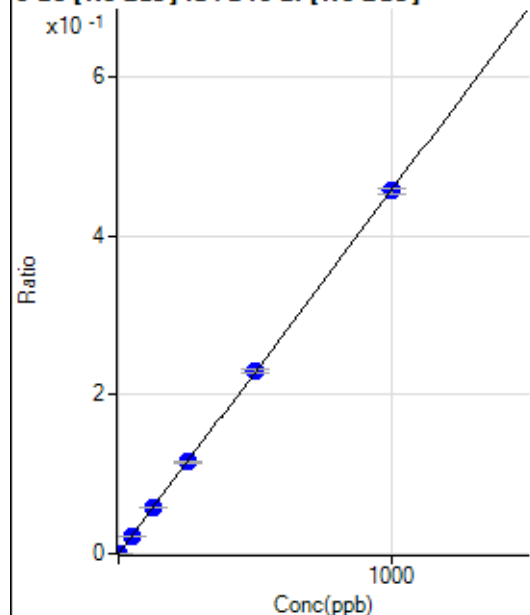


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8101420IMS.b\
Analysis File: P8101420IMS.batch.bin
DA Date-Time: 2020-10-14 17:40:45
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-10-14 12:48:02
2	004CALS.d	S01	2020-10-14 12:51:12
3	005CALS.d	S02	2020-10-14 12:54:20
4	006CALS.d	S03	2020-10-14 12:57:30
5	007CALS.d	S04	2020-10-14 13:00:37
6	008CALS.d	S05	2020-10-14 13:03:41
7	009CALS.d	S06	2020-10-14 13:06:39
8	010CALS.d	S07	2020-10-14 13:09:40
9	011CALS.d	S08	2020-10-14 13:12:38

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.32	0.0000	P	29.4
2	☐	0.100	0.116	132.64	0.0001	P	10.9
3	☐	1.000	0.954	801.87	0.0005	P	12.6
4	☐	50.000	49.346	41931.53	0.0226	P	1.5
5	☐	125.000	127.227	106103.06	0.0582	P	1.9
6	☐	250.000	251.871	212353.36	0.1152	P	1.8
7	☐	500.000	502.093	419465.18	0.2296	P	1.3
8	☐	1000.000	998.240	832794.21	0.4565	P	1.3
9	☐			399.26	0.0002	P	8.6

$$y = 4.5731\text{E-}004 * x + 2.0877\text{E-}005$$

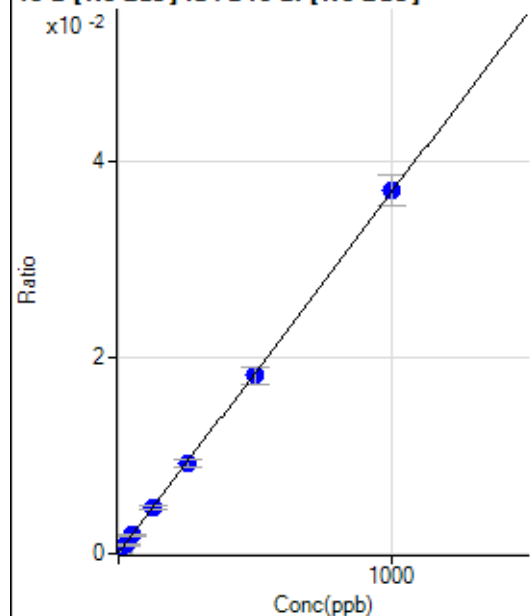
$$R = 1.0000$$

$$DL = 0.04033$$

$$BEC = 0.04565$$

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	175.30	0.0001	P	16.8
2	☐	2.500	2.132	315.94	0.0002	P	4.7
3	☐	25.000	22.449	1617.11	0.0009	P	16.4
4	☐	50.000	50.016	3582.41	0.0019	P	10.6
5	☐	125.000	124.662	8503.46	0.0047	P	9.3
6	☐	250.000	248.214	16956.44	0.0092	P	7.2
7	☐	500.000	492.039	33101.26	0.0181	P	9.2
8	☐	1000.000	1004.533	67350.74	0.0369	P	8.3
9	☐			10551.73	0.0059	P	10.4

$$y = 3.6641\text{E-}005 * x + 9.8313\text{E-}005$$

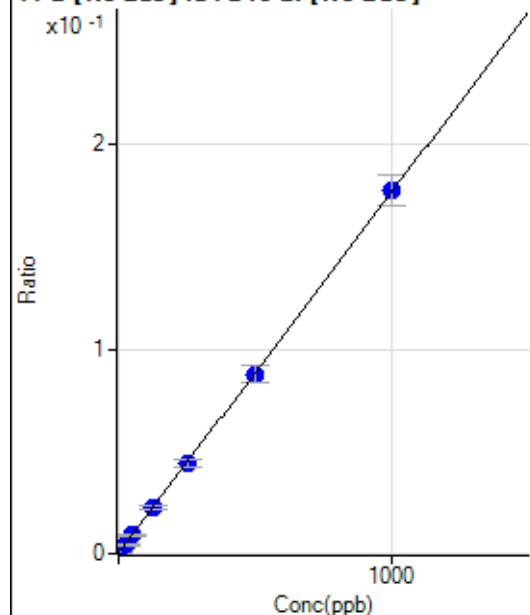
$$R = 1.0000$$

$$DL = 1.351$$

$$BEC = 2.683$$

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	761.21	0.0004	P	2.7
2	☐	2.500	2.125	1434.46	0.0008	P	9.1
3	☐	25.000	22.948	7835.90	0.0045	P	14.4
4	☐	50.000	49.257	16905.72	0.0091	P	9.1
5	☐	125.000	126.307	41363.10	0.0227	P	9.1
6	☐	250.000	246.755	81036.82	0.0439	P	8.2
7	☐	500.000	494.504	159988.21	0.0876	P	9.6
8	☐	1000.000	1003.485	323646.96	0.1774	P	8.5
9	☐			50908.54	0.0286	P	10.8

$$y = 1.7631E-004 * x + 4.2665E-004$$

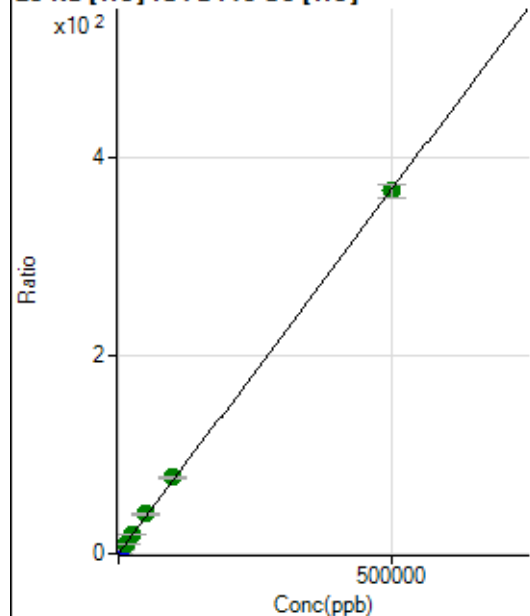
$$R = 1.0000$$

$$DL = 0.1928$$

$$BEC = 2.42$$

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	32069.22	0.2016	P	1.7
2	☐	50.000	60.996	39030.64	0.2463	P	1.7
3	☐	500.000	526.327	93473.87	0.5878	P	1.0
4	☐	5000.000	6005.208	695837.98	4.6081	P	7.5
5	☐	12500.000	13625.927	1644561.85	10.2001	A	1.2
6	☐	25000.000	26636.956	3177325.55	19.7475	A	2.3
7	☐	50000.000	54334.794	6347627.27	40.0719	A	2.1
8	☐	100000.00	104788.09	12742676.59	77.0941	A	1.6
9	☐	500000.00	498488.82	59772097.17	365.9880	A	3.7

$$y = 7.3379E-004 * x + 0.2016$$

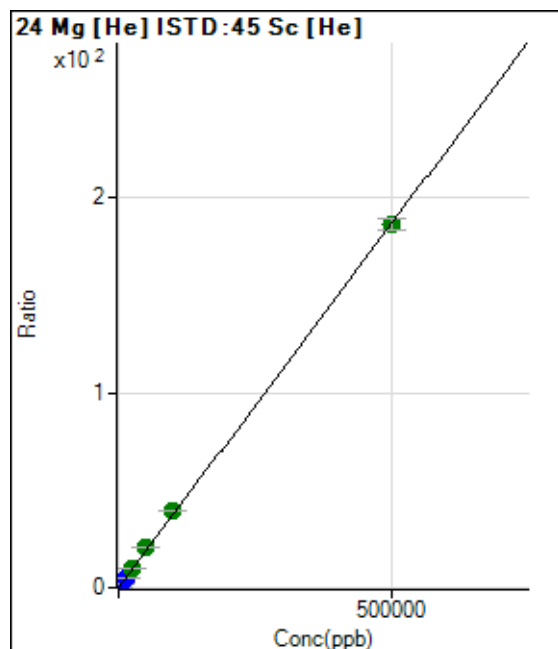
$$R = 0.9999$$

$$DL = 14.34$$

$$BEC = 274.7$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	466.69	0.0029	P	4.7
2	☐	50.000	46.841	3233.78	0.0204	P	1.4
3	☐	500.000	521.556	31412.04	0.1975	P	3.5
4	☐	5000.000	6005.497	338782.29	2.2436	P	7.5
5	☐	12500.000	13839.250	832999.25	5.1664	P	0.9
6	☐	25000.000	27541.631	1654069.55	10.2789	A	0.8
7	☐	50000.000	55111.348	3257527.85	20.5653	A	2.4
8	☐	100000.00	104926.71	6471552.66	39.1518	A	0.9
9	☐	500000.00	498332.88	30368331.58	185.9341	A	3.3

$$y = 3.7311\text{E-}004 * x + 0.0029$$

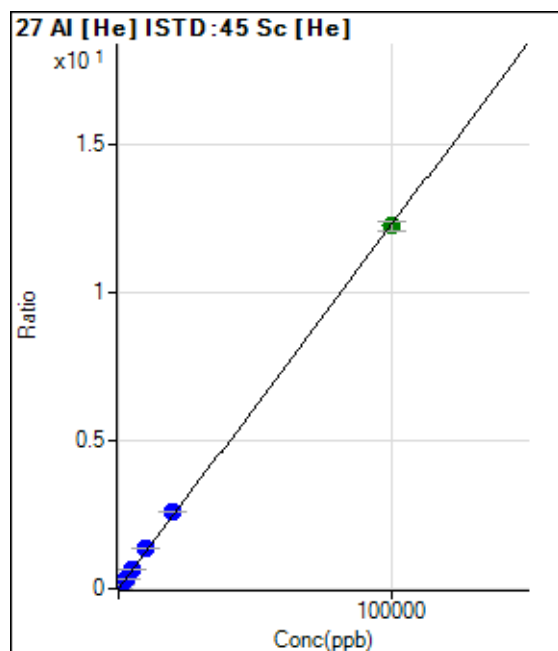
$$R = 0.9999$$

$$DL = 1.119$$

$$BEC = 7.861$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	381.21	0.0024	P	1.6
2	☒	2.000					
3	☐	20.000	20.122	773.68	0.0049	P	2.9
4	☐	1000.000	1170.319	22045.54	0.1460	P	7.0
5	☐	2500.000	2683.561	53465.61	0.3316	P	1.0
6	☐	5000.000	5363.659	106271.28	0.6604	P	0.8
7	☐	10000.000	10946.314	213099.29	1.3453	P	2.1
8	☐	20000.000	21013.976	426499.79	2.5803	P	1.2
9	☐	100000.00	99678.098	1997771.83	12.2306	A	3.0

$$y = 1.2268\text{E-}004 * x + 0.0024$$

$$R = 0.9999$$

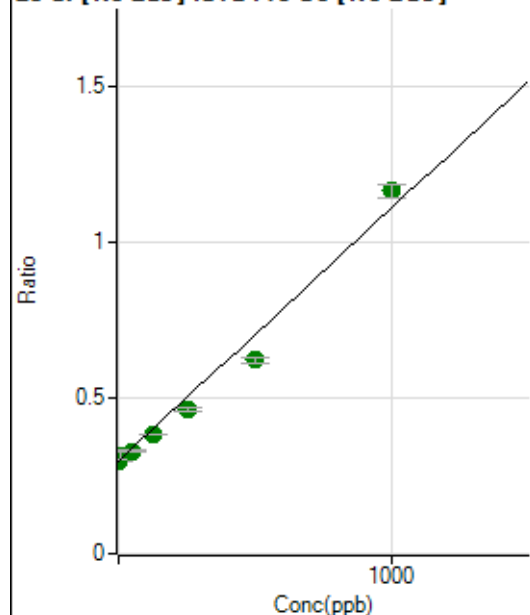
$$DL = 0.9312$$

$$BEC = 19.53$$

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	1121201.32	0.2979	A	0.2
2	☐	1.000	2.809	1131477.73	0.3002	A	1.6
3	☐	10.000	20.809	1149926.08	0.3148	A	7.8
4	☐	50.000	37.923	1247319.97	0.3287	A	2.0
5	☐	125.000	103.202	1429318.43	0.3816	A	0.7
6	☐	250.000	201.219	1755592.42	0.4610	A	2.2
7	☐	500.000	396.960	2344049.75	0.6196	A	3.7
8	☐	1000.000	1066.934	4476012.82	1.1624	A	3.9
9	☐			1189377.21	0.3157	A	4.4

$$y = 8.1023\text{E-}004 * x + 0.2979$$

$$R = 0.9913$$

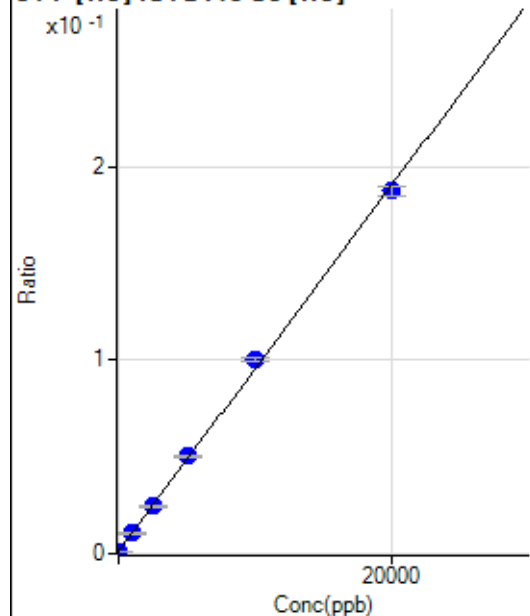
$$DL = 2.518$$

$$BEC = 367.7$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-13.181	163.89	0.0010	P	23.4
2	☐	0.000	11.386	200.01	0.0013	P	18.7
3	☐	0.000	1.795	186.12	0.0012	P	30.2
4	☐	1000.000	987.406	1589.02	0.0105	P	2.2
5	☐	2500.000	2466.105	3950.66	0.0245	P	5.5
6	☐	5000.000	5209.712	8119.12	0.0505	P	1.9
7	☐	10000.000	10492.133	15914.66	0.1005	P	1.4
8	☐	20000.000	19706.372	31014.18	0.1877	P	2.8
9	☐			197.23	0.0012	P	17.8

$$y = 9.4641\text{E-}006 * x + 0.0012$$

$$R = 0.9995$$

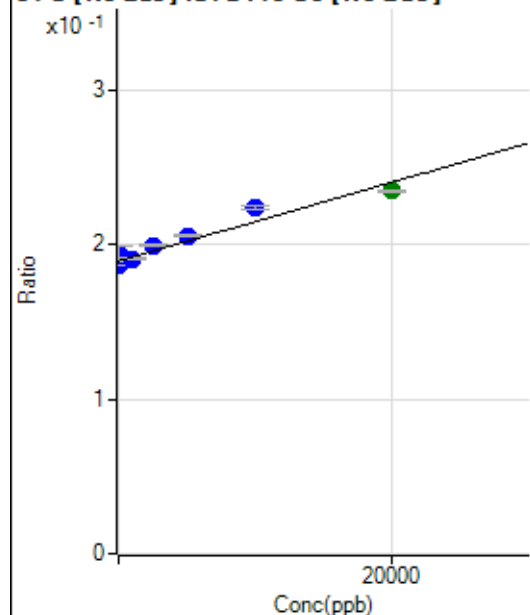
$$DL = 87.82$$

$$BEC = 121.9$$

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	-781.117	705029.04	0.1874	P	1.1
2	☐	0.000	-1063.230	703464.16	0.1866	P	0.2
3	☐	0.000	1844.346	709349.16	0.1940	P	5.6
4	☐	1000.000	515.030	723534.82	0.1906	P	0.5
5	☐	2500.000	3912.456	746525.61	0.1993	P	0.8
6	☐	5000.000	6358.913	782703.80	0.2055	P	0.8
7	☐	10000.000	13421.173	845664.60	0.2235	P	1.2
8	☐	20000.000	17797.377	903254.65	0.2346	A	0.2
9	☐			669246.64	0.1776	P	2.1

$$y = 2.5420\text{E-}006 * x + 0.1893$$

$$R = 0.9647$$

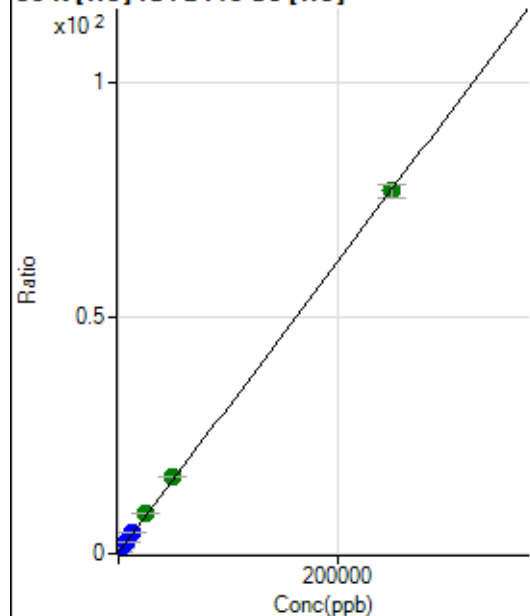
$$DL = 5269$$

$$BEC = 7.449\text{E}+04$$

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	32954.90	0.2071	P	2.6
2	☐	50.000	42.359	34881.75	0.2202	P	0.9
3	☐	500.000	495.413	57183.07	0.3596	P	1.3
4	☐	2500.000	2945.048	168126.70	1.1133	P	7.3
5	☐	6250.000	6796.189	370595.63	2.2984	P	0.6
6	☐	12500.000	13698.468	711601.73	4.4223	P	1.1
7	☐	25000.000	27488.341	1372674.04	8.6655	A	2.2
8	☐	50000.000	51863.870	2672314.66	16.1661	A	0.3
9	☐	250000.00	249300.37	12562367.82	76.9189	A	3.5

$$y = 3.0771\text{E-}004 * x + 0.2071$$

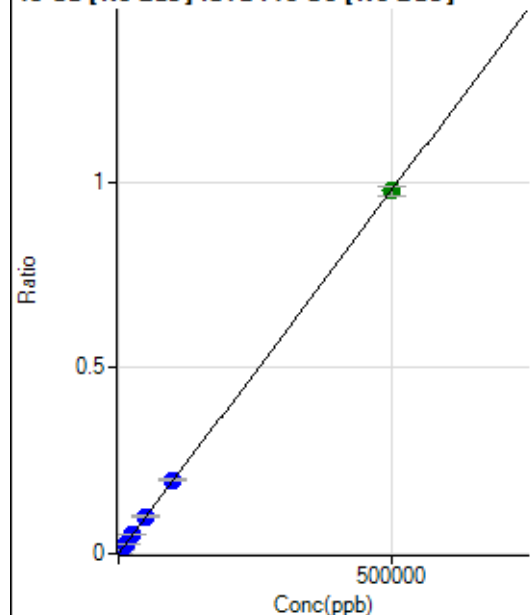
$$R = 0.9999$$

$$DL = 52.34$$

$$BEC = 673.1$$

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	483.70	0.0001	P	1.6
2	☐	50.000	42.192	795.34	0.0002	P	4.7
3	☐	500.000	488.205	3958.81	0.0011	P	4.9
4	☐	5000.000	5028.507	37780.48	0.0100	P	0.4
5	☐	12500.000	12916.407	95037.45	0.0254	P	0.4
6	☐	25000.000	25579.875	190861.07	0.0501	P	1.7
7	☐	50000.000	51312.868	379939.08	0.1004	P	1.8
8	☐	100000.00	101378.55	763253.83	0.1982	P	1.2
9	☐	500000.00	499553.32	3679055.28	0.9763	A	2.5

$$y = 1.9542\text{E-}006 * x + 1.2854\text{E-}004$$

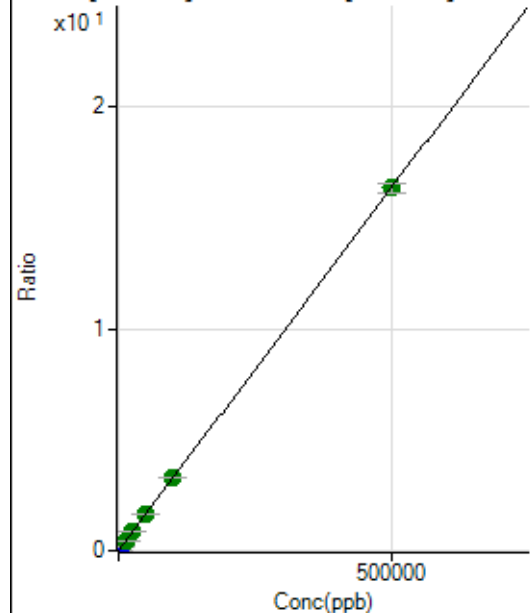
$$R = 1.0000$$

$$DL = 3.256$$

$$BEC = 65.78$$

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	22714.33	0.0060	P	1.1
2	☐	50.000	48.906	28778.60	0.0076	P	0.7
3	☐	500.000	500.718	81899.63	0.0224	P	6.5
4	☐	5000.000	5115.820	657786.76	0.1733	P	0.4
5	☐	12500.000	12970.220	1611406.14	0.4302	A	2.2
6	☐	25000.000	25823.172	3239403.78	0.8505	A	1.0
7	☐	50000.000	51141.392	6352090.01	1.6784	A	0.7
8	☐	100000.00	100072.28	12622428.36	3.2784	A	1.2
9	☐	500000.00	499817.33	61609202.70	16.3502	A	2.8

$$y = 3.2700\text{E-}005 * x + 0.0060$$

$$R = 1.0000$$

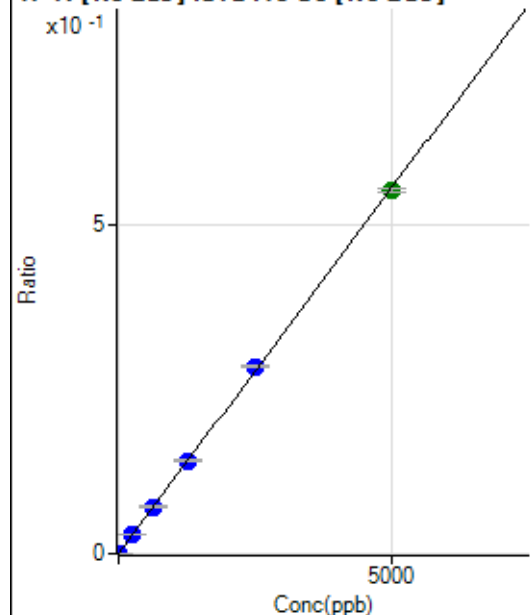
$$DL = 5.831$$

$$BEC = 184.6$$

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	650.03	0.0002	P	21.2
2	☐	0.500	0.502	861.16	0.0002	P	5.8
3	☐	5.000	5.169	2730.89	0.0007	P	9.7
4	☐	250.000	253.960	107886.07	0.0284	P	0.6
5	☐	625.000	641.751	268131.76	0.0716	P	0.7
6	☐	1250.000	1272.941	540070.17	0.1418	P	1.2
7	☐	2500.000	2559.149	1078168.79	0.2849	P	1.3
8	☐	5000.000	4962.398	2126395.40	0.5523	A	1.0
9	☐			802.82	0.0002	P	10.1

$$y = 1.1126E-004 * x + 1.7266E-004$$

$$R = 0.9999$$

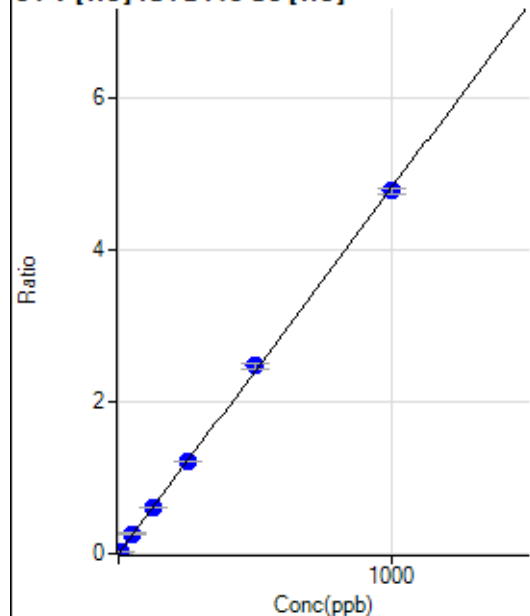
$$DL = 0.9883$$

$$BEC = 1.552$$

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	18.89	0.0001	P	37.6
2	☐	0.500	0.452	364.45	0.0023	P	7.0
3	☐	5.000	4.721	3639.39	0.0229	P	2.0
4	☐	50.000	54.147	39438.59	0.2612	P	7.9
5	☐	125.000	124.887	97116.01	0.6024	P	1.3
6	☐	250.000	251.841	195432.99	1.2146	P	1.6
7	☐	500.000	514.155	392725.02	2.4795	P	2.8
8	☐	1000.000	992.270	790883.34	4.7851	P	1.9
9	☐			164.45	0.0010	P	26.0

$$y = 0.0048 * x + 1.1893E-004$$

$$R = 0.9999$$

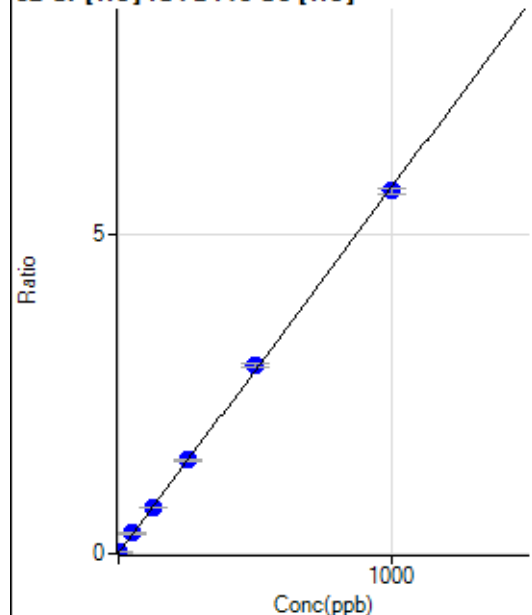
$$DL = 0.0278$$

$$BEC = 0.02466$$

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	913.37	0.0057	P	12.3
2	☐	0.200	0.142	1038.94	0.0066	P	3.3
3	☐	2.000	1.862	2614.71	0.0164	P	1.4
4	☐	50.000	54.470	48118.31	0.3186	P	7.1
5	☐	125.000	126.739	118299.58	0.7337	P	0.6
6	☐	250.000	254.783	236405.57	1.4692	P	1.3
7	☐	500.000	516.110	470498.56	2.9702	P	2.0
8	☐	1000.000	990.309	941106.10	5.6939	P	1.5
9	☐			4021.72	0.0246	P	4.1

$$y = 0.0057 * x + 0.0057$$

$$R = 0.9998$$

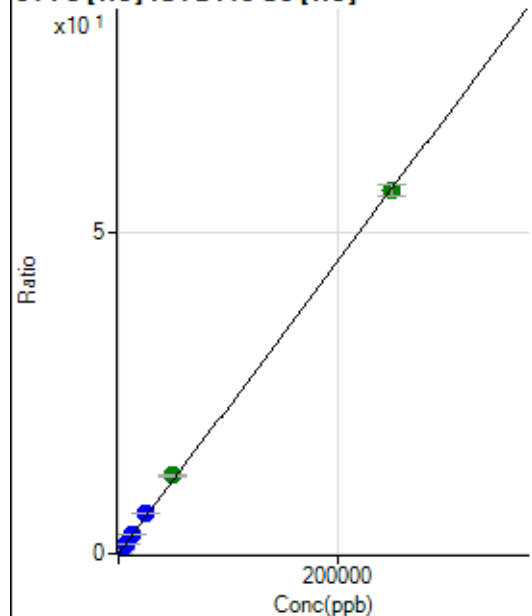
$$DL = 0.3689$$

$$BEC = 1$$

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	396.31	0.0025	P	12.1
2	☐	5.000	4.786	566.69	0.0036	P	11.8
3	☐	50.000	52.093	2277.99	0.0143	P	2.0
4	☐	2500.000	2948.360	101498.52	0.6721	P	7.3
5	☐	6250.000	6845.214	251067.20	1.5572	P	0.9
6	☐	12500.000	13646.848	499172.80	3.1020	P	1.2
7	☐	25000.000	27664.967	995711.68	6.2858	P	2.1
8	☐	50000.000	53720.314	2017071.02	12.2035	A	1.4
9	☐	250000.00	248912.73	9233870.35	56.5357	A	3.2

$$y = 2.2712E-004 * x + 0.0025$$

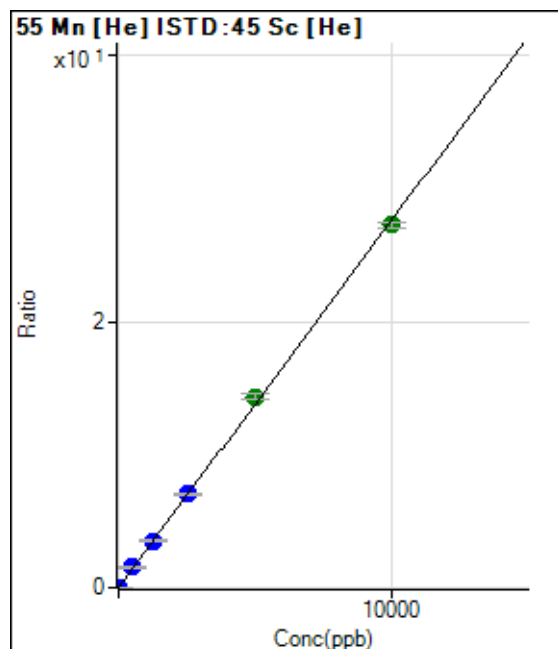
$$R = 0.9998$$

$$DL = 3.964$$

$$BEC = 10.96$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	100.00	0.0006	P	2.9
2	☒	0.100					
3	☐	1.000	1.041	557.79	0.0035	P	13.1
4	☐	500.000	550.876	229666.58	1.5211	P	7.6
5	☐	1250.000	1279.897	569661.86	3.5332	P	1.0
6	☐	2500.000	2550.598	1132842.59	7.0404	P	1.7
7	☐	5000.000	5197.302	2272222.85	14.3454	A	2.6
8	☐	10000.000	9882.418	4508277.81	27.2766	A	1.7
9	☐			3318.20	0.0203	P	4.1

$$y = 0.0028 * x + 6.2843E-004$$

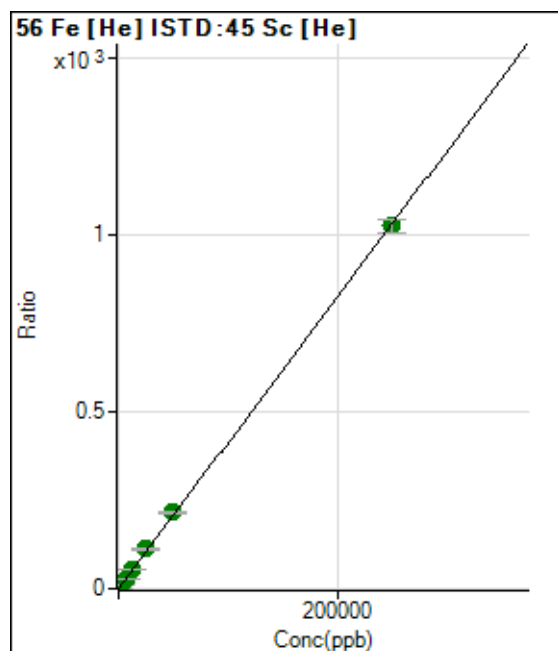
$$R = 0.9997$$

$$DL = 0.01976$$

$$BEC = 0.2277$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2905.90	0.0183	P	6.8
2	☐	5.000	5.088	6208.87	0.0392	P	0.6
3	☐	50.000	51.831	36805.03	0.2314	P	0.2
4	☐	2500.000	2960.518	1840620.69	12.1932	A	8.1
5	☐	6250.000	6729.722	4465444.60	27.6938	A	0.6
6	☐	12500.000	13364.422	8846129.60	54.9785	A	2.0
7	☐	25000.000	27345.551	17815484.54	112.4749	A	2.5
8	☐	50000.000	52571.961	35735827.19	216.2167	A	1.9
9	☐	250000.00	249191.23	167362935.2	1,024.799	A	3.7

$$y = 0.0041 * x + 0.0183$$

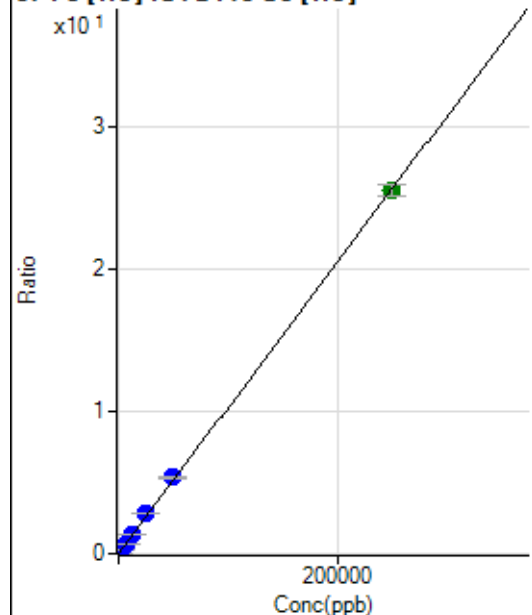
$$R = 0.9999$$

$$DL = 0.8996$$

$$BEC = 4.44$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	242.60	0.0015	P	25.7
2	☒	5.000					
3	☐	50.000	43.634	951.90	0.0060	P	7.1
4	☐	2500.000	2866.041	44527.08	0.2949	P	7.6
5	☐	6250.000	6675.359	110422.37	0.6848	P	0.9
6	☐	12500.000	13411.548	221148.09	1.3744	P	1.6
7	☐	25000.000	27444.093	445200.83	2.8108	P	2.7
8	☐	50000.000	52370.899	886295.75	5.3624	P	1.8
9	☐	250000.00	249221.54	4166994.45	25.5128	A	3.2

$$y = 1.0236\text{E-}004 * x + 0.0015$$

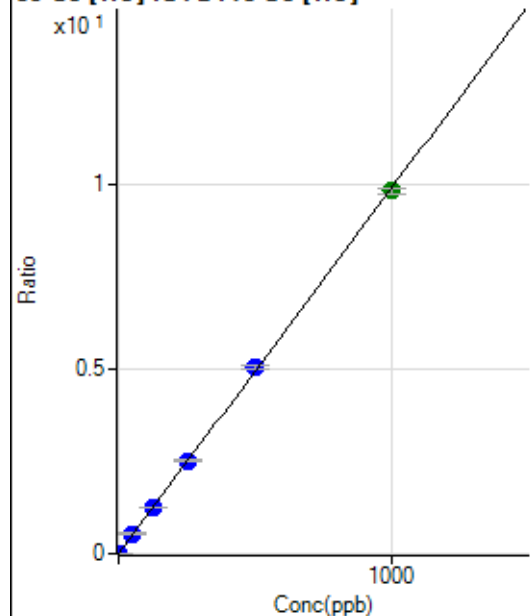
$$R = 0.9999$$

$$DL = 11.49$$

$$BEC = 14.88$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.33	0.0003	P	21.8
2	☐	0.100	0.099	208.89	0.0013	P	17.1
3	☐	1.000	0.924	1511.21	0.0095	P	7.3
4	☐	50.000	54.443	81636.42	0.5404	P	6.3
5	☐	125.000	127.129	203357.00	1.2614	P	2.2
6	☐	250.000	253.551	404747.72	2.5154	P	1.7
7	☐	500.000	511.596	803849.94	5.0751	P	2.6
8	☐	1000.000	992.826	1627799.02	9.8486	A	1.6
9	☐			2788.08	0.0171	P	2.0

$$y = 0.0099 * x + 3.3476\text{E-}004$$

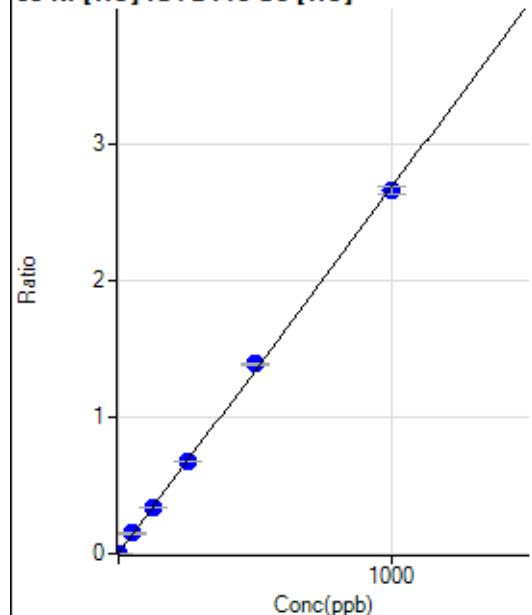
$$R = 0.9999$$

$$DL = 0.02203$$

$$BEC = 0.03375$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	220.00	0.0014	P	8.4
2	☐	0.100	0.086	255.56	0.0016	P	16.7
3	☐	1.000	0.972	633.35	0.0040	P	6.5
4	☐	50.000	55.526	22648.12	0.1500	P	7.6
5	☐	125.000	127.149	55091.68	0.3417	P	1.2
6	☐	250.000	252.296	108882.34	0.6767	P	1.3
7	☐	500.000	517.087	219458.94	1.3854	P	1.9
8	☐	1000.000	990.338	438307.73	2.6520	P	2.3
9	☐			1406.75	0.0086	P	11.4

$$y = 0.0027 * x + 0.0014$$

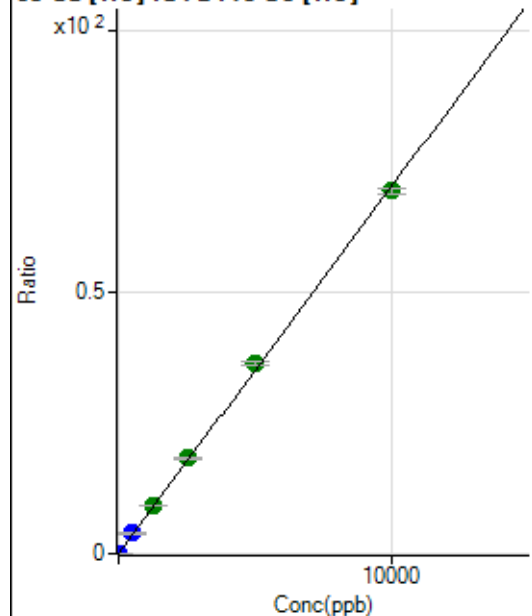
$$R = 0.9998$$

$$DL = 0.1306$$

$$BEC = 0.5163$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	502.24	0.0032	P	1.9
2	☐	0.200	0.221	746.69	0.0047	P	6.0
3	☐	2.000	2.274	3043.69	0.0191	P	0.9
4	☐	500.000	561.068	595834.49	3.9463	P	7.7
5	☐	1250.000	1306.054	1480362.79	9.1820	A	1.6
6	☐	2500.000	2595.611	2935665.48	18.2449	A	1.9
7	☐	5000.000	5169.275	5755669.57	36.3323	A	1.6
8	☐	10000.000	9881.399	11478951.64	69.4487	A	1.3
9	☐			5070.95	0.0311	P	6.7

$$y = 0.0070 * x + 0.0032$$

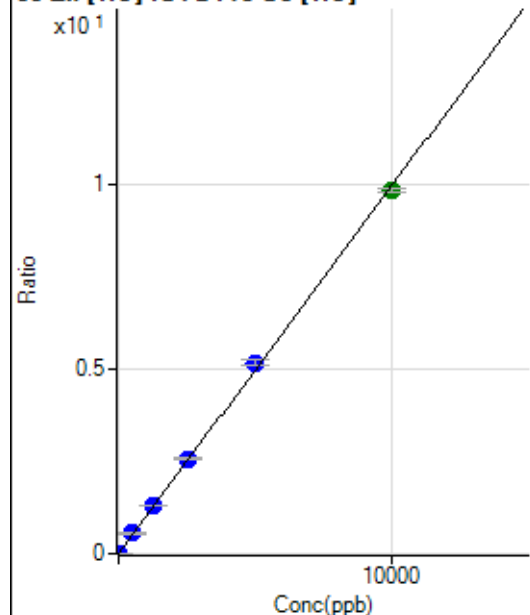
$$R = 0.9997$$

$$DL = 0.02516$$

$$BEC = 0.4492$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	204.45	0.0013	P	17.2
2	☒	0.200					
3	☐	2.000	1.712	474.46	0.0030	P	7.7
4	☐	500.000	557.373	83763.15	0.5547	P	7.5
5	☐	1250.000	1291.784	207013.44	1.2840	P	1.2
6	☐	2500.000	2582.286	412820.16	2.5654	P	1.1
7	☐	5000.000	5198.624	817863.72	5.1633	P	2.4
8	☐	10000.000	9872.025	1620492.15	9.8038	A	1.1
9	☐			4071.74	0.0249	P	3.7

$$y = 9.9296\text{E-}004 * x + 0.0013$$

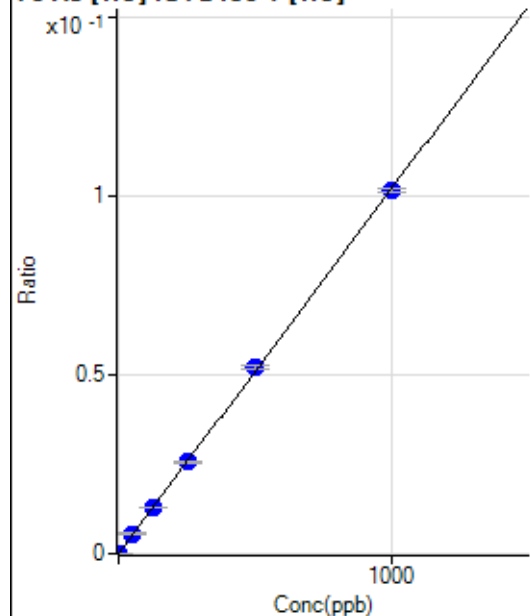
$$R = 0.9997$$

$$DL = 0.6668$$

$$BEC = 1.295$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.67	0.0000	P	57.5
2	☐	0.100	0.103	15.00	0.0000	P	24.7
3	☐	1.000	0.958	118.34	0.0001	P	4.6
4	☐	50.000	53.786	6121.95	0.0055	P	8.5
5	☐	125.000	126.002	15360.54	0.0129	P	1.9
6	☐	250.000	251.294	30482.10	0.0256	P	1.3
7	☐	500.000	509.853	61076.11	0.0520	P	1.9
8	☐	1000.000	994.435	123351.83	0.1015	P	1.0
9	☐			49.68	0.0000	P	5.6

$$y = 1.0205\text{E-}004 * x + 2.2801\text{E-}006$$

$$R = 0.9999$$

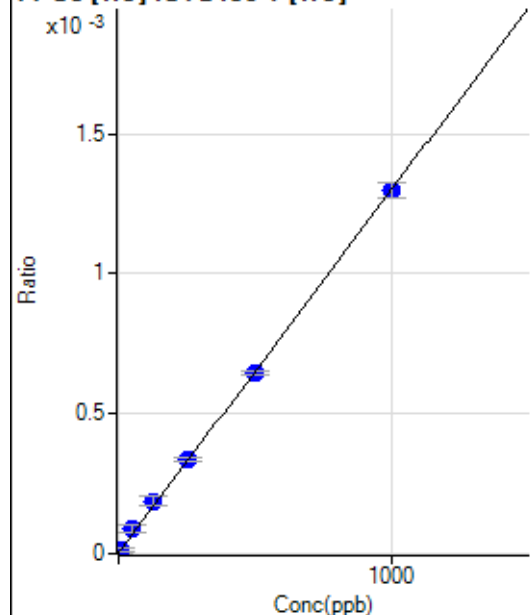
$$DL = 0.03856$$

$$BEC = 0.02234$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.33	0.0000	P	100.
2	☐	0.500	-2.207	0.00	0.0000	P	
3	☐	5.000	7.277	14.44	0.0000	P	81.3
4	☐	50.000	65.757	97.78	0.0001	P	32.1
5	☐	125.000	142.000	223.34	0.0002	P	17.0
6	☐	250.000	257.032	400.01	0.0003	P	5.7
7	☐	500.000	497.207	761.14	0.0006	P	1.9
8	☐	1000.000	996.716	1575.66	0.0013	P	4.2
9	☐			2.22	0.0000	P	173.

$$y = 1.2980\text{E-}006 * x + 2.8646\text{E-}006$$

$$R = 0.9998$$

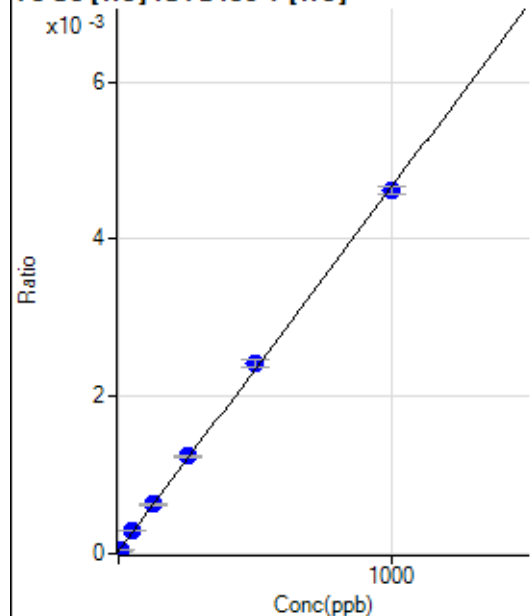
$$DL = 6.618$$

$$BEC = 2.207$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	37.67	0.0000	P	9.1
2	☐	0.500	0.799	42.00	0.0000	P	8.2
3	☐	5.000	5.673	69.01	0.0001	P	7.9
4	☐	50.000	55.902	324.71	0.0003	P	6.1
5	☐	125.000	128.452	748.43	0.0006	P	4.6
6	☐	250.000	260.851	1473.23	0.0012	P	2.9
7	☐	500.000	514.231	2830.91	0.0024	P	3.7
8	☐	1000.000	989.441	5605.35	0.0046	P	2.3
9	☐			48.01	0.0000	P	10.5

$$y = 4.6288\text{E-}006 * x + 3.2191\text{E-}005$$

$$R = 0.9998$$

$$DL = 1.898$$

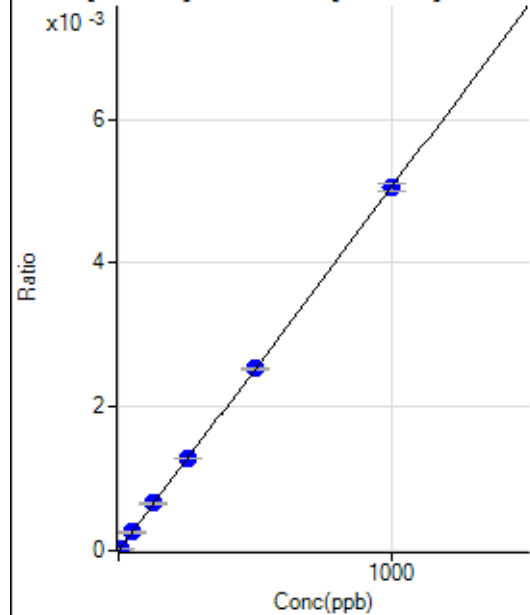
$$BEC = 6.955$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3227.04		P	7.2
2	☐			3123.59		P	3.8
3	☐			3200.35		P	4.1
4	☐			3080.18		P	9.6
5	☐			3196.99		P	0.5
6	☐			3133.61		P	5.0
7	☐			3186.99		P	6.2
8	☐			3393.91		P	4.4
9	☐			3400.59		P	7.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-28.69	0.0000	P	-50.
2	☒	0.500					
3	☐	5.000	4.267	179.72	0.0000	P	55.2
4	☐	50.000	51.424	2580.61	0.0003	P	6.6
5	☐	125.000	130.867	6562.82	0.0007	P	2.7
6	☐	250.000	251.871	12829.47	0.0013	P	0.3
7	☐	500.000	500.772	25840.17	0.0025	P	1.0
8	☐	1000.000	998.345	51246.32	0.0050	P	1.9
9	☐			2.26	0.0000	P	867.

$$y = 5.0561E-006 * x - 2.8673E-006$$

$$R = 1.0000$$

$$DL = 0.8606$$

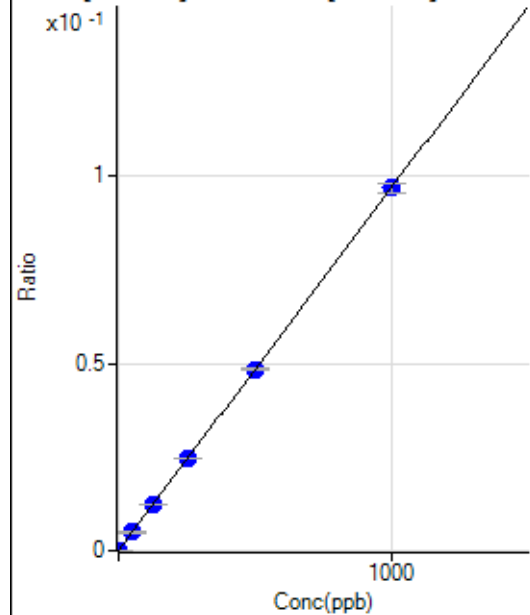
$$BEC = -0.5671$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			467.79		P	6.7
2	☐			450.01		P	11.9
3	☐			498.90		P	16.8
4	☐			430.01		P	15.5
5	☐			442.23		P	3.7
6	☐			405.57		P	3.1
7	☐			463.35		P	0.7
8	☐			442.24		P	5.7
9	☐			461.12		P	6.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	630.59	0.0001	P	8.9
2	☐	0.100	0.198	822.27	0.0001	P	13.8
3	☐	1.000	0.997	1555.69	0.0002	P	13.2
4	☐	50.000	49.804	49094.96	0.0049	P	2.2
5	☐	125.000	126.770	123018.65	0.0123	P	1.0
6	☐	250.000	252.446	247651.92	0.0245	P	0.9
7	☐	500.000	499.130	494852.92	0.0484	P	0.9
8	☐	1000.000	999.612	984670.73	0.0969	P	2.8
9	☐			5768.02	0.0006	P	4.2

$$y = 9.6909\text{E-}005 * x + 6.3102\text{E-}005$$

$$R = 1.0000$$

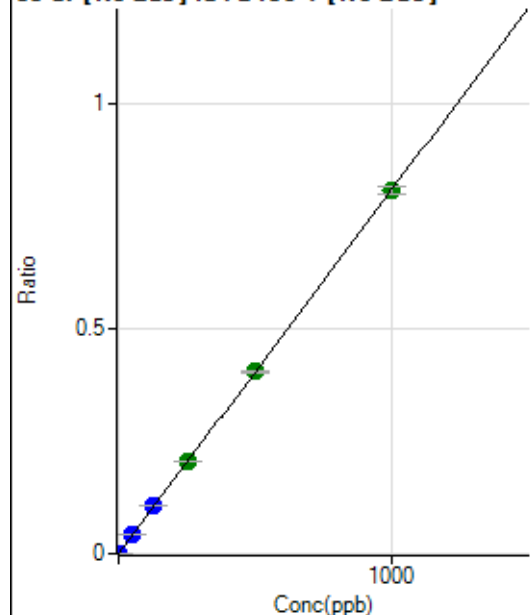
$$DL = 0.174$$

$$BEC = 0.6512$$

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	119.45	0.0000	P	17.2
2	☐	0.100	0.102	944.54	0.0001	P	17.5
3	☐	1.000	0.983	7874.64	0.0008	P	4.5
4	☐	50.000	51.339	416734.98	0.0415	P	1.9
5	☐	125.000	130.047	1047205.07	0.1051	P	0.3
6	☐	250.000	253.840	2071551.09	0.2052	A	1.1
7	☐	500.000	501.045	4137765.15	0.4050	A	0.6
8	☐	1000.000	997.820	8192362.33	0.8065	A	2.0
9	☐			43950.14	0.0043	P	3.5

$$y = 8.0822\text{E-}004 * x + 1.1964\text{E-}005$$

$$R = 1.0000$$

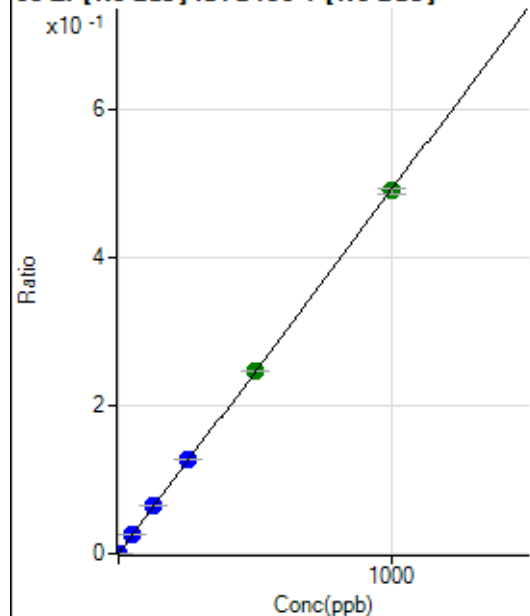
$$DL = 0.007655$$

$$BEC = 0.0148$$

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	425.02	0.0000	P	31.7
2	☐	0.100	0.089	863.94	0.0001	P	4.2
3	☐	1.000	0.926	4845.41	0.0005	P	10.3
4	☐	50.000	51.407	253933.48	0.0253	P	1.5
5	☐	125.000	130.730	640034.84	0.0642	P	0.4
6	☐	250.000	257.684	1278250.65	0.1266	P	0.1
7	☐	500.000	500.854	2513640.77	0.2460	A	0.5
8	☐	1000.000	996.866	4973950.89	0.4896	A	1.4
9	☐			1669.60	0.0002	P	4.6

$$y = 4.9112\text{E-}004 * x + 4.2454\text{E-}005$$

$$R = 1.0000$$

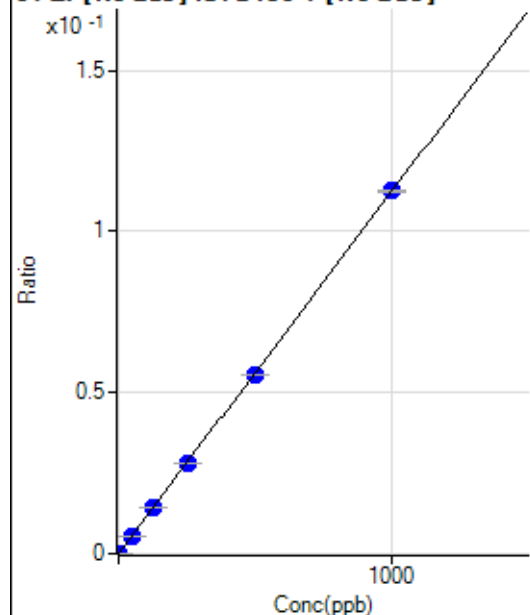
$$DL = 0.0821$$

$$BEC = 0.08644$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.22	0.0000	P	5.1
2	☐	0.100	0.032	158.34	0.0000	P	21.5
3	☐	1.000	0.761	952.84	0.0001	P	7.4
4	☐	50.000	49.959	56448.11	0.0056	P	1.2
5	☐	125.000	126.228	141294.28	0.0142	P	2.0
6	☐	250.000	249.134	282531.60	0.0280	P	0.9
7	☐	500.000	495.597	568627.40	0.0557	P	0.3
8	☐	1000.000	1002.267	1143241.85	0.1125	P	0.9
9	☐			355.57	0.0000	P	15.9

$$y = 1.1227\text{E-}004 * x + 1.2232\text{E-}005$$

$$R = 1.0000$$

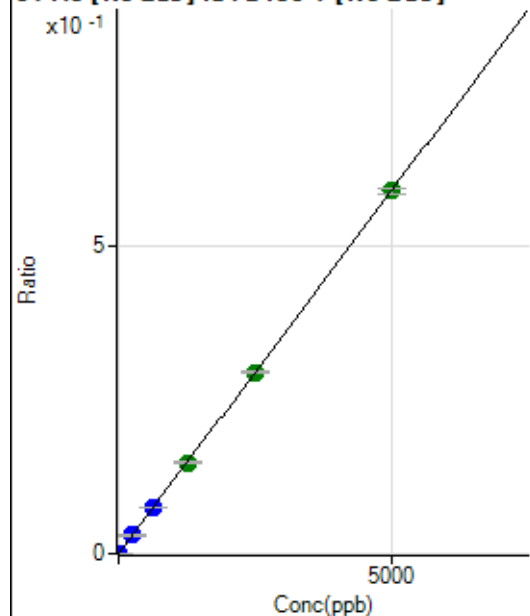
$$DL = 0.01673$$

$$BEC = 0.109$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	17.6
2	☐	0.500	0.378	627.81	0.0001	P	4.8
3	☐	5.000	4.872	5773.55	0.0006	P	6.0
4	☐	250.000	252.795	298579.15	0.0297	P	2.6
5	☐	625.000	636.812	746044.28	0.0749	P	1.2
6	☐	1250.000	1257.952	1493501.56	0.1479	A	0.8
7	☐	2500.000	2494.553	2996878.91	0.2933	A	1.3
8	☐	5000.000	4999.120	5970922.31	0.5878	A	1.5
9	☐			1975.20	0.0002	P	5.9

$$y = 1.1757\text{E-}004 * x + 1.8369\text{E-}005$$

$$R = 1.0000$$

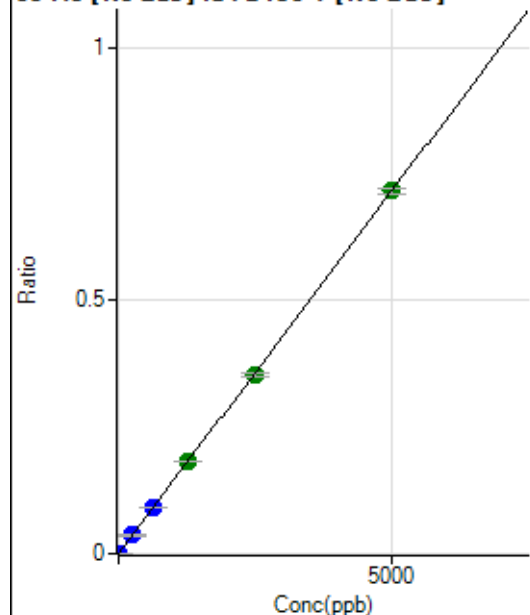
$$DL = 0.08238$$

$$BEC = 0.1562$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.33	0.0000	P	13.9
2	☐	0.500	0.460	716.70	0.0001	P	7.1
3	☐	5.000	5.054	7104.84	0.0007	P	11.7
4	☐	250.000	253.568	364640.94	0.0363	P	2.1
5	☐	625.000	644.731	919865.62	0.0923	P	0.4
6	☐	1250.000	1273.251	1841177.77	0.1823	A	1.0
7	☐	2500.000	2470.353	3614609.76	0.3538	A	1.3
8	☐	5000.000	5006.366	7283085.49	0.7169	A	1.7
9	☐			2369.71	0.0002	P	7.5

$$y = 1.4320E-004 * x + 5.8333E-006$$

$$R = 1.0000$$

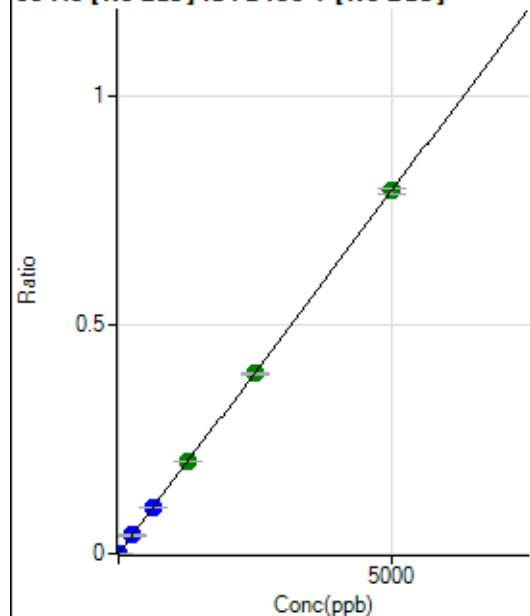
$$DL = 0.01702$$

$$BEC = 0.04073$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	23.0
2	☐	0.500	0.435	786.16	0.0001	P	14.4
3	☐	5.000	4.949	7752.37	0.0008	P	7.9
4	☐	250.000	251.855	401335.30	0.0400	P	3.4
5	☐	625.000	642.383	1015678.45	0.1020	P	0.8
6	☐	1250.000	1269.245	2033906.08	0.2014	A	0.5
7	☐	2500.000	2484.038	4027902.69	0.3942	A	1.2
8	☐	5000.000	5000.904	8061826.13	0.7936	A	1.8
9	☐			3114.32	0.0003	P	6.4

$$y = 1.5869E-004 * x + 9.4583E-006$$

$$R = 1.0000$$

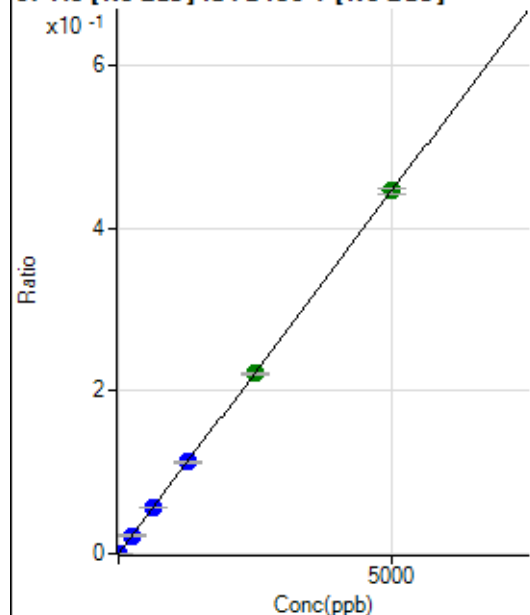
$$DL = 0.04116$$

$$BEC = 0.0596$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	63.1
2	☐	0.500	0.489	463.91	0.0000	P	3.1
3	☐	5.000	4.744	4150.71	0.0004	P	7.6
4	☐	250.000	250.531	224132.48	0.0223	P	2.8
5	☐	625.000	636.426	564938.65	0.0567	P	1.8
6	☐	1250.000	1262.144	1135495.34	0.1125	P	0.7
7	☐	2500.000	2485.117	2262304.04	0.2214	A	1.1
8	☐	5000.000	5002.951	4528111.95	0.4458	A	1.9
9	☐			1400.10	0.0001	P	12.0

$$y = 8.9098\text{E-}005 * x + 2.7938\text{E-}006$$

$$R = 1.0000$$

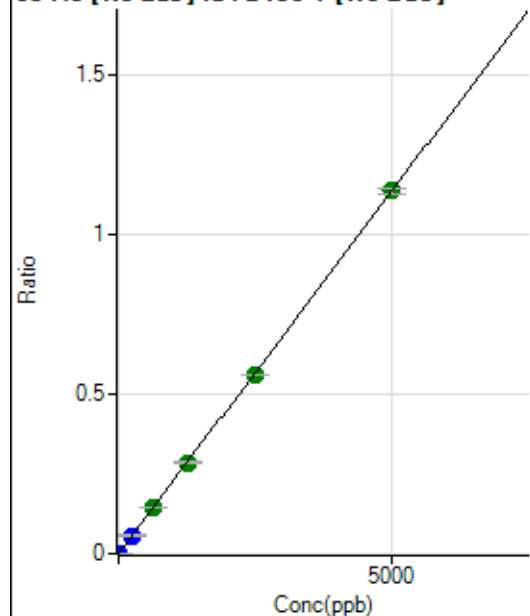
$$DL = 0.05937$$

$$BEC = 0.03136$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	32.4
2	☐	0.500	0.452	1080.63	0.0001	P	14.6
3	☐	5.000	4.774	10618.20	0.0011	P	5.5
4	☐	250.000	251.888	573100.12	0.0571	P	2.5
5	☐	625.000	638.650	1441743.97	0.1447	A	0.5
6	☐	1250.000	1258.043	2878255.79	0.2851	A	1.6
7	☐	2500.000	2474.703	5729443.23	0.5608	A	0.6
8	☐	5000.000	5008.837	11529566.23	1.1350	A	1.7
9	☐			3622.80	0.0004	P	5.2

$$y = 2.2660\text{E-}004 * x + 5.5721\text{E-}006$$

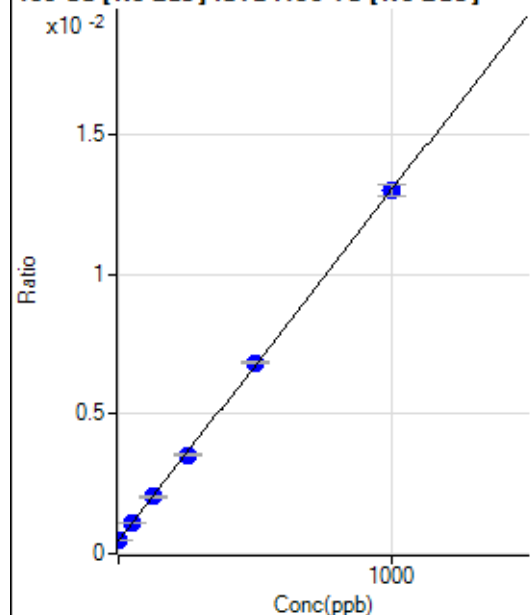
$$R = 1.0000$$

$$DL = 0.02393$$

$$BEC = 0.02459$$

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	2636.43	0.0005	P	3.1
2	☐	0.100	0.720	2622.55	0.0005	P	2.0
3	☐	1.000	1.449	2647.54	0.0005	P	8.1
4	☐	50.000	50.391	6179.34	0.0011	P	1.6
5	☐	125.000	126.975	11702.52	0.0021	P	3.2
6	☐	250.000	244.385	20543.50	0.0035	P	2.3
7	☐	500.000	507.156	39056.00	0.0068	P	1.2
8	☐	1000.000	997.559	75408.95	0.0130	P	3.0
9	☐			2689.22	0.0005	P	6.0

$$y = 1.2563\text{E-}005 * x + 4.6156\text{E-}004$$

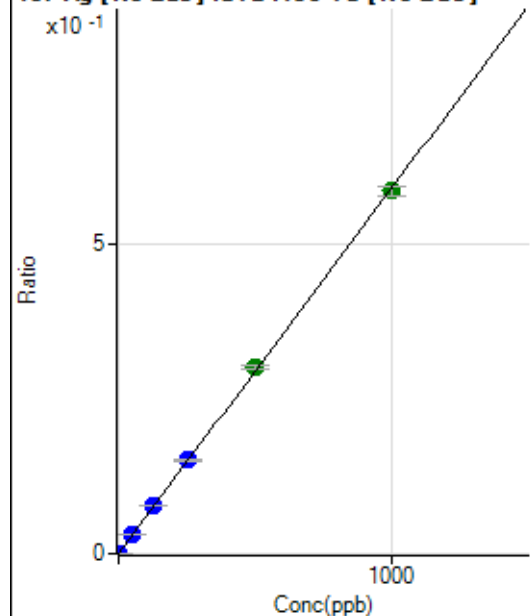
$$R = 0.9999$$

$$DL = 3.444$$

$$BEC = 36.74$$

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	55.56	0.0000	P	16.5
2	☐	0.100	0.111	419.47	0.0001	P	11.1
3	☐	1.000	1.007	3336.62	0.0006	P	8.9
4	☐	50.000	51.990	173654.70	0.0308	P	1.0
5	☐	125.000	129.503	436014.08	0.0766	P	0.7
6	☐	250.000	255.731	879988.73	0.1513	P	2.0
7	☐	500.000	509.001	1720833.48	0.3011	A	2.4
8	☐	1000.000	993.404	3410424.38	0.5876	A	2.9
9	☐			1655.70	0.0003	P	5.2

$$y = 5.9154\text{E-}004 * x + 9.7178\text{E-}006$$

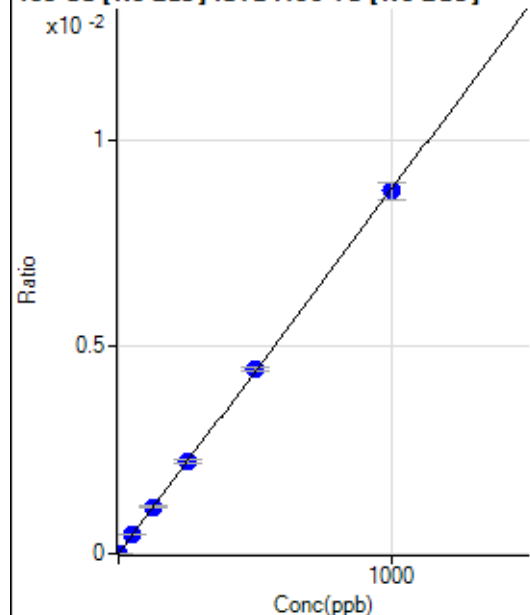
$$R = 0.9999$$

$$DL = 0.008153$$

$$BEC = 0.01643$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	21.4
2	☐	0.100	0.204	20.83	0.0000	P	19.7
3	☐	1.000	1.226	70.83	0.0000	P	19.5
4	☐	50.000	51.620	2578.06	0.0005	P	2.9
5	☐	125.000	127.633	6408.51	0.0011	P	4.5
6	☐	250.000	252.980	12971.52	0.0022	P	5.0
7	☐	500.000	506.814	25529.25	0.0045	P	2.9
8	☐	1000.000	995.438	50897.58	0.0088	P	4.5
9	☐			52.78	0.0000	P	27.9

$$y = 8.8105\text{E-}006 * x + 1.9441\text{E-}006$$

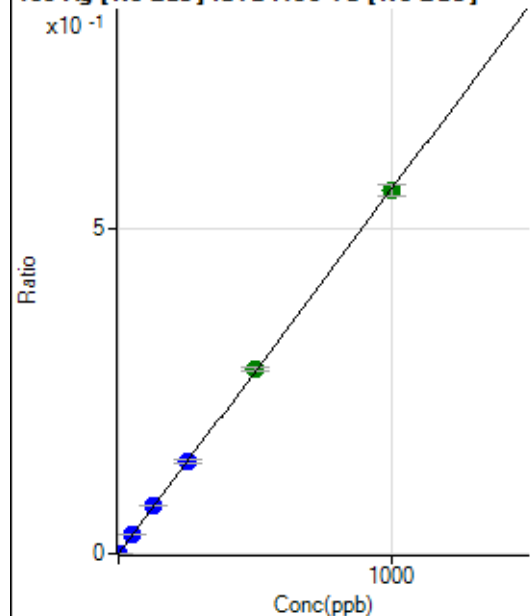
$$R = 1.0000$$

$$DL = 0.1419$$

$$BEC = 0.2207$$

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	22.22	0.0000	P	57.5
2	☐	0.100	0.106	352.80	0.0001	P	8.9
3	☐	1.000	0.953	2969.84	0.0005	P	7.5
4	☐	50.000	51.772	163922.43	0.0290	P	1.3
5	☐	125.000	130.332	415991.00	0.0731	P	1.4
6	☐	250.000	253.575	827197.05	0.1422	P	2.7
7	☐	500.000	505.353	1619865.07	0.2834	A	2.3
8	☐	1000.000	995.674	3240734.08	0.5584	A	3.3
9	☐			1527.91	0.0003	P	7.3

$$y = 5.6086\text{E-}004 * x + 3.8889\text{E-}006$$

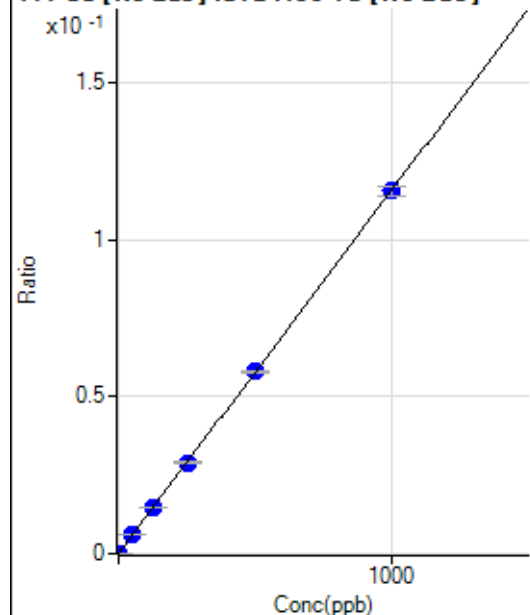
$$R = 1.0000$$

$$DL = 0.01195$$

$$BEC = 0.006934$$

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	265.86	0.0000	P	1.1
2	☐	0.100	0.109	329.61	0.0001	P	3.8
3	☐	1.000	1.163	999.10	0.0002	P	3.1
4	☐	50.000	51.487	33843.45	0.0060	P	2.0
5	☐	125.000	126.169	83226.56	0.0146	P	1.1
6	☐	250.000	251.090	169029.20	0.0291	P	2.1
7	☐	500.000	500.902	331068.80	0.0579	P	1.4
8	☐	1000.000	999.056	670212.21	0.1155	P	3.0
9	☐			553.10	0.0001	P	10.6

$$y = 1.1555\text{E-}004 * x + 4.6542\text{E-}005$$

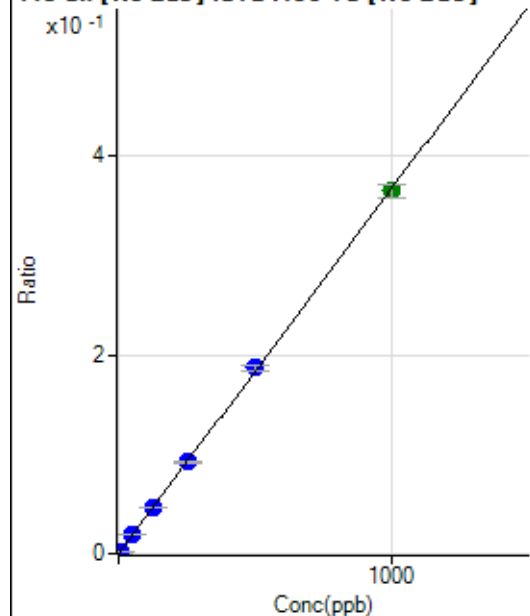
$$R = 1.0000$$

$$DL = 0.01378$$

$$BEC = 0.4028$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	49.6
2	☐	0.500	0.448	1055.62	0.0002	P	3.0
3	☐	5.000	4.756	9762.03	0.0018	P	6.7
4	☐	50.000	51.108	105997.82	0.0188	P	1.4
5	☐	125.000	127.324	265989.07	0.0467	P	0.5
6	☐	250.000	251.089	535916.02	0.0921	P	3.0
7	☐	500.000	509.852	1069183.42	0.1871	P	2.6
8	☐	1000.000	994.457	2117386.57	0.3649	A	3.6
9	☐			708.37	0.0001	P	7.4

$$y = 3.6688\text{E-}004 * x + 2.5227\text{E-}005$$

$$R = 0.9999$$

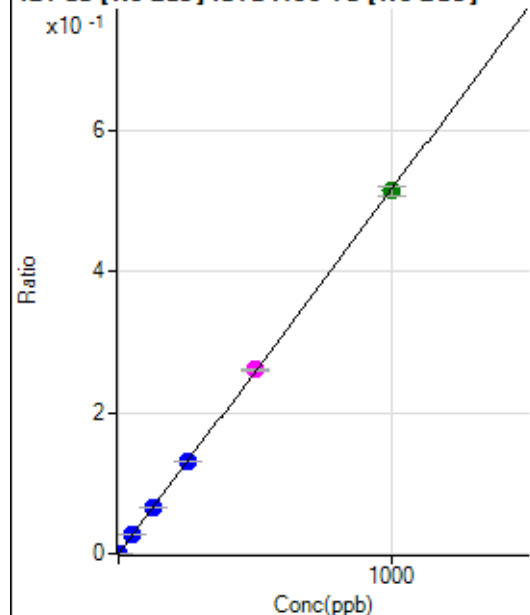
$$DL = 0.1024$$

$$BEC = 0.06876$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	52.5
2	☐	0.200	0.175	541.69	0.0001	P	13.8
3	☐	2.000	1.964	5634.67	0.0010	P	6.7
4	☐	50.000	50.914	148385.08	0.0263	P	0.9
5	☐	125.000	127.760	375302.29	0.0659	P	0.7
6	☐	250.000	253.100	759916.29	0.1306	P	1.8
7	☐	500.000	505.214	1490468.12	0.2608	M	0.8
8	☐	1000.000	996.227	2984212.50	0.5142	A	2.7
9	☐			2011.32	0.0003	P	4.8

$$y = 5.1613\text{E-}004 * x + 7.2813\text{E-}006$$

$$R = 1.0000$$

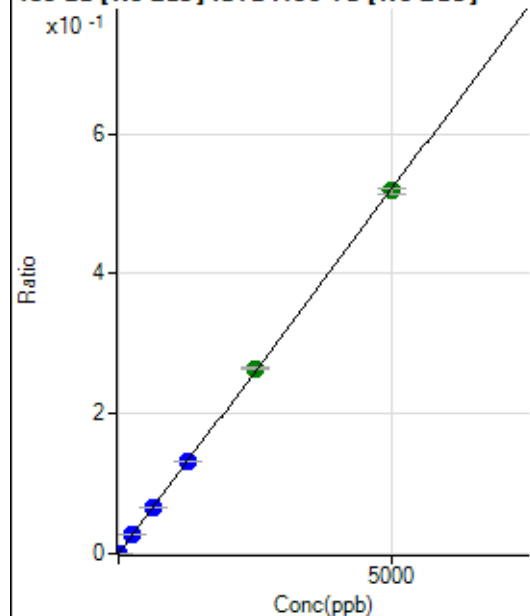
$$DL = 0.02224$$

$$BEC = 0.01411$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.34	0.0000	P	43.7
2	☐	1.000	0.981	602.81	0.0001	P	19.1
3	☐	10.000	9.697	5609.62	0.0010	P	4.7
4	☐	250.000	256.203	150664.57	0.0267	P	2.4
5	☐	625.000	636.872	377522.55	0.0663	P	1.4
6	☐	1250.000	1262.488	765002.23	0.1315	P	1.4
7	☐	2500.000	2537.769	1511005.70	0.2643	A	0.9
8	☐	5000.000	4976.200	3008619.77	0.5183	A	1.8
9	☐			5334.53	0.0009	P	3.1

$$y = 1.0416\text{E-}004 * x + 5.8482\text{E-}006$$

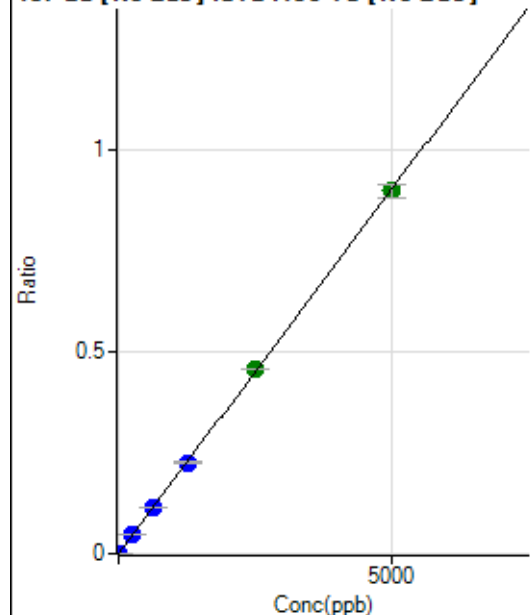
$$R = 1.0000$$

$$DL = 0.07369$$

$$BEC = 0.05615$$

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	30.55	0.0000	P	16.4
2	☐	0.100	0.990	1025.07	0.0002	P	6.6
3	☐	10.000	9.729	9706.50	0.0018	P	6.0
4	☐	250.000	256.073	260607.03	0.0462	P	1.2
5	☐	625.000	637.484	653980.32	0.1149	P	1.8
6	☐	1250.000	1248.372	1309023.73	0.2251	P	2.3
7	☐	2500.000	2532.139	2609259.37	0.4565	A	0.4
8	☐	5000.000	4982.474	5212274.64	0.8982	A	3.6
9	☐			9353.47	0.0016	P	3.8

$$y = 1.8027\text{E-}004 * x + 5.3528\text{E-}006$$

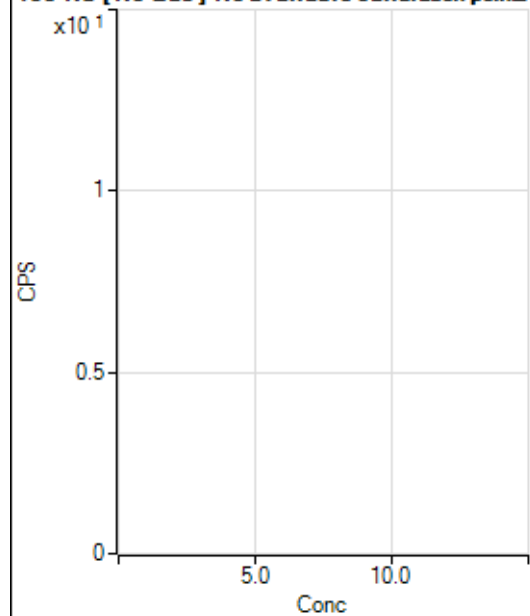
$$R = 1.0000$$

$$DL = 0.0146$$

$$BEC = 0.02969$$

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	☐			8.89		P	43.3
3	☐			0.00		P	
4	☐			8.89		P	114.
5	☐			17.78		P	86.6
6	☐			33.33		P	72.1
7	☐			82.22		P	28.5
8	☐			122.23		P	17.5
9	☐			15.55		P	24.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			2.22		P	86.6
6	☐			3.33		P	100.
7	☐			6.67		P	173.
8	☐			10.00		P	33.3
9	☐			1.11		P	173.

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	99.0
2	☐			11.11		P	43.3
3	☐			13.89		P	69.3
4	☐			13.89		P	69.3
5	☐			30.56		P	41.7
6	☐			25.00		P	88.2
7	☐			41.67		P	60.0
8	☐			86.11		P	14.8
9	☐			188.90		P	20.8

156 Dy [He] No available calibration points

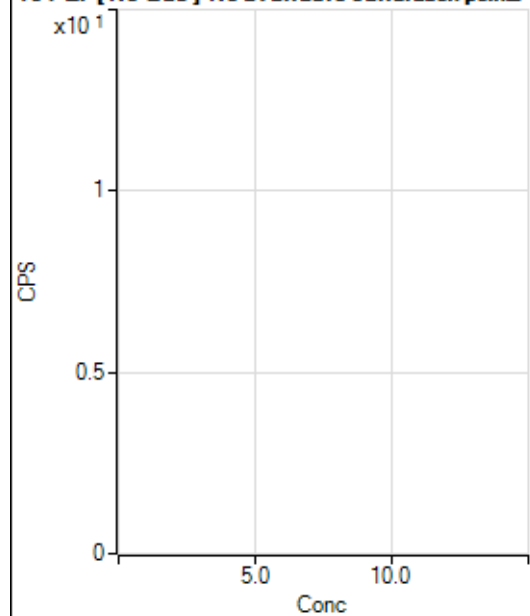
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			6.67		P	100.
3	☐			7.78		P	24.7
4	☐			3.33		P	0.0
5	☐			4.44		P	173.
6	☐			12.22		P	31.5
7	☐			16.66		P	34.6
8	☐			27.78		P	18.3
9	☐			106.67		P	23.6

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	49.5
2	☐			52.78		P	24.1
3	☐			25.00		P	57.7
4	☐			50.00		P	28.9
5	☐			86.11		P	14.8
6	☐			58.33		P	28.6
7	☐			77.78		P	40.6
8	☐			97.23		P	24.7
9	☐			286.12		P	3.4

160 Gd [He] No available calibration points

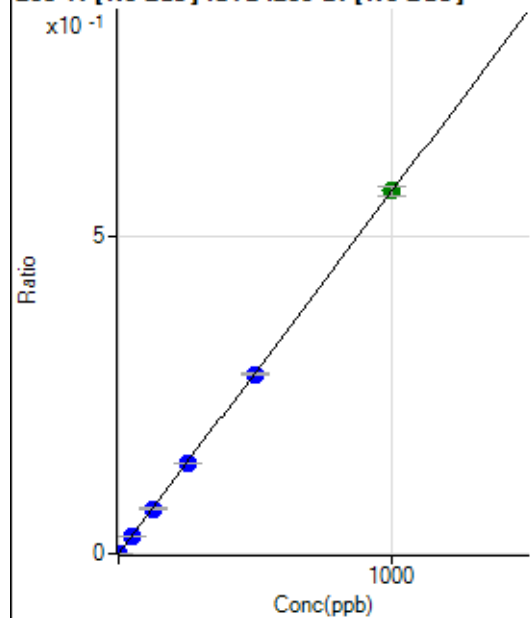
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			32.22		P	43.1
2	☐			16.67		P	20.0
3	☐			20.00		P	16.7
4	☐			27.78		P	18.3
5	☐			31.11		P	6.2
6	☐			27.78		P	6.9
7	☐			26.67		P	0.0
8	☐			43.33		P	53.8
9	☐			117.78		P	18.4

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	124.
2	☐			30.56		P	41.7
3	☐			27.78		P	45.8
4	☐			41.67		P	20.0
5	☐			22.22		P	57.3
6	☐			27.78		P	17.3
7	☐			41.67		P	60.0
8	☐			33.33		P	75.0
9	☐			47.22		P	83.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	49.5
2	☐			24.44		P	105.
3	☐			8.89		P	43.3
4	☐			15.56		P	12.4
5	☐			11.11		P	86.6
6	☐			8.89		P	43.3
7	☐			18.89		P	27.0
8	☐			15.55		P	24.8
9	☐			27.78		P	45.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	16.0
2	☐	0.100	0.079	186.12	0.0001	P	28.2
3	☐	1.000	0.946	1641.82	0.0006	P	7.2
4	☐	50.000	49.867	87287.21	0.0285	P	1.3
5	☐	125.000	124.361	215942.12	0.0711	P	1.5
6	☐	250.000	248.834	440239.45	0.1422	P	1.3
7	☐	500.000	495.659	863524.29	0.2832	P	1.1
8	☐	1000.000	1002.549	1718109.96	0.5728	A	2.4
9	☐			1333.44	0.0005	P	13.3

$$y = 5.7134\text{E-}004 * x + 1.6454\text{E-}005$$

$$R = 1.0000$$

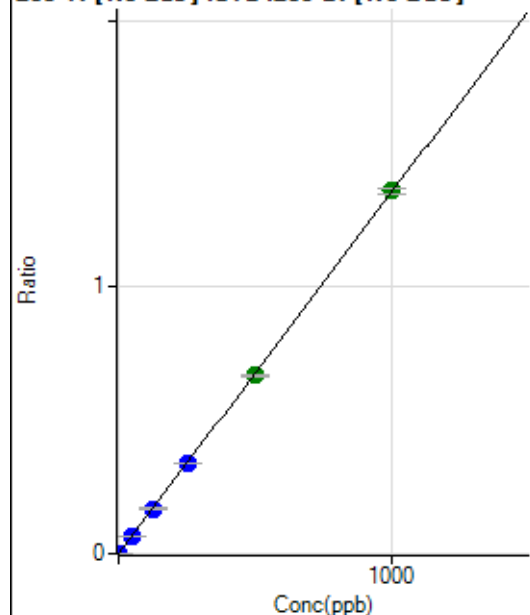
$$DL = 0.01383$$

$$BEC = 0.0288$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	77.78	0.0000	P	16.9
2	☐	0.100	0.076	388.90	0.0001	P	15.9
3	☐	1.000	0.980	3978.50	0.0014	P	12.0
4	☐	50.000	49.253	204403.81	0.0668	P	2.9
5	☐	125.000	123.667	509162.68	0.1676	P	2.3
6	☐	250.000	249.226	1045669.59	0.3377	P	1.2
7	☐	500.000	492.668	2035397.53	0.6676	A	2.0
8	☐	1000.000	1004.064	4081208.47	1.3605	A	1.6
9	☐			2989.32	0.0010	P	13.3

$$y = 0.0014 * x + 2.5628E-005$$

$$R = 1.0000$$

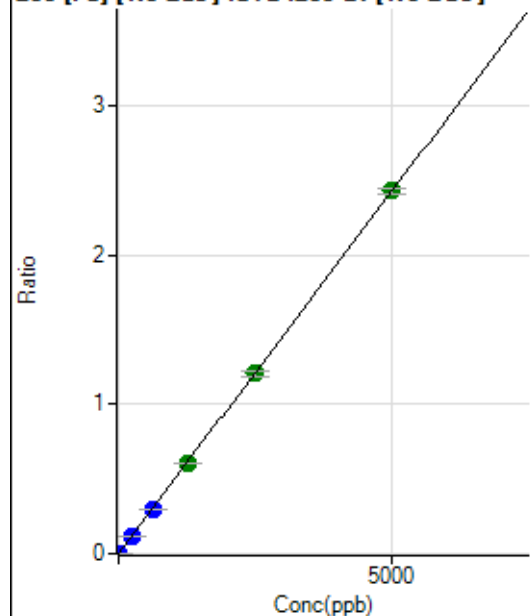
$$DL = 0.0096$$

$$BEC = 0.01891$$

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	309.27	0.0001	P	3.9
2	☐	0.100	0.093	444.46	0.0001	P	17.9
3	☐	1.000	0.848	1514.93	0.0005	P	6.4
4	☐	250.000	241.864	360007.60	0.1176	P	1.1
5	☐	625.000	611.404	902491.21	0.2971	P	2.4
6	☐	1250.000	1246.726	1875290.32	0.6056	A	0.3
7	☐	2500.000	2483.548	3677821.26	1.2063	A	2.9
8	☐	5000.000	5011.151	7300804.04	2.4340	A	1.8
9	☐			3833.98	0.0013	P	9.4

$$y = 4.8569E-004 * x + 1.0182E-004$$

$$R = 1.0000$$

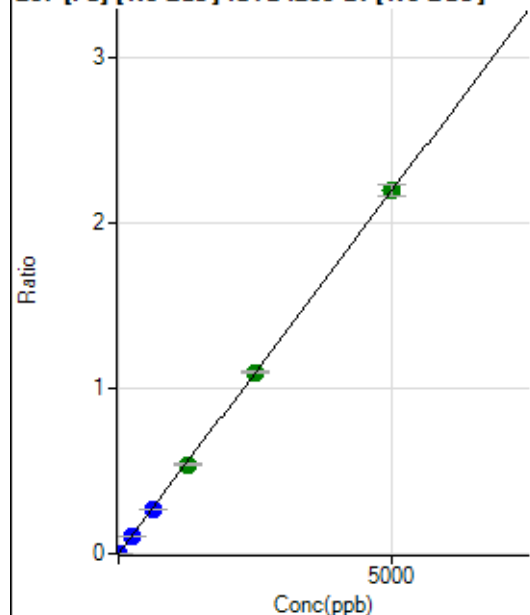
$$DL = 0.02479$$

$$BEC = 0.2096$$

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	242.60	0.0001	P	23.6
2	☐	0.100	0.063	324.09	0.0001	P	3.5
3	☐	1.000	0.948	1459.37	0.0005	P	3.3
4	☐	250.000	237.674	318673.26	0.1041	P	2.3
5	☐	625.000	612.426	814442.79	0.2681	P	2.4
6	☐	1250.000	1229.997	1666758.10	0.5383	A	1.0
7	☐	2500.000	2505.897	3343691.16	1.0966	A	1.3
8	☐	5000.000	5004.240	6567452.46	2.1898	A	3.1
9	☐			3302.34	0.0011	P	7.2

$$y = 4.3758E-004 * x + 7.9968E-005$$

$$R = 1.0000$$

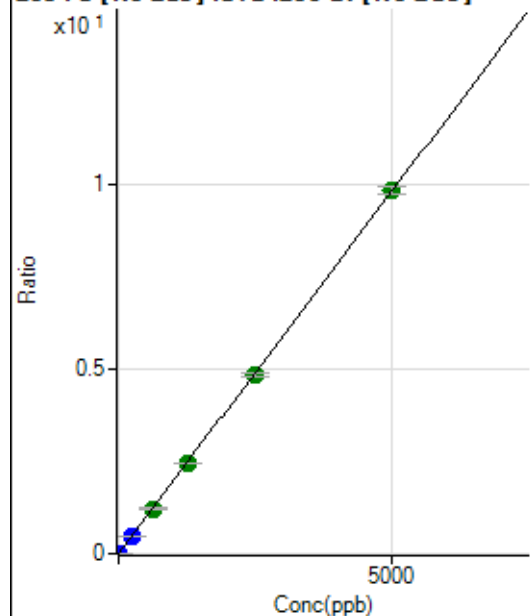
$$DL = 0.1296$$

$$BEC = 0.1827$$

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	1177.82	0.0004	P	9.7
2	☒	0.100					
3	☐	1.000	0.887	6276.64	0.0021	P	4.4
4	☐	250.000	241.720	1453851.38	0.4748	P	1.6
5	☐	625.000	620.810	3703128.41	1.2189	A	2.3
6	☐	1250.000	1245.969	7573535.02	2.4459	A	0.3
7	☐	2500.000	2476.603	14822274.99	4.8613	A	1.5
8	☐	5000.000	5013.644	29516837.18	9.8408	A	2.1
9	☐			15188.93	0.0053	P	5.7

$$y = 0.0020 * x + 3.8800E-004$$

$$R = 1.0000$$

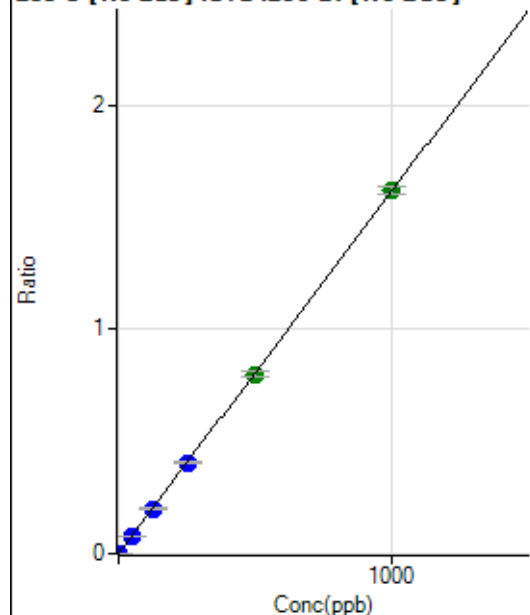
$$DL = 0.05782$$

$$BEC = 0.1977$$

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	5.55	0.0000	P	86.6
2	☐	0.100	0.086	422.24	0.0001	P	13.0
3	☐	1.000	0.956	4550.93	0.0015	P	6.3
4	☐	50.000	49.162	242936.85	0.0793	P	2.1
5	☐	125.000	124.757	611842.85	0.2013	P	1.1
6	☐	250.000	250.634	1252429.50	0.4045	P	1.4
7	☐	500.000	496.354	2442531.65	0.8011	A	2.6
8	☐	1000.000	1001.737	4849232.62	1.6167	A	2.1
9	☐			644.48	0.0002	P	16.7

$$y = 0.0016 * x + 1.8245E-006$$

$$R = 1.0000$$

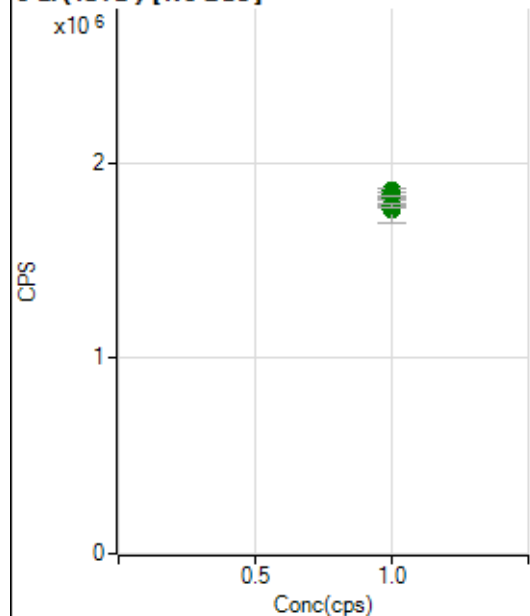
$$DL = 0.002937$$

$$BEC = 0.001131$$

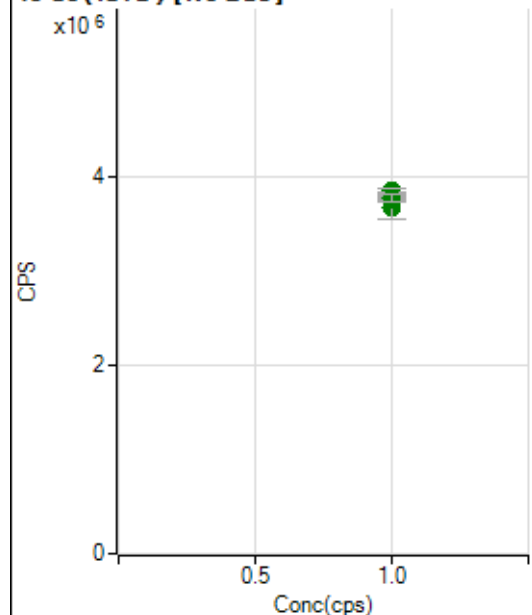
Weight: <None>

Min Conc: 0

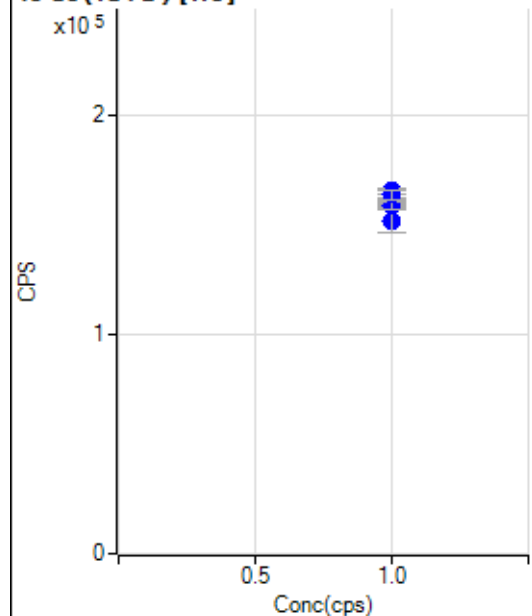
6 Li (ISTD) [No Gas]



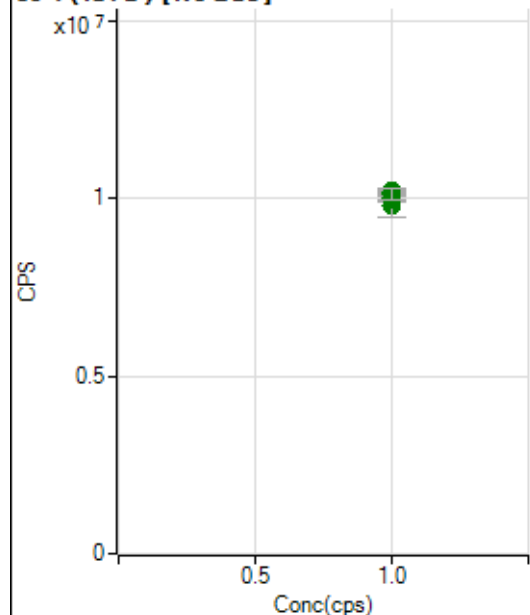
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1784391.50		A	1.0
2	☐	1.000		1791769.65		A	1.6
3	☐	1.000		1760563.64		A	8.3
4	☐	1.000		1856556.36		A	1.0
5	☐	1.000		1823122.61		A	0.6
6	☐	1.000		1843493.47		A	1.2
7	☐	1.000		1826729.80		A	0.6
8	☐	1.000		1824358.40		A	1.1
9	☐	1.000		1782106.92		A	0.8

45 Sc (ISTD) [No Gas]

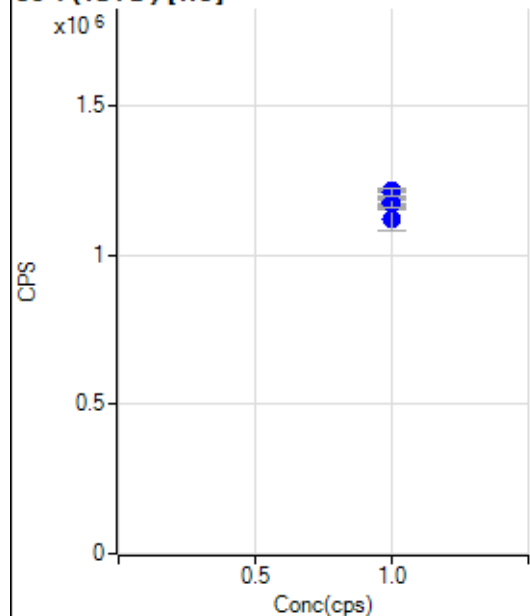
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3763246.33		A	0.6
2	☐	1.000		3769185.71		A	0.7
3	☐	1.000		3663574.11		A	5.6
4	☐	1.000		3795112.93		A	0.1
5	☐	1.000		3746210.43		A	1.0
6	☐	1.000		3808947.82		A	1.3
7	☐	1.000		3784963.45		A	1.7
8	☐	1.000		3850514.94		A	1.2
9	☐	1.000		3769479.11		A	2.0

45 Sc (ISTD) [He]

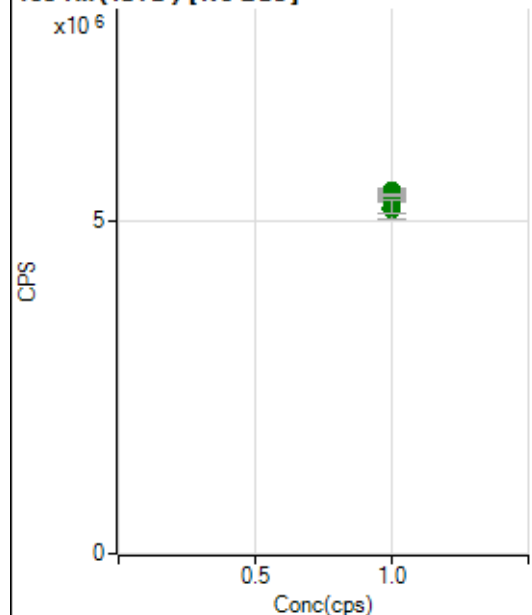
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		159115.63		P	0.9
2	☐	1.000		158447.77		P	0.5
3	☐	1.000		159044.71		P	1.5
4	☐	1.000		151496.41		P	6.6
5	☐	1.000		161242.19		P	1.1
6	☐	1.000		160930.78		P	1.4
7	☐	1.000		158458.15		P	2.4
8	☐	1.000		165308.35		P	1.5
9	☐	1.000		163425.99		P	2.8

89 Y (ISTD) [No Gas]

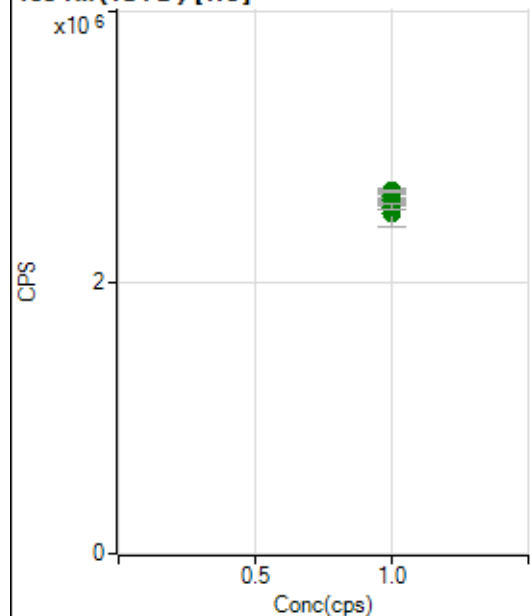
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9996241.45		A	1.3
2	☐	1.000		10002060.06		A	0.9
3	☐	1.000		9788088.81		A	6.6
4	☐	1.000		10042301.59		A	1.5
5	☐	1.000		9962264.78		A	0.4
6	☐	1.000		10097154.29		A	0.5
7	☐	1.000		10217401.51		A	0.5
8	☐	1.000		10159569.57		A	1.1
9	☐	1.000		10111838.11		A	3.1

89 Y (ISTD) [He]

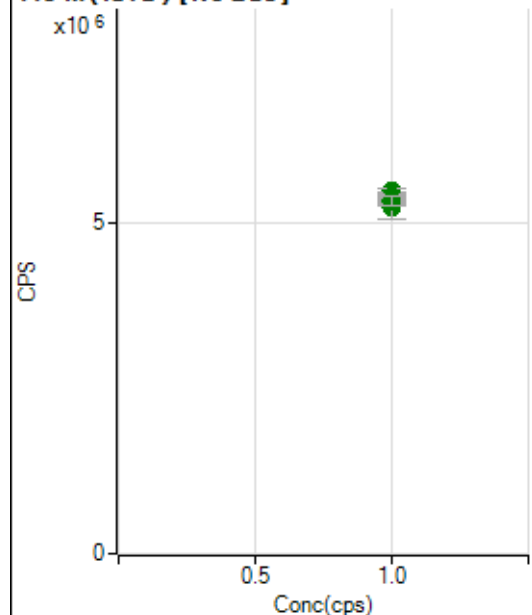
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1169442.28		P	0.9
2	☐	1.000		1170027.49		P	1.0
3	☐	1.000		1181714.20		P	2.0
4	☐	1.000		1119022.82		P	6.6
5	☐	1.000		1194438.02		P	0.9
6	☐	1.000		1188558.25		P	0.8
7	☐	1.000		1174186.21		P	2.9
8	☐	1.000		1215493.68		P	0.8
9	☐	1.000		1211465.39		P	2.6

103 Rh (ISTD) [No Gas]

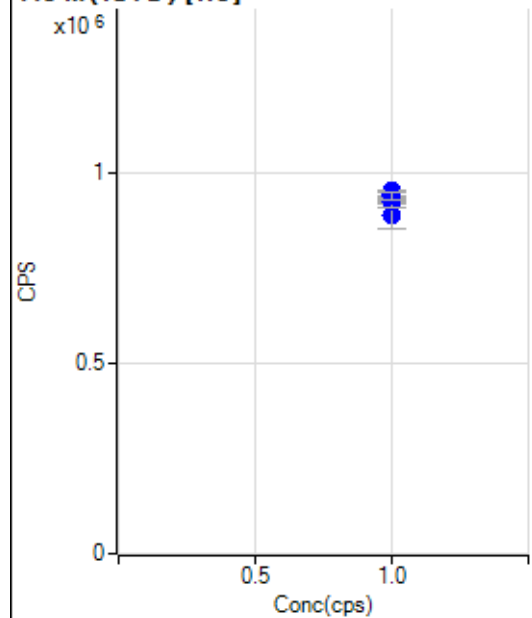
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5342032.24		A	0.8
2	☐	1.000		5319872.43		A	1.8
3	☐	1.000		5174858.15		A	5.6
4	☐	1.000		5439214.36		A	1.1
5	☐	1.000		5328319.13		A	0.4
6	☐	1.000		5420122.30		A	0.6
7	☐	1.000		5384453.20		A	1.0
8	☐	1.000		5378216.14		A	0.9
9	☐	1.000		5194904.80		A	4.0

103 Rh (ISTD) [He]

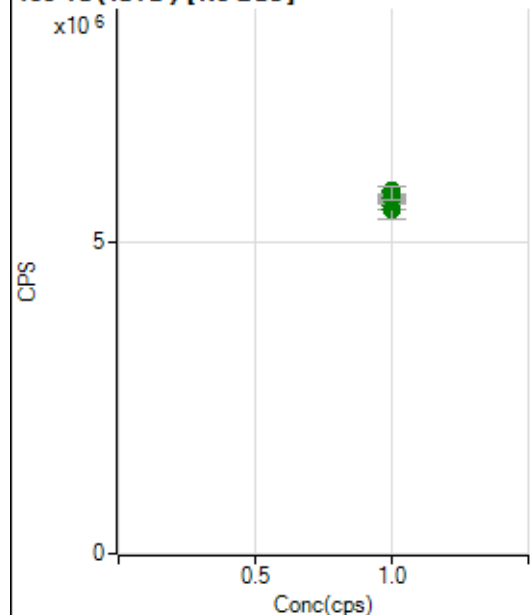
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2641689.49		A	1.1
2	☐	1.000		2659527.37		A	0.5
3	☐	1.000		2646962.50		A	2.8
4	☐	1.000		2509968.54		A	7.7
5	☐	1.000		2674155.03		A	0.5
6	☐	1.000		2680531.19		A	1.1
7	☐	1.000		2609102.64		A	3.2
8	☐	1.000		2675682.91		A	0.3
9	☐	1.000		2561435.76		A	1.6

115 In (ISTD) [No Gas]

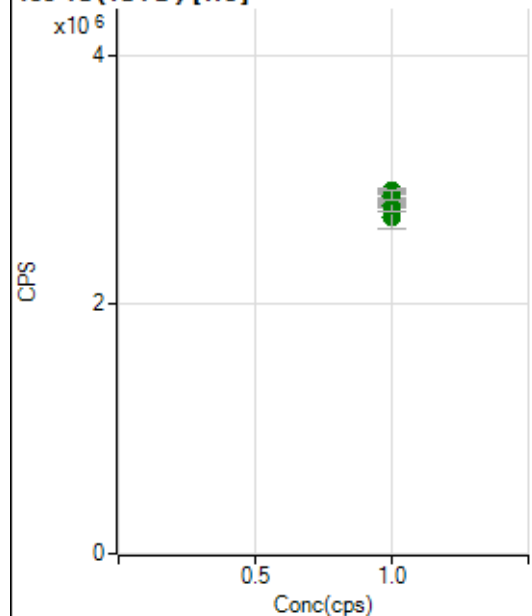
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5408547.00		A	2.4
2	☐	1.000		5356431.49		A	1.4
3	☐	1.000		5250961.43		A	6.5
4	☐	1.000		5447270.61		A	1.6
5	☐	1.000		5329779.96		A	0.9
6	☐	1.000		5500315.19		A	1.1
7	☐	1.000		5413805.15		A	1.0
8	☐	1.000		5374564.09		A	1.4
9	☐	1.000		5347516.91		A	2.3

115 In (ISTD) [He]

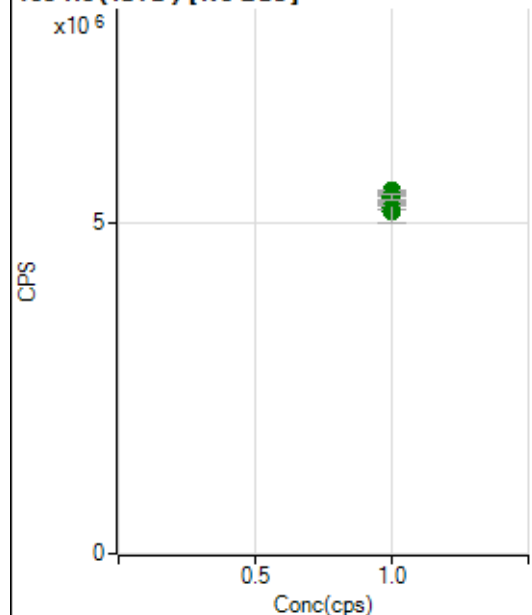
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		930371.54		P	0.9
2	☐	1.000		929353.65		P	1.4
3	☐	1.000		935782.02		P	2.2
4	☐	1.000		885021.37		P	7.1
5	☐	1.000		951029.22		P	0.9
6	☐	1.000		944126.44		P	1.0
7	☐	1.000		921703.43		P	3.1
8	☐	1.000		950170.19		P	0.3
9	☐	1.000		937642.07		P	2.3

159 Tb (ISTD) [No Gas]

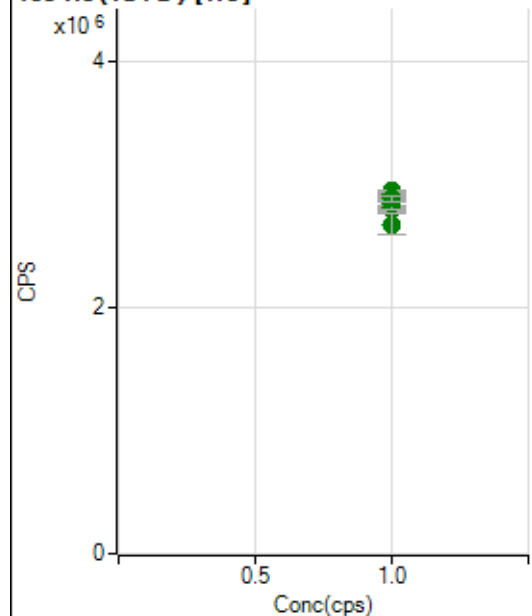
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5712431.24		A	0.7
2	☐	1.000		5573432.90		A	2.2
3	☐	1.000		5528748.98		A	5.8
4	☐	1.000		5644986.86		A	0.7
5	☐	1.000		5691207.07		A	1.3
6	☐	1.000		5818317.97		A	2.0
7	☐	1.000		5716174.01		A	1.2
8	☐	1.000		5806224.15		A	2.4
9	☐	1.000		5782942.21		A	3.3

159 Tb (ISTD) [He]

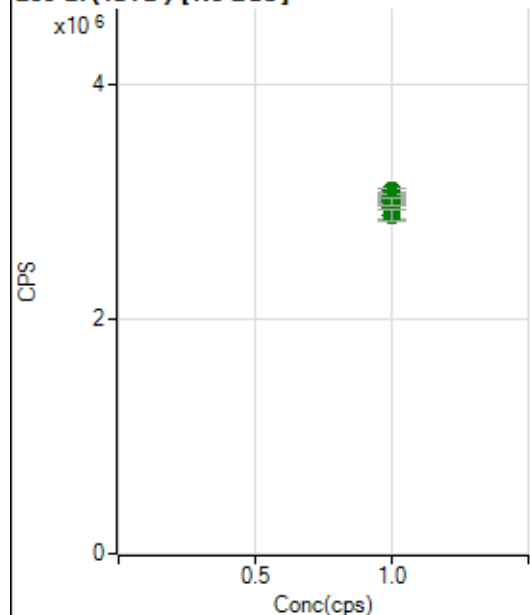
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2810254.78		A	1.4
2	☐	1.000		2806966.24		A	1.0
3	☐	1.000		2839311.48		A	2.6
4	☐	1.000		2691354.68		A	6.4
5	☐	1.000		2875307.53		A	2.4
6	☐	1.000		2868874.16		A	0.6
7	☐	1.000		2784567.14		A	2.8
8	☐	1.000		2909837.49		A	1.1
9	☐	1.000		2873237.87		A	2.8

165 Ho (ISTD) [No Gas]

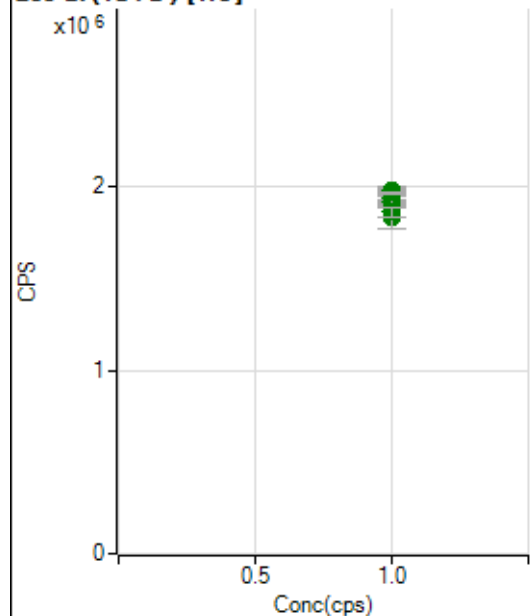
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5312839.57		A	0.6
2	☐	1.000		5235480.76		A	1.5
3	☐	1.000		5174306.10		A	6.8
4	☐	1.000		5362252.20		A	2.0
5	☐	1.000		5371654.94		A	2.0
6	☐	1.000		5483194.00		A	0.3
7	☐	1.000		5406268.31		A	0.3
8	☐	1.000		5394677.46		A	2.2
9	☐	1.000		5397572.25		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2795321.07		A	1.9
2	☐	1.000		2810124.75		A	1.1
3	☐	1.000		2853749.51		A	3.6
4	☐	1.000		2682505.91		A	6.2
5	☐	1.000		2914350.13		A	0.7
6	☐	1.000		2919672.91		A	2.1
7	☐	1.000		2842067.28		A	2.5
8	☐	1.000		2953409.16		A	0.4
9	☐	1.000		2889314.33		A	1.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3036987.11		A	0.7
2	☐	1.000		3019257.52		A	1.6
3	☐	1.000		2952661.48		A	6.4
4	☐	1.000		3062201.76		A	0.9
5	☐	1.000		3039038.50		A	1.9
6	☐	1.000		3096482.77		A	0.9
7	☐	1.000		3049362.49		A	1.1
8	☐	1.000		3000203.05		A	1.9
9	☐	1.000		2894197.66		A	3.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1912893.06		A	0.6
2	☐	1.000		1940638.72		A	2.2
3	☐	1.000		1963940.28		A	3.7
4	☐	1.000		1833474.07		A	6.6
5	☐	1.000		1970349.64		A	1.2
6	☐	1.000		1975637.37		A	0.9
7	☐	1.000		1916554.31		A	3.3
8	☐	1.000		1964554.21		A	0.7
9	☐	1.000		1859566.67		A	2.6

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8101420\IMS.b
Acq. Date-Time 2020-10-14 09:06:32
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		3892	38923.59			0.535	5.000
24		65828	658282.19			0.428	5.000
25		8997	89969.20			0.966	5.000
26		9977	99769.38			0.792	5.000
59		24456	244562.31			0.466	5.000
113		3492	34921.21			0.992	5.000
115		11001	110012.06			1.038	5.000
206		3473	34733.01			1.107	5.000
207		2903	29026.39			0.801	5.000
208		7186	71859.39			1.018	5.000
220		1	10.40			16.445	

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

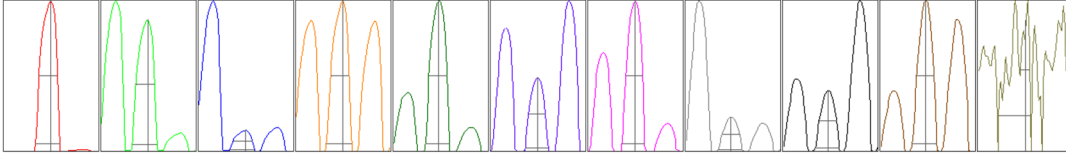
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	3885	3879	3895	3876	3927
24	65675	65918	66201	65897	65451
25	8937	8877	9040	9089	9041
26	9915	9986	9949	9925	10110
59	24335	24424	24624	24386	24512
113	3457	3499	3542	3461	3501
115	11157	11025	11028	10847	10950
206	3440	3458	3458	3472	3539
207	2892	2920	2887	2880	2934
208	7101	7187	7141	7207	7294

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	7039.54	9.00	8.90 - 9.10	
24	116484.36	24.00	23.90 - 24.10	
25	15688.18	25.00	24.90 - 25.10	
26	18005.45	26.00	25.90 - 26.10	
59	45100.14	58.95	58.90 - 59.10	
113	6962.66	113.00	112.90 - 113.10	
115	21716.37	115.00	114.90 - 115.10	
206	6625.60	205.95	205.90 - 206.10	
207	5518.01	206.95	206.90 - 207.10	
208	13744.70	207.95	207.90 - 208.10	
220	1.30	220.05	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.770	0.900	
24	0.59	0.784	0.900	
25	0.61	0.785	0.900	
26	0.59	0.809	0.900	
59	0.57	0.761	0.900	
113	0.52	0.726	0.900	
115	0.52	0.722	0.900	
206	0.55	0.754	0.900	
207	0.55	0.759	0.900	
208	0.55	0.778	0.900	
220	0.30	1.002		

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	9.4 V	Deflect	13.2 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-110 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	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.7 mm	Torch V	-0.4 mm
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EM

Discriminator	4.0 mV	Analog HV	2181 V	Pulse HV	1312 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		5642	56417.50			0.479	
89		3414	34139.38			0.421	
205		9965	99652.22			1.513	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	5677	5603	5633	5652	5644
89	3436	3411	3405	3399	3419
205	10181	9888	9855	9838	10065

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	9.4 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-110 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	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.02		
Hardware Settings					
Torch					
Torch H	0.7 mm	Torch V	-0.4 mm		
EM					
Discriminator	4.0 mV	Analog HV	2181 V	Pulse HV	1312 V