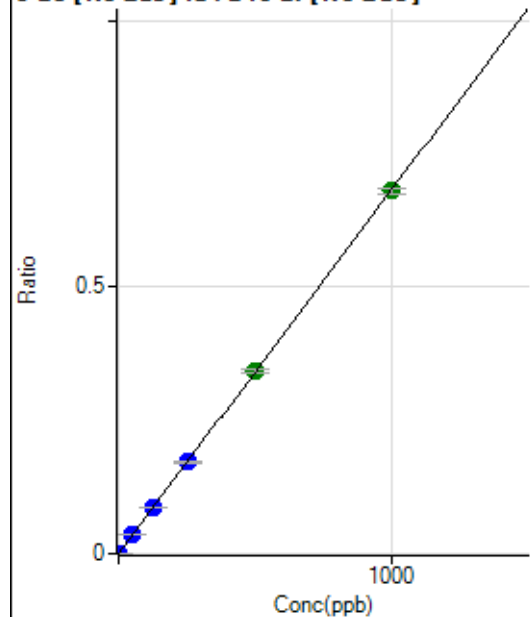


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8100421IMS.b\
Analysis File: P8100421IMS.batch.bin
DA Date-Time: 2021-10-04 18:10:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-10-04 15:01:19
2	005CALS.d	S02	2021-10-04 15:07:28
3	006CALS.d	S03	2021-10-04 15:10:33
4	007CALS.d	S04	2021-10-04 15:13:36
5	008CALS.d	S05	2021-10-04 15:16:42
6	009CALS.d	S06	2021-10-04 15:19:46
7	010CALS.d	S07	2021-10-04 15:22:52
8	011CALS.d	S08	2021-10-04 15:25:55

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	55.32	0.0000	P	7.2
2	☐	1.000	1.028	3229.06	0.0007	P	5.4
3	☐	50.000	51.471	162182.08	0.0351	P	3.0
4	☐	125.000	125.796	395637.89	0.0859	P	0.9
5	☐	250.000	251.678	782663.27	0.1718	P	1.0
6	☐	500.000	503.821	1568067.41	0.3439	A	1.8
7	☐	1000.000	997.497	2909678.66	0.6809	A	1.4
8	☐			359.27	0.0001	P	3.9

$$y = 6.8259E-004 * x + 1.2574E-005$$

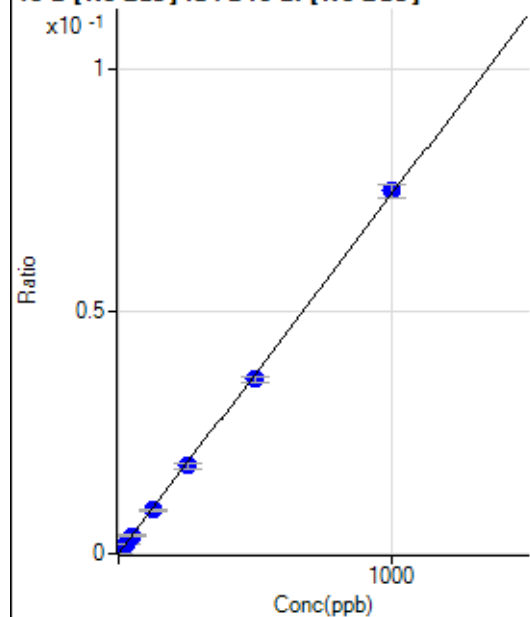
$$R = 1.0000$$

$$DL = 0.00398$$

$$BEC = 0.01842$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	240.62	0.0001	P	15.6
2	☐	25.000	24.084	8306.72	0.0018	P	4.5
3	☐	50.000	49.163	17025.86	0.0037	P	7.6
4	☐	125.000	120.025	41158.07	0.0089	P	4.8
5	☐	250.000	243.155	82165.77	0.0180	P	5.7
6	☐	500.000	485.023	163884.42	0.0359	P	3.6
7	☐	1000.000	1009.886	319450.70	0.0748	P	4.0
8	☐			32792.11	0.0081	P	11.2

$$y = 7.3978E-005 * x + 5.4836E-005$$

$$R = 0.9998$$

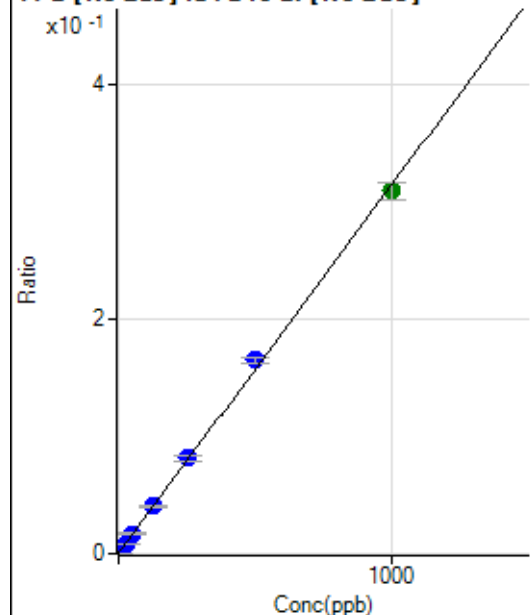
$$DL = 0.348$$

$$BEC = 0.7413$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1235.14	0.0003	P	4.2
2	☐	25.000	25.773	37873.29	0.0084	P	6.7
3	☐	50.000	53.142	78268.22	0.0170	P	7.3
4	☐	125.000	127.782	186185.25	0.0404	P	6.2
5	☐	250.000	259.729	372747.35	0.0819	P	6.1
6	☐	500.000	525.448	753865.77	0.1653	P	2.8
7	☐	1000.000	984.319	1322101.14	0.3094	A	4.9
8	☐			151066.69	0.0374	P	11.0

$$y = 3.1407E-004 * x + 2.8091E-004$$

$$R = 0.9995$$

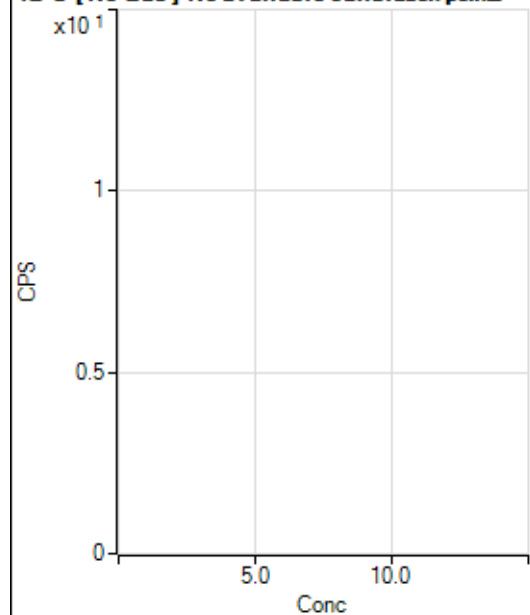
$$DL = 0.1125$$

$$BEC = 0.8944$$

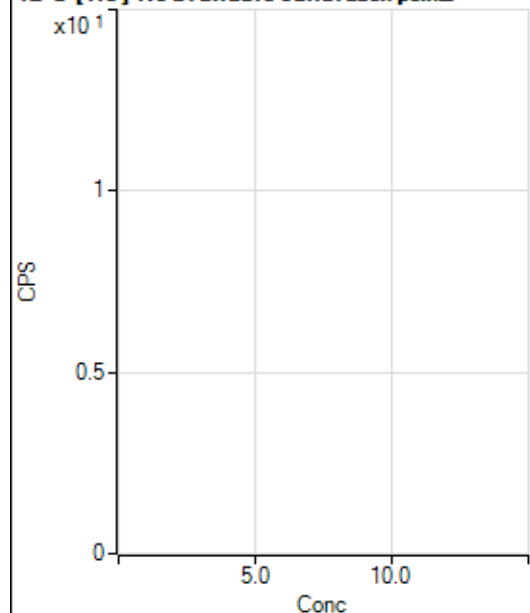
Weight: <None>

Min Conc: 0

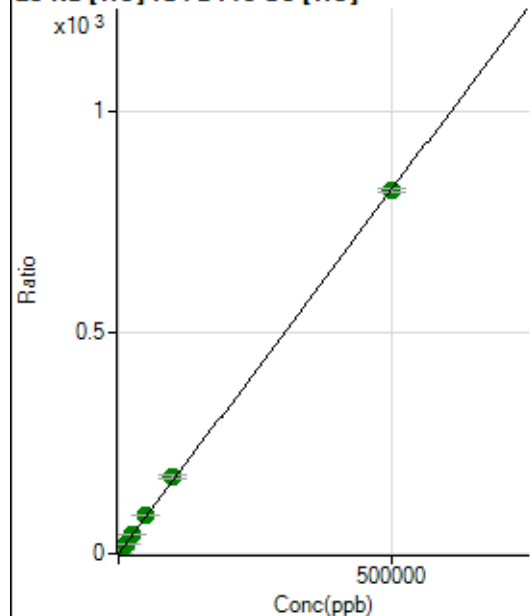
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			5796489.62		A	0.4
2	☐			5957694.79		A	1.2
3	☐			6469159.26		A	0.3
4	☐			6344984.08		A	0.8
5	☐			6389909.69		A	0.6
6	☐			6511061.60		A	1.5
7	☐			6815969.60		A	3.4
8	☐			6310453.96		A	2.4

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			56662.78		P	2.1
2	☐			59298.00		P	1.1
3	☐			64823.82		P	1.0
4	☐			63072.01		P	0.5
5	☐			63325.88		P	0.9
6	☐			65664.03		P	1.4
7	☐			70176.65		P	1.5
8	☐			74218.45		P	0.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	26057.05	0.1109	P	3.7
2	☐	500.000	560.524	241889.72	1.0316	P	0.8
3	☐	5000.000	5530.820	2205621.97	9.1961	A	2.2
4	☐	12500.000	13561.446	5217736.01	22.3876	A	2.6
5	☐	25000.000	26883.442	10253313.51	44.2711	A	1.6
6	☐	50000.000	52722.605	20532529.97	86.7160	A	1.4
7	☐	100000.00	105979.35	40757339.45	174.1985	A	4.2
8	☐	500000.00	498405.79	207498154.6	818.8204	A	0.9

$$y = 0.0016 * x + 0.1109$$

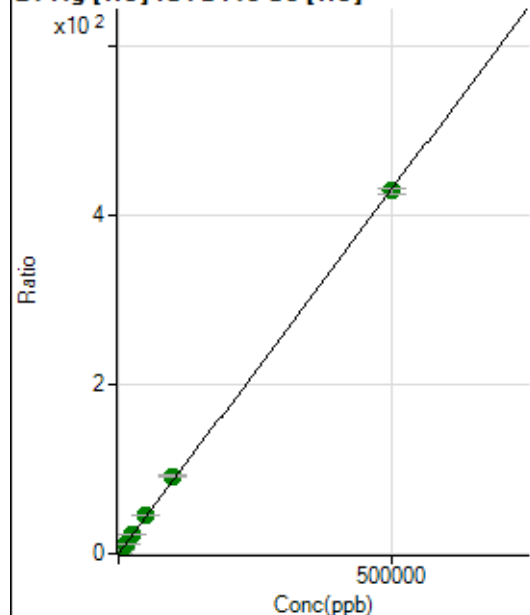
$$R = 0.9999$$

$$DL = 7.58$$

$$BEC = 67.48$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	316.68	0.0013	P	11.4
2	☐	500.000	547.805	110727.82	0.4722	P	1.1
3	☐	5000.000	5506.026	1135462.31	4.7342	A	2.7
4	☐	12500.000	13969.505	2799138.61	12.0093	A	1.1
5	☐	25000.000	27040.081	5383369.13	23.2446	A	2.5
6	☐	50000.000	53084.669	10804534.61	45.6321	A	0.2
7	☐	100000.00	106788.98	21477865.76	91.7955	A	3.8
8	☐	500000.00	498189.88	108509437.1	428.2378	A	1.7

$$y = 8.5958\text{E-}004 * x + 0.0013$$

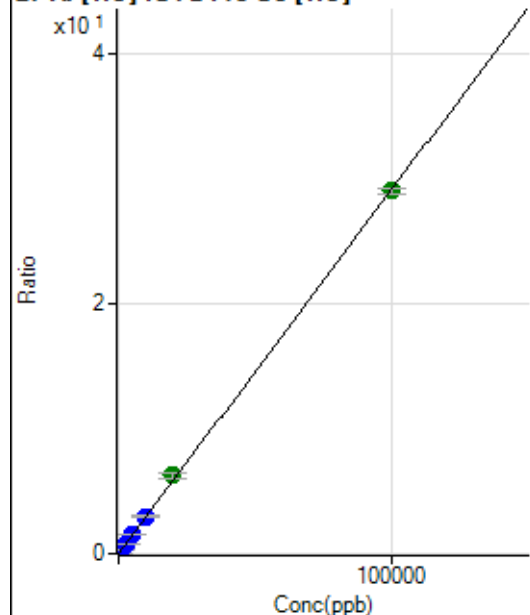
R = 0.9999

DL = 0.5361

BEC = 1.568

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	124.57	0.0005	P	9.4
2	☐	20.000	22.279	1645.31	0.0070	P	1.0
3	☐	1000.000	1067.614	74675.44	0.3113	P	0.8
4	☐	2500.000	2650.559	179969.89	0.7722	P	1.6
5	☐	5000.000	5245.643	353802.99	1.5276	P	1.1
6	☐	10000.000	10268.494	707931.41	2.9899	P	0.7
7	☐	20000.000	21399.092	1457375.63	6.2303	A	5.3
8	☐	100000.00	99676.609	7353256.58	29.0185	A	1.8

$$y = 2.9112\text{E-}004 * x + 5.3024\text{E-}004$$

R = 0.9999

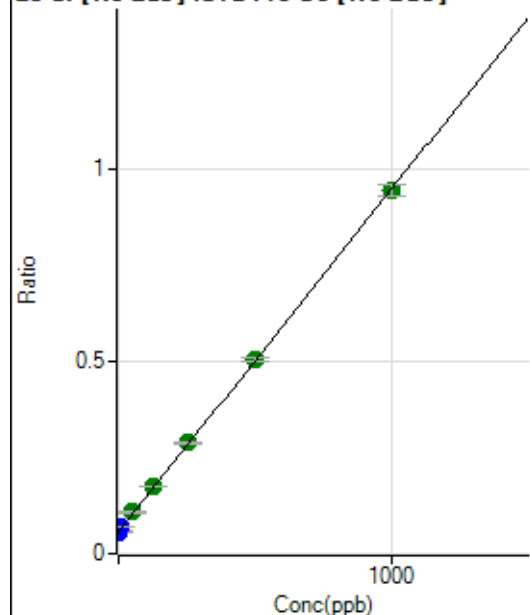
DL = 0.5153

BEC = 1.821

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	528333.96	0.0572	P	1.1
2	☐	10.000	14.078	638793.56	0.0697	P	2.7
3	☐	50.000	56.700	995991.78	0.1077	A	1.8
4	☐	125.000	133.504	1601086.43	0.1761	A	1.3
5	☐	250.000	260.492	2624848.52	0.2892	A	1.8
6	☐	500.000	502.190	4742527.76	0.5045	A	1.9
7	☐	1000.000	994.843	8764661.65	0.9434	A	3.2
8	☐			953883.34	0.1031	A	3.0

$$y = 8.9077E-004 * x + 0.0572$$

R = 0.9999

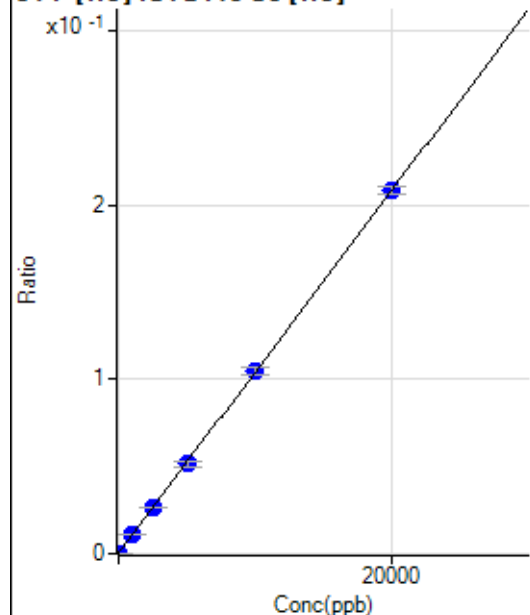
DL = 2.06

BEC = 64.22

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-4.488	63.89	0.0003	P	19.6
2	☐	0.000	4.488	86.11	0.0004	P	47.8
3	☐	1000.000	1036.258	2661.43	0.0111	P	7.5
4	☐	2500.000	2499.733	6137.59	0.0263	P	2.1
5	☐	5000.000	4908.814	11902.40	0.0514	P	6.4
6	☐	10000.000	10051.428	24841.32	0.1049	P	4.8
7	☐	20000.000	19995.303	48774.40	0.2084	P	2.2
8	☐			77.78	0.0003	P	5.0

$$y = 1.0405E-005 * x + 3.1838E-004$$

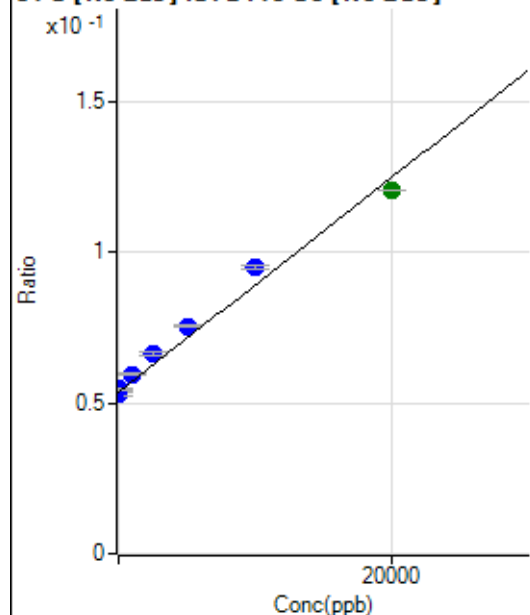
R = 1.0000

DL = 32.83

BEC = 30.6

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-251.588	487460.82	0.0528	P	2.9
2	☐	0.000	251.588	500091.31	0.0546	P	1.1
3	☐	1000.000	1658.155	551056.23	0.0596	P	0.9
4	☐	2500.000	3548.721	602844.84	0.0663	P	1.6
5	☐	5000.000	6116.218	684801.73	0.0755	P	0.8
6	☐	10000.000	11622.095	893153.84	0.0951	P	1.9
7	☐	20000.000	18745.900	1119049.86	0.1204	A	0.1
8	☐			397015.75	0.0429	P	2.2

$$y = 3.5601\text{E-}006 * x + 0.0537$$

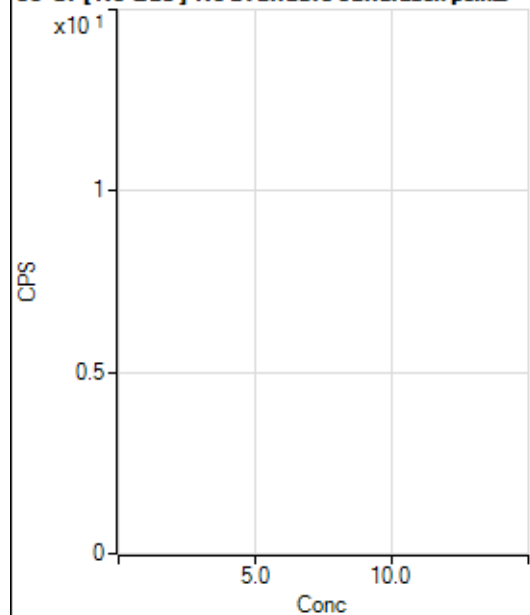
$$R = 0.9919$$

$$DL = 890.1$$

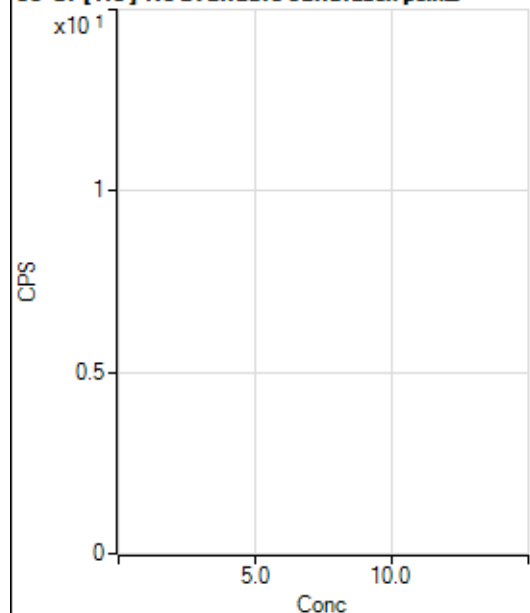
$$BEC = 1.508\text{E+}04$$

Weight: <None>

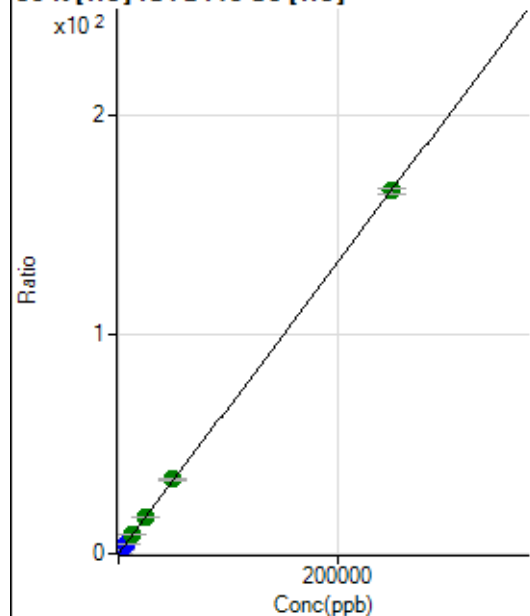
Min Conc: 0

35 Cl [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2378834.45		A	3.9
2	☐			2079140.84		A	4.2
3	☐			2042438.59		A	2.6
4	☐			2042254.75		A	2.1
5	☐			1887193.77		A	4.3
6	☐			1863108.98		A	3.4
7	☐			1806828.51		A	2.2
8	☐			2965467.43		A	2.2

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			13025.63		P	2.6
2	☐			11471.47		P	3.0
3	☐			11463.15		P	1.5
4	☐			11040.61		P	7.5
5	☐			9967.62		P	1.8
6	☐			9742.43		P	2.5
7	☐			9792.42		P	2.0
8	☐			20731.93		P	2.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	16520.97	0.0703	P	2.7
2	☐	500.000	501.873	94503.28	0.4031	P	2.7
3	☐	2500.000	2599.924	430418.63	1.7945	P	0.9
4	☐	6250.000	6449.470	1013257.27	4.3474	P	1.8
5	☐	12500.000	13012.857	2014953.47	8.7002	A	0.7
6	☐	25000.000	25231.328	3978513.55	16.8032	A	0.7
7	☐	50000.000	50951.716	7923792.80	33.8605	A	2.9
8	☐	250000.00	249754.89	41987986.01	165.7029	A	1.4

$$y = 6.6318\text{E-}004 * x + 0.0703$$

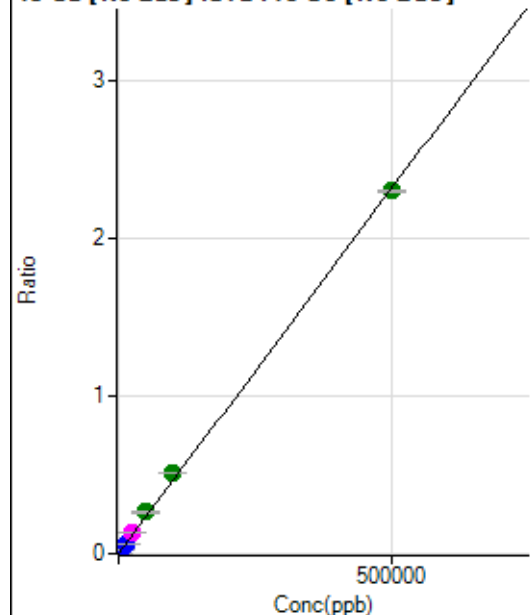
$$R = 1.0000$$

$$DL = 8.482$$

$$BEC = 106$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	558.28	0.0001	P	5.8
2	☐	500.000	498.355	21730.28	0.0024	P	2.2
3	☐	5000.000	5672.053	243872.18	0.0264	P	1.3
4	☐	12500.000	14023.945	591926.39	0.0651	P	1.0
5	☐	25000.000	28299.812	1191901.55	0.1313	M	2.0
6	☐	50000.000	57156.836	2491347.57	0.2652	A	3.1
7	☐	100000.00	110914.38	4781720.47	0.5146	A	0.3
8	☐	500000.00	496891.63	21339391.15	2.3050	A	0.8

$$y = 4.6388\text{E-}006 * x + 6.0480\text{E-}005$$

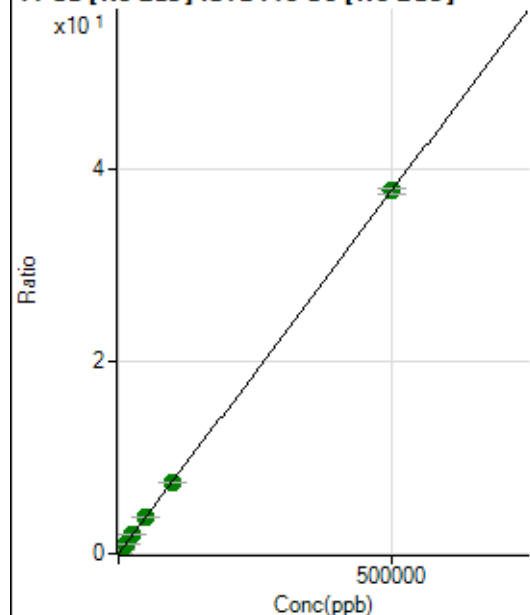
$$R = 0.9997$$

$$DL = 2.285$$

$$BEC = 13.04$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	36520.80	0.0040	P	1.8
2	☐	500.000	496.664	378531.07	0.0413	P	2.6
3	☐	5000.000	5050.297	3551147.26	0.3840	A	0.5
4	☐	12500.000	12540.800	8615098.81	0.9476	A	1.1
5	☐	25000.000	25248.520	17277135.77	1.9038	A	0.5
6	☐	50000.000	50092.518	35449711.59	3.7733	A	3.0
7	☐	100000.00	98165.509	68676194.14	7.3907	A	0.7
8	☐	500000.00	500343.70	348566885.6	37.6535	A	1.5

$$y = 7.5247\text{E-}005 * x + 0.0040$$

$$R = 1.0000$$

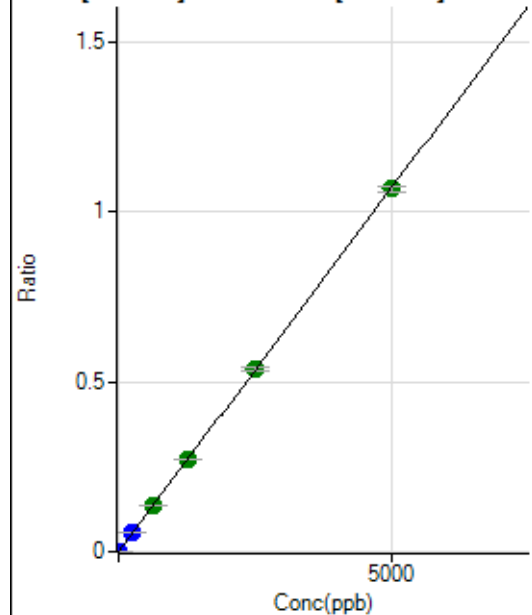
$$DL = 2.895$$

$$BEC = 52.55$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD :45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	297.23	0.0000	P	5.9
2	☐	5.000	5.079	10253.94	0.0011	P	6.2
3	☐	250.000	259.740	514224.77	0.0556	P	1.5
4	☐	625.000	637.035	1239183.61	0.1363	A	1.9
5	☐	1250.000	1275.263	2476386.40	0.2729	A	0.9
6	☐	2500.000	2508.468	5042958.10	0.5367	A	1.9
7	☐	5000.000	4987.459	9916104.39	1.0671	A	1.5
8	☐			1677.92	0.0002	P	5.9

$$y = 2.1396\text{E-}004 * x + 3.2150\text{E-}005$$

$$R = 1.0000$$

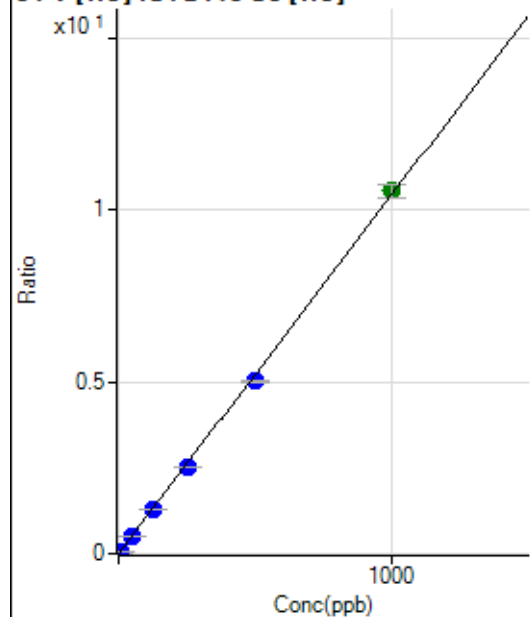
$$DL = 0.0267$$

$$BEC = 0.1503$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	13.33	0.0001	P	25.3
2	☐	5.000	5.109	12523.35	0.0534	P	0.4
3	☐	50.000	48.801	122236.03	0.5097	P	2.9
4	☐	125.000	122.237	297520.56	1.2765	P	2.0
5	☐	250.000	243.507	588944.83	2.5429	P	0.3
6	☐	500.000	480.942	1189183.38	5.0224	P	0.9
7	☐	1000.000	1011.557	2471873.26	10.5634	A	3.4
8	☐			798.92	0.0032	P	2.4

$$y = 0.0104 * x + 5.6763\text{E-}005$$

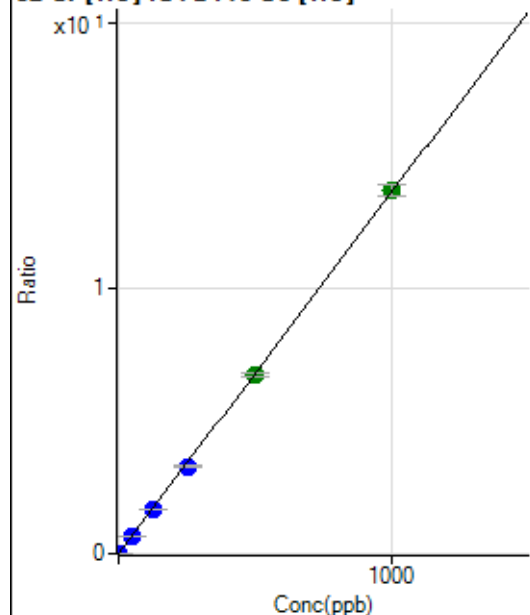
$$R = 0.9997$$

$$DL = 0.00413$$

$$BEC = 0.005436$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1000.05	0.0043	P	7.2
2	☐	2.000	1.983	7324.16	0.0312	P	3.0
3	☐	50.000	48.824	160388.62	0.6687	P	0.8
4	☐	125.000	121.676	386947.04	1.6601	P	1.3
5	☐	250.000	241.975	763649.32	3.2973	P	0.5
6	☐	500.000	495.867	1598888.55	6.7524	A	1.9
7	☐	1000.000	1004.547	3200304.75	13.6750	A	3.1
8	☐			12239.76	0.0483	P	2.0

$$y = 0.0136 * x + 0.0043$$

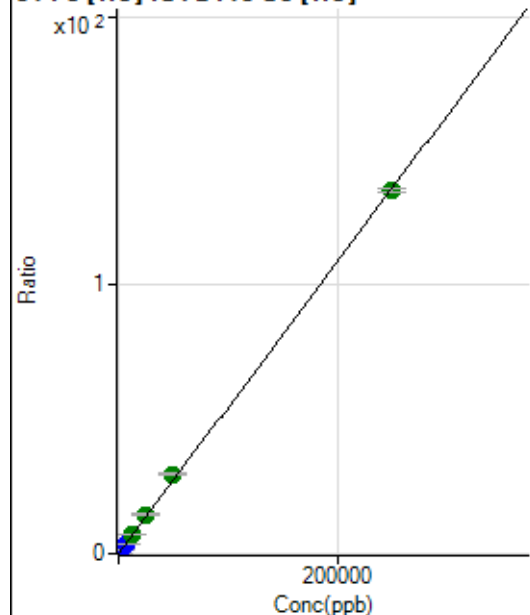
$$R = 1.0000$$

$$DL = 0.06762$$

$$BEC = 0.3124$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	633.36	0.0027	P	25.2
2	☐	50.000	55.832	7741.15	0.0330	P	2.8
3	☐	2500.000	2695.081	351730.40	1.4665	P	1.4
4	☐	6250.000	6660.135	843742.78	3.6200	P	1.2
5	☐	12500.000	13712.448	1725480.05	7.4502	A	1.5
6	☐	25000.000	27010.742	3474165.24	14.6729	A	1.4
7	☐	50000.000	54538.278	6932418.96	29.6237	A	3.3
8	☐	250000.00	248818.44	34243191.27	135.1417	A	1.1

$$y = 5.4312E-004 * x + 0.0027$$

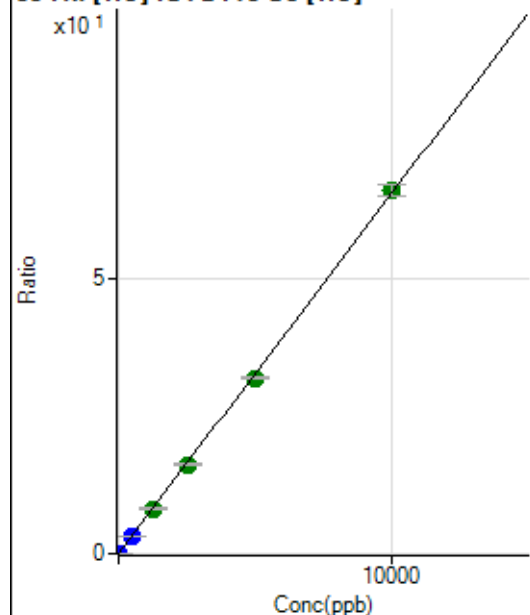
$$R = 0.9998$$

$$DL = 3.757$$

$$BEC = 4.968$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	268.89	0.0011	P	12.2
2	☐	1.000	1.026	1841.25	0.0079	P	3.6
3	☐	500.000	492.836	772731.94	3.2220	P	2.4
4	☐	1250.000	1241.950	1891846.03	8.1177	A	3.2
5	☐	2500.000	2472.970	3743347.44	16.1627	A	1.0
6	☐	5000.000	4868.802	7534012.18	31.8202	A	1.0
7	☐	10000.000	10073.721	15405912.55	65.8359	A	3.2
8	☐			17824.55	0.0704	P	2.7

$$y = 0.0065 * x + 0.0011$$

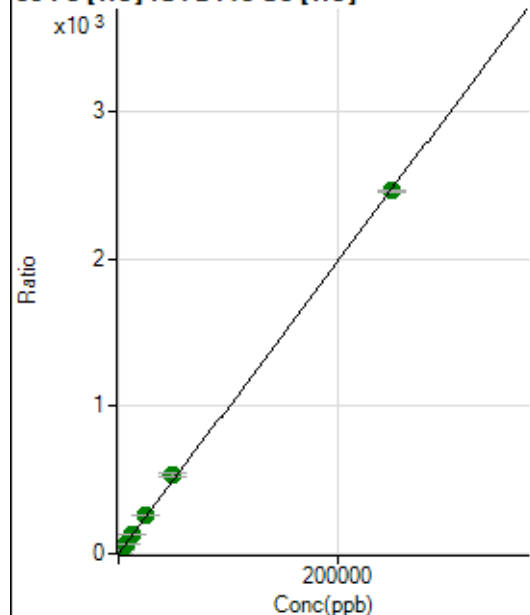
$$R = 0.9999$$

$$DL = 0.06416$$

$$BEC = 0.175$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4728.65	0.0201	P	2.4
2	☐	50.000	54.527	131050.14	0.5589	P	1.6
3	☐	2500.000	2672.253	6338105.23	26.4273	A	2.4
4	☐	6250.000	6620.756	15254201.15	65.4463	A	1.8
5	☐	12500.000	13315.007	30478608.32	131.5987	A	0.2
6	☐	25000.000	26212.916	61335809.24	259.0556	A	1.3
7	☐	50000.000	54171.353	125266258.3	535.3402	A	3.4
8	☐	250000.00	248992.69	623491895.4	2460.560	A	0.7

$$y = 0.0099 * x + 0.0201$$

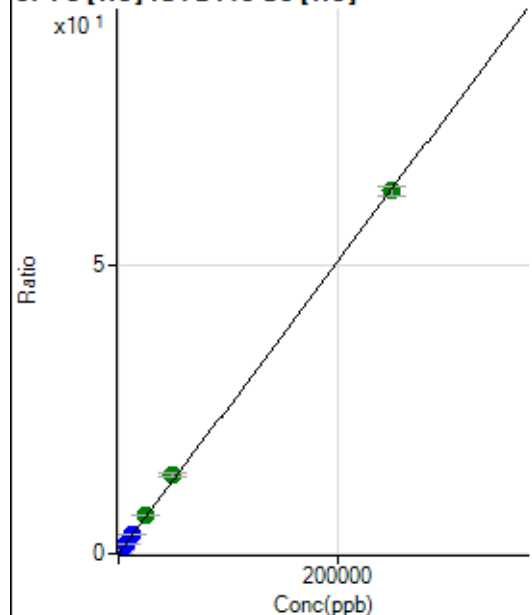
$$R = 0.9998$$

$$DL = 0.1486$$

$$BEC = 2.035$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	135.19	0.0006	P	8.5
2	☐	50.000	54.577	3359.71	0.0143	P	2.4
3	☐	2500.000	2616.954	158334.17	0.6601	P	1.4
4	☐	6250.000	6518.735	383078.74	1.6435	P	1.3
5	☐	12500.000	13006.869	759372.72	3.2788	P	0.4
6	☐	25000.000	26880.189	1604200.74	6.7754	A	1.2
7	☐	50000.000	53686.028	3165815.99	13.5315	A	4.7
8	☐	250000.00	249041.54	15903533.57	62.7684	A	2.4

$$y = 2.5204\text{E-}004 * x + 5.7469\text{E-}004$$

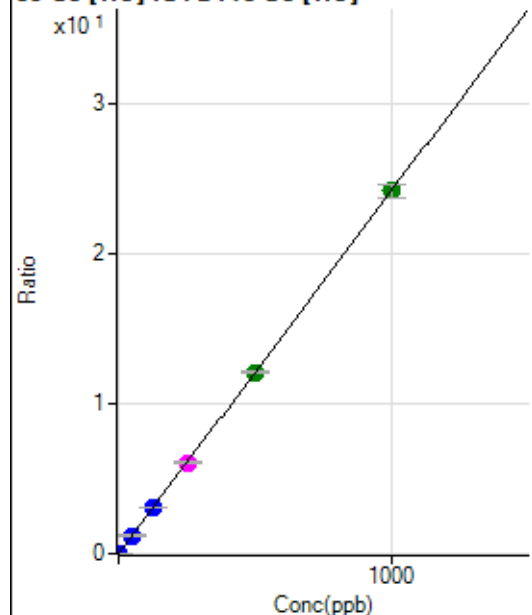
$$R = 0.9999$$

$$DL = 0.5794$$

$$BEC = 2.28$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	94.44	0.0004	P	9.2
2	☐	1.000	1.003	5792.34	0.0247	P	1.5
3	☐	50.000	50.146	291541.51	1.2156	P	1.7
4	☐	125.000	125.440	708600.15	3.0401	P	1.4
5	☐	250.000	251.269	1410345.47	6.0892	M	3.1
6	☐	500.000	500.017	2868975.44	12.1170	A	1.1
7	☐	1000.000	999.612	5668144.22	24.2233	A	3.4
8	☐			14103.73	0.0557	P	3.8

$$y = 0.0242 * x + 4.0182\text{E-}004$$

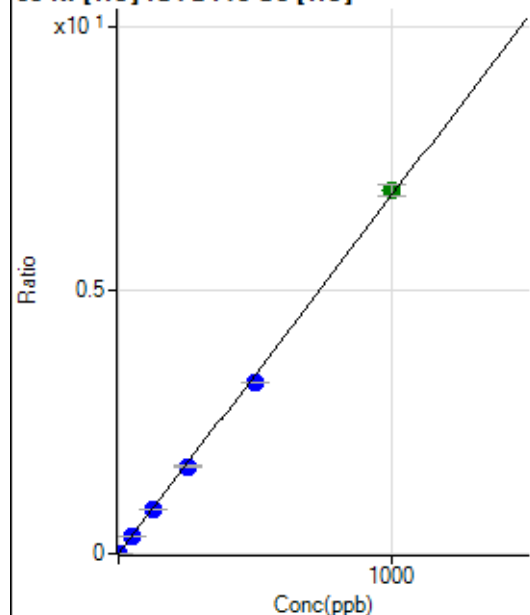
$$R = 1.0000$$

$$DL = 0.004599$$

$$BEC = 0.01658$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	143.34	0.0006	P	19.8
2	☐	1.000	1.075	1855.70	0.0079	P	3.5
3	☐	50.000	49.868	81448.05	0.3396	P	0.6
4	☐	125.000	123.774	196246.74	0.8419	P	0.7
5	☐	250.000	243.781	383907.29	1.6576	P	0.5
6	☐	500.000	477.372	768421.61	3.2453	P	0.5
7	☐	1000.000	1013.029	1611408.78	6.8862	A	3.2
8	☐			6322.57	0.0250	P	2.1

$$y = 0.0068 * x + 6.0886E-004$$

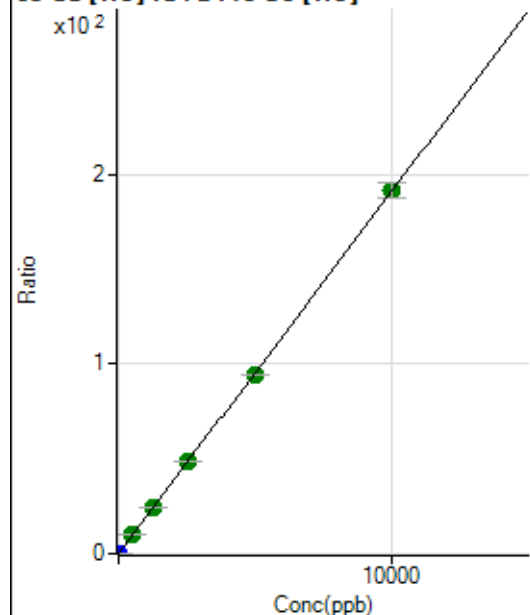
$$R = 0.9996$$

$$DL = 0.0533$$

$$BEC = 0.08958$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1195.62	0.0051	P	5.0
2	☐	2.000	1.994	10127.04	0.0432	P	1.1
3	☐	500.000	525.934	2411528.02	10.0553	A	3.1
4	☐	1250.000	1271.617	5665206.51	24.3047	A	0.6
5	☐	2500.000	2525.440	11178099.28	48.2643	A	0.2
6	☐	5000.000	4938.785	22347278.83	94.3814	A	0.7
7	☐	10000.000	10020.249	44801117.11	191.4842	A	4.4
8	☐			14020.36	0.0553	P	1.2

$$y = 0.0191 * x + 0.0051$$

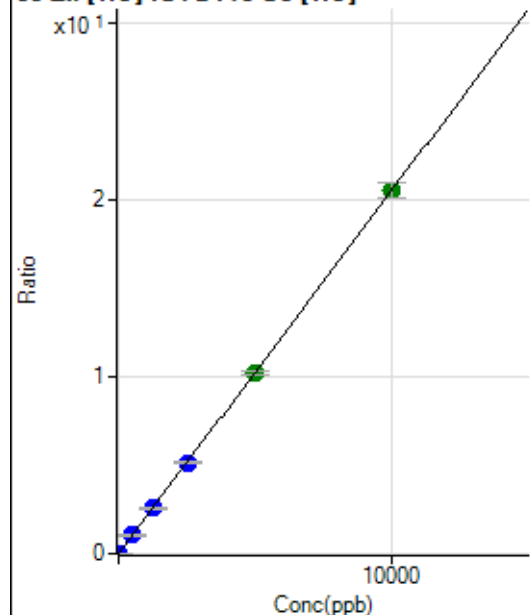
$$R = 1.0000$$

$$DL = 0.03961$$

$$BEC = 0.2661$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	558.91	0.0024	P	6.5
2	☐	2.000	2.427	1722.35	0.0074	P	10.6
3	☐	500.000	506.807	249713.67	1.0412	P	1.8
4	☐	1250.000	1249.242	597332.13	2.5629	P	2.0
5	☐	2500.000	2510.807	1192439.04	5.1487	P	0.7
6	☐	5000.000	5002.921	2428602.55	10.2567	A	2.2
7	☐	10000.000	9995.592	4793810.66	20.4901	A	4.3
8	☐			19175.29	0.0757	P	2.1

$$y = 0.0020 * x + 0.0024$$

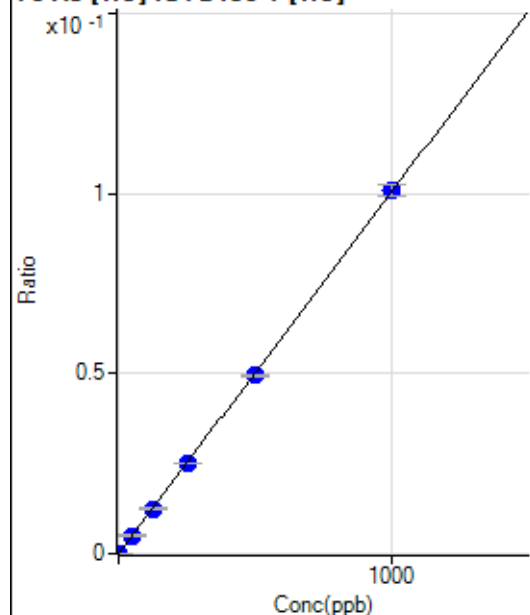
$$R = 1.0000$$

$$DL = 0.2267$$

$$BEC = 1.159$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	28.00	0.0000	P	8.9
2	☐	1.000	0.975	304.04	0.0001	P	7.5
3	☐	50.000	50.341	14623.01	0.0051	P	1.2
4	☐	125.000	124.427	35380.55	0.0125	P	1.2
5	☐	250.000	250.497	70428.03	0.0252	P	0.3
6	☐	500.000	493.109	141892.29	0.0496	P	0.6
7	☐	1000.000	1003.376	289709.68	0.1009	P	3.3
8	☐			126.01	0.0000	P	0.8

$$y = 1.0050E-004 * x + 9.9636E-006$$

$$R = 1.0000$$

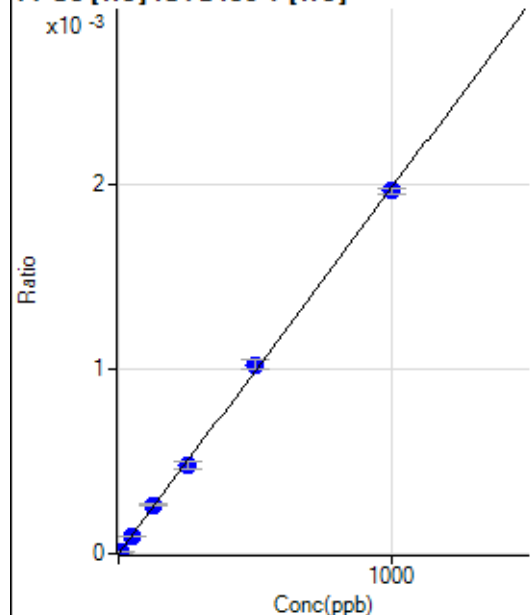
$$DL = 0.02646$$

$$BEC = 0.09914$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	4.775	27.78	0.0000	P	24.7
3	☐	50.000	48.262	276.67	0.0001	P	3.4
4	☐	125.000	133.069	745.59	0.0003	P	4.3
5	☐	250.000	242.348	1342.30	0.0005	P	7.6
6	☐	500.000	517.784	2934.78	0.0010	P	4.6
7	☐	1000.000	992.100	5643.40	0.0020	P	1.6
8	☐			1.11	0.0000	P	173.2

$$y = 1.9793\text{E-}006 * x + 3.9274\text{E-}007$$

$$R = 0.9997$$

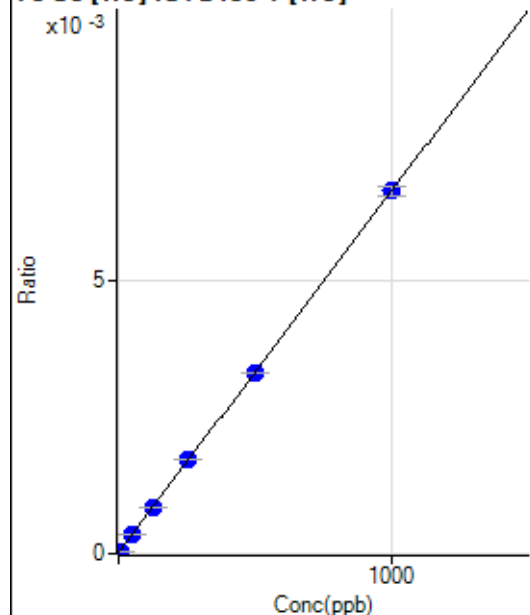
$$DL = 1.031$$

$$BEC = 0.1984$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	59.34	0.0000	P	5.7
2	☐	5.000	4.563	145.02	0.0001	P	0.4
3	☐	50.000	52.086	1059.15	0.0004	P	0.8
4	☐	125.000	125.116	2409.12	0.0009	P	2.2
5	☐	250.000	256.411	4821.65	0.0017	P	1.2
6	☐	500.000	496.366	9498.16	0.0033	P	0.8
7	☐	1000.000	1000.098	19144.88	0.0067	P	2.9
8	☐			71.01	0.0000	P	13.2

$$y = 6.6425\text{E-}006 * x + 2.1126\text{E-}005$$

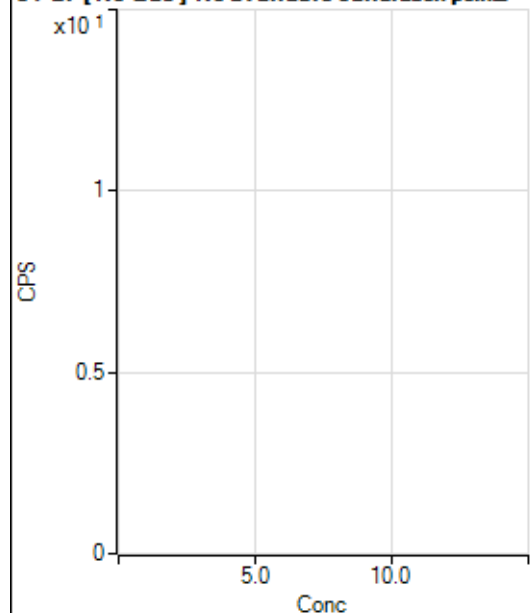
$$R = 1.0000$$

$$DL = 0.5465$$

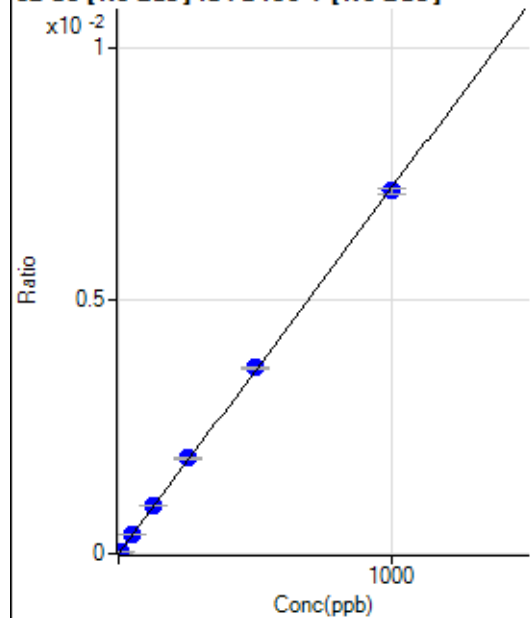
$$BEC = 3.18$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			23427.11		P	2.7
2	☐			24560.32		P	0.8
3	☐			23808.09		P	2.4
4	☐			23366.90		P	1.6
5	☐			22467.91		P	2.2
6	☐			23052.74		P	1.1
7	☐			24837.47		P	0.6
8	☐			27171.03		P	2.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1.99	0.0000	P	4393.
2	☐	5.000	5.624	1182.56	0.0000	P	7.8
3	☐	50.000	53.418	11534.61	0.0004	P	1.0
4	☐	125.000	132.327	27961.08	0.0010	P	1.6
5	☐	250.000	260.893	55668.18	0.0019	P	1.0
6	☐	500.000	507.971	112123.72	0.0037	P	1.8
7	☐	1000.000	992.201	220553.90	0.0072	P	1.6
8	☐			250.68	0.0000	P	27.4

$$y = 7.2190E-006 * x + 6.3846E-008$$

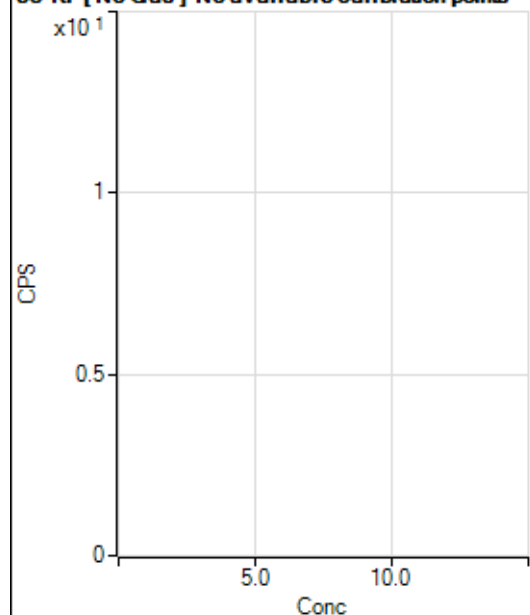
$$R = 0.9999$$

$$DL = 1.166$$

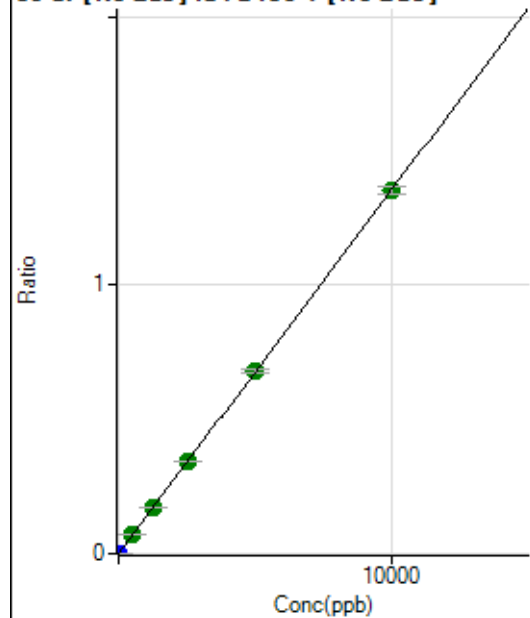
$$BEC = 0.008844$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			945.60		P	5.3
2	☐			878.93		P	4.5
3	☐			967.82		P	2.6
4	☐			962.27		P	7.6
5	☐			950.04		P	6.0
6	☐			993.38		P	9.7
7	☐			992.27		P	4.7
8	☐			1026.72		P	5.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1500.12	0.0001	P	4.0
2	☐	1.000	1.159	6043.13	0.0002	P	10.3
3	☐	500.000	510.866	2071218.25	0.0693	A	1.2
4	☐	1250.000	1287.117	5104977.03	0.1744	A	1.2
5	☐	2500.000	2528.232	10124771.50	0.3425	A	1.2
6	☐	5000.000	5019.233	20789255.32	0.6800	A	2.1
7	☐	10000.000	9978.143	41620420.03	1.3517	A	2.1
8	☐			19728.21	0.0006	P	2.2

$$y = 1.3546E-004 * x + 5.0920E-005$$

$$R = 1.0000$$

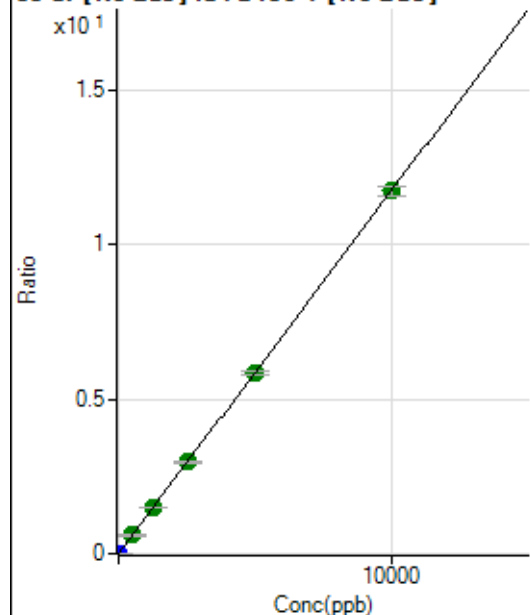
$$DL = 0.04494$$

$$BEC = 0.3759$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	772.27	0.0000	P	3.9
2	☐	1.000	1.109	38631.98	0.0013	P	1.4
3	☐	500.000	503.988	17697113.42	0.5918	A	1.6
4	☐	1250.000	1284.097	44126153.42	1.5077	A	1.6
5	☐	2500.000	2517.336	87358863.06	2.9556	A	1.1
6	☐	5000.000	4993.208	179247331.7	5.8626	A	1.8
7	☐	10000.000	9994.600	361271913.6	11.7347	A	3.0
8	☐			160518.16	0.0052	P	3.4

$$y = 0.0012 * x + 2.6214E-005$$

$$R = 1.0000$$

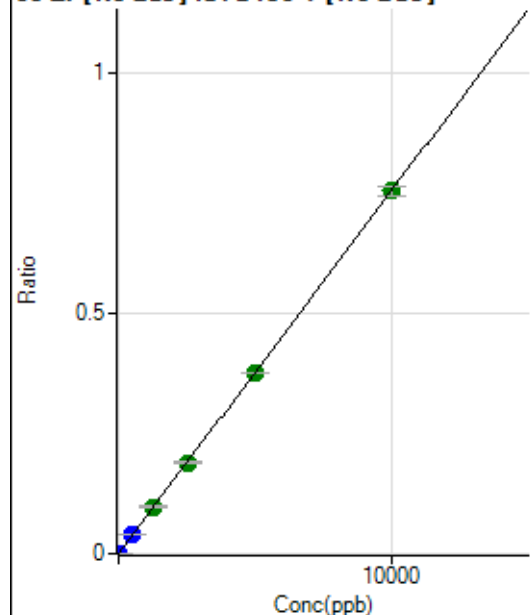
$$DL = 0.002589$$

$$BEC = 0.02233$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1127.85	0.0000	P	12.3
2	☐	1.000	9.864	22732.87	0.0008	P	1.8
3	☐	500.000	507.151	1144355.39	0.0383	P	0.7
4	☐	1250.000	1287.901	2841784.29	0.0971	A	2.6
5	☐	2500.000	2514.418	5602364.41	0.1895	A	0.4
6	☐	5000.000	4990.414	11502299.56	0.3761	A	0.4
7	☐	10000.000	9996.092	23196063.54	0.7534	A	2.5
8	☐			7630.07	0.0002	P	4.1

$$y = 7.5366E-005 * x + 3.8263E-005$$

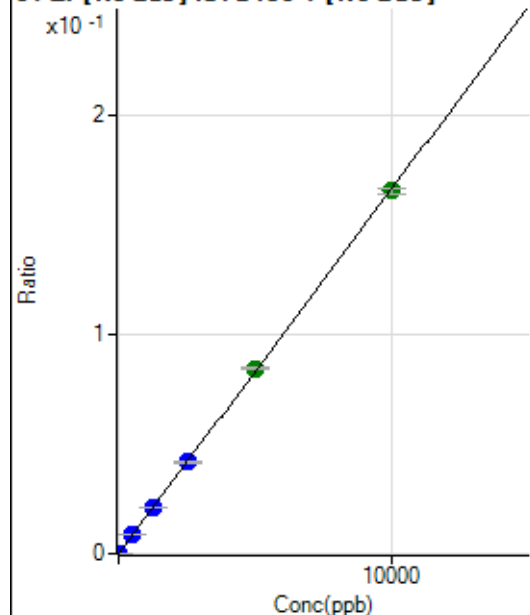
$$R = 1.0000$$

$$DL = 0.1873$$

$$BEC = 0.5077$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	225.01	0.0000	P	15.4
2	☐	1.000	9.744	4931.58	0.0002	P	4.6
3	☐	500.000	506.786	252159.30	0.0084	P	0.6
4	☐	1250.000	1276.721	621299.41	0.0212	P	1.9
5	☐	2500.000	2526.488	1241305.00	0.0420	P	2.0
6	☐	5000.000	5078.588	2581468.13	0.0844	A	1.6
7	☐	10000.000	9950.404	5092687.92	0.1654	A	1.7
8	☐			1533.46	0.0000	P	6.0

$$y = 1.6621\text{E-}005 * x + 7.6430\text{E-}006$$

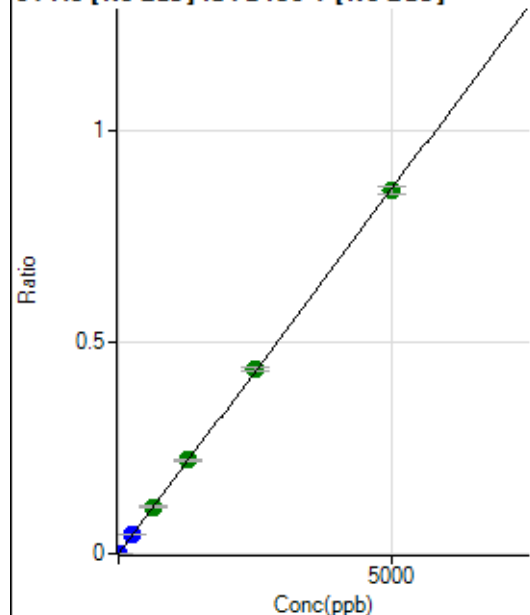
$$R = 1.0000$$

$$DL = 0.2127$$

$$BEC = 0.4598$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	480.58	0.0000	P	16.3
2	☐	5.000	5.084	25991.58	0.0009	P	0.9
3	☐	250.000	253.646	1309648.30	0.0438	P	1.9
4	☐	625.000	645.711	3262460.06	0.1115	A	1.7
5	☐	1250.000	1284.709	6553732.65	0.2217	A	1.5
6	☐	2500.000	2527.245	13336427.12	0.4362	A	1.8
7	☐	5000.000	4974.929	26436872.47	0.8586	A	2.2
8	☐			9142.13	0.0003	P	2.8

$$y = 1.7259\text{E-}004 * x + 1.6326\text{E-}005$$

$$R = 0.9999$$

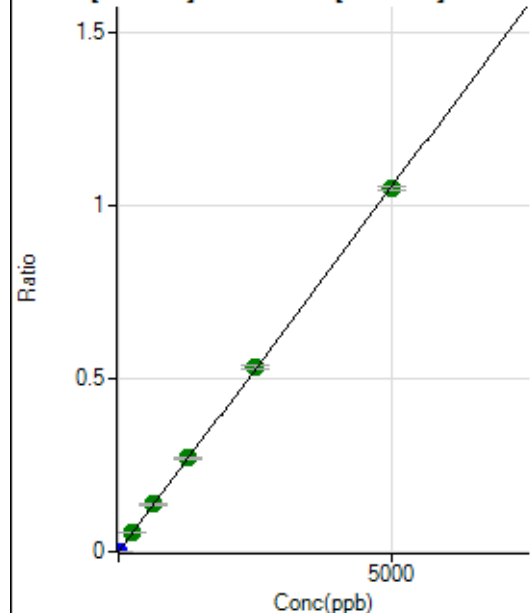
$$DL = 0.04629$$

$$BEC = 0.09459$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	275.01	0.0000	P	17.5
2	☐	5.000	5.145	31764.85	0.0011	P	1.7
3	☐	250.000	254.733	1603596.68	0.0536	A	1.7
4	☐	625.000	647.204	3986901.96	0.1362	A	1.5
5	☐	1250.000	1287.523	8008581.34	0.2710	A	1.6
6	☐	2500.000	2527.488	16263708.69	0.5319	A	1.7
7	☐	5000.000	4973.863	32234703.84	1.0468	A	1.1
8	☐			10787.85	0.0004	P	3.2

$$y = 2.1045\text{E-}004 * x + 9.3298\text{E-}006$$

$$R = 0.9999$$

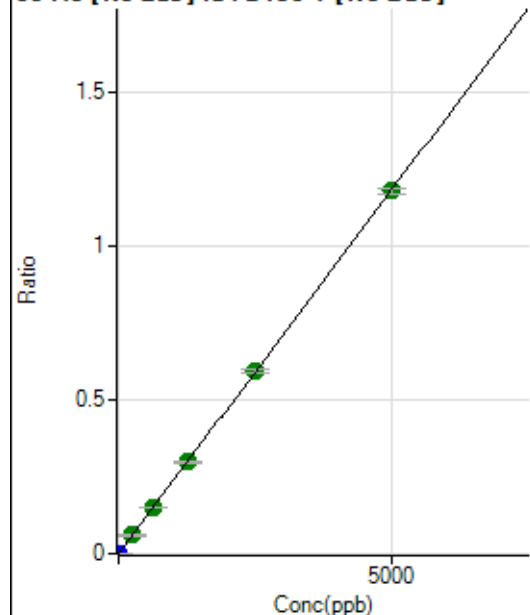
$$DL = 0.02326$$

$$BEC = 0.04433$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	441.68	0.0000	P	10.2
2	☐	5.000	5.029	34930.69	0.0012	P	1.1
3	☐	250.000	252.871	1784285.04	0.0597	A	1.4
4	☐	625.000	641.523	4429369.41	0.1513	A	1.5
5	☐	1250.000	1259.094	8776938.48	0.2970	A	2.2
6	☐	2500.000	2512.053	18117461.69	0.5925	A	1.9
7	☐	5000.000	4989.491	36241398.73	1.1769	A	1.6
8	☐			26425.89	0.0009	P	2.3

$$y = 2.3587\text{E-}004 * x + 1.4983\text{E-}005$$

$$R = 1.0000$$

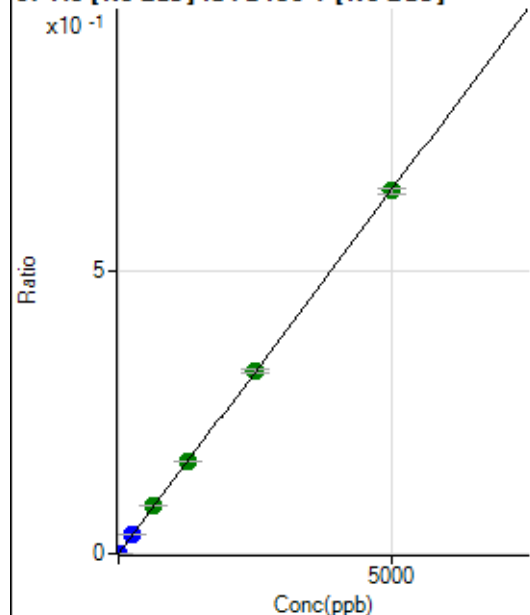
$$DL = 0.01944$$

$$BEC = 0.06352$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	155.56	0.0000	P	17.0
2	☐	5.000	5.238	19708.87	0.0007	P	1.6
3	☐	250.000	255.373	980616.66	0.0328	P	1.1
4	☐	625.000	652.827	2453424.69	0.0838	A	0.6
5	☐	1250.000	1271.366	4823646.25	0.1632	A	1.6
6	☐	2500.000	2504.406	9830419.67	0.3215	A	1.9
7	☐	5000.000	4988.708	19719462.94	0.6404	A	1.3
8	☐			6468.36	0.0002	P	4.6

$$y = 1.2837E-004 * x + 5.2799E-006$$

$$R = 1.0000$$

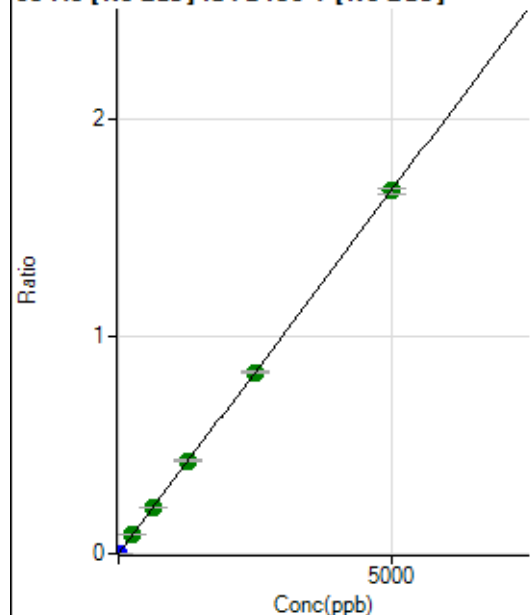
$$DL = 0.02096$$

$$BEC = 0.04113$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	375.01	0.0000	P	16.4
2	☐	5.000	5.101	50063.45	0.0017	P	1.6
3	☐	250.000	258.822	2593148.56	0.0867	A	0.9
4	☐	625.000	644.990	6324667.33	0.2161	A	0.5
5	☐	1250.000	1275.326	12625445.08	0.4272	A	1.9
6	☐	2500.000	2496.243	25566139.63	0.8361	A	1.0
7	☐	5000.000	4992.607	51493509.83	1.6723	A	1.5
8	☐			15486.84	0.0005	P	4.3

$$y = 3.3495E-004 * x + 1.2738E-005$$

$$R = 1.0000$$

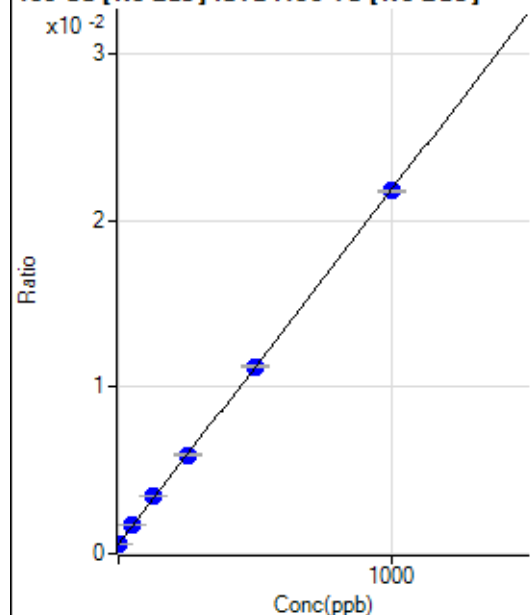
$$DL = 0.0187$$

$$BEC = 0.03803$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	8055.33	0.0006	P	5.2
2	☐	1.000	2.060	8600.11	0.0006	P	1.0
3	☐	50.000	53.137	24263.62	0.0017	P	1.9
4	☐	125.000	136.496	48268.45	0.0035	P	1.5
5	☐	250.000	251.833	84346.96	0.0059	P	0.9
6	☐	500.000	501.844	167252.82	0.0112	P	1.5
7	☐	1000.000	997.025	320931.79	0.0218	P	0.6
8	☐			8872.54	0.0006	P	2.8

$$y = 2.1246E-005 * x + 5.7660E-004$$

R = 0.9999

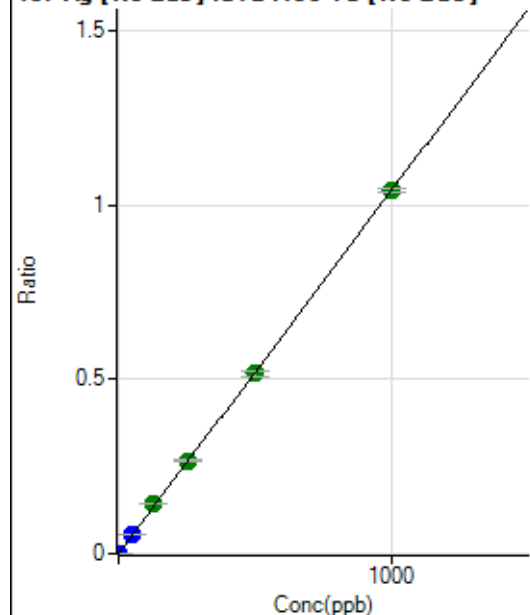
DL = 4.214

BEC = 27.14

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	380.57	0.0000	P	24.3
2	☐	1.000	0.992	14713.76	0.0011	P	1.8
3	☐	50.000	51.715	767338.12	0.0539	P	0.6
4	☐	125.000	136.611	1977607.12	0.1424	A	1.2
5	☐	250.000	254.883	3781084.81	0.2657	A	2.1
6	☐	500.000	496.588	7703171.53	0.5177	A	3.3
7	☐	1000.000	998.948	15358286.46	1.0413	A	1.1
8	☐			4962.16	0.0003	P	9.4

$$y = 0.0010 * x + 2.7200E-005$$

R = 0.9999

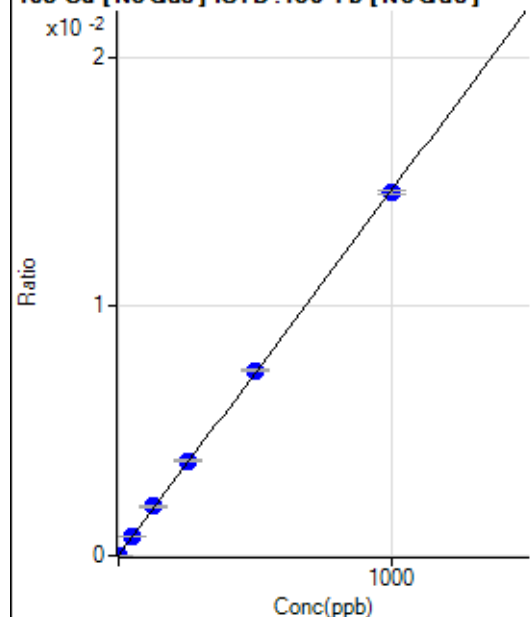
DL = 0.01901

BEC = 0.02609

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	140.28	0.0000	P	28.4
2	☐	1.000	0.924	326.40	0.0000	P	14.1
3	☐	50.000	53.695	11336.71	0.0008	P	2.8
4	☐	125.000	133.972	27398.22	0.0020	P	3.0
5	☐	250.000	260.005	54365.30	0.0038	P	2.1
6	☐	500.000	506.361	110591.01	0.0074	P	1.6
7	☐	1000.000	993.012	214790.55	0.0146	P	1.2
8	☐			208.34	0.0000	P	15.3

$$y = 1.4656E-005 * x + 1.0029E-005$$

R = 0.9999

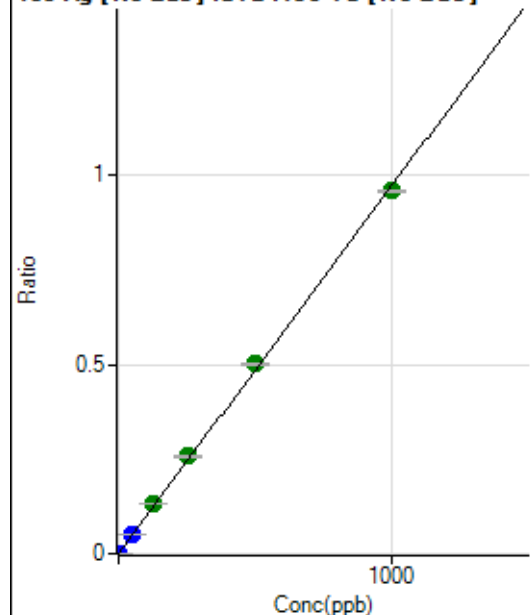
DL = 0.5821

BEC = 0.6843

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	325.01	0.0000	P	5.8
2	☐	1.000	1.003	13835.17	0.0010	P	2.2
3	☐	50.000	53.721	743426.64	0.0523	P	0.4
4	☐	125.000	136.326	1840356.94	0.1326	A	2.3
5	☐	250.000	264.966	3666571.22	0.2576	A	1.3
6	☐	500.000	515.368	7457453.73	0.5011	A	1.4
7	☐	1000.000	986.972	14152564.90	0.9596	A	0.7
8	☐			4692.59	0.0003	P	4.0

$$y = 9.7223E-004 * x + 2.3258E-005$$

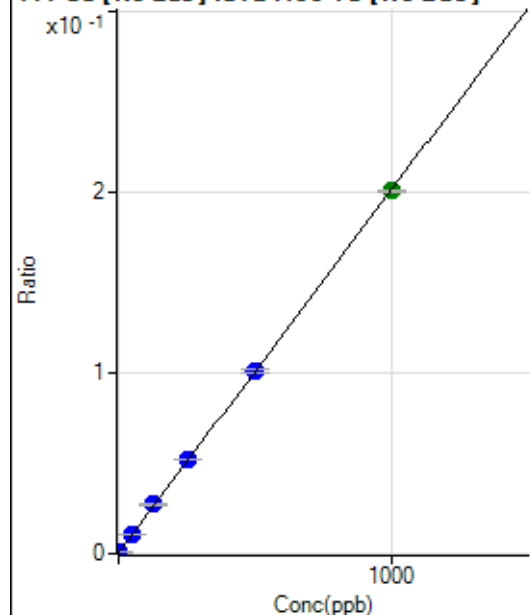
R = 0.9997

DL = 0.004167

BEC = 0.02392

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	5655.82	0.0004	P	5.3
2	☐	1.000	1.093	8654.44	0.0006	P	2.1
3	☐	50.000	52.478	155608.92	0.0109	P	0.3
4	☐	125.000	133.754	378319.54	0.0272	P	1.3
5	☐	250.000	256.706	738992.90	0.0519	P	0.6
6	☐	500.000	500.971	1502224.35	0.1009	P	2.2
7	☐	1000.000	996.620	2955863.99	0.2004	A	0.8
8	☐			7141.39	0.0005	P	2.6

$$y = 2.0070\text{E-}004 * x + 4.0485\text{E-}004$$

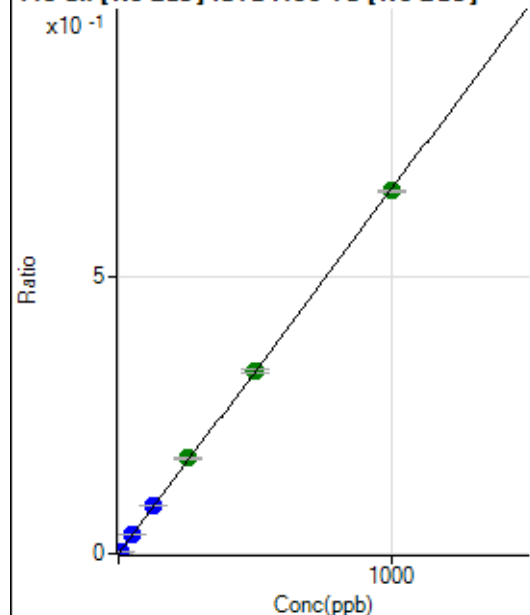
$$R = 0.9999$$

$$DL = 0.3215$$

$$BEC = 2.017$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	758.38	0.0001	P	4.8
2	☐	5.000	4.990	46125.49	0.0033	P	0.5
3	☐	50.000	51.837	484531.77	0.0341	P	1.9
4	☐	125.000	131.292	1196573.36	0.0862	P	1.7
5	☐	250.000	262.481	2450988.05	0.1723	A	2.0
6	☐	500.000	501.801	4899734.87	0.3293	A	1.8
7	☐	1000.000	995.101	9628969.57	0.6529	A	0.4
8	☐			6952.56	0.0005	P	7.0

$$y = 6.5604\text{E-}004 * x + 5.4307\text{E-}005$$

$$R = 0.9999$$

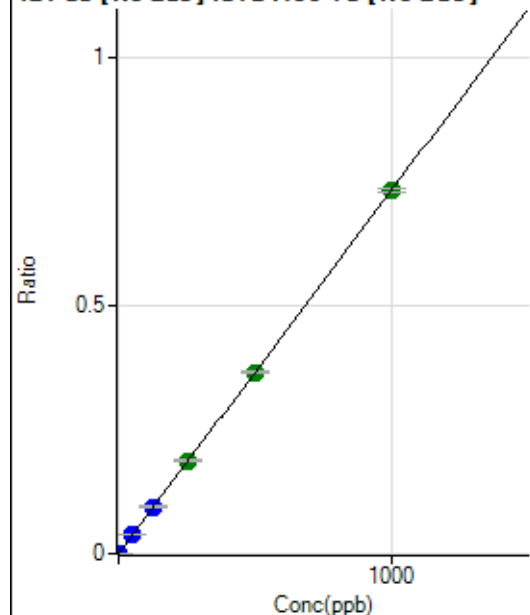
$$DL = 0.01196$$

$$BEC = 0.08278$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	77.78	0.0000	P	13.1
2	☐	2.000	1.976	20126.44	0.0015	P	1.7
3	☐	50.000	50.864	529731.80	0.0372	P	0.8
4	☐	125.000	129.335	1314349.50	0.0947	P	2.0
5	☐	250.000	256.006	2666119.61	0.1874	A	2.7
6	☐	500.000	499.105	5436504.50	0.3653	A	1.3
7	☐	1000.000	998.361	10777085.83	0.7307	A	1.0
8	☐			6443.36	0.0004	P	8.6

$$y = 7.3192\text{E-}004 * x + 5.5719\text{E-}006$$

$$R = 1.0000$$

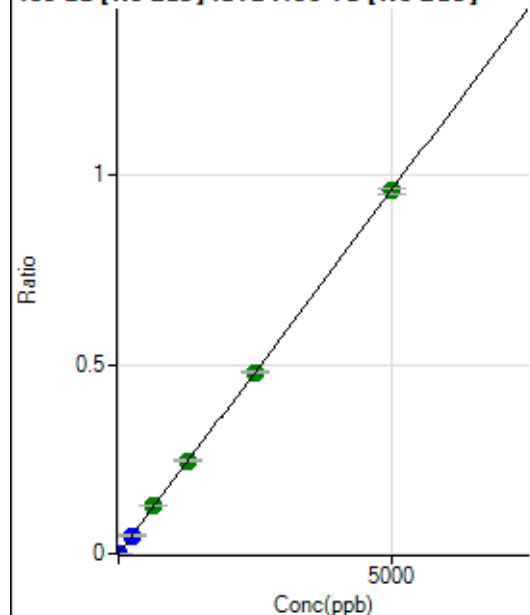
$$DL = 0.002982$$

$$BEC = 0.007613$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	63.89	0.0000	P	32.0
2	☐	10.000	10.168	27152.90	0.0020	P	1.4
3	☐	250.000	250.484	685065.18	0.0482	P	1.6
4	☐	625.000	662.881	1768995.68	0.1274	A	2.0
5	☐	1250.000	1281.249	3503975.99	0.2463	A	3.3
6	☐	2500.000	2493.437	7132833.58	0.4793	A	0.8
7	☐	5000.000	4990.710	14147600.14	0.9593	A	1.7
8	☐			6162.66	0.0004	P	2.5

$$y = 1.9221\text{E-}004 * x + 4.5642\text{E-}006$$

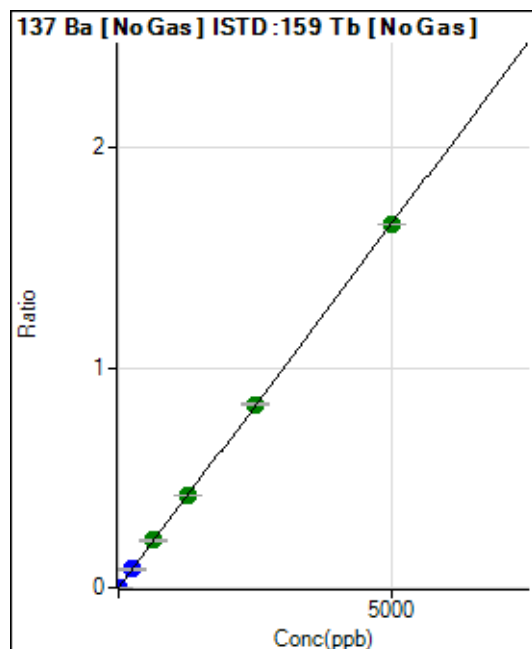
$$R = 1.0000$$

$$DL = 0.02278$$

$$BEC = 0.02375$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	69.44	0.0000	P	28.8
2	☐	10.000	10.149	46614.45	0.0034	P	3.4
3	☐	250.000	252.659	1189615.22	0.0836	P	1.9
4	☐	625.000	654.084	3005336.27	0.2165	A	2.3
5	☐	1250.000	1267.803	5970559.86	0.4196	A	1.8
6	☐	2500.000	2512.122	12373449.15	0.8314	A	0.9
7	☐	5000.000	4985.720	24336336.66	1.6501	A	0.1
8	☐			10732.31	0.0007	P	4.5

$$y = 3.3096E-004 * x + 4.9806E-006$$

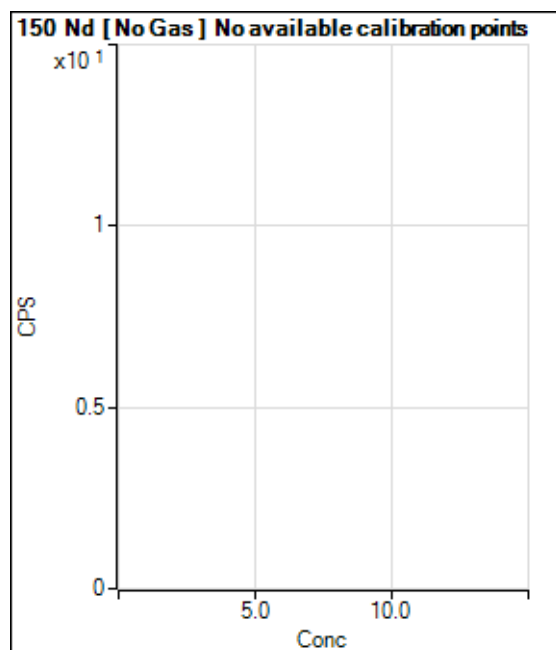
$$R = 1.0000$$

$$DL = 0.013$$

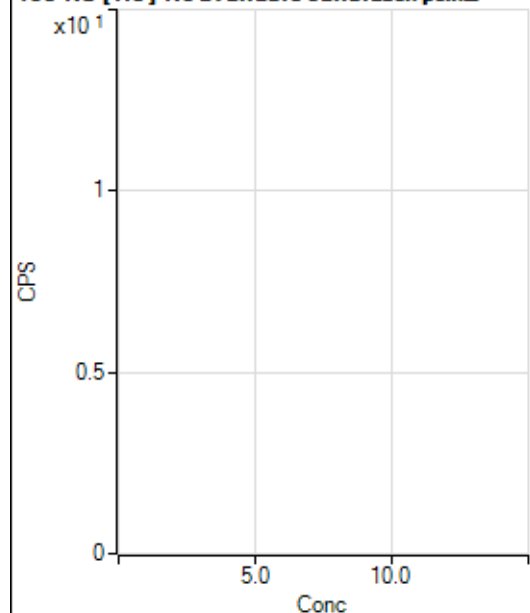
$$BEC = 0.01505$$

Weight: <None>

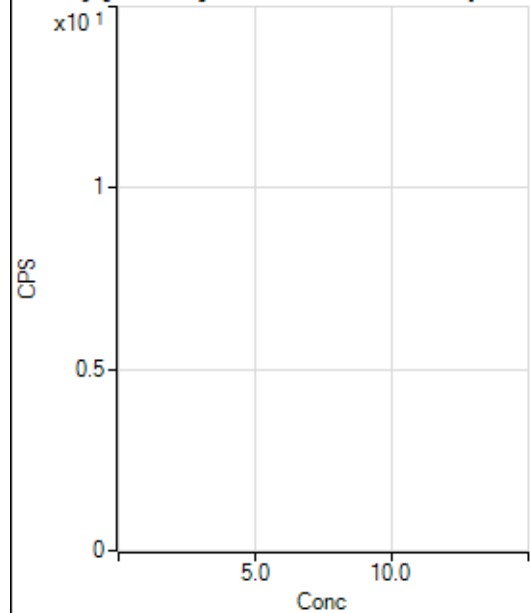
Min Conc: 0



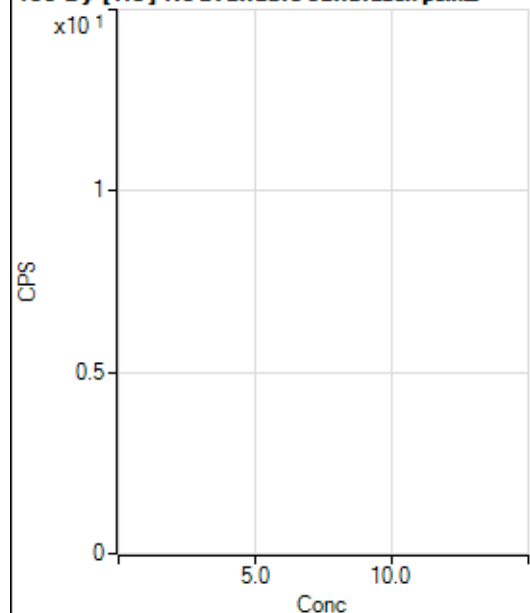
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			0.00		P	
2	☐			4.45		P	86.6
3	☐			31.11		P	44.6
4	☐			82.22		P	33.8
5	☐			173.34		P	11.5
6	☐			282.23		P	8.9
7	☐			586.69		P	10.8
8	☐			131.12		P	12.8

150 Nd [He] No available calibration points

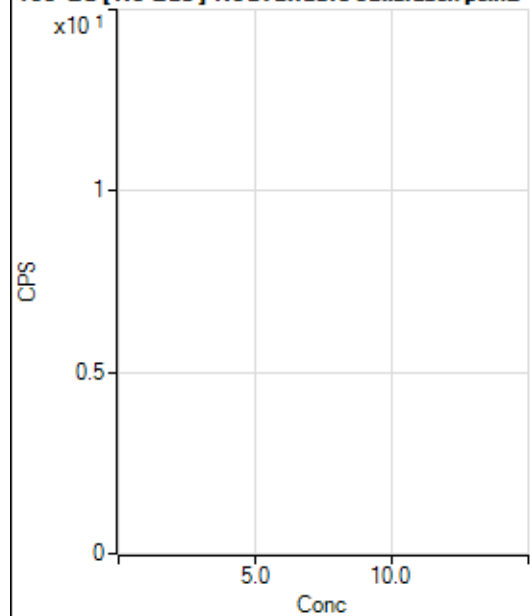
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1.11		P	173.2
2	☐			1.11		P	173.2
3	☐			2.22		P	86.6
4	☐			3.33		P	173.2
5	☐			7.78		P	65.5
6	☐			11.11		P	45.8
7	☐			24.44		P	61.5
8	☐			30.00		P	61.9

156 Dy [No Gas] No available calibration points

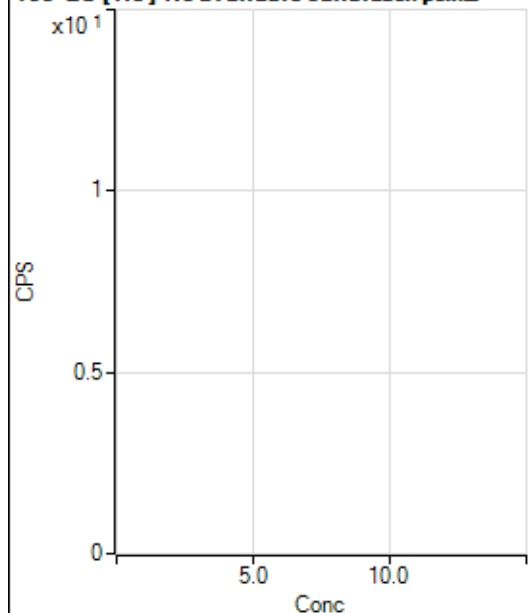
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			25.00		P	33.3
2	☐			11.11		P	114.6
3	☐			55.56		P	37.8
4	☐			55.56		P	60.6
5	☐			138.89		P	17.3
6	☐			286.12		P	22.2
7	☐			500.03		P	10.4
8	☐			1886.30		P	10.0

156 Dy [He] No available calibration points

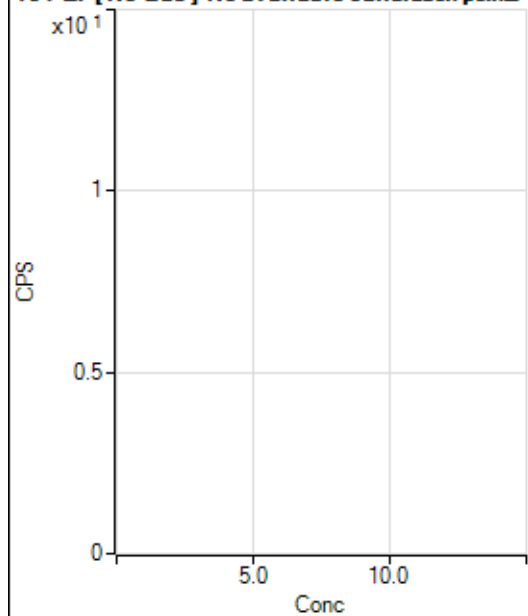
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			12.22		P	15.7
2	☐			4.44		P	43.4
3	☐			13.33		P	25.0
4	☐			17.78		P	47.2
5	☐			48.89		P	59.6
6	☐			107.78		P	31.6
7	☐			258.89		P	22.9
8	☐			958.93		P	5.2

160 Gd [No Gas] Noavailable calibration poin_

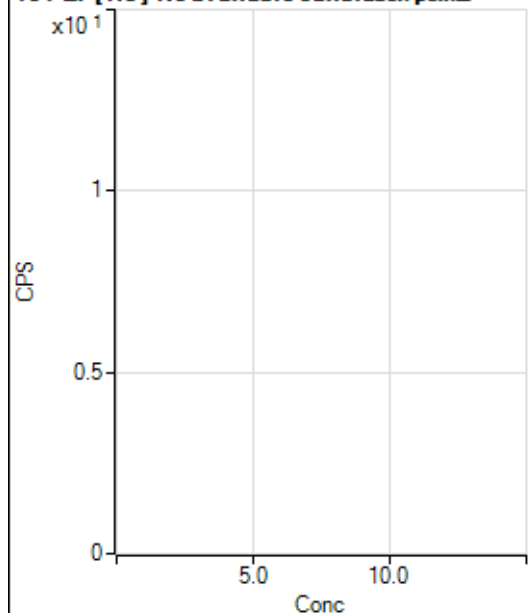
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			111.11		P	8.7
2	☐			130.56		P	13.3
3	☐			138.89		P	3.5
4	☐			158.34		P	18.2
5	☐			233.34		P	32.1
6	☐			325.01		P	24.5
7	☐			586.14		P	0.8
8	☐			2269.70		P	7.4

160 Gd [He] No available calibration points

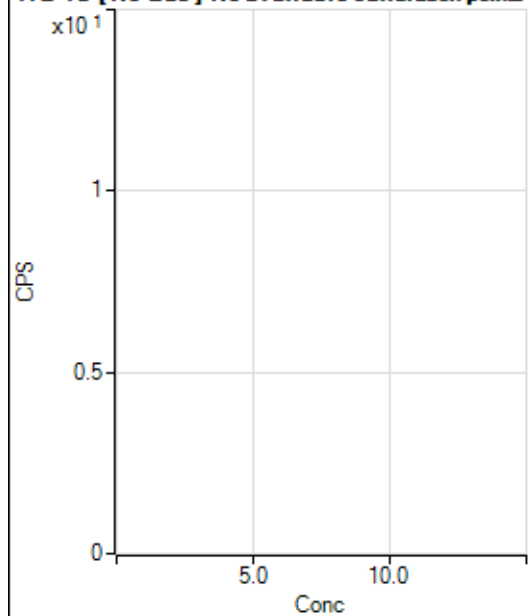
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			52.22		P	3.7
2	☐			37.78		P	22.2
3	☐			56.66		P	27.0
4	☐			80.00		P	11.0
5	☐			125.56		P	12.0
6	☐			170.00		P	10.4
7	☐			268.90		P	8.0
8	☐			1218.96		P	1.6

164 Er [No Gas] No available calibration points

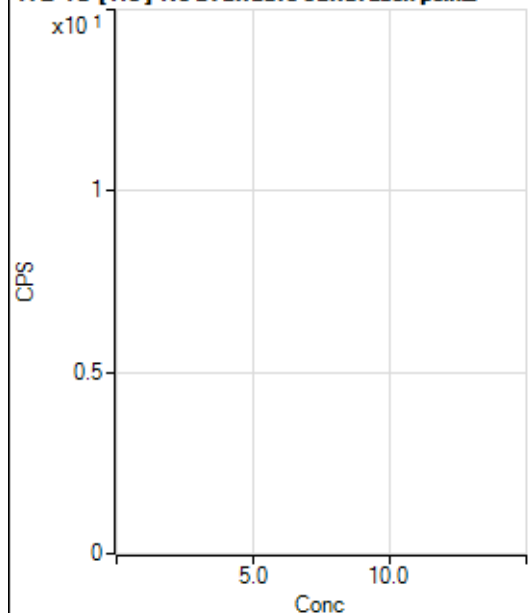
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			113.89		P	4.2
2	☐			83.34		P	20.0
3	☐			100.00		P	8.3
4	☐			97.23		P	35.7
5	☐			102.78		P	28.5
6	☐			94.45		P	41.7
7	☐			175.01		P	24.7
8	☐			366.68		P	9.1

164 Er [He] No available calibration points

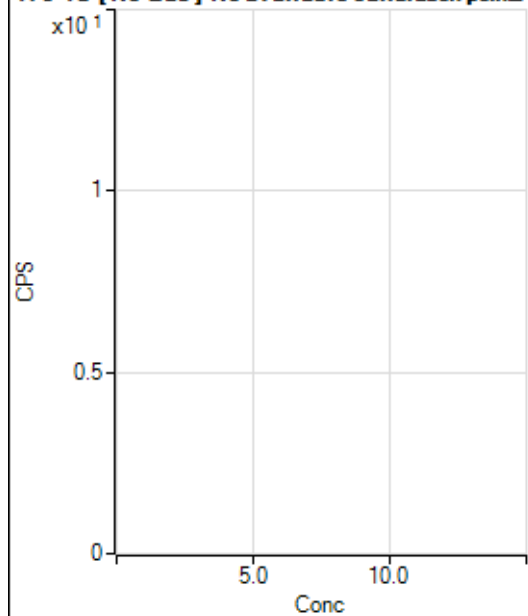
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			31.11		P	16.4
2	☐			30.00		P	22.2
3	☐			40.00		P	25.0
4	☐			51.11		P	19.9
5	☐			37.78		P	18.4
6	☐			37.78		P	10.2
7	☐			80.00		P	12.5
8	☐			183.33		P	12.6

172 Yb [No Gas] No available calibration points

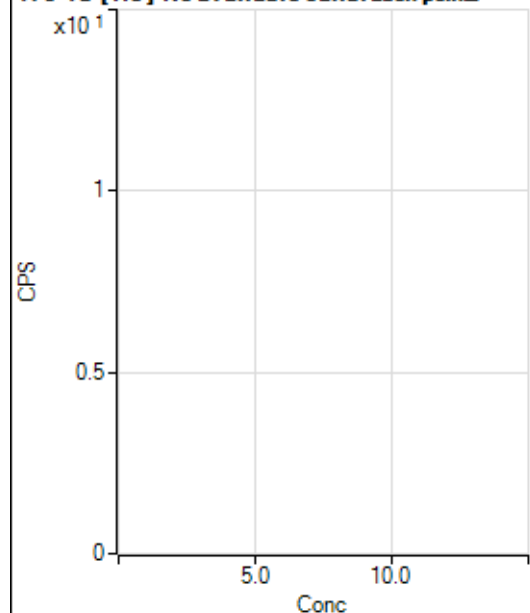
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			55.55		P	69.3
2	☐			33.33		P	25.0
3	☐			22.22		P	21.6
4	☐			25.00		P	88.2
5	☐			41.67		P	20.0
6	☐			38.89		P	24.7
7	☐			52.78		P	18.2
8	☐			105.56		P	22.8

172 Yb [He] No available calibration points

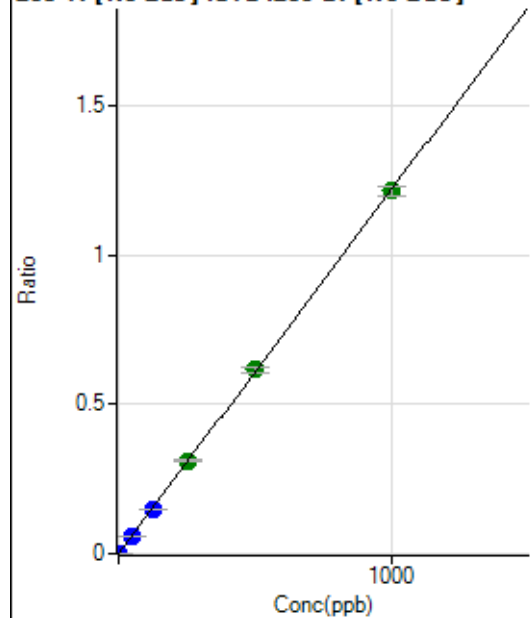
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			14.82		P	57.3
2	☐			16.67		P	66.6
3	☐			16.67		P	57.7
4	☐			12.96		P	89.2
5	☐			27.78		P	40.0
6	☐			24.07		P	48.0
7	☐			24.08		P	53.3
8	☐			50.00		P	11.1

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1941.87		P	5.4
2	☐			1877.96		P	6.2
3	☐			3681.19		P	4.0
4	☐			6593.50		P	3.2
5	☐			11816.70		P	3.1
6	☐			22353.00		P	2.6
7	☐			42223.98		P	1.6
8	☐			1950.20		P	5.6

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2053.90		P	1.3
2	☐			1977.97		P	7.9
3	☐			2900.36		P	4.2
4	☐			4247.07		P	3.3
5	☐			6885.23		P	3.8
6	☐			11555.22		P	2.0
7	☐			22385.92		P	1.3
8	☐			2077.98		P	5.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1197.31	0.0002	P	3.0
2	☐	1.000	0.938	9859.53	0.0013	P	3.4
3	☐	50.000	47.591	452234.31	0.0582	P	1.2
4	☐	125.000	119.817	1130766.30	0.1463	P	1.1
5	☐	250.000	255.935	2396313.31	0.3124	A	1.2
6	☐	500.000	505.575	4860518.21	0.6169	A	3.1
7	☐	1000.000	996.497	9314493.87	1.2157	A	2.8
8	☐			2922.64	0.0004	P	9.0

$$y = 0.0012 * x + 1.5789E-004$$

$$R = 0.9999$$

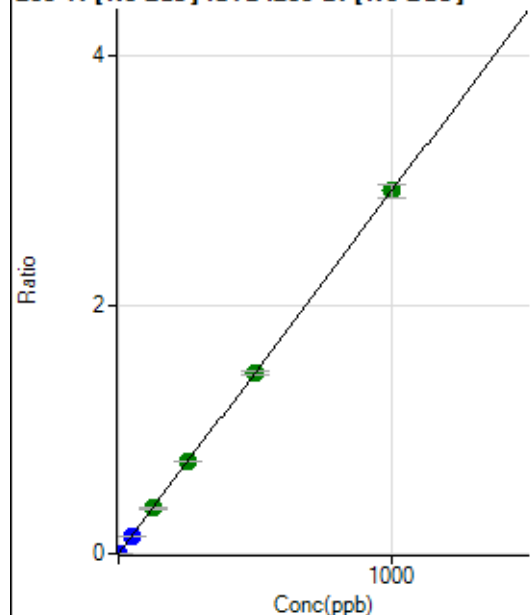
$$DL = 0.01155$$

$$BEC = 0.1294$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2922.65	0.0004	P	7.5
2	☐	1.000	0.976	24448.65	0.0032	P	2.2
3	☐	50.000	47.670	1081184.71	0.1392	P	2.5
4	☐	125.000	125.707	2830920.59	0.3664	A	3.4
5	☐	250.000	253.796	5671989.19	0.7393	A	0.3
6	☐	500.000	496.293	11388586.97	1.4453	A	2.2
7	☐	1000.000	1000.933	22327515.78	2.9145	A	3.9
8	☐			6840.88	0.0010	P	5.9

$$y = 0.0029 * x + 3.8557E-004$$

$$R = 1.0000$$

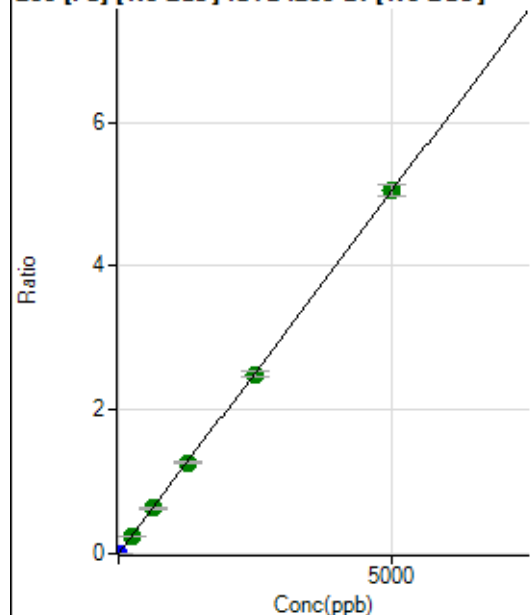
$$DL = 0.02966$$

$$BEC = 0.1324$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1216.75	0.0002	P	6.3
2	☐	1.000	0.956	8512.18	0.0011	P	2.4
3	☐	250.000	246.678	1931656.34	0.2486	A	1.8
4	☐	625.000	627.011	4882233.21	0.6317	A	1.9
5	☐	1250.000	1257.774	9720967.69	1.2671	A	1.3
6	☐	2500.000	2480.494	19689117.11	2.4987	A	2.3
7	☐	5000.000	5007.724	38647865.22	5.0444	A	3.3
8	☐			14538.03	0.0021	P	2.1

$$y = 0.0010 * x + 1.6038E-004$$

$$R = 1.0000$$

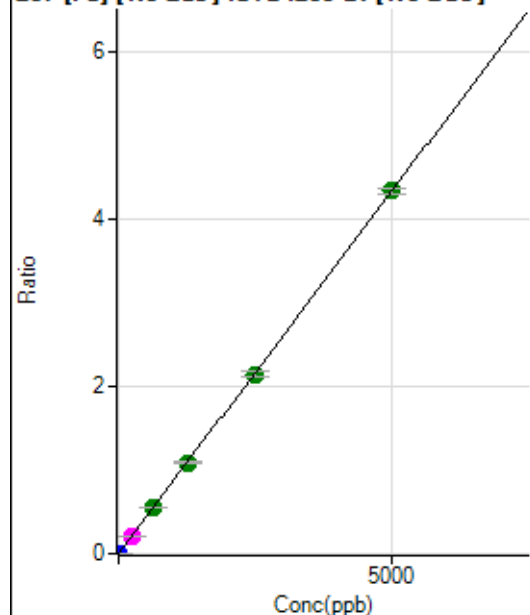
$$DL = 0.02996$$

$$BEC = 0.1592$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1094.51	0.0001	P	14.0
2	☐	1.000	0.938	7242.90	0.0010	P	4.4
3	☐	250.000	241.716	1625914.97	0.2094	M	5.5
4	☐	625.000	631.929	4227701.86	0.5471	A	2.1
5	☐	1250.000	1255.456	8338156.84	1.0868	A	1.7
6	☐	2500.000	2478.545	16904474.57	2.1453	A	3.3
7	☐	5000.000	5008.912	33223296.81	4.3354	A	1.5
8	☐			12361.67	0.0018	P	2.9

$$y = 8.6551\text{E-}004 * x + 1.4425\text{E-}004$$

$$R = 1.0000$$

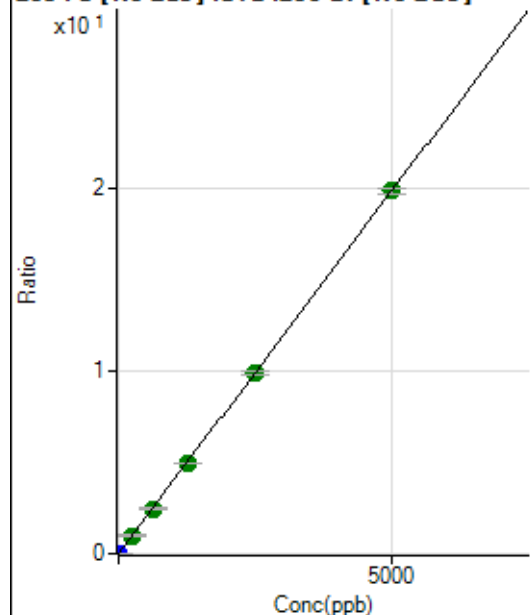
$$DL = 0.07019$$

$$BEC = 0.1667$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4824.51	0.0006	P	4.3
2	☐	1.000	0.964	33821.65	0.0045	P	0.6
3	☐	250.000	248.836	7685381.49	0.9894	A	2.8
4	☐	625.000	623.293	19142438.77	2.4772	A	2.1
5	☐	1250.000	1249.088	38083083.32	4.9637	A	0.4
6	☐	2500.000	2490.642	77988218.99	9.8969	A	2.3
7	☐	5000.000	5005.179	152399024.9	19.8881	A	1.9
8	☐			57239.23	0.0082	P	2.3

$$y = 0.0040 * x + 6.3592\text{E-}004$$

$$R = 1.0000$$

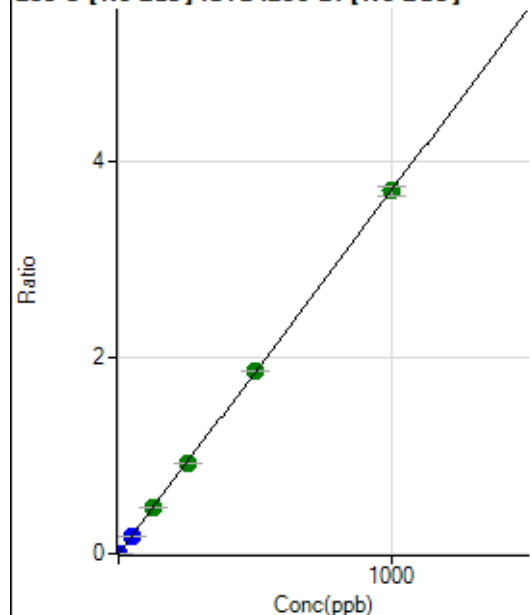
$$DL = 0.02056$$

$$BEC = 0.16$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	63.89	0.0000	P	19.0
2	☐	1.000	0.919	25890.86	0.0034	P	2.5
3	☐	50.000	47.604	1371419.84	0.1765	P	1.7
4	☐	125.000	125.771	3604324.82	0.4664	A	1.9
5	☐	250.000	250.320	7122116.91	0.9283	A	0.6
6	☐	500.000	501.892	14669084.18	1.8612	A	0.5
7	☐	1000.000	998.997	28383800.98	3.7046	A	2.9
8	☐			4020.21	0.0006	P	8.3

$$y = 0.0037 * x + 8.4130E-006$$

$$R = 1.0000$$

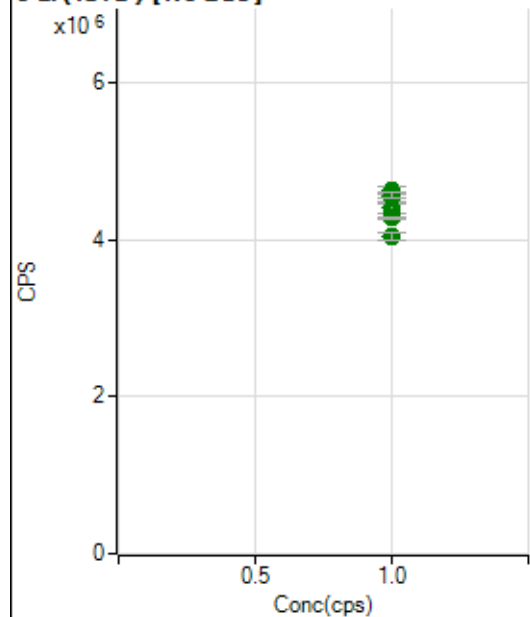
$$DL = 0.001295$$

$$BEC = 0.002269$$

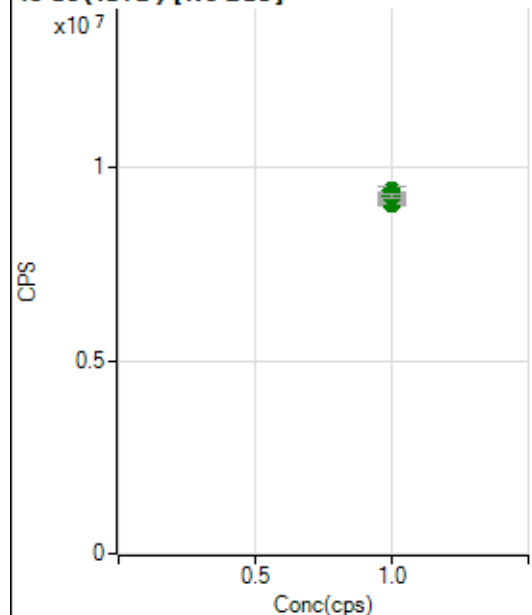
Weight: <None>

Min Conc: 0

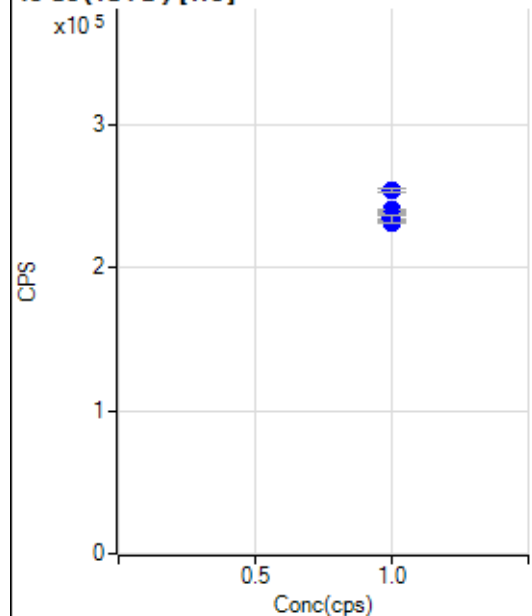
6 Li (ISTD) [No Gas]



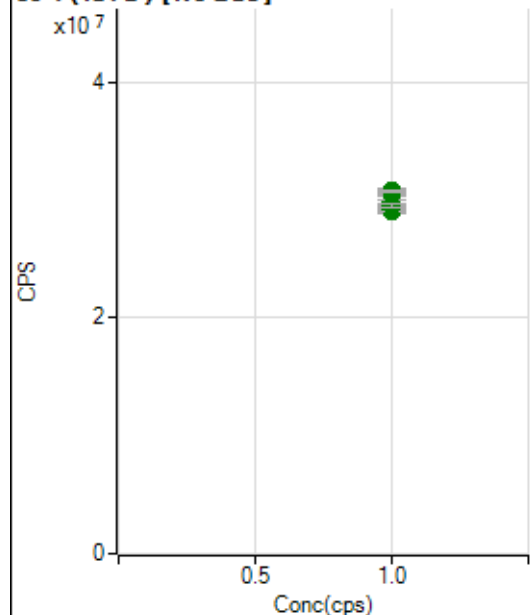
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4400292.42		A	2.7
2	☐	1.000		4526124.42		A	2.6
3	☐	1.000		4616300.92		A	2.1
4	☐	1.000		4606862.85		A	0.2
5	☐	1.000		4555836.60		A	1.1
6	☐	1.000		4559703.74		A	1.4
7	☐	1.000		4273559.77		A	0.7
8	☐	1.000		4040243.48		A	2.0

45 Sc (ISTD) [No Gas]

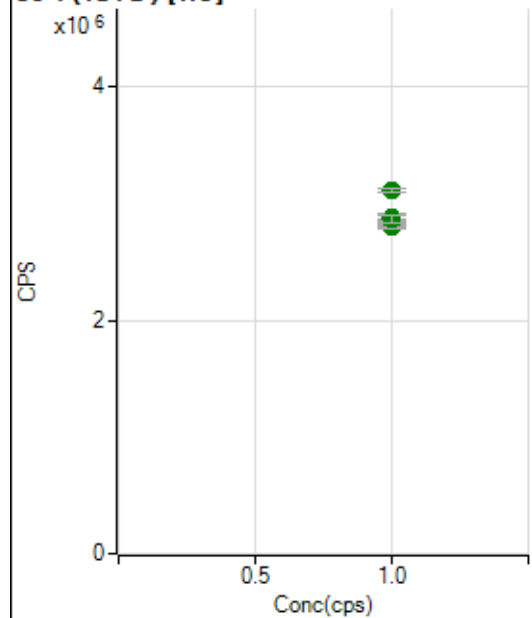
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		9237726.18		A	2.2
2	☐	1.000		9163075.56		A	2.3
3	☐	1.000		9248205.42		A	1.3
4	☐	1.000		9091367.57		A	1.6
5	☐	1.000		9075110.70		A	0.7
6	☐	1.000		9397679.86		A	1.9
7	☐	1.000		9292611.32		A	1.0
8	☐	1.000		9257814.65		A	1.0

45 Sc (ISTD) [He]

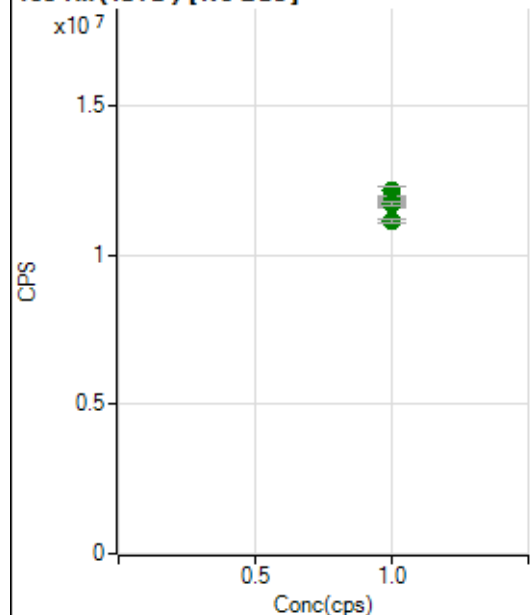
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		235109.78		P	1.3
2	☐	1.000		234503.31		P	1.8
3	☐	1.000		239868.35		P	1.0
4	☐	1.000		233096.52		P	1.0
5	☐	1.000		231602.62		P	0.3
6	☐	1.000		236775.10		P	0.4
7	☐	1.000		234125.17		P	2.5
8	☐	1.000		253409.20		P	1.2

89 Y (ISTD) [No Gas]

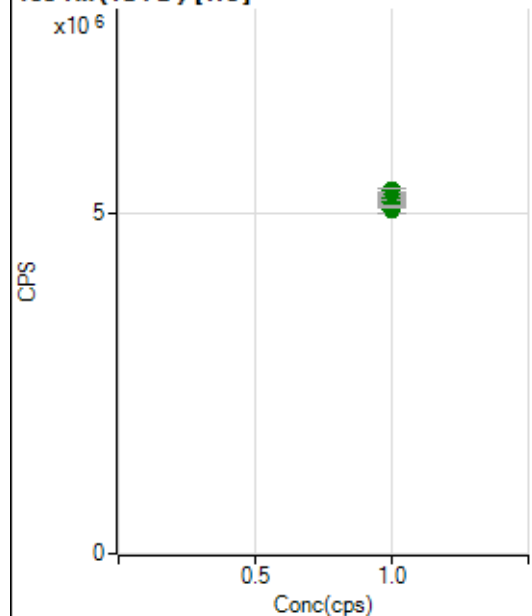
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		29456370.67		A	1.1
2	☐	1.000		29082722.34		A	0.9
3	☐	1.000		29908612.61		A	1.0
4	☐	1.000		29273041.79		A	1.8
5	☐	1.000		29558900.39		A	1.4
6	☐	1.000		30578670.10		A	1.1
7	☐	1.000		30797185.65		A	1.7
8	☐	1.000		30716650.10		A	0.6

89 Y (ISTD) [He]

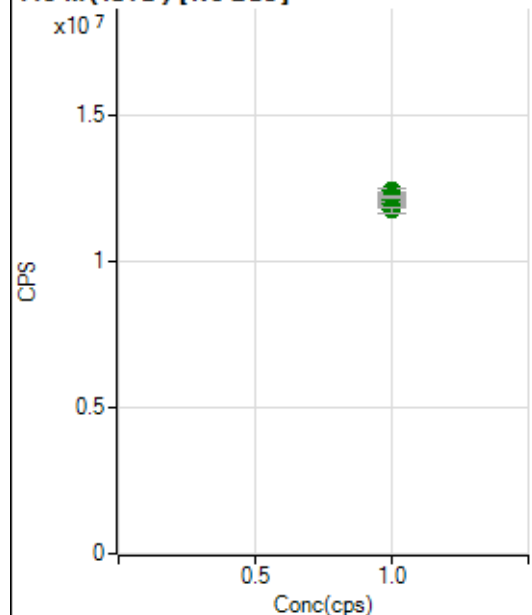
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2809340.27		A	0.5
2	☐	1.000		2819477.87		A	1.8
3	☐	1.000		2884948.05		A	1.8
4	☐	1.000		2827118.53		A	0.9
5	☐	1.000		2796322.81		A	0.4
6	☐	1.000		2862453.29		A	0.2
7	☐	1.000		2874105.72		A	2.4
8	☐	1.000		3111477.31		A	0.9

103 Rh (ISTD) [No Gas]

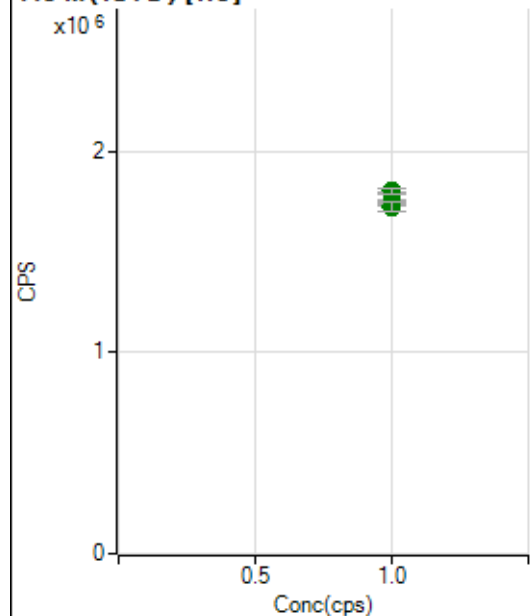
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11845677.61		A	0.7
2	☐	1.000		11836555.04		A	0.5
3	☐	1.000		12146338.29		A	2.4
4	☐	1.000		11723397.14		A	2.4
5	☐	1.000		11776455.82		A	0.6
6	☐	1.000		11986300.53		A	0.3
7	☐	1.000		11701996.79		A	1.1
8	☐	1.000		11136612.49		A	1.2

103 Rh (ISTD) [He]

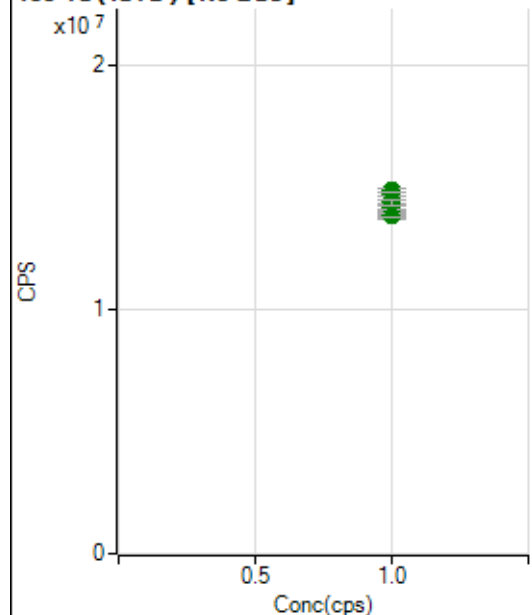
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		5220386.59		A	2.5
2	☐	1.000		5181367.08		A	1.9
3	☐	1.000		5336570.27		A	1.0
4	☐	1.000		5222148.57		A	1.5
5	☐	1.000		5143590.10		A	0.5
6	☐	1.000		5166495.55		A	1.6
7	☐	1.000		5074547.46		A	3.0
8	☐	1.000		5092184.44		A	0.5

115 In (ISTD) [No Gas]

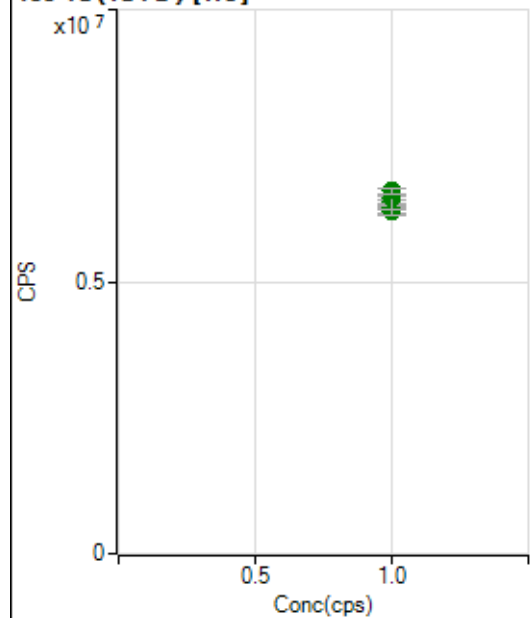
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11962327.18		A	1.8
2	☐	1.000		11936017.74		A	0.4
3	☐	1.000		12255743.82		A	2.2
4	☐	1.000		11989935.07		A	1.2
5	☐	1.000		12122221.97		A	0.8
6	☐	1.000		12421329.18		A	1.8
7	☐	1.000		12217336.59		A	0.9
8	☐	1.000		11780471.25		A	1.7

115 In (ISTD) [He]

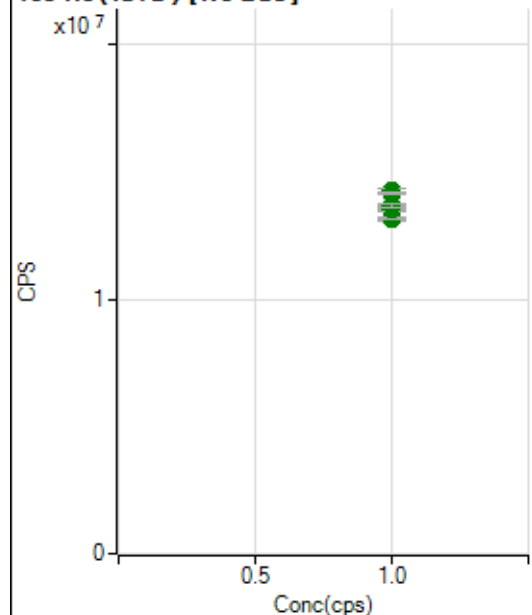
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1754221.86		A	0.2
2	☐	1.000		1724699.93		A	2.8
3	☐	1.000		1789493.58		A	0.8
4	☐	1.000		1743240.02		A	1.8
5	☐	1.000		1718567.79		A	1.8
6	☐	1.000		1741430.55		A	0.7
7	☐	1.000		1725414.18		A	2.5
8	☐	1.000		1802787.16		A	1.5

159 Tb (ISTD) [No Gas]

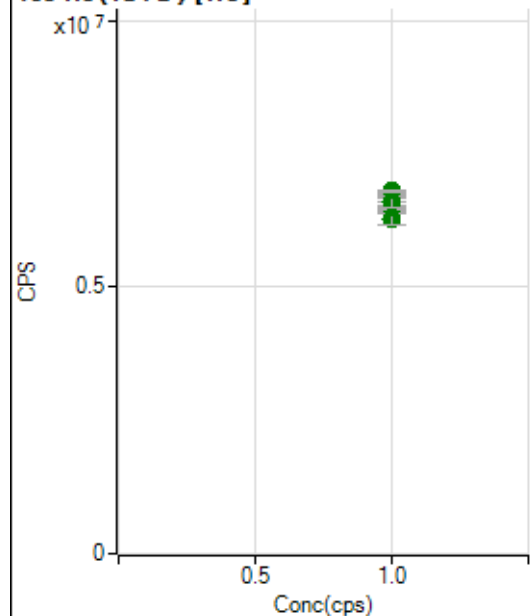
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		13969070.90		A	1.0
2	☐	1.000		13861666.32		A	1.5
3	☐	1.000		14227446.18		A	1.2
4	☐	1.000		13885419.79		A	1.2
5	☐	1.000		14231659.37		A	1.3
6	☐	1.000		14883128.80		A	1.0
7	☐	1.000		14748706.45		A	0.6
8	☐	1.000		14412458.25		A	1.9

159 Tb (ISTD) [He]

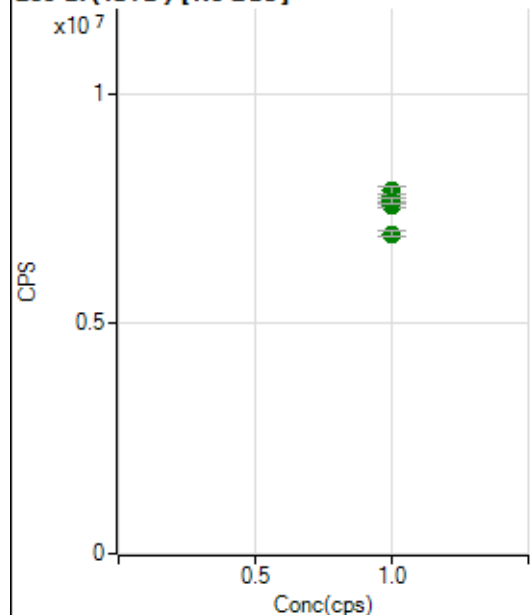
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6302256.71		A	1.1
2	☐	1.000		6281617.75		A	2.3
3	☐	1.000		6475715.46		A	0.9
4	☐	1.000		6373030.74		A	1.7
5	☐	1.000		6305815.25		A	2.9
6	☐	1.000		6585565.74		A	0.6
7	☐	1.000		6522638.51		A	5.6
8	☐	1.000		6668608.86		A	1.3

165 Ho (ISTD) [No Gas]

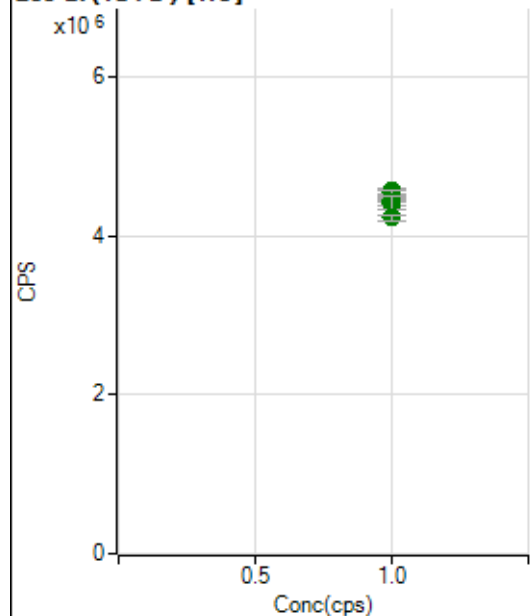
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		13129532.67		A	1.2
2	☐	1.000		13179714.36		A	0.8
3	☐	1.000		13568397.18		A	1.8
4	☐	1.000		13524793.53		A	0.6
5	☐	1.000		13558418.53		A	1.2
6	☐	1.000		14262565.25		A	1.8
7	☐	1.000		14142890.07		A	0.6
8	☐	1.000		13701288.50		A	1.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6441388.66		A	0.4
2	☐	1.000		6276855.74		A	3.5
3	☐	1.000		6537508.72		A	2.4
4	☐	1.000		6548123.65		A	1.3
5	☐	1.000		6493958.79		A	0.7
6	☐	1.000		6709349.97		A	0.7
7	☐	1.000		6612897.47		A	3.3
8	☐	1.000		6808955.11		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		7584377.32		A	1.2
2	☐	1.000		7575315.09		A	1.1
3	☐	1.000		7769451.69		A	1.2
4	☐	1.000		7729463.36		A	2.1
5	☐	1.000		7672191.13		A	1.0
6	☐	1.000		7882061.20		A	2.1
7	☐	1.000		7664712.11		A	2.1
8	☐	1.000		6944558.37		A	1.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4438393.40		A	0.6
2	☐	1.000		4410580.70		A	1.9
3	☐	1.000		4564776.29		A	1.4
4	☐	1.000		4484702.02		A	1.3
5	☐	1.000		4448906.11		A	1.0
6	☐	1.000		4540110.69		A	1.7
7	☐	1.000		4421658.44		A	3.8
8	☐	1.000		4223552.44		A	1.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8100421\IMS.b
Acq. Date-Time 2021-10-04 14:27:50
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		17629	176285.85			1.264	5.000
24		153902	1539023.56			0.870	5.000
25		20416	204155.44			0.891	5.000
26		23509	235087.29			0.925	5.000
59		39069	390686.72			0.749	5.000
113		16810	168104.63			0.788	5.000
115		52907	529072.87			1.140	5.000
206		20623	206226.03			1.049	5.000
207		17196	171961.26			0.568	5.000
208		43141	431412.58			1.038	5.000
220		1	5.60			28.516	

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

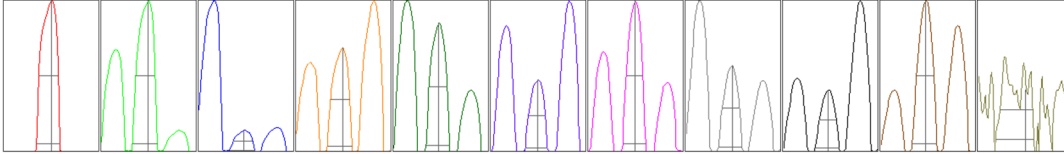
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	17921	17597	17716	17307	17602
24	154748	151791	155096	153402	154475
25	20629	20372	20566	20183	20328
26	23773	23261	23622	23308	23580
59	39410	38900	39266	38671	39096
113	16966	16690	16942	16717	16737
115	52725	52053	53168	52893	53696
206	20828	20338	20850	20524	20571
207	17228	17084	17345	17159	17164
208	43486	42493	43615	43166	42946

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	30504.92	9.05	8.90 - 9.10	
24	263631.91	24.00	23.90 - 24.10	
25	35284.94	24.95	24.90 - 25.10	
26	41213.21	26.00	25.90 - 26.10	
59	72638.32	58.95	58.90 - 59.10	
113	33125.30	113.00	112.90 - 113.10	
115	106411.48	115.00	114.90 - 115.10	
206	39616.42	206.00	205.90 - 206.10	
207	33084.27	206.95	206.90 - 207.10	
208	81728.69	207.95	207.90 - 208.10	
220	0.65	220.05	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.739	0.900	
24	0.61	0.783	0.900	
25	0.61	0.783	0.900	
26	0.61	0.784	0.900	
59	0.57	0.739	0.900	
113	0.53	0.689	0.900	
115	0.52	0.728	0.900	
206	0.54	0.742	0.900	
207	0.54	0.774	0.900	
208	0.55	0.779	0.900	
220	1.02	1.209		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.75 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.4 V	Deflect	14.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.8 mm
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EM

Discriminator	4.0 mV	Analog HV	2255 V	Pulse HV	1537 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		7410	74097.90			1.710	
89		25991	259914.57			1.696	
205		20757	207567.12			1.489	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	7470	7186	7446	7448	7498
89	26208	25214	26059	26230	26247
205	21001	20221	20798	20917	20846

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.4 V	Deflect	5.4 V
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US EPA Tune Check Report

Extract 2	-195.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	123	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.01		
Hardware Settings					
Torch					
Torch H	0.9 mm	Torch V	-0.8 mm		
EM					
Discriminator	4.0 mV	Analog HV	2255 V	Pulse HV	1537 V