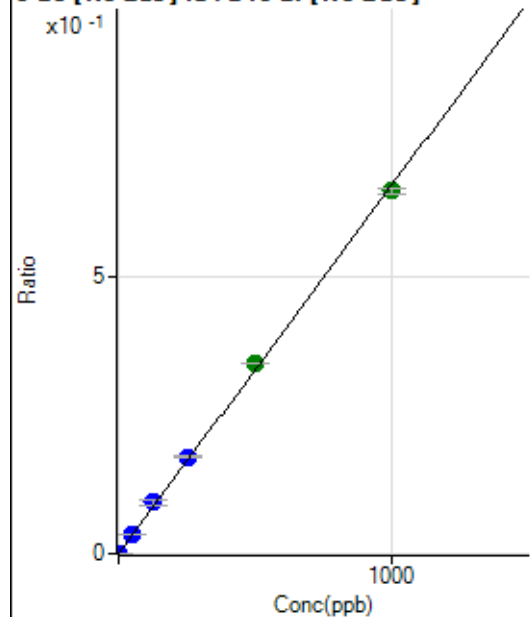


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8102321 MS.b\
Analysis File: P8102321 MS.batch.bin
DA Date-Time: 2021-10-23 23:27:42
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-10-23 12:26:04
2	005CALS.d	S02	2021-10-23 12:32:13
3	006CALS.d	S03	2021-10-23 12:35:19
4	007CALS.d	S04	2021-10-23 12:38:22
5	008CALS.d	S05	2021-10-23 12:41:28
6	009CALS.d	S06	2021-10-23 12:44:31
7	010CALS.d	S07	2021-10-23 12:47:37
8	011CALS.d	S08	2021-10-23 12:50:40

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.99	0.0000	P	4.3
2	☐	1.000	1.109	3546.41	0.0008	P	12.9
3	☐	50.000	52.048	176356.28	0.0346	P	4.2
4	☐	125.000	139.102	446816.22	0.0925	P	8.6
5	☐	250.000	263.235	889917.72	0.1750	P	3.3
6	☐	500.000	518.384	1736396.08	0.3447	A	0.4
7	☐	1000.000	985.634	3251846.67	0.6553	A	1.7
8	☐			687.22	0.0002	P	8.3

$$y = 6.6487\text{E-}004 * x + 1.2921\text{E-}005$$

$$R = 0.9996$$

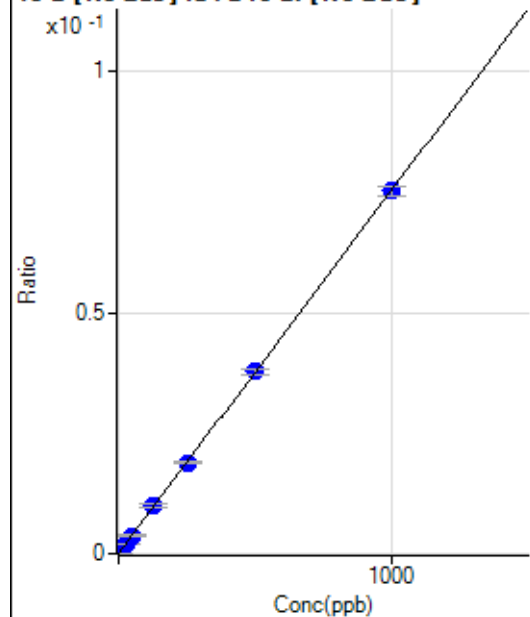
$$DL = 0.002519$$

$$BEC = 0.01943$$

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	213.96	0.0000	P	4.2
2	☐	25.000	26.482	9621.26	0.0020	P	15.2
3	☐	50.000	49.609	19258.17	0.0038	P	7.5
4	☐	125.000	130.791	47813.03	0.0099	P	10.4
5	☐	250.000	249.953	96056.36	0.0189	P	1.8
6	☐	500.000	501.015	190413.49	0.0378	P	2.8
7	☐	1000.000	998.763	373710.24	0.0753	P	2.5
8	☐			31901.74	0.0071	P	13.6

$$y = 7.5359\text{E-}005 * x + 4.4563\text{E-}005$$

$$R = 1.0000$$

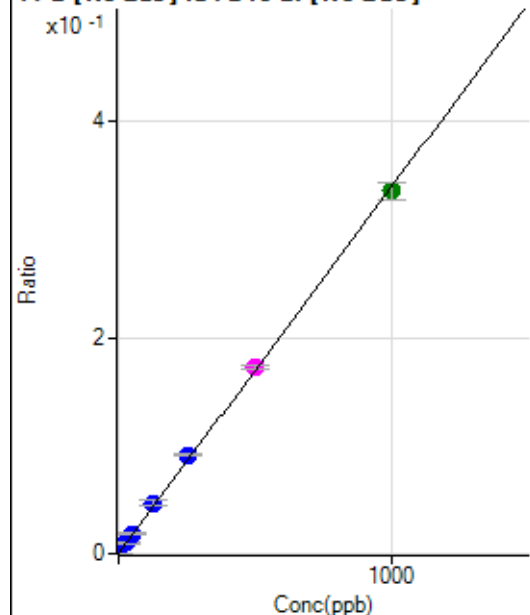
$$DL = 0.07465$$

$$BEC = 0.5913$$

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	1035.17	0.0002	P	4.4
2	☐	25.000	28.303	46214.01	0.0098	P	16.7
3	☐	50.000	52.999	92564.04	0.0182	P	8.2
4	☐	125.000	138.274	227361.37	0.0471	P	10.5
5	☐	250.000	269.294	465766.04	0.0915	P	2.3
6	☐	500.000	508.203	869119.29	0.1725	M	1.2
7	☐	1000.000	989.183	1665405.12	0.3356	A	4.7
8	☐			150721.82	0.0337	P	13.2

$$y = 3.3907\text{E-}004 * x + 2.1578\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.08387$$

$$BEC = 0.6364$$

Weight: <None>

Min Conc: 0

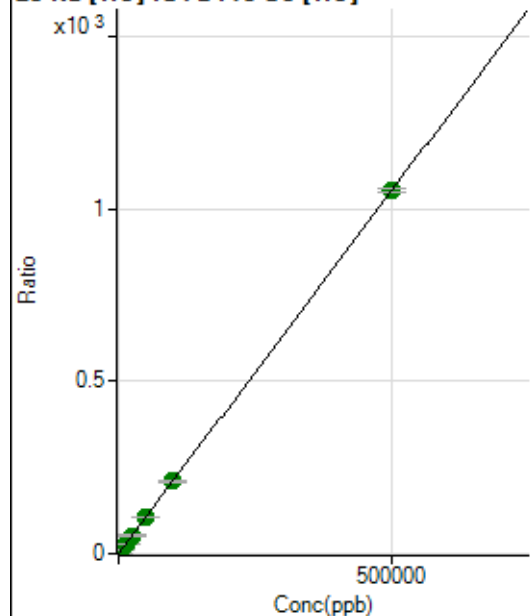
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6121169.41		A	1.8
2	☐			6135569.80		A	0.7
3	☐			6644518.03		A	1.6
4	☐			6634274.28		A	1.0
5	☐			6808095.77		A	2.9
6	☐			6957546.68		A	1.1
7	☐			8394139.08		A	2.0
8	☐			6897049.37		A	2.1

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53118.83		P	1.2
2	☐			51953.81		P	2.3
3	☐			59660.82		P	2.0
4	☐			57649.51		P	1.2
5	☐			59311.66		P	2.0
6	☐			63814.34		P	0.9
7	☐			77027.54		P	2.1
8	☐			72347.98		P	0.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18122.71	0.0807	P	1.0
2	☐	500.000	502.411	261068.25	1.1376	P	0.4
3	☐	5000.000	5097.402	2487571.08	10.8043	A	3.4
4	☐	12500.000	12621.445	6236354.65	26.6329	A	0.5
5	☐	25000.000	25135.962	12245981.18	52.9602	A	0.2
6	☐	50000.000	50502.611	24007027.97	106.3251	A	1.7
7	☐	100000.00	99939.425	45985254.85	210.3273	A	2.2
8	☐	500000.00	499951.04	227662571.7	1,051.848	A	1.1

$$y = 0.0021 * x + 0.0807$$

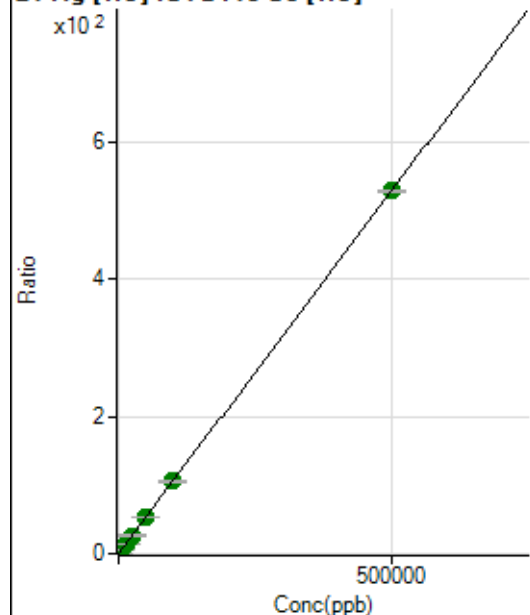
$$R = 1.0000$$

$$DL = 1.182$$

$$BEC = 38.34$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	458.35	0.0020	P	9.6
2	☐	500.000	497.556	121073.72	0.5276	P	1.7
3	☐	5000.000	5260.293	1279685.45	5.5583	A	2.2
4	☐	12500.000	12805.647	3167750.16	13.5282	A	0.3
5	☐	25000.000	25099.289	6130286.16	26.5135	A	1.3
6	☐	50000.000	50141.781	11959064.33	52.9650	A	1.1
7	☐	100000.00	99521.178	22977482.11	105.1226	A	3.8
8	☐	500000.00	500066.38	114324637.2	528.2037	A	0.7

$$y = 0.0011 * x + 0.0020$$

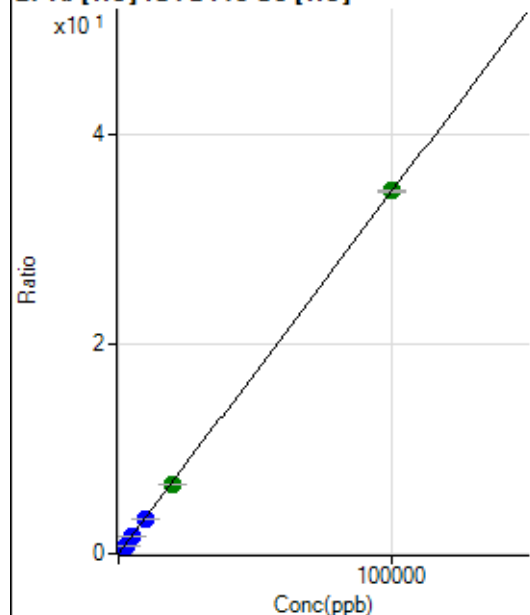
$$R = 1.0000$$

$$DL = 0.5555$$

$$BEC = 1.931$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	141.65	0.0006	P	12.3
2	☐	20.000	19.553	1693.22	0.0074	P	3.0
3	☐	1000.000	956.829	76164.13	0.3308	P	1.1
4	☐	2500.000	2335.539	188855.59	0.8066	P	1.0
5	☐	5000.000	4719.492	376695.92	1.6292	P	0.9
6	☐	10000.000	9413.609	733619.54	3.2490	P	0.7
7	☐	20000.000	19154.739	1445221.01	6.6103	A	2.3
8	☐	100000.00	100246.26	7487203.12	34.5925	A	0.8

$$y = 3.4507E-004 * x + 6.3063E-004$$

$$R = 1.0000$$

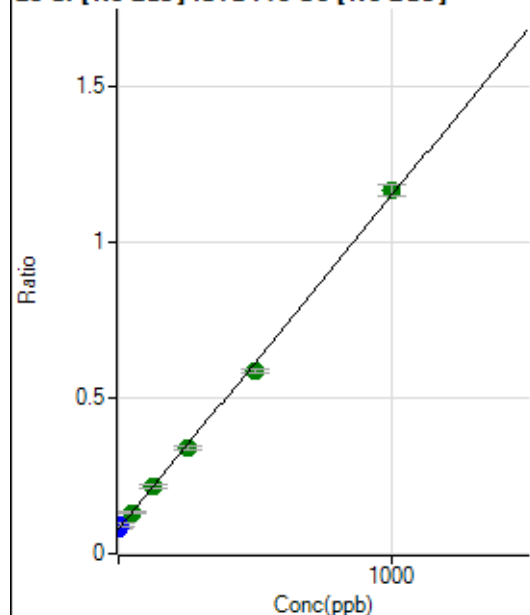
$$DL = 0.6768$$

$$BEC = 1.828$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	674263.96	0.0789	P	1.9
2	☐	10.000	13.292	779086.00	0.0932	P	8.8
3	☐	50.000	48.832	1175966.01	0.1311	A	2.6
4	☐	125.000	126.528	1868781.31	0.2142	A	6.8
5	☐	250.000	241.931	3022421.42	0.3375	A	4.0
6	☐	500.000	475.534	5217621.99	0.5871	A	2.4
7	☐	1000.000	1014.085	10200230.00	1.1626	A	3.1
8	☐			1249439.95	0.1496	A	1.7

$$y = 0.0011 * x + 0.0789$$

$$R = 0.9995$$

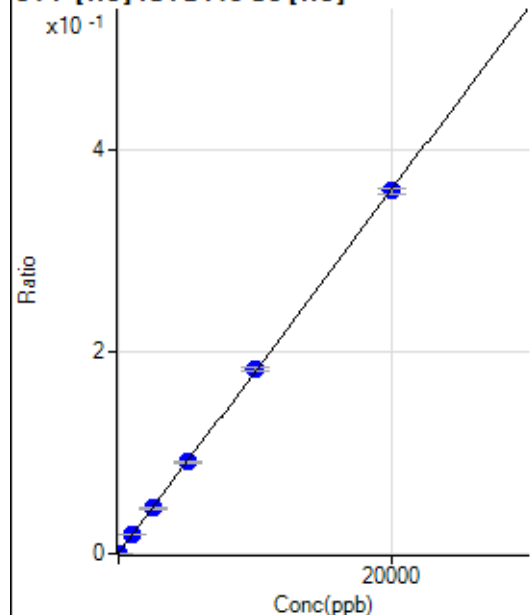
$$DL = 4.167$$

$$BEC = 73.88$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	2.957	86.11	0.0004	P	42.2
2	☐	0.000	-2.957	63.89	0.0003	P	7.9
3	☐	1000.000	1067.683	4498.06	0.0195	P	3.6
4	☐	2500.000	2494.009	10581.89	0.0452	P	2.4
5	☐	5000.000	5051.925	21088.12	0.0912	P	1.9
6	☐	10000.000	10098.963	41086.65	0.1820	P	2.2
7	☐	20000.000	19934.902	78471.11	0.3589	P	1.9
8	☐			136.11	0.0006	P	23.0

$$y = 1.7987E-005 * x + 3.3167E-004$$

$$R = 1.0000$$

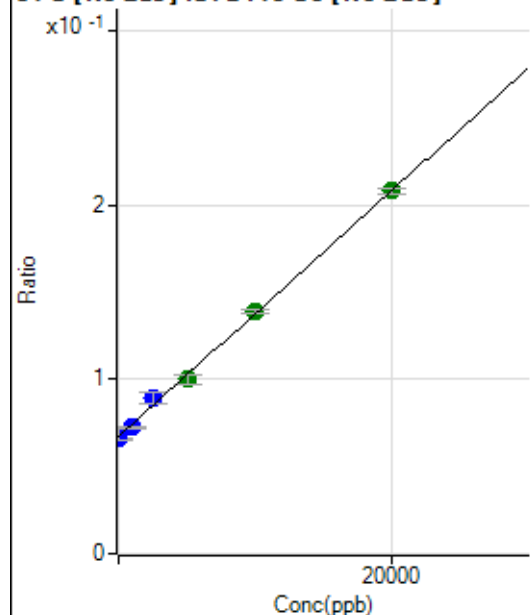
$$DL = 15.38$$

$$BEC = 18.44$$

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	-144.051	566207.87	0.0663	P	1.1
2	☐	0.000	144.051	570975.78	0.0683	P	10.2
3	☐	1000.000	710.271	648556.37	0.0723	P	2.1
4	☐	2500.000	3108.456	778612.36	0.0892	P	6.7
5	☐	5000.000	4636.493	895324.93	0.1000	A	4.9
6	☐	10000.000	10103.271	1231247.04	0.1385	A	1.7
7	☐	20000.000	19977.671	1826059.35	0.2081	A	1.5
8	☐			496585.02	0.0595	P	2.2

$$y = 7.0498E-006 * x + 0.0673$$

R = 0.9990

DL = 1629

BEC = 9548

Weight: <None>

Min Conc: 0

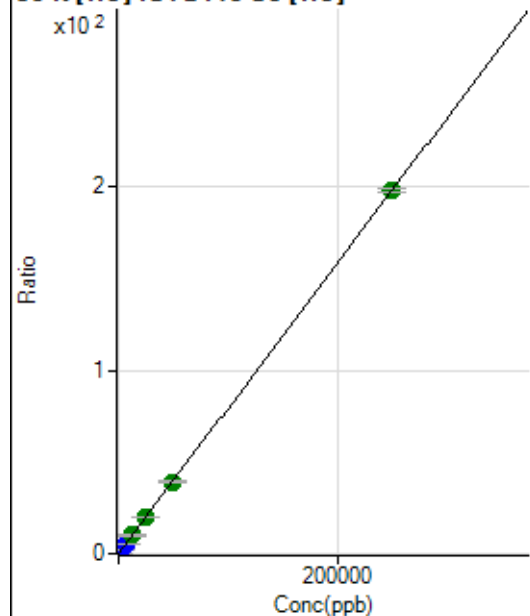
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			635513.70		P	1.2
2	☐			521810.16		P	1.5
3	☐			535953.07		P	1.0
4	☐			486517.40		P	1.3
5	☐			470440.24		P	1.7
6	☐			472050.74		P	1.3
7	☐			470398.92		P	0.8
8	☐			455269.87		P	3.0

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3061.52		P	2.9
2	☐			2486.39		P	7.2
3	☐			2711.44		P	8.4
4	☐			2261.35		P	8.4
5	☐			2294.69		P	6.4
6	☐			2339.15		P	3.0
7	☐			2247.46		P	7.4
8	☐			2191.88		P	5.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	17803.09	0.0792	P	1.5
2	☐	500.000	475.980	104555.91	0.4556	P	1.3
3	☐	2500.000	2530.787	478951.32	2.0803	P	0.6
4	☐	6250.000	6187.792	1164148.00	4.9718	P	1.0
5	☐	12500.000	12522.169	2307439.59	9.9802	A	2.3
6	☐	25000.000	24686.133	4425213.03	19.5979	A	1.5
7	☐	50000.000	49212.378	8523229.88	38.9902	A	3.2
8	☐	250000.00	250189.09	42832327.69	197.8974	A	1.2

$$y = 7.9067E-004 * x + 0.0792$$

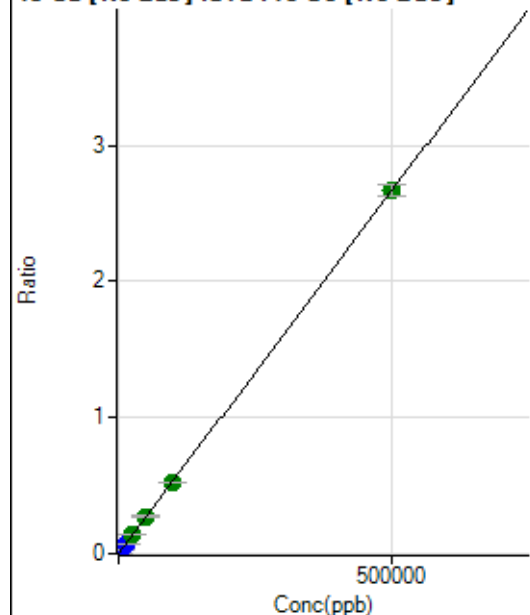
$$R = 1.0000$$

$$DL = 4.395$$

$$BEC = 100.2$$

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	499.12	0.0001	P	7.3
2	☐	500.000	493.777	22443.45	0.0027	P	11.5
3	☐	5000.000	4907.399	234869.52	0.0262	P	2.0
4	☐	12500.000	12863.639	598158.86	0.0686	P	6.9
5	☐	25000.000	26104.950	1245160.36	0.1391	A	4.6
6	☐	50000.000	51475.737	2436663.70	0.2741	A	1.3
7	☐	100000.00	97556.202	4557789.35	0.5195	A	0.9
8	☐	500000.00	500277.78	22244687.37	2.6638	A	3.2

$$y = 5.3246\text{E-}006 * x + 5.8461\text{E-}005$$

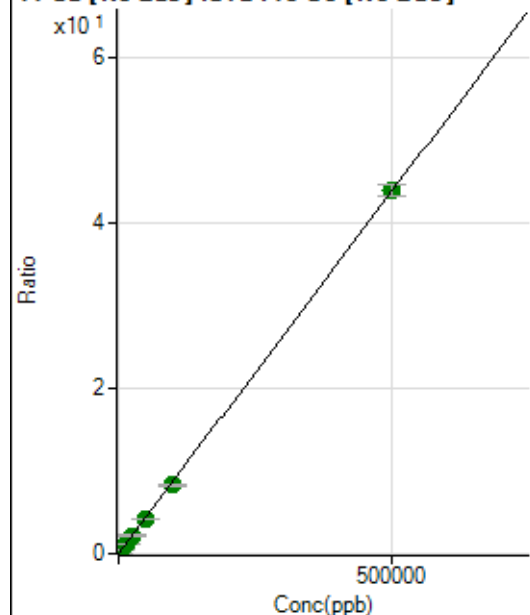
$$R = 1.0000$$

$$DL = 2.42$$

$$BEC = 10.98$$

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	35946.45	0.0042	P	0.2
2	☐	500.000	495.079	397212.65	0.0475	P	10.1
3	☐	5000.000	4933.226	3909992.38	0.4359	A	0.2
4	☐	12500.000	12553.848	9629854.30	1.1027	A	5.1
5	☐	25000.000	24513.994	19238329.61	2.1492	A	5.9
6	☐	50000.000	48559.256	37801431.55	4.2532	A	1.6
7	☐	100000.00	94458.945	72544060.44	8.2695	A	1.9
8	☐	500000.00	501275.91	366325236.6	43.8664	A	3.0

$$y = 8.7501\text{E-}005 * x + 0.0042$$

$$R = 0.9999$$

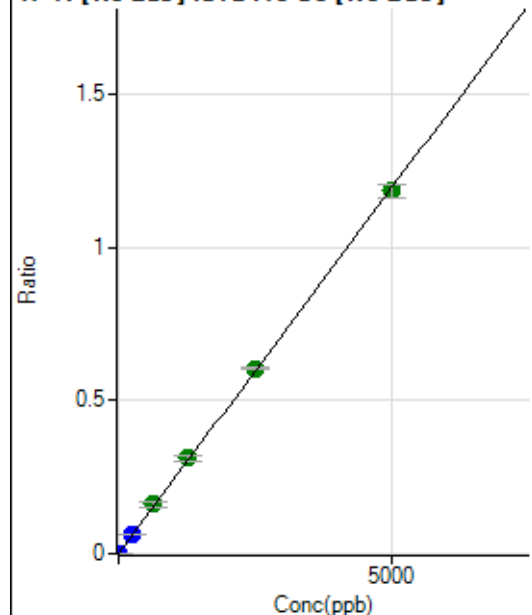
$$DL = 0.2777$$

$$BEC = 48.1$$

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	280.57	0.0000	P	11.5
2	☐	5.000	5.510	11279.79	0.0013	P	10.5
3	☐	250.000	257.989	553344.27	0.0617	P	1.8
4	☐	625.000	671.193	1399416.28	0.1605	A	8.0
5	☐	1250.000	1304.397	2791707.31	0.3118	A	5.2
6	☐	2500.000	2533.544	5383081.24	0.6056	A	1.7
7	☐	5000.000	4963.454	10406296.50	1.1864	A	3.4
8	☐			2641.99	0.0003	P	9.2

$$y = 2.3902\text{E-}004 * x + 3.2824\text{E-}005$$

$$R = 0.9999$$

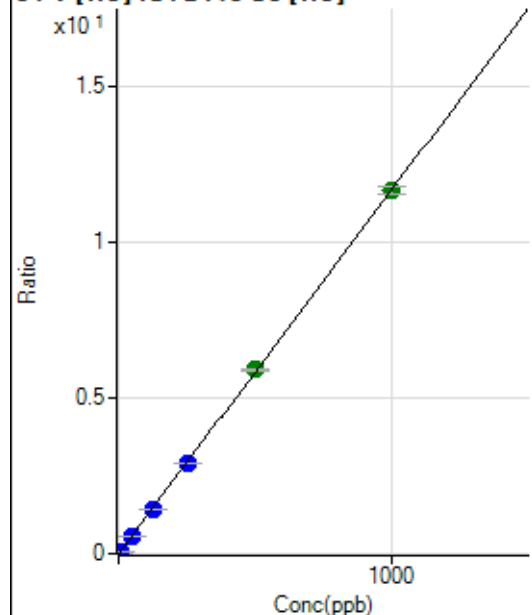
$$DL = 0.04737$$

$$BEC = 0.1373$$

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	10.00	0.0000	P	55.5
2	☐	5.000	5.096	13682.16	0.0596	P	2.8
3	☐	50.000	50.113	134899.61	0.5859	P	0.5
4	☐	125.000	122.591	335589.41	1.4332	P	1.5
5	☐	250.000	247.943	670237.97	2.8987	P	0.6
6	☐	500.000	505.563	1334486.12	5.9105	A	1.6
7	☐	1000.000	998.028	2551017.58	11.6678	A	2.0
8	☐			735.58	0.0034	P	15.7

$$y = 0.0117 * x + 4.4190\text{E-}005$$

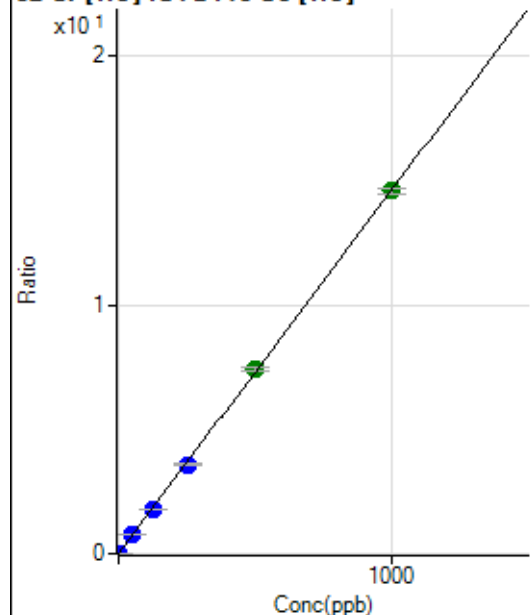
$$R = 1.0000$$

$$DL = 0.006296$$

$$BEC = 0.00378$$

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	960.04	0.0043	P	4.1
2	☐	2.000	2.009	7714.36	0.0336	P	1.4
3	☐	50.000	50.122	169544.04	0.7364	P	0.3
4	☐	125.000	122.132	418711.72	1.7882	P	1.1
5	☐	250.000	245.681	830732.23	3.5928	P	0.8
6	☐	500.000	505.782	1668936.33	7.3920	A	1.9
7	☐	1000.000	998.541	3190151.52	14.5894	A	1.4
8	☐			11305.66	0.0522	P	0.7

$$y = 0.0146 * x + 0.0043$$

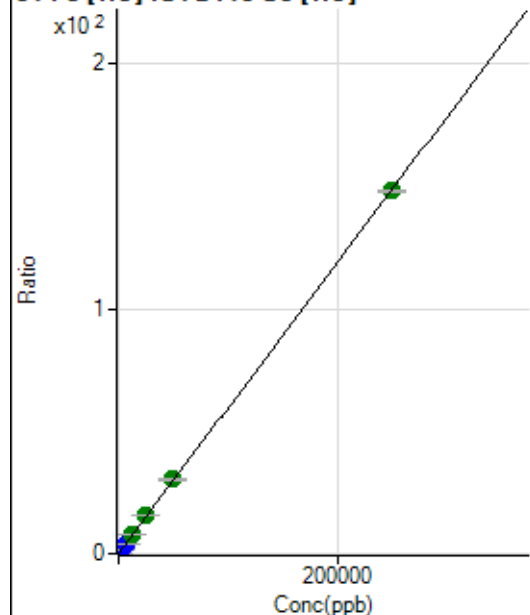
$$R = 1.0000$$

$$DL = 0.03632$$

$$BEC = 0.2926$$

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	631.51	0.0028	P	4.0
2	☐	50.000	52.853	7843.01	0.0342	P	1.6
3	☐	2500.000	2613.981	357817.09	1.5541	P	0.5
4	☐	6250.000	6323.890	879418.39	3.7558	P	1.3
5	☐	12500.000	13215.783	1814015.26	7.8458	A	1.9
6	☐	25000.000	26404.900	3539086.86	15.6730	A	0.3
7	☐	50000.000	51187.106	6643460.22	30.3803	A	1.4
8	☐	250000.00	249583.31	32059079.65	148.1203	A	0.8

$$y = 5.9346E-004 * x + 0.0028$$

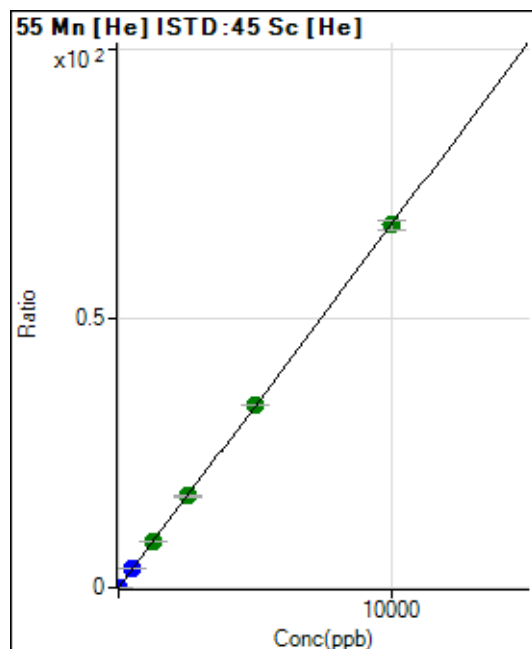
$$R = 1.0000$$

$$DL = 0.5731$$

$$BEC = 4.737$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	87.78	0.0004	P	12.2
2	☐	1.000	1.118	1822.36	0.0079	P	7.1
3	☐	500.000	506.435	787708.22	3.4213	P	1.4
4	☐	1250.000	1260.970	1994477.44	8.5180	A	2.6
5	☐	2500.000	2516.238	3930041.37	16.9972	A	2.0
6	☐	5000.000	5025.155	7664562.53	33.9445	A	0.8
7	☐	10000.000	9981.670	14739499.50	67.4249	A	2.9
8	☐			24690.33	0.1141	P	1.2

$$y = 0.0068 * x + 3.9064E-004$$

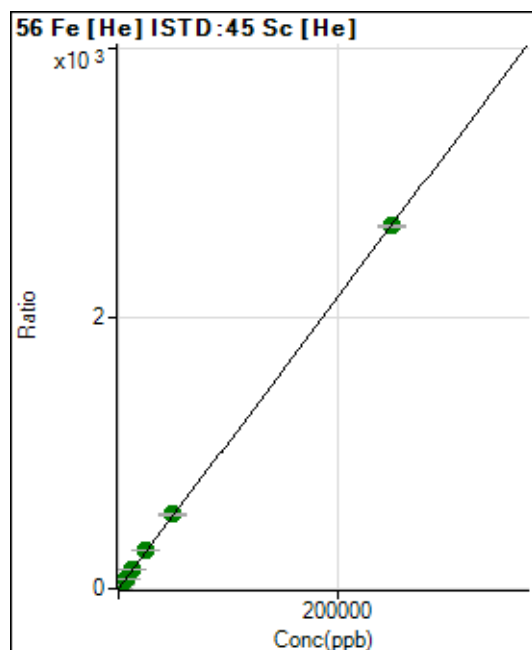
$$R = 1.0000$$

$$DL = 0.02117$$

$$BEC = 0.05783$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5323.31	0.0237	P	6.0
2	☐	50.000	52.688	135376.75	0.5899	P	2.3
3	☐	2500.000	2677.033	6629595.23	28.7943	A	0.8
4	☐	6250.000	6541.956	16468409.05	70.3314	A	1.5
5	☐	12500.000	13107.441	32578605.59	140.8920	A	0.3
6	☐	25000.000	25972.003	63030065.30	279.1500	A	1.0
7	☐	50000.000	50995.036	119799583.2	548.0775	A	3.7
8	☐	250000.00	249664.35	580773050.0	2.683216	A	0.8

$$y = 0.0107 * x + 0.0237$$

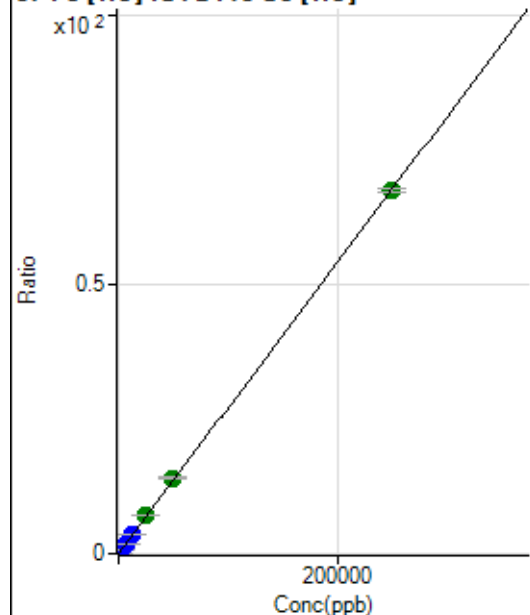
$$R = 1.0000$$

$$DL = 0.397$$

$$BEC = 2.205$$

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	225.93	0.0010	P	20.3
2	☐	50.000	51.543	3430.10	0.0149	P	4.8
3	☐	2500.000	2603.585	162335.15	0.7051	P	1.0
4	☐	6250.000	6299.503	399130.64	1.7046	P	0.7
5	☐	12500.000	12669.135	792442.47	3.4271	P	0.4
6	☐	25000.000	26150.313	1597032.80	7.0728	A	0.7
7	☐	50000.000	51976.436	3073400.68	14.0569	A	2.1
8	☐	250000.00	249478.95	14602355.19	67.4671	A	1.2

$$y = 2.7043\text{E-}004 * x + 0.0010$$

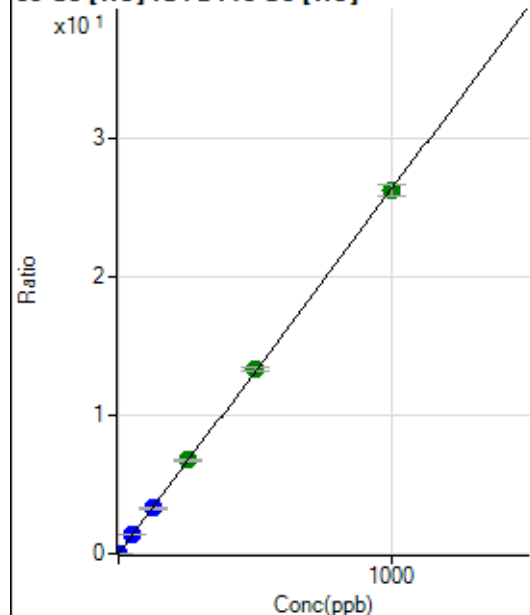
R = 1.0000

DL = 2.262

BEC = 3.717

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	101.11	0.0005	P	12.2
2	☐	1.000	0.989	6085.80	0.0265	P	3.0
3	☐	50.000	50.428	306174.82	1.3298	P	0.8
4	☐	125.000	124.133	766352.93	3.2729	P	1.0
5	☐	250.000	256.199	1561887.06	6.7544	A	1.8
6	☐	500.000	506.196	3013037.63	13.3448	A	1.6
7	☐	1000.000	995.440	5736695.54	26.2423	A	3.2
8	☐			13534.30	0.0625	P	1.5

$$y = 0.0264 * x + 4.5074\text{E-}004$$

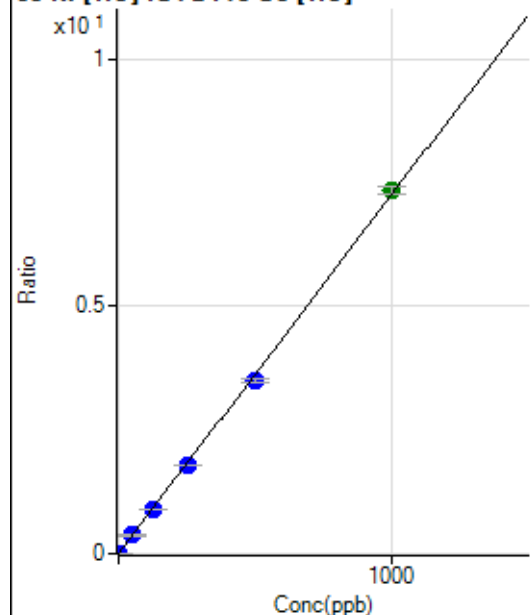
R = 0.9999

DL = 0.006255

BEC = 0.0171

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	242.23	0.0011	P	14.5
2	☐	1.000	1.069	2026.83	0.0088	P	1.3
3	☐	50.000	50.817	85143.99	0.3698	P	1.2
4	☐	125.000	124.062	211036.09	0.9013	P	0.2
5	☐	250.000	244.967	411236.79	1.7785	P	0.8
6	☐	500.000	481.004	788263.27	3.4912	P	1.6
7	☐	1000.000	1010.833	1603846.99	7.3356	A	2.0
8	☐			5467.77	0.0253	P	1.3

$$y = 0.0073 * x + 0.0011$$

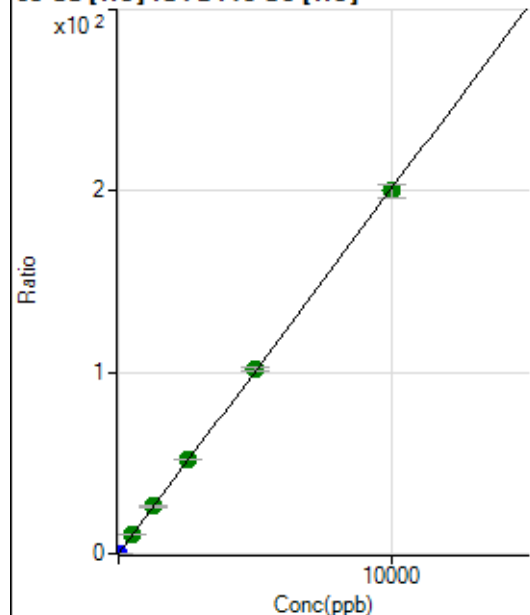
$$R = 0.9997$$

$$DL = 0.0644$$

$$BEC = 0.1482$$

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	718.92	0.0032	P	13.8
2	☐	2.000	1.814	9111.89	0.0397	P	3.6
3	☐	500.000	539.215	2498924.72	10.8530	A	2.3
4	☐	1250.000	1293.202	6093636.23	26.0242	A	1.8
5	☐	2500.000	2580.301	12006271.07	51.9225	A	0.7
6	☐	5000.000	5064.198	23007996.60	101.9019	A	1.7
7	☐	10000.000	9940.465	43719394.35	200.0192	A	3.8
8	☐			12923.76	0.0597	P	1.4

$$y = 0.0201 * x + 0.0032$$

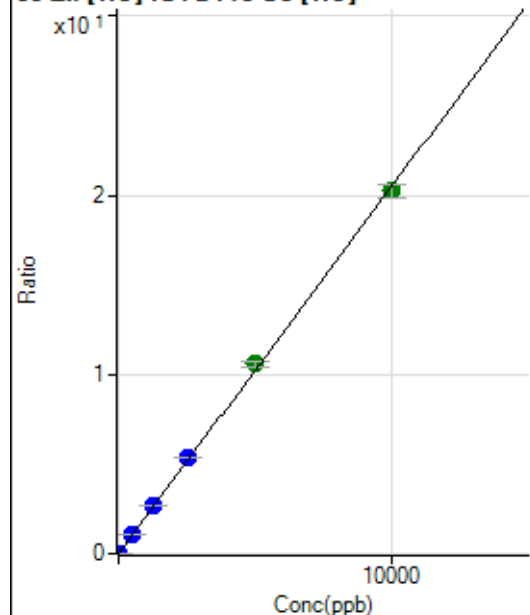
$$R = 0.9999$$

$$DL = 0.06587$$

$$BEC = 0.1593$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	634.47	0.0028	P	4.2
2	☐	2.000	2.126	1646.78	0.0072	P	1.8
3	☐	500.000	523.036	247143.61	1.0734	P	0.7
4	☐	1250.000	1292.941	620339.65	2.6493	P	0.9
5	☐	2500.000	2604.309	1233257.67	5.3335	P	0.2
6	☐	5000.000	5165.418	2387562.27	10.5757	A	3.0
7	☐	10000.000	9884.694	4423033.86	20.2353	A	3.9
8	☐			8995.16	0.0416	P	1.9

$$y = 0.0020 * x + 0.0028$$

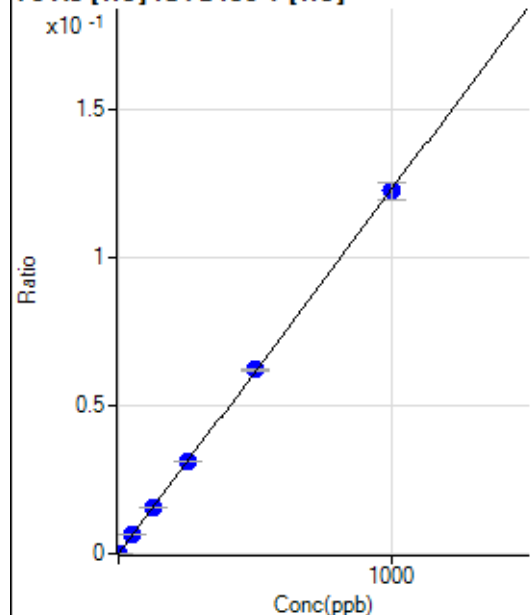
$$R = 0.9997$$

$$DL = 0.1734$$

$$BEC = 1.38$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.33	0.0000	P	39.7
2	☐	1.000	0.996	296.03	0.0001	P	0.7
3	☐	50.000	52.296	14828.59	0.0064	P	0.2
4	☐	125.000	126.166	37370.22	0.0155	P	0.9
5	☐	250.000	252.717	74301.88	0.0310	P	1.4
6	☐	500.000	505.601	143606.23	0.0621	P	0.9
7	☐	1000.000	996.260	274290.54	0.1223	P	4.8
8	☐			113.68	0.0001	P	13.2

$$y = 1.2274E-004 * x + 4.9231E-006$$

$$R = 1.0000$$

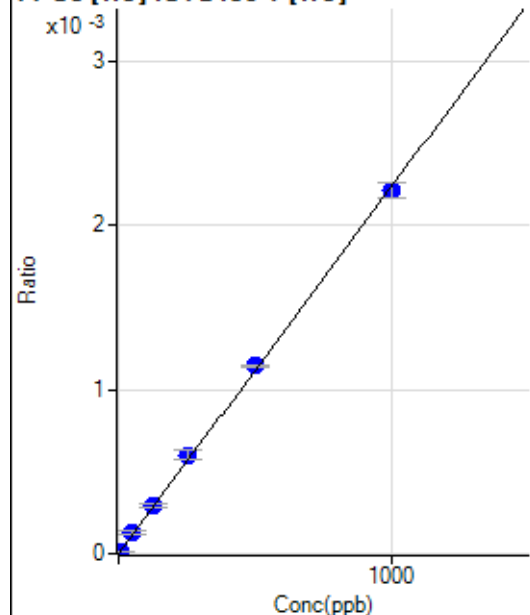
$$DL = 0.04773$$

$$BEC = 0.04011$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.352	27.78	0.0000	P	35.3
3	☐	50.000	57.531	296.67	0.0001	P	12.2
4	☐	125.000	129.046	695.58	0.0003	P	7.6
5	☐	250.000	267.716	1432.31	0.0006	P	9.9
6	☐	500.000	512.599	2650.28	0.0011	P	1.1
7	☐	1000.000	988.387	4954.25	0.0022	P	4.4
8	☐			4.44	0.0000	P	114.6

$$y = 2.2345\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

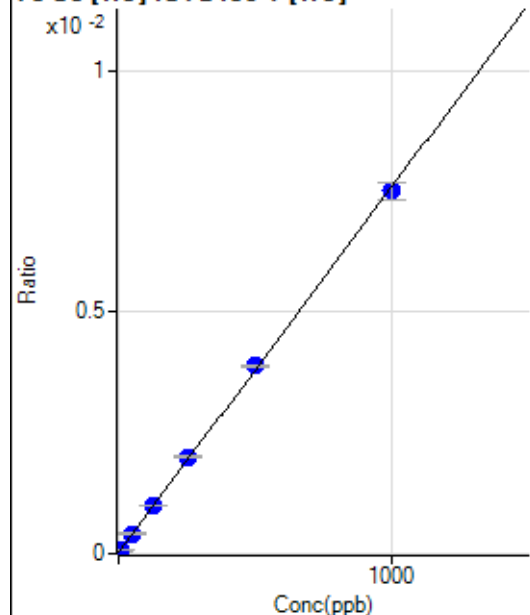
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	53.01	0.0000	P	10.9
2	☐	5.000	5.993	159.69	0.0001	P	3.1
3	☐	50.000	52.087	962.80	0.0004	P	1.9
4	☐	125.000	129.379	2416.12	0.0010	P	1.6
5	☐	250.000	262.368	4806.98	0.0020	P	1.5
6	☐	500.000	512.674	9022.48	0.0039	P	1.0
7	☐	1000.000	989.914	16840.40	0.0075	P	4.5
8	☐			65.01	0.0000	P	10.5

$$y = 7.5606\text{E-}006 * x + 2.3289\text{E-}005$$

$$R = 0.9998$$

$$DL = 1.008$$

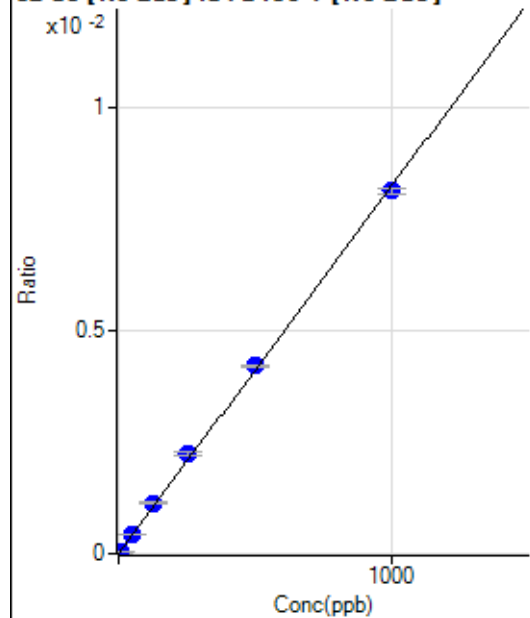
$$BEC = 3.08$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25044.86		P	2.5
2	☐			24115.62		P	3.6
3	☐			24246.14		P	3.8
4	☐			23430.66		P	3.9
5	☐			23761.46		P	2.4
6	☐			23183.12		P	3.0
7	☐			24363.19		P	1.0
8	☐			23737.94		P	2.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-4.01	0.0000	P	-286.
2	☐	5.000	5.662	1113.88	0.0000	P	13.1
3	☐	50.000	53.959	11314.13	0.0004	P	1.9
4	☐	125.000	137.812	28702.70	0.0011	P	4.9
5	☐	250.000	270.406	57683.41	0.0022	P	4.2
6	☐	500.000	511.547	109941.60	0.0042	P	0.9
7	☐	1000.000	987.322	204593.22	0.0081	P	1.6
8	☐			313.35	0.0000	P	19.3

$$y = 8.2290E-006 * x - 1.6638E-007$$

$$R = 0.9996$$

$$DL = 0.1736$$

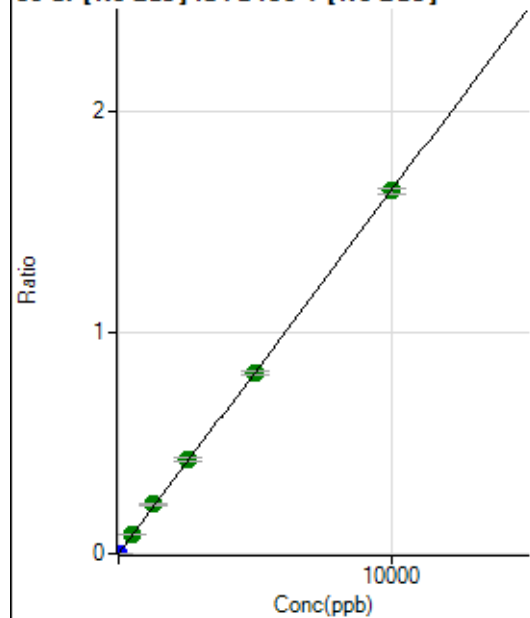
$$BEC = -0.02022$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			897.82		P	0.9
2	☐			871.15		P	6.7
3	☐			881.15		P	8.3
4	☐			888.93		P	3.2
5	☐			832.25		P	9.5
6	☐			858.93		P	9.3
7	☐			837.81		P	7.0
8	☐			930.04		P	1.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1430.67	0.0001	P	7.1
2	☐	1.000	1.176	6037.60	0.0003	P	8.8
3	☐	500.000	528.832	2216493.78	0.0870	A	1.2
4	☐	1250.000	1352.784	5627401.00	0.2223	A	5.2
5	☐	2500.000	2600.123	11073075.08	0.4273	A	5.5
6	☐	5000.000	4955.438	21266487.45	0.8143	A	1.8
7	☐	10000.000	9982.961	41308820.72	1.6404	A	1.6
8	☐			32118.09	0.0013	P	4.5

$$y = 1.6431E-004 * x + 5.7867E-005$$

$$R = 0.9999$$

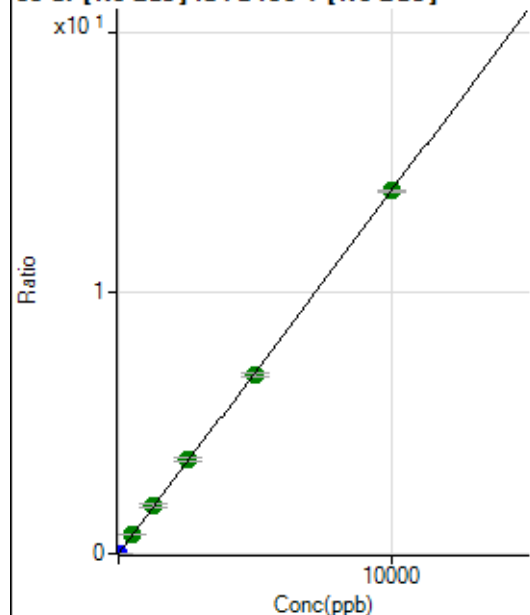
$$DL = 0.07469$$

$$BEC = 0.3522$$

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	566.69	0.0000	P	15.7
2	☐	1.000	1.214	41050.10	0.0017	P	13.1
3	☐	500.000	525.661	18646354.06	0.7315	A	1.1
4	☐	1250.000	1343.342	47286164.94	1.8693	A	7.2
5	☐	2500.000	2601.237	93825583.35	3.6196	A	4.7
6	☐	5000.000	4929.867	179167712.3	6.8599	A	1.6
7	☐	10000.000	9996.807	350343366.1	13.9105	A	0.2
8	☐			260667.25	0.0107	P	5.9

$$y = 0.0014 * x + 2.2955E-005$$

$$R = 0.9999$$

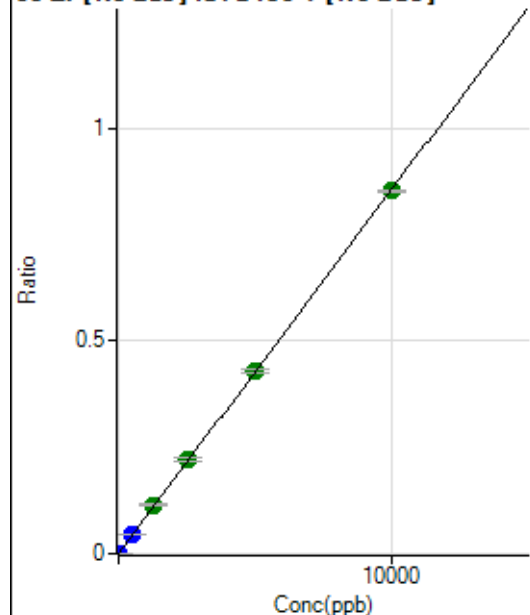
$$DL = 0.007763$$

$$BEC = 0.0165$$

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	1072.29	0.0000	P	12.1
2	☐	1.000	10.424	22385.28	0.0009	P	15.7
3	☐	500.000	517.440	1130064.72	0.0443	P	0.6
4	☐	1250.000	1343.735	2910566.47	0.1150	A	6.8
5	☐	2500.000	2592.600	5750724.87	0.2219	A	5.7
6	☐	5000.000	4995.058	11165810.93	0.4275	A	2.2
7	☐	10000.000	9966.731	21482452.56	0.8530	A	0.7
8	☐			12350.26	0.0005	P	5.0

$$y = 8.5581E-005 * x + 4.3381E-005$$

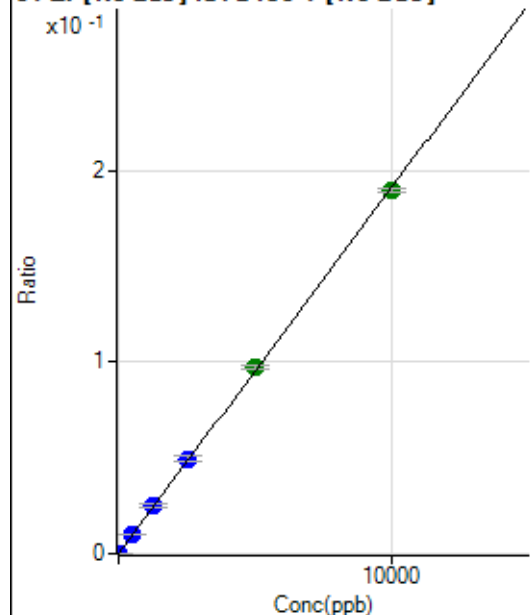
$$R = 0.9999$$

$$DL = 0.1845$$

$$BEC = 0.5069$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	205.56	0.0000	P	10.9
2	☐	1.000	10.148	4845.43	0.0002	P	11.7
3	☐	500.000	512.410	249507.66	0.0098	P	2.0
4	☐	1250.000	1316.031	635989.68	0.0251	P	5.1
5	☐	2500.000	2597.583	1284674.89	0.0496	P	6.2
6	☐	5000.000	5103.615	2544015.42	0.0974	A	2.0
7	☐	10000.000	9914.921	4765643.68	0.1892	A	1.0
8	☐			2692.01	0.0001	P	6.0

$$y = 1.9085\text{E-}005 * x + 8.3093\text{E-}006$$

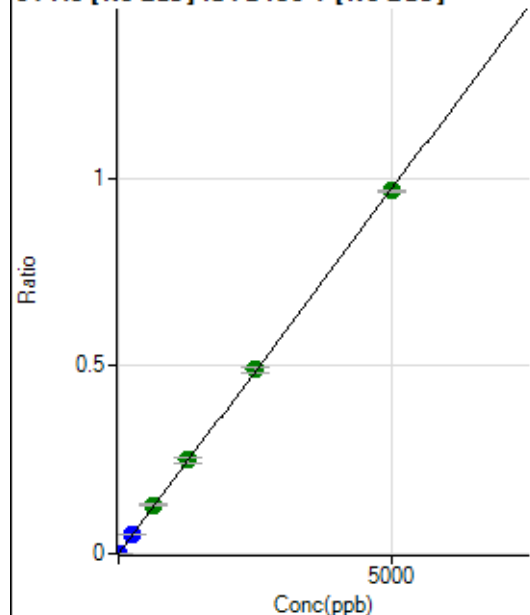
$$R = 0.9999$$

$$DL = 0.1426$$

$$BEC = 0.4354$$

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	413.91	0.0000	P	14.5
2	☐	5.000	5.374	25454.34	0.0011	P	12.4
3	☐	250.000	258.820	1283068.43	0.0503	P	2.6
4	☐	625.000	664.028	3270096.02	0.1291	A	3.3
5	☐	1250.000	1284.990	6473411.95	0.2499	A	6.4
6	☐	2500.000	2520.258	12797668.26	0.4900	A	2.3
7	☐	5000.000	4975.804	24365826.76	0.9675	A	0.5
8	☐			11371.63	0.0005	P	9.8

$$y = 1.9443\text{E-}004 * x + 1.6761\text{E-}005$$

$$R = 0.9999$$

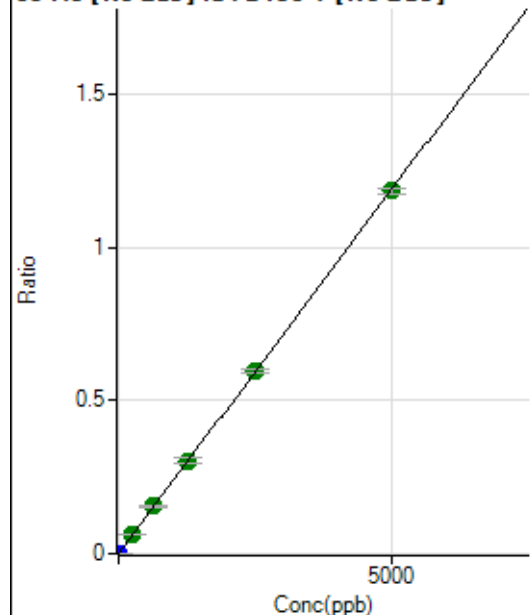
$$DL = 0.03748$$

$$BEC = 0.08621$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	113.89	0.0000	P	16.8
2	☐	5.000	5.500	31464.10	0.0013	P	14.4
3	☐	250.000	258.330	1567621.68	0.0615	A	2.4
4	☐	625.000	658.555	3969534.77	0.1568	A	4.0
5	☐	1250.000	1280.270	7898180.73	0.3048	A	5.8
6	☐	2500.000	2509.578	15602652.78	0.5974	A	1.7
7	☐	5000.000	4983.032	29875316.29	1.1863	A	1.4
8	☐			10454.25	0.0004	P	7.8

$$y = 2.3806E-004 * x + 4.6138E-006$$

$$R = 1.0000$$

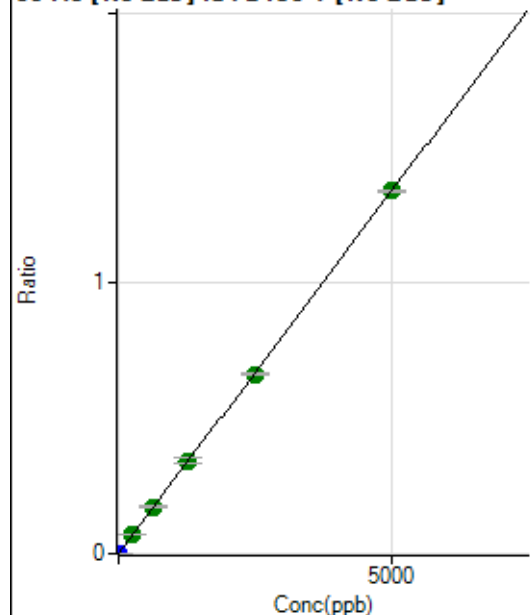
$$DL = 0.009791$$

$$BEC = 0.01938$$

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	255.57	0.0000	P	3.0
2	☐	5.000	5.410	35058.80	0.0015	P	12.1
3	☐	250.000	257.013	1757712.06	0.0690	A	2.4
4	☐	625.000	649.098	4408352.31	0.1741	A	4.7
5	☐	1250.000	1274.771	8862184.23	0.3420	A	6.1
6	☐	2500.000	2475.348	17343635.46	0.6641	A	1.5
7	☐	5000.000	5002.770	33802386.17	1.3421	A	0.8
8	☐			27308.31	0.0011	P	9.1

$$y = 2.6828E-004 * x + 1.0338E-005$$

$$R = 1.0000$$

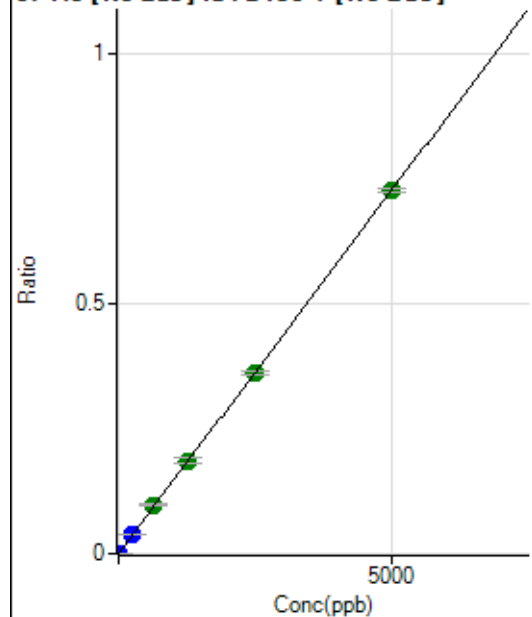
$$DL = 0.003426$$

$$BEC = 0.03854$$

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	66.67	0.0000	P	44.1
2	☐	5.000	5.401	18882.72	0.0008	P	9.8
3	☐	250.000	255.178	943596.02	0.0370	P	1.4
4	☐	625.000	664.512	2440764.18	0.0964	A	3.6
5	☐	1250.000	1281.128	4814885.78	0.1858	A	6.9
6	☐	2500.000	2482.816	9405349.60	0.3601	A	1.8
7	☐	5000.000	4995.612	18248460.13	0.7246	A	1.1
8	☐			6824.09	0.0003	P	13.2

$$y = 1.4505E-004 * x + 2.6845E-006$$

$$R = 0.9999$$

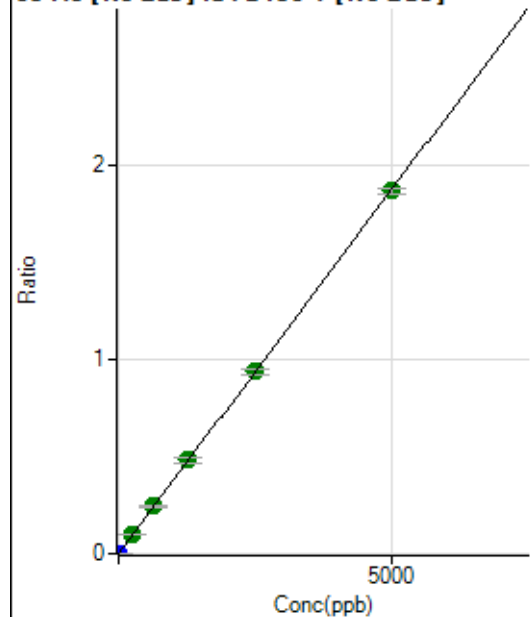
$$DL = 0.0245$$

$$BEC = 0.01851$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	155.56	0.0000	P	10.2
2	☐	5.000	5.424	48984.60	0.0020	P	10.1
3	☐	250.000	261.602	2500124.04	0.0981	A	1.8
4	☐	625.000	659.469	6259804.74	0.2472	A	4.1
5	☐	1250.000	1284.374	12480829.45	0.4815	A	5.3
6	☐	2500.000	2504.088	24516413.22	0.9388	A	2.7
7	☐	5000.000	4984.473	47061361.12	1.8687	A	1.7
8	☐			16930.21	0.0007	P	9.1

$$y = 3.7490E-004 * x + 6.2872E-006$$

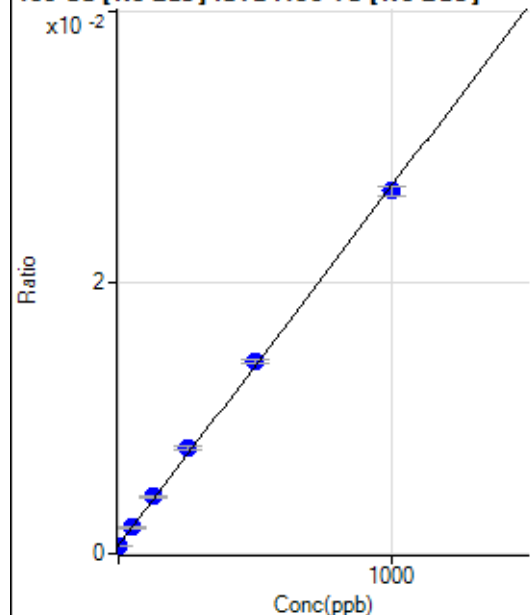
$$R = 1.0000$$

$$DL = 0.005112$$

$$BEC = 0.01677$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	6045.95	0.0006	P	6.0
2	☐	1.000	0.562	6209.91	0.0006	P	2.0
3	☐	50.000	51.337	20713.29	0.0020	P	5.7
4	☐	125.000	137.320	44442.21	0.0042	P	3.9
5	☐	250.000	271.699	82338.80	0.0078	P	4.9
6	☐	500.000	512.238	154294.25	0.0142	P	2.0
7	☐	1000.000	986.850	286680.85	0.0268	P	2.3
8	☐			6048.71	0.0006	P	6.2

$$y = 2.6504\text{E-}005 * x + 6.0174\text{E-}004$$

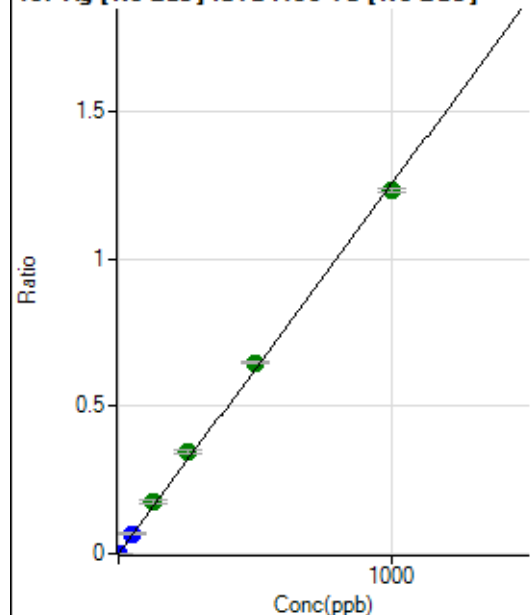
$$R = 0.9996$$

$$DL = 4.059$$

$$BEC = 22.7$$

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	105.56	0.0000	P	61.1
2	☐	1.000	1.058	13379.08	0.0013	P	9.8
3	☐	50.000	54.291	718580.48	0.0680	P	3.2
4	☐	125.000	141.326	1854191.62	0.1771	A	6.7
5	☐	250.000	275.897	3649377.25	0.3457	A	3.9
6	☐	500.000	517.818	7062863.18	0.6489	A	1.2
7	☐	1000.000	982.361	13192631.45	1.2310	A	0.9
8	☐			4920.46	0.0005	P	9.9

$$y = 0.0013 * x + 1.0651\text{E-}005$$

$$R = 0.9993$$

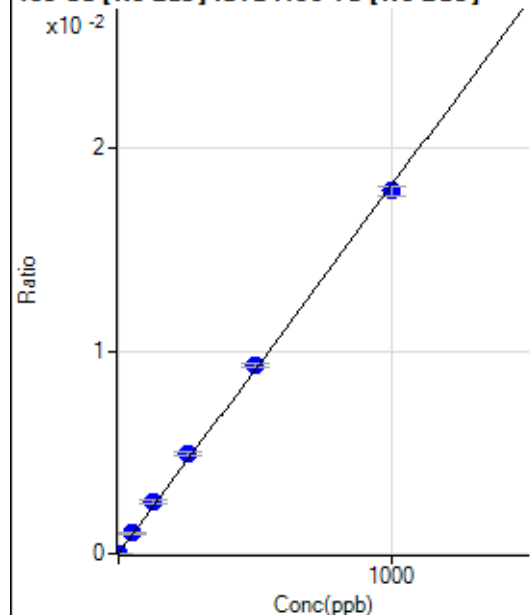
$$DL = 0.01558$$

$$BEC = 0.0085$$

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	61.11	0.0000	P	24.2
2	☐	1.000	1.283	290.28	0.0000	P	29.7
3	☐	50.000	54.667	10541.65	0.0010	P	5.1
4	☐	125.000	140.497	26773.37	0.0026	P	6.0
5	☐	250.000	272.884	52358.80	0.0050	P	4.0
6	☐	500.000	513.642	101551.63	0.0093	P	2.1
7	☐	1000.000	985.287	191728.42	0.0179	P	2.4
8	☐			191.67	0.0000	P	11.9

$$y = 1.8156E-005 * x + 6.1030E-006$$

$$R = 0.9995$$

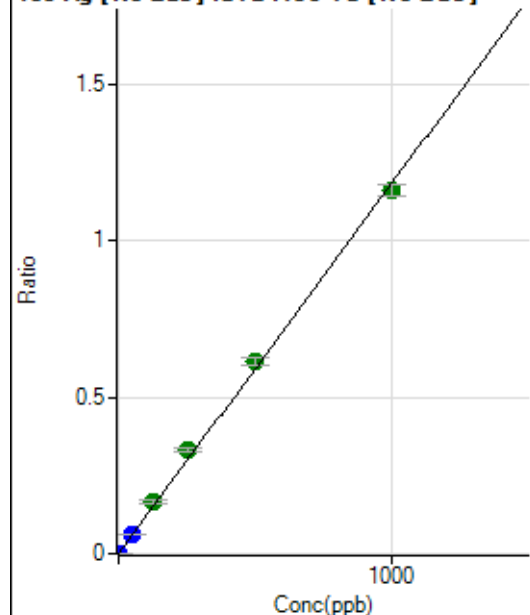
$$DL = 0.2439$$

$$BEC = 0.3361$$

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	108.34	0.0000	P	37.2
2	☐	1.000	1.080	12872.97	0.0013	P	11.9
3	☐	50.000	53.720	670814.37	0.0635	P	2.5
4	☐	125.000	140.113	1734470.98	0.1656	A	5.9
5	☐	250.000	279.498	3487498.43	0.3304	A	4.3
6	☐	500.000	519.486	6681015.64	0.6141	A	4.0
7	☐	1000.000	980.807	12422229.27	1.1594	A	3.3
8	☐			4373.04	0.0004	P	11.1

$$y = 0.0012 * x + 1.0677E-005$$

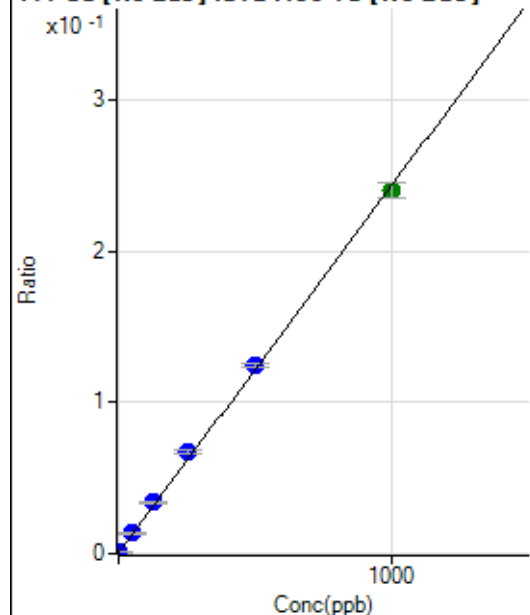
$$R = 0.9992$$

$$DL = 0.01007$$

$$BEC = 0.009032$$

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	4213.00	0.0004	P	6.1
2	☐	1.000	1.034	6737.07	0.0007	P	4.3
3	☐	50.000	53.692	142029.21	0.0134	P	3.0
4	☐	125.000	137.380	353558.57	0.0338	P	5.3
5	☐	250.000	275.495	710026.43	0.0673	P	4.5
6	☐	500.000	511.664	1355702.38	0.1246	P	2.6
7	☐	1000.000	986.062	2567593.29	0.2397	A	4.3
8	☐			5023.59	0.0005	P	7.3

$$y = 2.4267\text{E-}004 * x + 4.1933\text{E-}004$$

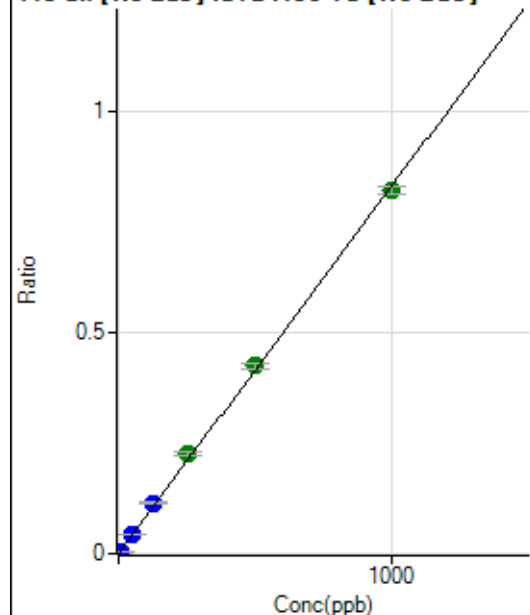
$$R = 0.9995$$

$$DL = 0.3149$$

$$BEC = 1.728$$

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	3292.17	0.0003	P	5.0
2	☐	5.000	5.108	45579.81	0.0046	P	12.0
3	☐	50.000	52.496	462765.21	0.0438	P	3.0
4	☐	125.000	137.188	1193904.46	0.1140	P	5.1
5	☐	250.000	270.161	2365770.95	0.2242	A	4.3
6	☐	500.000	511.314	4613592.94	0.4239	A	3.4
7	☐	1000.000	987.654	8772169.55	0.8186	A	2.1
8	☐			4664.82	0.0005	P	5.2

$$y = 8.2850\text{E-}004 * x + 3.2717\text{E-}004$$

$$R = 0.9996$$

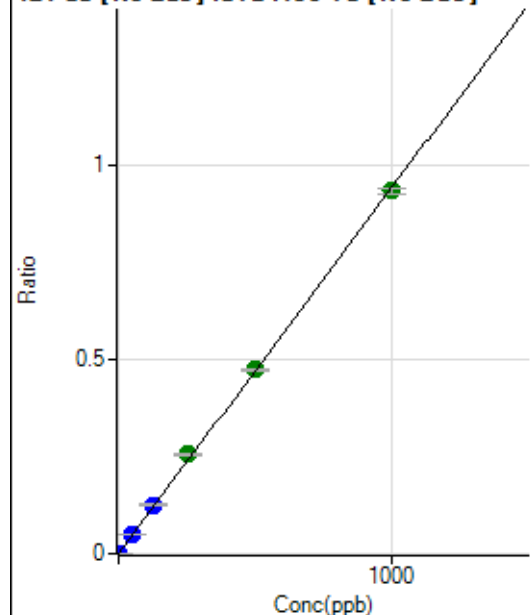
$$DL = 0.05879$$

$$BEC = 0.3949$$

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	61.11	0.0000	P	38.7
2	☐	2.000	2.126	20073.61	0.0020	P	13.2
3	☐	50.000	51.836	515979.35	0.0489	P	3.1
4	☐	125.000	133.977	1322404.17	0.1263	P	5.5
5	☐	250.000	271.428	2700952.49	0.2558	A	2.9
6	☐	500.000	502.737	5156557.93	0.4738	A	1.7
7	☐	1000.000	992.060	10018684.25	0.9350	A	1.8
8	☐			6935.29	0.0007	P	7.5

$$y = 9.4246\text{E-}004 * x + 6.0141\text{E-}006$$

$$R = 0.9997$$

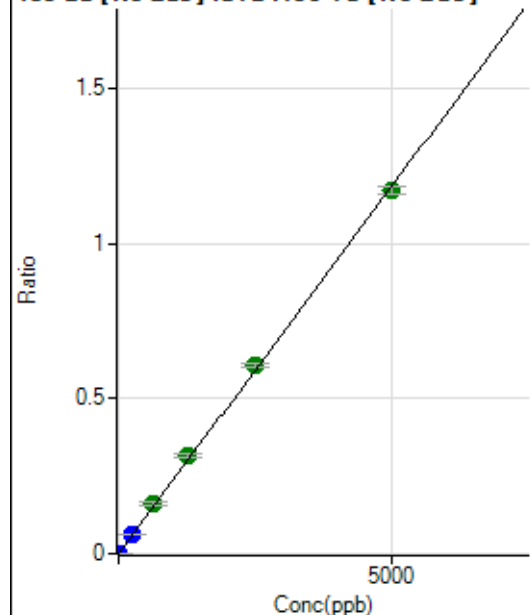
$$DL = 0.007404$$

$$BEC = 0.006381$$

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	83.34	0.0000	P	9.2
2	☐	10.000	10.718	25371.68	0.0025	P	14.6
3	☐	250.000	257.131	642183.03	0.0608	P	2.3
4	☐	625.000	674.794	1670436.69	0.1595	A	6.3
5	☐	1250.000	1328.202	3315005.74	0.3140	A	3.5
6	☐	2500.000	2562.947	6595360.09	0.6060	A	1.8
7	☐	5000.000	4942.394	12520296.81	1.1685	A	2.1
8	☐			4759.32	0.0005	P	3.3

$$y = 2.3642\text{E-}004 * x + 8.2831\text{E-}006$$

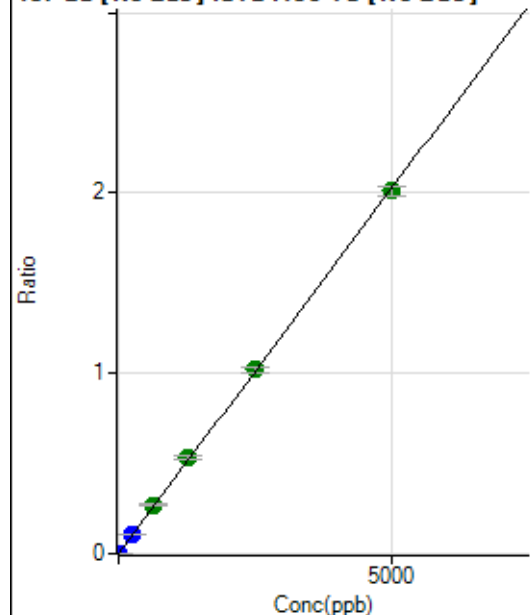
$$R = 0.9997$$

$$DL = 0.009642$$

$$BEC = 0.03503$$

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	5.3
2	☐	10.000	10.842	44005.92	0.0044	P	11.4
3	☐	250.000	255.602	1092722.37	0.1035	P	2.8
4	☐	625.000	668.120	2832033.68	0.2704	A	5.7
5	☐	1250.000	1319.956	5640637.76	0.5343	A	3.2
6	☐	2500.000	2516.833	11085598.60	1.0187	A	3.5
7	☐	5000.000	4968.423	21547512.11	2.0110	A	2.4
8	☐			8502.90	0.0008	P	9.1

$$y = 4.0475E-004 * x + 1.1053E-005$$

$$R = 0.9999$$

$$DL = 0.004336$$

$$BEC = 0.02731$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			13.33		P	100.0
3	☐			53.33		P	25.0
4	☐			60.00		P	29.4
5	☐			195.56		P	17.2
6	☐			308.90		P	9.7
7	☐			508.91		P	10.9
8	☐			111.11		P	9.2

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			3.33		P	100.1
4	☐			5.55		P	69.3
5	☐			8.89		P	57.3
6	☐			25.56		P	39.8
7	☐			37.78		P	33.4
8	☐			33.33		P	36.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			13.89		P	91.6
3	☐			50.00		P	60.1
4	☐			86.11		P	20.1
5	☐			155.56		P	17.2
6	☐			261.12		P	10.3
7	☐			422.24		P	28.0
8	☐			1700.16		P	7.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	173.2
2	☐			1.11		P	173.2
3	☐			13.33		P	66.2
4	☐			30.00		P	40.1
5	☐			55.56		P	25.0
6	☐			103.34		P	14.8
7	☐			180.00		P	19.5
8	☐			728.92		P	5.7

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.11		P	27.9
2	☐			66.67		P	37.5
3	☐			72.22		P	17.6
4	☐			113.89		P	11.2
5	☐			125.01		P	37.1
6	☐			247.23		P	7.0
7	☐			388.90		P	12.2
8	☐			1508.46		P	4.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	25.8
2	☐			53.33		P	16.5
3	☐			61.11		P	22.0
4	☐			83.33		P	14.4
5	☐			98.89		P	14.0
6	☐			156.67		P	11.8
7	☐			230.01		P	9.5
8	☐			828.92		P	6.3

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	45.8
2	☐			72.22		P	33.3
3	☐			72.22		P	52.0
4	☐			75.00		P	19.3
5	☐			83.34		P	10.0
6	☐			125.00		P	29.1
7	☐			127.78		P	18.8
8	☐			250.01		P	16.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.45		P	31.1
2	☐			27.78		P	36.7
3	☐			25.56		P	7.5
4	☐			44.44		P	21.7
5	☐			36.67		P	39.6
6	☐			41.11		P	24.8
7	☐			63.33		P	27.3
8	☐			126.67		P	26.7

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	44.6
2	☐			33.33		P	50.0
3	☐			33.33		P	75.0
4	☐			50.00		P	57.7
5	☐			47.22		P	27.0
6	☐			52.78		P	36.5
7	☐			47.22		P	79.6
8	☐			133.34		P	25.0

172 Yb [He] No available calibration points

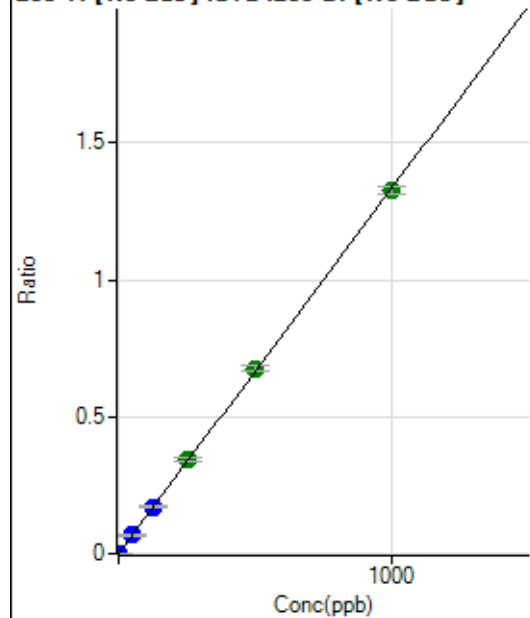
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.96		P	24.8
2	☐			14.81		P	86.6
3	☐			11.11		P	86.6
4	☐			18.52		P	45.8
5	☐			27.78		P	34.6
6	☐			24.07		P	87.4
7	☐			33.33		P	16.7
8	☐			66.67		P	33.3

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1072.30		P	5.3
2	☐			1052.85		P	21.4
3	☐			2644.79		P	3.3
4	☐			4745.46		P	7.7
5	☐			9017.20		P	3.7
6	☐			17111.58		P	1.7
7	☐			32265.13		P	0.8
8	☐			1188.97		P	15.4

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4754.64		P	1.7
2	☐			4760.20		P	6.6
3	☐			5501.26		P	3.2
4	☐			6855.60		P	4.9
5	☐			8810.47		P	1.2
6	☐			12600.65		P	5.5
7	☐			20015.38		P	0.5
8	☐			4612.00		P	4.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	338.90	0.0001	P	15.8
2	☐	1.000	1.090	7580.20	0.0015	P	10.4
3	☐	50.000	50.024	363222.28	0.0667	P	2.2
4	☐	125.000	128.330	927270.82	0.1711	P	5.1
5	☐	250.000	257.594	1931357.62	0.3433	A	4.2
6	☐	500.000	507.308	3820516.75	0.6760	A	3.3
7	☐	1000.000	994.030	7175740.53	1.3246	A	2.2
8	☐			2191.93	0.0005	P	6.9

$$y = 0.0013 * x + 6.4607E-005$$

$$R = 0.9999$$

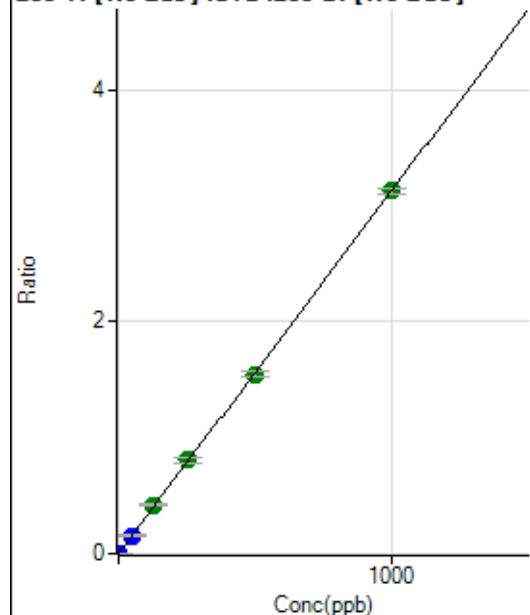
$$DL = 0.02292$$

$$BEC = 0.04849$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	969.51	0.0002	P	8.3
2	☐	1.000	1.057	17445.67	0.0035	P	10.5
3	☐	50.000	49.836	849695.33	0.1561	P	3.2
4	☐	125.000	135.091	2292074.07	0.4228	A	4.8
5	☐	250.000	257.069	4525826.32	0.8044	A	4.2
6	☐	500.000	493.764	8731133.27	1.5450	A	3.2
7	☐	1000.000	1000.098	16950634.58	3.1291	A	1.9
8	☐			5078.95	0.0011	P	15.9

$$y = 0.0031 * x + 1.8507E-004$$

$$R = 0.9999$$

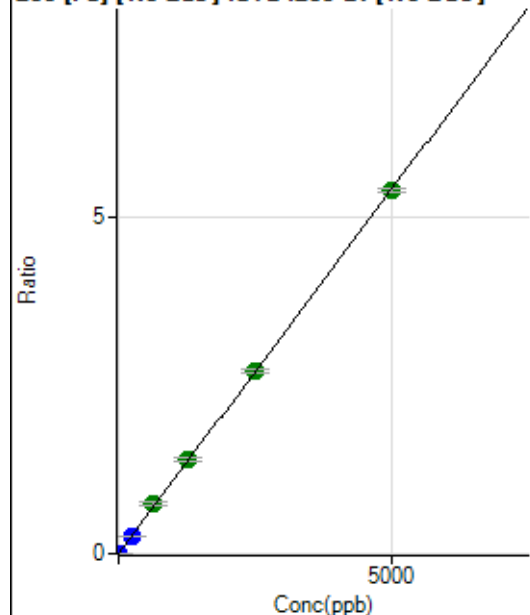
$$DL = 0.01481$$

$$BEC = 0.05916$$

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	524.09	0.0001	P	9.9
2	☐	1.000	1.080	6316.48	0.0013	P	15.1
3	☐	250.000	241.401	1421897.85	0.2612	P	1.2
4	☐	625.000	683.814	4008114.04	0.7396	A	5.9
5	☐	1250.000	1291.064	7856044.21	1.3964	A	4.5
6	☐	2500.000	2504.879	15315029.97	2.7091	A	1.7
7	☐	5000.000	4980.372	29181523.11	5.3863	A	1.0
8	☐			12016.90	0.0025	P	10.2

$$y = 0.0011 * x + 1.0008E-004$$

$$R = 0.9999$$

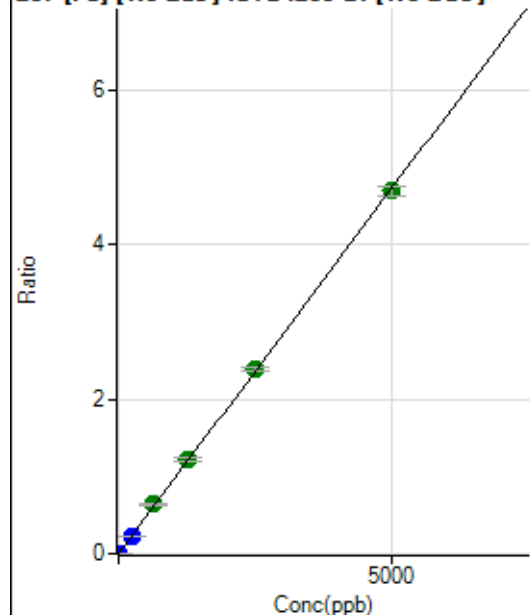
$$DL = 0.02741$$

$$BEC = 0.09254$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	403.72	0.0001	P	0.8
2	☐	1.000	1.061	5401.23	0.0011	P	10.3
3	☐	250.000	243.106	1252377.67	0.2300	P	1.8
4	☐	625.000	677.072	3472067.44	0.6406	A	5.5
5	☐	1250.000	1291.509	6875281.29	1.2218	A	3.5
6	☐	2500.000	2527.119	13510174.26	2.3906	A	2.9
7	☐	5000.000	4969.899	25469331.59	4.7014	A	2.4
8	☐			10558.22	0.0022	P	3.2

$$y = 9.4597\text{E-}004 * x + 7.7027\text{E-}005$$

$$R = 0.9999$$

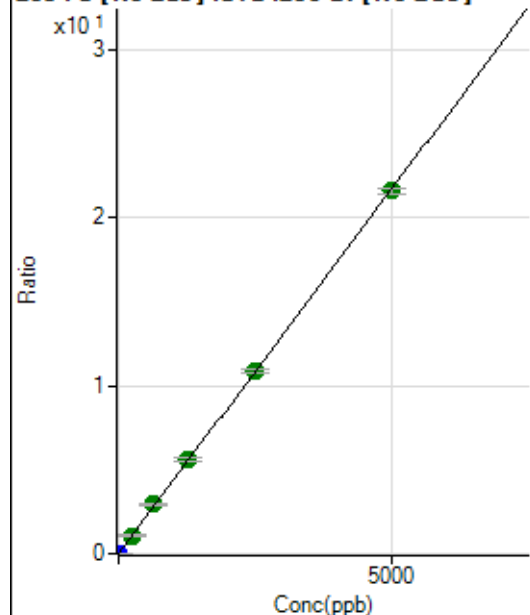
$$DL = 0.001945$$

$$BEC = 0.08143$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2026.03	0.0004	P	8.8
2	☐	1.000	1.044	24565.10	0.0049	P	9.0
3	☐	250.000	249.476	5889258.69	1.0817	A	2.2
4	☐	625.000	673.367	15822241.79	2.9190	A	5.6
5	☐	1250.000	1286.283	31367612.56	5.5756	A	4.3
6	☐	2500.000	2514.924	61615091.54	10.9010	A	1.8
7	☐	5000.000	4977.447	116882309.3	21.5745	A	1.7
8	☐			48273.32	0.0100	P	6.8

$$y = 0.0043 * x + 3.8688\text{E-}004$$

$$R = 0.9999$$

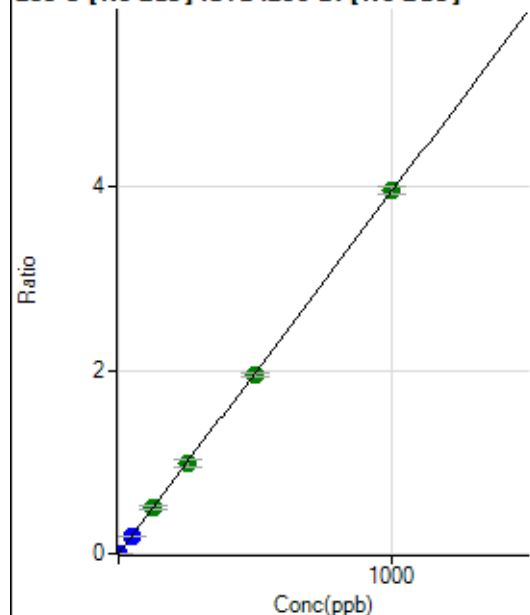
$$DL = 0.02346$$

$$BEC = 0.08926$$

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	16.67	0.0000	P	2.1
2	☐	1.000	0.994	19573.92	0.0039	P	13.2
3	☐	50.000	47.132	1012333.02	0.1859	P	1.4
4	☐	125.000	126.787	2710512.86	0.5002	A	6.1
5	☐	250.000	251.080	5566491.96	0.9906	A	8.1
6	☐	500.000	494.316	11023547.47	1.9502	A	2.0
7	☐	1000.000	1002.492	21424517.32	3.9550	A	2.2
8	☐			3703.44	0.0008	P	8.5

$$y = 0.0039 * x + 3.1818E-006$$

$$R = 1.0000$$

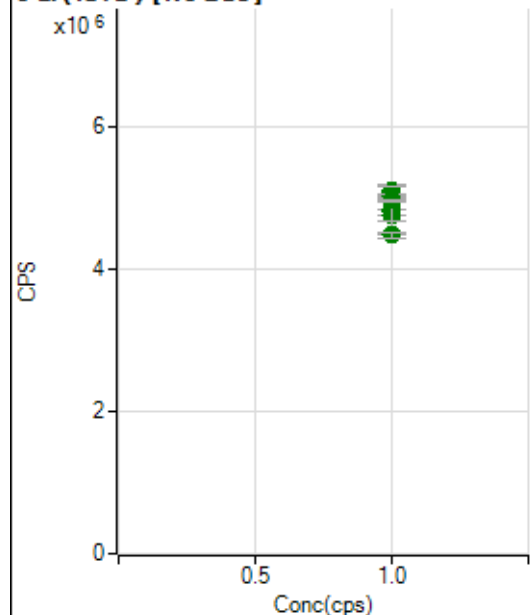
$$DL = 4.98E-05$$

$$BEC = 0.0008065$$

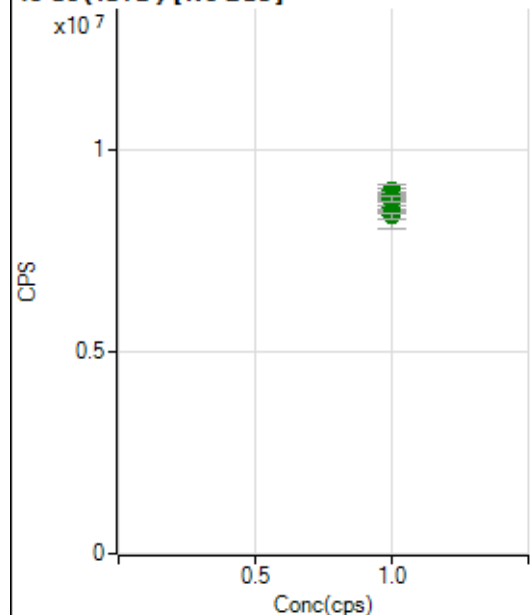
Weight: <None>

Min Conc: 0

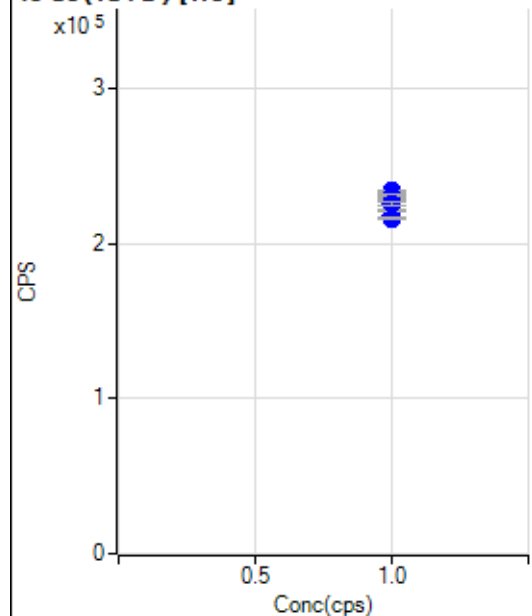
6 Li (ISTD) [No Gas]



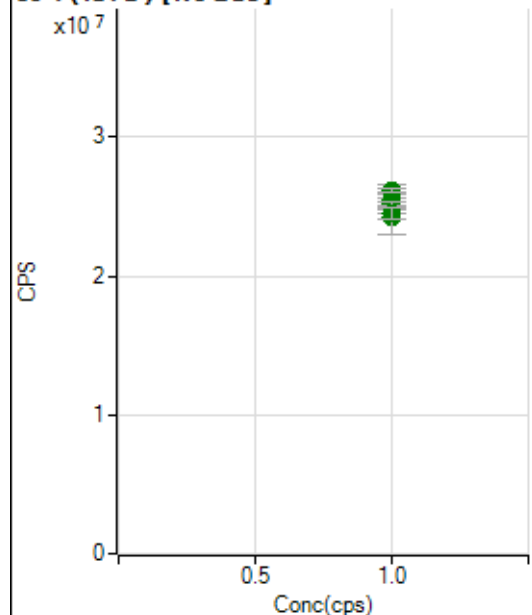
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4799378.78		A	1.5
2	☐	1.000		4769848.67		A	11.6
3	☐	1.000		5099410.19		A	3.5
4	☐	1.000		4850961.76		A	7.4
5	☐	1.000		5087578.64		A	2.9
6	☐	1.000		5037783.26		A	1.0
7	☐	1.000		4962248.53		A	0.1
8	☐	1.000		4479808.99		A	2.0

45 Sc (ISTD) [No Gas]

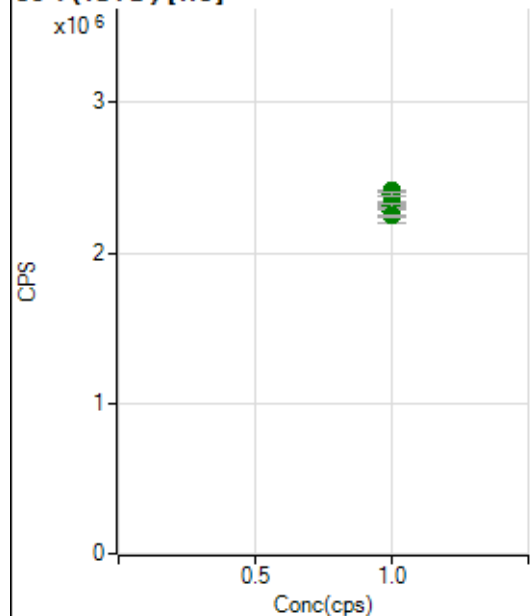
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8541473.55		A	1.0
2	☐	1.000		8405655.01		A	8.6
3	☐	1.000		8970753.20		A	1.9
4	☐	1.000		8753308.76		A	6.9
5	☐	1.000		8965494.86		A	4.0
6	☐	1.000		8889174.17		A	1.6
7	☐	1.000		8774164.45		A	1.5
8	☐	1.000		8353923.07		A	1.9

45 Sc (ISTD) [He]

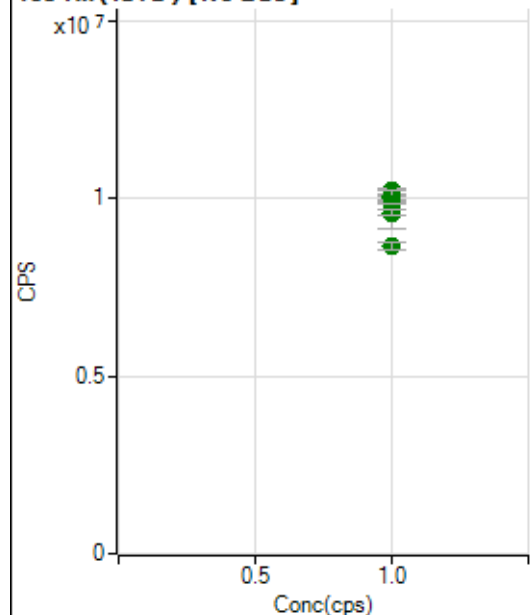
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		224731.41		P	2.2
2	☐	1.000		229491.91		P	0.6
3	☐	1.000		230239.91		P	0.4
4	☐	1.000		234157.78		P	0.4
5	☐	1.000		231228.16		P	0.7
6	☐	1.000		225811.78		P	1.2
7	☐	1.000		218708.52		P	2.4
8	☐	1.000		216442.76		P	0.3

89 Y (ISTD) [No Gas]

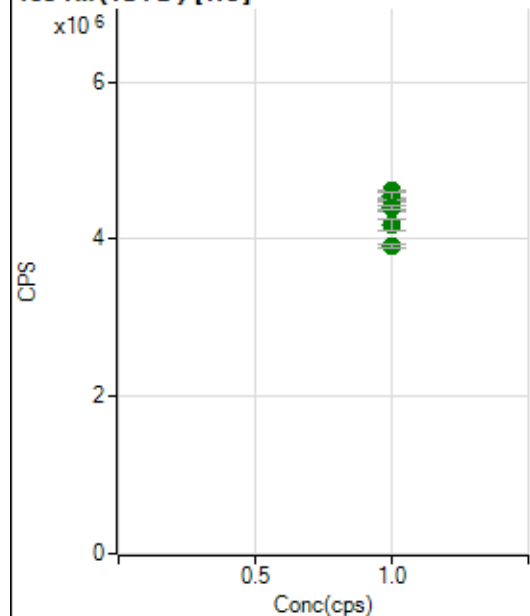
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24726783.80		A	1.5
2	☐	1.000		24179246.31		A	10.1
3	☐	1.000		25493905.46		A	1.3
4	☐	1.000		25346846.84		A	4.2
5	☐	1.000		25958057.11		A	4.6
6	☐	1.000		26118743.22		A	0.9
7	☐	1.000		25185809.35		A	1.4
8	☐	1.000		24445331.30		A	3.4

89 Y (ISTD) [He]

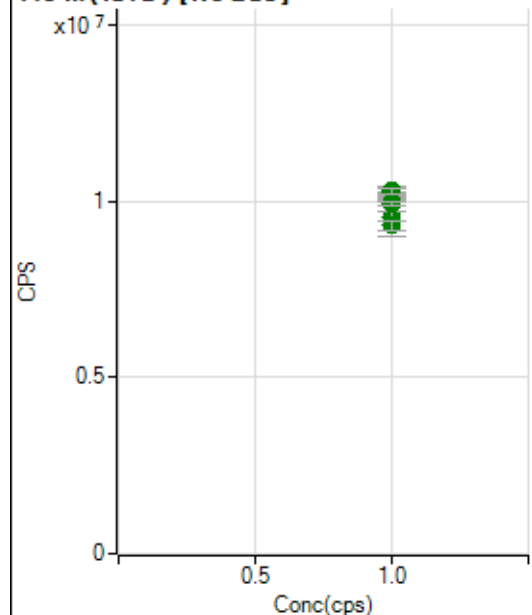
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2280966.32		A	3.5
2	☐	1.000		2327899.68		A	1.0
3	☐	1.000		2308334.62		A	0.3
4	☐	1.000		2412441.00		A	0.7
5	☐	1.000		2395153.51		A	1.0
6	☐	1.000		2313938.94		A	0.9
7	☐	1.000		2245705.49		A	3.9
8	☐	1.000		2247338.52		A	0.6

103 Rh (ISTD) [No Gas]

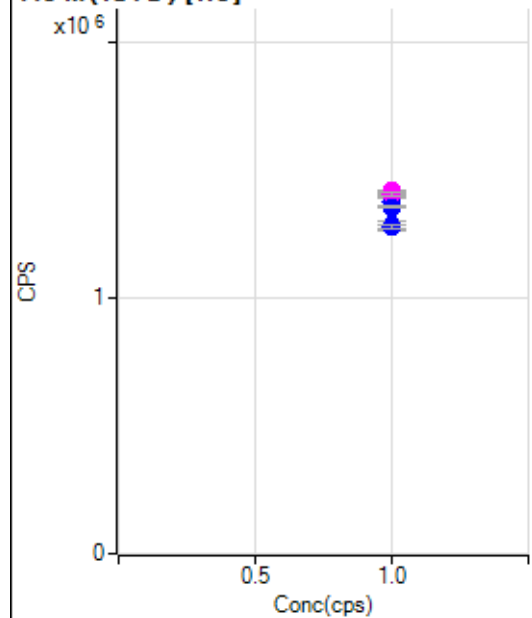
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10001764.98		A	0.6
2	☐	1.000		9583684.16		A	9.8
3	☐	1.000		10199896.49		A	1.3
4	☐	1.000		9979343.28		A	6.3
5	☐	1.000		10044947.71		A	3.0
6	☐	1.000		9825786.50		A	0.2
7	☐	1.000		9592824.09		A	1.6
8	☐	1.000		8643362.69		A	2.6

103 Rh (ISTD) [He]

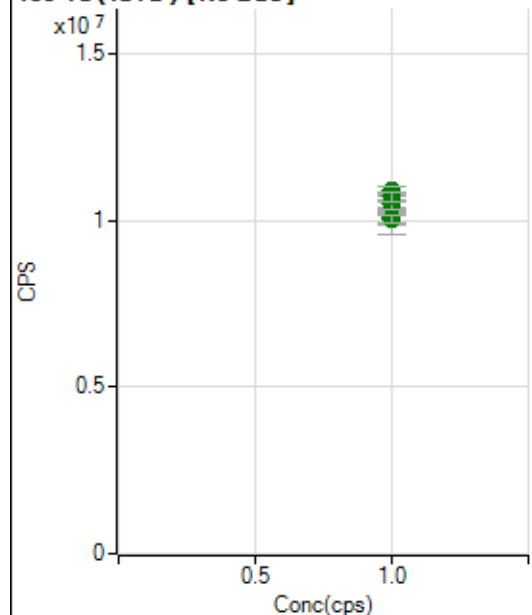
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4422550.38		A	2.9
2	☐	1.000		4494434.48		A	0.9
3	☐	1.000		4506377.16		A	0.7
4	☐	1.000		4613721.91		A	0.9
5	☐	1.000		4547036.22		A	2.2
6	☐	1.000		4397772.26		A	1.2
7	☐	1.000		4186105.04		A	3.2
8	☐	1.000		3915103.28		A	1.7

115 In (ISTD) [No Gas]

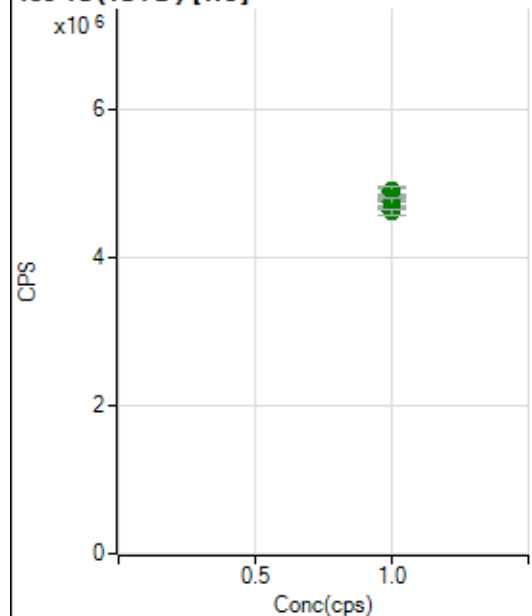
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9928998.75		A	0.9
2	☐	1.000		9568666.51		A	11.5
3	☐	1.000		10156543.28		A	1.9
4	☐	1.000		9980781.89		A	5.6
5	☐	1.000		10278915.32		A	2.3
6	☐	1.000		10294729.26		A	1.3
7	☐	1.000		9905943.31		A	1.1
8	☐	1.000		9312009.32		A	2.9

115 In (ISTD) [He]

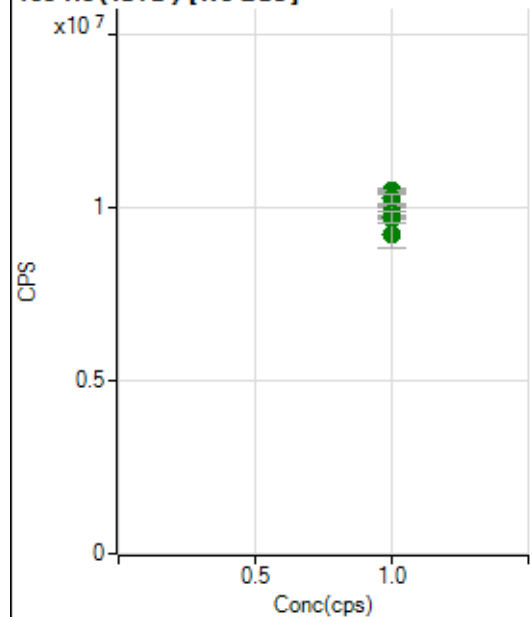
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1374079.91		P	2.2
2	☐	1.000		1394229.96		P	0.3
3	☐	1.000		1407527.49		P	0.7
4	☐	1.000		1417103.25		M	0.7
5	☐	1.000		1403899.32		M	1.1
6	☐	1.000		1355620.34		P	1.1
7	☐	1.000		1281879.34		P	2.7
8	☐	1.000		1276312.46		P	0.9

159 Tb (ISTD) [No Gas]

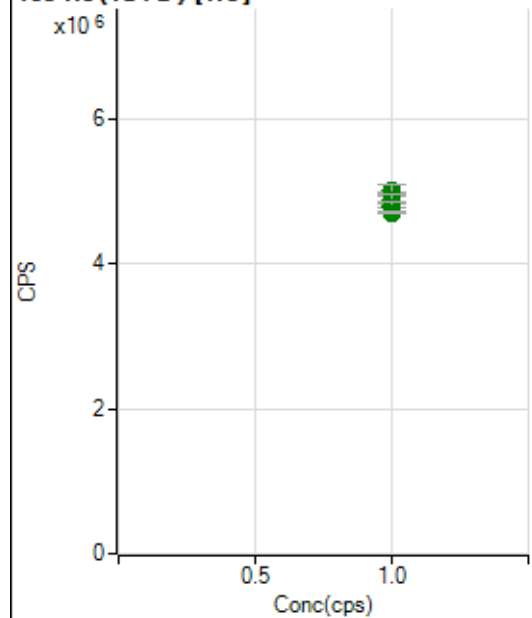
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10061711.80		A	3.9
2	☐	1.000		10082412.97		A	10.4
3	☐	1.000		10567021.37		A	3.0
4	☐	1.000		10492188.67		A	5.1
5	☐	1.000		10566960.81		A	4.3
6	☐	1.000		10885983.52		A	2.3
7	☐	1.000		10718463.80		A	2.5
8	☐	1.000		10040412.14		A	2.6

159 Tb (ISTD) [He]

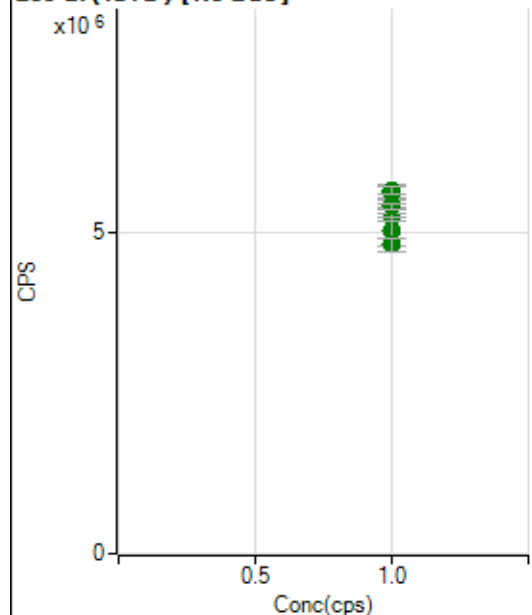
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4683451.08		A	1.6
2	☐	1.000		4781117.39		A	0.9
3	☐	1.000		4758708.19		A	2.3
4	☐	1.000		4898443.50		A	2.3
5	☐	1.000		4908084.79		A	2.1
6	☐	1.000		4808916.01		A	1.4
7	☐	1.000		4752114.41		A	2.6
8	☐	1.000		4621746.56		A	1.9

165 Ho (ISTD) [No Gas]

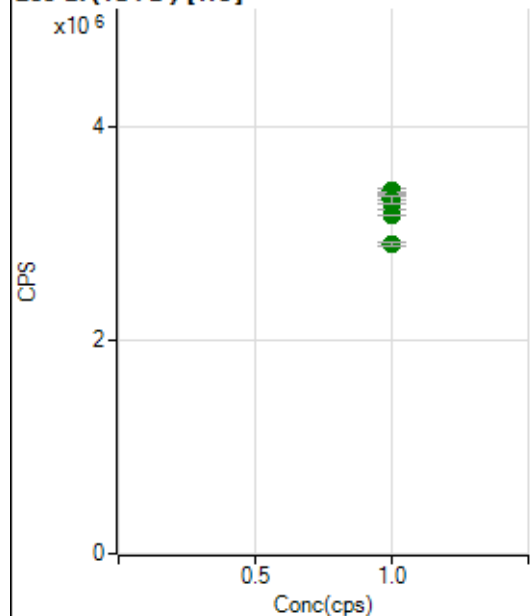
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9636197.26		A	1.5
2	☐	1.000		9217030.33		A	9.1
3	☐	1.000		9860462.20		A	2.0
4	☐	1.000		9893894.40		A	3.5
5	☐	1.000		10285875.32		A	5.2
6	☐	1.000		10466295.11		A	0.6
7	☐	1.000		10242506.57		A	2.7
8	☐	1.000		9722801.78		A	3.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4740147.26		A	2.0
2	☐	1.000		4805155.00		A	1.2
3	☐	1.000		4857897.67		A	0.6
4	☐	1.000		4930540.28		A	3.0
5	☐	1.000		5011156.52		A	3.3
6	☐	1.000		4897802.46		A	2.6
7	☐	1.000		4783026.04		A	3.6
8	☐	1.000		4713997.67		A	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5240652.80		A	2.1
2	☐	1.000		5025251.56		A	8.8
3	☐	1.000		5445311.03		A	2.3
4	☐	1.000		5428691.48		A	4.5
5	☐	1.000		5632952.28		A	4.4
6	☐	1.000		5653597.77		A	2.1
7	☐	1.000		5418261.10		A	1.7
8	☐	1.000		4824111.53		A	4.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3277208.67		A	2.5
2	☐	1.000		3351533.84		A	1.5
3	☐	1.000		3343590.12		A	1.5
4	☐	1.000		3405556.16		A	1.2
5	☐	1.000		3387007.73		A	0.9
6	☐	1.000		3318372.70		A	1.9
7	☐	1.000		3173815.96		A	0.2
8	☐	1.000		2910852.84		A	1.2

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8102321 MS.b
Acq. Date-Time 2021-10-23 11:53:02
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		19081	190805.92			1.643	5.000
24		164350	1643500.25			1.905	5.000
25		21841	218405.53			1.967	5.000
26		24684	246844.15			1.925	5.000
59		40336	403359.71			2.041	5.000
113		15050	150501.45			2.068	5.000
115		48333	483329.00			2.967	5.000
206		14717	147170.69			2.562	5.000
207		12256	122564.17			2.296	5.000
208		30257	302574.11			2.234	5.000
220		1	8.40			34.297	

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

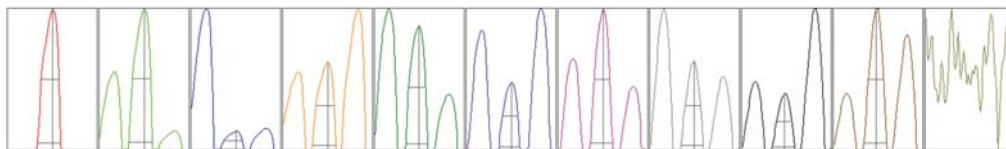
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	19134	19136	19241	18543	19349
24	163457	164044	167396	159729	167124
25	21924	21883	22220	21110	22066
26	24983	24727	25021	23861	24830
59	40593	40675	40802	38869	40740
113	15164	14955	15276	14551	15306
115	49730	48951	49026	46046	47911
206	14553	14665	15174	14209	14984
207	12134	12277	12619	11865	12387
208	30276	30188	30819	29172	30832

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	34964.16	9.05	8.90 - 9.10	
24	286788.15	24.05	23.90 - 24.10	
25	38439.47	25.05	24.90 - 25.10	
26	43083.37	26.05	25.90 - 26.10	
59	75189.60	59.00	58.90 - 59.10	
113	30616.18	113.05	112.90 - 113.10	
115	98789.45	115.05	114.90 - 115.10	
206	29644.11	206.00	205.90 - 206.10	
207	24623.09	206.95	206.90 - 207.10	
208	61366.02	207.95	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.775	0.900	
24	0.61	0.786	0.900	
25	0.61	0.786	0.900	
26	0.61	0.785	0.900	
59	0.57	0.736	0.900	
113	0.51	0.688	0.900	
115	0.51	0.746	0.900	
206	0.51	0.740	0.900	
207	0.51	0.767	0.900	
208	0.51	0.766	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

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

US EPA Tune Check Report

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	7.7 V	Deflect	15.0 V
Extract 2	-200.0 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	124	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	124	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.8 mm
---------	--------	---------	---------

EM

Discriminator	3.9 mV	Analog HV	2261 V	Pulse HV	1550 V
---------------	--------	-----------	--------	----------	--------

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		8128	81275.71			0.478	
89		22179	221785.86			0.677	
205		15113	151133.33			1.233	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8139	8101	8175	8146	8077
89	22347	22149	22306	22114	21977
205	15334	15137	15247	14942	14907

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	7.7 V	Deflect	5.4 V
-----------	--------	------------	-------	---------	-------

US EPA Tune Check Report

Extract 2 -200.0 V

Omega Bias -100 V

Cell Entrance -50 V

Cell Exit -70 V

Plate Bias -60 V

Cell Parameters

Use Gas Yes

He Flow 4.5 mL/min

H2 Flow ---

3rd Gas Flow ---

OctP Bias -18.0 V

OctP RF 200 V

Energy Discrimination 5.0 V

QP Parameters

Mass Gain 124

Mass Offset 124

Axis Gain 0.9991

Axis Offset 0.00

QP Bias -13.0 V

Hardware Settings

Torch

Torch H 0.9 mm

Torch V -0.8 mm

EM

Discriminator 3.9 mV

Analog HV 2261 V

Pulse HV 1550 V