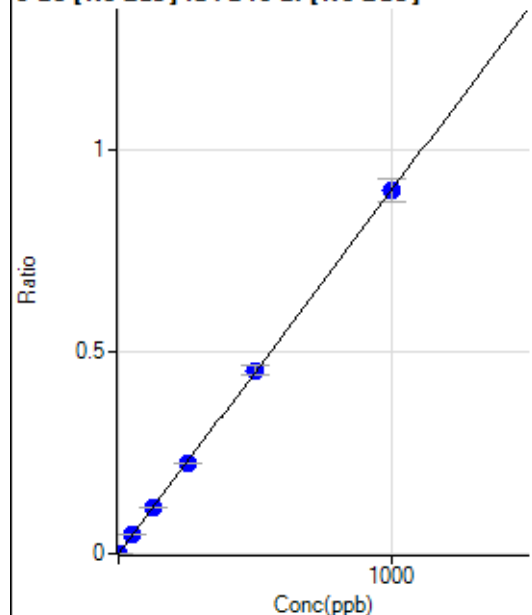


Calibration for 007CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8052020MS.b\
 Analysis File: P8052020MS.batch.bin
 DA Date-Time: 2020-05-21 13:02:35
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-05-20 14:49:38
2	004CALS.d	S01	2020-05-20 14:52:50
3	005CALS.d	S02	2020-05-20 14:56:00
4	006CALS.d	S03	2020-05-20 14:59:11
5	007CALS.d	S04	2020-05-20 15:02:18
6	008CALS.d	S05	2020-05-20 15:05:24
7	009CALS.d	S06	2020-05-20 15:08:22
8	011CALS.d	S07	2020-05-20 15:14:31
9	012CALS.d	S08	2020-05-20 15:17:32

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.99	0.0001	P	6.9
2	☐	0.100	0.087	99.98	0.0002	P	6.7
3	☐	1.000	0.980	643.89	0.0010	P	3.9
4	☐	50.000	52.518	31264.77	0.0473	P	4.0
5	☐	125.000	124.696	78043.67	0.1122	P	0.6
6	☐	250.000	247.048	158925.84	0.2223	P	0.7
7	☐	500.000	504.279	322776.31	0.4536	P	4.8
8	☐	1000.000	998.510	632234.11	0.8981	P	6.5
9	☐			200.63	0.0003	P	7.0

$$y = 8.9934\text{E-}004 * x + 7.2517\text{E-}005$$

$$R = 1.0000$$

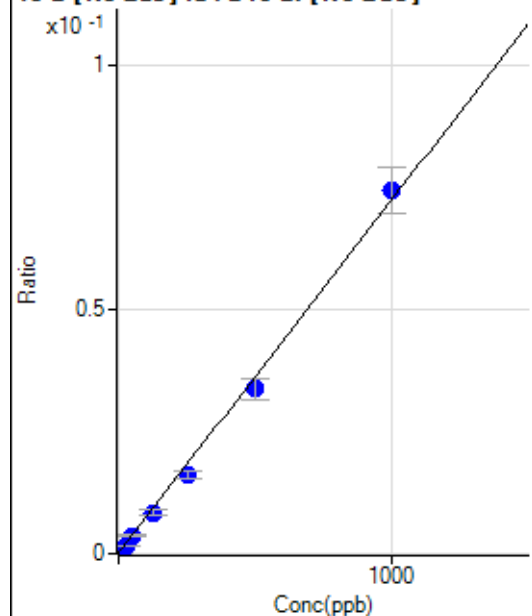
$$DL = 0.01669$$

$$BEC = 0.08063$$

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	100.65	0.0002	P	20.3
2	☐	2.500	1.838	189.30	0.0003	P	11.1
3	☐	25.000	19.494	1053.17	0.0016	P	12.7
4	☐	50.000	49.150	2453.06	0.0037	P	10.0
5	☐	125.000	114.388	5854.70	0.0084	P	10.6
6	☐	250.000	221.612	11571.65	0.0162	P	11.7
7	☐	500.000	465.029	23996.88	0.0338	P	13.1
8	☐	1000.000	1026.091	52201.89	0.0743	P	12.7
9	☐			10599.07	0.0154	P	8.2

$$y = 7.2263\text{E-}005 * x + 1.5202\text{E-}004$$

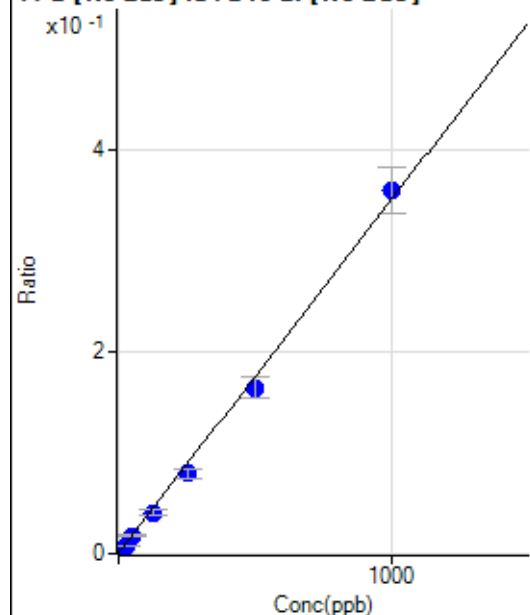
$$R = 0.9987$$

$$DL = 1.28$$

$$BEC = 2.104$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	407.26	0.0006	P	0.8
2	☐	2.500	1.974	868.52	0.0013	P	4.0
3	☐	25.000	20.617	5292.59	0.0078	P	11.1
4	☐	50.000	49.162	11827.78	0.0178	P	7.0
5	☐	125.000	115.163	28505.44	0.0410	P	10.5
6	☐	250.000	224.074	56654.44	0.0792	P	10.0
7	☐	500.000	466.902	116807.12	0.1643	P	12.9
8	☐	1000.000	1024.413	252715.03	0.3597	P	12.8
9	☐			50733.82	0.0738	P	10.4

$$y = 3.5053\text{E-}004 * x + 6.1546\text{E-}004$$

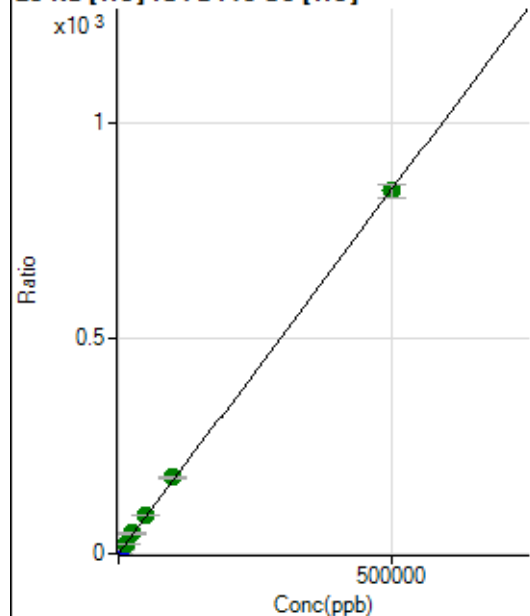
$$R = 0.9989$$

$$DL = 0.0418$$

$$BEC = 1.756$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16729.41	0.3332	P	7.5
2	☐	50.000	56.955	22214.61	0.4292	P	1.1
3	☐	500.000	559.954	63650.30	1.2767	P	6.7
4	☐	5000.000	5586.390	515338.26	9.7459	P	2.3
5	☐	12500.000	13361.757	1222843.85	22.8469	A	1.3
6	☐	25000.000	27873.058	2457000.42	47.2975	A	4.9
7	☐	50000.000	52508.178	4875544.51	88.8061	A	2.3
8	☐	100000.00	104793.75	9428935.45	176.9039	A	3.3
9	☐	500000.00	498619.31	43354896.80	840.4746	A	3.8

$$y = 0.0017 * x + 0.3332$$

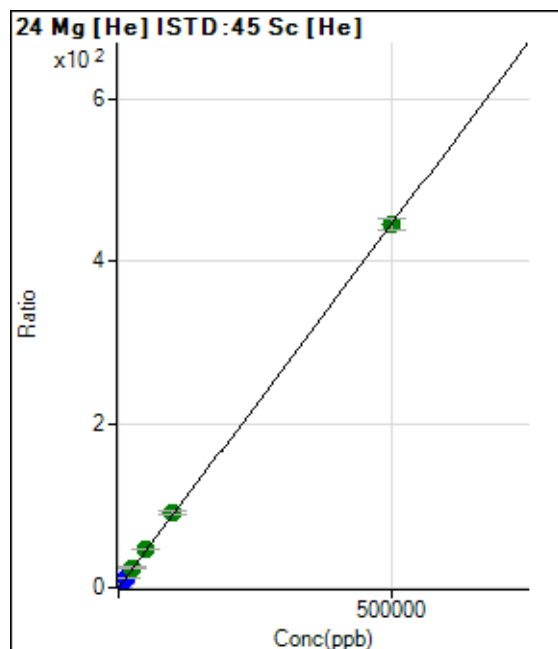
$$R = 0.9999$$

$$DL = 44.53$$

$$BEC = 197.8$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	158.34	0.0031	P	24.0
2	☐	50.000	52.403	2580.85	0.0499	P	7.2
3	☐	500.000	552.483	24721.56	0.4959	P	7.1
4	☐	5000.000	5447.753	257131.72	4.8626	P	1.8
5	☐	12500.000	13404.731	640161.27	11.9603	P	1.2
6	☐	25000.000	27643.016	1281456.49	24.6609	A	3.9
7	☐	50000.000	52441.970	2568255.48	46.7818	A	2.6
8	☐	100000.00	102832.51	4888782.40	91.7306	A	3.6
9	☐	500000.00	499030.00	22966949.99	445.1422	A	3.0

$$y = 8.9201\text{E-}004 * x + 0.0031$$

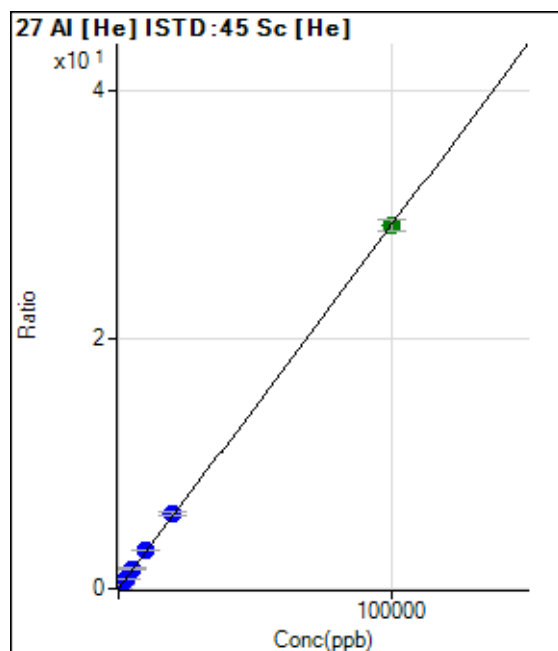
$$R = 1.0000$$

$$DL = 2.525$$

$$BEC = 3.507$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	207.96	0.0041	P	11.6
2	☒	2.000					
3	☐	20.000	22.586	535.91	0.0107	P	6.2
4	☐	1000.000	1082.878	16905.12	0.3197	P	2.8
5	☐	2500.000	2641.769	41435.68	0.7740	P	0.6
6	☐	5000.000	5536.899	84024.90	1.6178	P	5.4
7	☐	10000.000	10449.806	167430.48	3.0496	P	2.2
8	☐	20000.000	20683.941	321481.69	6.0322	P	3.6
9	☐	100000.00	99787.013	1500883.42	29.0860	A	3.0

$$y = 2.9144\text{E-}004 * x + 0.0041$$

$$R = 1.0000$$

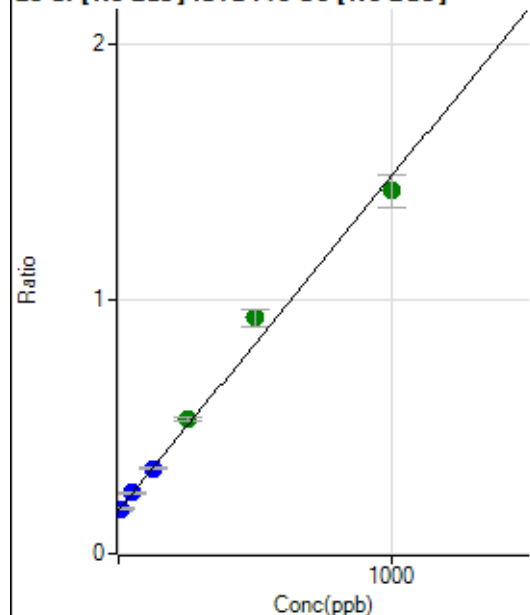
$$DL = 4.913$$

$$BEC = 14.16$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	299494.24	0.1700	P	2.4
2	☐	1.000	3.496	301037.55	0.1746	P	1.5
3	☐	10.000	4.734	316100.49	0.1762	P	5.0
4	☐	50.000	54.084	424912.85	0.2410	P	2.7
5	☐	125.000	126.399	610280.51	0.3358	P	1.7
6	☐	250.000	273.848	978906.30	0.5292	A	2.4
7	☐	500.000	575.327	1702220.26	0.9246	A	7.3
8	☐	1000.000	956.046	2557116.66	1.4240	A	8.9
9	☐			541820.33	0.3069	P	2.9

$$y = 0.0013 * x + 0.1700$$

$$R = 0.9955$$

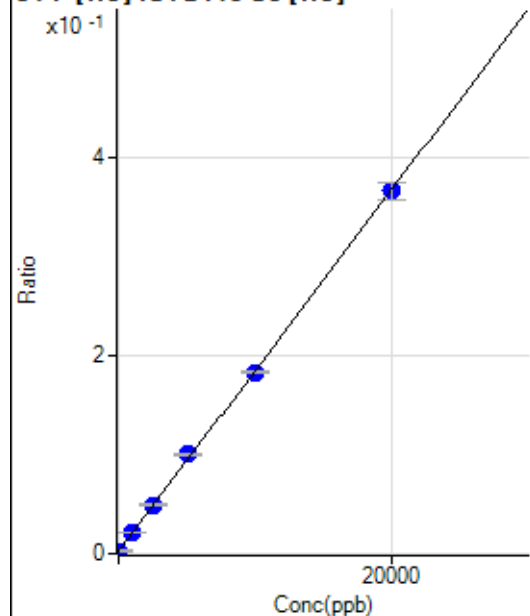
$$DL = 9.271$$

$$BEC = 129.6$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-19.425	102.78	0.0021	P	21.5
2	☐	0.000	-6.085	119.45	0.0023	P	34.1
3	☐	0.000	25.510	141.67	0.0029	P	34.0
4	☐	1000.000	1025.330	1116.74	0.0211	P	6.3
5	☐	2500.000	2569.430	2639.19	0.0493	P	4.2
6	☐	5000.000	5374.862	5226.07	0.1005	P	2.8
7	☐	10000.000	9912.847	10067.67	0.1833	P	1.5
8	☐	20000.000	19939.916	19527.48	0.3663	P	5.1
9	☐			122.23	0.0024	P	26.1

$$y = 1.8251E-005 * x + 0.0024$$

$$R = 0.9998$$

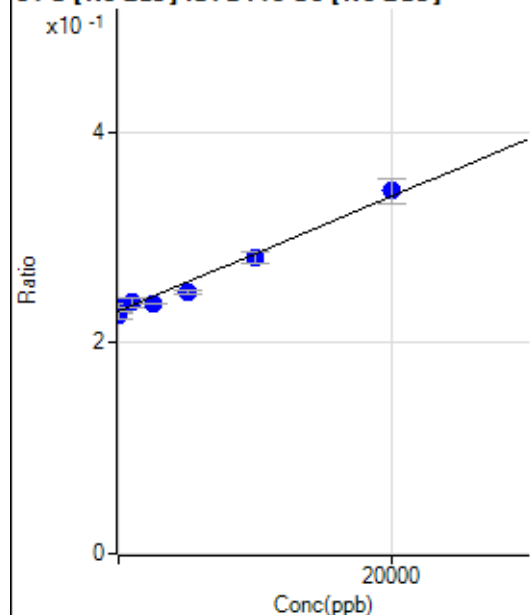
$$DL = 120.7$$

$$BEC = 132.1$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	8.628	405230.75	0.2301	P	2.7
2	☐	0.000	856.719	404615.94	0.2347	P	1.3
3	☐	0.000	-865.348	404334.54	0.2253	P	3.3
4	☐	1000.000	1470.414	419532.89	0.2380	P	4.4
5	☐	2500.000	1299.078	430866.71	0.2371	P	0.3
6	☐	5000.000	3242.759	458042.38	0.2477	P	0.9
7	☐	10000.000	9281.564	516721.80	0.2805	P	4.0
8	☐	20000.000	20925.123	617864.74	0.3439	P	7.2
9	☐			390258.09	0.2211	P	1.1

$$y = 5.4417\text{E-}006 * x + 0.2300$$

$$R = 0.9912$$

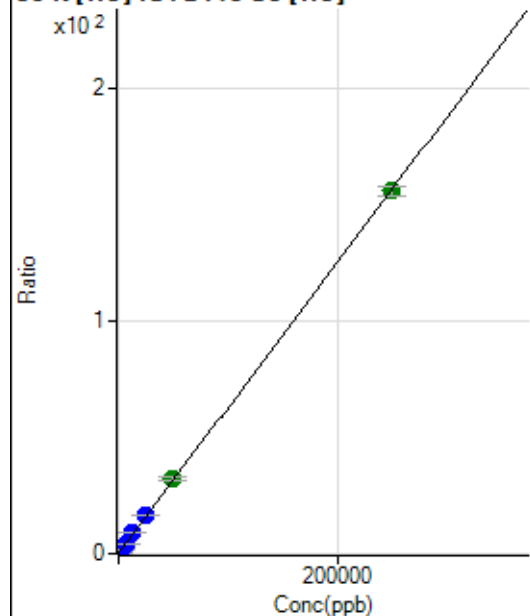
$$DL = 3027$$

$$BEC = 4.227\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12333.34	0.2456	P	7.1
2	☐	50.000	47.733	14254.59	0.2754	P	1.6
3	☐	500.000	564.950	29792.42	0.5978	P	7.5
4	☐	2500.000	2755.363	103800.79	1.9630	P	2.1
5	☐	6250.000	6635.664	234537.24	4.3816	P	0.7
6	☐	12500.000	14048.884	467756.51	9.0022	P	4.1
7	☐	25000.000	26245.435	911542.87	16.6042	P	2.7
8	☐	50000.000	51395.912	1720465.53	32.2803	A	3.3
9	☐	250000.00	249506.50	8036717.45	155.7612	A	2.8

$$y = 6.2329\text{E-}004 * x + 0.2456$$

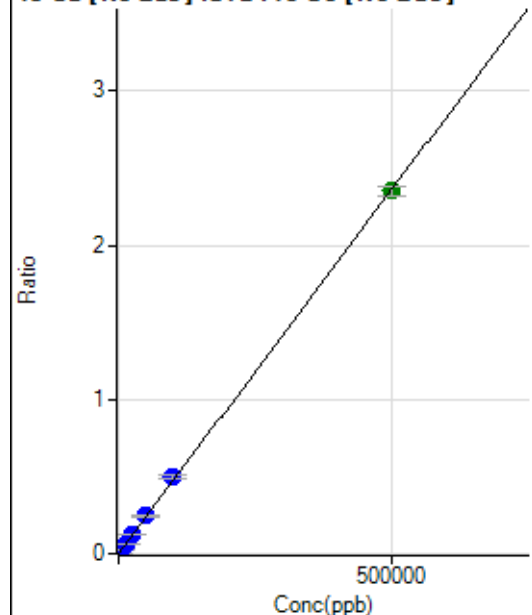
$$R = 1.0000$$

$$DL = 84.11$$

$$BEC = 394.1$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	319.46	0.0002	P	15.6
2	☐	50.000	49.189	713.92	0.0004	P	16.0
3	☐	500.000	498.294	4545.28	0.0025	P	3.8
4	☐	5000.000	5391.085	45141.02	0.0256	P	4.1
5	☐	12500.000	12895.503	110859.91	0.0610	P	1.6
6	☐	25000.000	26023.140	227356.43	0.1229	P	1.3
7	☐	50000.000	52296.436	454542.97	0.2468	P	5.0
8	☐	100000.00	105480.89	894808.64	0.4977	P	5.8
9	☐	500000.00	498609.22	4150174.88	2.3520	A	2.6

$$y = 4.7167\text{E-}006 * x + 1.8159\text{E-}004$$

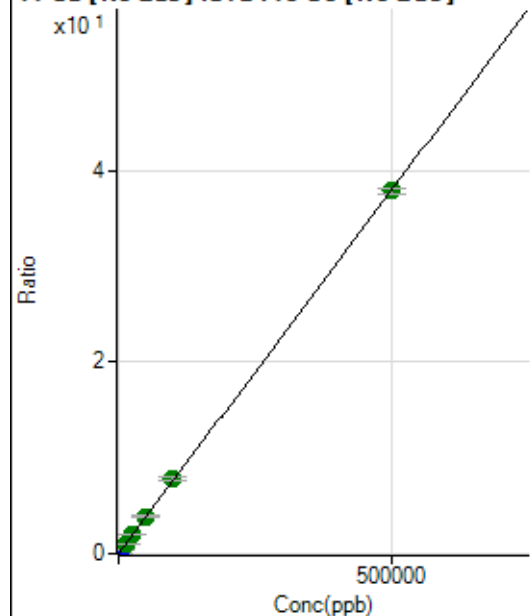
$$R = 0.9999$$

$$DL = 17.98$$

$$BEC = 38.5$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15597.75	0.0089	P	2.9
2	☐	50.000	59.252	23027.30	0.0134	P	0.9
3	☐	500.000	508.464	85202.60	0.0475	P	3.0
4	☐	5000.000	5444.231	744461.70	0.4223	P	3.3
5	☐	12500.000	12824.576	1785799.93	0.9827	A	1.9
6	☐	25000.000	25363.764	3578582.16	1.9349	A	1.2
7	☐	50000.000	51261.736	7185138.53	3.9015	A	4.5
8	☐	100000.00	102930.93	14065238.86	7.8251	A	6.3
9	☐	500000.00	499256.88	66918054.97	37.9207	A	1.9

$$y = 7.5937\text{E-}005 * x + 0.0089$$

$$R = 1.0000$$

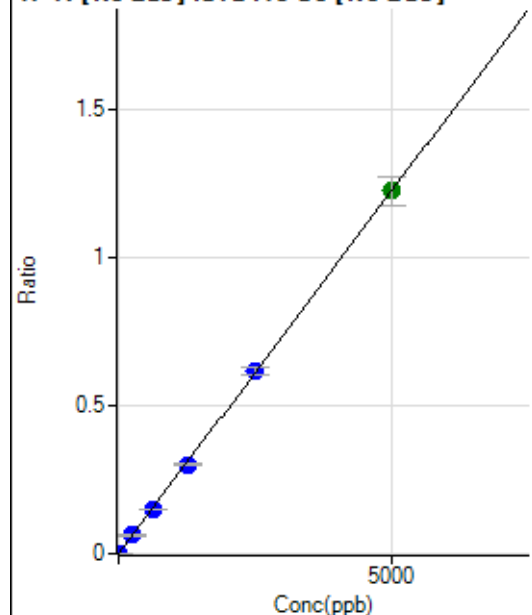
$$DL = 10.06$$

$$BEC = 116.6$$

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	241.68	0.0001	P	17.6
2	☐	0.500	0.433	419.46	0.0002	P	17.0
3	☐	5.000	4.787	2344.70	0.0013	P	10.8
4	☐	250.000	253.115	109472.51	0.0621	P	4.5
5	☐	625.000	616.440	274521.44	0.1511	P	0.5
6	☐	1250.000	1226.382	555556.73	0.3004	P	1.2
7	☐	2500.000	2509.793	1132122.80	0.6146	P	3.9
8	☐	5000.000	5001.923	2200216.28	1.2248	A	7.6
9	☐			497.24	0.0003	P	10.0

$$y = 2.4484\text{E-}004 * x + 1.3742\text{E-}004$$

$$R = 1.0000$$

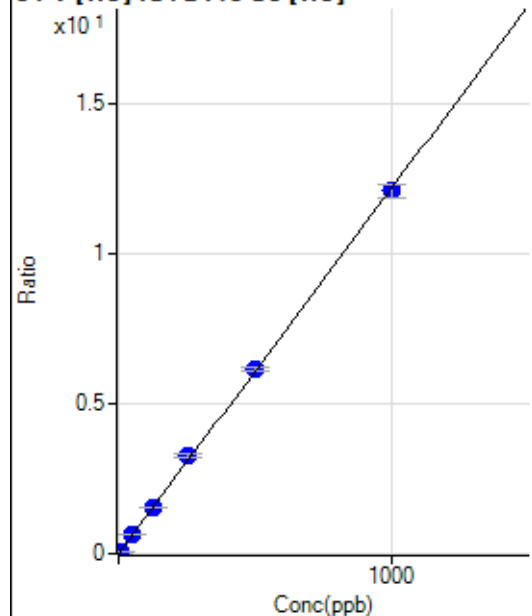
$$DL = 0.2959$$

$$BEC = 0.5613$$

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	15.55	0.0003	P	41.1
2	☐	0.500	0.467	310.01	0.0060	P	3.5
3	☐	5.000	5.709	3476.01	0.0697	P	7.2
4	☐	50.000	51.852	33362.17	0.6309	P	2.1
5	☐	125.000	126.513	82374.17	1.5389	P	0.8
6	☐	250.000	267.250	168854.61	3.2505	P	4.9
7	☐	500.000	504.526	336880.96	6.1362	P	2.4
8	☐	1000.000	993.139	643730.01	12.0786	P	3.6
9	☐			164.45	0.0032	P	19.7

$$y = 0.0122 * x + 3.0585\text{E-}004$$

$$R = 0.9998$$

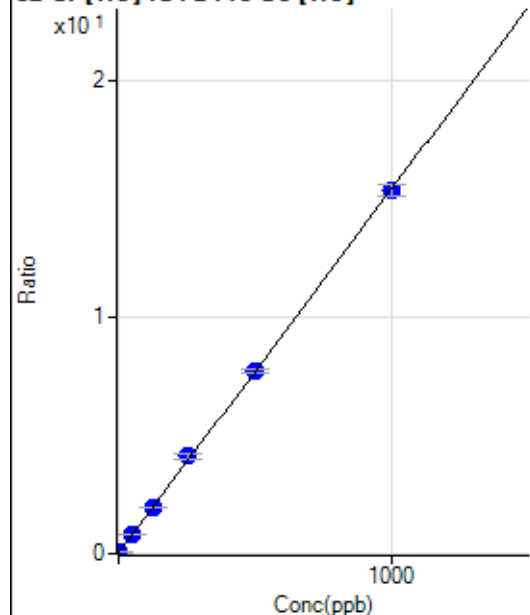
$$DL = 0.031$$

$$BEC = 0.02515$$

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	710.02	0.0141	P	4.8
2	☐	0.200	0.189	882.26	0.0171	P	5.4
3	☐	2.000	2.129	2341.32	0.0470	P	7.5
4	☐	50.000	52.436	43531.63	0.8231	P	0.9
5	☐	125.000	126.872	105542.46	1.9715	P	0.7
6	☐	250.000	265.805	213790.08	4.1150	P	4.4
7	☐	500.000	500.773	424930.78	7.7401	P	2.5
8	☐	1000.000	995.306	819246.25	15.3698	P	3.0
9	☐			12895.95	0.2498	P	0.3

$$y = 0.0154 * x + 0.0141$$

$$R = 0.9999$$

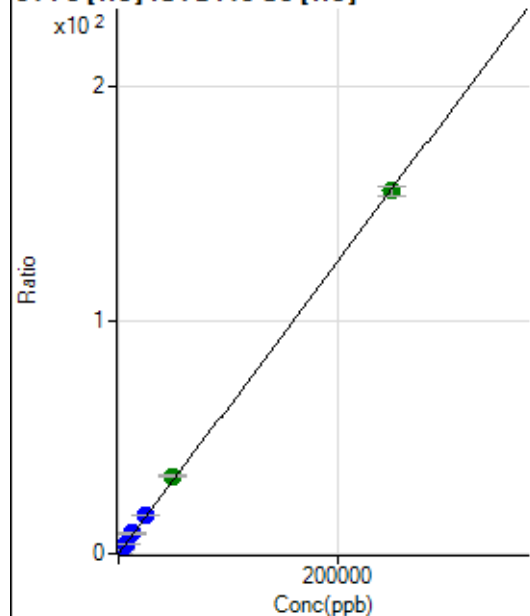
$$DL = 0.133$$

$$BEC = 0.9157$$

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	237.04	0.0047	P	7.6
2	☐	5.000	5.240	412.97	0.0080	P	5.9
3	☐	50.000	59.666	2092.78	0.0420	P	5.7
4	☐	2500.000	2764.133	91515.18	1.7308	P	2.6
5	☐	6250.000	6726.156	225059.92	4.2048	P	1.3
6	☐	12500.000	14179.785	460140.52	8.8592	P	5.3
7	☐	25000.000	26648.041	913875.94	16.6450	P	2.0
8	☐	50000.000	53258.269	1772486.99	33.2617	A	4.0
9	☐	250000.00	249085.00	8025851.92	155.5451	A	2.6

$$y = 6.2445E-004 * x + 0.0047$$

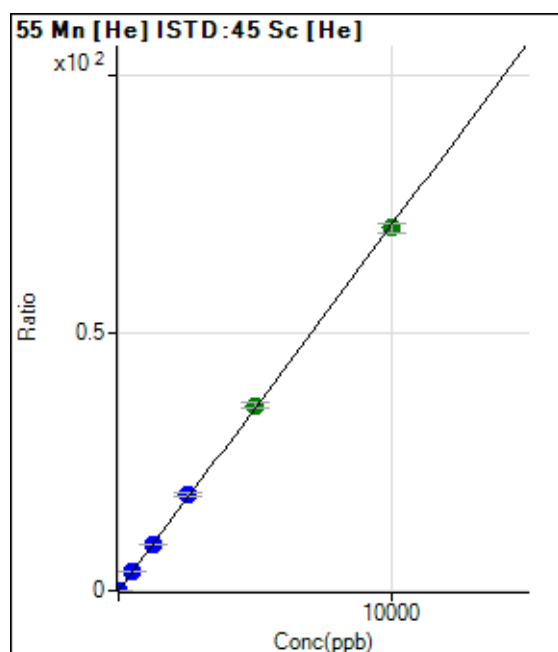
$$R = 0.9999$$

$$DL = 1.714$$

$$BEC = 7.527$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0009	P	42.7
2	☐	0.100	0.113	87.78	0.0017	P	4.4
3	☐	1.000	0.923	372.23	0.0074	P	6.0
4	☐	500.000	520.892	195688.65	3.7011	P	3.0
5	☐	1250.000	1267.685	482012.98	9.0061	P	1.7
6	☐	2500.000	2644.197	975953.43	18.7843	P	4.3
7	☐	5000.000	5068.697	1976736.43	36.0071	A	2.6
8	☐	10000.000	9926.347	3758540.29	70.5141	A	3.0
9	☐			2821.42	0.0547	P	4.4

$$y = 0.0071 * x + 8.9551E-004$$

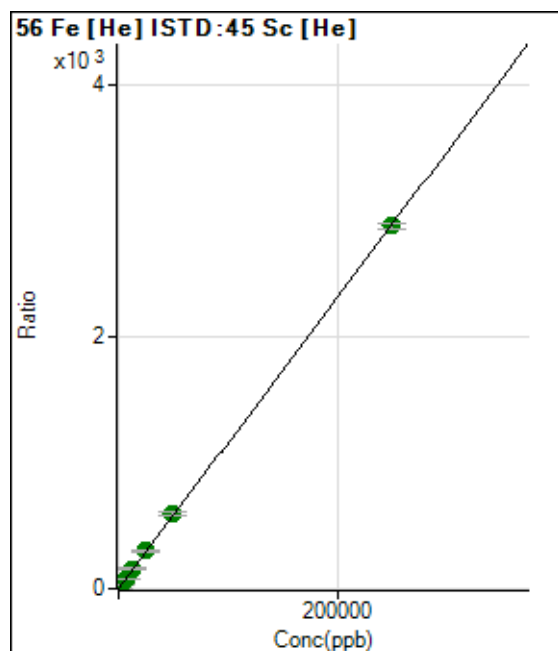
$$R = 0.9999$$

$$DL = 0.1616$$

$$BEC = 0.1261$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1520.48	0.0302	P	4.8
2	☐	5.000	5.607	4917.61	0.0950	P	4.5
3	☐	50.000	58.933	35453.44	0.7112	P	7.0
4	☐	2500.000	2690.717	1645441.69	31.1226	A	4.0
5	☐	6250.000	6569.470	4064867.07	75.9431	A	1.5
6	☐	12500.000	13558.475	8139770.26	156.7039	A	5.2
7	☐	25000.000	25963.731	16471248.17	300.0516	A	3.1
8	☐	50000.000	51729.988	31857698.86	597.7911	A	3.7
9	☐	250000.00	249494.81	148794077.4	2,883.043	A	1.8

$$y = 0.0116 * x + 0.0302$$

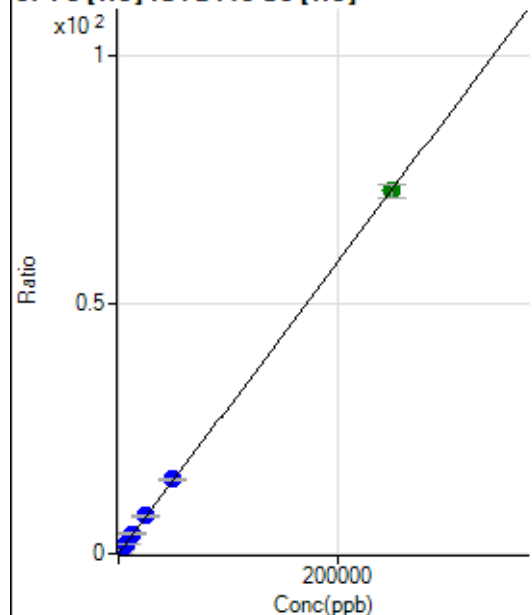
$$R = 1.0000$$

$$DL = 0.3766$$

$$BEC = 2.617$$

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	74.07	0.0015	P	29.8
2	☒	5.000					
3	☐	50.000	56.150	887.08	0.0178	P	12.4
4	☐	2500.000	2669.146	41235.72	0.7797	P	0.9
5	☐	6250.000	6536.450	102084.90	1.9073	P	1.2
6	☐	12500.000	13770.818	208673.94	4.0166	P	4.4
7	☐	25000.000	25925.596	415048.63	7.5605	P	2.8
8	☐	50000.000	51319.433	797642.20	14.9645	P	3.4
9	☐	250000.00	249571.15	3753791.23	72.7682	A	3.6

$$y = 2.9157\text{E-}004 * x + 0.0015$$

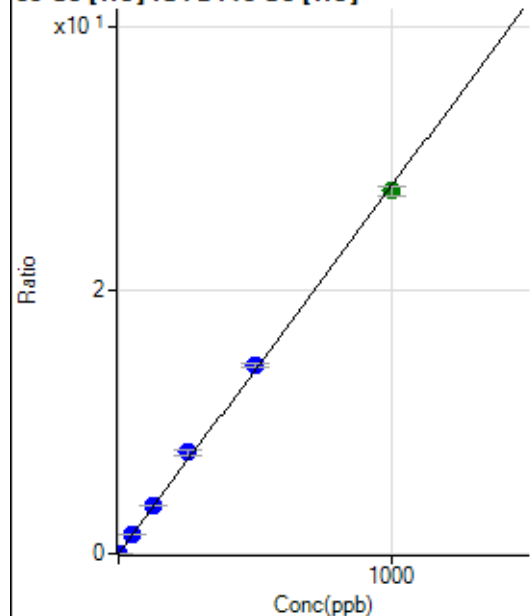
$$R = 1.0000$$

$$DL = 4.466$$

$$BEC = 5.001$$

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	95.56	0.0019	P	12.2
2	☐	0.100	0.073	203.34	0.0039	P	14.8
3	☐	1.000	1.010	1500.09	0.0301	P	5.9
4	☐	50.000	54.471	80481.64	1.5218	P	1.3
5	☐	125.000	129.814	193983.82	3.6241	P	0.9
6	☐	250.000	274.712	398316.36	7.6672	P	4.6
7	☐	500.000	512.273	784844.70	14.2959	P	2.5
8	☐	1000.000	986.860	1468059.77	27.5383	A	2.5
9	☐			2297.99	0.0446	P	4.4

$$y = 0.0279 * x + 0.0019$$

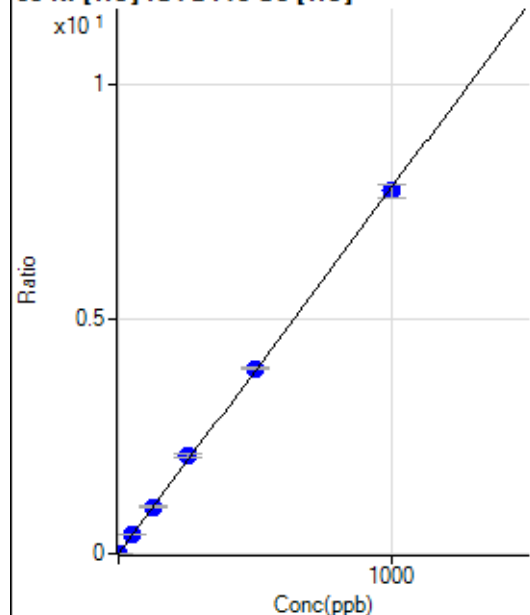
$$R = 0.9995$$

$$DL = 0.02494$$

$$BEC = 0.06828$$

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	80.00	0.0016	P	10.0
2	☐	0.100	0.107	125.56	0.0024	P	11.0
3	☐	1.000	1.232	556.68	0.0112	P	11.3
4	☐	50.000	53.819	22245.28	0.4207	P	3.0
5	☐	125.000	128.487	53633.98	1.0022	P	2.4
6	☐	250.000	268.560	108732.74	2.0930	P	4.6
7	☐	500.000	506.874	216818.08	3.9489	P	1.7
8	☐	1000.000	991.296	411530.36	7.7213	P	3.5
9	☐			4279.57	0.0830	P	6.9

$$y = 0.0078 * x + 0.0016$$

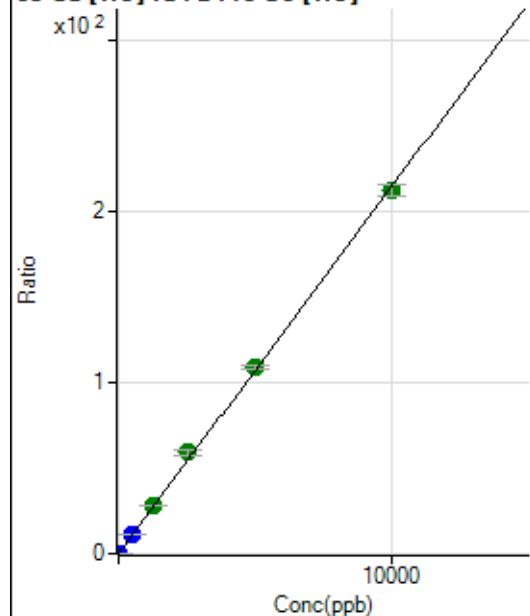
$$R = 0.9998$$

$$DL = 0.06112$$

$$BEC = 0.2045$$

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	352.70	0.0070	P	9.9
2	☐	0.200	0.185	569.47	0.0110	P	7.4
3	☐	2.000	2.254	2760.86	0.0553	P	4.8
4	☐	500.000	544.246	617186.57	11.6709	P	1.3
5	☐	1250.000	1307.779	1500255.68	28.0342	A	2.8
6	☐	2500.000	2768.018	3081553.83	59.3288	A	5.2
7	☐	5000.000	5071.222	5966936.30	108.6891	A	2.6
8	☐	10000.000	9887.950	11296085.54	211.9171	A	3.0
9	☐			5103.16	0.0989	P	5.5

$$y = 0.0214 * x + 0.0070$$

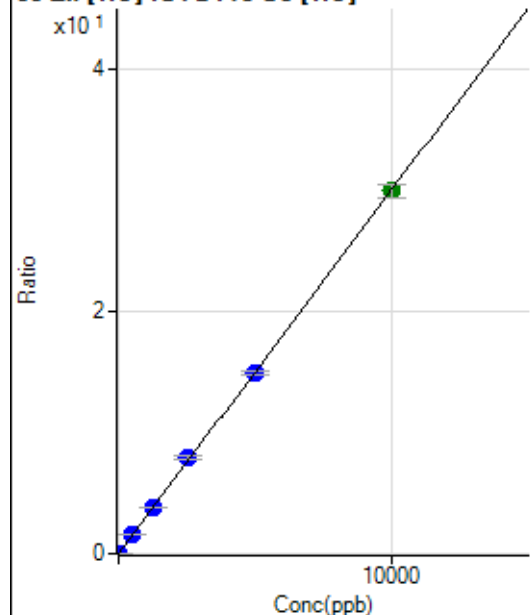
$$R = 0.9996$$

$$DL = 0.09701$$

$$BEC = 0.3281$$

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	88.89	0.0018	P	21.2
2	☒	0.200					
3	☐	2.000	2.578	475.57	0.0095	P	4.8
4	☐	500.000	522.178	83070.50	1.5710	P	2.7
5	☐	1250.000	1260.811	202909.13	3.7908	P	0.8
6	☐	2500.000	2655.473	414658.11	7.9821	P	4.7
7	☐	5000.000	4963.674	819058.58	14.9187	P	2.2
8	☐	10000.000	9976.834	1597920.91	29.9843	A	3.8
9	☐			4634.13	0.0898	P	2.6

$$y = 0.0030 * x + 0.0018$$

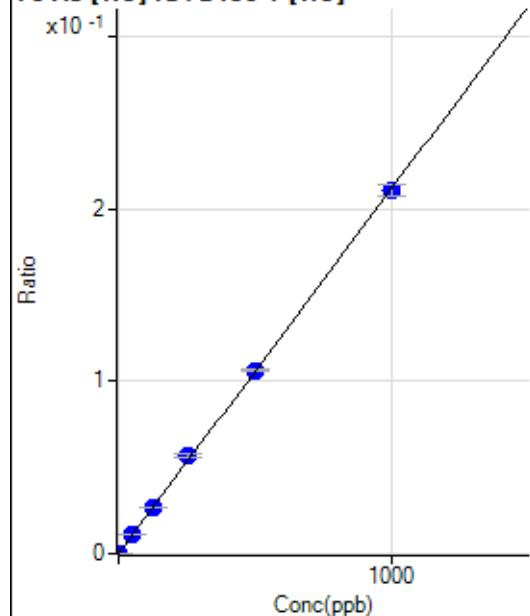
$$R = 0.9999$$

$$DL = 0.3768$$

$$BEC = 0.5922$$

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	8.00	0.0000	P	7.2
2	☐	0.100	0.099	18.67	0.0000	P	33.2
3	☐	1.000	0.970	106.34	0.0002	P	12.0
4	☐	50.000	51.135	5512.97	0.0108	P	2.2
5	☐	125.000	126.233	13834.48	0.0268	P	1.0
6	☐	250.000	267.435	28141.71	0.0567	P	4.2
7	☐	500.000	502.606	56071.67	0.1065	P	1.9
8	☐	1000.000	994.127	107537.64	0.2106	P	3.1
9	☐			47.01	0.0001	P	13.2

$$y = 2.1181E-004 * x + 1.6782E-005$$

$$R = 0.9998$$

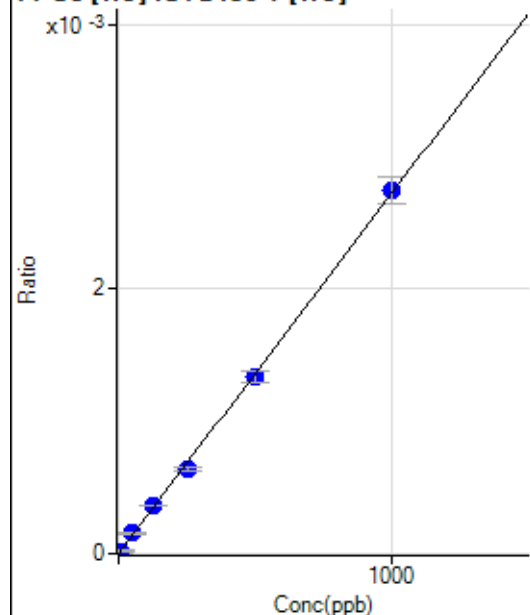
$$DL = 0.01714$$

$$BEC = 0.07923$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	0.500	1.627	3.33	0.0000	P	99.7
3	☐	5.000	5.298	7.78	0.0000	P	71.3
4	☐	50.000	55.430	77.78	0.0002	P	3.9
5	☐	125.000	134.168	190.00	0.0004	P	1.2
6	☐	250.000	233.969	317.78	0.0006	P	4.7
7	☐	500.000	490.051	703.36	0.0013	P	6.8
8	☐	1000.000	1007.563	1400.08	0.0027	P	7.4
9	☐			1.11	0.0000	P	173.

$$y = 2.7213\text{E-}006 * x + 2.2277\text{E-}006$$

$$R = 0.9997$$

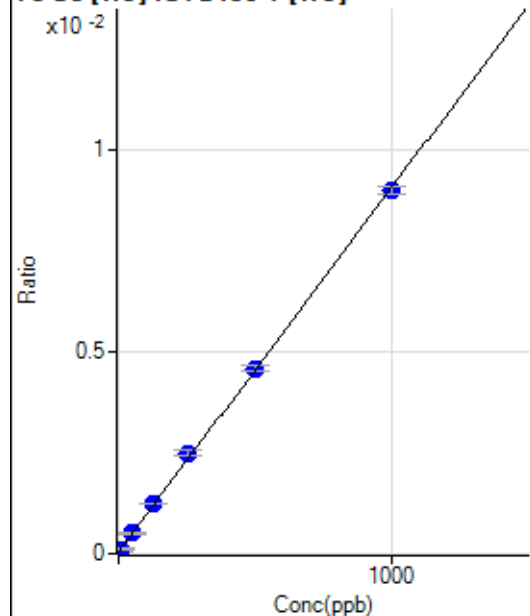
$$DL = 4.254$$

$$BEC = 0.8186$$

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	21.00	0.0000	P	25.9
2	☐	0.500	1.614	29.00	0.0001	P	9.7
3	☐	5.000	7.880	55.34	0.0001	P	21.4
4	☐	50.000	51.834	259.70	0.0005	P	11.0
5	☐	125.000	130.729	632.41	0.0012	P	0.7
6	☐	250.000	271.442	1237.52	0.0025	P	5.3
7	☐	500.000	504.705	2420.46	0.0046	P	2.7
8	☐	1000.000	991.464	4589.88	0.0090	P	2.1
9	☐			16.00	0.0000	P	34.6

$$y = 9.0188\text{E-}006 * x + 4.3935\text{E-}005$$

$$R = 0.9997$$

$$DL = 3.786$$

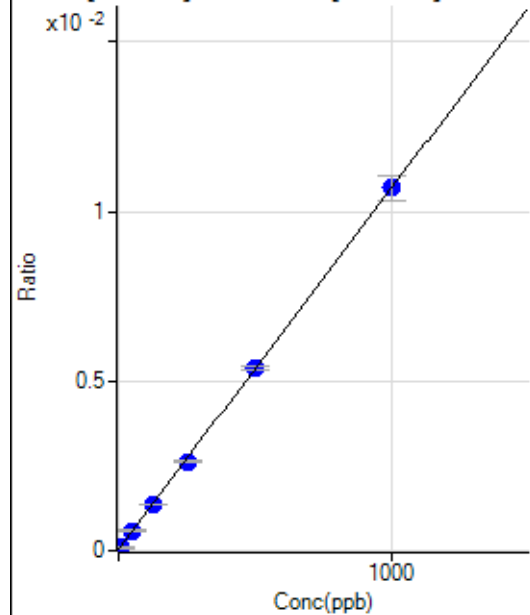
$$BEC = 4.872$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1882.07		P	5.9
2	☐			1775.27		P	15.6
3	☐			1745.24		P	7.5
4	☐			1888.74		P	14.2
5	☐			1715.21		P	9.3
6	☐			1798.64		P	7.8
7	☐			1738.56		P	11.4
8	☐			1758.59		P	7.9
9	☐			1815.33		P	3.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	216.53	0.0000	P	16.0
2	☒	0.500					
3	☐	5.000	4.001	425.61	0.0001	P	13.9
4	☐	50.000	51.288	2823.07	0.0006	P	6.6
5	☐	125.000	123.174	6777.57	0.0014	P	1.0
6	☐	250.000	243.207	13595.31	0.0026	P	1.4
7	☐	500.000	501.934	27561.01	0.0054	P	2.9
8	☐	1000.000	1000.900	53002.78	0.0107	P	6.7
9	☐			211.85	0.0000	P	20.2

$$y = 1.0644\text{E-}005 * x + 4.4881\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.024$$

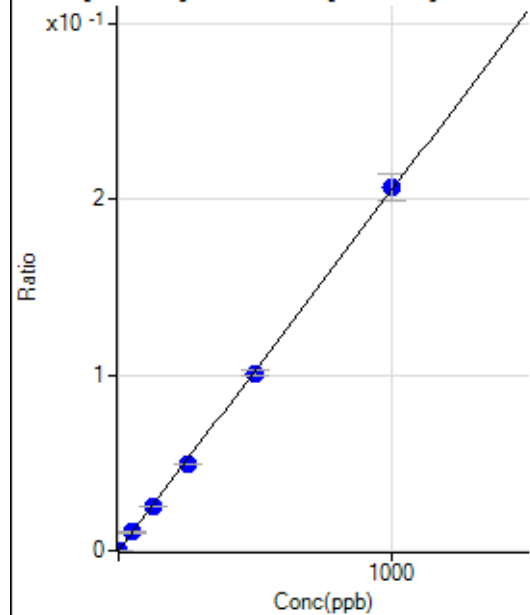
$$BEC = 4.217$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			367.78		P	9.1
2	☐			398.90		P	5.4
3	☐			453.35		P	2.7
4	☐			450.01		P	5.3
5	☐			405.56		P	6.3
6	☐			460.01		P	8.8
7	☐			403.35		P	3.8
8	☐			445.57		P	8.7
9	☐			413.34		P	17.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	658.37	0.0001	P	13.7
2	☐	0.100	0.158	813.94	0.0002	P	5.6
3	☐	1.000	0.985	1644.59	0.0003	P	13.8
4	☐	50.000	51.270	50831.99	0.0106	P	6.5
5	☐	125.000	121.457	125101.34	0.0250	P	0.5
6	☐	250.000	240.805	255464.83	0.0495	P	1.0
7	☐	500.000	491.636	516134.94	0.1009	P	2.9
8	☐	1000.000	1006.860	1022652.45	0.2065	P	7.5
9	☐			6134.85	0.0012	P	3.3

$$y = 2.0494\text{E-}004 * x + 1.3584\text{E-}004$$

$$R = 0.9999$$

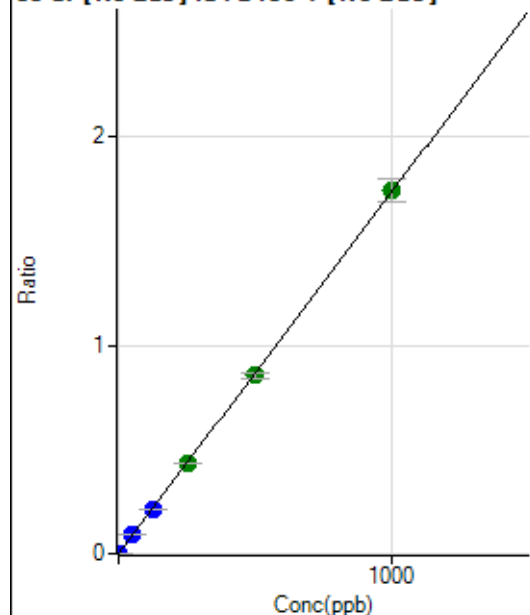
$$DL = 0.2716$$

$$BEC = 0.6629$$

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	341.68	0.0001	P	17.7
2	☐	0.100	0.094	1130.63	0.0002	P	8.3
3	☐	1.000	0.991	8733.53	0.0018	P	0.7
4	☐	50.000	52.270	433392.67	0.0907	P	5.0
5	☐	125.000	124.225	1077090.96	0.2155	P	0.3
6	☐	250.000	248.449	2224396.40	0.4309	A	0.6
7	☐	500.000	493.559	4378492.72	0.8559	A	2.9
8	☐	1000.000	1003.592	8623026.93	1.7403	A	6.4
9	☐			46653.60	0.0095	P	2.0

$$y = 0.0017 * x + 7.0843E-005$$

$$R = 1.0000$$

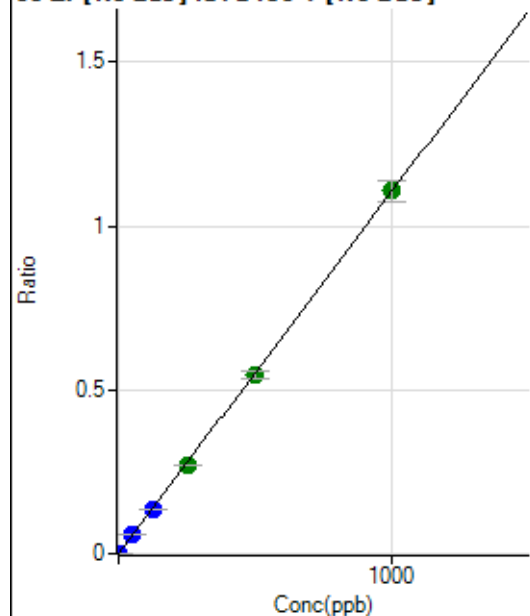
$$DL = 0.02166$$

$$BEC = 0.04086$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	163.89	0.0000	P	40.7
2	☐	0.100	0.103	711.15	0.0001	P	8.5
3	☐	1.000	0.877	4887.10	0.0010	P	3.1
4	☐	50.000	51.877	273754.72	0.0573	P	5.3
5	☐	125.000	124.004	684423.58	0.1369	P	0.7
6	☐	250.000	244.697	1394722.51	0.2702	A	1.8
7	☐	500.000	496.599	2803998.05	0.5482	A	4.3
8	☐	1000.000	1003.057	5487550.60	1.1073	A	6.0
9	☐			1675.14	0.0003	P	7.6

$$y = 0.0011 * x + 3.3860E-005$$

$$R = 1.0000$$

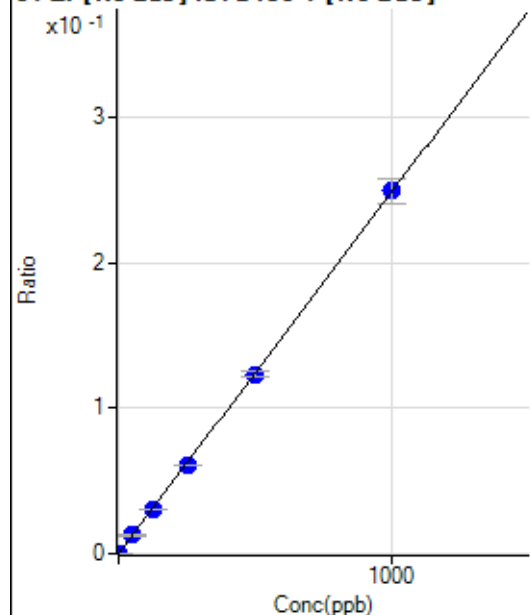
$$DL = 0.03741$$

$$BEC = 0.03067$$

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	44.45	0.0000	P	40.7
2	☐	0.100	0.096	161.12	0.0000	P	24.6
3	☐	1.000	0.854	1080.63	0.0002	P	9.6
4	☐	50.000	51.180	60866.95	0.0127	P	5.2
5	☐	125.000	122.367	152191.68	0.0304	P	1.4
6	☐	250.000	244.433	313947.00	0.0608	P	1.8
7	☐	500.000	496.052	631210.05	0.1234	P	3.7
8	☐	1000.000	1003.636	1236909.96	0.2497	P	6.7
9	☐			416.69	0.0001	P	16.5

$$y = 2.4874\text{E-}004 * x + 9.2439\text{E-}006$$

$$R = 1.0000$$

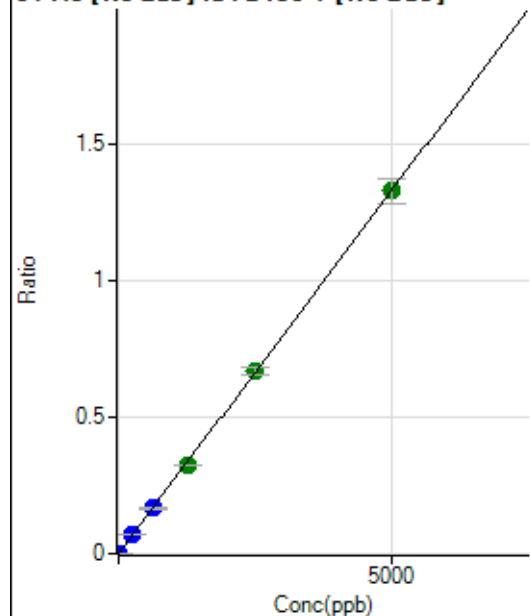
$$DL = 0.04543$$

$$BEC = 0.03716$$

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	36.11	0.0000	P	37.7
2	☐	0.500	0.566	763.93	0.0002	P	7.1
3	☐	5.000	5.296	6915.79	0.0014	P	4.2
4	☐	250.000	263.112	334351.04	0.0700	P	4.8
5	☐	625.000	622.699	827760.21	0.1656	P	0.7
6	☐	1250.000	1229.696	1688198.37	0.3270	A	0.1
7	☐	2500.000	2511.806	3417080.54	0.6679	A	3.6
8	☐	5000.000	4998.805	6585590.55	1.3293	A	6.8
9	☐			3167.11	0.0006	P	9.0

$$y = 2.6592\text{E-}004 * x + 7.5104\text{E-}006$$

$$R = 1.0000$$

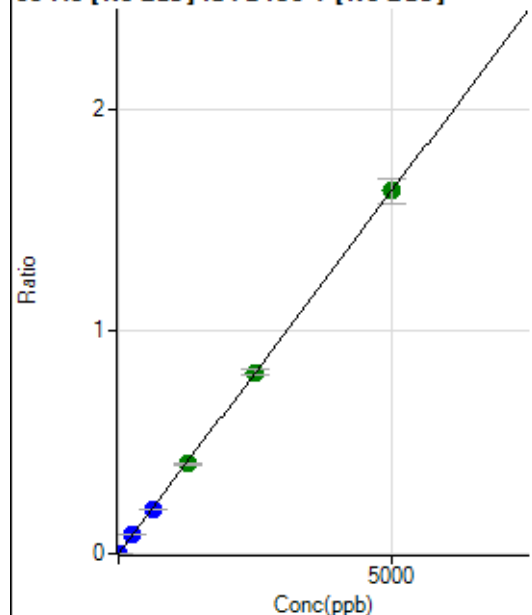
$$DL = 0.0319$$

$$BEC = 0.02824$$

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	13.89	0.0000	P	35.1
2	☐	0.500	0.485	780.60	0.0002	P	12.9
3	☐	5.000	5.264	8391.69	0.0017	P	5.7
4	☐	250.000	261.945	408079.52	0.0854	P	5.5
5	☐	625.000	619.565	1009960.24	0.2020	P	1.2
6	☐	1250.000	1238.595	2085248.77	0.4039	A	1.0
7	☐	2500.000	2496.104	4163976.35	0.8140	A	3.2
8	☐	5000.000	5004.881	8085820.75	1.6321	A	6.7
9	☐			4617.55	0.0009	P	4.9

$$y = 3.2610E-004 * x + 2.8759E-006$$

$$R = 1.0000$$

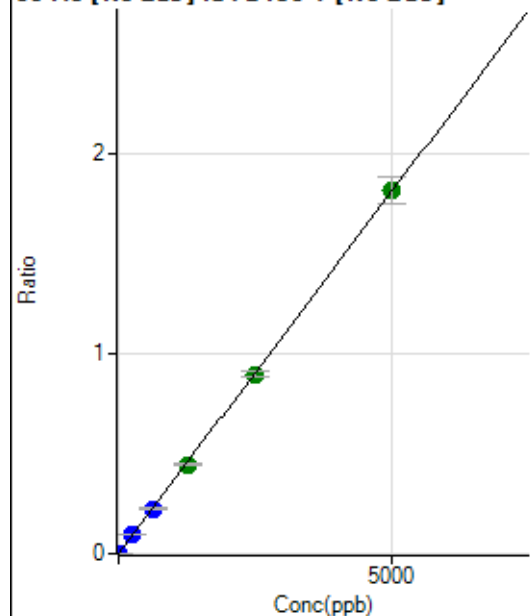
$$DL = 0.009282$$

$$BEC = 0.008819$$

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	66.67	0.0000	P	47.5
2	☐	0.500	0.553	1036.18	0.0002	P	9.8
3	☐	5.000	5.255	9356.20	0.0019	P	4.9
4	☐	250.000	263.806	456802.49	0.0956	P	5.4
5	☐	625.000	623.574	1129730.19	0.2260	P	0.7
6	☐	1250.000	1232.413	2305764.68	0.4467	A	1.8
7	☐	2500.000	2482.162	4601428.14	0.8996	A	3.6
8	☐	5000.000	5012.804	8998380.41	1.8167	A	7.3
9	☐			5562.34	0.0011	P	1.4

$$y = 3.6241E-004 * x + 1.3888E-005$$

$$R = 1.0000$$

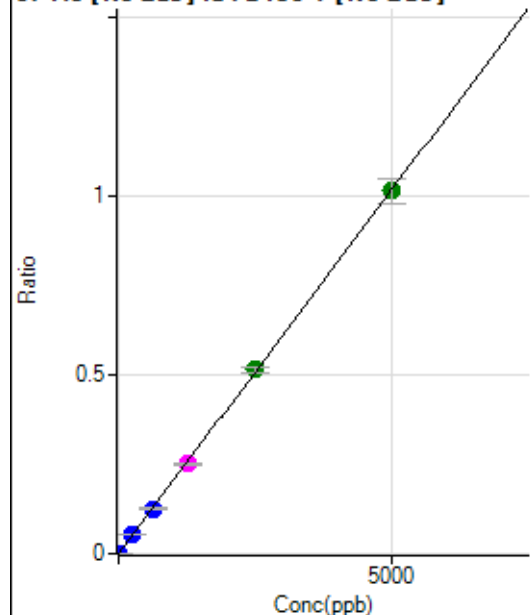
$$DL = 0.05455$$

$$BEC = 0.03832$$

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	5.55	0.0000	P	86.6
2	☐	0.500	0.559	555.58	0.0001	P	19.3
3	☐	5.000	5.172	5137.22	0.0011	P	3.5
4	☐	250.000	259.514	252139.97	0.0528	P	4.4
5	☐	625.000	621.175	631245.09	0.1263	P	0.6
6	☐	1250.000	1237.541	1298795.82	0.2516	M	1.4
7	☐	2500.000	2527.463	2628331.76	0.5138	A	3.5
8	☐	5000.000	4989.385	5025746.55	1.0143	A	6.6
9	☐			3058.76	0.0006	P	3.5

$$y = 2.0330\text{E-}004 * x + 1.1340\text{E-}006$$

$$R = 1.0000$$

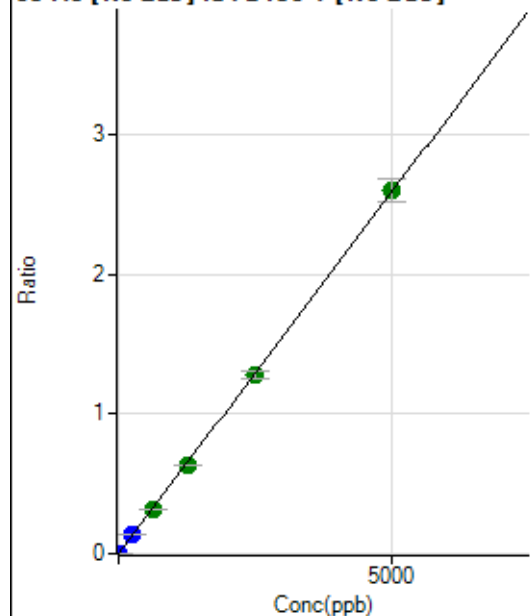
$$DL = 0.01449$$

$$BEC = 0.005578$$

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	22.22	0.0000	P	141.
2	☐	0.500	0.567	1444.56	0.0003	P	12.1
3	☐	5.000	5.190	13151.05	0.0027	P	3.1
4	☐	250.000	262.168	649451.40	0.1359	P	5.1
5	☐	625.000	621.358	1610381.98	0.3222	A	0.6
6	☐	1250.000	1228.432	3288191.83	0.6369	A	0.5
7	☐	2500.000	2472.630	6557754.96	1.2820	A	3.4
8	☐	5000.000	5018.924	12894232.93	2.6022	A	6.3
9	☐			7546.72	0.0015	P	4.0

$$y = 5.1847\text{E-}004 * x + 4.5909\text{E-}006$$

$$R = 1.0000$$

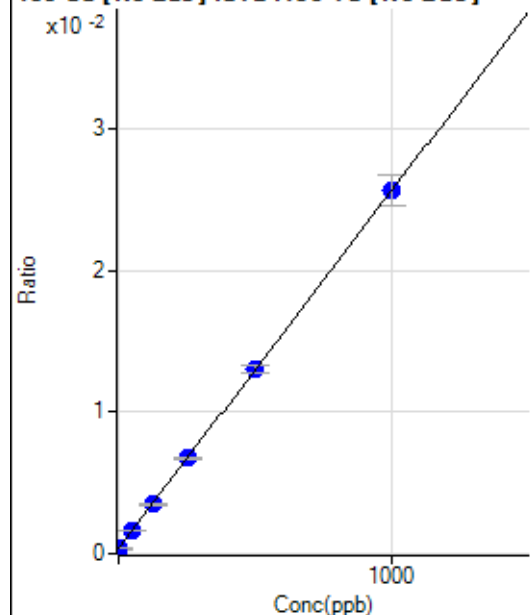
$$DL = 0.0375$$

$$BEC = 0.008855$$

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	1236.20	0.0004	P	8.6
2	☐	0.100	-3.197	980.62	0.0003	P	8.5
3	☐	1.000	-0.874	1191.74	0.0004	P	2.4
4	☐	50.000	49.610	5326.19	0.0016	P	3.3
5	☐	125.000	122.118	11783.10	0.0035	P	1.8
6	☐	250.000	251.389	23690.26	0.0067	P	1.9
7	☐	500.000	500.107	45063.14	0.0130	P	3.9
8	☐	1000.000	999.981	88402.01	0.0257	P	8.3
9	☐			1252.87	0.0004	P	1.1

$$y = 2.5272\text{E-}005 * x + 3.8167\text{E-}004$$

$$R = 1.0000$$

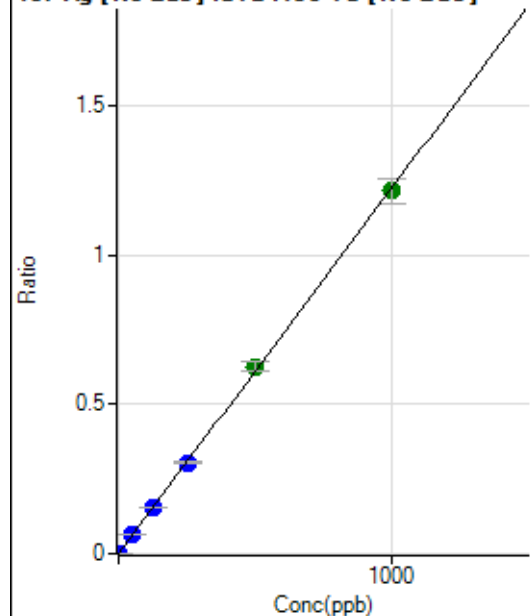
$$DL = 3.88$$

$$BEC = 15.1$$

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	27.78	0.0000	P	69.0
2	☐	0.100	0.108	458.35	0.0001	P	6.0
3	☐	1.000	1.015	4139.63	0.0012	P	6.2
4	☐	50.000	53.288	211896.13	0.0651	P	4.5
5	☐	125.000	125.494	520758.80	0.1533	P	0.8
6	☐	250.000	249.633	1072571.93	0.3049	P	0.8
7	☐	500.000	513.003	2168085.86	0.6266	A	4.8
8	☐	1000.000	993.364	4184318.19	1.2133	A	6.8
9	☐			1272.32	0.0004	P	4.4

$$y = 0.0012 * x + 8.5612\text{E-}006$$

$$R = 0.9999$$

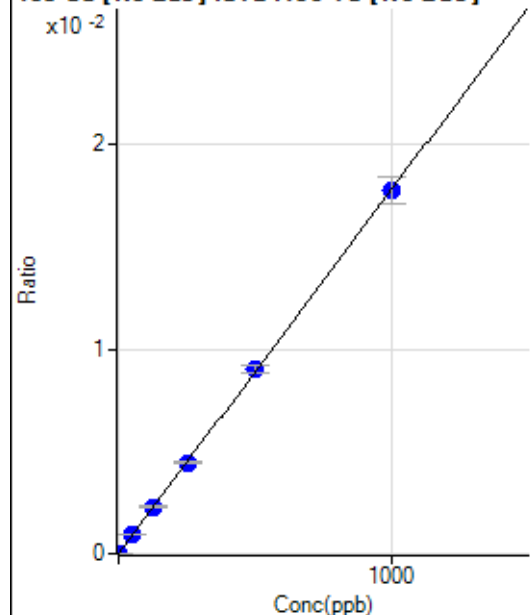
$$DL = 0.01451$$

$$BEC = 0.007009$$

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	8.33	0.0000	P	50.2
2	☐	0.100	0.141	16.67	0.0000	P	65.6
3	☐	1.000	1.034	69.44	0.0000	P	23.0
4	☐	50.000	52.508	3050.37	0.0009	P	2.4
5	☐	125.000	128.015	7742.55	0.0023	P	5.5
6	☐	250.000	249.598	15622.85	0.0044	P	2.1
7	☐	500.000	505.890	31144.91	0.0090	P	4.3
8	☐	1000.000	996.653	61124.76	0.0177	P	7.3
9	☐			43.05	0.0000	P	22.2

$$y = 1.7785E-005 * x + 2.5788E-006$$

$$R = 1.0000$$

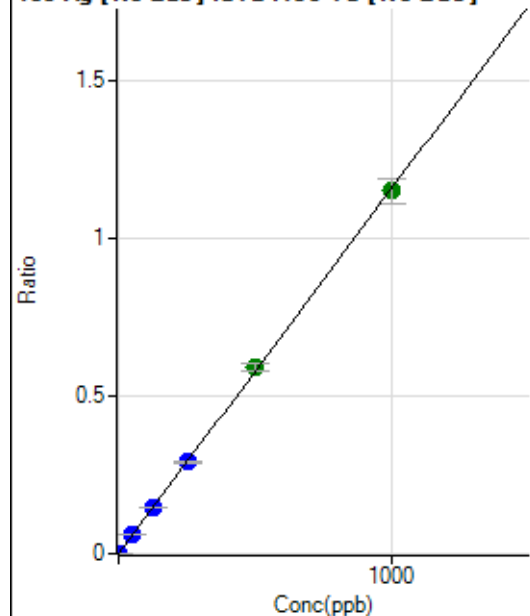
$$DL = 0.2183$$

$$BEC = 0.145$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0000	P	17.2
2	☐	0.100	0.108	436.13	0.0001	P	14.8
3	☐	1.000	1.089	4209.09	0.0013	P	0.9
4	☐	50.000	53.445	201430.76	0.0619	P	4.8
5	☐	125.000	127.268	500614.20	0.1474	P	1.2
6	☐	250.000	251.728	1025085.47	0.2914	P	1.6
7	☐	500.000	510.262	2044688.66	0.5908	A	3.7
8	☐	1000.000	993.981	3968134.72	1.1508	A	7.1
9	☐			1113.97	0.0003	P	5.3

$$y = 0.0012 * x + 8.5674E-006$$

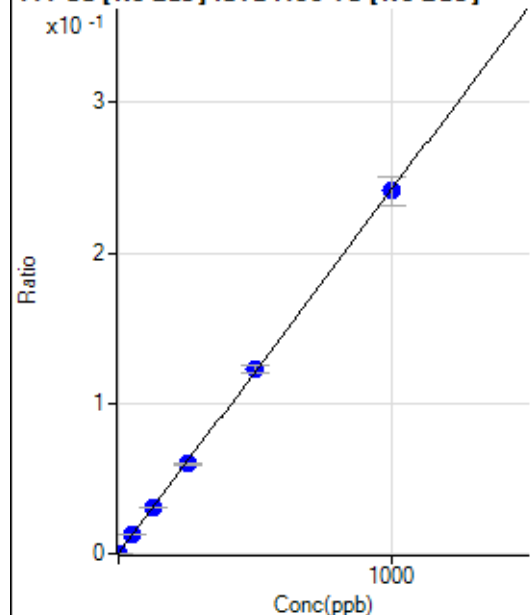
$$R = 0.9999$$

$$DL = 0.003812$$

$$BEC = 0.0074$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	533.09	0.0002	P	6.8
2	☒	0.100					
3	☐	1.000	0.899	1265.63	0.0004	P	4.6
4	☐	50.000	52.891	42161.01	0.0130	P	5.7
5	☐	125.000	125.499	103668.45	0.0305	P	2.1
6	☐	250.000	247.233	210882.16	0.0600	P	1.7
7	☐	500.000	507.449	425229.38	0.1229	P	4.6
8	☐	1000.000	996.760	831326.49	0.2412	P	8.1
9	☐			793.24	0.0002	P	1.3

$$y = 2.4184\text{E-}004 * x + 1.6456\text{E-}004$$

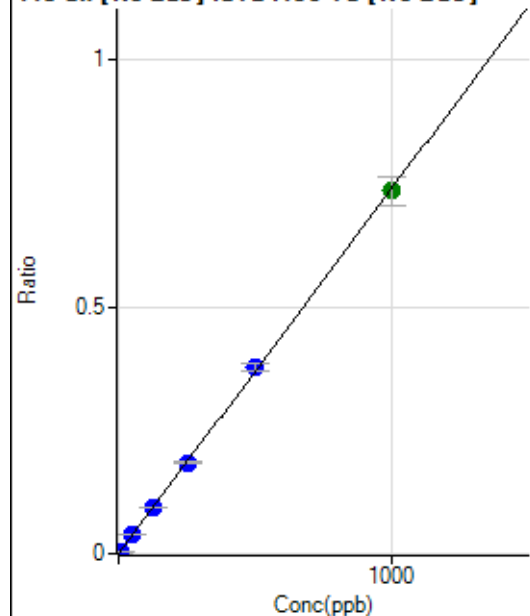
$$R = 1.0000$$

$$DL = 0.1397$$

$$BEC = 0.6804$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.78	0.0001	P	20.8
2	☐	0.500	0.483	1366.77	0.0004	P	8.8
3	☐	5.000	5.106	12711.76	0.0038	P	3.4
4	☐	50.000	53.203	128208.44	0.0394	P	4.1
5	☐	125.000	126.457	317706.00	0.0935	P	0.9
6	☐	250.000	249.078	647665.94	0.1841	P	1.5
7	☐	500.000	510.825	1306777.96	0.3776	P	3.9
8	☐	1000.000	994.475	2533367.37	0.7350	A	7.9
9	☐			1608.47	0.0005	P	6.8

$$y = 7.3903\text{E-}004 * x + 6.2362\text{E-}005$$

$$R = 0.9999$$

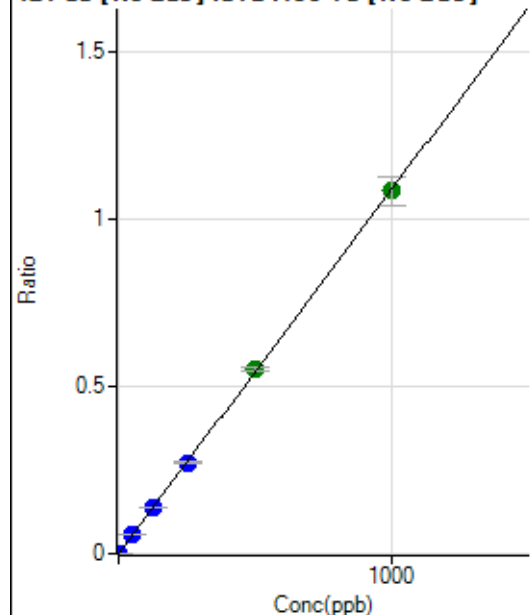
$$DL = 0.05272$$

$$BEC = 0.08438$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	173.
2	☐	0.200	0.195	697.26	0.0002	P	7.5
3	☐	2.000	1.897	6849.10	0.0021	P	6.9
4	☐	50.000	52.291	185172.96	0.0569	P	5.8
5	☐	125.000	125.957	465672.76	0.1371	P	0.8
6	☐	250.000	249.925	956536.13	0.2720	P	3.0
7	☐	500.000	506.127	1907174.00	0.5508	A	2.0
8	☐	1000.000	996.721	3738985.32	1.0847	A	7.6
9	☐			2972.63	0.0009	P	10.1

$$y = 0.0011 * x + 1.7095E-006$$

$$R = 1.0000$$

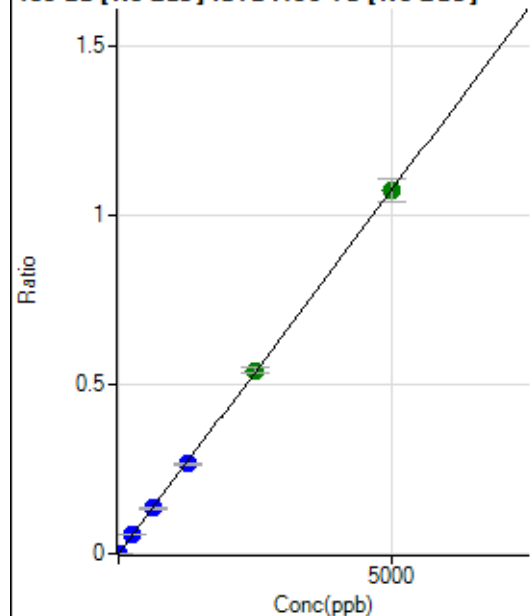
$$DL = 0.008163$$

$$BEC = 0.001571$$

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	61.11	0.0000	P	16.2
2	☐	1.000	0.967	738.93	0.0002	P	4.0
3	☐	10.000	9.883	7110.41	0.0021	P	1.1
4	☐	250.000	262.033	183571.51	0.0564	P	4.8
5	☐	625.000	624.098	456242.91	0.1343	P	1.0
6	☐	1250.000	1239.776	938256.69	0.2668	P	2.1
7	☐	2500.000	2522.067	1878728.10	0.5427	A	2.6
8	☐	5000.000	4991.034	3704353.42	1.0739	A	6.4
9	☐			6840.82	0.0020	P	5.1

$$y = 2.1516E-004 * x + 1.8860E-005$$

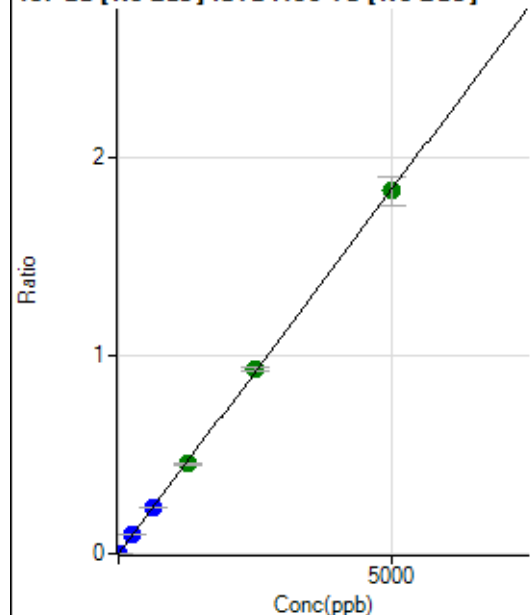
$$R = 1.0000$$

$$DL = 0.04248$$

$$BEC = 0.08766$$

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	83.34	0.0000	P	19.0
2	☐	1.000	1.029	1316.77	0.0004	P	3.8
3	☐	10.000	10.306	12628.44	0.0038	P	5.6
4	☐	250.000	263.113	314752.67	0.0967	P	4.9
5	☐	625.000	630.525	787125.33	0.2317	P	0.2
6	☐	1250.000	1233.957	1594677.57	0.4534	A	1.6
7	☐	2500.000	2535.801	3225348.10	0.9317	A	3.0
8	☐	5000.000	4984.764	6312925.06	1.8315	A	7.8
9	☐			11816.55	0.0035	P	4.8

$$y = 3.6741\text{E-}004 * x + 2.5666\text{E-}005$$

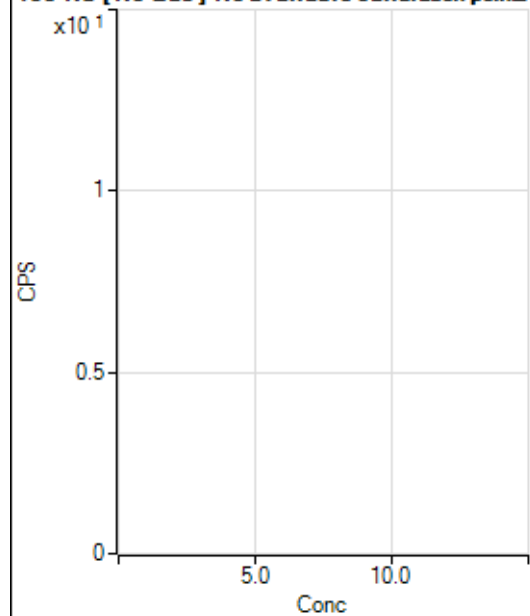
$$R = 1.0000$$

$$DL = 0.03978$$

$$BEC = 0.06986$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			2.22		P	173.
3	☐			4.44		P	173.
4	☐			11.11		P	124.
5	☐			28.89		P	13.3
6	☐			33.33		P	20.0
7	☐			55.56		P	25.0
8	☐			106.67		P	12.5
9	☐			13.33		P	50.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			0.00		P	
3	☐			1.11		P	173.
4	☐			2.22		P	173.
5	☐			1.11		P	173.
6	☐			4.45		P	86.6
7	☐			4.44		P	173.
8	☐			12.22		P	41.7
9	☐			4.44		P	43.4

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			8.33		P	100.
3	☐			11.11		P	43.3
4	☐			2.78		P	173.
5	☐			27.78		P	86.6
6	☐			22.22		P	94.4
7	☐			55.56		P	56.8
8	☐			102.78		P	24.8
9	☐			180.56		P	28.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			2.22		P	86.6
3	☐			2.22		P	86.6
4	☐			1.11		P	173.
5	☐			3.33		P	0.0
6	☐			7.78		P	89.2
7	☐			18.89		P	36.7
8	☐			25.56		P	54.3
9	☐			96.67		P	24.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			38.89		P	12.4
3	☐			22.22		P	78.1
4	☐			13.89		P	34.7
5	☐			30.56		P	31.5
6	☐			27.78		P	17.3
7	☐			25.00		P	57.7
8	☐			80.56		P	31.6
9	☐			261.12		P	45.8

160 Gd [He] No available calibration points

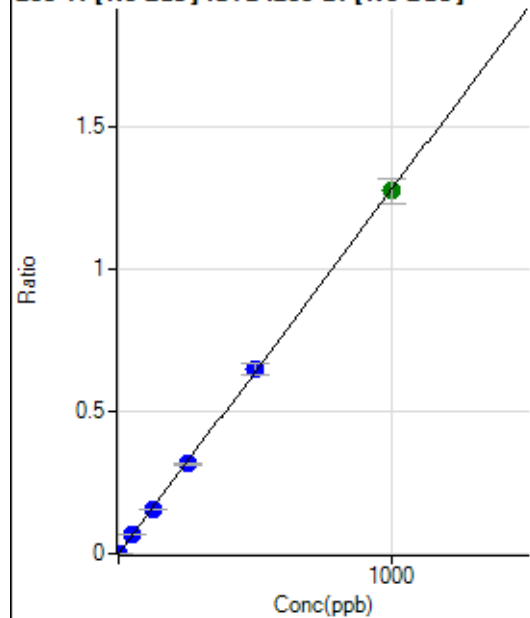
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	108.
2	☐			8.89		P	78.1
3	☐			5.55		P	69.3
4	☐			12.22		P	41.7
5	☐			7.78		P	89.2
6	☐			12.22		P	41.7
7	☐			30.00		P	11.1
8	☐			34.45		P	20.1
9	☐			113.34		P	26.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	49.5
2	☐			13.89		P	173.
3	☐			8.33		P	0.0
4	☐			19.44		P	89.2
5	☐			19.44		P	65.5
6	☐			19.44		P	65.5
7	☐			19.45		P	24.7
8	☐			44.45		P	65.8
9	☐			52.78		P	24.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	24.7
2	☐			3.33		P	100.
3	☐			8.89		P	78.1
4	☐			2.22		P	86.6
5	☐			6.67		P	50.0
6	☐			4.44		P	114.
7	☐			8.89		P	57.3
8	☐			10.00		P	0.0
9	☐			20.00		P	60.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	88.89	0.0000	P	6.6
2	☐	0.100	0.095	327.79	0.0002	P	13.3
3	☐	1.000	0.945	2505.89	0.0013	P	4.9
4	☐	50.000	51.936	128344.27	0.0666	P	5.5
5	☐	125.000	122.103	318230.27	0.1564	P	2.2
6	☐	250.000	246.316	658893.01	0.3155	P	1.5
7	☐	500.000	508.511	1344420.62	0.6514	P	6.1
8	☐	1000.000	996.931	2601183.72	1.2770	A	6.8
9	☐			1430.68	0.0007	P	6.4

$$y = 0.0013 * x + 4.6283E-005$$

$$R = 0.9999$$

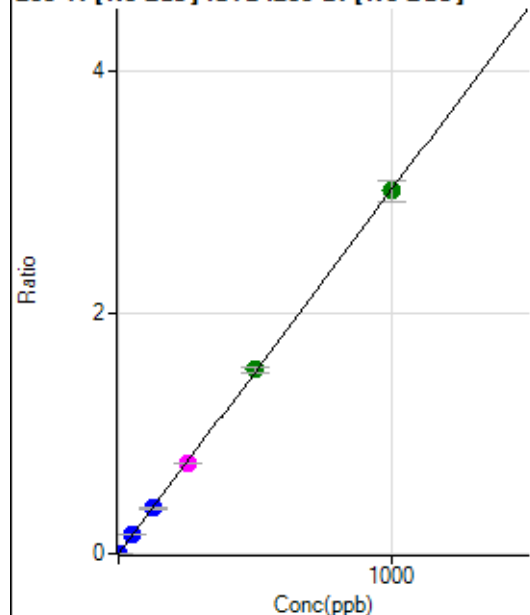
$$DL = 0.007171$$

$$BEC = 0.03613$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	247.23	0.0001	P	26.6
2	☐	0.100	0.084	747.27	0.0004	P	5.0
3	☐	1.000	0.933	5870.93	0.0029	P	4.1
4	☐	50.000	52.090	303480.96	0.1574	P	4.8
5	☐	125.000	124.710	766154.86	0.3766	P	1.7
6	☐	250.000	247.319	1559515.55	0.7468	M	0.7
7	☐	500.000	506.140	3156969.32	1.5282	A	3.3
8	☐	1000.000	997.532	6136534.77	3.0117	A	6.1
9	☐			3189.39	0.0016	P	18.3

$$y = 0.0030 * x + 1.2902E-004$$

$$R = 1.0000$$

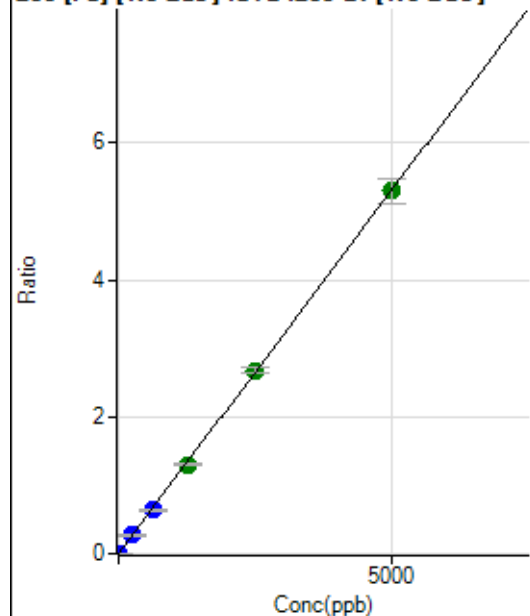
$$DL = 0.03415$$

$$BEC = 0.04274$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	177.78	0.0001	P	4.7
2	☐	0.100	0.098	381.49	0.0002	P	4.9
3	☐	1.000	0.946	2183.56	0.0011	P	3.2
4	☐	250.000	254.189	519846.50	0.2697	P	5.9
5	☐	625.000	597.922	1290317.53	0.6343	P	1.3
6	☐	1250.000	1229.519	2723818.52	1.3042	A	1.1
7	☐	2500.000	2527.350	5537164.71	2.6807	A	3.6
8	☐	5000.000	4994.621	10789864.02	5.2977	A	7.1
9	☐			8599.29	0.0044	P	2.8

$$y = 0.0011 * x + 9.2464E-005$$

$$R = 1.0000$$

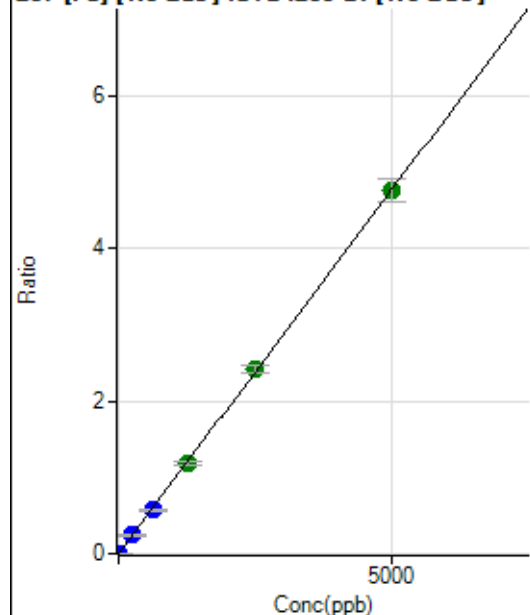
$$DL = 0.01234$$

$$BEC = 0.08718$$

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	190.75	0.0001	P	16.7
2	☐	0.100	0.106	388.90	0.0002	P	6.1
3	☐	1.000	0.899	1903.88	0.0010	P	3.2
4	☐	250.000	253.495	465375.80	0.2414	P	5.0
5	☐	625.000	598.165	1158303.59	0.5694	P	1.8
6	☐	1250.000	1237.784	2460343.57	1.1782	A	3.0
7	☐	2500.000	2533.326	4978899.01	2.4112	A	4.6
8	☐	5000.000	4989.571	9676251.02	4.7490	A	6.2
9	☐			7600.52	0.0039	P	3.4

$$y = 9.5177\text{E-}004 * x + 9.9348\text{E-}005$$

$$R = 1.0000$$

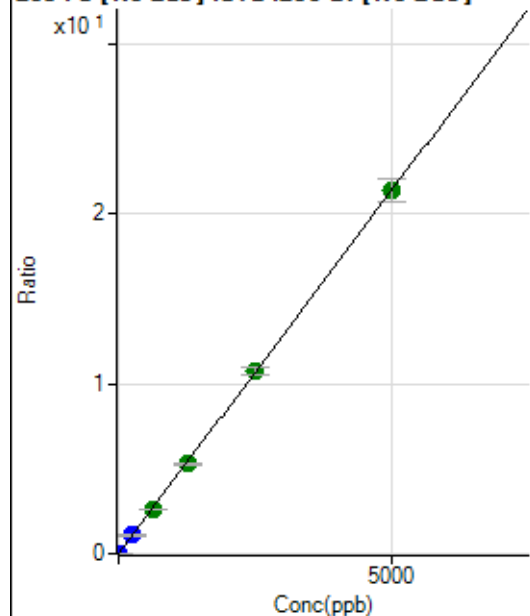
$$DL = 0.05233$$

$$BEC = 0.1044$$

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	794.47	0.0004	P	3.8
2	☐	0.100	0.100	1637.11	0.0008	P	6.3
3	☐	1.000	0.939	8823.58	0.0044	P	1.7
4	☐	250.000	255.173	2103138.25	1.0908	P	5.2
5	☐	625.000	608.629	5291744.68	2.6013	A	1.5
6	☐	1250.000	1232.647	11000729.01	5.2679	A	2.0
7	☐	2500.000	2520.186	22240257.38	10.7699	A	4.4
8	☐	5000.000	4996.033	43494865.55	21.3500	A	6.5
9	☐			34507.46	0.0178	P	1.7

$$y = 0.0043 * x + 4.1344\text{E-}004$$

$$R = 1.0000$$

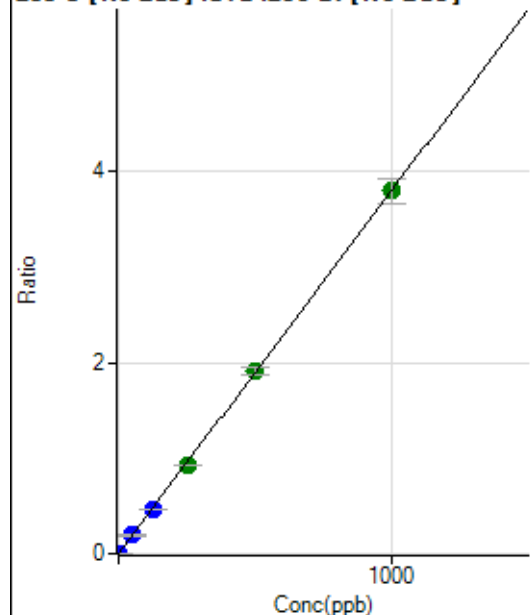
$$DL = 0.01102$$

$$BEC = 0.09675$$

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	77.78	0.0000	P	26.9
2	☐	0.100	0.089	733.38	0.0004	P	5.5
3	☐	1.000	0.959	7341.25	0.0037	P	4.2
4	☐	50.000	51.008	373630.35	0.1938	P	4.9
5	☐	125.000	121.686	940275.33	0.4622	P	1.3
6	☐	250.000	244.294	1937897.33	0.9279	A	1.4
7	☐	500.000	503.861	3953194.88	1.9138	A	3.4
8	☐	1000.000	999.860	7734781.94	3.7977	A	7.1
9	☐			902.84	0.0005	P	5.5

$$y = 0.0038 * x + 4.0496E-005$$

$$R = 1.0000$$

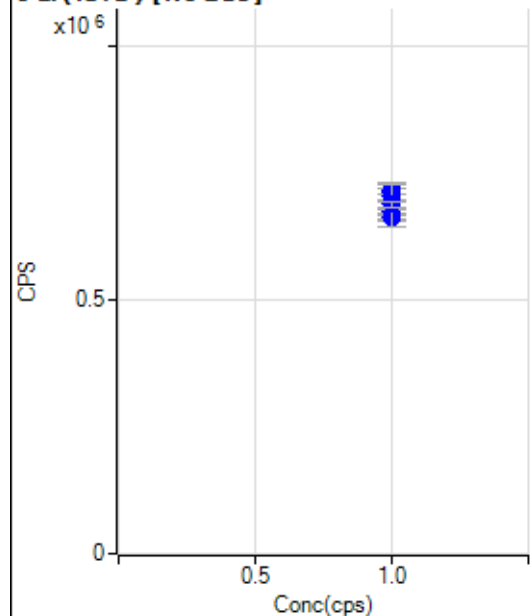
$$DL = 0.00859$$

$$BEC = 0.01066$$

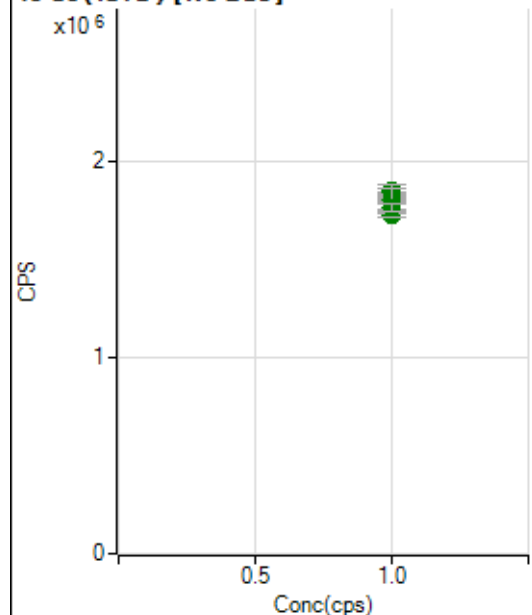
Weight: <None>

Min Conc: 0

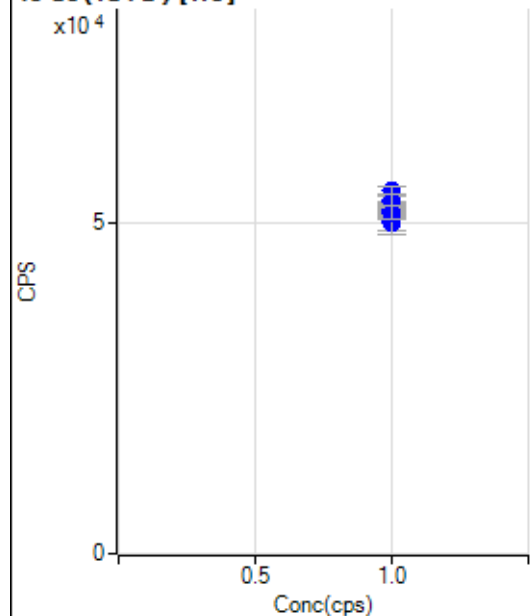
6 Li (ISTD) [No Gas]



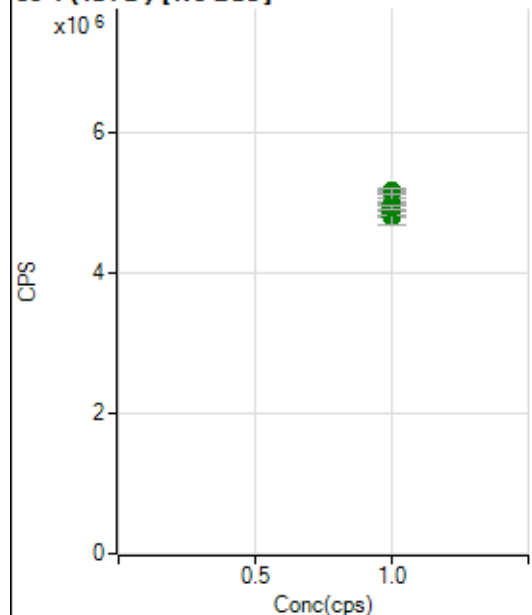
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		661759.68		P	1.8
2	☐	1.000		664254.01		P	0.9
3	☐	1.000		675192.08		P	1.0
4	☐	1.000		661827.99		P	5.1
5	☐	1.000		695475.05		P	0.3
6	☐	1.000		715100.96		P	1.3
7	☐	1.000		712587.49		P	4.4
8	☐	1.000		706053.06		P	6.8
9	☐	1.000		687937.68		P	1.7

45 Sc (ISTD) [No Gas]

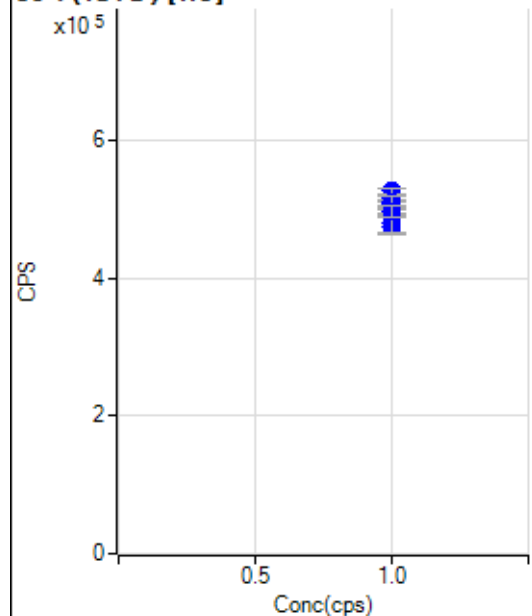
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1762052.11		A	2.4
2	☐	1.000		1724193.22		A	1.4
3	☐	1.000		1796164.10		A	4.3
4	☐	1.000		1764365.44		A	3.6
5	☐	1.000		1817257.99		A	0.4
6	☐	1.000		1849483.83		A	1.0
7	☐	1.000		1844017.42		A	4.3
8	☐	1.000		1802549.38		A	6.8
9	☐	1.000		1765061.71		A	1.7

45 Sc (ISTD) [He]

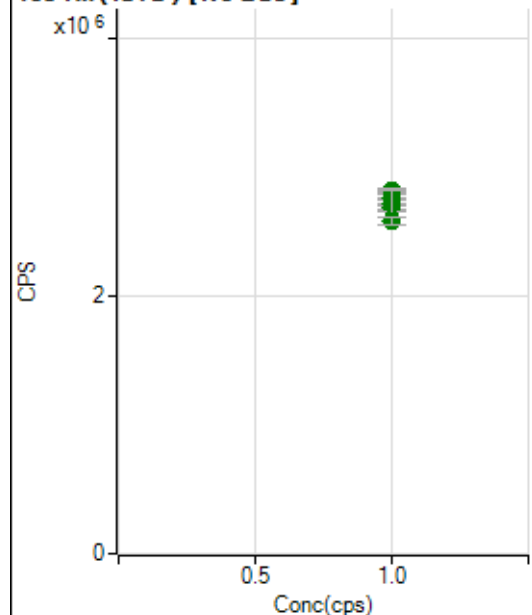
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		50352.59		P	5.9
2	☐	1.000		51767.79		P	1.6
3	☐	1.000		50001.72		P	6.6
4	☐	1.000		52890.69		P	1.7
5	☐	1.000		53532.07		P	1.9
6	☐	1.000		52021.64		P	4.5
7	☐	1.000		54919.88		P	2.2
8	☐	1.000		53340.10		P	3.6
9	☐	1.000		51630.70		P	3.6

89 Y (ISTD) [No Gas]

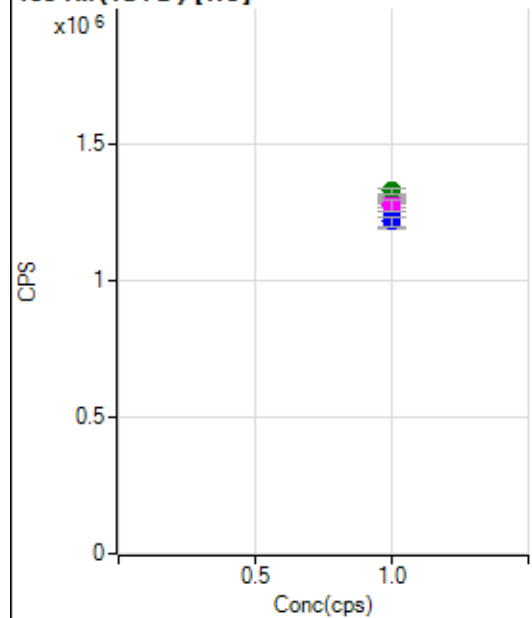
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4836295.38		A	2.3
2	☐	1.000		4836129.37		A	1.9
3	☐	1.000		4883065.31		A	3.7
4	☐	1.000		4785758.57		A	4.9
5	☐	1.000		4998646.17		A	0.4
6	☐	1.000		5162595.13		A	0.5
7	☐	1.000		5118362.49		A	2.6
8	☐	1.000		4967483.50		A	5.9
9	☐	1.000		4928133.26		A	1.5

89 Y (ISTD) [He]

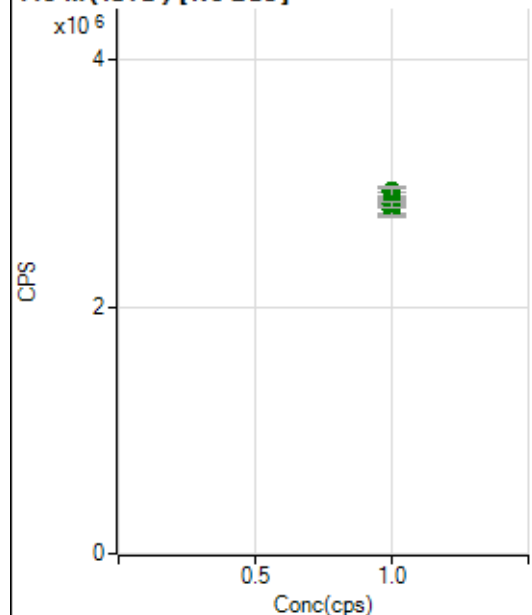
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		475517.69		P	5.5
2	☐	1.000		495985.77		P	1.5
3	☐	1.000		480970.88		P	6.0
4	☐	1.000		508317.85		P	1.4
5	☐	1.000		517162.10		P	1.8
6	☐	1.000		497118.87		P	3.6
7	☐	1.000		526717.53		P	1.4
8	☐	1.000		511012.72		P	3.3
9	☐	1.000		497264.80		P	3.8

103 Rh (ISTD) [No Gas]

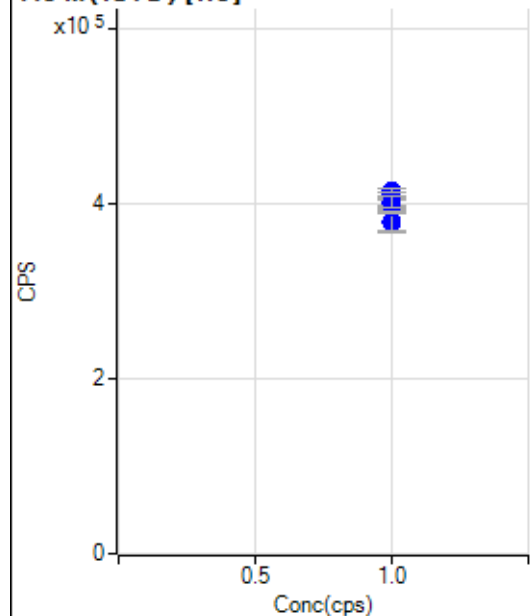
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2718235.80		A	3.7
2	☐	1.000		2695032.89		A	1.7
3	☐	1.000		2762235.18		A	3.0
4	☐	1.000		2706824.13		A	3.4
5	☐	1.000		2813213.11		A	0.9
6	☐	1.000		2817394.88		A	1.8
7	☐	1.000		2761064.04		A	3.9
8	☐	1.000		2723214.32		A	7.6
9	☐	1.000		2582414.10		A	2.4

103 Rh (ISTD) [He]

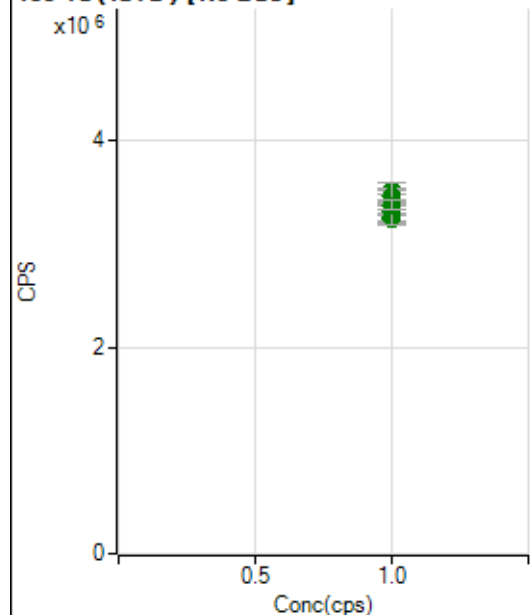
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1231012.72		P	5.5
2	☐	1.000		1294838.77		M	1.7
3	☐	1.000		1229856.07		P	6.3
4	☐	1.000		1298793.76		M	2.0
5	☐	1.000		1327123.88		M	1.1
6	☐	1.000		1282295.23		M	4.0
7	☐	1.000		1328257.06		A	1.6
8	☐	1.000		1276233.83		M	3.3
9	☐	1.000		1216618.57		P	2.9

115 In (ISTD) [No Gas]

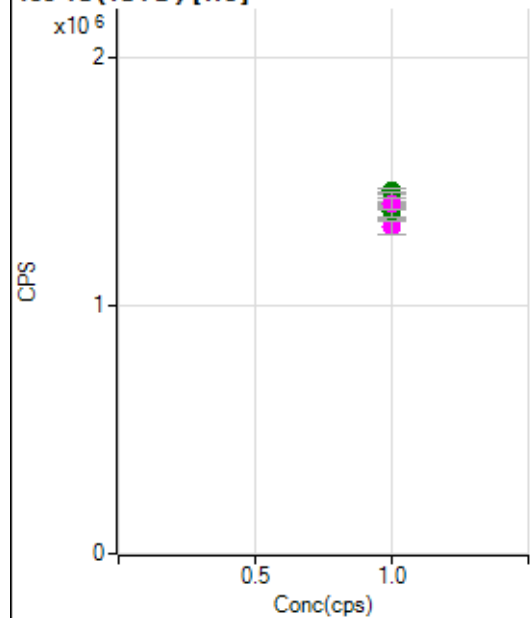
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2791940.46		A	2.7
2	☐	1.000		2786316.87		A	2.1
3	☐	1.000		2837246.63		A	1.3
4	☐	1.000		2792158.04		A	4.3
5	☐	1.000		2891794.59		A	0.7
6	☐	1.000		2940636.52		A	1.0
7	☐	1.000		2922897.92		A	3.9
8	☐	1.000		2855454.45		A	7.8
9	☐	1.000		2833905.22		A	1.8

115 In (ISTD) [He]

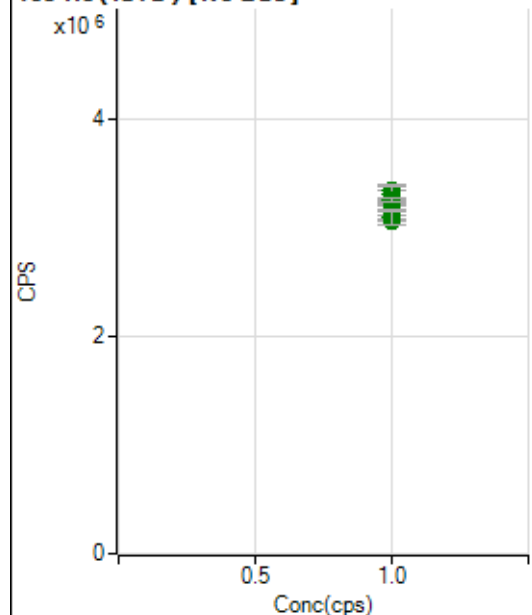
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		378073.98		P	6.1
2	☐	1.000		395993.34		P	0.9
3	☐	1.000		380410.23		P	6.3
4	☐	1.000		405717.67		P	1.0
5	☐	1.000		409813.57		P	1.4
6	☐	1.000		395247.76		P	3.9
7	☐	1.000		414115.12		P	1.0
8	☐	1.000		398611.32		P	4.1
9	☐	1.000		401574.94		P	3.5

159 Tb (ISTD) [No Gas]

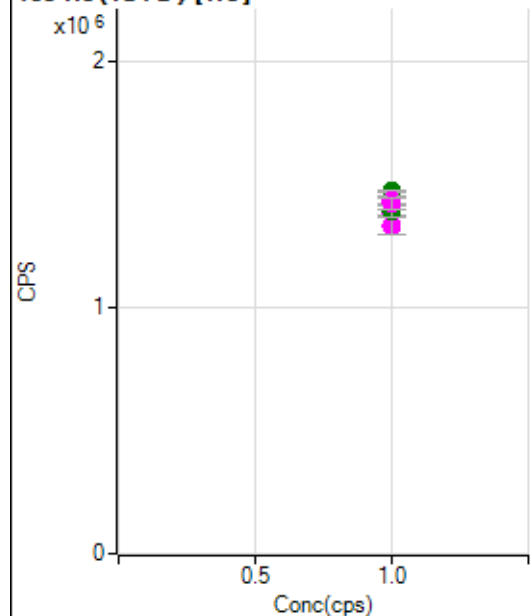
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3242308.25		A	2.2
2	☐	1.000		3258441.38		A	2.0
3	☐	1.000		3314884.39		A	1.9
4	☐	1.000		3259627.90		A	4.5
5	☐	1.000		3397432.45		A	1.0
6	☐	1.000		3517757.62		A	1.4
7	☐	1.000		3464303.80		A	3.7
8	☐	1.000		3460527.24		A	7.6
9	☐	1.000		3383820.85		A	2.5

159 Tb (ISTD) [He]

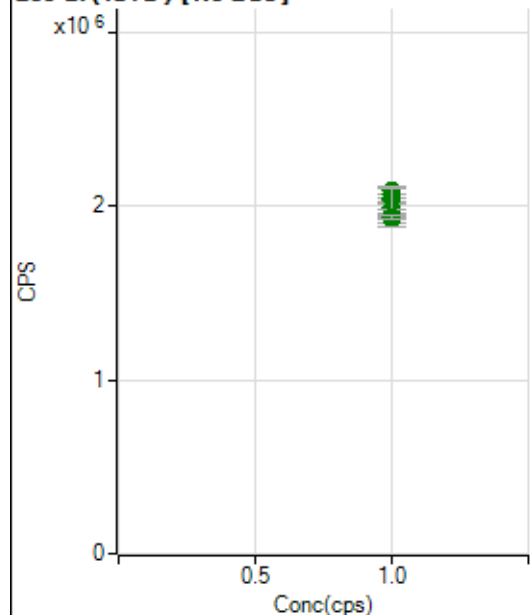
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1315309.47		M	4.6
2	☐	1.000		1375619.26		M	2.8
3	☐	1.000		1314088.07		M	3.9
4	☐	1.000		1401727.96		A	1.8
5	☐	1.000		1433622.44		M	2.4
6	☐	1.000		1378108.89		A	3.5
7	☐	1.000		1460164.32		A	1.1
8	☐	1.000		1434261.87		A	3.3
9	☐	1.000		1410147.25		M	3.1

165 Ho (ISTD) [No Gas]

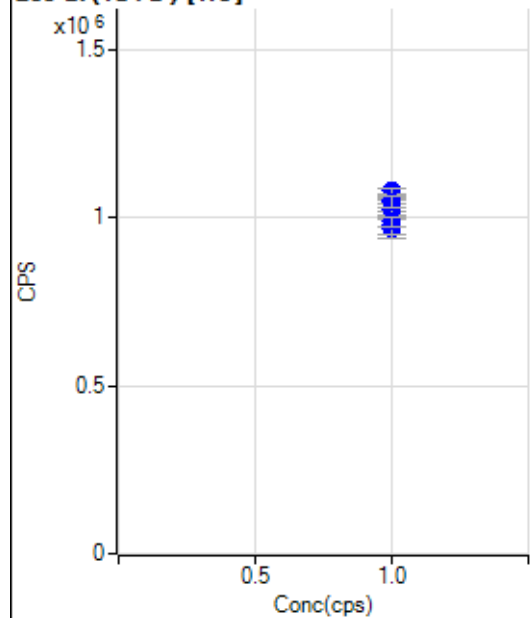
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3087667.45		A	4.2
2	☐	1.000		3070525.98		A	0.3
3	☐	1.000		3156142.21		A	2.7
4	☐	1.000		3093468.65		A	4.1
5	☐	1.000		3241257.04		A	0.8
6	☐	1.000		3317282.43		A	2.2
7	☐	1.000		3342493.22		A	3.8
8	☐	1.000		3271887.14		A	6.3
9	☐	1.000		3263914.72		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1339112.71		M	5.9
2	☐	1.000		1388330.50		M	1.3
3	☐	1.000		1332681.58		M	5.2
4	☐	1.000		1430657.62		M	1.8
5	☐	1.000		1436382.15		A	2.3
6	☐	1.000		1394512.43		A	3.9
7	☐	1.000		1475835.08		A	0.6
8	☐	1.000		1440812.91		M	1.9
9	☐	1.000		1422900.65		M	3.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1921954.78		A	2.4
2	☐	1.000		1947194.15		A	1.5
3	☐	1.000		1993550.12		A	3.0
4	☐	1.000		1931113.31		A	4.7
5	☐	1.000		2034539.08		A	1.6
6	☐	1.000		2088484.60		A	2.1
7	☐	1.000		2067823.02		A	4.6
8	☐	1.000		2042614.17		A	6.1
9	☐	1.000		1936034.12		A	0.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		970153.12		P	6.0
2	☐	1.000		1019484.48		P	0.3
3	☐	1.000		978964.03		P	5.5
4	☐	1.000		1047318.20		P	1.1
5	☐	1.000		1051832.36		P	2.0
6	☐	1.000		1023446.04		P	3.8
7	☐	1.000		1081096.75		P	1.5
8	☐	1.000		1050215.84		P	3.4
9	☐	1.000		990227.23		P	2.9

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8052020MS.b
Acq. Date-Time 2020-05-20 14:08:18
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		2928	29283.49			1.464	5.000
24		25697	256971.12			0.976	5.000
25		3505	35054.81			1.249	5.000
26		4128	41275.04			1.828	5.000
59		22369	223693.53			1.323	5.000
113		4070	40698.48			1.604	5.000
115		12173	121733.74			3.553	5.000
206		4739	47392.29			1.897	5.000
207		3955	39553.60			1.923	5.000
208		9678	96781.17			2.017	5.000
220		0	2.50			31.623	

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

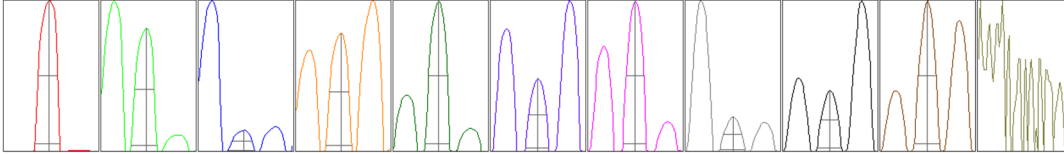
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2944	2950	2875	2979	2893
24	25874	25963	25489	25779	25381
25	3524	3548	3454	3538	3463
26	4157	4157	4043	4222	4057
59	22352	22678	22054	22660	22104
113	4038	4146	3992	4129	4044
115	12667	12537	11935	12113	11615
206	4729	4802	4664	4856	4644
207	3903	4049	3912	4026	3887
208	9652	9875	9563	9872	9429

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4921.15	8.95	8.90 - 9.10	
24	43386.89	23.95	23.90 - 24.10	
25	5866.15	24.95	24.90 - 25.10	
26	6831.65	25.95	25.90 - 26.10	
59	39696.97	58.95	58.90 - 59.10	
113	7743.11	113.00	112.90 - 113.10	
115	23136.72	115.00	114.90 - 115.10	
206	8839.64	206.05	205.90 - 206.10	
207	7428.73	207.00	206.90 - 207.10	
208	18409.06	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.784	0.900	
24	0.63	0.821	0.900	
25	0.63	0.827	0.900	
26	0.63	0.821	0.900	
59	0.59	0.777	0.900	
113	0.55	0.730	0.900	
115	0.55	0.733	0.900	
206	0.56	0.792	0.900	
207	0.56	0.761	0.900	
208	0.55	0.807	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.51 L/min Dilution Gas 0.46 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	10.3 V	Deflect	15.0 V
Extract 2	-210.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 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	150 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9995	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm
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EM

Discriminator	4.0 mV	Analog HV	2169 V	Pulse HV	1203 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		5311	53109.89			2.043	
89		8993	89927.85			1.903	
205		11870	118699.61			2.544	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	5426	5283	5411	5165	5269
89	9205	9002	9094	8763	8899
205	12231	11691	12095	11481	11852

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.51 L/min	Dilution Gas	0.46 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	10.3 V	Deflect	4.0 V
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US EPA Tune Check Report

Extract 2	-210.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-100 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	190 V		
QP Parameters					
Mass Gain	122	Axis Gain	0.9995	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	-0.05		
Hardware Settings					
Torch					
Torch H	0.3 mm	Torch V	0.0 mm		
EM					
Discriminator	4.0 mV	Analog HV	2169 V	Pulse HV	1203 V