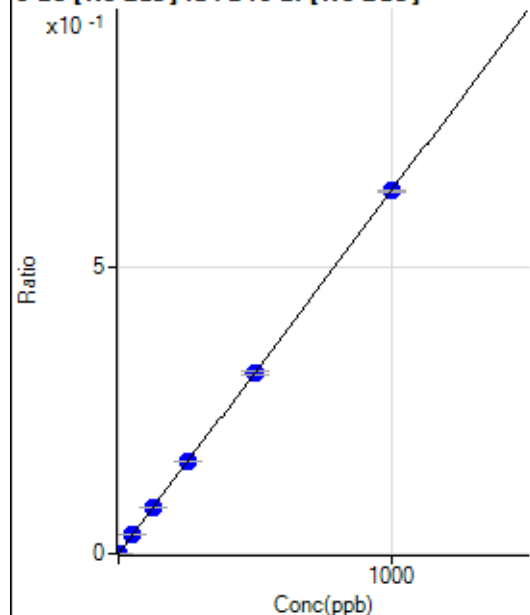


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7101420IMS.b\
Analysis File: P7101420IMS.batch.bin
DA Date-Time: 2020-10-14 15:03:01
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-10-14 13:11:35
2	004CALS.d	S02	2020-10-14 13:15:03
3	005CALS.d	S03	2020-10-14 13:18:30
4	006CALS.d	S04	2020-10-14 13:21:57
5	007CALS.d	S05	2020-10-14 13:25:23
6	008CALS.d	S06	2020-10-14 13:28:43
7	009CALS.d	S07	2020-10-14 13:31:59
8	010CALS.d	S08	2020-10-14 13:35:14

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.71	0.0000	P	25.8
2	☐	1.000	0.931	2266.88	0.0006	P	5.9
3	☐	50.000	51.418	120821.76	0.0326	P	0.8
4	☐	125.000	127.565	295498.73	0.0810	P	1.6
5	☐	250.000	253.025	566362.54	0.1606	P	0.5
6	☐	500.000	498.525	1095209.64	0.3164	P	1.5
7	☐	1000.000	999.590	2108955.37	0.6345	P	0.6
8	☐			320.38	0.0001	P	7.6

$$y = 6.3471\text{E-}004 * x + 1.4160\text{E-}005$$

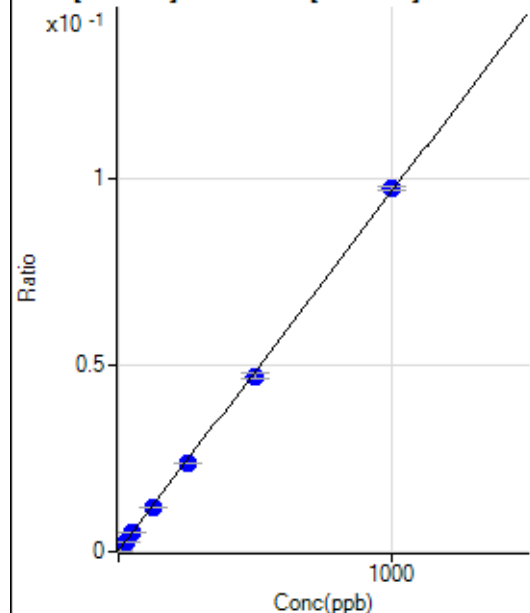
$$R = 1.0000$$

$$DL = 0.01727$$

$$BEC = 0.02231$$

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	1019.51	0.0003	P	12.2
2	☐	25.000	21.832	8858.36	0.0024	P	3.7
3	☐	50.000	48.544	18233.55	0.0049	P	0.4
4	☐	125.000	122.431	43858.36	0.0120	P	0.8
5	☐	250.000	244.191	83579.73	0.0237	P	0.9
6	☐	500.000	487.161	162704.32	0.0470	P	3.1
7	☐	1000.000	1008.345	322540.61	0.0970	P	1.1
8	☐			14585.12	0.0046	P	4.8

$$y = 9.5961\text{E-}005 * x + 2.6893\text{E-}004$$

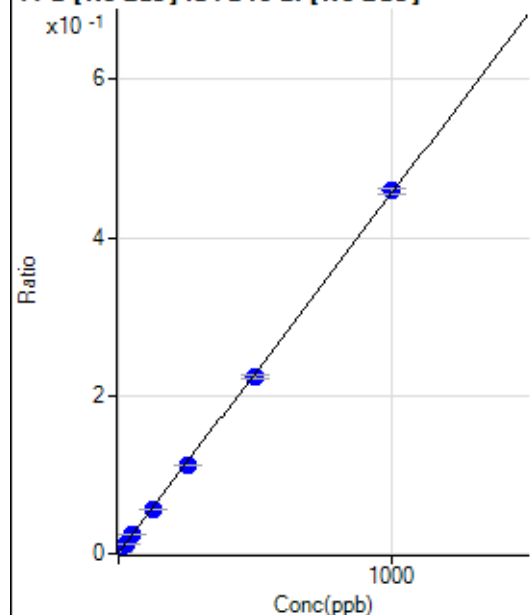
$$R = 0.9999$$

$$DL = 1.025$$

$$BEC = 2.802$$

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	4731.43	0.0012	P	4.7
2	☐	25.000	22.759	43451.84	0.0116	P	1.3
3	☐	50.000	48.819	86736.46	0.0234	P	2.0
4	☐	125.000	120.766	204874.63	0.0561	P	0.9
5	☐	250.000	244.948	397020.95	0.1126	P	0.9
6	☐	500.000	489.797	774832.09	0.2239	P	2.6
7	☐	1000.000	1007.008	1525700.77	0.4590	P	1.3
8	☐			69096.96	0.0217	P	6.6

$$y = 4.5456\text{E-}004 * x + 0.0012$$

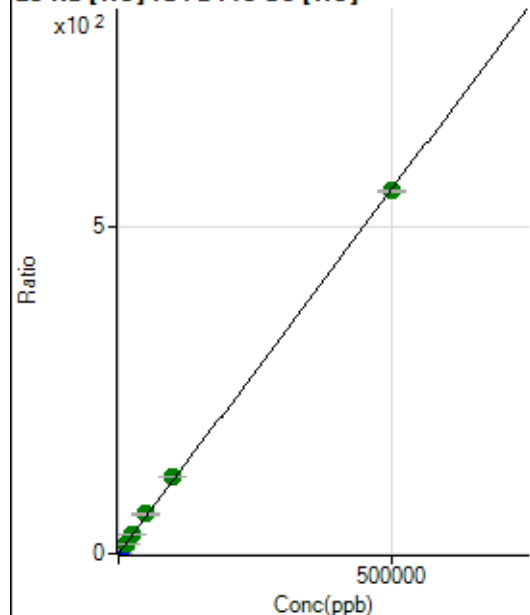
R = 0.9999

DL = 0.384

BEC = 2.746

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	38494.28	0.0720	P	0.7
2	☐	500.000	543.631	362239.45	0.6778	P	1.2
3	☐	5000.000	5743.789	3350833.34	6.4719	P	1.2
4	☐	12500.000	13898.305	7801587.76	15.5578	A	5.3
5	☐	25000.000	26913.022	15157227.94	30.0590	A	0.8
6	☐	50000.000	54206.024	30159001.02	60.4694	A	1.3
7	☐	100000.00	106311.68	60048263.15	118.5266	A	0.4
8	☐	500000.00	498178.96	289665464.8	555.1528	A	0.8

$$y = 0.0011 * x + 0.0720$$

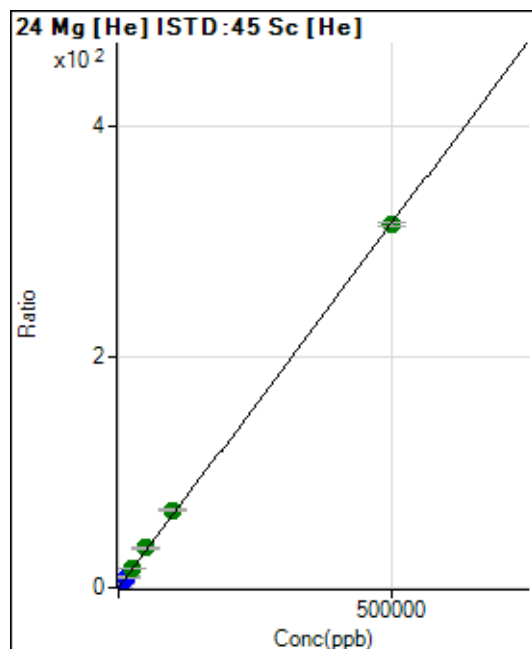
R = 0.9999

DL = 1.322

BEC = 64.65

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	541.69	0.0010	P	13.2
2	☐	500.000	527.062	178547.08	0.3341	P	1.7
3	☐	5000.000	5708.236	1868153.56	3.6080	P	2.1
4	☐	12500.000	14223.228	4506914.12	8.9887	P	5.7
5	☐	25000.000	27288.618	8695222.76	17.2447	A	1.8
6	☐	50000.000	54483.406	17170965.66	34.4291	A	1.6
7	☐	100000.00	106780.57	34184335.49	67.4757	A	0.6
8	☐	500000.00	498030.92	164204030.0	314.7070	A	1.2

$$y = 6.3190\text{E-}004 * x + 0.0010$$

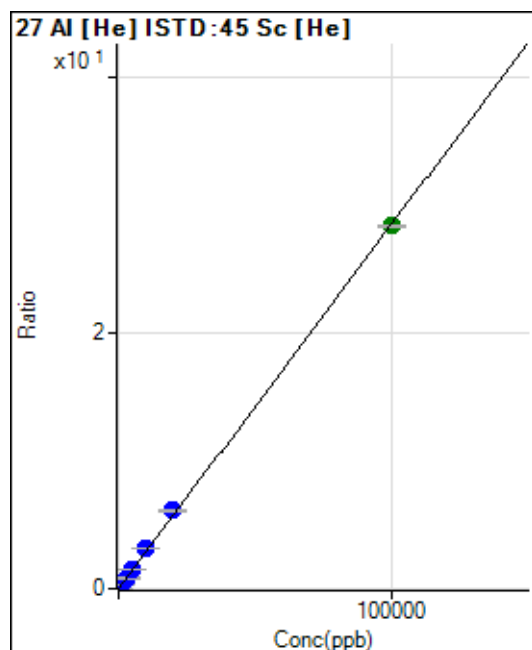
$$R = 0.9999$$

$$DL = 0.6355$$

$$BEC = 1.603$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.90	0.0003	P	15.6
2	☐	20.000	22.824	3639.43	0.0068	P	7.2
3	☐	1000.000	1123.906	165957.38	0.3205	P	2.3
4	☐	2500.000	2832.234	404660.72	0.8072	P	6.5
5	☐	5000.000	5495.631	789670.83	1.5661	P	1.2
6	☐	10000.000	10943.429	1555130.64	3.1182	P	1.8
7	☐	20000.000	21405.995	3089826.20	6.0991	P	1.1
8	☐	100000.00	99590.131	14805760.40	28.3745	A	0.3

$$y = 2.8491\text{E-}004 * x + 3.0643\text{E-}004$$

$$R = 0.9999$$

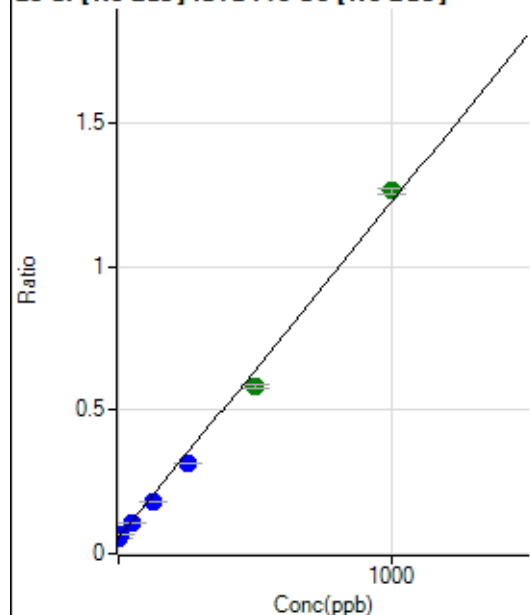
$$DL = 0.5044$$

$$BEC = 1.076$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	527019.75	0.0559	P	1.2
2	☐	10.000	7.348	599245.60	0.0645	P	1.6
3	☐	50.000	43.563	976764.18	0.1069	P	1.5
4	☐	125.000	107.255	1641236.07	0.1815	P	0.2
5	☐	250.000	222.274	2787218.38	0.3160	P	0.9
6	☐	500.000	451.832	5191260.40	0.5847	A	2.6
7	☐	1000.000	1033.582	11133605.54	1.2654	A	1.3
8	☐			653312.16	0.0727	P	0.7

$$y = 0.0012 * x + 0.0559$$

$$R = 0.9979$$

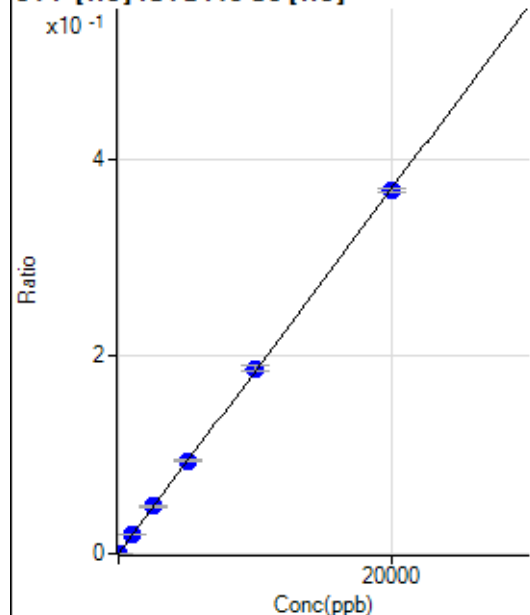
$$DL = 1.782$$

$$BEC = 47.81$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-1.691	94.45	0.0002	P	28.0
2	☐	0.000	1.691	127.78	0.0002	P	36.0
3	☐	1000.000	1022.744	9884.02	0.0191	P	1.5
4	☐	2500.000	2608.979	24264.60	0.0484	P	4.5
5	☐	5000.000	5066.478	47272.58	0.0937	P	1.7
6	☐	10000.000	10163.432	93678.70	0.1879	P	2.6
7	☐	20000.000	19886.905	186112.70	0.3674	P	1.1
8	☐			252.79	0.0005	P	9.9

$$y = 1.8463E-005 * x + 2.0787E-004$$

$$R = 0.9999$$

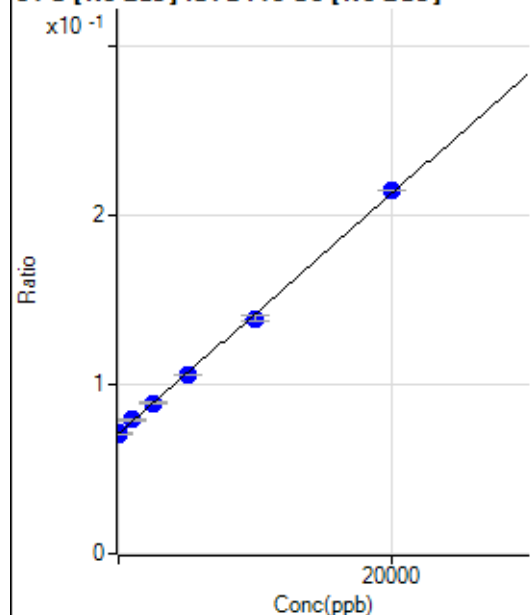
$$DL = 11.01$$

$$BEC = 11.26$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	82.033	675557.52	0.0717	P	0.9
2	☐	0.000	-82.033	655015.52	0.0706	P	0.7
3	☐	1000.000	1158.041	724839.24	0.0793	P	1.1
4	☐	2500.000	2507.476	804149.21	0.0889	P	1.2
5	☐	5000.000	4886.476	932983.67	0.1058	P	0.5
6	☐	10000.000	9589.198	1235469.06	0.1391	P	2.1
7	☐	20000.000	20224.946	1887907.79	0.2146	P	0.2
8	☐			576348.15	0.0642	P	1.6

$$y = 7.0920\text{E-}006 * x + 0.0711$$

$$R = 0.9996$$

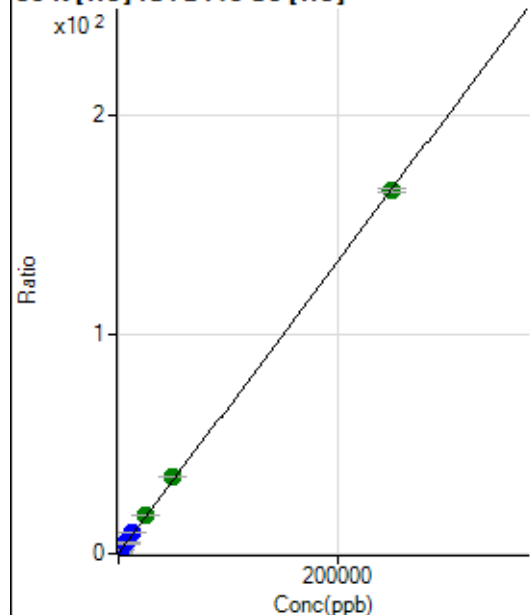
$$DL = 238.4$$

$$BEC = 1.003\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	60361.69	0.1130	P	1.8
2	☐	500.000	515.264	243068.73	0.4548	P	0.5
3	☐	2500.000	2818.579	1026637.23	1.9828	P	1.4
4	☐	6250.000	7125.172	2427041.09	4.8399	P	5.3
5	☐	12500.000	13784.961	4668354.44	9.2581	P	1.0
6	☐	25000.000	26689.184	8887073.20	17.8190	A	1.4
7	☐	50000.000	52904.677	17838646.23	35.2107	A	0.3
8	☐	250000.00	249160.80	86308041.51	165.4101	A	1.1

$$y = 6.6342\text{E-}004 * x + 0.1130$$

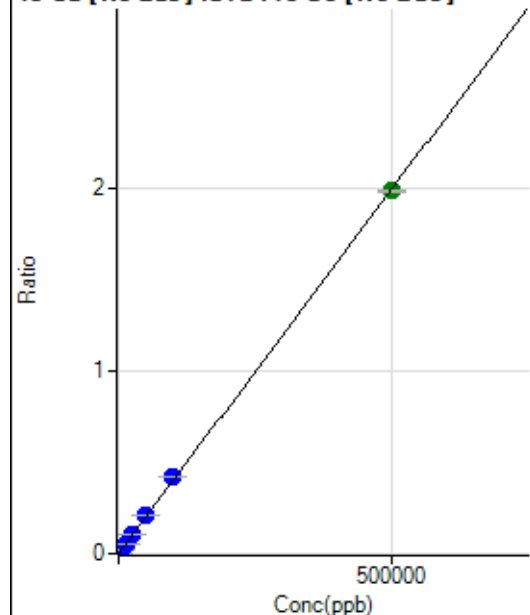
$$R = 0.9999$$

$$DL = 9.117$$

$$BEC = 170.3$$

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	344.46	0.0000	P	24.7
2	☐	500.000	507.667	19160.02	0.0021	P	3.7
3	☐	5000.000	5500.146	200990.78	0.0220	P	0.7
4	☐	12500.000	13447.290	486005.32	0.0537	P	1.4
5	☐	25000.000	27223.342	959093.18	0.1088	P	0.5
6	☐	50000.000	53193.521	1886611.70	0.2125	P	1.8
7	☐	100000.00	106644.04	3747411.33	0.4259	P	0.4
8	☐	500000.00	498211.98	17871853.70	1.9896	A	0.5

$$y = 3.9934\text{E-}006 * x + 3.6593\text{E-}005$$

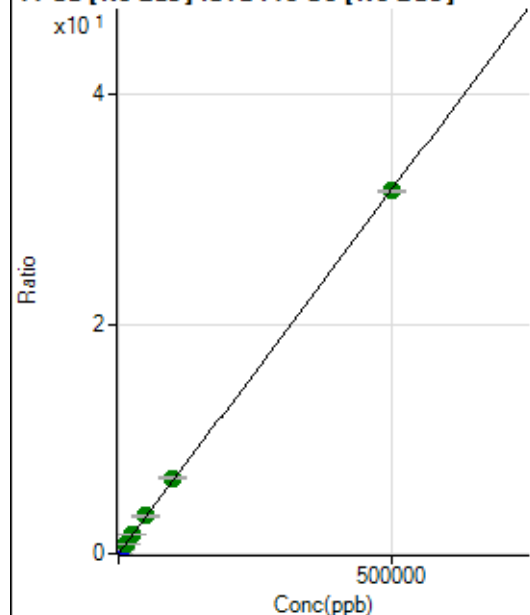
$$R = 0.9999$$

$$DL = 6.797$$

$$BEC = 9.163$$

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	18111.60	0.0019	P	5.0
2	☐	500.000	512.350	318960.93	0.0344	P	0.3
3	☐	5000.000	5502.275	3199329.04	0.3502	P	0.6
4	☐	12500.000	12893.460	7398578.03	0.8181	A	1.2
5	☐	25000.000	26004.545	14533869.77	1.6480	A	0.7
6	☐	50000.000	51762.697	29112616.27	3.2784	A	1.6
7	☐	100000.00	104404.98	58163831.86	6.6106	A	0.5
8	☐	500000.00	498877.63	283676034.1	31.5800	A	0.3

$$y = 6.3298\text{E-}005 * x + 0.0019$$

$$R = 1.0000$$

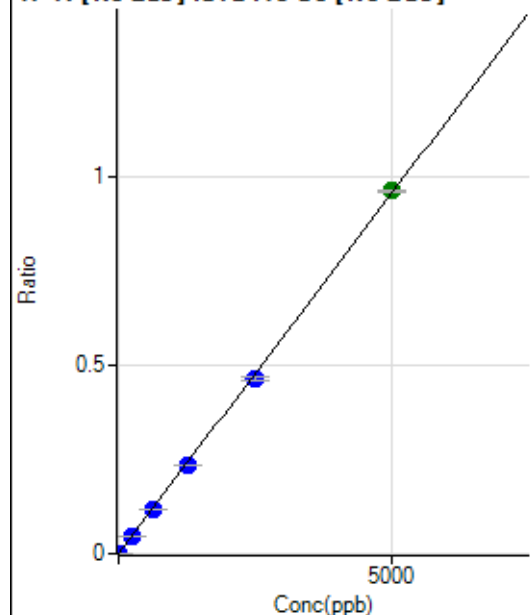
$$DL = 4.583$$

$$BEC = 30.38$$

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	136.12	0.0000	P	2.7
2	☐	5.000	4.756	8577.68	0.0009	P	1.9
3	☐	250.000	249.042	435146.16	0.0476	P	1.0
4	☐	625.000	614.445	1062673.99	0.1175	P	1.3
5	☐	1250.000	1238.466	2088573.72	0.2368	P	0.4
6	☐	2500.000	2435.055	4134699.79	0.4656	P	1.6
7	☐	5000.000	5036.724	8473599.15	0.9631	A	0.6
8	☐			1191.75	0.0001	P	2.9

$$y = 1.9121\text{E-}004 * x + 1.4447\text{E-}005$$

$$R = 0.9999$$

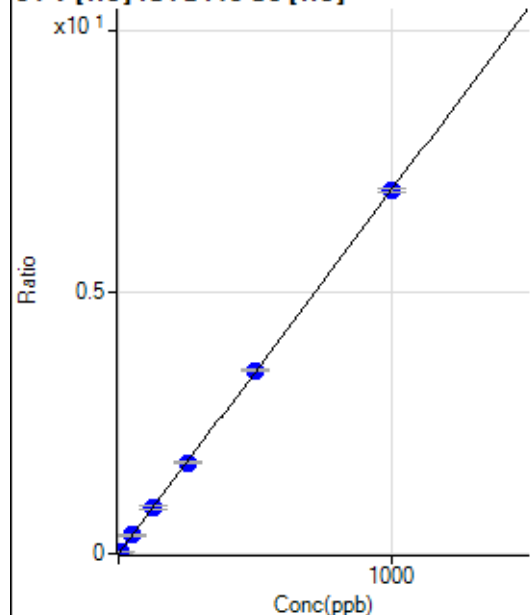
$$DL = 0.00615$$

$$BEC = 0.07556$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	49.7
2	☐	5.000	4.795	17816.39	0.0333	P	1.2
3	☐	50.000	50.448	181529.38	0.3506	P	1.6
4	☐	125.000	127.508	444313.73	0.8861	P	5.7
5	☐	250.000	250.281	877074.37	1.7394	P	0.8
6	☐	500.000	503.613	1745622.48	3.4999	P	1.1
7	☐	1000.000	997.788	3512949.64	6.9342	P	0.9
8	☐			683.36	0.0013	P	11.1

$$y = 0.0069 * x + 1.4570\text{E-}005$$

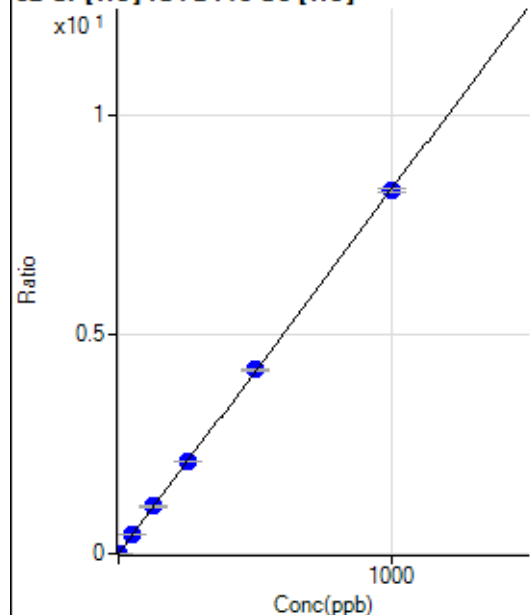
$$R = 1.0000$$

$$DL = 0.003128$$

$$BEC = 0.002097$$

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	1297.85	0.0024	P	5.8
2	☐	2.000	1.961	10000.14	0.0187	P	3.1
3	☐	50.000	50.994	220492.73	0.4259	P	1.8
4	☐	125.000	129.341	539704.61	1.0764	P	5.9
5	☐	250.000	252.650	1059091.48	2.1003	P	0.9
6	☐	500.000	505.815	2096053.41	4.2025	P	0.9
7	☐	1000.000	995.837	4190374.04	8.2715	P	0.9
8	☐			14945.44	0.0286	P	2.8

$$y = 0.0083 * x + 0.0024$$

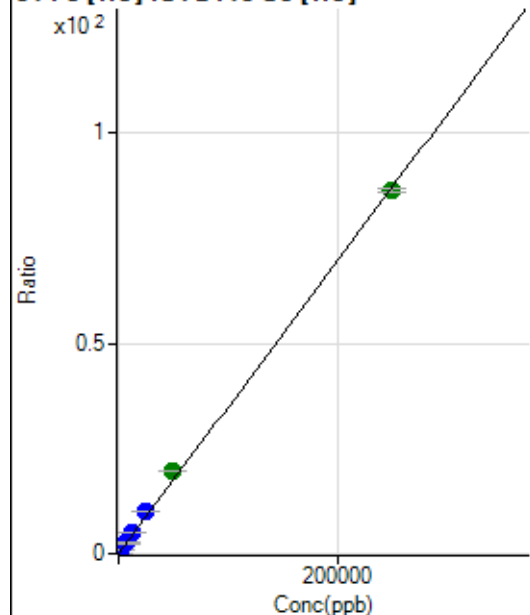
$$R = 1.0000$$

$$DL = 0.05085$$

$$BEC = 0.2924$$

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	1234.67	0.0023	P	10.1
2	☐	50.000	56.815	11793.59	0.0221	P	1.3
3	☐	2500.000	2910.798	525256.74	1.0145	P	1.5
4	☐	6250.000	7326.484	1278447.20	2.5499	P	6.0
5	☐	12500.000	14375.802	2521823.12	5.0012	P	1.2
6	☐	25000.000	28434.853	4932685.01	9.8899	P	1.0
7	☐	50000.000	56543.619	9961986.74	19.6640	A	0.9
8	☐	250000.00	248222.97	45038097.34	86.3160	A	1.0

$$y = 3.4773E-004 * x + 0.0023$$

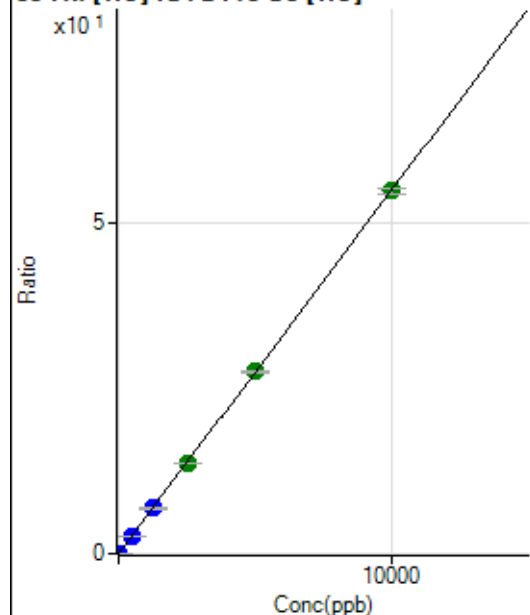
$$R = 0.9996$$

$$DL = 2.009$$

$$BEC = 6.644$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	107.78	0.0002	P	5.5
2	☐	1.000	0.913	2791.40	0.0052	P	5.6
3	☐	500.000	496.148	1412291.47	2.7277	P	1.6
4	☐	1250.000	1247.138	3437698.94	6.8561	P	5.7
5	☐	2500.000	2509.122	6955753.65	13.7937	A	0.4
6	☐	5000.000	5021.890	13769917.57	27.6072	A	0.9
7	☐	10000.000	9987.325	27813882.37	54.9038	A	1.3
8	☐			21476.88	0.0412	P	2.7

$$y = 0.0055 * x + 2.0173E-004$$

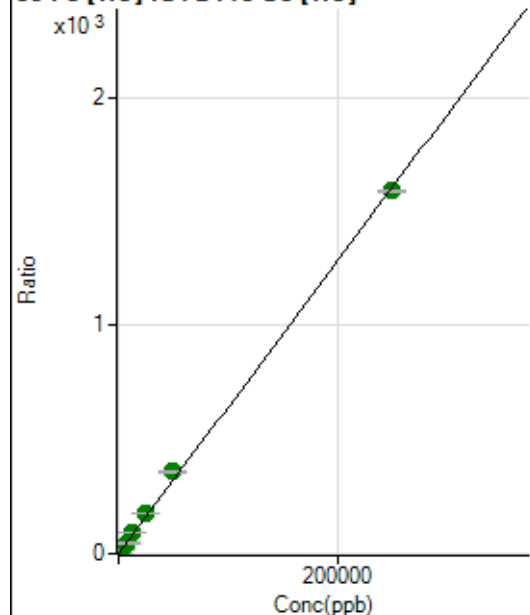
$$R = 1.0000$$

$$DL = 0.006072$$

$$BEC = 0.0367$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11341.56	0.0212	P	3.2
2	☐	50.000	53.477	194461.62	0.3638	P	1.6
3	☐	2500.000	2804.104	9313035.16	17.9866	A	2.4
4	☐	6250.000	7122.702	22892960.46	45.6551	A	5.5
5	☐	12500.000	14085.832	45516981.57	90.2667	A	1.2
6	☐	25000.000	28136.717	89921862.19	180.2882	A	0.8
7	☐	50000.000	55966.116	181657189.2	358.5863	A	1.4
8	☐	250000.00	248388.95	830374788.9	1,591.405	A	0.3

$$y = 0.0064 * x + 0.0212$$

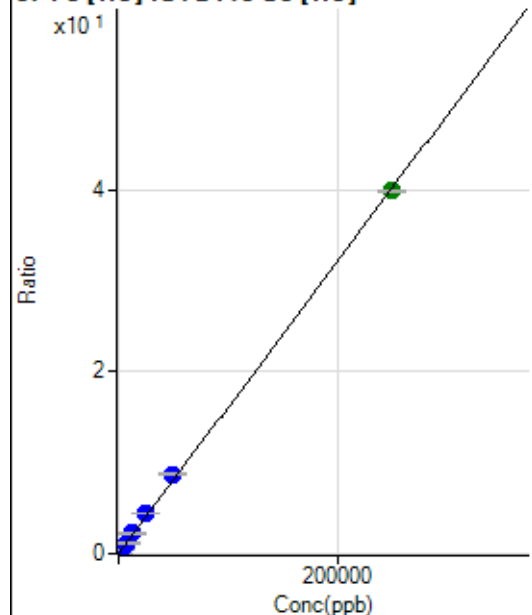
$$R = 0.9997$$

$$DL = 0.315$$

$$BEC = 3.313$$

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	590.76	0.0011	P	12.6
2	☐	50.000	54.052	5225.11	0.0098	P	1.7
3	☐	2500.000	2811.648	234136.02	0.4522	P	2.1
4	☐	6250.000	7127.012	573915.06	1.1446	P	5.5
5	☐	12500.000	13951.413	1129180.18	2.2395	P	1.8
6	☐	25000.000	27732.661	2219766.42	4.4505	P	0.9
7	☐	50000.000	54693.605	4446098.02	8.7761	P	0.6
8	☐	250000.00	248690.40	20819498.85	39.9007	A	0.7

$$y = 1.6044E-004 * x + 0.0011$$

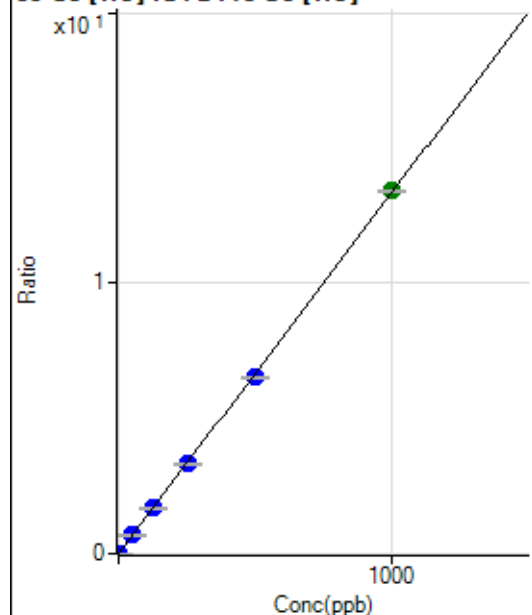
R = 0.9998

DL = 2.598

BEC = 6.885

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	106.67	0.0002	P	16.0
2	☐	1.000	0.922	6687.14	0.0125	P	0.8
3	☐	50.000	50.697	350482.15	0.6769	P	1.8
4	☐	125.000	126.743	848433.35	1.6920	P	5.6
5	☐	250.000	247.881	1668590.36	3.3091	P	1.0
6	☐	500.000	489.516	3259229.26	6.5346	P	1.0
7	☐	1000.000	1005.519	6800063.79	13.4225	A	0.7
8	☐			12857.93	0.0246	P	1.2

$$y = 0.0133 * x + 1.9949E-004$$

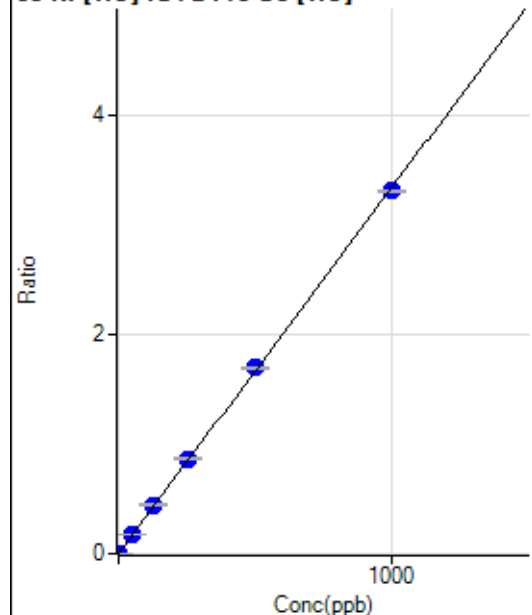
R = 0.9999

DL = 0.007193

BEC = 0.01494

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	72.22	0.0001	P	10.4
2	☐	1.000	1.065	1973.49	0.0037	P	3.8
3	☐	50.000	53.045	91780.32	0.1773	P	1.4
4	☐	125.000	133.423	223467.06	0.4457	P	5.6
5	☐	250.000	259.282	436649.30	0.8659	P	1.0
6	☐	500.000	508.791	847487.60	1.6991	P	0.8
7	☐	1000.000	992.079	1678371.16	3.3129	P	0.8
8	☐			5206.53	0.0100	P	1.3

$$y = 0.0033 * x + 1.3522E-004$$

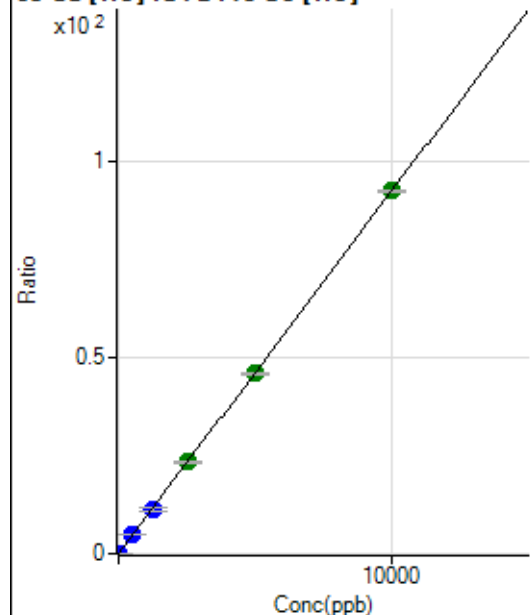
$$R = 0.9999$$

$$DL = 0.01266$$

$$BEC = 0.04049$$

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	2247.97	0.0042	P	0.6
2	☐	2.000	2.047	12354.17	0.0231	P	2.2
3	☐	500.000	513.395	2456932.77	4.7454	P	1.5
4	☐	1250.000	1219.225	5648610.54	11.2636	P	5.1
5	☐	2500.000	2531.230	11788921.49	23.3799	A	1.6
6	☐	5000.000	4970.494	22896581.88	45.9063	A	0.8
7	☐	10000.000	10010.122	46834705.97	92.4468	A	0.8
8	☐			12296.37	0.0236	P	1.7

$$y = 0.0092 * x + 0.0042$$

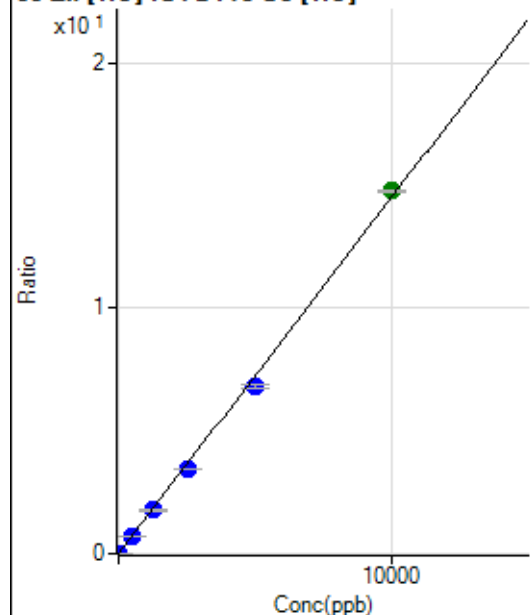
$$R = 1.0000$$

$$DL = 0.008175$$

$$BEC = 0.4555$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	607.80	0.0011	P	6.1
2	☐	2.000	1.879	2064.61	0.0039	P	2.7
3	☐	500.000	486.127	365607.01	0.7061	P	1.7
4	☐	1250.000	1227.565	893315.74	1.7814	P	5.3
5	☐	2500.000	2383.644	1743713.62	3.4580	P	0.8
6	☐	5000.000	4696.852	3397837.45	6.8128	P	1.5
7	☐	10000.000	10184.161	7483108.64	14.7708	A	0.7
8	☐			16160.14	0.0310	P	2.3

$$y = 0.0015 * x + 0.0011$$

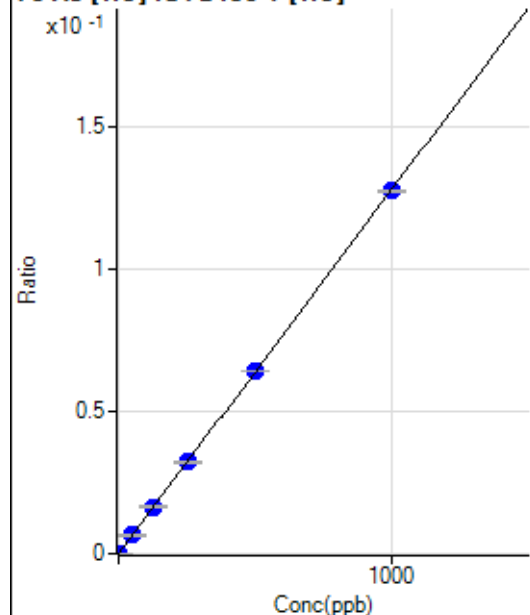
$$R = 0.9993$$

$$DL = 0.144$$

$$BEC = 0.7845$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17.90	0.0000	P	31.9
2	☐	1.000	0.940	448.78	0.0001	P	9.9
3	☐	50.000	50.423	22649.69	0.0065	P	1.0
4	☐	125.000	128.061	56415.34	0.0164	P	5.3
5	☐	250.000	251.266	111908.34	0.0322	P	0.3
6	☐	500.000	503.780	221125.31	0.0645	P	0.4
7	☐	1000.000	997.390	444715.65	0.1277	P	0.4
8	☐			170.99	0.0000	P	8.1

$$y = 1.2806E-004 * x + 4.9547E-006$$

$$R = 1.0000$$

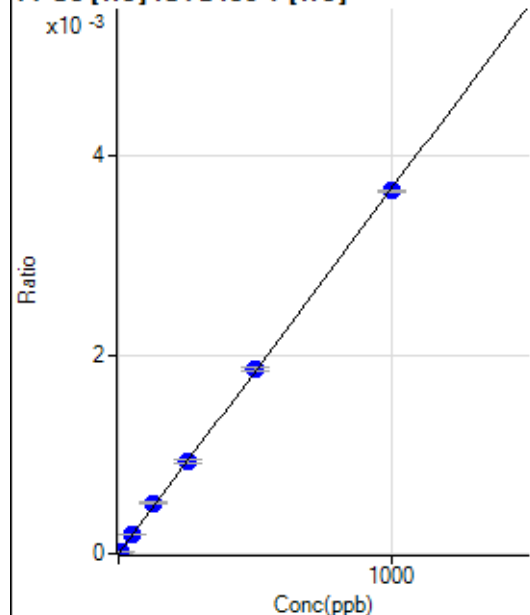
$$DL = 0.03703$$

$$BEC = 0.03869$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	5.241	70.00	0.0000	P	12.3
3	☐	50.000	54.044	696.69	0.0002	P	3.0
4	☐	125.000	138.450	1750.13	0.0005	P	3.9
5	☐	250.000	252.989	3231.50	0.0009	P	4.7
6	☐	500.000	506.397	6373.68	0.0019	P	2.2
7	☐	1000.000	994.169	12711.20	0.0037	P	0.4
8	☐			6.67	0.0000	P	50.6

$$y = 3.6718\text{E-}006 * x + 3.0736\text{E-}007$$

$$R = 0.9999$$

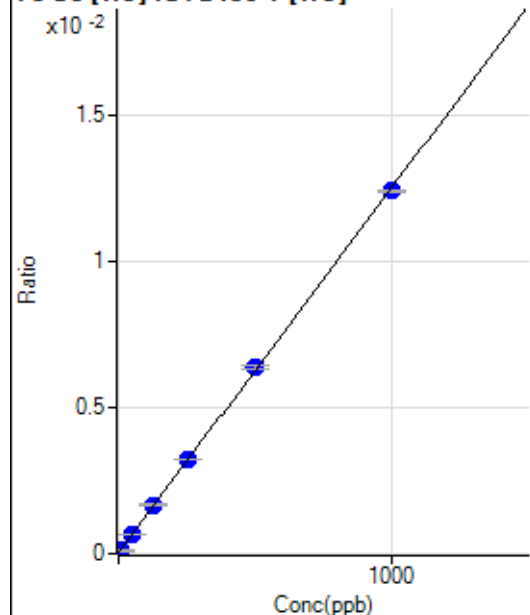
$$DL = 0.435$$

$$BEC = 0.08371$$

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	133.95	0.0000	P	12.3
2	☐	5.000	5.057	358.03	0.0001	P	8.6
3	☐	50.000	50.887	2351.44	0.0007	P	1.6
4	☐	125.000	130.818	5730.17	0.0017	P	6.0
5	☐	250.000	256.404	11234.61	0.0032	P	1.2
6	☐	500.000	510.642	21925.18	0.0064	P	1.9
7	☐	1000.000	992.306	43163.82	0.0124	P	0.8
8	☐			165.44	0.0000	P	9.9

$$y = 1.2455\text{E-}005 * x + 3.7054\text{E-}005$$

$$R = 0.9999$$

$$DL = 1.1$$

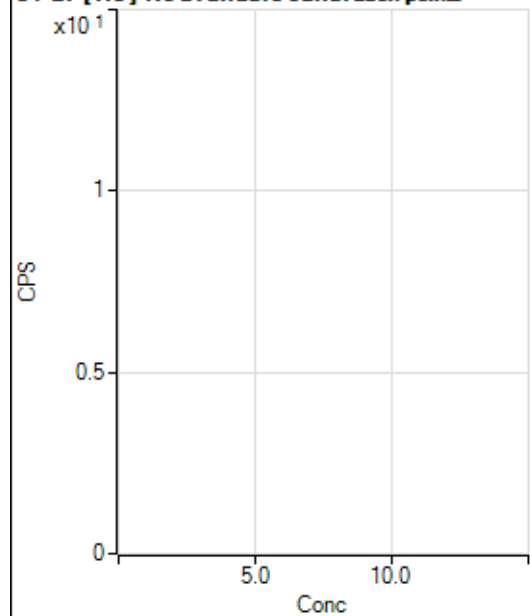
$$BEC = 2.975$$

Weight: <None>

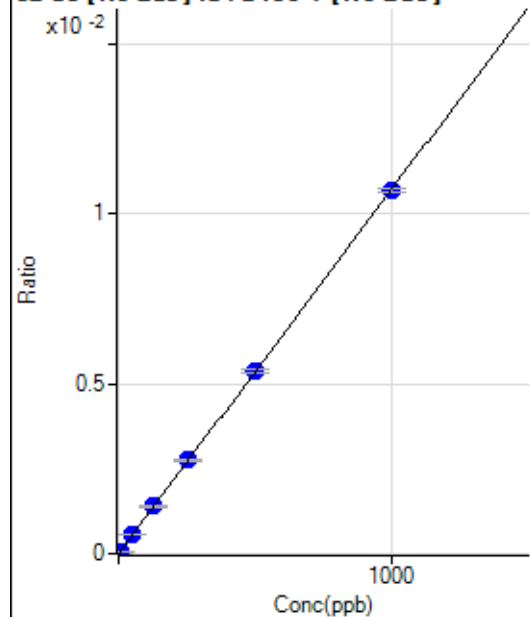
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			42825.36		P	0.8
2	☐			41329.29		P	3.5
3	☐			41777.76		P	0.7
4	☐			40006.01		P	1.6
5	☐			40139.80		P	2.9
6	☐			39630.17		P	1.8
7	☐			42162.40		P	1.6
8	☐			42582.95		P	0.5

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			340.35		P	36.1
2	☐			226.90		P	16.7
3	☐			233.58		P	30.1
4	☐			233.58		P	23.6
5	☐			293.64		P	19.4
6	☐			266.95		P	15.2
7	☐			216.89		P	18.7
8	☐			260.27		P	17.6

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.09	0.0000	P	128.
2	☐	5.000	5.129	1218.54	0.0001	P	4.3
3	☐	50.000	53.126	12085.45	0.0006	P	0.8
4	☐	125.000	130.542	29715.36	0.0014	P	2.1
5	☐	250.000	256.324	58118.08	0.0027	P	0.3
6	☐	500.000	502.214	114462.38	0.0054	P	2.1
7	☐	1000.000	996.462	225931.43	0.0107	P	1.1
8	☐			194.49	0.0000	P	15.2

$$y = 1.0697E-005 * x + 1.9842E-006$$

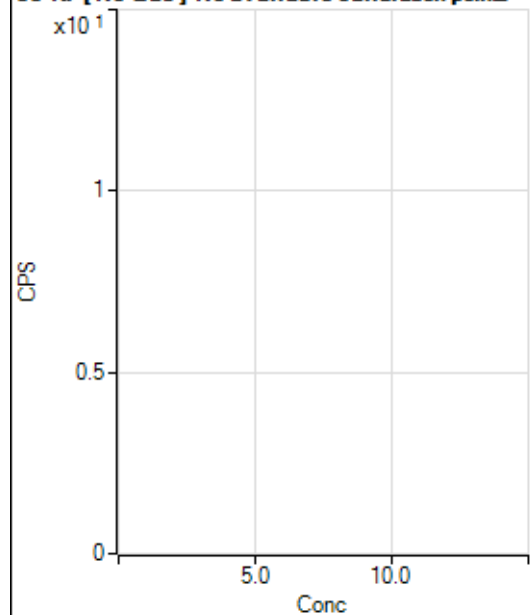
$$R = 1.0000$$

$$DL = 0.7168$$

$$BEC = 0.1855$$

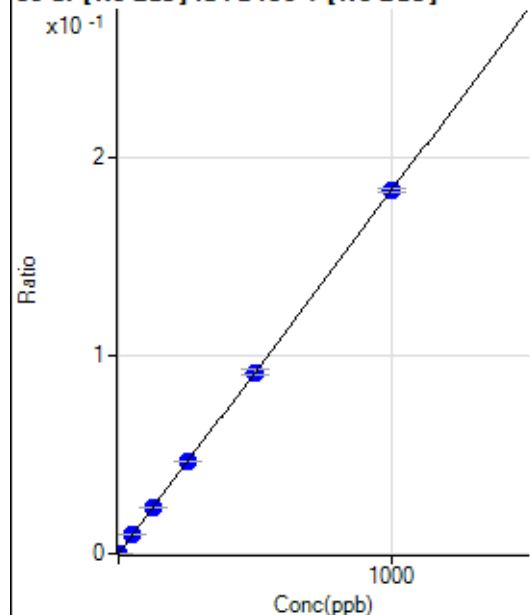
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			565.57		P	10.7
2	☐			551.13		P	2.3
3	☐			497.79		P	2.8
4	☐			493.35		P	9.8
5	☐			561.13		P	13.2
6	☐			552.24		P	6.5
7	☐			545.57		P	6.2
8	☐			613.35		P	3.0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	927.83	0.0000	P	6.6
2	☐	1.000	0.945	4620.30	0.0002	P	1.0
3	☐	50.000	51.932	202617.29	0.0096	P	0.4
4	☐	125.000	126.887	495108.40	0.0233	P	1.9
5	☐	250.000	252.713	981967.41	0.0464	P	0.5
6	☐	500.000	499.710	1951544.38	0.0916	P	2.4
7	☐	1000.000	999.135	3881756.34	0.1832	P	1.0
8	☐			20985.08	0.0010	P	0.6

$$y = 1.8328\text{E-}004 * x + 4.2350\text{E-}005$$

$$R = 1.0000$$

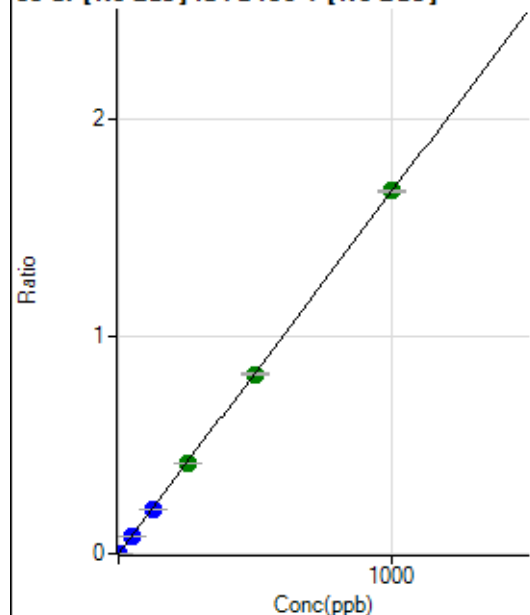
$$DL = 0.0457$$

$$BEC = 0.2311$$

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	302.79	0.0000	P	12.7
2	☐	1.000	0.937	33756.86	0.0016	P	1.1
3	☐	50.000	49.849	1761203.21	0.0831	P	0.5
4	☐	125.000	120.568	4271309.78	0.2010	P	1.2
5	☐	250.000	250.416	8841586.66	0.4174	A	0.3
6	☐	500.000	496.632	17632751.96	0.8278	A	1.7
7	☐	1000.000	1002.142	35401651.83	1.6704	A	0.8
8	☐			176651.83	0.0085	P	1.8

$$y = 0.0017 * x + 1.3799\text{E-}005$$

$$R = 1.0000$$

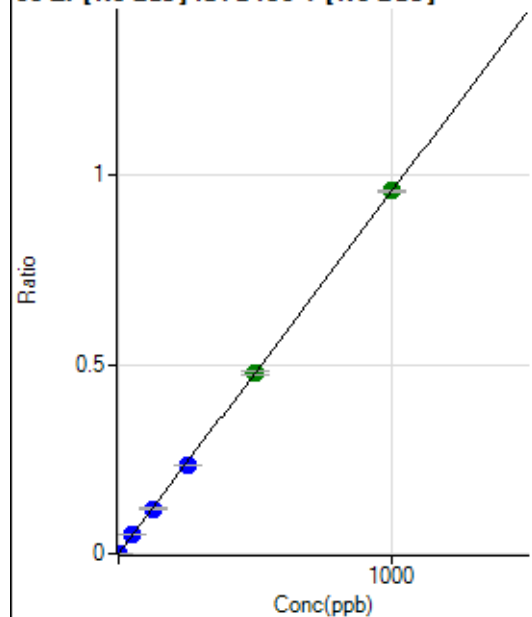
$$DL = 0.003151$$

$$BEC = 0.008279$$

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	966.72	0.0000	P	11.4
2	☐	1.000	0.931	20050.54	0.0009	P	0.7
3	☐	50.000	50.675	1028844.07	0.0485	P	0.5
4	☐	125.000	124.159	2526319.65	0.1189	P	1.7
5	☐	250.000	244.956	4967060.92	0.2345	P	0.3
6	☐	500.000	498.720	10168578.01	0.4774	A	1.6
7	☐	1000.000	1001.972	20325206.53	0.9591	A	0.8
8	☐			5806.86	0.0003	P	1.2

$$y = 9.5712\text{E-}004 * x + 4.4144\text{E-}005$$

$$R = 1.0000$$

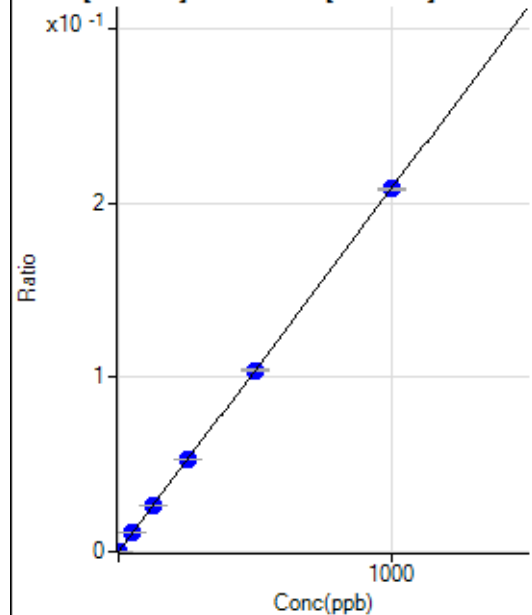
$$DL = 0.01583$$

$$BEC = 0.04612$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.01	0.0000	P	27.6
2	☐	1.000	0.963	4467.48	0.0002	P	1.1
3	☐	50.000	52.182	230465.20	0.0109	P	1.0
4	☐	125.000	127.241	563256.40	0.0265	P	1.8
5	☐	250.000	252.501	1113932.86	0.0526	P	0.3
6	☐	500.000	499.921	2217704.26	0.1041	P	1.6
7	☐	1000.000	999.025	4409433.09	0.2080	P	0.3
8	☐			1400.17	0.0001	P	9.5

$$y = 2.0824\text{E-}004 * x + 7.9987\text{E-}006$$

$$R = 1.0000$$

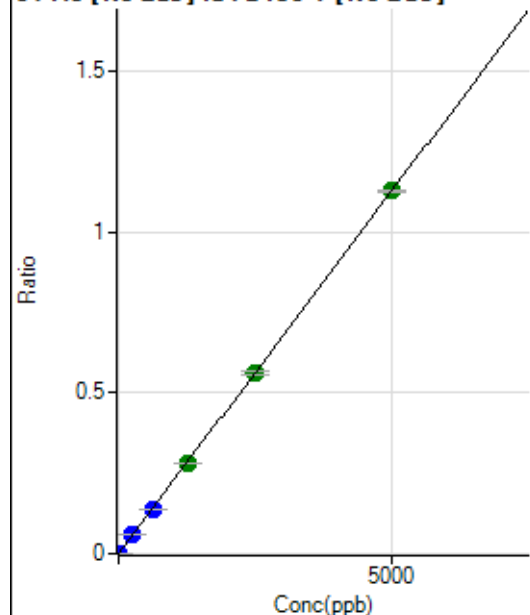
$$DL = 0.03185$$

$$BEC = 0.03841$$

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	341.68	0.0000	P	5.3
2	☐	5.000	4.709	23107.94	0.0011	P	0.9
3	☐	250.000	253.598	1212979.74	0.0572	P	0.5
4	☐	625.000	615.756	2952785.31	0.1389	P	1.8
5	☐	1250.000	1251.148	5979886.89	0.2823	A	0.4
6	☐	2500.000	2489.128	11961908.43	0.5616	A	2.4
7	☐	5000.000	5006.125	23939105.57	1.1296	A	0.7
8	☐			7024.10	0.0003	P	4.7

$$y = 2.2563\text{E-}004 * x + 1.5591\text{E-}005$$

$$R = 1.0000$$

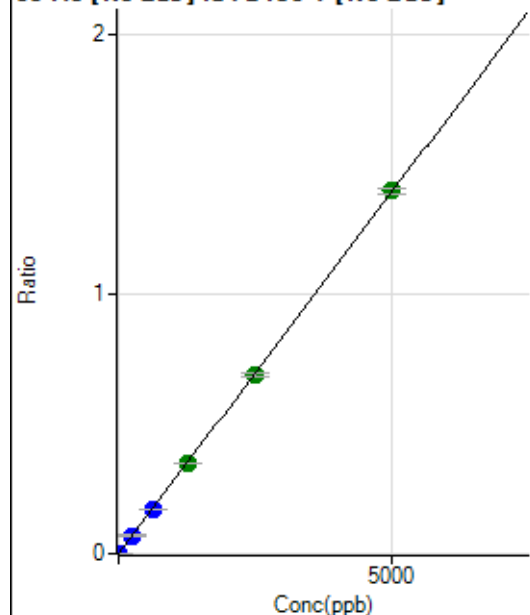
$$DL = 0.011$$

$$BEC = 0.0691$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.34	0.0000	P	25.0
2	☐	5.000	4.802	28732.15	0.0013	P	2.5
3	☐	250.000	252.293	1489939.80	0.0703	P	0.6
4	☐	625.000	611.179	3619419.26	0.1703	P	1.5
5	☐	1250.000	1246.215	7355616.92	0.3473	A	0.3
6	☐	2500.000	2465.561	14633943.73	0.6870	A	1.8
7	☐	5000.000	5019.779	29642794.41	1.3988	A	1.4
8	☐			8233.13	0.0004	P	6.6

$$y = 2.7865\text{E-}004 * x + 2.6630\text{E-}006$$

$$R = 1.0000$$

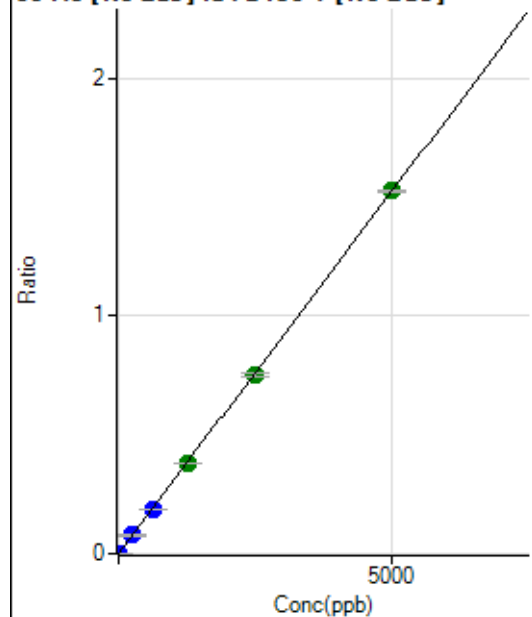
$$DL = 0.007178$$

$$BEC = 0.009557$$

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	111.11	0.0000	P	43.0
2	☐	5.000	4.759	31167.74	0.0015	P	1.1
3	☐	250.000	252.492	1629623.50	0.0769	P	0.4
4	☐	625.000	613.802	3972254.04	0.1869	P	1.9
5	☐	1250.000	1252.887	8081728.65	0.3815	A	0.4
6	☐	2500.000	2473.348	16042367.03	0.7532	A	2.2
7	☐	5000.000	5013.880	32359128.85	1.5269	A	0.6
8	☐			19227.31	0.0009	P	5.6

$$y = 3.0452\text{E-}004 * x + 5.0589\text{E-}006$$

$$R = 1.0000$$

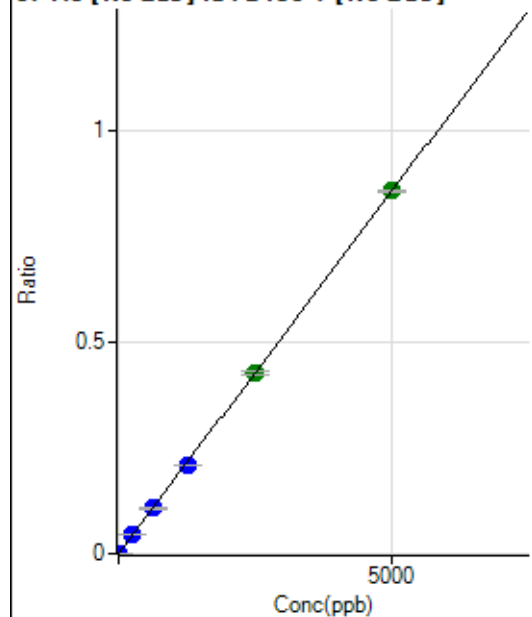
$$DL = 0.02145$$

$$BEC = 0.01661$$

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	38.89	0.0000	P	23.8
2	☐	5.000	4.739	17391.52	0.0008	P	2.5
3	☐	250.000	254.084	920052.41	0.0434	P	0.6
4	☐	625.000	624.131	2266130.96	0.1066	P	1.9
5	☐	1250.000	1226.353	4438292.20	0.2095	P	0.4
6	☐	2500.000	2493.751	9075167.65	0.4261	A	2.0
7	☐	5000.000	5008.941	18137948.84	0.8558	A	0.7
8	☐			4895.40	0.0002	P	2.3

$$y = 1.7086\text{E-}004 * x + 1.7716\text{E-}006$$

$$R = 1.0000$$

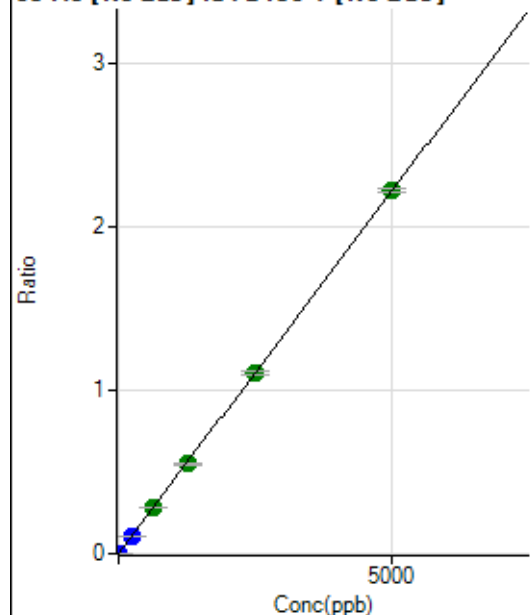
$$DL = 0.0074$$

$$BEC = 0.01037$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0000	P	8.2
2	☐	5.000	4.706	44753.98	0.0021	P	3.2
3	☐	250.000	251.705	2363419.76	0.1115	P	0.4
4	☐	625.000	633.415	5963697.49	0.2806	A	2.4
5	☐	1250.000	1240.541	11642038.11	0.5496	A	1.0
6	☐	2500.000	2483.939	23440417.89	1.1005	A	2.1
7	☐	5000.000	5009.258	47034971.19	2.2193	A	0.9
8	☐			11857.98	0.0006	P	3.0

$$y = 4.4305\text{E-}004 * x + 3.1702\text{E-}006$$

$$R = 1.0000$$

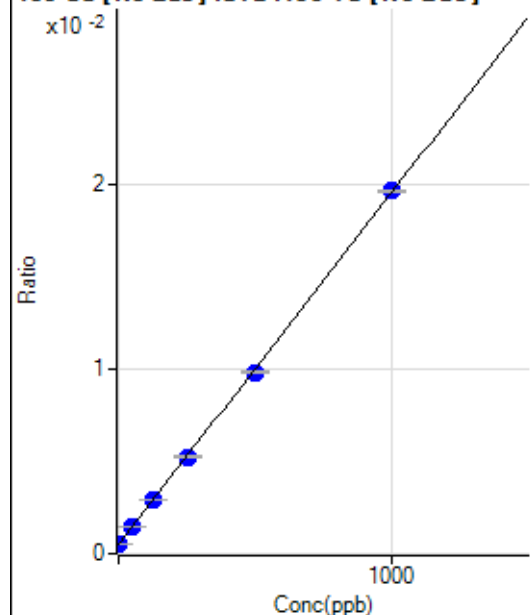
$$DL = 0.001753$$

$$BEC = 0.007156$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9242.10	0.0005	P	3.9
2	☐	1.000	0.598	9425.57	0.0005	P	1.8
3	☐	50.000	52.323	27260.04	0.0015	P	1.0
4	☐	125.000	127.634	54248.34	0.0029	P	1.7
5	☐	250.000	249.083	97634.15	0.0052	P	2.4
6	☐	500.000	488.782	183950.85	0.0098	P	1.4
7	☐	1000.000	1005.393	365705.56	0.0196	P	0.4
8	☐			9433.95	0.0005	P	3.7

$$y = 1.9022\text{E-}005 * x + 5.0028\text{E-}004$$

$$R = 0.9999$$

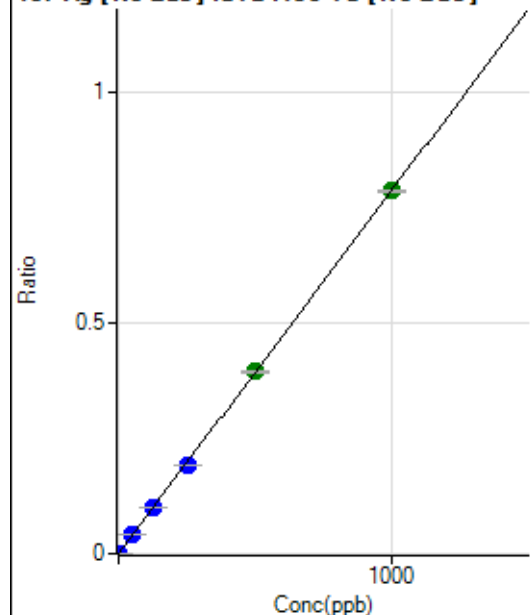
$$DL = 3.113$$

$$BEC = 26.3$$

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	166.68	0.0000	P	9.1
2	☐	1.000	1.005	14699.61	0.0008	P	3.3
3	☐	50.000	52.101	745654.02	0.0409	P	0.9
4	☐	125.000	125.716	1828281.96	0.0987	P	1.2
5	☐	250.000	244.507	3577610.15	0.1920	P	0.9
6	☐	500.000	503.093	7415029.33	0.3949	A	1.1
7	☐	1000.000	999.632	14623080.19	0.7847	A	0.8
8	☐			6351.57	0.0004	P	2.9

$$y = 7.8502\text{E-}004 * x + 9.0240\text{E-}006$$

$$R = 1.0000$$

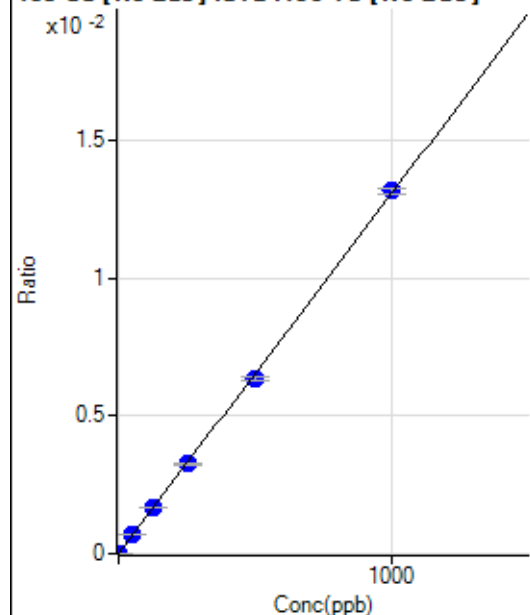
$$DL = 0.003143$$

$$BEC = 0.0115$$

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	16.67	0.0000	P	50.0
2	☐	1.000	1.075	275.01	0.0000	P	2.1
3	☐	50.000	52.262	12450.02	0.0007	P	1.3
4	☐	125.000	126.590	30628.91	0.0017	P	0.7
5	☐	250.000	249.680	60758.27	0.0033	P	1.3
6	☐	500.000	484.699	118790.96	0.0063	P	1.7
7	☐	1000.000	1007.419	245029.28	0.0132	P	1.8
8	☐			161.12	0.0000	P	10.5

$$y = 1.3053\text{E-}005 * x + 9.0147\text{E-}007$$

$$R = 0.9998$$

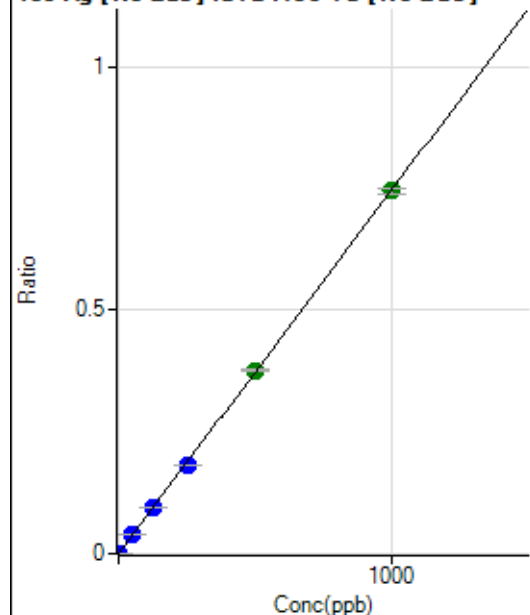
$$DL = 0.1035$$

$$BEC = 0.06906$$

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	58.33	0.0000	P	24.2
2	☐	1.000	0.974	13462.30	0.0007	P	0.7
3	☐	50.000	52.707	717416.50	0.0394	P	1.8
4	☐	125.000	125.937	1742135.41	0.0940	P	0.8
5	☐	250.000	245.026	3410293.13	0.1830	P	0.8
6	☐	500.000	505.255	7083070.64	0.3773	A	1.9
7	☐	1000.000	998.364	13891010.73	0.7455	A	1.9
8	☐			6404.39	0.0004	P	3.5

$$y = 7.4675E-004 * x + 3.1548E-006$$

$$R = 1.0000$$

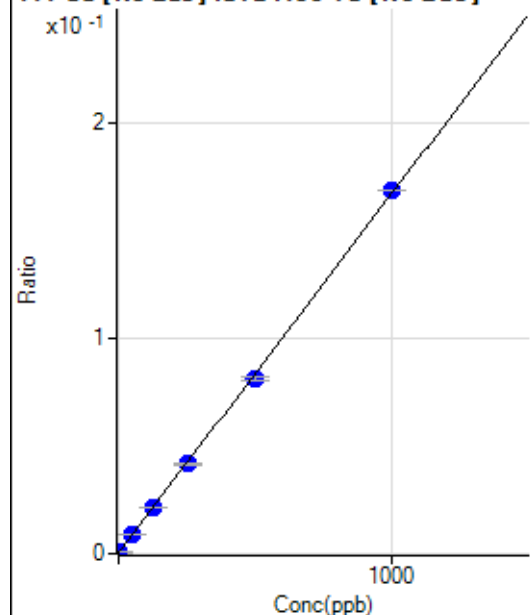
$$DL = 0.003069$$

$$BEC = 0.004225$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6477.25	0.0004	P	3.9
2	☐	1.000	1.045	9661.37	0.0005	P	0.6
3	☐	50.000	52.836	166699.57	0.0091	P	1.2
4	☐	125.000	126.618	396929.08	0.0214	P	1.1
5	☐	250.000	247.549	774580.92	0.0416	P	0.5
6	☐	500.000	483.367	1517124.41	0.0808	P	2.0
7	☐	1000.000	1008.585	3135133.77	0.1682	P	0.1
8	☐			7602.15	0.0004	P	2.9

$$y = 1.6647E-004 * x + 3.5062E-004$$

$$R = 0.9998$$

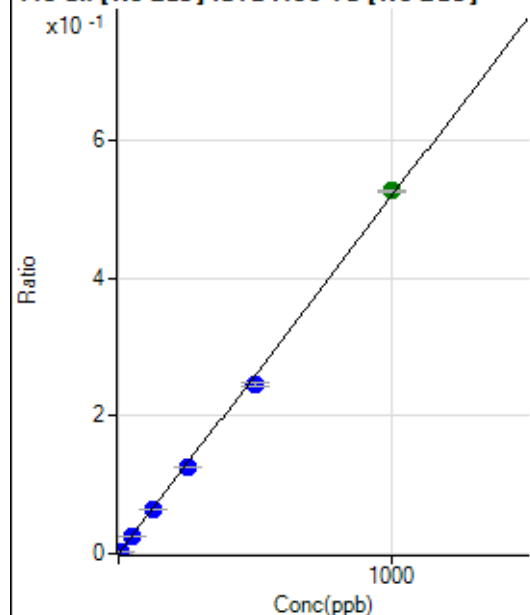
$$DL = 0.2491$$

$$BEC = 2.106$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	902.85	0.0000	P	5.4
2	☐	5.000	4.704	45931.27	0.0025	P	0.3
3	☐	50.000	50.362	477900.90	0.0262	P	0.3
4	☐	125.000	123.355	1188270.83	0.0641	P	1.0
5	☐	250.000	242.133	2345934.10	0.1259	P	1.0
6	☐	500.000	474.205	4626929.10	0.2465	P	1.7
7	☐	1000.000	1015.053	9829622.88	0.5275	A	0.3
8	☐			4303.56	0.0002	P	3.4

$$y = 5.1963\text{E-}004 * x + 4.8868\text{E-}005$$

$$R = 0.9995$$

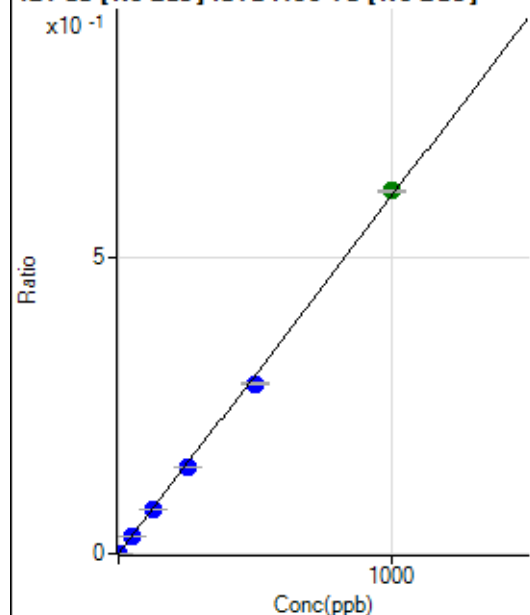
$$DL = 0.01513$$

$$BEC = 0.09404$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.12	0.0000	P	6.0
2	☐	2.000	1.838	20470.97	0.0011	P	4.6
3	☐	50.000	50.233	551271.96	0.0302	P	0.7
4	☐	125.000	123.488	1377144.74	0.0743	P	1.1
5	☐	250.000	240.422	2697688.73	0.1447	P	0.4
6	☐	500.000	474.820	5366501.55	0.2858	P	1.4
7	☐	1000.000	1015.162	11388348.08	0.6111	A	0.4
8	☐			7160.35	0.0004	P	4.5

$$y = 6.0200\text{E-}004 * x + 4.6618\text{E-}006$$

$$R = 0.9995$$

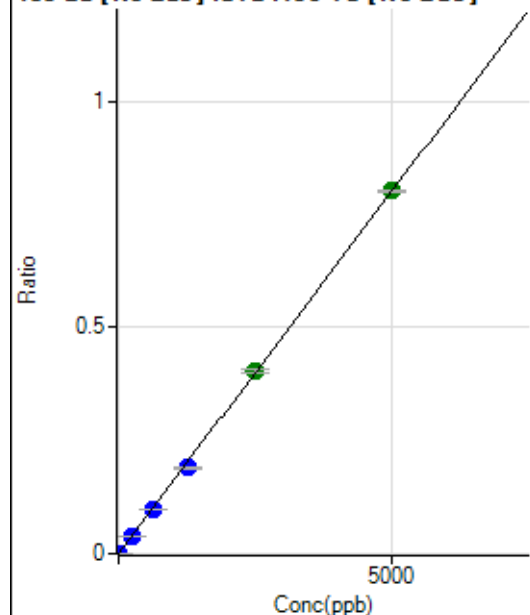
$$DL = 0.001399$$

$$BEC = 0.007744$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	30.7
2	☐	10.000	9.177	27096.29	0.0015	P	2.7
3	☐	250.000	246.472	718714.90	0.0394	P	1.1
4	☐	625.000	605.172	1793314.19	0.0968	P	1.4
5	☐	1250.000	1182.972	3527195.83	0.1892	P	0.9
6	☐	2500.000	2515.540	7554813.10	0.4024	A	1.7
7	☐	5000.000	5011.644	14940396.52	0.8017	A	0.9
8	☐			23962.74	0.0014	P	2.8

$$y = 1.5997\text{E-}004 * x + 3.0038\text{E-}006$$

$$R = 0.9999$$

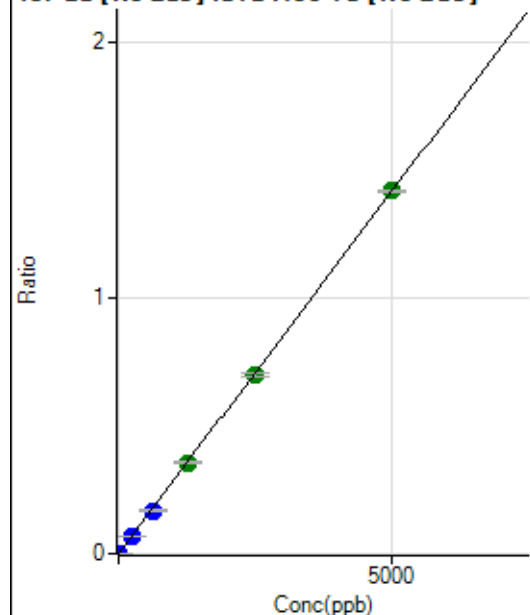
$$DL = 0.01728$$

$$BEC = 0.01878$$

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	111.12	0.0000	P	23.1
2	☐	10.000	9.095	47556.80	0.0026	P	2.2
3	☐	250.000	242.582	1252296.27	0.0687	P	1.5
4	☐	625.000	596.320	3128515.93	0.1689	P	1.1
5	☐	1250.000	1261.706	6660089.60	0.3573	A	0.4
6	☐	2500.000	2478.792	13179282.50	0.7020	A	1.8
7	☐	5000.000	5011.636	26448647.47	1.4194	A	0.8
8	☐			41779.94	0.0024	P	1.7

$$y = 2.8321\text{E-}004 * x + 6.0153\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.0147$$

$$BEC = 0.02124$$

Weight: <None>

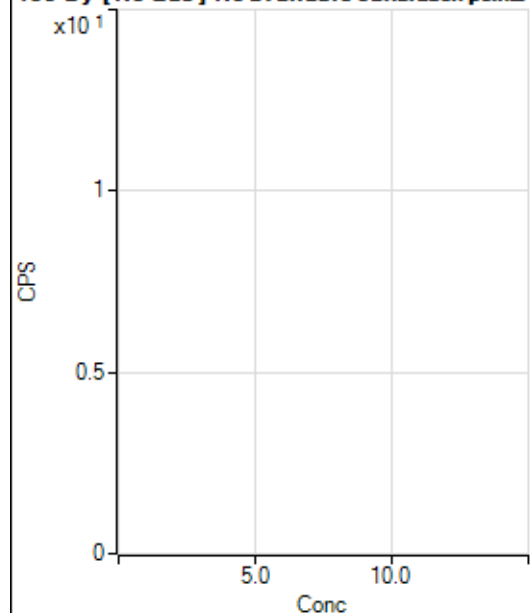
Min Conc: 0

150 Nd [No Gas] No available calibration points

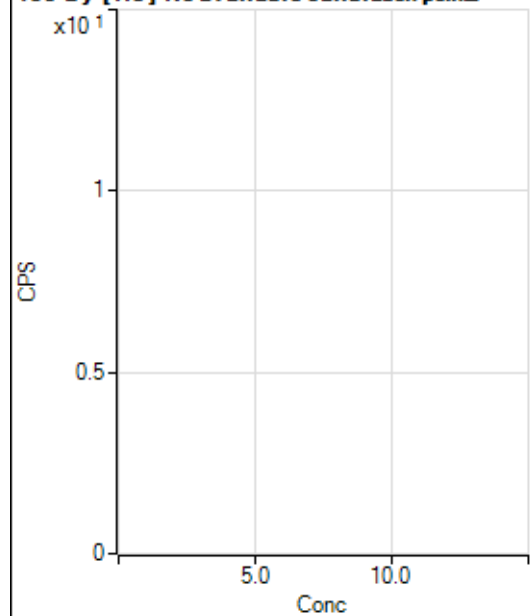
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			20.00		P	66.7
2	☐			11.11		P	69.3
3	☐			75.56		P	48.6
4	☐			180.00		P	26.7
5	☐			362.24		P	17.1
6	☐			737.81		P	18.6
7	☐			1324.54		P	8.0
8	☐			44.45		P	17.3

150 Nd [He] No available calibration points

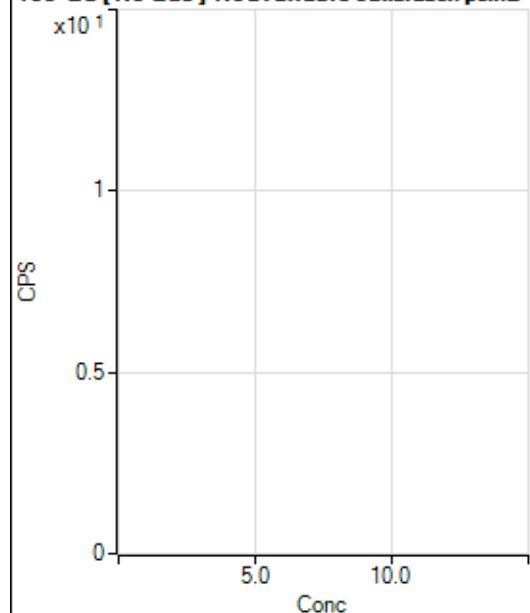
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			2.22		P	86.6
3	☐			13.33		P	25.0
4	☐			24.45		P	43.8
5	☐			55.56		P	39.0
6	☐			85.56		P	6.0
7	☐			117.78		P	5.9
8	☐			22.22		P	45.8

156 Dy [No Gas] No available calibration points

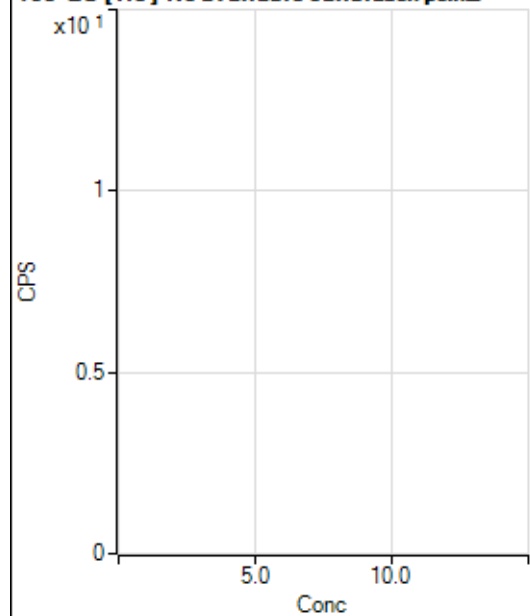
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	69.3
2	☐			19.44		P	89.2
3	☐			25.00		P	33.3
4	☐			91.67		P	41.7
5	☐			172.23		P	15.6
6	☐			252.79		P	7.6
7	☐			422.24		P	20.7
8	☐			830.60		P	5.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	78.1
2	☐			17.78		P	57.3
3	☐			30.00		P	38.5
4	☐			68.89		P	19.5
5	☐			113.34		P	12.8
6	☐			205.56		P	7.3
7	☐			463.34		P	4.4
8	☐			475.57		P	7.2

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

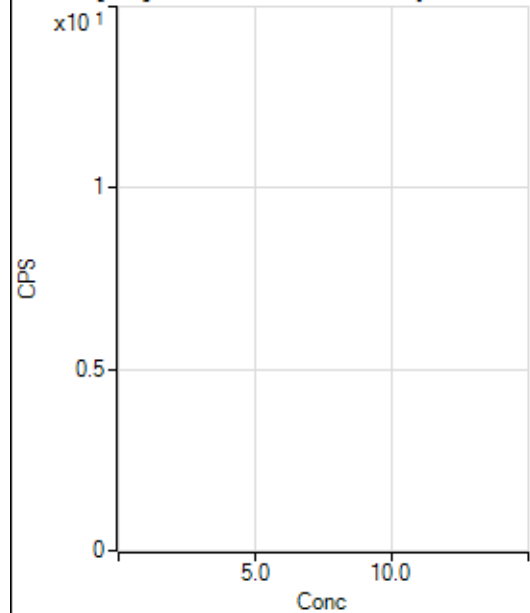
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			138.89		P	18.3
2	☐			122.23		P	47.9
3	☐			169.45		P	45.7
4	☐			169.45		P	7.5
5	☐			183.34		P	18.2
6	☐			280.57		P	25.3
7	☐			327.79		P	8.2
8	☐			1050.07		P	7.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			330.01		P	9.0
2	☐			314.45		P	23.9
3	☐			357.79		P	5.7
4	☐			348.90		P	6.4
5	☐			340.01		P	8.4
6	☐			388.90		P	8.0
7	☐			438.90		P	8.4
8	☐			810.03		P	5.7

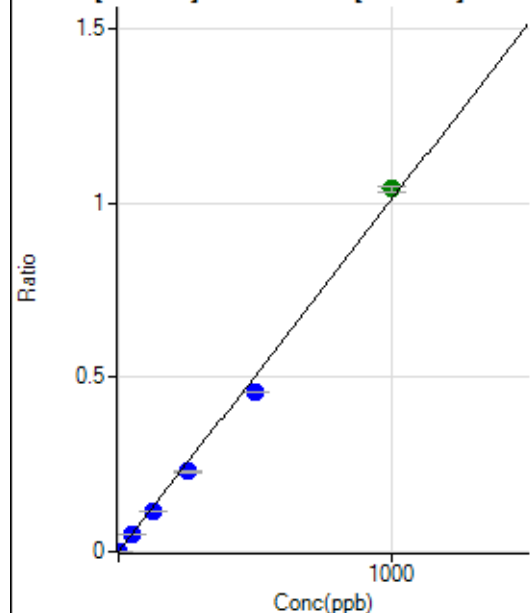
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	19.5
2	☐			69.45		P	50.0
3	☐			83.33		P	55.7
4	☐			66.67		P	33.1
5	☐			83.34		P	36.1
6	☐			144.45		P	3.3
7	☐			102.78		P	30.7
8	☐			202.79		P	22.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.11		P	40.0
2	☐			50.00		P	17.6
3	☐			50.00		P	6.7
4	☐			43.33		P	7.7
5	☐			42.22		P	16.4
6	☐			67.78		P	22.2
7	☐			54.44		P	15.4
8	☐			92.22		P	9.1

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.68	0.0000	P	16.6
2	☐	1.000	0.866	10565.59	0.0009	P	2.0
3	☐	50.000	46.737	563002.59	0.0472	P	1.0
4	☐	125.000	114.219	1392600.68	0.1152	P	2.4
5	☐	250.000	227.375	2754298.80	0.2294	P	1.8
6	☐	500.000	453.028	5432876.51	0.4570	P	0.4
7	☐	1000.000	1030.653	12033268.07	1.0396	A	1.5
8	☐			1605.69	0.0002	P	10.3

$$y = 0.0010 * x + 1.7921E-005$$

$$R = 0.9981$$

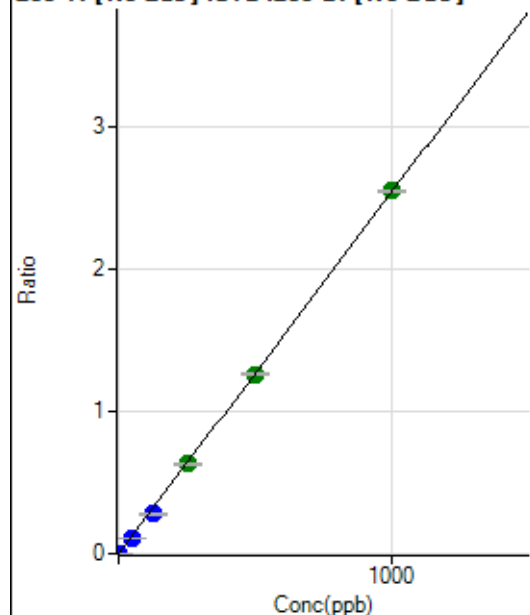
$$DL = 0.008833$$

$$BEC = 0.01777$$

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	522.25	0.0000	P	9.5
2	☐	1.000	0.821	25196.67	0.0021	P	0.8
3	☐	50.000	44.852	1357937.38	0.1138	P	0.3
4	☐	125.000	109.543	3356905.72	0.2778	P	2.1
5	☐	250.000	247.849	7545981.94	0.6284	A	1.4
6	☐	500.000	496.585	14967072.04	1.2590	A	0.8
7	☐	1000.000	1004.435	29475799.27	2.5465	A	0.7
8	☐			3756.18	0.0004	P	4.0

$$y = 0.0025 * x + 4.3231E-005$$

$$R = 0.9999$$

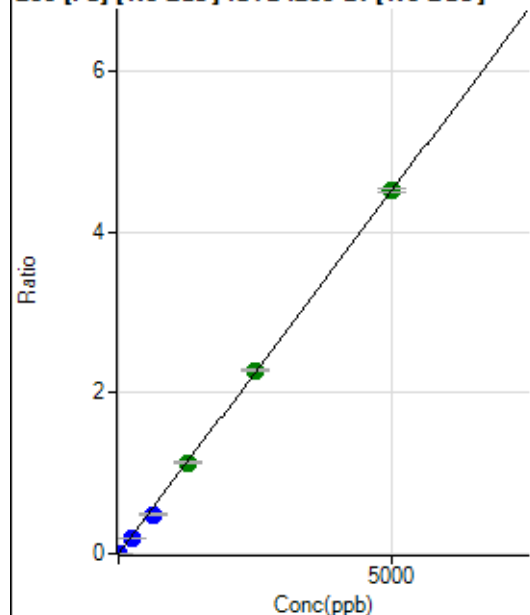
$$DL = 0.004855$$

$$BEC = 0.01705$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	562.98	0.0000	P	20.1
2	☐	1.000	0.786	8962.42	0.0008	P	0.7
3	☐	250.000	221.286	2382874.65	0.1996	P	0.6
4	☐	625.000	541.947	5907463.27	0.4888	P	2.2
5	☐	1250.000	1248.963	13525627.73	1.1264	A	2.5
6	☐	2500.000	2522.285	27041479.54	2.2748	A	1.4
7	☐	5000.000	5000.934	52203406.26	4.5102	A	1.0
8	☐			24220.32	0.0024	P	2.4

$$y = 9.0186\text{E-}004 * x + 4.6619\text{E-}005$$

$$R = 0.9998$$

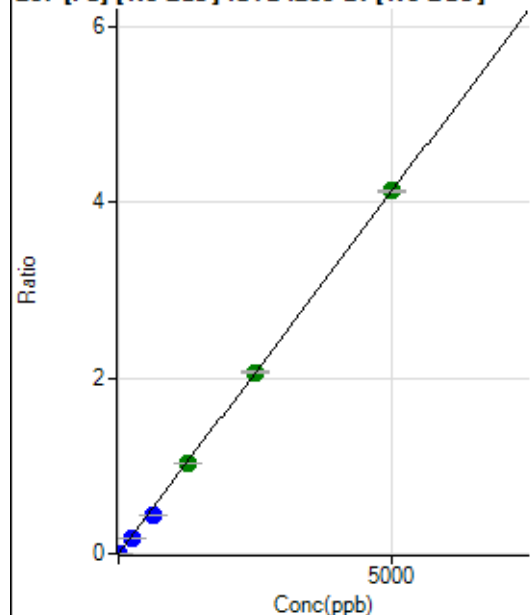
$$DL = 0.03114$$

$$BEC = 0.05169$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	457.43	0.0000	P	18.2
2	☐	1.000	0.758	7861.70	0.0007	P	2.5
3	☐	250.000	218.440	2151661.19	0.1802	P	0.7
4	☐	625.000	537.207	5357100.75	0.4432	P	1.4
5	☐	1250.000	1251.456	12398261.97	1.0325	A	1.3
6	☐	2500.000	2507.611	24592403.33	2.0688	A	1.9
7	☐	5000.000	5008.383	47825391.81	4.1319	A	0.4
8	☐			20977.84	0.0021	P	2.3

$$y = 8.2498\text{E-}004 * x + 3.7922\text{E-}005$$

$$R = 0.9998$$

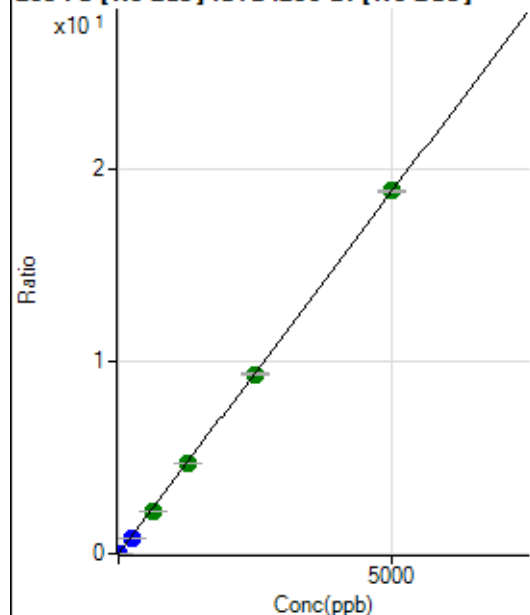
$$DL = 0.02517$$

$$BEC = 0.04597$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2248.64	0.0002	P	3.3
2	☐	1.000	0.823	38913.97	0.0033	P	1.1
3	☐	250.000	218.210	9805363.20	0.8214	P	0.4
4	☐	625.000	584.108	26572350.65	2.1984	A	1.0
5	☐	1250.000	1243.422	56196010.31	4.6797	A	1.1
6	☐	2500.000	2485.072	111176831.6	9.3525	A	1.5
7	☐	5000.000	5015.810	218489680.5	18.8767	A	0.8
8	☐			97194.12	0.0097	P	1.8

$$y = 0.0038 * x + 1.8624E-004$$

$$R = 1.0000$$

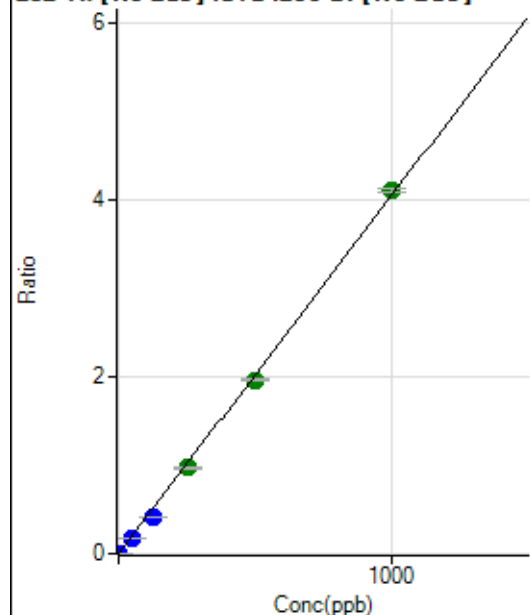
$$DL = 0.00495$$

$$BEC = 0.04949$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1305.64	0.0001	P	5.2
2	☐	1.000	-0.003	1142.67	0.0001	P	5.6
3	☐	50.000	40.903	1975007.92	0.1654	P	1.1
4	☐	125.000	101.679	4968719.73	0.4111	P	1.9
5	☐	250.000	240.448	11673647.37	0.9721	A	1.5
6	☐	500.000	485.355	23324274.60	1.9620	A	0.9
7	☐	1000.000	1013.082	47399180.23	4.0952	A	1.2
8	☐			5912.55	0.0006	P	8.7

$$y = 0.0040 * x + 1.0808E-004$$

$$R = 0.9996$$

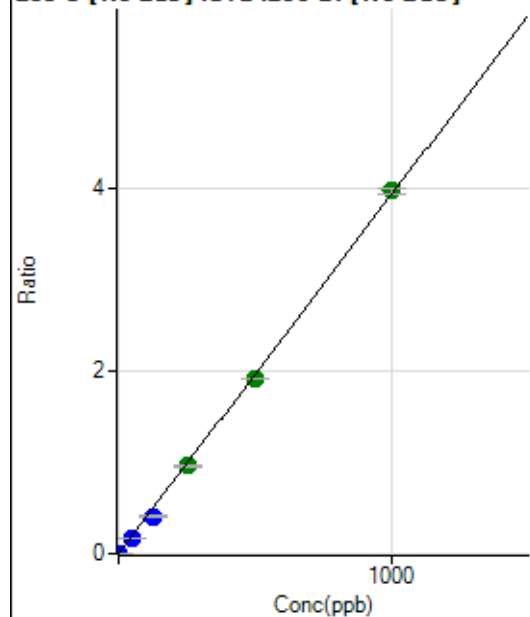
$$DL = 0.004157$$

$$BEC = 0.02674$$

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	26.7
2	☐	1.000	0.768	35894.69	0.0030	P	0.6
3	☐	50.000	41.351	1941035.33	0.1626	P	0.5
4	☐	125.000	103.318	4909791.34	0.4063	P	2.2
5	☐	250.000	243.811	11511817.71	0.9587	A	1.6
6	☐	500.000	488.612	22840773.43	1.9212	A	0.4
7	☐	1000.000	1010.384	45981898.60	3.9728	A	1.8
8	☐			5009.45	0.0005	P	5.6

$$y = 0.0039 * x + 6.4408E-006$$

$$R = 0.9997$$

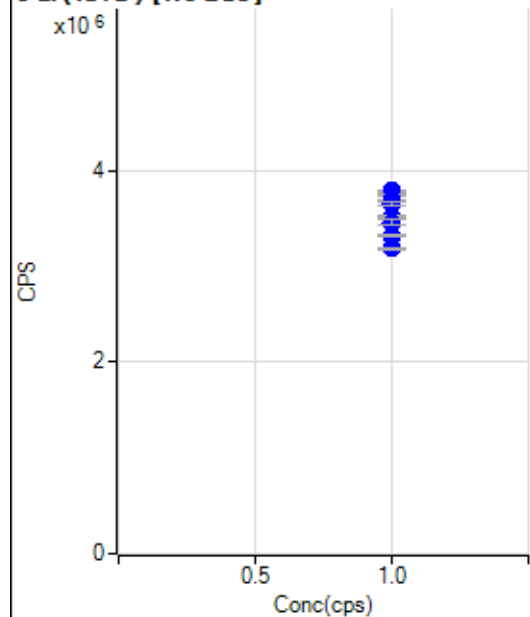
$$DL = 0.001312$$

$$BEC = 0.001638$$

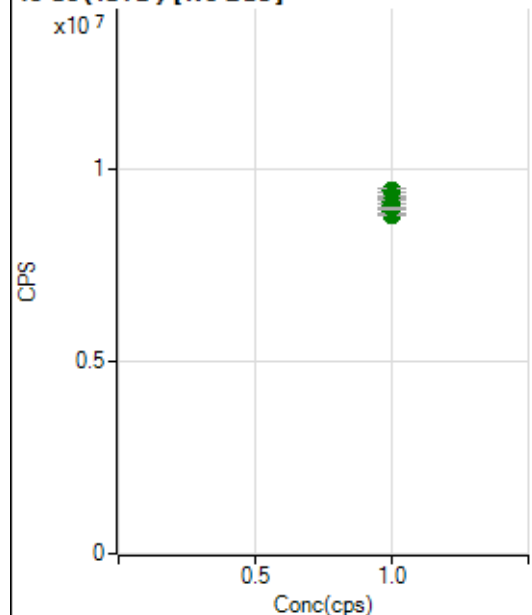
Weight: <None>

Min Conc: 0

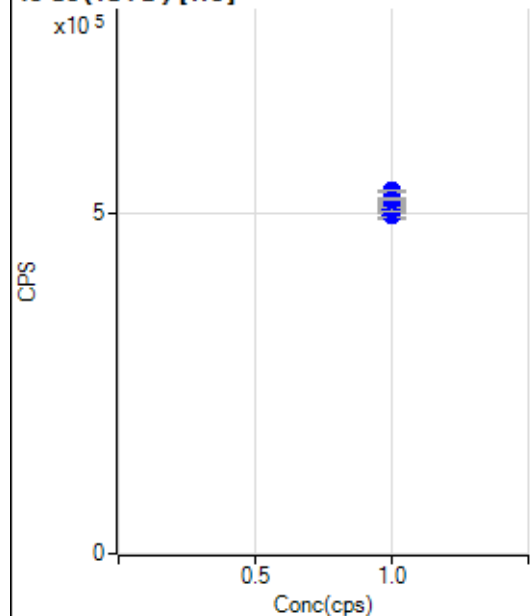
6 Li (ISTD) [No Gas]



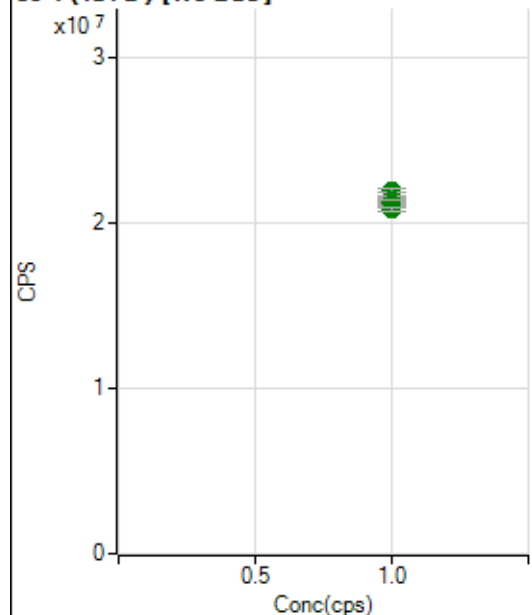
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3791373.55		P	0.3
2	☐	1.000		3747911.54		P	0.7
3	☐	1.000		3700596.47		P	0.2
4	☐	1.000		3649371.82		P	1.2
5	☐	1.000		3526267.10		P	0.3
6	☐	1.000		3461697.45		P	1.7
7	☐	1.000		3324068.56		P	0.5
8	☐	1.000		3186016.83		P	1.1

45 Sc (ISTD) [No Gas]

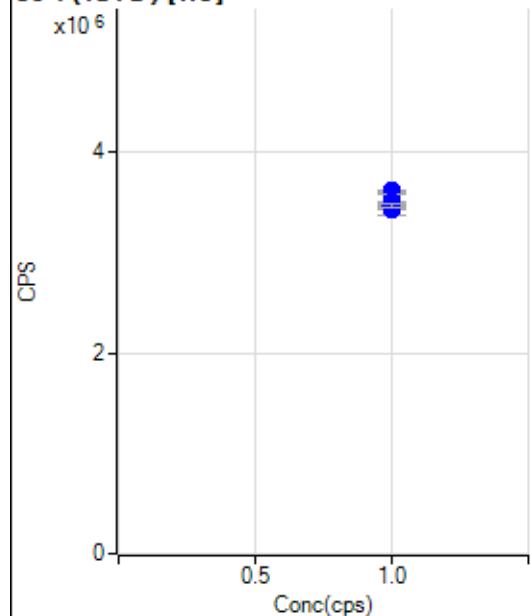
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9420836.60		A	1.2
2	☐	1.000		9284601.81		A	0.6
3	☐	1.000		9135796.60		A	0.8
4	☐	1.000		9044710.28		A	0.9
5	☐	1.000		8819402.51		A	0.9
6	☐	1.000		8882157.16		A	2.2
7	☐	1.000		8798741.12		A	0.7
8	☐	1.000		8982740.28		A	0.5

45 Sc (ISTD) [He]

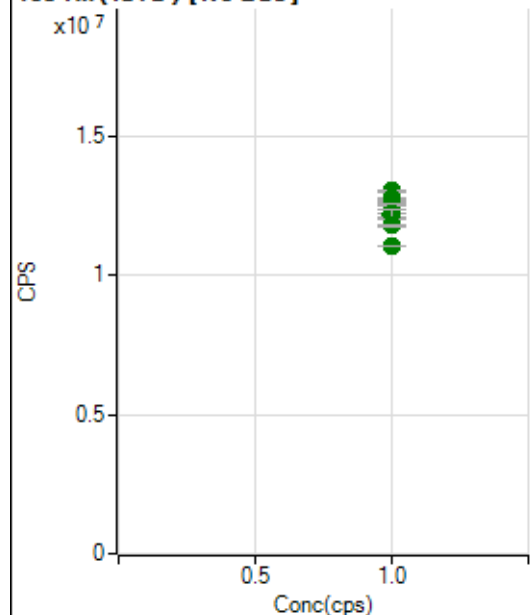
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		534422.58		P	0.8
2	☐	1.000		534458.01		P	0.3
3	☐	1.000		517744.60		P	0.5
4	☐	1.000		502194.47		P	4.1
5	☐	1.000		504272.70		P	0.9
6	☐	1.000		498798.16		P	1.3
7	☐	1.000		506635.44		P	0.9
8	☐	1.000		521791.36		P	0.6

89 Y (ISTD) [No Gas]

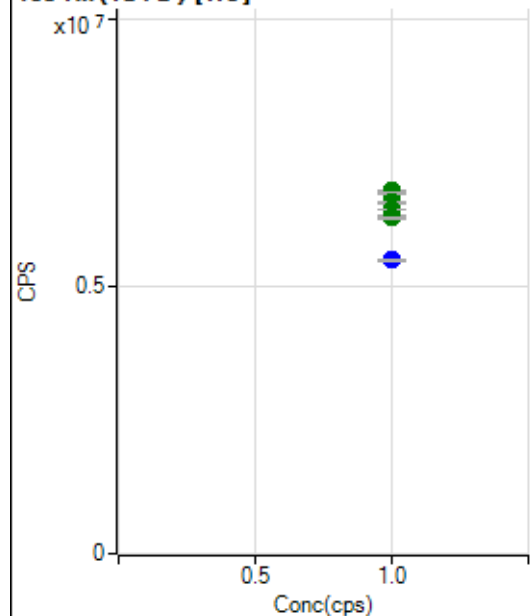
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21920098.01		A	1.2
2	☐	1.000		21434907.18		A	0.9
3	☐	1.000		21192936.49		A	0.3
4	☐	1.000		21255470.93		A	1.9
5	☐	1.000		21181607.05		A	0.4
6	☐	1.000		21306376.91		A	2.5
7	☐	1.000		21194311.63		A	1.2
8	☐	1.000		20745886.36		A	1.1

89 Y (ISTD) [He]

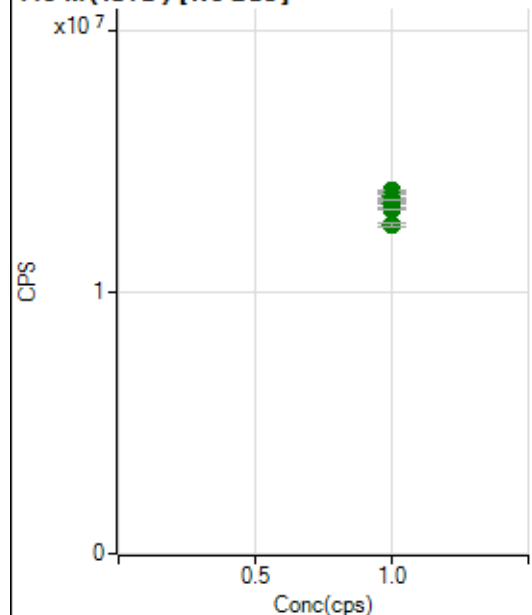
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3614585.88		P	0.4
2	☐	1.000		3579266.02		P	0.3
3	☐	1.000		3505173.11		P	0.4
4	☐	1.000		3443845.02		P	3.9
5	☐	1.000		3477482.59		P	0.5
6	☐	1.000		3427414.22		P	0.4
7	☐	1.000		3481840.33		P	0.6
8	☐	1.000		3471287.69		P	1.2

103 Rh (ISTD) [No Gas]

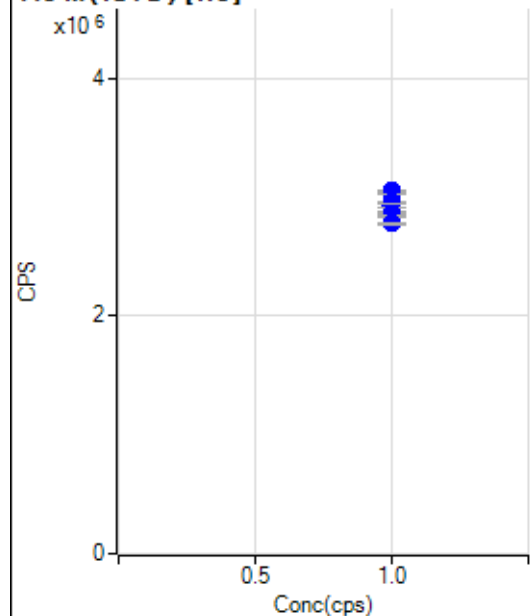
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13030343.83		A	0.3
2	☐	1.000		12758718.00		A	0.3
3	☐	1.000		12655822.45		A	0.3
4	☐	1.000		12519152.73		A	0.8
5	☐	1.000		12184791.76		A	1.1
6	☐	1.000		12190534.82		A	2.7
7	☐	1.000		11790532.32		A	0.7
8	☐	1.000		11064718.87		A	0.3

103 Rh (ISTD) [He]

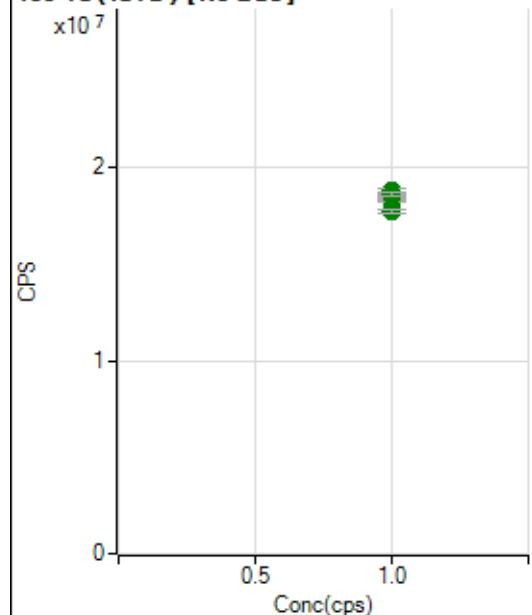
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6786725.80		A	0.5
2	☐	1.000		6748610.45		A	0.3
3	☐	1.000		6587964.34		A	0.4
4	☐	1.000		6449169.07		A	3.6
5	☐	1.000		6437554.28		A	0.5
6	☐	1.000		6292028.10		A	0.9
7	☐	1.000		6277625.67		A	0.2
8	☐	1.000		5496390.54		P	0.7

115 In (ISTD) [No Gas]

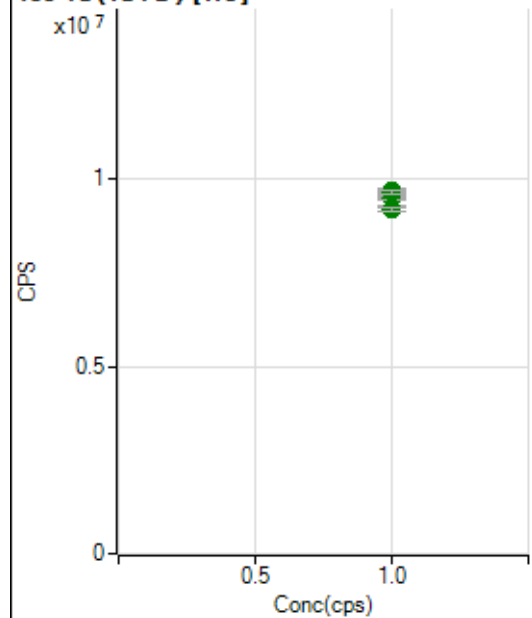
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13863966.43		A	0.7
2	☐	1.000		13649222.64		A	1.4
3	☐	1.000		13526180.36		A	0.6
4	☐	1.000		13486597.31		A	1.2
5	☐	1.000		13483973.32		A	0.2
6	☐	1.000		13369956.54		A	2.1
7	☐	1.000		13145428.93		A	0.3
8	☐	1.000		12566916.67		A	0.6

115 In (ISTD) [He]

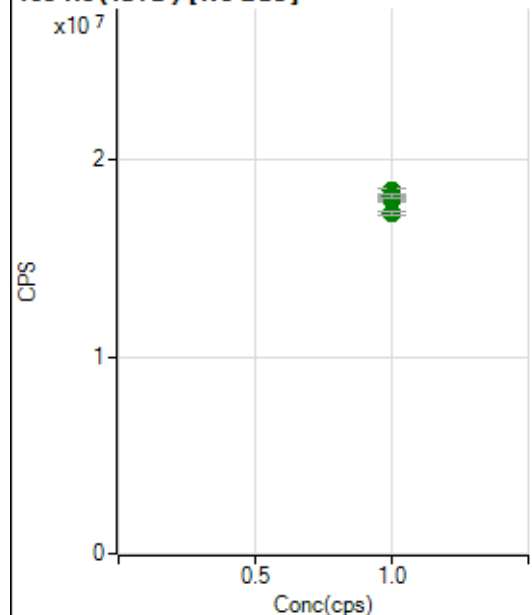
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3051049.26		P	0.7
2	☐	1.000		3025287.57		P	0.5
3	☐	1.000		2963099.87		P	0.1
4	☐	1.000		2910457.93		P	3.6
5	☐	1.000		2926341.81		P	0.7
6	☐	1.000		2864865.80		P	0.5
7	☐	1.000		2840445.85		P	0.7
8	☐	1.000		2776528.54		P	0.8

159 Tb (ISTD) [No Gas]

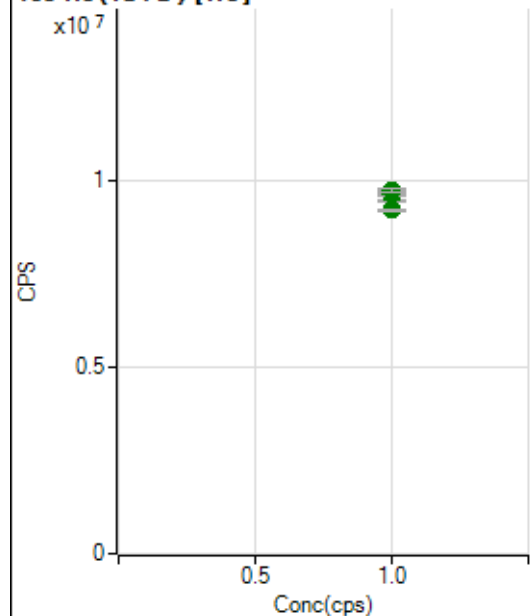
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18475891.67		A	0.5
2	☐	1.000		18420737.50		A	0.7
3	☐	1.000		18227471.95		A	0.7
4	☐	1.000		18525663.33		A	1.4
5	☐	1.000		18638431.53		A	0.5
6	☐	1.000		18776567.77		A	1.5
7	☐	1.000		18634507.36		A	0.9
8	☐	1.000		17693892.24		A	0.9

159 Tb (ISTD) [He]

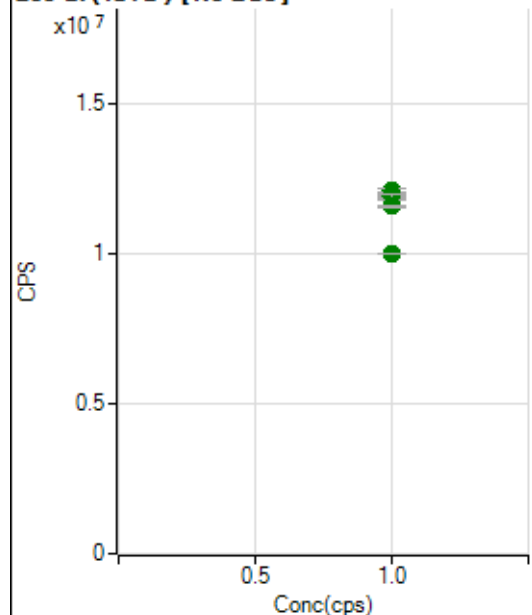
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9694413.67		A	1.5
2	☐	1.000		9591292.22		A	0.8
3	☐	1.000		9549103.47		A	1.1
4	☐	1.000		9514943.40		A	4.3
5	☐	1.000		9621981.94		A	0.7
6	☐	1.000		9507420.00		A	0.6
7	☐	1.000		9643214.72		A	1.1
8	☐	1.000		9201991.67		A	0.7

165 Ho (ISTD) [No Gas]

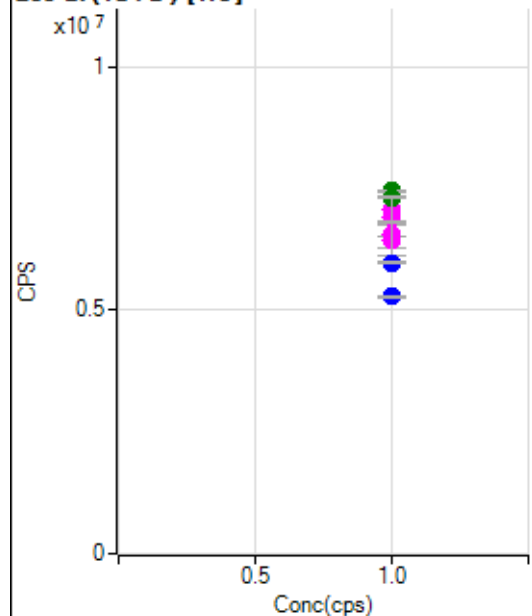
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18233403.34		A	0.4
2	☐	1.000		18001813.34		A	1.1
3	☐	1.000		18110084.87		A	0.9
4	☐	1.000		18272775.01		A	0.4
5	☐	1.000		18073127.79		A	0.7
6	☐	1.000		18425380.42		A	1.8
7	☐	1.000		18144239.31		A	1.1
8	☐	1.000		17291671.83		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9726951.80		A	1.0
2	☐	1.000		9718389.93		A	1.2
3	☐	1.000		9583848.19		A	1.9
4	☐	1.000		9609604.72		A	3.2
5	☐	1.000		9696290.20		A	0.2
6	☐	1.000		9661561.94		A	1.1
7	☐	1.000		9724546.25		A	1.2
8	☐	1.000		9221525.49		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12074962.74		A	1.2
2	☐	1.000		11857352.18		A	0.5
3	☐	1.000		11937624.55		A	0.6
4	☐	1.000		12088305.93		A	1.6
5	☐	1.000		12009397.74		A	1.0
6	☐	1.000		11888848.01		A	1.3
7	☐	1.000		11575058.58		A	0.8
8	☐	1.000		9992851.17		A	0.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7442793.85		A	0.5
2	☐	1.000		7046068.64		M	8.7
3	☐	1.000		7314040.73		A	0.8
4	☐	1.000		6897691.01		M	11.5
5	☐	1.000		6547248.38		M	8.6
6	☐	1.000		6444428.65		M	10.7
7	☐	1.000		5974630.68		P	0.7
8	☐	1.000		5273898.12		P	0.3

US EPA Tune Check Sample Report

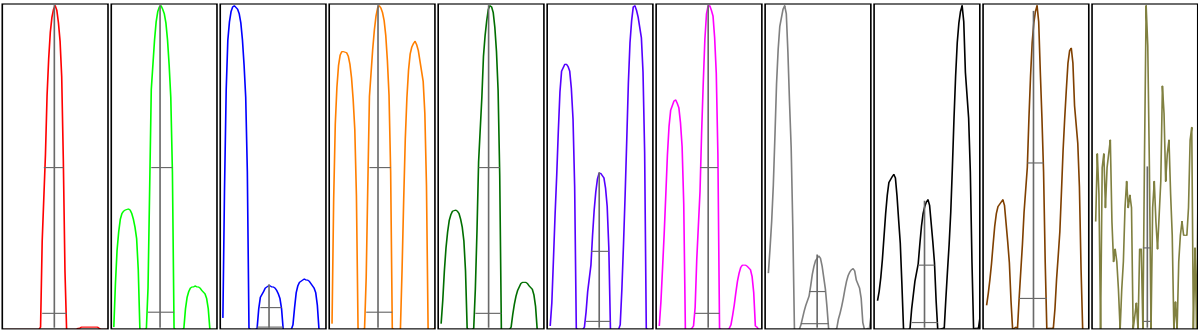
Batch Folder C:\Agilent\ICPMH\1\DATA\P7101420IMS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	10830	0.86	5.00	
24	218272	0.66	5.00	
25	29246	0.70	5.00	
26	33899	0.79	5.00	
59	90872	0.80	5.00	
113	15905	0.60	5.00	
115	46611	2.78	5.00	
206	20304	0.74	5.00	
207	17393	0.88	5.00	
208	41920	1.02	5.00	
220	1	12.78		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	10797	10689	10853	10874	10935
24	217667	216693	218288	218093	220620
25	29240	29087	29187	29122	29595
26	33862	33626	33832	33829	34345
59	90876	89894	90788	90849	91952
113	15805	15880	16008	15831	16003
115	48555	47146	46355	45243	45757
206	20160	20174	20485	20266	20435
207	17173	17303	17456	17488	17547
208	41486	41440	42370	42144	42160
220	1	0	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	20368	9.00	8.9 - 9.1		0.728	0.900	
24	360431	23.90	23.9 - 24.1		0.776	0.900	
25	48024	24.90	24.9 - 25.1		0.741	0.900	
26	55926	25.90	25.9 - 26.1		0.779	0.900	
59	157981	58.95	58.9 - 59.1		0.775	0.900	
113	30715	113.00	112.9 - 113.1		0.727	0.900	
115	90156	115.00	114.9 - 115.1		0.711	0.900	
206	41188	206.00	205.9 - 206.1		0.778	0.900	
207	33922	206.95	206.9 - 207.1		0.773	0.900	
208	84435	207.95	207.9 - 208.1		0.778	0.900	
220	1	220.10	-		0.245		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.70	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.4	V	Deflect	13.8	V
Extract 2	-190.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-90	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	26713	1.13	
89	21181	0.84	
205	53951	0.61	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	26974	26869	26938	26486	26300
89	21373	21308	21177	21138	20912
205	54401	53687	54184	53662	53821

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.70	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.2	V	Deflect	2.2	V
Extract 2	-180.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-90	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	3.9	mL/min	OctP RF	200	V			