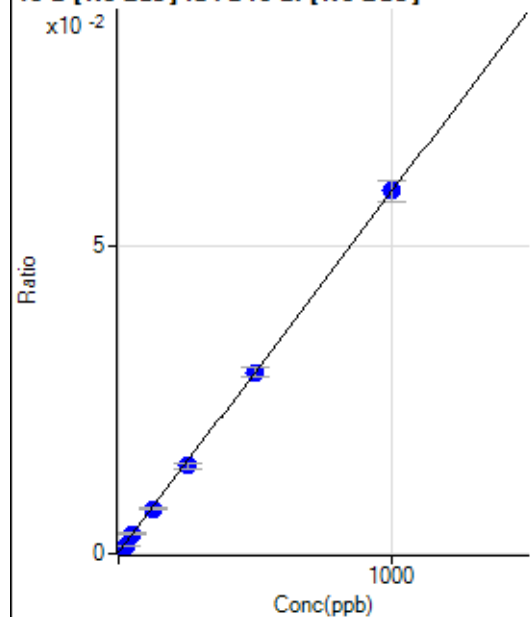
$$R = 0.9999$$

$$DL = 0.008416$$

$$BEC = 0.0164$$

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	622.56	0.0002	P	3.8
2	☐	25.000	20.045	4455.15	0.0014	P	1.3
3	☐	50.000	51.376	9734.04	0.0032	P	13.6
4	☐	125.000	121.191	23286.86	0.0073	P	6.2
5	☐	250.000	240.458	47799.93	0.0143	P	7.6
6	☐	500.000	499.989	95609.02	0.0296	P	4.9
7	☐	1000.000	1002.922	198808.87	0.0591	P	5.8
8	☐			43163.34	0.0133	P	8.0

$$y = 5.8723\text{E-}005 * x + 1.9046\text{E-}004$$

$$R = 0.9999$$

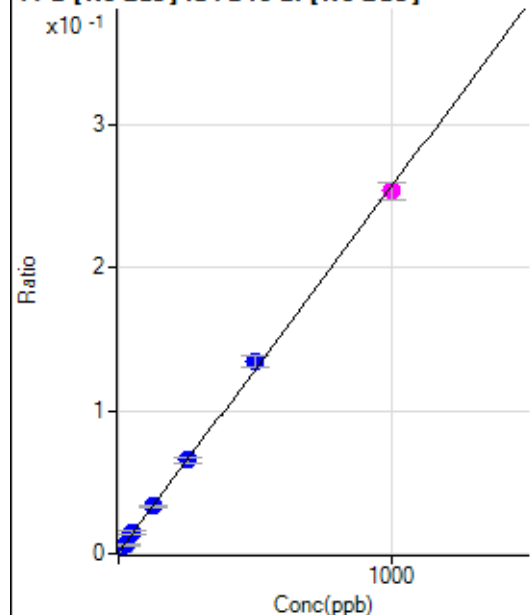
$$DL = 0.3745$$

$$BEC = 3.243$$

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	2813.73	0.0009	P	1.9
2	☐	25.000	21.106	20371.74	0.0063	P	8.3
3	☐	50.000	54.282	44731.79	0.0147	P	13.7
4	☐	125.000	127.159	106352.30	0.0334	P	4.6
5	☐	250.000	252.076	218077.69	0.0653	P	7.3
6	☐	500.000	521.997	434481.55	0.1343	P	6.8
7	☐	1000.000	988.096	852847.36	0.2534	M	4.8
8	☐			196489.38	0.0605	P	8.0

$$y = 2.5562E-004 * x + 8.6081E-004$$

$$R = 0.9996$$

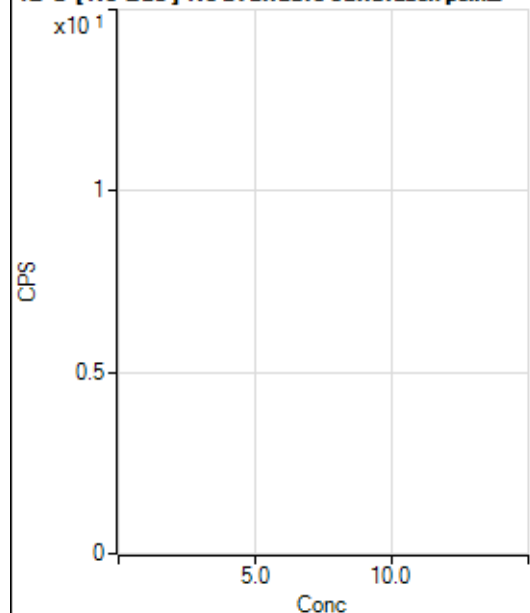
$$DL = 0.1884$$

$$BEC = 3.368$$

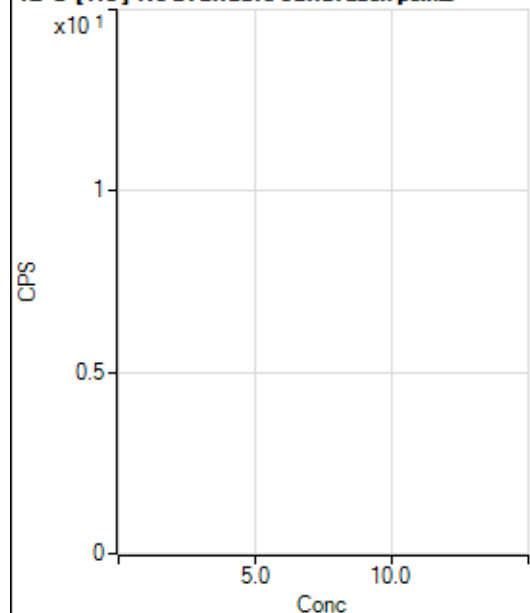
Weight: <None>

Min Conc: 0

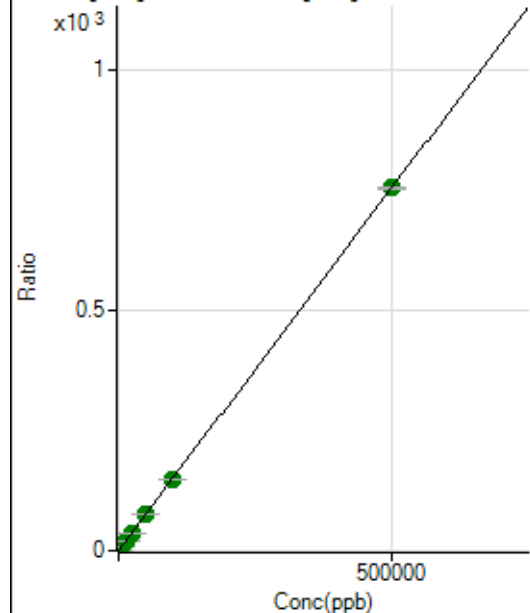
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5671547.09		A	0.2
2	☐			6071197.84		A	1.1
3	☐			6721495.37		A	2.4
4	☐			7354776.21		A	2.6
5	☐			7455367.44		A	3.8
6	☐			8257670.24		A	3.1
7	☐			9552487.37		A	4.2
8	☐			7740473.87		A	3.4

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			74068.72		P	0.2
2	☐			77318.37		P	1.2
3	☐			88400.78		P	1.6
4	☐			98975.50		P	1.0
5	☐			100866.10		P	1.3
6	☐			112237.97		P	0.6
7	☐			135377.91		P	1.3
8	☐			110609.99		P	1.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11760.57	0.0464	P	1.3
2	☐	500.000	465.828	189886.38	0.7483	P	1.2
3	☐	5000.000	4941.784	1929042.04	7.4920	A	2.7
4	☐	12500.000	12598.545	4753081.79	19.0281	A	0.6
5	☐	25000.000	24642.584	9701358.37	37.1744	A	1.6
6	☐	50000.000	49306.430	18751779.24	74.3344	A	0.4
7	☐	100000.00	98651.146	37591783.13	148.6800	A	1.0
8	☐	500000.00	500355.15	189426411.1	753.9109	A	0.7

$$y = 0.0015 * x + 0.0464$$

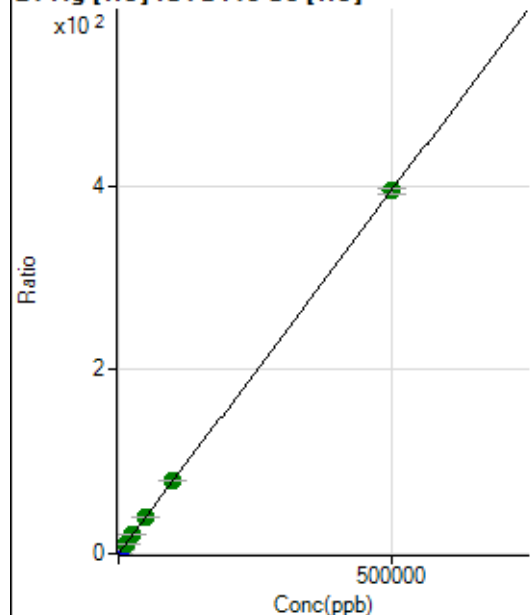
$$R = 1.0000$$

$$DL = 1.247$$

$$BEC = 30.82$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	447.24	0.0018	P	11.0
2	☐	500.000	494.847	99611.80	0.3925	P	0.7
3	☐	5000.000	4974.443	1011861.98	3.9296	P	3.1
4	☐	12500.000	13243.333	2612441.75	10.4588	A	1.4
5	☐	25000.000	25561.577	5267457.67	20.1854	A	2.0
6	☐	50000.000	50344.188	10027176.44	39.7540	A	0.6
7	☐	100000.00	100928.72	20150952.19	79.6960	A	0.6
8	☐	500000.00	499733.43	99136778.61	394.5956	A	1.5

$$y = 7.8961E-004 * x + 0.0018$$

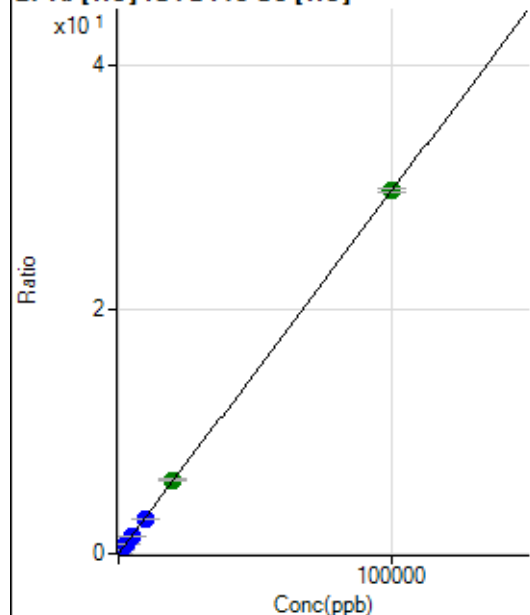
$$R = 1.0000$$

$$DL = 0.7381$$

$$BEC = 2.234$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	94.57	0.0004	P	2.3
2	☐	20.000	18.788	1509.90	0.0059	P	3.0
3	☐	1000.000	971.894	74340.73	0.2887	P	2.1
4	☐	2500.000	2482.031	184018.77	0.7367	P	1.4
5	☐	5000.000	4825.461	373681.87	1.4320	P	2.0
6	☐	10000.000	9602.693	718621.44	2.8493	P	1.3
7	☐	20000.000	20176.731	1513688.06	5.9864	A	2.5
8	☐	100000.00	100013.84	7455248.57	29.6726	A	0.9

$$y = 2.9668E-004 * x + 3.7335E-004$$

$$R = 1.0000$$

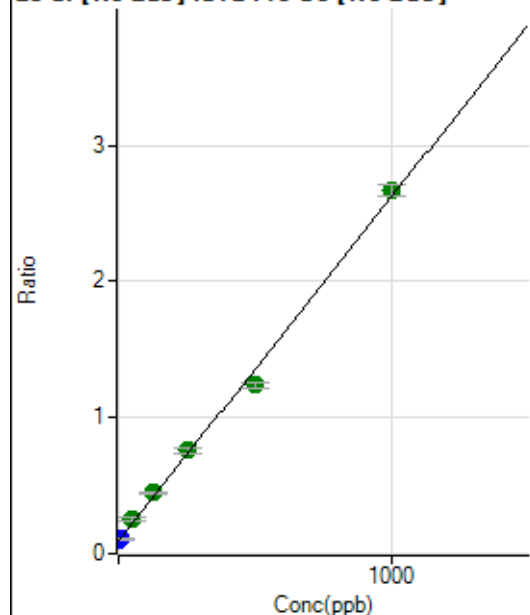
$$DL = 0.0877$$

$$BEC = 1.258$$

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	578672.43	0.0932	P	0.8
2	☐	10.000	5.100	650258.87	0.1061	P	2.8
3	☐	50.000	65.104	1490904.17	0.2578	A	10.5
4	☐	125.000	140.031	2698904.75	0.4472	A	4.7
5	☐	250.000	262.190	4854537.52	0.7560	A	6.2
6	☐	500.000	454.065	7867505.47	1.2411	A	3.1
7	☐	1000.000	1017.335	17165586.32	2.6651	A	3.4
8	☐			1641845.99	0.2558	A	2.2

$$y = 0.0025 * x + 0.0932$$

$$R = 0.9981$$

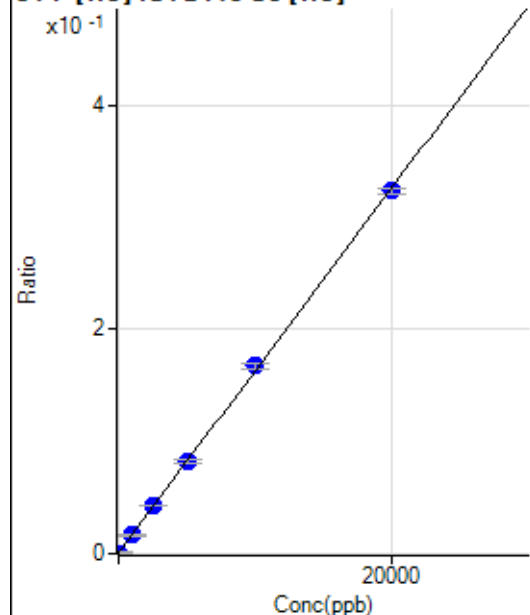
$$DL = 0.9292$$

$$BEC = 36.87$$

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	-5.403	166.67	0.0007	P	35.8
2	☐	0.000	5.403	211.12	0.0008	P	24.8
3	☐	1000.000	960.757	4211.84	0.0164	P	2.1
4	☐	2500.000	2573.799	10632.02	0.0426	P	1.3
5	☐	5000.000	5052.209	21613.93	0.0828	P	3.6
6	☐	10000.000	10244.670	42162.51	0.1672	P	3.1
7	☐	20000.000	19857.350	81765.57	0.3234	P	1.4
8	☐			138.89	0.0006	P	25.8

$$y = 1.6248E-005 * x + 7.4612E-004$$

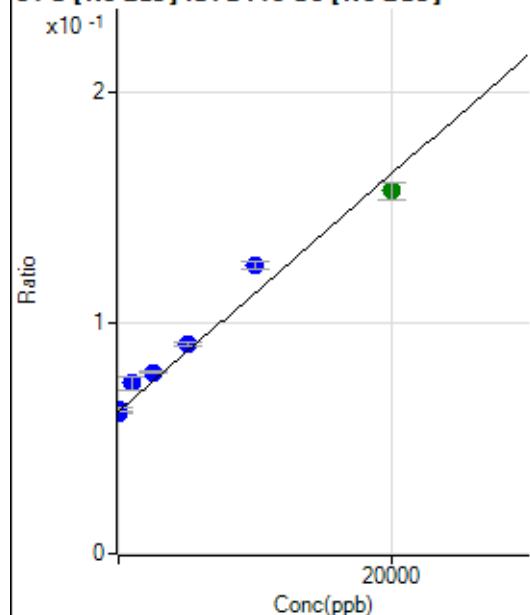
$$R = 0.9999$$

$$DL = 40.85$$

$$BEC = 45.92$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-105.570	380494.96	0.0613	P	1.6
2	☐	0.000	105.570	382266.30	0.0624	P	2.4
3	☐	1000.000	2346.513	428047.89	0.0739	P	8.7
4	☐	2500.000	3267.884	475002.73	0.0787	P	1.0
5	☐	5000.000	5676.266	585245.15	0.0911	P	1.6
6	☐	10000.000	12238.683	791792.42	0.1250	P	2.5
7	☐	20000.000	18548.281	1014225.71	0.1575	A	5.1
8	☐			324743.61	0.0506	P	1.7

$$y = 5.1590E-006 * x + 0.0618$$

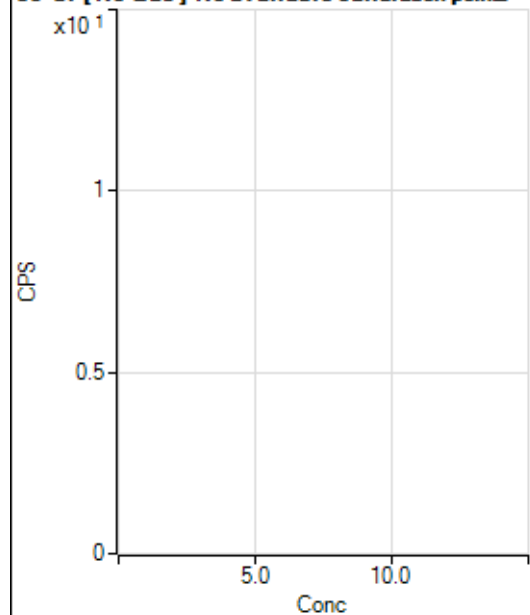
$$R = 0.9879$$

$$DL = 730.8$$

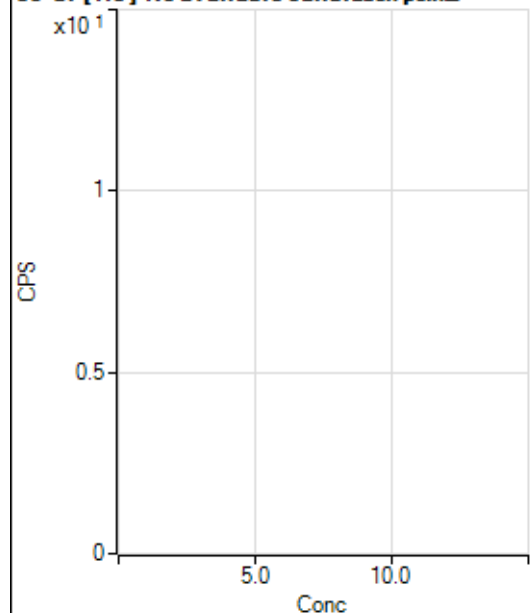
$$BEC = 1.198E+04$$

Weight: <None>

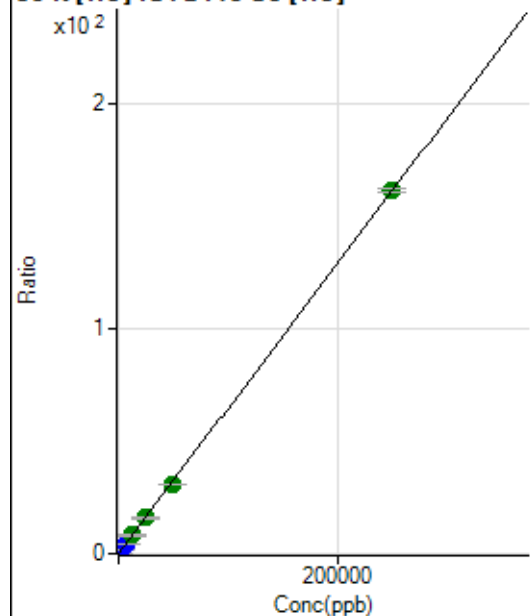
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			401727.66		P	3.5
2	☐			376861.44		P	1.1
3	☐			399430.26		P	0.6
4	☐			380997.62		P	1.4
5	☐			353993.76		P	2.0
6	☐			364512.35		P	1.7
7	☐			352916.57		P	1.1
8	☐			329477.26		P	2.6

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			3433.83		P	2.2
2	☐			3339.36		P	3.6
3	☐			3822.83		P	4.1
4	☐			3406.06		P	9.8
5	☐			3130.98		P	5.7
6	☐			3147.66		P	7.5
7	☐			3114.31		P	9.7
8	☐			3250.45		P	4.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23169.06	0.0915	P	1.2
2	☐	500.000	456.791	97716.79	0.3850	P	1.5
3	☐	2500.000	2455.767	429952.04	1.6697	P	1.2
4	☐	6250.000	6234.696	1023555.45	4.0981	P	2.8
5	☐	12500.000	12549.995	2128695.42	8.1566	A	1.2
6	☐	25000.000	24587.679	4007906.86	15.8925	A	1.8
7	☐	50000.000	47620.123	7760790.80	30.6940	A	2.2
8	☐	250000.00	250515.61	40470713.75	161.0822	A	1.1

$$y = 6.4264E-004 * x + 0.0915$$

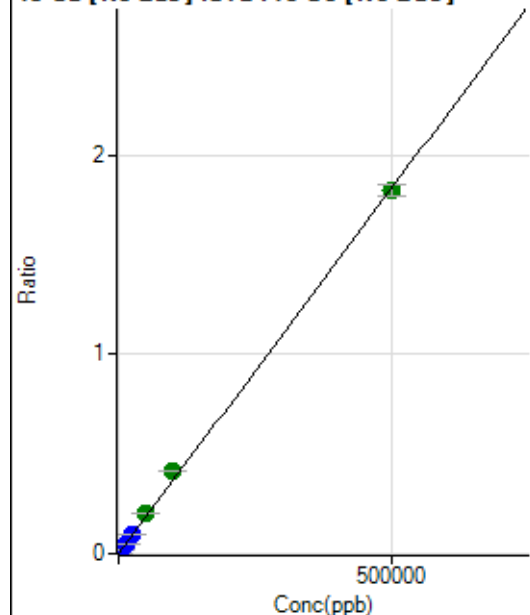
$$R = 0.9999$$

$$DL = 5.022$$

$$BEC = 142.4$$

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	397.87	0.0001	P	8.2
2	☐	500.000	503.752	11707.09	0.0019	P	4.8
3	☐	5000.000	5832.866	124125.94	0.0214	P	9.3
4	☐	12500.000	14021.725	310681.47	0.0515	P	1.4
5	☐	25000.000	27258.549	642257.12	0.1000	P	2.1
6	☐	50000.000	55456.020	1288824.81	0.2034	A	0.6
7	☐	100000.00	113064.25	2670725.25	0.4145	A	2.0
8	☐	500000.00	496682.24	11684259.48	1.8208	A	3.1

$$y = 3.6659\text{E-}006 * x + 6.4097\text{E-}005$$

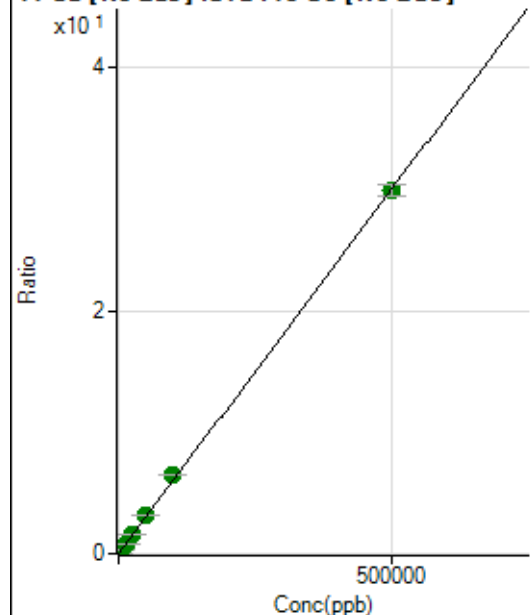
$$R = 0.9996$$

$$DL = 4.326$$

$$BEC = 17.48$$

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	20805.06	0.0034	P	2.9
2	☐	500.000	506.292	206432.58	0.0337	P	2.0
3	☐	5000.000	5853.972	2050040.96	0.3540	A	8.4
4	☐	12500.000	13672.729	4964820.40	0.8223	A	0.3
5	☐	25000.000	26977.426	10402297.96	1.6193	A	0.9
6	☐	50000.000	53466.925	20322701.99	3.2060	A	1.0
7	☐	100000.00	107086.00	41363412.56	6.4177	A	0.3
8	☐	500000.00	498099.37	191475534.2	29.8392	A	3.1

$$y = 5.9899\text{E-}005 * x + 0.0034$$

$$R = 0.9999$$

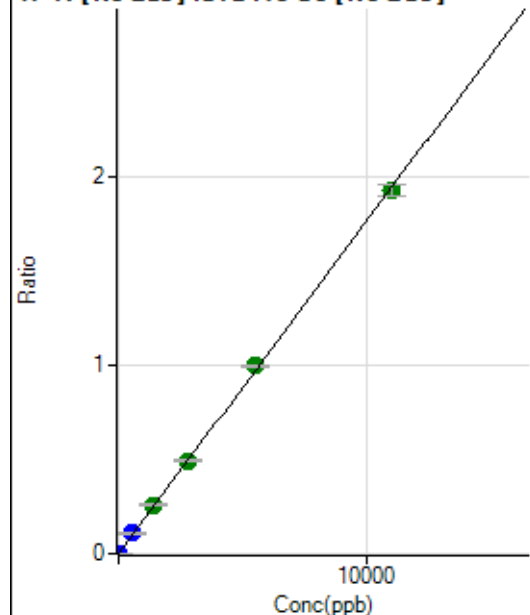
$$DL = 4.802$$

$$BEC = 55.95$$

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	388.91	0.0001	P	8.1
2	☐	5.000	5.048	5845.82	0.0010	P	2.4
3	☐	550.000	614.028	628295.62	0.1084	P	7.9
4	☐	1375.000	1459.631	1555312.19	0.2577	A	3.5
5	☐	2750.000	2796.730	3171682.69	0.4936	A	1.2
6	☐	5500.000	5645.972	6315456.00	0.9965	A	0.8
7	☐	11000.000	10901.551	12393663.99	1.9240	A	3.3
8	☐			5561.27	0.0009	P	16.6

$$y = 1.7648\text{E-}004 * x + 6.2610\text{E-}005$$

$$R = 0.9998$$

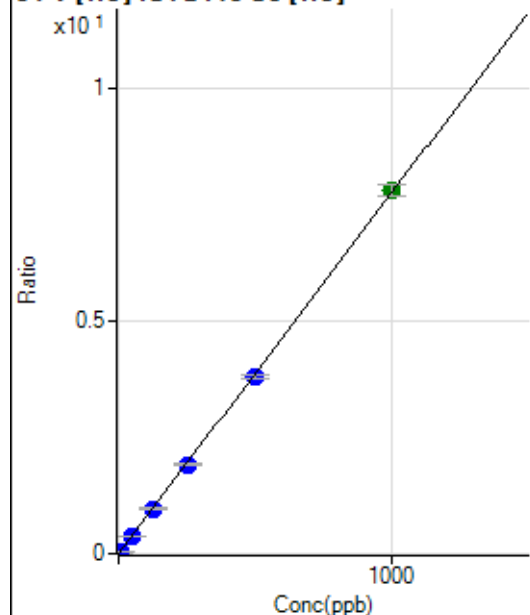
$$DL = 0.08671$$

$$BEC = 0.3548$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	64.1
2	☐	5.000	4.846	9533.25	0.0376	P	1.3
3	☐	50.000	48.443	96619.44	0.3752	P	2.0
4	☐	125.000	125.116	242048.27	0.9690	P	0.4
5	☐	250.000	245.617	496382.71	1.9023	P	2.4
6	☐	500.000	490.546	958178.89	3.7992	P	1.4
7	☐	1000.000	1005.887	1969708.39	7.7904	A	3.1
8	☐			575.57	0.0023	P	16.0

$$y = 0.0077 * x + 3.0595\text{E-}005$$

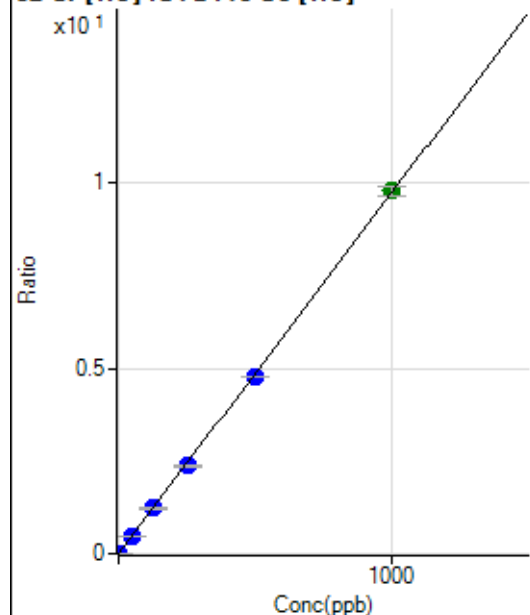
$$R = 0.9999$$

$$DL = 0.007591$$

$$BEC = 0.00395$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	817.81	0.0032	P	8.9
2	☐	2.000	1.827	5333.27	0.0210	P	3.5
3	☐	50.000	48.803	123176.14	0.4784	P	1.8
4	☐	125.000	125.780	306677.32	1.2278	P	1.5
5	☐	250.000	244.646	622370.94	2.3851	P	2.3
6	☐	500.000	492.050	1209246.32	4.7937	P	0.2
7	☐	1000.000	1005.276	2475489.25	9.7904	A	2.4
8	☐			28357.04	0.1129	P	2.2

$$y = 0.0097 * x + 0.0032$$

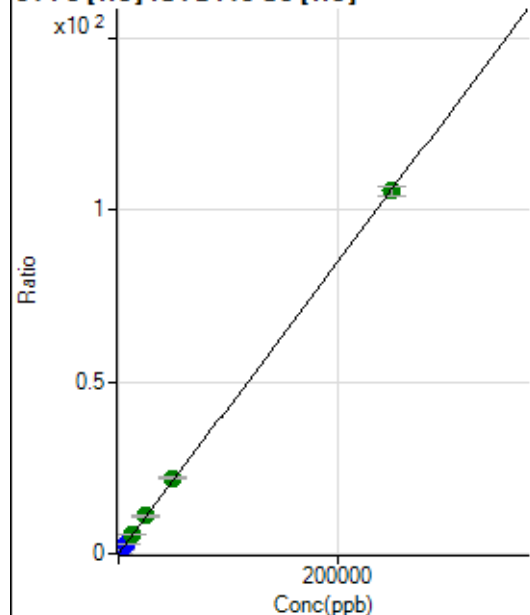
$$R = 0.9999$$

$$DL = 0.08885$$

$$BEC = 0.3321$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	701.88	0.0028	P	5.7
2	☐	50.000	51.405	6214.43	0.0245	P	3.6
3	☐	2500.000	2551.563	278383.77	1.0811	P	1.6
4	☐	6250.000	6576.366	694866.55	2.7820	P	1.5
5	☐	12500.000	12911.337	1424455.20	5.4592	A	3.2
6	☐	25000.000	25906.970	2762018.35	10.9513	A	1.3
7	☐	50000.000	52018.503	5558895.96	21.9864	A	1.2
8	☐	250000.00	249476.36	26487175.36	105.4343	A	2.4

$$y = 4.2261E-004 * x + 0.0028$$

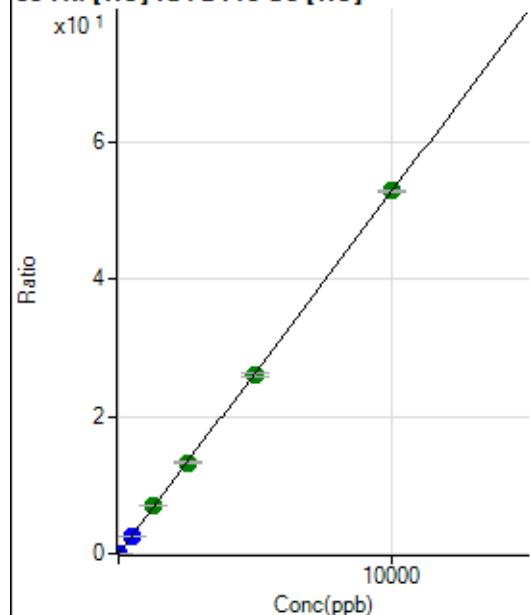
$$R = 1.0000$$

$$DL = 1.128$$

$$BEC = 6.556$$

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	73.33	0.0003	P	7.1
2	☐	1.000	1.029	1451.20	0.0057	P	0.9
3	☐	500.000	492.497	669072.02	2.5984	P	1.5
4	☐	1250.000	1311.903	1728656.02	6.9210	A	1.5
5	☐	2500.000	2504.223	3447473.53	13.2108	A	1.8
6	☐	5000.000	4938.289	6570424.83	26.0513	A	1.2
7	☐	10000.000	10022.437	13368125.22	52.8717	A	0.7
8	☐			10755.30	0.0428	P	4.6

$$y = 0.0053 * x + 2.8929E-004$$

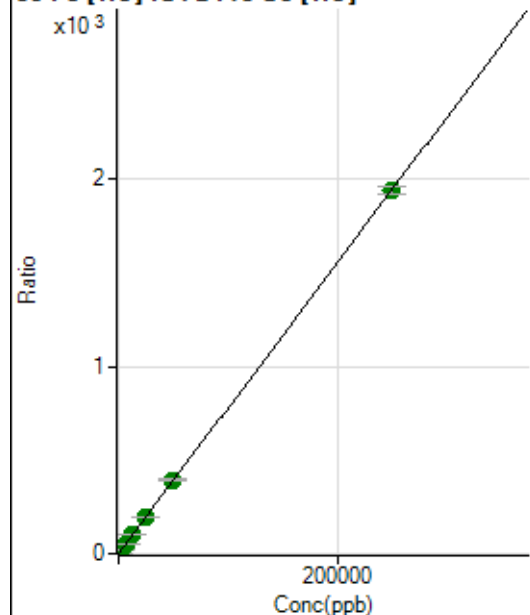
$$R = 0.9999$$

$$DL = 0.0117$$

$$BEC = 0.05484$$

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	5221.42	0.0206	P	1.3
2	☐	50.000	49.150	102128.80	0.4024	P	1.8
3	☐	2500.000	2586.634	5178753.65	20.1132	A	3.5
4	☐	6250.000	6597.747	12806795.43	51.2709	A	0.9
5	☐	12500.000	12807.772	25968488.77	99.5095	A	1.6
6	☐	25000.000	25518.220	49997471.03	198.2424	A	1.5
7	☐	50000.000	50921.536	100010268.9	395.5716	A	2.3
8	☐	250000.00	249738.92	487467718.3	1,939.955	A	2.0

$$y = 0.0078 * x + 0.0206$$

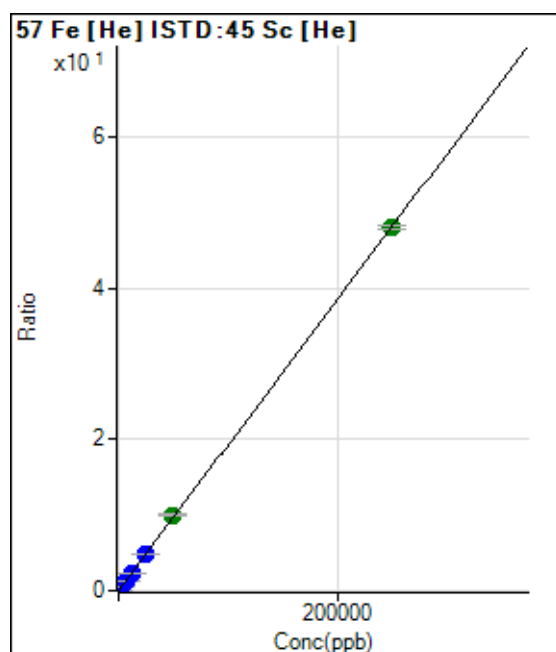
$$R = 1.0000$$

$$DL = 0.1059$$

$$BEC = 2.654$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	231.49	0.0009	P	26.7
2	☐	50.000	48.199	2583.62	0.0102	P	5.6
3	☐	2500.000	2511.776	124610.77	0.4839	P	1.7
4	☐	6250.000	6491.310	312036.97	1.2492	P	0.8
5	☐	12500.000	12404.325	622763.92	2.3863	P	1.2
6	☐	25000.000	24973.953	1211397.54	4.8035	P	1.7
7	☐	50000.000	52007.236	2528742.88	10.0021	A	1.5
8	☐	250000.00	249599.79	12059589.62	47.9997	A	1.0

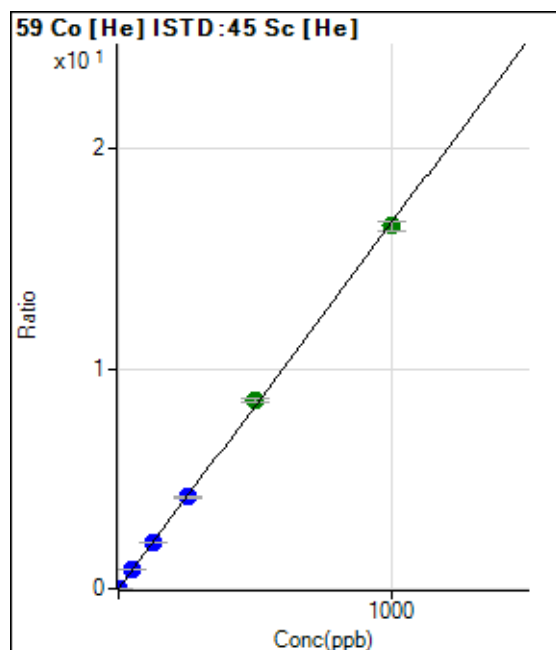
$$y = 1.9230E-004 * x + 9.1702E-004$$

R = 1.0000

$$DL = 3.814$$
$$\text{BEC} = 4.769$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	96.67	0.0004	P	30.4
2	☐	1.000	1.004	4332.94	0.0171	P	5.1
3	☐	50.000	50.163	214995.86	0.8349	P	0.7
4	☐	125.000	127.675	530623.98	2.1244	P	1.0
5	☐	250.000	251.120	1090237.55	4.1780	P	2.9
6	☐	500.000	515.432	2162812.61	8.5751	A	1.6
7	☐	1000.000	991.662	4170699.56	16.4977	A	2.6
8	☐			6616.07	0.0263	P	6.8

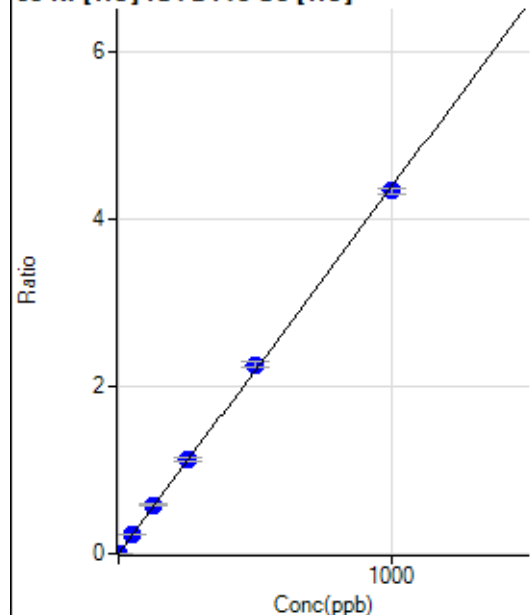
$$y = 0.0166 * x + 3.8226E-004$$

R = 0.9998

$$DL = 0.02095$$
$$\text{BEC} = 0.02298$$

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	54.44	0.0002	P	26.7
2	☐	1.000	1.054	1226.73	0.0048	P	8.2
3	☐	50.000	51.976	58698.78	0.2279	P	1.6
4	☐	125.000	133.614	146266.25	0.5856	P	1.7
5	☐	250.000	257.452	294371.01	1.1282	P	3.0
6	☐	500.000	515.899	570004.67	2.2605	P	2.8
7	☐	1000.000	989.012	1095635.29	4.3333	P	1.9
8	☐			8938.44	0.0356	P	0.8

$$y = 0.0044 * x + 2.1421E-004$$

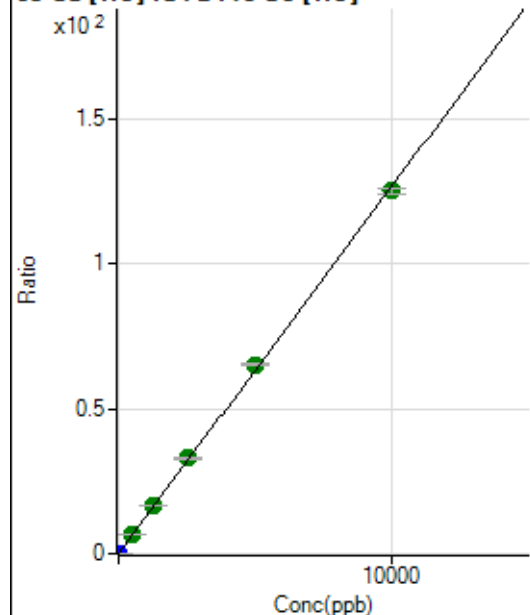
$$R = 0.9998$$

$$DL = 0.03912$$

$$BEC = 0.04889$$

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	791.14	0.0031	P	5.2
2	☐	2.000	2.085	7479.81	0.0295	P	3.0
3	☐	500.000	524.523	1708166.50	6.6332	A	2.0
4	☐	1250.000	1330.873	4202710.63	16.8256	A	0.7
5	☐	2500.000	2595.648	8561488.69	32.8126	A	3.4
6	☐	5000.000	5156.692	16442735.31	65.1847	A	1.2
7	☐	10000.000	9886.407	31598247.86	124.9691	A	1.5
8	☐			19452.45	0.0774	P	5.6

$$y = 0.0126 * x + 0.0031$$

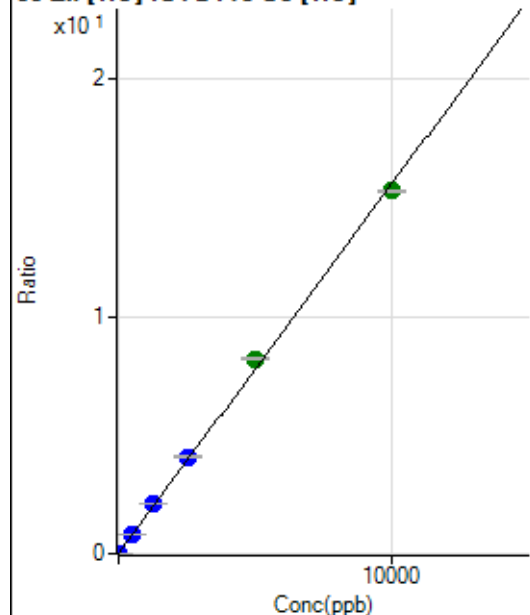
$$R = 0.9997$$

$$DL = 0.03847$$

$$BEC = 0.247$$

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	1077.83	0.0043	P	12.2
2	☐	2.000	2.309	1991.27	0.0078	P	2.8
3	☐	500.000	519.151	209064.71	0.8119	P	1.2
4	☐	1250.000	1342.417	522737.34	2.0926	P	1.6
5	☐	2500.000	2606.755	1059312.19	4.0596	P	2.3
6	☐	5000.000	5275.913	2071136.34	8.2119	A	1.2
7	☐	10000.000	9822.845	3864735.67	15.2855	A	0.5
8	☐			6702.77	0.0267	P	4.7

$$y = 0.0016 * x + 0.0043$$

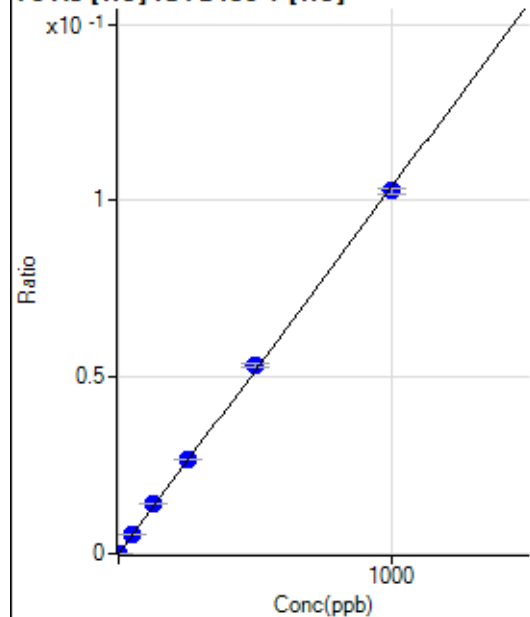
$$R = 0.9993$$

$$DL = 0.9972$$

$$BEC = 2.733$$

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	9.67	0.0000	P	16.3
2	☐	1.000	1.089	258.03	0.0001	P	9.6
3	☐	50.000	52.203	11768.75	0.0054	P	0.6
4	☐	125.000	135.271	29447.21	0.0140	P	1.4
5	☐	250.000	257.152	60019.77	0.0267	P	0.8
6	☐	500.000	513.797	116408.02	0.0533	P	2.4
7	☐	1000.000	989.919	228956.53	0.1027	P	1.5
8	☐			105.34	0.0000	P	22.6

$$y = 1.0379E-004 * x + 4.4997E-006$$

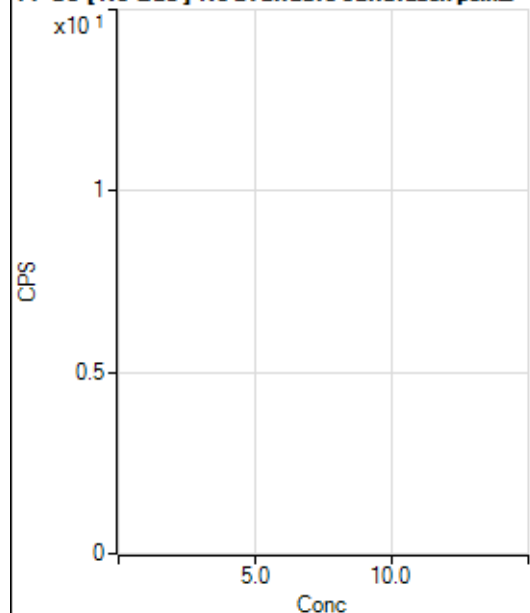
$$R = 0.9998$$

$$DL = 0.02118$$

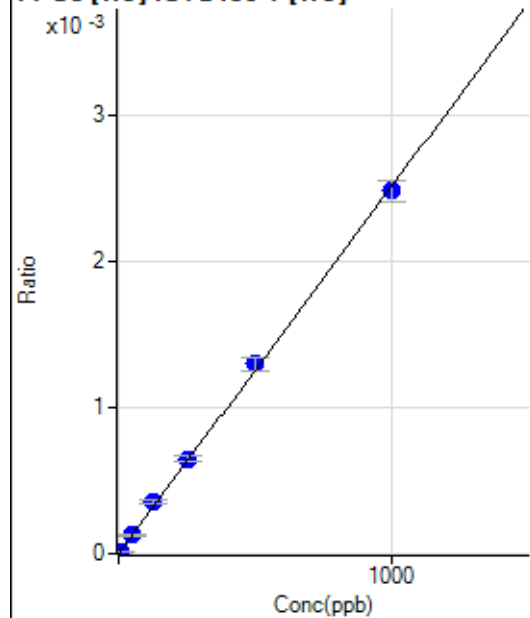
$$BEC = 0.04336$$

Weight: <None>

Min Conc: 0

77 Se [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			193.54		P	28.5
2	☐			670.71		P	7.8
3	☐			6037.58		P	8.0
4	☐			14539.26		P	5.0
5	☐			29491.29		P	1.7
6	☐			58237.79		P	1.5
7	☐			112128.78		P	1.3
8	☐			286.96		P	20.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.33	0.0000	P	2.4
2	☐	5.000	6.444	38.89	0.0000	P	5.7
3	☐	50.000	50.396	277.79	0.0001	P	5.0
4	☐	125.000	138.712	732.25	0.0003	P	8.0
5	☐	250.000	257.358	1454.53	0.0006	P	5.3
6	☐	500.000	516.271	2825.87	0.0013	P	6.9
7	☐	1000.000	988.284	5523.36	0.0025	P	5.9
8	☐			2.22	0.0000	P	86.6

$$y = 2.5070\text{E-}006 * x + 1.5492\text{E-}006$$

$$R = 0.9997$$

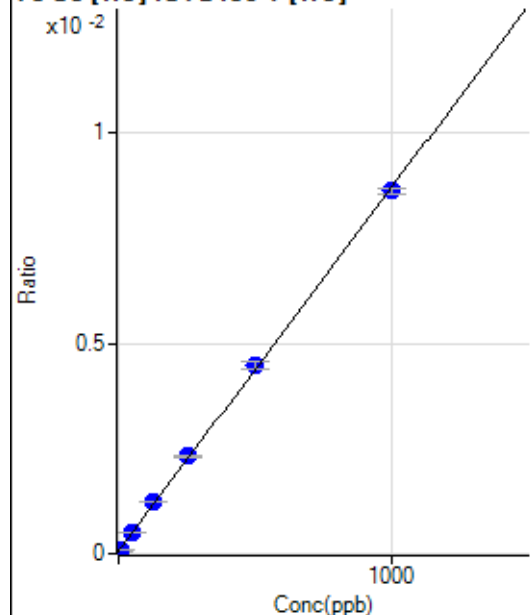
$$DL = 0.04488$$

$$BEC = 0.618$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	133.01	0.0001	P	16.0
2	☐	5.000	4.620	224.03	0.0001	P	2.0
3	☐	50.000	51.672	1103.82	0.0005	P	3.9
4	☐	125.000	137.512	2622.51	0.0013	P	0.8
5	☐	250.000	261.163	5214.83	0.0023	P	2.6
6	☐	500.000	509.415	9744.37	0.0045	P	3.9
7	☐	1000.000	990.856	19224.71	0.0086	P	1.4
8	☐			133.68	0.0001	P	7.4

$$y = 8.6440\text{E-}006 * x + 6.1991\text{E-}005$$

$$R = 0.9998$$

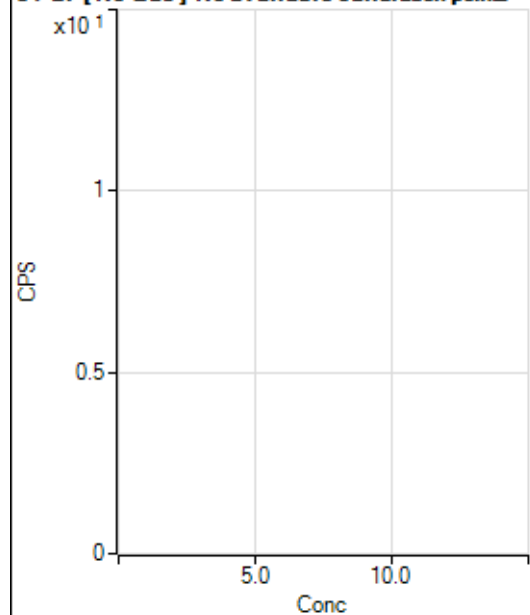
$$DL = 3.451$$

$$BEC = 7.172$$

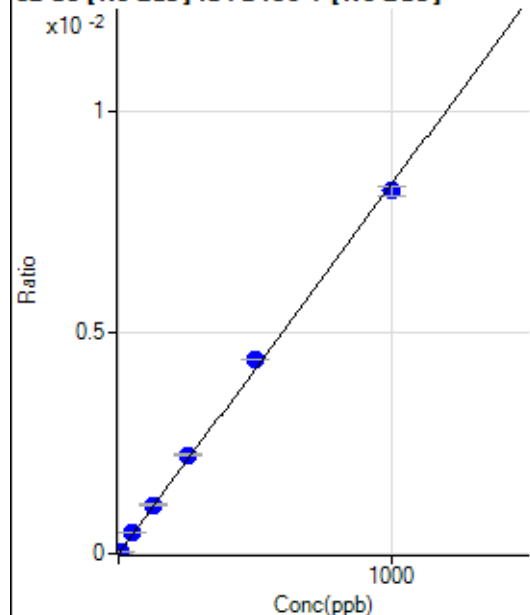
Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			25867.49		P	3.2
2	☐			27281.66		P	3.2
3	☐			27446.11		P	6.9
4	☐			27559.23		P	3.1
5	☐			27622.89		P	4.1
6	☐			27301.92		P	5.6
7	☐			27552.89		P	2.8
8	☐			27726.85		P	4.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-166.82	0.0000	P	-180.
2	☐	5.000	5.880	649.33	0.0000	P	0.3
3	☐	50.000	55.770	6953.89	0.0005	P	6.9
4	☐	125.000	131.672	17892.87	0.0011	P	3.5
5	☐	250.000	264.941	36689.54	0.0022	P	1.8
6	☐	500.000	525.068	72139.59	0.0044	P	0.9
7	☐	1000.000	982.604	142189.72	0.0082	P	2.6
8	☐			-123.86	0.0000	P	-108.

$$y = 8.3695E-006 * x - 1.0020E-005$$

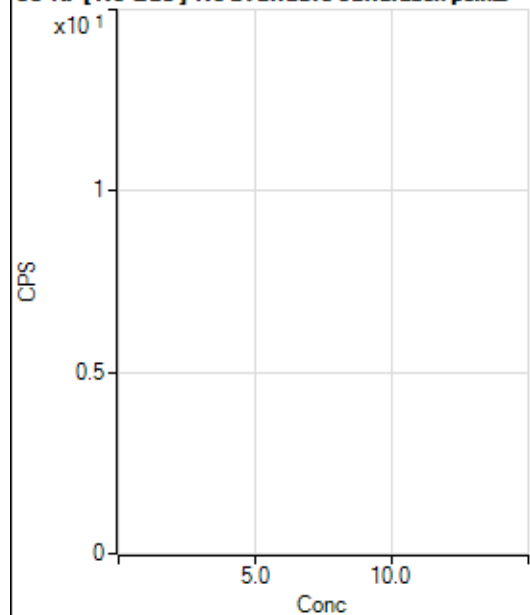
$$R = 0.9994$$

$$DL = 6.467$$

$$BEC = -1.197$$

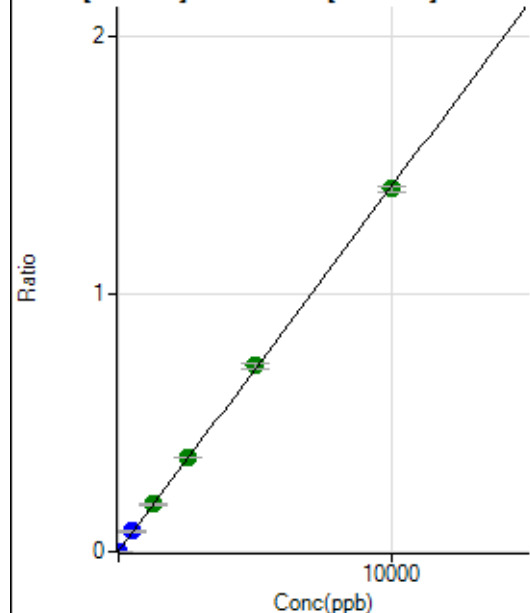
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13430.17		P	0.7
2	☐			13899.31		P	0.8
3	☐			13756.27		P	3.0
4	☐			13779.63		P	0.9
5	☐			13987.71		P	1.4
6	☐			13738.34		P	0.7
7	☐			13450.59		P	0.3
8	☐			13354.68		P	1.0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	21277.79	0.0013	P	4.4
2	☐	1.000	1.523	24778.03	0.0015	P	2.6
3	☐	500.000	563.941	1235208.19	0.0813	P	9.4
4	☐	1250.000	1296.647	3034875.50	0.1852	A	2.9
5	☐	2500.000	2564.533	6067428.52	0.3650	A	1.1
6	☐	5000.000	5086.791	11888600.00	0.7228	A	3.4
7	☐	10000.000	9931.443	24411897.42	1.4099	A	1.7
8	☐			43357.45	0.0026	P	0.8

$$y = 1.4184\text{E-}004 * x + 0.0013$$

$$R = 0.9999$$

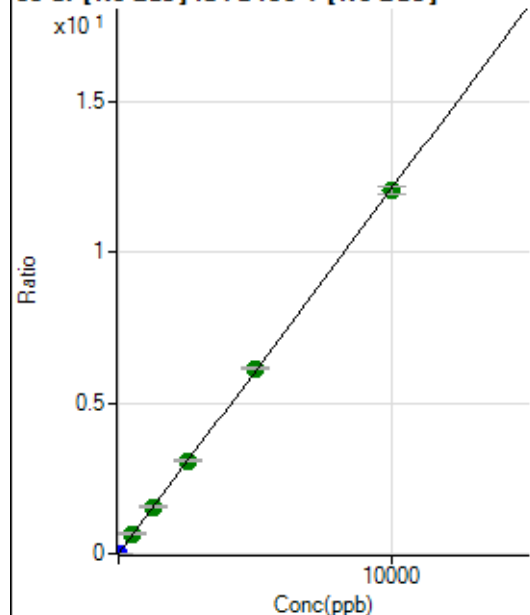
$$DL = 1.193$$

$$BEC = 9.025$$

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	261.12	0.0000	P	25.9
2	☐	1.000	1.047	21238.91	0.0013	P	4.4
3	☐	500.000	541.918	9984083.21	0.6556	A	6.4
4	☐	1250.000	1285.298	25480374.35	1.5549	A	3.0
5	☐	2500.000	2540.528	51085073.37	3.0734	A	1.4
6	☐	5000.000	5083.264	101186614.7	6.1495	A	1.0
7	☐	10000.000	9941.728	208230712.9	12.0270	A	2.2
8	☐			192263.24	0.0117	P	6.4

$$y = 0.0012 * x + 1.5675\text{E-}005$$

$$R = 0.9999$$

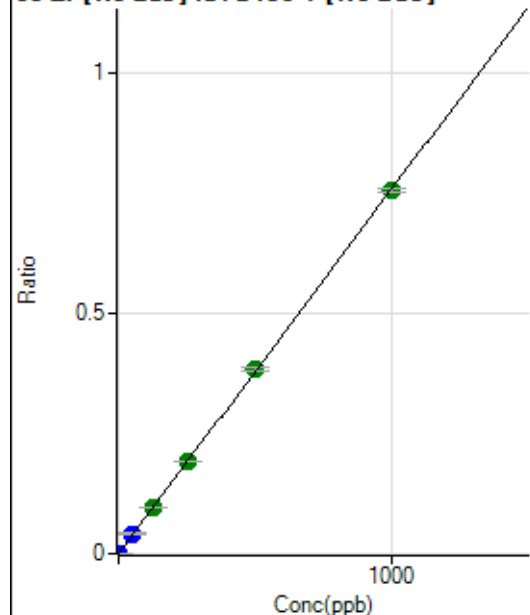
$$DL = 0.01006$$

$$BEC = 0.01296$$

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	825.05	0.0000	P	16.9
2	☐	1.000	0.952	12758.99	0.0008	P	3.3
3	☐	50.000	54.991	633566.15	0.0417	P	9.2
4	☐	125.000	127.034	1576707.87	0.0962	A	3.0
5	☐	250.000	252.424	3177343.75	0.1911	A	1.2
6	☐	500.000	506.440	6307359.78	0.3834	A	2.7
7	☐	1000.000	995.670	13054500.20	0.7538	A	1.1
8	☐			10593.40	0.0006	P	2.2

$$y = 7.5704\text{E-}004 * x + 4.9507\text{E-}005$$

$$R = 1.0000$$

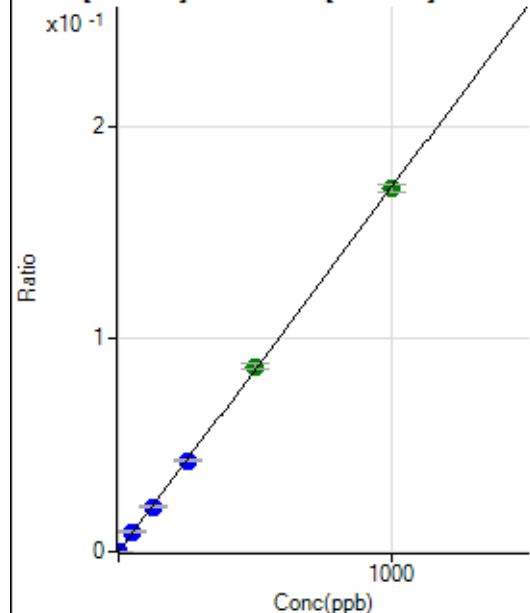
$$DL = 0.03316$$

$$BEC = 0.06539$$

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	150.01	0.0000	P	37.1
2	☐	1.000	0.935	2797.59	0.0002	P	5.7
3	☐	50.000	54.238	141069.30	0.0093	P	10.9
4	☐	125.000	123.907	347694.71	0.0212	P	1.9
5	☐	250.000	250.504	712625.43	0.0429	P	2.8
6	☐	500.000	507.986	1430062.87	0.0869	A	3.0
7	☐	1000.000	995.806	2951502.60	0.1704	A	2.1
8	☐			2222.51	0.0001	P	11.5

$$y = 1.7113\text{E-}004 * x + 8.9766\text{E-}006$$

$$R = 0.9999$$

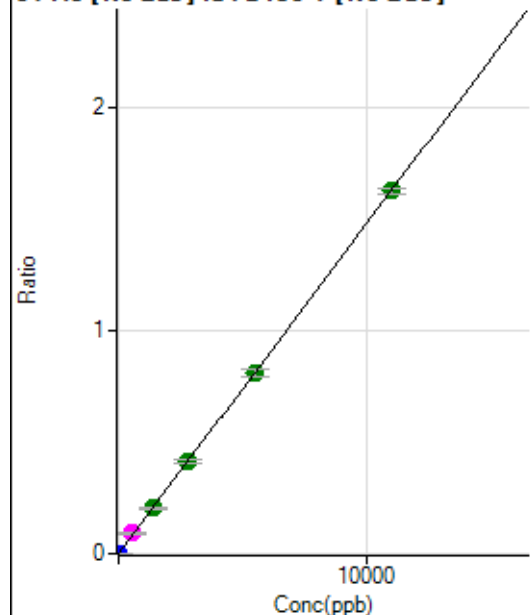
$$DL = 0.05845$$

$$BEC = 0.05245$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	341.68	0.0000	P	23.9
2	☐	5.000	6.016	15066.95	0.0009	P	1.7
3	☐	550.000	616.611	1385786.83	0.0911	M	9.0
4	☐	1375.000	1386.455	3358642.11	0.2049	A	2.9
5	☐	2750.000	2791.731	6857370.34	0.4126	A	2.9
6	☐	5500.000	5495.864	13359069.48	0.8123	A	4.1
7	☐	11000.000	10986.872	28114831.53	1.6238	A	1.5
8	☐			16067.56	0.0010	P	9.6

$$y = 1.4779\text{E-}004 * x + 2.0485\text{E-}005$$

$$R = 1.0000$$

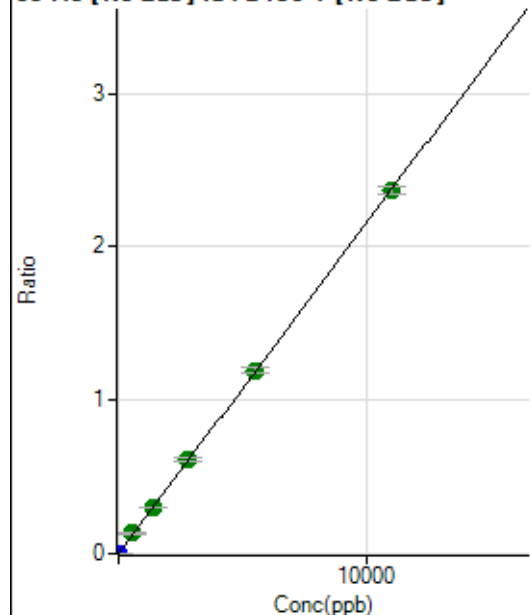
$$DL = 0.09958$$

$$BEC = 0.1386$$

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	75.00	0.0000	P	58.6
2	☐	5.000	4.932	17709.06	0.0011	P	1.9
3	☐	550.000	617.883	2029332.60	0.1334	A	8.4
4	☐	1375.000	1389.139	4914185.44	0.2999	A	3.2
5	☐	2750.000	2847.333	10214493.54	0.6147	A	4.1
6	☐	5500.000	5527.584	19625809.12	1.1932	A	3.5
7	☐	11000.000	10956.713	40948333.55	2.3652	A	2.0
8	☐			21479.36	0.0013	P	15.1

$$y = 2.1587\text{E-}004 * x + 4.5154\text{E-}006$$

$$R = 0.9999$$

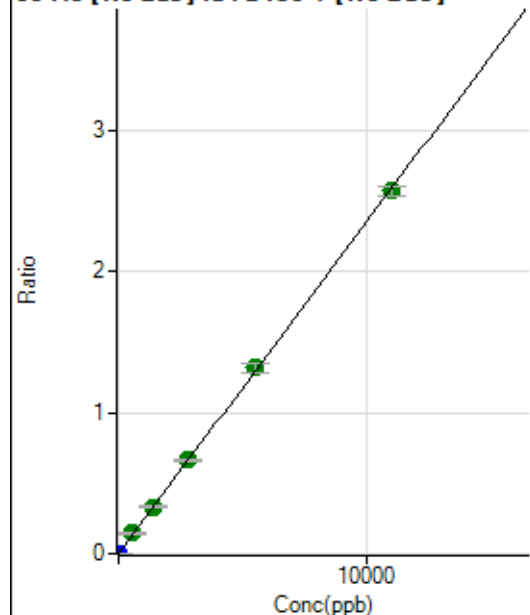
$$DL = 0.03677$$

$$BEC = 0.02092$$

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	283.34	0.0000	P	26.8
2	☐	5.000	5.131	20290.26	0.0012	P	3.1
3	☐	550.000	625.031	2237054.15	0.1472	A	9.6
4	☐	1375.000	1405.585	5422795.70	0.3310	A	4.0
5	☐	2750.000	2829.837	11075667.26	0.6664	A	2.4
6	☐	5500.000	5589.669	21647156.21	1.3162	A	4.2
7	☐	11000.000	10927.632	44545127.39	2.5732	A	2.6
8	☐			35041.22	0.0021	P	8.5

$$y = 2.3547\text{E-}004 * x + 1.7044\text{E-}005$$

$$R = 0.9999$$

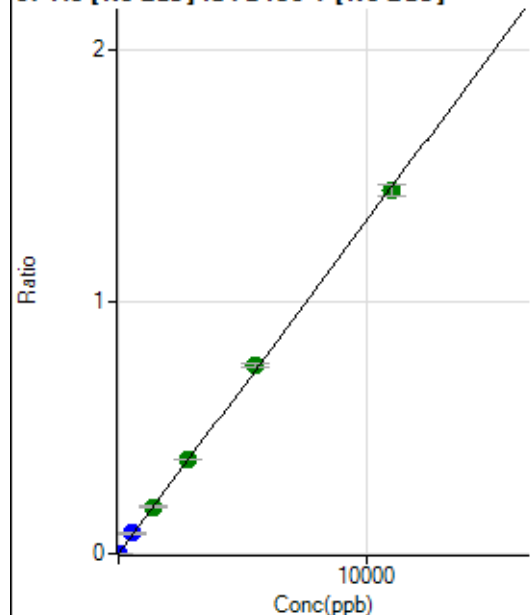
$$DL = 0.05821$$

$$BEC = 0.07238$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30.55	0.0000	P	81.9
2	☐	5.000	5.075	11138.15	0.0007	P	4.9
3	☐	550.000	622.226	1250284.55	0.0823	P	9.4
4	☐	1375.000	1412.394	3058895.42	0.1867	A	4.2
5	☐	2750.000	2823.176	6204157.86	0.3732	A	0.4
6	☐	5500.000	5667.513	12324792.29	0.7492	A	2.2
7	☐	11000.000	10889.664	24917761.15	1.4396	A	3.2
8	☐			13138.96	0.0008	P	13.3

$$y = 1.3220\text{E-}004 * x + 1.8295\text{E-}006$$

$$R = 0.9998$$

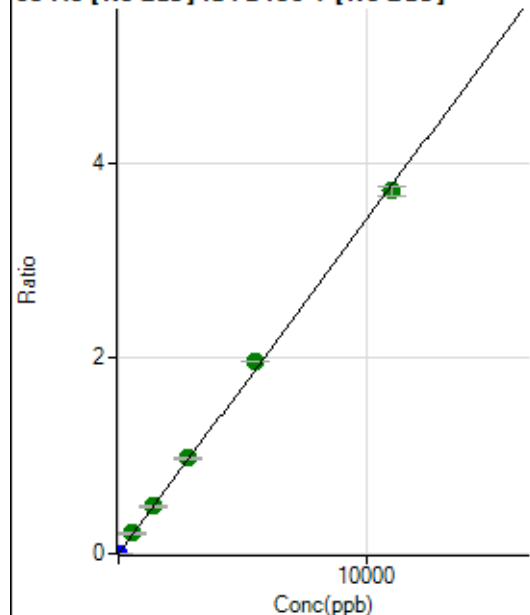
$$DL = 0.03402$$

$$BEC = 0.01384$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	152.79	0.0000	P	33.7
2	☐	5.000	5.075	28908.68	0.0017	P	4.1
3	☐	550.000	622.468	3236046.73	0.2131	A	10.7
4	☐	1375.000	1410.520	7912409.03	0.4828	A	3.0
5	☐	2750.000	2847.061	16197825.88	0.9746	A	2.5
6	☐	5500.000	5740.944	32332472.95	1.9652	A	0.7
7	☐	11000.000	10847.199	64274188.24	3.7130	A	2.7
8	☐			34422.75	0.0021	P	13.5

$$y = 3.4230\text{E-}004 * x + 9.1491\text{E-}006$$

$$R = 0.9996$$

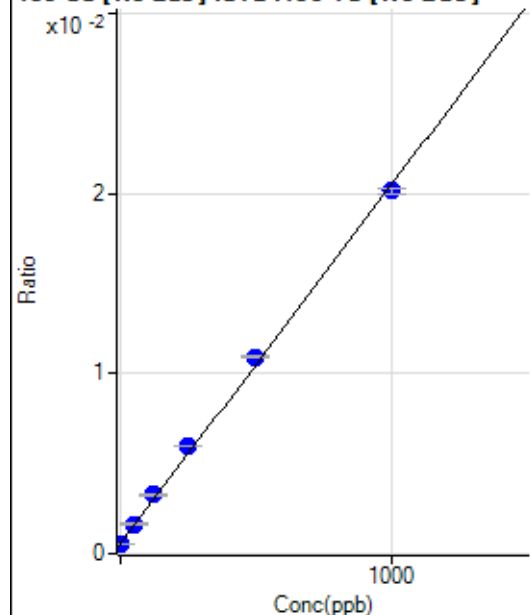
$$DL = 0.02706$$

$$BEC = 0.02673$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4067.40	0.0005	P	4.2
2	☐	1.000	0.640	4209.10	0.0005	P	3.5
3	☐	50.000	56.897	12661.79	0.0016	P	5.3
4	☐	125.000	140.125	26835.48	0.0033	P	3.2
5	☐	250.000	273.734	51017.86	0.0060	P	0.9
6	☐	500.000	520.990	95597.67	0.0109	P	1.3
7	☐	1000.000	981.336	183832.97	0.0201	P	1.4
8	☐			4239.68	0.0005	P	3.6

$$y = 2.0023\text{E-}005 * x + 4.9143\text{E-}004$$

$$R = 0.9993$$

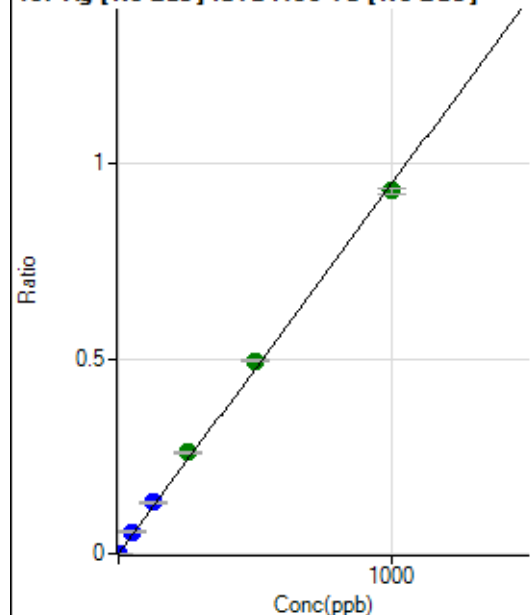
$$DL = 3.126$$

$$BEC = 24.54$$

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	125.00	0.0000	P	34.9
2	☐	1.000	1.007	8077.58	0.0010	P	4.8
3	☐	50.000	57.560	422466.00	0.0545	P	8.1
4	☐	125.000	138.110	1064214.31	0.1308	P	5.1
5	☐	250.000	274.142	2217341.50	0.2596	A	2.6
6	☐	500.000	520.626	4315229.18	0.4930	A	0.9
7	☐	1000.000	981.635	8484679.96	0.9296	A	1.6
8	☐			4081.29	0.0005	P	3.0

$$y = 9.4698\text{E-}004 * x + 1.5158\text{E-}005$$

$$R = 0.9993$$

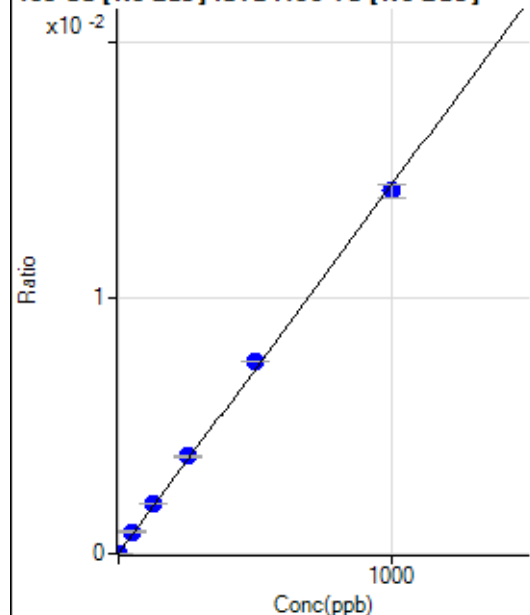
$$DL = 0.01678$$

$$BEC = 0.01601$$

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	45.83	0.0000	P	24.0
2	☐	1.000	1.012	168.06	0.0000	P	5.0
3	☐	50.000	57.834	6498.85	0.0008	P	9.9
4	☐	125.000	134.962	15895.46	0.0020	P	2.0
5	☐	250.000	264.125	32590.19	0.0038	P	1.0
6	☐	500.000	521.571	65888.00	0.0075	P	0.8
7	☐	1000.000	984.046	129563.15	0.0142	P	3.6
8	☐			145.84	0.0000	P	9.9

$$y = 1.4423\text{E-}005 * x + 5.5374\text{E-}006$$

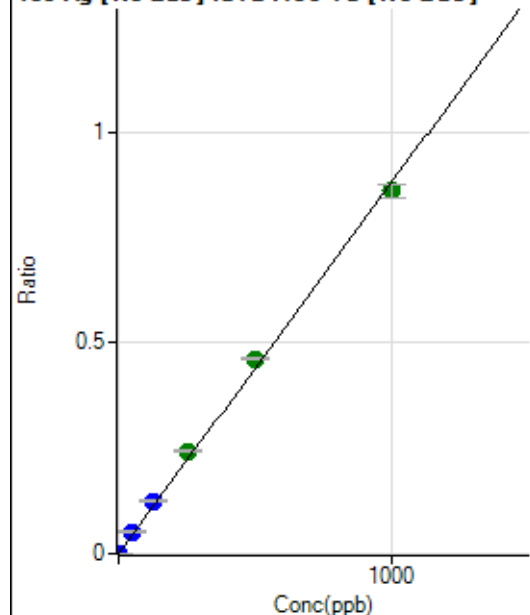
$$R = 0.9995$$

$$DL = 0.2767$$

$$BEC = 0.3839$$

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	83.34	0.0000	P	9.5
2	☐	1.000	1.037	7699.58	0.0009	P	3.1
3	☐	50.000	59.168	403502.38	0.0521	P	7.9
4	☐	125.000	142.058	1017706.72	0.1250	P	1.0
5	☐	250.000	276.895	2081098.92	0.2436	A	1.4
6	☐	500.000	525.934	4049685.42	0.4628	A	1.6
7	☐	1000.000	977.718	7849934.98	0.8603	A	3.6
8	☐			3758.96	0.0004	P	4.5

$$y = 8.7984\text{E-}004 * x + 1.0064\text{E-}005$$

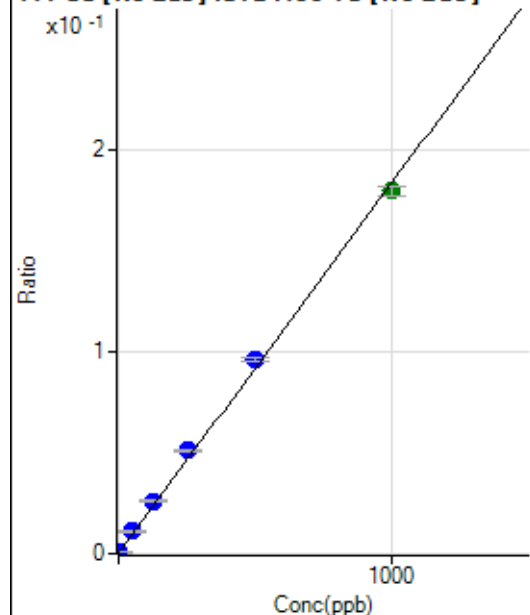
$$R = 0.9990$$

$$DL = 0.003266$$

$$BEC = 0.01144$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2860.93	0.0003	P	3.4
2	☐	1.000	1.142	4633.04	0.0006	P	2.8
3	☐	50.000	58.971	86604.22	0.0112	P	6.6
4	☐	125.000	140.979	213292.21	0.0262	P	4.0
5	☐	250.000	277.506	437824.05	0.0513	P	2.5
6	☐	500.000	522.653	842223.55	0.0962	P	2.6
7	☐	1000.000	979.351	1643114.78	0.1800	A	2.6
8	☐			3612.96	0.0004	P	4.6

$$y = 1.8348\text{E-}004 * x + 3.4566\text{E-}004$$

$$R = 0.9991$$

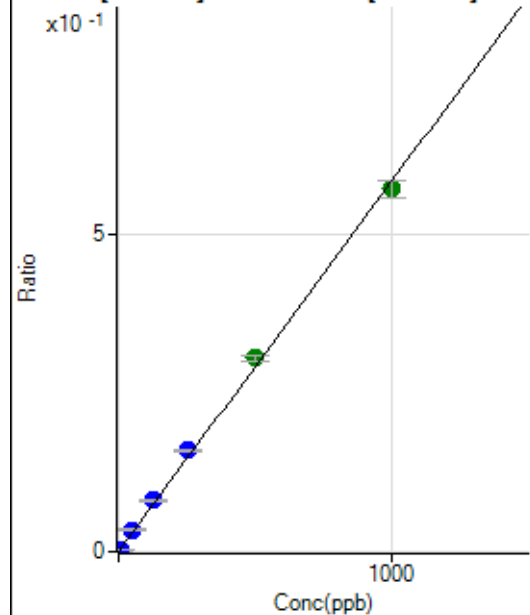
$$DL = 0.193$$

$$BEC = 1.884$$

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	700.04	0.0001	P	12.7
2	☐	5.000	5.358	26746.49	0.0032	P	6.0
3	☐	50.000	58.210	263329.37	0.0340	P	9.1
4	☐	125.000	139.003	659957.94	0.0811	P	2.8
5	☐	250.000	272.648	1358214.94	0.1590	P	0.5
6	☐	500.000	524.143	2674127.62	0.3055	A	2.9
7	☐	1000.000	980.104	5212297.99	0.5713	A	4.4
8	☐			5181.90	0.0006	P	4.7

$$y = 5.8276\text{E-}004 * x + 8.4653\text{E-}005$$

$$R = 0.9992$$

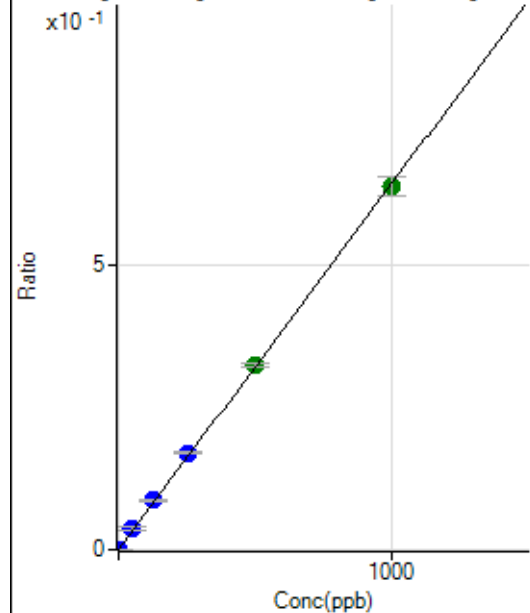
$$DL = 0.05555$$

$$BEC = 0.1453$$

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	58.34	0.0000	P	36.5
2	☐	2.000	2.065	11166.06	0.0013	P	4.4
3	☐	50.000	57.745	288266.75	0.0372	P	9.8
4	☐	125.000	134.492	706008.17	0.0867	P	1.9
5	☐	250.000	264.991	1459737.38	0.1709	P	1.0
6	☐	500.000	505.858	2854500.76	0.3262	A	2.2
7	☐	1000.000	991.749	5834868.88	0.6395	A	5.2
8	☐			7063.67	0.0008	P	6.9

$$y = 6.4484\text{E-}004 * x + 7.0293\text{E-}006$$

$$R = 0.9998$$

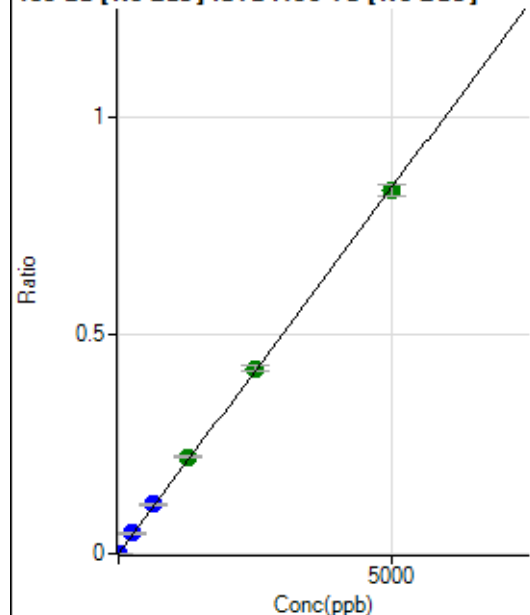
$$DL = 0.01194$$

$$BEC = 0.0109$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	56.3
2	☐	10.000	9.938	13918.73	0.0017	P	4.3
3	☐	250.000	284.574	368997.07	0.0477	P	9.3
4	☐	625.000	673.539	917967.63	0.1128	P	2.8
5	☐	1250.000	1323.710	1893209.98	0.2217	A	2.4
6	☐	2500.000	2532.169	3710695.57	0.4240	A	2.5
7	☐	5000.000	4957.692	7577293.05	0.8302	A	3.1
8	☐			5204.58	0.0006	P	10.9

$$y = 1.6746\text{E-}004 * x + 2.6669\text{E-}006$$

$$R = 0.9998$$

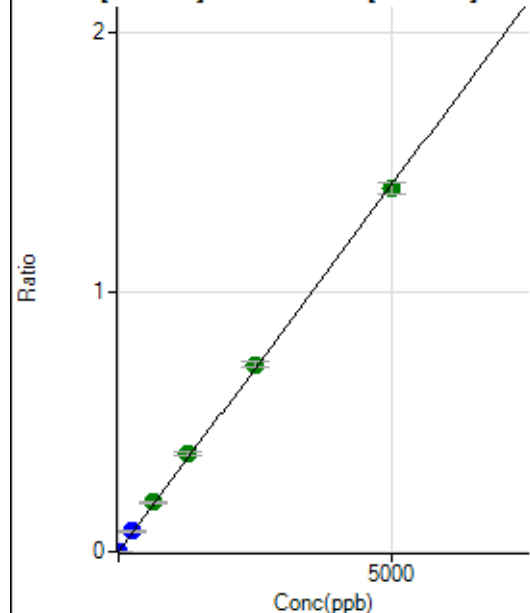
$$DL = 0.02688$$

$$BEC = 0.01593$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.11	0.0000	P	103.7
2	☐	10.000	10.256	24264.03	0.0029	P	1.5
3	☐	250.000	285.908	626712.07	0.0809	P	9.2
4	☐	625.000	678.561	1562924.59	0.1921	A	4.3
5	☐	1250.000	1335.057	3228244.71	0.3779	A	3.0
6	☐	2500.000	2549.288	6313905.44	0.7216	A	3.3
7	☐	5000.000	4945.601	12777083.19	1.4000	A	3.2
8	☐			9588.28	0.0011	P	23.0

$$y = 2.8307\text{E-}004 * x + 4.3126\text{E-}006$$

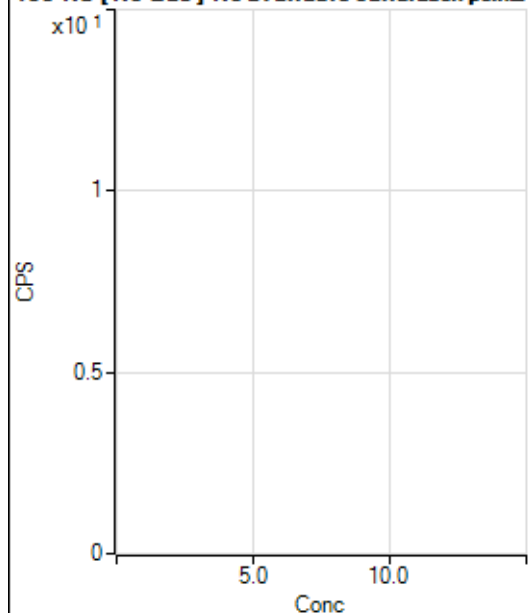
$$R = 0.9997$$

$$DL = 0.04739$$

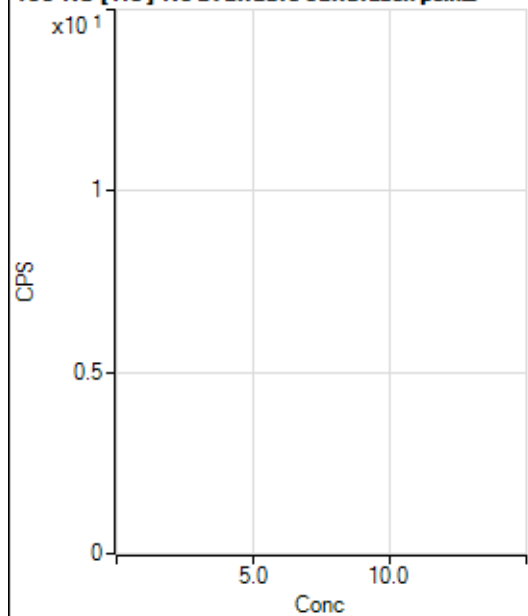
$$BEC = 0.01524$$

Weight: <None>

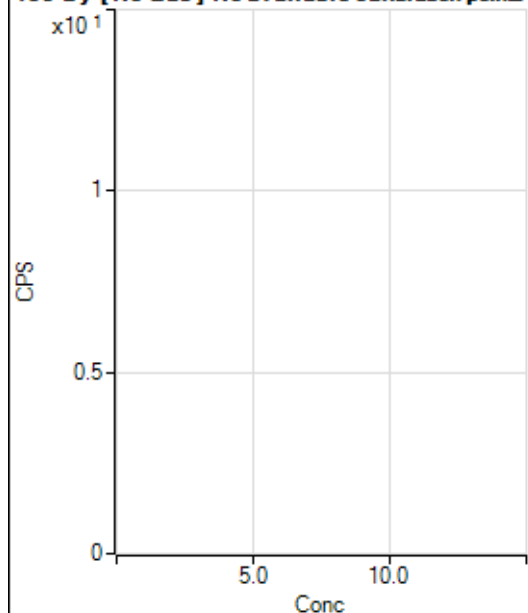
Min Conc: 0

150 Nd [No Gas] No available calibration points

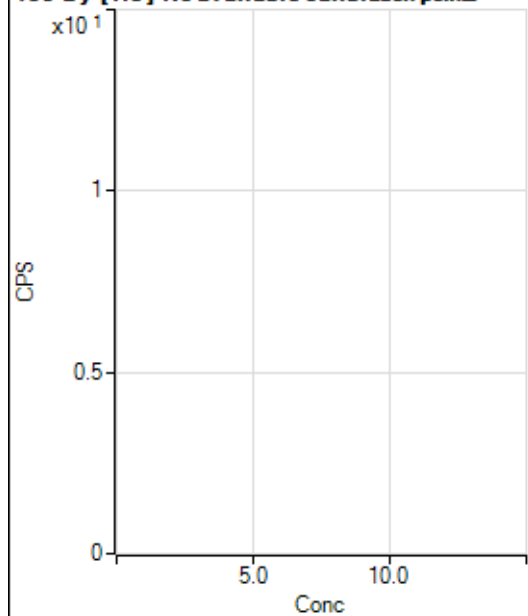
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			2.22		P	173.2
3	☐			22.22		P	34.7
4	☐			35.56		P	28.6
5	☐			120.00		P	11.1
6	☐			180.01		P	18.5
7	☐			362.24		P	9.3
8	☐			55.56		P	60.4

150 Nd [He] No available calibration points

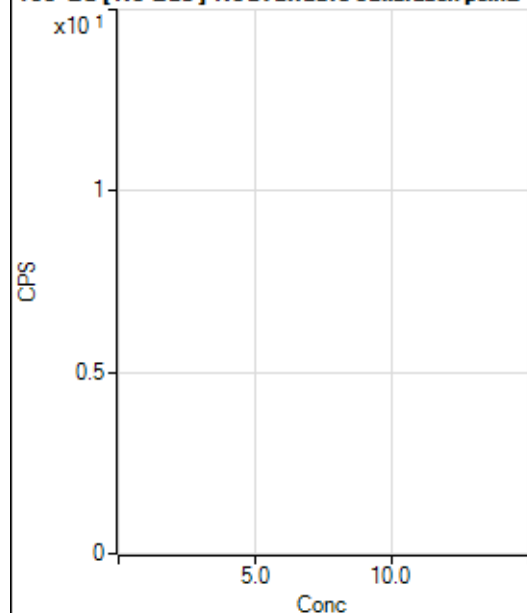
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			6.67		P	100.0
4	☐			6.67		P	0.0
5	☐			12.22		P	15.7
6	☐			26.67		P	0.0
7	☐			33.33		P	26.4
8	☐			15.56		P	12.4

156 Dy [No Gas] No available calibration points

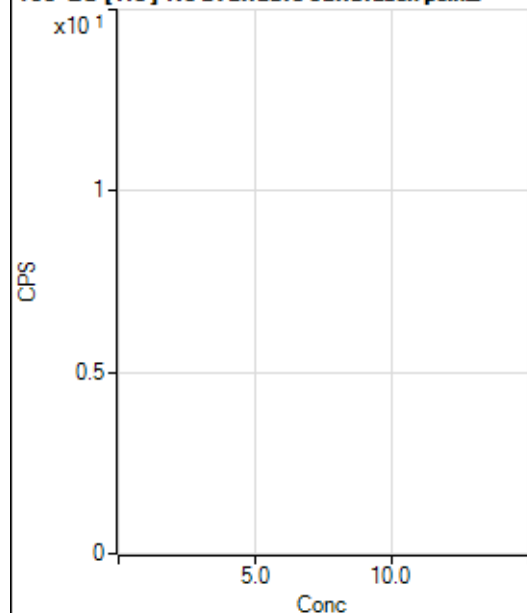
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			16.67		P	50.0
3	☐			27.78		P	45.8
4	☐			50.00		P	57.7
5	☐			113.89		P	22.4
6	☐			177.78		P	7.2
7	☐			330.57		P	12.9
8	☐			1075.07		P	6.9

156 Dy [He] No available calibration points

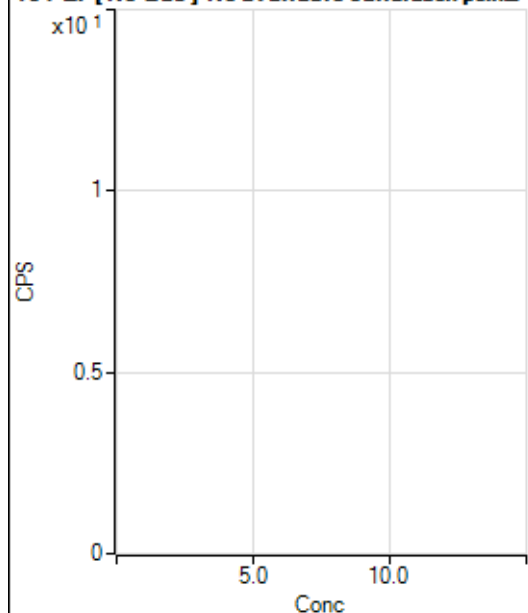
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			3.33		P	100.1
3	☐			8.89		P	78.1
4	☐			18.89		P	36.7
5	☐			46.67		P	7.1
6	☐			87.78		P	9.6
7	☐			133.33		P	21.4
8	☐			522.24		P	9.1

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

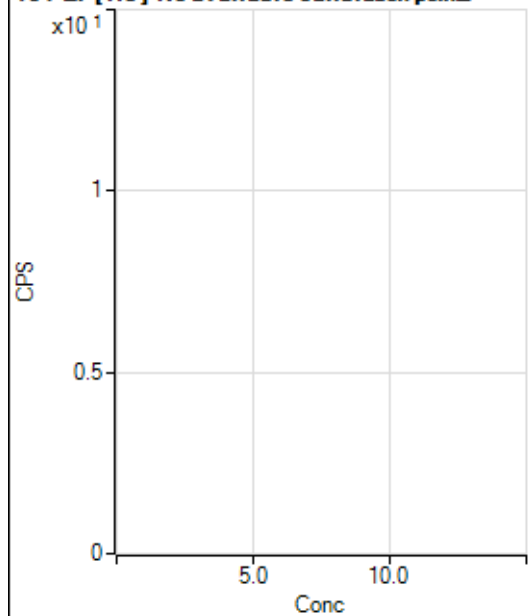
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	10.2
2	☐			63.89		P	7.5
3	☐			38.89		P	12.4
4	☐			58.33		P	14.3
5	☐			91.67		P	32.8
6	☐			152.78		P	36.3
7	☐			275.01		P	21.2
8	☐			1047.30		P	7.6

160 Gd [He] No available calibration points

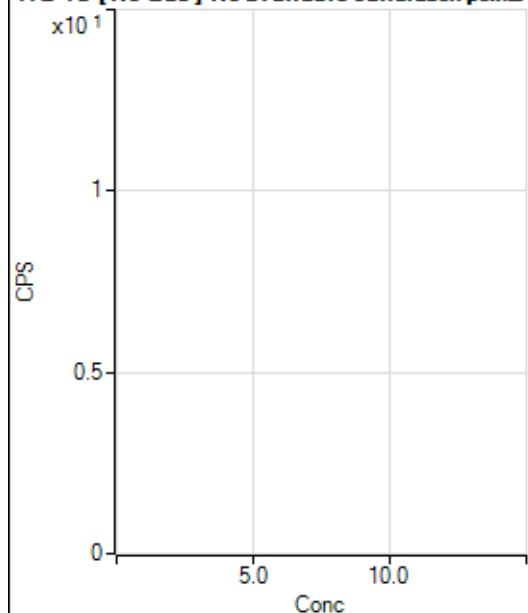
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			78.89		P	17.6
2	☐			83.33		P	20.8
3	☐			87.78		P	7.9
4	☐			100.00		P	15.3
5	☐			130.00		P	11.7
6	☐			144.45		P	19.6
7	☐			204.45		P	14.7
8	☐			664.47		P	11.1

164 Er [No Gas] No available calibration points

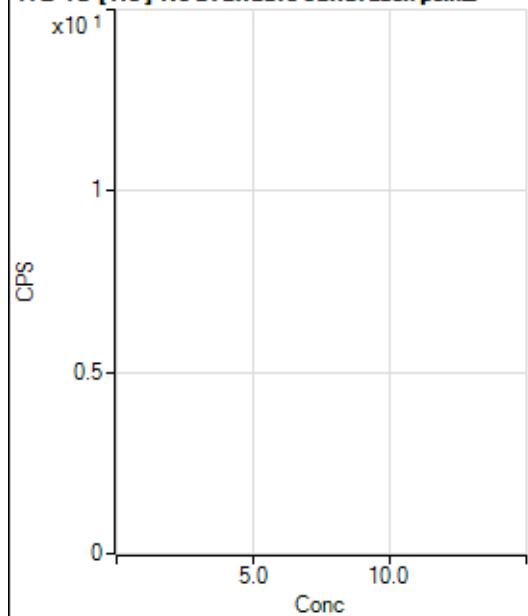
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	0.0
2	☐			41.67		P	40.0
3	☐			30.55		P	15.7
4	☐			66.67		P	21.7
5	☐			72.22		P	6.7
6	☐			77.78		P	34.4
7	☐			125.00		P	29.1
8	☐			205.56		P	18.7

164 Er [He] No available calibration points

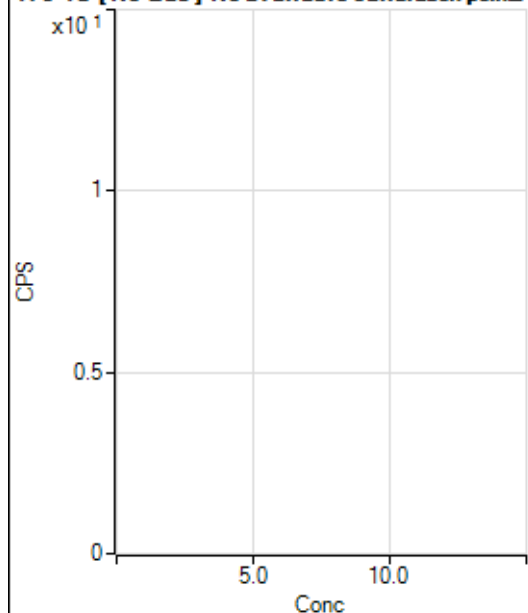
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			21.11		P	50.8
2	☐			35.56		P	21.6
3	☐			26.67		P	33.1
4	☐			32.22		P	21.5
5	☐			51.11		P	18.8
6	☐			31.11		P	32.7
7	☐			53.33		P	34.8
8	☐			125.56		P	15.6

172 Yb [No Gas] No available calibration points

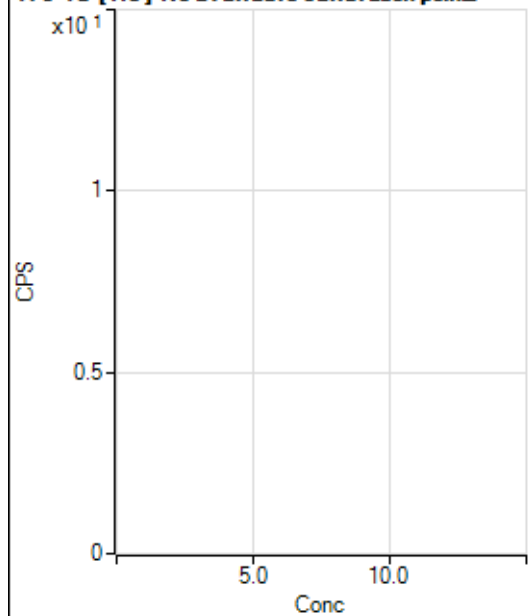
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	24.7
2	☐			25.00		P	57.7
3	☐			22.22		P	43.3
4	☐			19.45		P	107.9
5	☐			27.78		P	34.6
6	☐			41.67		P	20.0
7	☐			69.45		P	54.1
8	☐			100.00		P	22.0

172 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			9.26		P	69.2
2	☐			20.37		P	41.7
3	☐			25.92		P	24.7
4	☐			22.22		P	43.3
5	☐			27.78		P	40.0
6	☐			18.52		P	45.8
7	☐			38.89		P	62.3
8	☐			75.93		P	40.3

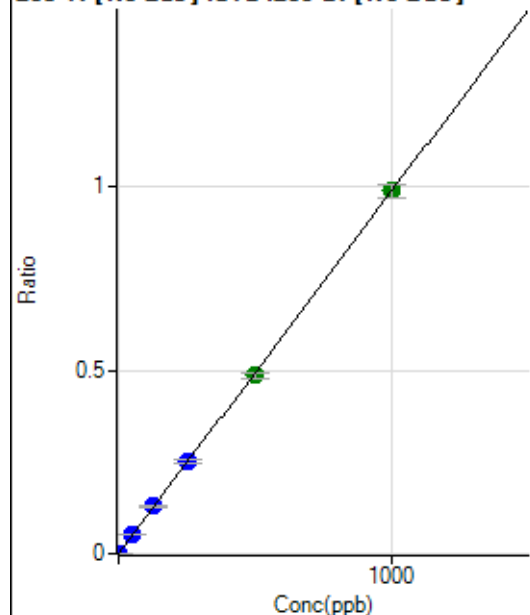
176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			988.96		P	3.8
2	☐			1061.19		P	13.8
3	☐			1889.07		P	7.6
4	☐			3261.62		P	8.2
5	☐			6073.83		P	4.5
6	☐			10471.14		P	3.7
7	☐			21267.75		P	2.4
8	☐			1113.97		P	5.1

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5934.79		P	8.3
2	☐			6029.27		P	5.6
3	☐			6881.57		P	1.3
4	☐			7161.37		P	3.4
5	☐			9101.46		P	3.3
6	☐			11772.16		P	2.3
7	☐			17382.10		P	2.6
8	☐			6062.62		P	4.4

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	538.92	0.0001	P	8.5
2	☐	1.000	0.960	4917.76	0.0011	P	0.7
3	☐	50.000	52.622	219653.90	0.0522	P	7.6
4	☐	125.000	130.087	562083.38	0.1287	P	5.5
5	☐	250.000	256.288	1167028.81	0.2535	P	3.5
6	☐	500.000	492.971	2303840.35	0.4876	A	3.1
7	☐	1000.000	1001.176	4625933.91	0.9901	A	3.8
8	☐			2706.27	0.0006	P	17.2

$$y = 9.8878\text{E-}004 * x + 1.1918\text{E-}004$$

$$R = 0.9999$$

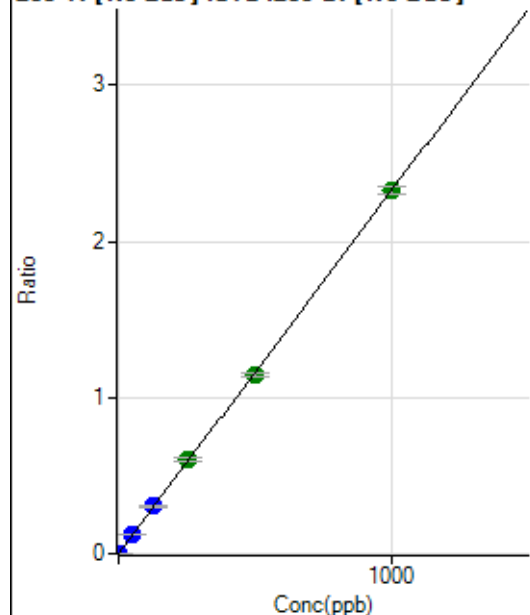
$$DL = 0.03065$$

$$BEC = 0.1205$$

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	1450.13	0.0003	P	11.8
2	☐	1.000	0.944	11566.61	0.0025	P	0.7
3	☐	50.000	53.347	523931.33	0.1243	P	5.5
4	☐	125.000	131.175	1332433.03	0.3052	P	4.9
5	☐	250.000	259.800	2780078.66	0.6041	A	3.9
6	☐	500.000	494.425	5430252.07	1.1493	A	2.3
7	☐	1000.000	999.398	10855752.59	2.3228	A	2.2
8	☐			6155.79	0.0014	P	16.0

$$y = 0.0023 * x + 3.2033\text{E-}004$$

$$R = 0.9999$$

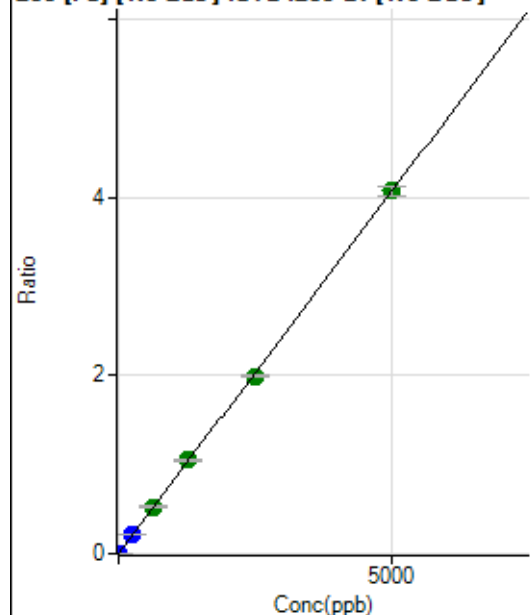
$$DL = 0.04875$$

$$BEC = 0.1378$$

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	788.93	0.0002	P	1.1
2	☐	1.000	0.927	4269.30	0.0009	P	6.0
3	☐	250.000	261.989	898693.65	0.2132	P	6.1
4	☐	625.000	648.686	2305102.39	0.5277	A	3.6
5	☐	1250.000	1288.853	4825023.26	1.0484	A	4.0
6	☐	2500.000	2451.350	9421736.67	1.9938	A	0.6
7	☐	5000.000	5011.052	19047275.43	4.0756	A	2.7
8	☐			14422.12	0.0034	P	14.9

$$y = 8.1330\text{E-}004 * x + 1.7461\text{E-}004$$

$$R = 0.9999$$

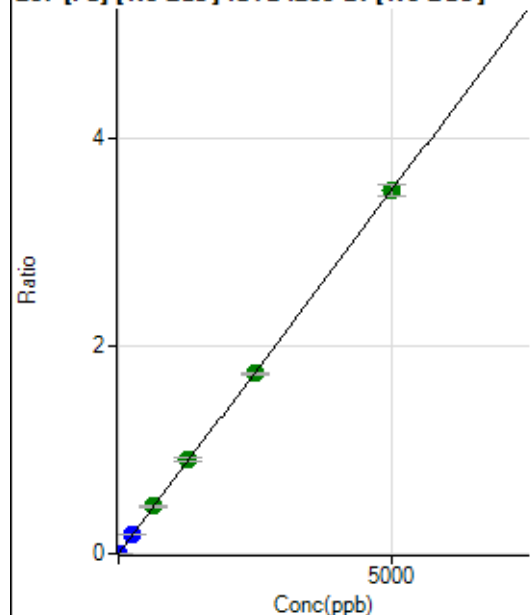
$$DL = 0.006793$$

$$BEC = 0.2147$$

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	687.07	0.0002	P	9.0
2	☐	1.000	0.972	3830.27	0.0008	P	6.5
3	☐	250.000	266.558	787850.49	0.1870	P	6.5
4	☐	625.000	653.649	2001876.88	0.4583	A	3.0
5	☐	1250.000	1295.003	4178640.49	0.9078	A	2.7
6	☐	2500.000	2477.438	8204759.21	1.7365	A	1.5
7	☐	5000.000	4995.621	16364759.74	3.5015	A	3.2
8	☐			11706.06	0.0027	P	12.5

$$y = 7.0088\text{E-}004 * x + 1.5227\text{E-}004$$

$$R = 0.9999$$

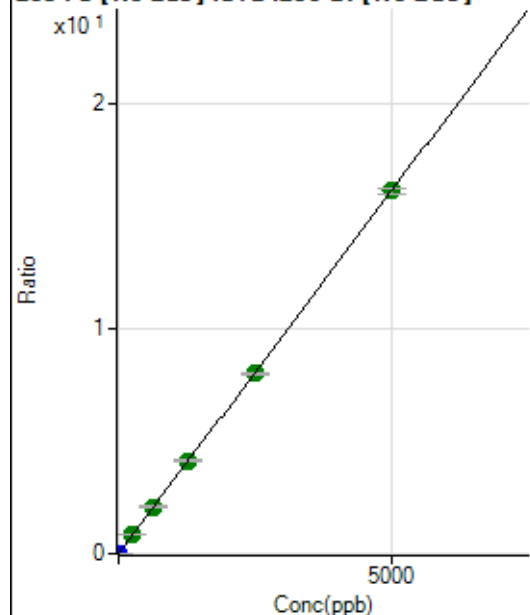
$$DL = 0.05869$$

$$BEC = 0.2173$$

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	3126.14	0.0007	P	7.5
2	☐	1.000	0.966	17519.82	0.0038	P	4.3
3	☐	250.000	265.546	3614660.49	0.8574	A	5.3
4	☐	625.000	643.903	9080263.99	2.0781	A	2.1
5	☐	1250.000	1281.668	19036972.54	4.1358	A	3.0
6	☐	2500.000	2477.959	37779797.48	7.9954	A	1.0
7	☐	5000.000	4999.963	75416831.44	16.1323	A	1.9
8	☐			55061.54	0.0128	P	10.7

$$y = 0.0032 * x + 6.9260E-004$$

$$R = 1.0000$$

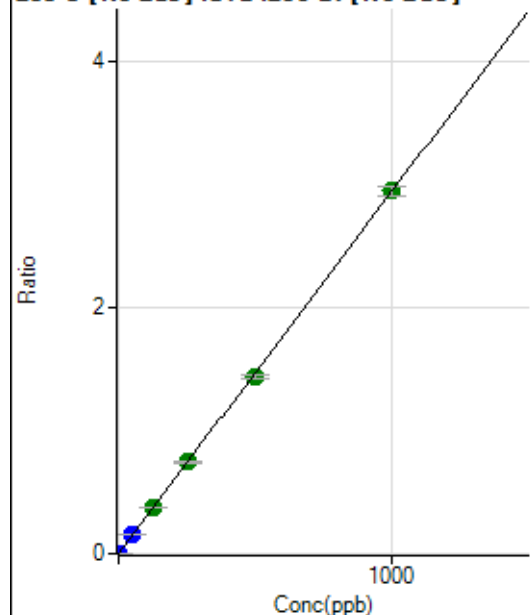
$$DL = 0.04838$$

$$BEC = 0.2147$$

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	19.44	0.0000	P	50.3
2	☐	1.000	0.952	12884.73	0.0028	P	2.9
3	☐	50.000	53.093	656816.84	0.1559	P	7.1
4	☐	125.000	127.762	1638672.78	0.3752	A	3.4
5	☐	250.000	253.661	3430523.49	0.7449	A	1.6
6	☐	500.000	491.177	6814410.22	1.4424	A	2.2
7	☐	1000.000	1002.996	13764390.67	2.9454	A	2.8
8	☐			4491.52	0.0010	P	22.0

$$y = 0.0029 * x + 4.3231E-006$$

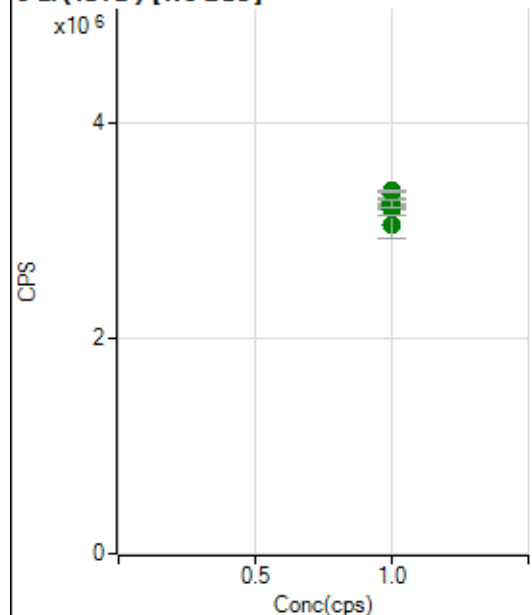
$$R = 0.9999$$

$$DL = 0.002221$$

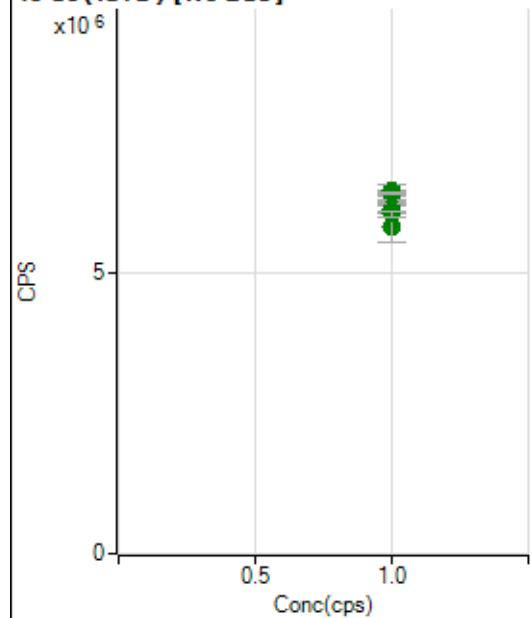
$$BEC = 0.001472$$

Weight: <None>

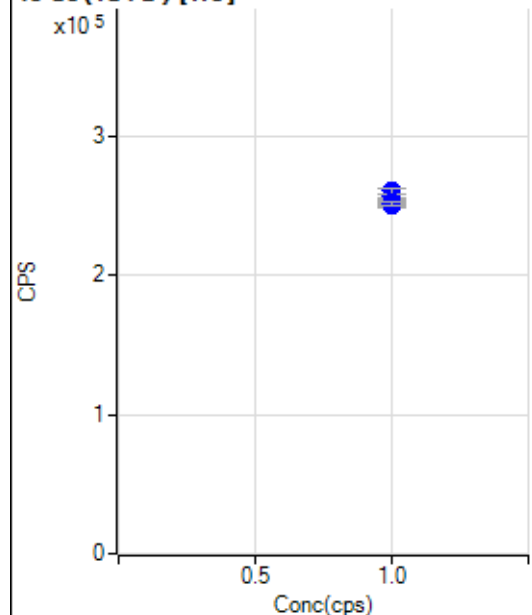
Min Conc: 0

6 Li (ISTD) [No Gas]

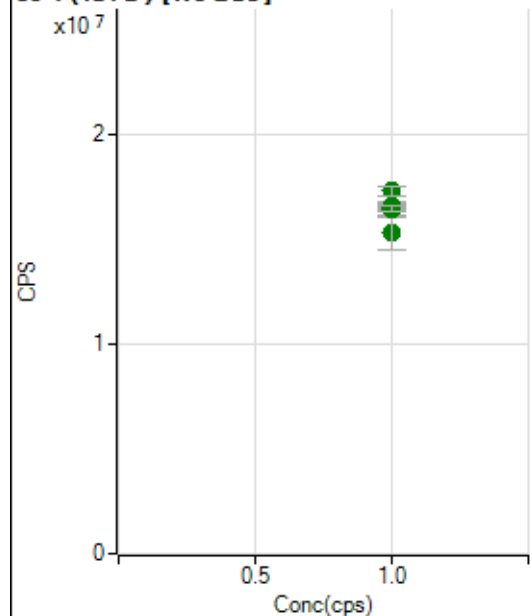
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3269757.80		A	4.7
2	☐	1.000		3257891.44		A	1.1
3	☐	1.000		3057892.56		A	8.3
4	☐	1.000		3186314.47		A	2.8
5	☐	1.000		3341880.76		A	2.0
6	☐	1.000		3235160.40		A	1.2
7	☐	1.000		3365436.05		A	0.5
8	☐	1.000		3247464.96		A	2.6

45 Sc (ISTD) [No Gas]

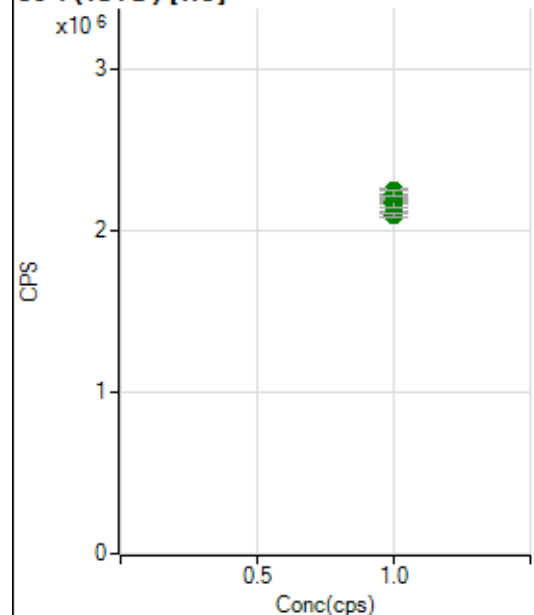
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6208937.34		A	1.3
2	☐	1.000		6131540.67		A	2.5
3	☐	1.000		5821200.43		A	9.3
4	☐	1.000		6037447.27		A	1.5
5	☐	1.000		6424435.67		A	1.4
6	☐	1.000		6338211.09		A	1.9
7	☐	1.000		6445150.87		A	3.2
8	☐	1.000		6417544.70		A	0.5

45 Sc (ISTD) [He]

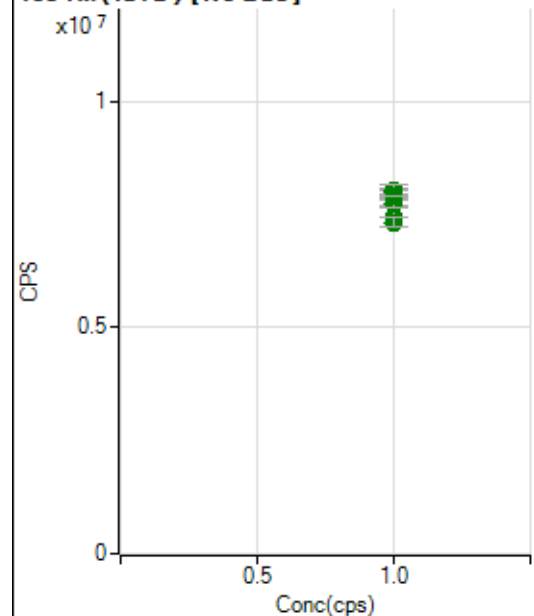
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		253253.84		P	2.1
2	☐	1.000		253797.61		P	1.7
3	☐	1.000		257515.87		P	0.8
4	☐	1.000		249789.81		P	0.8
5	☐	1.000		261007.57		P	1.6
6	☐	1.000		252252.18		P	2.1
7	☐	1.000		252843.79		P	0.9
8	☐	1.000		251258.48		P	1.0

89 Y (ISTD) [No Gas]

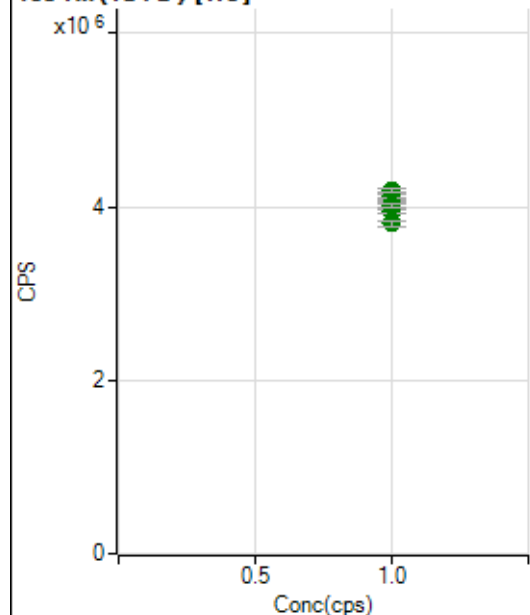
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16630411.14		A	2.0
2	☐	1.000		16566975.03		A	2.6
3	☐	1.000		15291826.99		A	9.7
4	☐	1.000		16396381.28		A	3.0
5	☐	1.000		16623278.64		A	1.2
6	☐	1.000		16453901.84		A	1.7
7	☐	1.000		17319716.69		A	3.0
8	☐	1.000		16488747.53		A	1.9

89 Y(ISTD) [He]

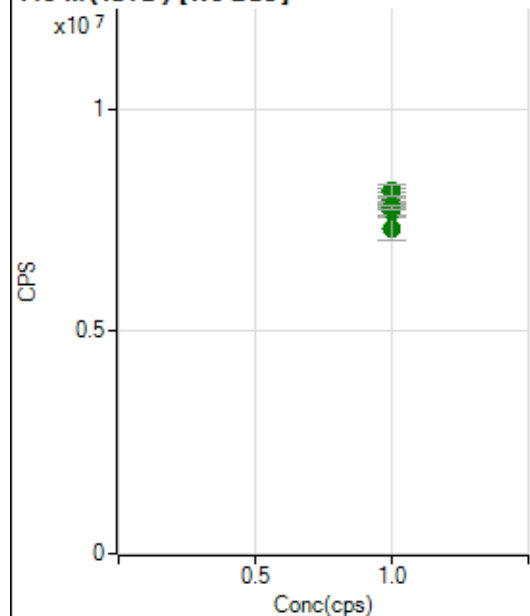
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2150280.26		A	2.4
2	☐	1.000		2197655.64		A	2.6
3	☐	1.000		2170552.69		A	2.0
4	☐	1.000		2096951.04		A	0.7
5	☐	1.000		2248625.14		A	1.4
6	☐	1.000		2183964.12		A	3.5
7	☐	1.000		2228831.10		A	1.8
8	☐	1.000		2234372.33		A	1.3

103 Rh(ISTD) [No Gas]

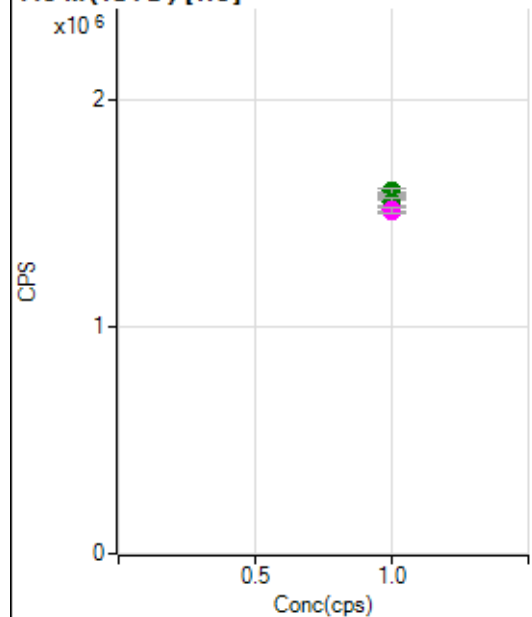
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7977338.03		A	1.4
2	☐	1.000		8012710.59		A	1.5
3	☐	1.000		7440126.21		A	6.5
4	☐	1.000		7719643.49		A	2.1
5	☐	1.000		8008579.87		A	1.7
6	☐	1.000		7993986.03		A	3.6
7	☐	1.000		7899010.59		A	0.4
8	☐	1.000		7321069.17		A	2.9

103 Rh (ISTD) [He]

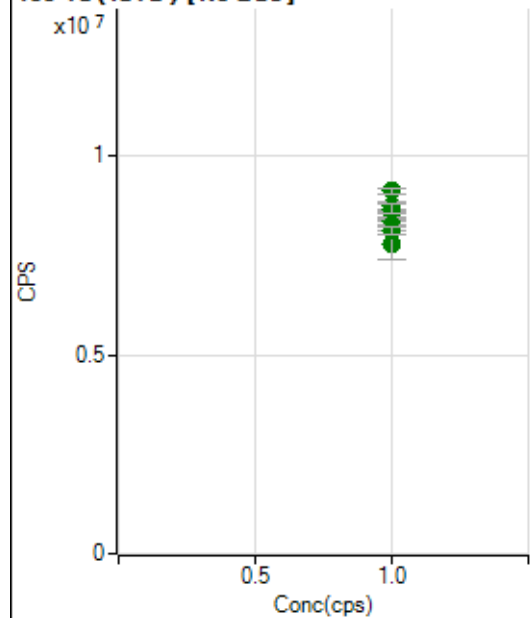
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4027751.33		A	2.6
2	☐	1.000		4099145.22		A	3.5
3	☐	1.000		4127132.27		A	1.3
4	☐	1.000		3935284.01		A	1.1
5	☐	1.000		4182452.75		A	0.9
6	☐	1.000		4019396.61		A	1.3
7	☐	1.000		4006677.93		A	1.2
8	☐	1.000		3805331.47		A	1.7

115 In (ISTD) [No Gas]

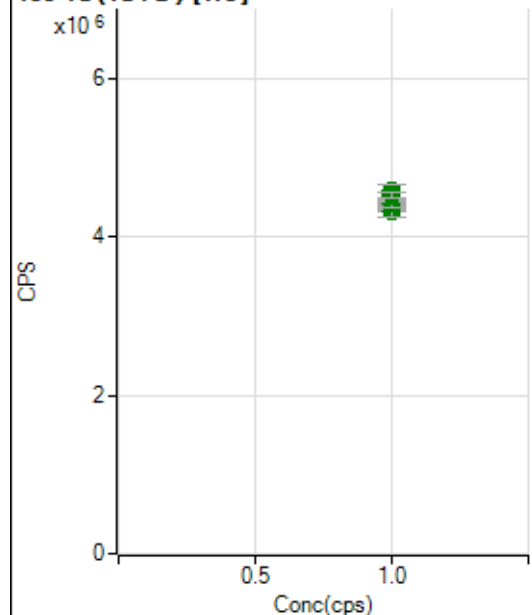
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7992114.17		A	1.8
2	☐	1.000		8013521.55		A	3.0
3	☐	1.000		7312107.60		A	7.0
4	☐	1.000		7711639.11		A	2.4
5	☐	1.000		8135165.07		A	2.3
6	☐	1.000		7956523.24		A	1.2
7	☐	1.000		8163586.84		A	3.2
8	☐	1.000		7805079.84		A	1.2

115 In (ISTD) [He]

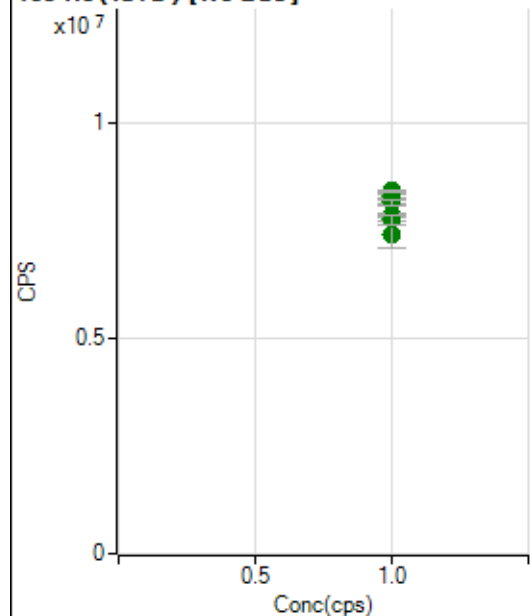
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1567454.10		M	4.0
2	☐	1.000		1566845.38		A	0.6
3	☐	1.000		1573237.00		A	0.4
4	☐	1.000		1509787.64		M	0.4
5	☐	1.000		1601456.10		A	1.6
6	☐	1.000		1553449.12		A	1.7
7	☐	1.000		1523596.99		A	2.1
8	☐	1.000		1515809.52		M	2.0

159 Tb (ISTD) [No Gas]

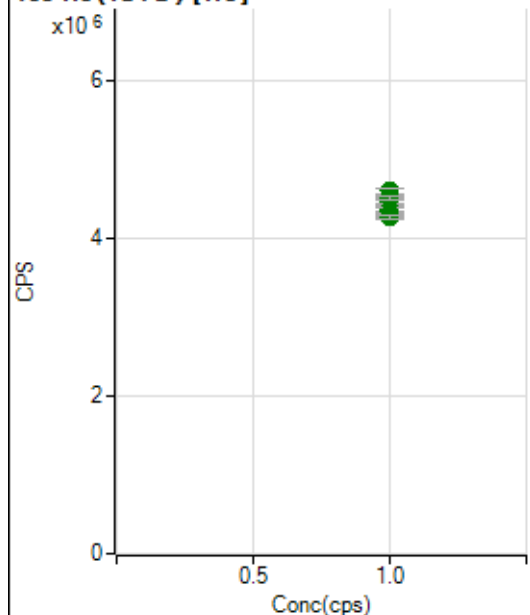
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8278915.57		A	1.7
2	☐	1.000		8347323.42		A	2.1
3	☐	1.000		7787356.41		A	9.3
4	☐	1.000		8142142.38		A	2.4
5	☐	1.000		8543123.69		A	1.8
6	☐	1.000		8753224.59		A	2.1
7	☐	1.000		9128826.60		A	1.7
8	☐	1.000		8673048.97		A	2.7

159 Tb (ISTD) [He]

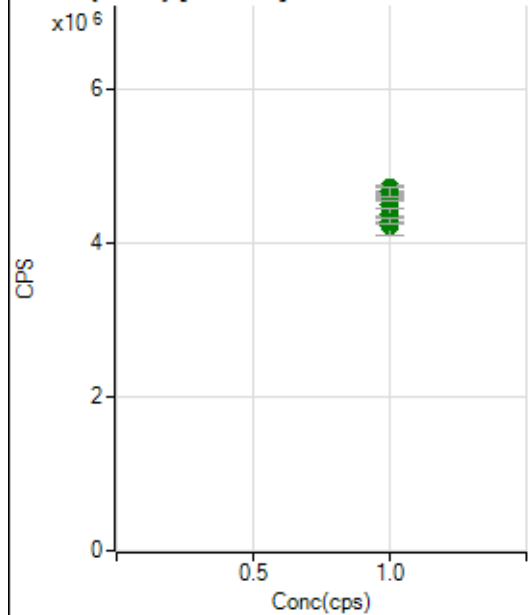
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4391857.33		A	2.3
2	☐	1.000		4427673.16		A	2.6
3	☐	1.000		4363924.83		A	2.2
4	☐	1.000		4321636.78		A	3.2
5	☐	1.000		4577834.48		A	3.5
6	☐	1.000		4404917.23		A	1.3
7	☐	1.000		4503812.19		A	2.1
8	☐	1.000		4526866.21		A	1.6

165 Ho (ISTD) [No Gas]

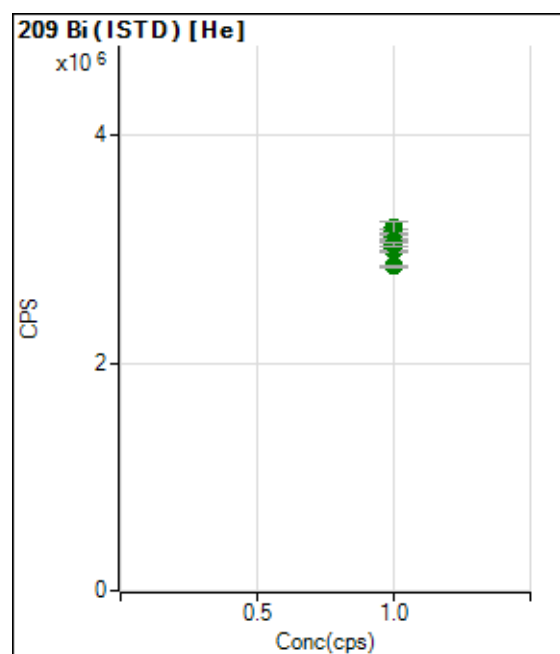
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7842603.82		A	0.8
2	☐	1.000		7842718.40		A	0.8
3	☐	1.000		7389299.12		A	8.2
4	☐	1.000		7744163.98		A	2.7
5	☐	1.000		8153334.47		A	1.1
6	☐	1.000		8279231.61		A	1.2
7	☐	1.000		8409493.94		A	0.4
8	☐	1.000		8149656.69		A	1.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4292463.20		A	1.9
2	☐	1.000		4341819.35		A	2.8
3	☐	1.000		4352144.97		A	1.5
4	☐	1.000		4267311.05		A	0.9
5	☐	1.000		4594935.73		A	1.7
6	☐	1.000		4461306.01		A	1.0
7	☐	1.000		4475707.71		A	1.7
8	☐	1.000		4509215.21		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4518603.23		A	2.4
2	☐	1.000		4600775.24		A	1.9
3	☐	1.000		4224658.79		A	6.0
4	☐	1.000		4371249.83		A	3.6
5	☐	1.000		4604749.38		A	2.2
6	☐	1.000		4725554.55		A	1.7
7	☐	1.000		4675422.64		A	2.6
8	☐	1.000		4286341.53		A	1.6



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3101376.59		A	2.6
2	☐	1.000		3002839.33		A	0.9
3	☐	1.000		3150799.64		A	1.9
4	☐	1.000		2982511.10		A	0.9
5	☐	1.000		3186477.14		A	3.4
6	☐	1.000		3080528.46		A	0.7
7	☐	1.000		3034640.33		A	1.2
8	☐	1.000		2846316.00		A	1.0

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8032222-MS.b

Acq. Date-Time 2022-03-22 14:09:24

Report Comment ---

Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		8370	83704.86			1.090	5.000
24		72835	728345.68			1.485	5.000
25		9693	96930.21			1.274	5.000
26		11192	111922.00			0.940	5.000
59		18318	183176.59			0.968	5.000
113		7938	79382.69			0.662	5.000
115		25392	253923.63			0.813	5.000
206		8001	80011.47			0.984	5.000
207		6661	66613.00			0.616	5.000
208		16507	165070.38			0.991	5.000
220		1	8.00			29.315	

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

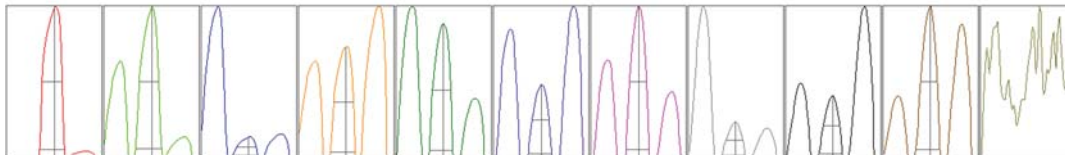
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	8366	8381	8392	8484	8230
24	72438	74687	72405	72758	71885
25	9633	9868	9646	9764	9554
26	11159	11210	11117	11366	11109
59	18222	18579	18368	18316	18104
113	7983	7995	7904	7940	7870
115	25190	25572	25580	25465	25155
206	8052	8022	8016	8053	7864
207	6692	6668	6708	6617	6621
208	16610	16721	16473	16435	16296

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	14439.61	9.05	8.90 - 9.10	
24	128287.43	24.05	23.90 - 24.10	
25	16544.79	25.00	24.90 - 25.10	
26	19044.01	26.00	25.90 - 26.10	
59	33764.96	59.00	58.90 - 59.10	
113	15734.35	113.05	112.90 - 113.10	
115	50445.68	115.05	114.90 - 115.10	
206	16199.67	206.00	205.90 - 206.10	
207	13410.60	207.00	206.90 - 207.10	
208	32776.83	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.781	0.900	
24	0.61	0.822	0.900	
25	0.61	0.788	0.900	
26	0.62	0.783	0.900	
59	0.57	0.738	0.900	
113	0.52	0.731	0.900	
115	0.53	0.726	0.900	
206	0.51	0.737	0.900	
207	0.52	0.743	0.900	
208	0.52	0.763	0.900	
220	0.53			

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.73 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.1 V	Deflect	15.0 V
Extract 2	-160.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	124	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.2 mm
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EM

Discriminator	3.9 mV	Analog HV	2292 V	Pulse HV	1648 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		4587	45874.44			2.966	
89		16915	169145.93			3.865	
205		22823	228229.77			3.541	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	4631	4721	4693	4406	4486
89	17241	17303	17536	15952	16542
205	23105	23448	23567	21662	22332

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.75 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.1 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-160.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-75 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.2 mm
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EM

Discriminator	3.9 mV	Analog HV	2292 V	Pulse HV	1648 V
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