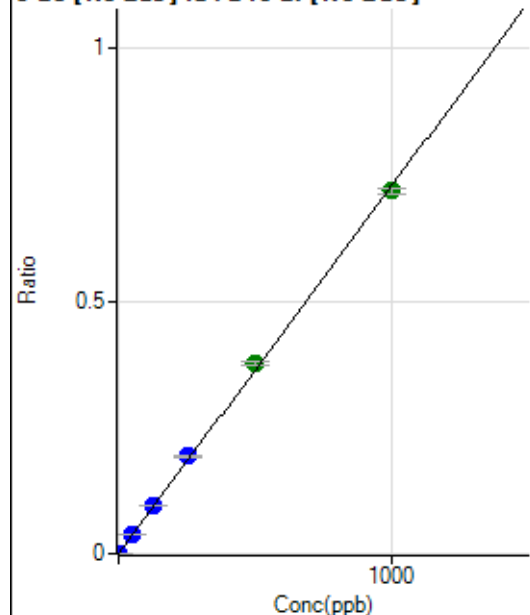


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8022323-MS.b\
Analysis File: P8022323-MS.batch.bin
DA Date-Time: 2023-02-23 13:49:20
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-02-23 08:59:39
2	005CALS.d	S02	2023-02-23 09:02:49
3	006CALS.d	S03	2023-02-23 09:06:01
4	007CALS.d	S04	2023-02-23 09:09:08
5	008CALS.d	S05	2023-02-23 09:12:16
6	009CALS.d	S06	2023-02-23 09:15:22
7	010CALS.d	S07	2023-02-23 09:18:31
8	011CALS.d	S08	2023-02-23 09:21:37

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	102.49	0.0000	P	2.4
2	☐	1.000	1.043	2543.24	0.0008	P	4.4
3	☐	50.000	52.910	123321.42	0.0385	P	2.7
4	☐	125.000	132.601	305210.80	0.0964	P	0.5
5	☐	250.000	264.861	600316.45	0.1926	P	1.5
6	☐	500.000	515.955	1173698.07	0.3751	A	1.9
7	☐	1000.000	987.212	2234374.66	0.7177	A	1.5
8	☐			635.77	0.0002	P	9.1

$$y = 7.2701\text{E-}004 * x + 3.2124\text{E-}005$$

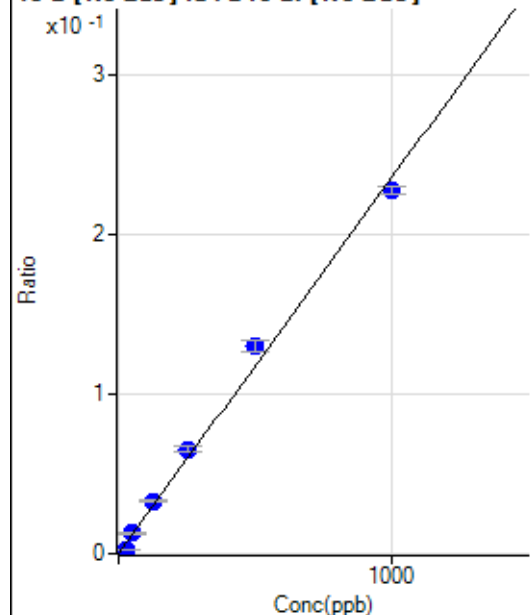
$$R = 0.9997$$

$$DL = 0.003129$$

$$BEC = 0.04419$$

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	334.61	0.0001	P	10.9
2	☐	25.000	8.266	6598.86	0.0020	P	2.7
3	☐	50.000	53.348	40552.24	0.0127	P	2.5
4	☐	125.000	138.503	103436.68	0.0327	P	3.1
5	☐	250.000	277.081	203445.21	0.0653	P	5.2
6	☐	500.000	552.232	406534.83	0.1300	P	5.4
7	☐	1000.000	965.677	707689.28	0.2273	P	2.2
8	☐			53675.81	0.0182	P	7.8

$$y = 2.3526\text{E-}004 * x + 1.0485\text{E-}004$$

$$R = 0.9970$$

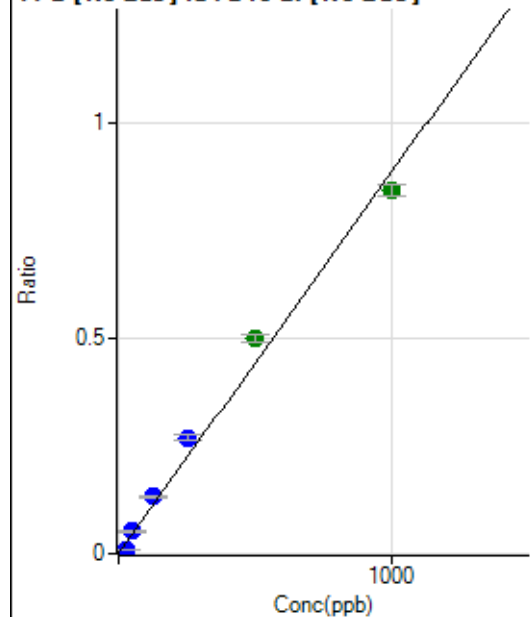
$$DL = 0.1457$$

$$BEC = 0.4457$$

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	1345.14	0.0004	P	2.1
2	☐	25.000	8.990	26978.15	0.0084	P	4.3
3	☐	50.000	58.219	166481.26	0.0520	P	3.8
4	☐	125.000	150.119	421800.08	0.1333	P	3.5
5	☐	250.000	304.132	840120.27	0.2696	P	5.6
6	☐	500.000	564.308	1563465.34	0.4999	A	3.9
7	☐	1000.000	951.162	2623174.17	0.8424	A	3.2
8	☐			219959.81	0.0747	P	7.6

$$y = 8.8519\text{E-}004 * x + 4.2150\text{E-}004$$

$$R = 0.9943$$

$$DL = 0.02993$$

$$BEC = 0.4762$$

Weight: <None>

Min Conc: 0

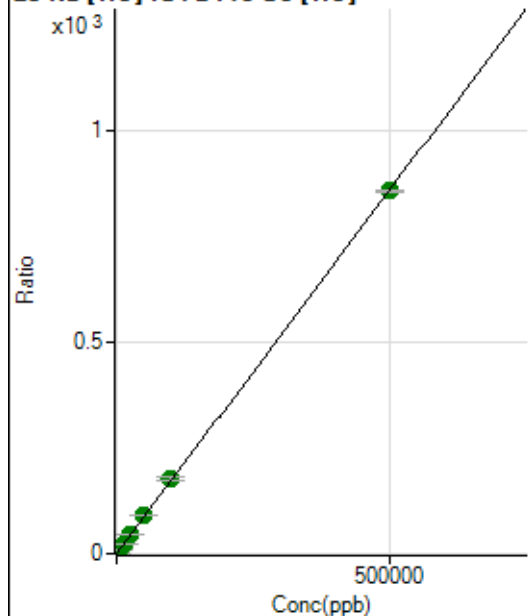
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3842459.72		A	1.3
2	☐			3619856.98		A	1.2
3	☐			4165458.38		A	1.3
4	☐			4196948.83		A	1.0
5	☐			4211568.84		A	3.1
6	☐			4317948.97		A	2.6
7	☐			4609880.10		A	2.7
8	☐			4164598.84		A	3.3

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45942.22		P	1.6
2	☐			43049.69		P	0.5
3	☐			51752.94		P	2.1
4	☐			52957.31		P	1.1
5	☐			53269.45		P	2.1
6	☐			55145.60		P	1.6
7	☐			59967.55		P	1.4
8	☐			54462.75		P	1.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11313.02	0.0960	P	3.7
2	☐	500.000	468.626	106031.74	0.9015	P	1.9
3	☐	5000.000	5476.635	1094705.47	9.5090	A	2.3
4	☐	12500.000	13301.803	2690326.38	22.9585	A	0.3
5	☐	25000.000	26924.517	5324932.58	46.3727	A	0.4
6	☐	50000.000	52055.190	10495150.67	89.5661	A	1.1
7	☐	100000.00	102975.47	20809502.20	177.0856	A	2.9
8	☐	500000.00	499078.38	97885683.44	857.8896	A	0.5

$$y = 0.0017 * x + 0.0960$$

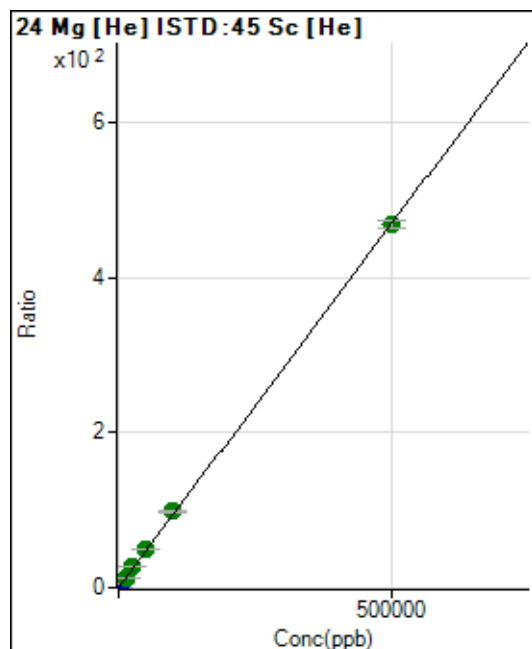
$$R = 1.0000$$

$$DL = 6.252$$

$$BEC = 55.85$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	913.94	0.0078	P	10.6
2	☐	500.000	482.688	54249.30	0.4612	P	1.0
3	☐	5000.000	5600.001	606430.48	5.2683	P	2.1
4	☐	12500.000	13822.431	1522317.73	12.9923	A	2.7
5	☐	25000.000	28109.654	3033074.39	26.4135	A	1.0
6	☐	50000.000	52698.570	5801085.68	49.5120	A	0.4
7	☐	100000.00	105029.58	11595255.81	98.6709	A	2.4
8	☐	500000.00	498529.70	53431177.93	468.3186	A	2.3

$$y = 9.3938\text{E-}004 * x + 0.0078$$

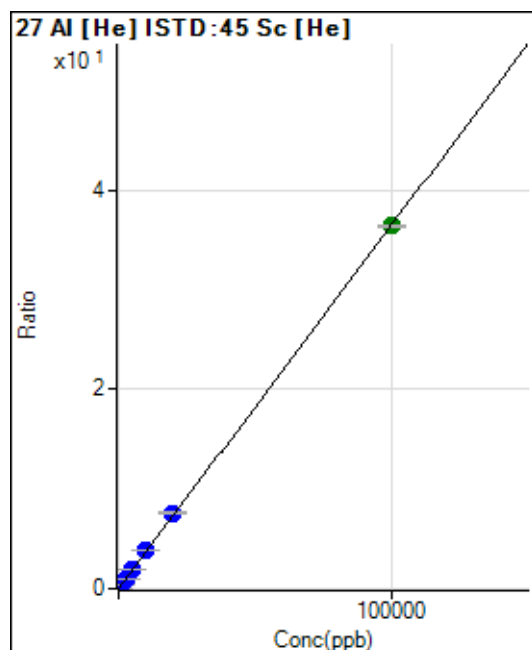
$$R = 0.9999$$

$$DL = 2.624$$

$$BEC = 8.258$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.32	0.0005	P	10.7
2	☐	20.000	18.538	849.92	0.0072	P	1.9
3	☐	1000.000	1113.260	46866.21	0.4071	P	2.6
4	☐	2500.000	2662.940	114043.93	0.9732	P	1.3
5	☐	5000.000	5414.373	227172.57	1.9783	P	0.4
6	☐	10000.000	10558.909	452004.61	3.8577	P	0.3
7	☐	20000.000	20684.238	887960.72	7.5565	P	3.1
8	☐	100000.00	99781.337	4159291.29	36.4510	A	0.7

$$y = 3.6530\text{E-}004 * x + 4.5244\text{E-}004$$

$$R = 1.0000$$

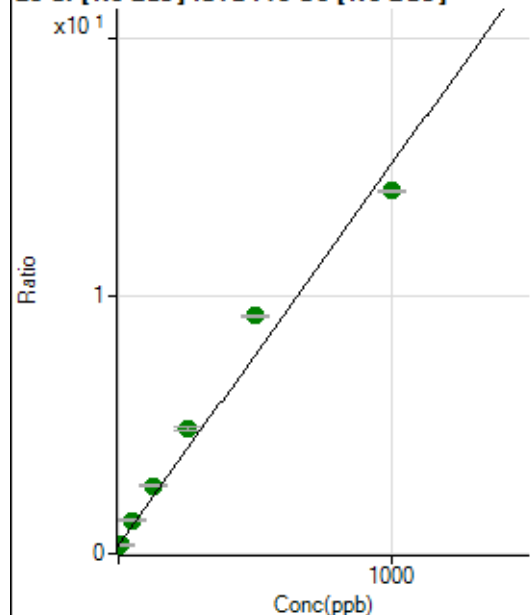
$$DL = 0.3971$$

$$BEC = 1.239$$

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	1046683.31	0.3250	A	1.3
2	☐	10.000	0.888	1102716.33	0.3382	A	2.4
3	☐	50.000	65.966	4073798.14	1.3016	A	1.5
4	☐	125.000	156.358	8360804.09	2.6399	A	2.7
5	☐	250.000	306.032	15215568.74	4.8558	A	1.6
6	☐	500.000	601.991	28990359.67	9.2374	A	1.1
7	☐	1000.000	930.370	44539445.79	14.0990	A	0.4
8	☐			1591353.41	0.5128	A	2.4

$$y = 0.0148 * x + 0.3250$$

$$R = 0.9893$$

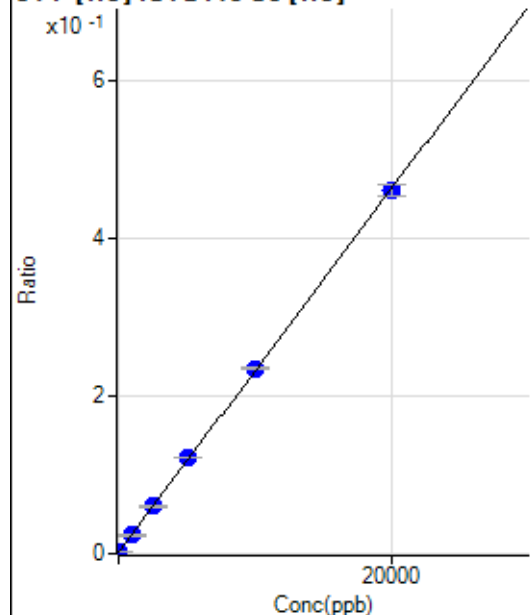
$$DL = 0.8552$$

$$BEC = 21.95$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-4.631	183.34	0.0016	P	35.4
2	☐	0.000	4.631	208.34	0.0018	P	45.8
3	☐	1000.000	954.304	2725.33	0.0237	P	5.1
4	☐	2500.000	2544.615	7074.12	0.0604	P	4.2
5	☐	5000.000	5222.558	14023.82	0.1221	P	1.6
6	☐	10000.000	10120.647	27548.98	0.2351	P	1.7
7	☐	20000.000	19880.745	54084.94	0.4602	P	3.3
8	☐			119.45	0.0010	P	11.0

$$y = 2.3067E-005 * x + 0.0017$$

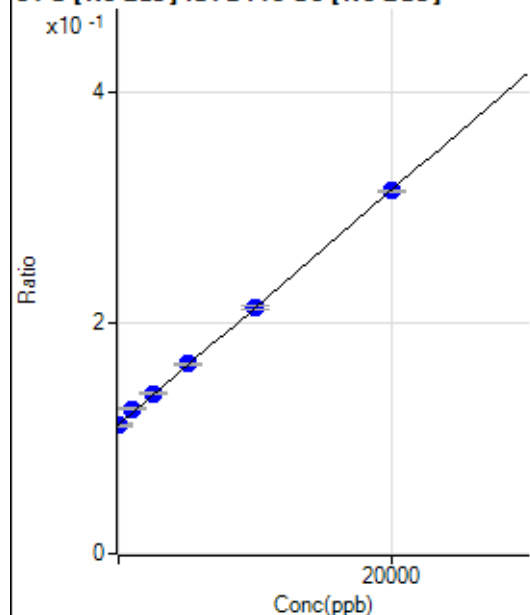
$$R = 0.9999$$

$$DL = 88.39$$

$$BEC = 72.06$$

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	46.214	361510.89	0.1123	P	1.0
2	☐	0.000	-46.214	363004.75	0.1113	P	2.1
3	☐	1000.000	1347.473	392864.51	0.1255	P	0.8
4	☐	2500.000	2662.067	439945.92	0.1389	P	1.9
5	☐	5000.000	5168.436	515225.41	0.1644	P	1.7
6	☐	10000.000	10006.958	670614.84	0.2137	P	1.6
7	☐	20000.000	19916.780	993838.61	0.3146	P	0.4
8	☐			322240.38	0.1038	P	2.4

$$y = 1.0182E-005 * x + 0.1118$$

R = 0.9998

DL = 507.2

BEC = 1.098E+04

Weight: <None>

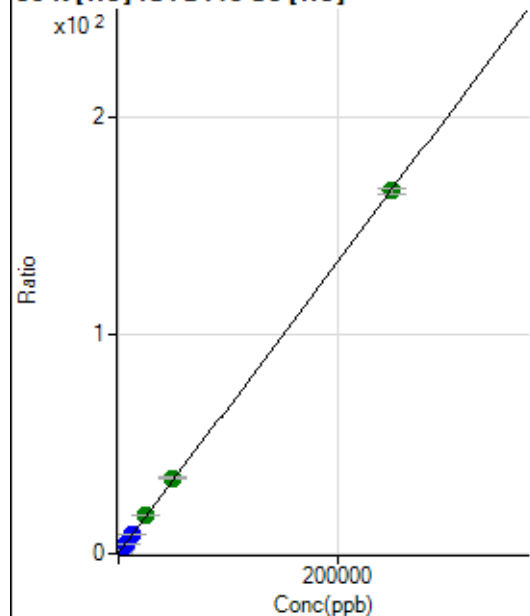
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161122.80		P	0.6
2	☐			155888.39		P	0.7
3	☐			163063.41		P	0.7
4	☐			159834.05		P	1.2
5	☐			160367.43		P	1.2
6	☐			159213.28		P	0.7
7	☐			164201.11		P	1.2
8	☐			156607.05		P	1.2

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1286.21		P	8.0
2	☐			1127.86		P	19.0
3	☐			1266.76		P	10.1
4	☐			1194.52		P	3.6
5	☐			1233.42		P	1.8
6	☐			1216.76		P	9.7
7	☐			1216.76		P	8.6
8	☐			1225.09		P	3.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	26024.03	0.2208	P	1.6
2	☐	500.000	463.096	62145.56	0.5283	P	1.5
3	☐	2500.000	2661.704	228884.55	1.9882	P	0.5
4	☐	6250.000	6506.359	532142.55	4.5411	P	2.6
5	☐	12500.000	13296.309	1039173.31	9.0497	P	1.1
6	☐	25000.000	26221.017	2065977.93	17.6319	A	0.8
7	☐	50000.000	51758.399	4064915.02	34.5890	A	2.9
8	☐	250000.00	249478.45	18925155.46	165.8772	A	1.5

$$y = 6.6401E-004 * x + 0.2208$$

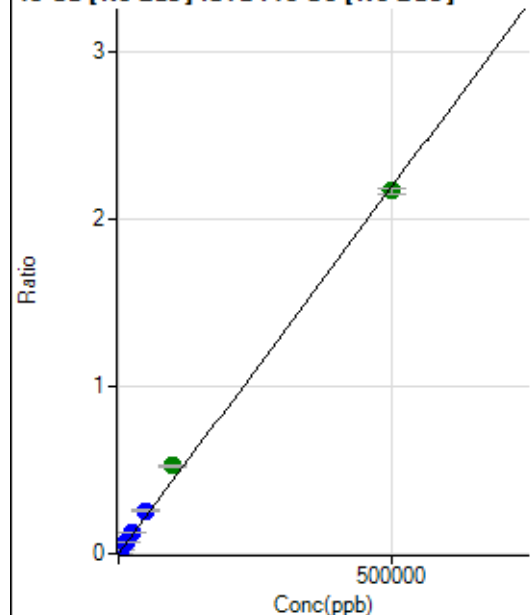
$$R = 1.0000$$

$$DL = 16.31$$

$$BEC = 332.6$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	117.07	0.0000	P	11.4
2	☐	500.000	481.252	7008.77	0.0021	P	0.8
3	☐	5000.000	6015.715	82759.24	0.0264	P	2.7
4	☐	12500.000	14861.612	206751.55	0.0653	P	1.3
5	☐	25000.000	30004.906	412892.56	0.1318	P	0.9
6	☐	50000.000	58899.998	811528.89	0.2586	P	1.6
7	☐	100000.00	119596.85	1658675.74	0.5251	A	0.9
8	☐	500000.00	494871.20	6742919.38	2.1725	A	1.8

$$y = 4.3899\text{E-}006 * x + 3.6329\text{E-}005$$

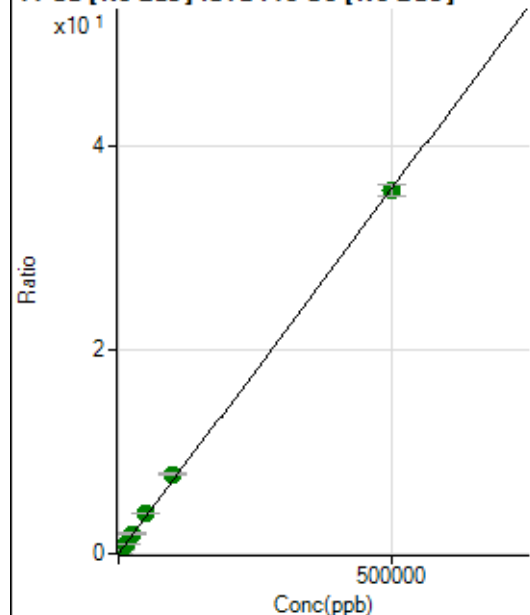
$$R = 0.9991$$

$$DL = 2.829$$

$$BEC = 8.276$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13173.74	0.0041	P	1.5
2	☐	500.000	472.556	123719.92	0.0379	P	0.9
3	☐	5000.000	5599.063	1267702.19	0.4051	A	2.4
4	☐	12500.000	14047.585	3199434.29	1.0101	A	1.1
5	☐	25000.000	27342.006	6147551.56	1.9623	A	2.8
6	☐	50000.000	55158.721	12410347.17	3.9544	A	2.5
7	☐	100000.00	109186.46	24715307.71	7.8237	A	1.1
8	☐	500000.00	497485.08	110593016.8	35.6326	A	3.3

$$y = 7.1617\text{E-}005 * x + 0.0041$$

$$R = 0.9998$$

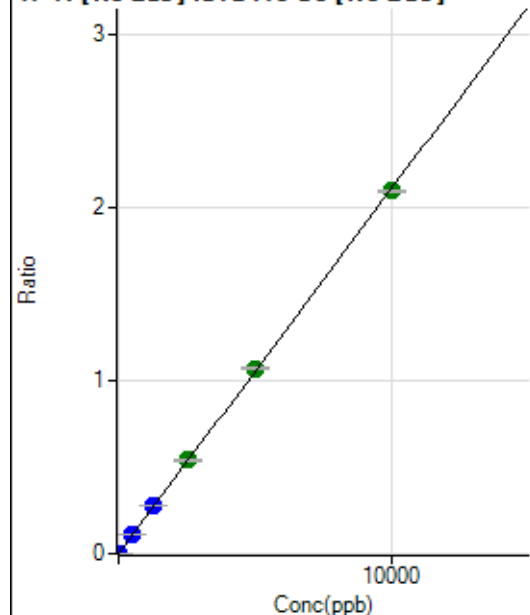
$$DL = 2.551$$

$$BEC = 57.13$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	144.45	0.0000	P	17.5
2	☐	5.000	4.644	3339.36	0.0010	P	5.1
3	☐	500.000	527.870	348238.17	0.1113	P	1.4
4	☐	1250.000	1314.423	877277.94	0.2770	P	2.9
5	☐	2500.000	2561.091	1691136.39	0.5397	A	1.3
6	☐	5000.000	5070.086	3352717.79	1.0683	A	1.2
7	☐	10000.000	9940.238	6616565.60	2.0945	A	0.7
8	☐			1605.69	0.0005	P	7.6

$$y = 2.1070\text{E-}004 * x + 4.4808\text{E-}005$$

$$R = 0.9999$$

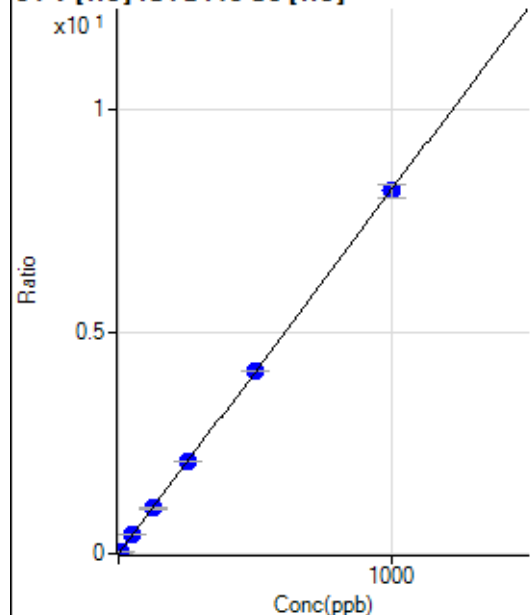
$$DL = 0.1118$$

$$BEC = 0.2127$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15.55	0.0001	P	24.6
2	☐	5.000	4.672	4518.53	0.0384	P	7.3
3	☐	50.000	50.909	48054.98	0.4175	P	1.4
4	☐	125.000	124.513	119621.69	1.0208	P	1.4
5	☐	250.000	254.341	239429.38	2.0851	P	0.5
6	☐	500.000	503.509	483636.92	4.1276	P	0.3
7	☐	1000.000	997.178	960576.29	8.1745	P	3.4
8	☐			306.67	0.0027	P	12.3

$$y = 0.0082 * x + 1.3195\text{E-}004$$

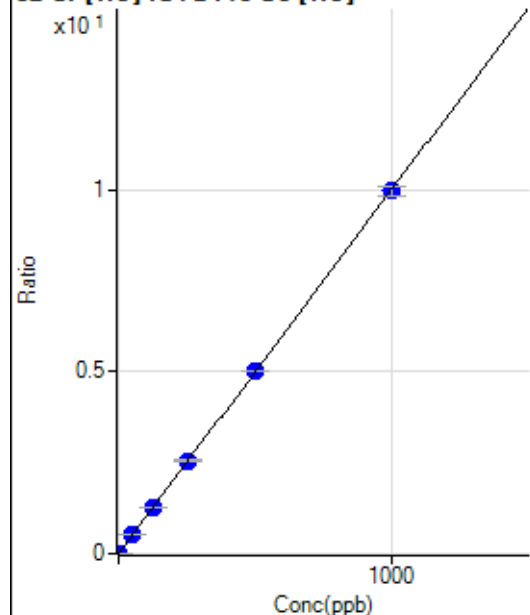
$$R = 1.0000$$

$$DL = 0.01188$$

$$BEC = 0.0161$$

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	384.45	0.0033	P	14.7
2	☐	2.000	1.918	2641.38	0.0225	P	1.3
3	☐	50.000	51.317	59493.28	0.5168	P	2.8
4	☐	125.000	125.068	147049.88	1.2549	P	1.1
5	☐	250.000	255.661	294136.46	2.5617	P	1.6
6	☐	500.000	502.768	589880.24	5.0346	P	0.7
7	☐	1000.000	997.127	1172968.90	9.9818	P	2.9
8	☐			10629.59	0.0932	P	2.6

$$y = 0.0100 * x + 0.0033$$

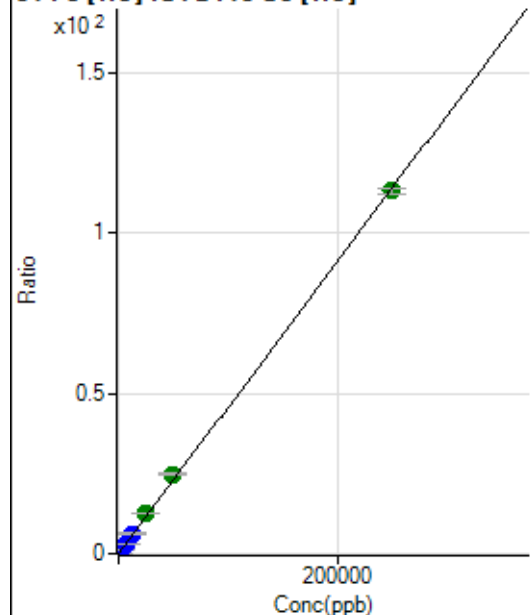
$$R = 1.0000$$

$$DL = 0.1434$$

$$BEC = 0.326$$

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	575.95	0.0049	P	10.5
2	☐	50.000	47.729	3131.88	0.0266	P	6.0
3	☐	2500.000	2745.158	144532.40	1.2555	P	2.0
4	☐	6250.000	6723.164	359487.09	3.0679	P	0.6
5	☐	12500.000	13824.756	723707.70	6.3032	P	1.8
6	☐	25000.000	28033.549	1496999.06	12.7765	A	1.5
7	☐	50000.000	54665.004	2927195.67	24.9094	A	2.7
8	☐	250000.00	248683.12	12926348.67	113.3010	A	1.9

$$y = 4.5558E-004 * x + 0.0049$$

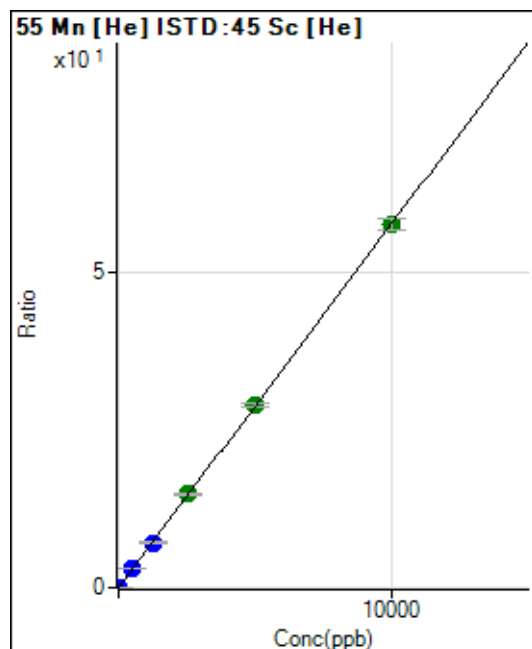
$$R = 0.9998$$

$$DL = 3.376$$

$$BEC = 10.73$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.89	0.0005	P	43.0
2	☐	1.000	0.868	648.91	0.0055	P	8.9
3	☐	500.000	509.427	339059.75	2.9455	P	1.5
4	☐	1250.000	1241.970	841357.78	7.1803	P	0.9
5	☐	2500.000	2573.442	1708020.62	14.8774	A	3.2
6	☐	5000.000	5013.929	3395732.59	28.9858	A	2.7
7	☐	10000.000	9975.207	6776440.60	57.6667	A	3.1
8	☐			7044.01	0.0617	P	1.5

$$y = 0.0058 * x + 5.0018E-004$$

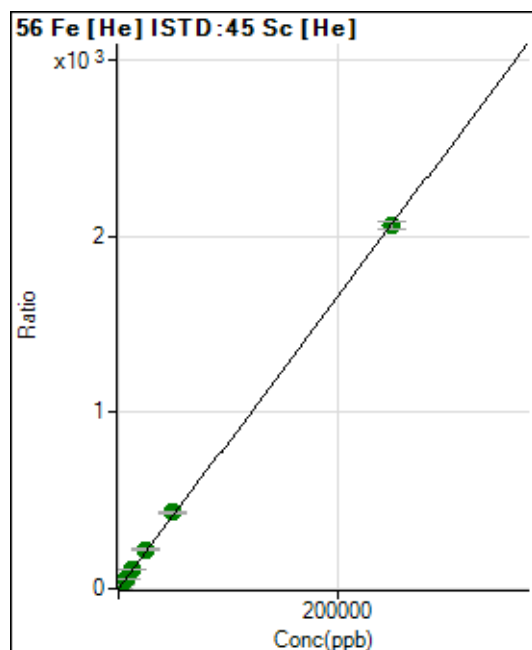
$$R = 1.0000$$

$$DL = 0.1117$$

$$BEC = 0.08652$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2637.33	0.0224	P	2.9
2	☐	50.000	47.868	49184.98	0.4182	P	2.2
3	☐	2500.000	2796.883	2664668.67	23.1474	A	3.2
4	☐	6250.000	6703.732	6497395.34	55.4497	A	0.9
5	☐	12500.000	13667.089	12975945.54	113.0236	A	2.8
6	☐	25000.000	26941.548	26102882.53	222.7786	A	2.8
7	☐	50000.000	52673.845	51186750.68	435.5366	A	2.1
8	☐	250000.00	249198.41	235063599.7	2,060.427	A	2.1

$$y = 0.0083 * x + 0.0224$$

$$R = 0.9999$$

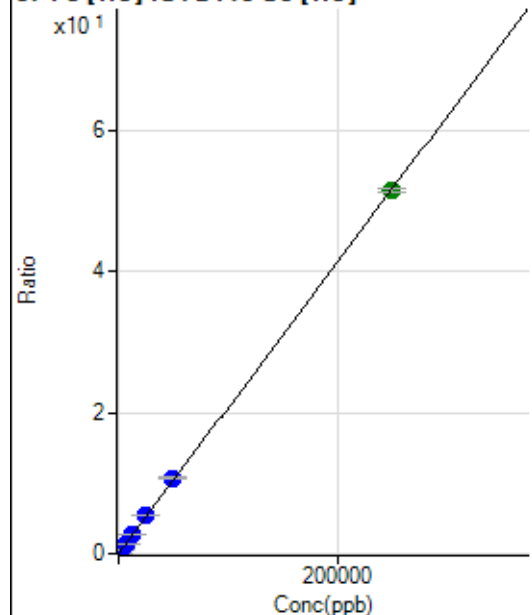
$$DL = 0.2376$$

$$BEC = 2.706$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	246.30	0.0021	P	10.8
2	☐	50.000	44.912	1333.42	0.0113	P	3.8
3	☐	2500.000	2739.466	65171.05	0.5661	P	0.6
4	☐	6250.000	6652.887	160751.83	1.3719	P	1.5
5	☐	12500.000	13519.426	319841.04	2.7857	P	2.4
6	☐	25000.000	26623.097	642514.49	5.4837	P	1.4
7	☐	50000.000	52106.340	1261006.16	10.7306	P	2.3
8	☐	250000.00	249352.98	5857959.97	51.3428	A	1.1

$$y = 2.0590\text{E-}004 * x + 0.0021$$

$$R = 0.9999$$

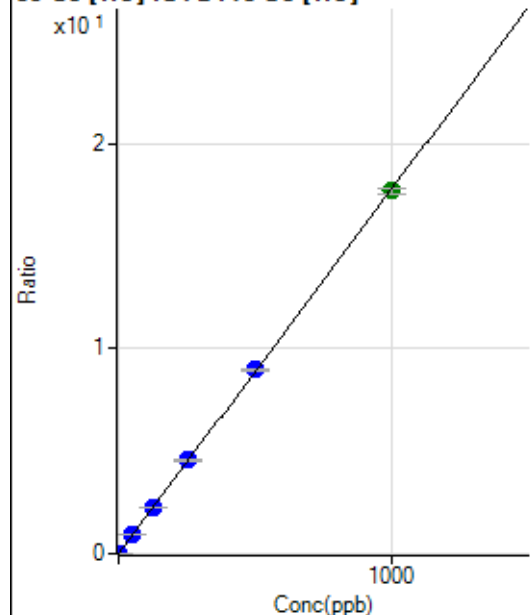
$$DL = 3.282$$

$$BEC = 10.15$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.56	0.0011	P	15.2
2	☐	1.000	0.930	2070.17	0.0176	P	3.3
3	☐	50.000	51.695	105923.42	0.9201	P	1.2
4	☐	125.000	127.099	264912.95	2.2607	P	1.8
5	☐	250.000	256.173	523065.57	4.5555	P	2.1
6	☐	500.000	504.721	1051539.32	8.9744	P	0.5
7	☐	1000.000	995.749	2080621.55	17.7043	A	1.6
8	☐			1909.04	0.0167	P	3.0

$$y = 0.0178 * x + 0.0011$$

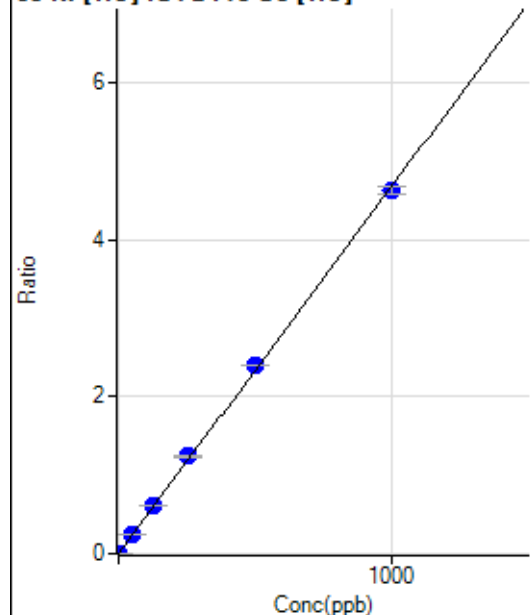
$$R = 1.0000$$

$$DL = 0.02731$$

$$BEC = 0.05996$$

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	52.22	0.0004	P	20.0
2	☐	1.000	0.933	564.46	0.0048	P	13.3
3	☐	50.000	54.118	29141.06	0.2531	P	2.5
4	☐	125.000	130.484	71448.54	0.6097	P	0.9
5	☐	250.000	265.326	142322.89	1.2394	P	2.3
6	☐	500.000	513.523	281017.22	2.3984	P	0.6
7	☐	1000.000	988.516	542499.70	4.6164	P	2.1
8	☐			1834.58	0.0161	P	5.0

$$y = 0.0047 * x + 4.4338E-004$$

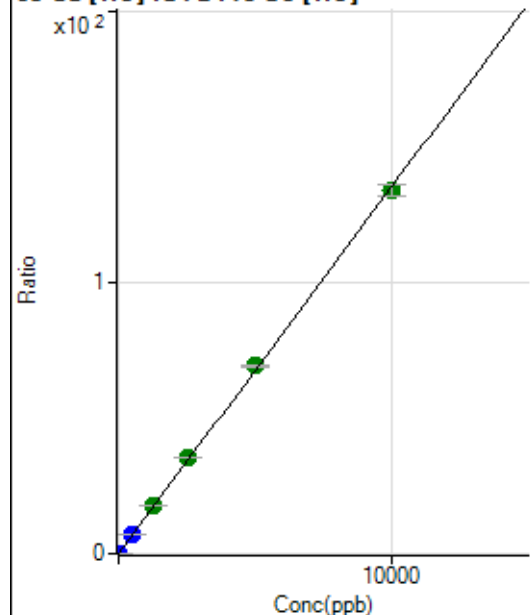
$$R = 0.9997$$

$$DL = 0.05694$$

$$BEC = 0.09495$$

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	500.01	0.0042	P	10.5
2	☐	2.000	1.956	3606.05	0.0307	P	5.4
3	☐	500.000	530.122	824809.42	7.1650	P	1.4
4	☐	1250.000	1310.624	2074914.78	17.7079	A	2.2
5	☐	2500.000	2632.304	4083589.46	35.5609	A	0.2
6	☐	5000.000	5126.216	8112897.65	69.2482	A	1.4
7	☐	10000.000	9894.732	15706607.40	133.6604	A	3.1
8	☐			5149.89	0.0451	P	4.1

$$y = 0.0135 * x + 0.0042$$

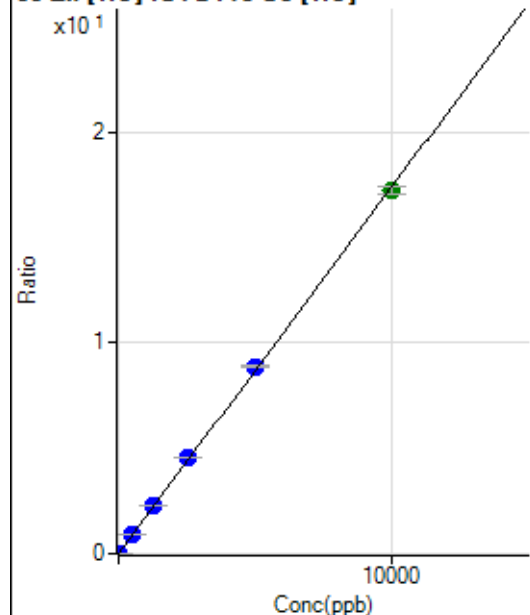
$$R = 0.9998$$

$$DL = 0.09925$$

$$BEC = 0.3141$$

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	141.12	0.0012	P	14.0
2	☐	2.000	2.170	584.46	0.0050	P	7.5
3	☐	500.000	542.198	108678.94	0.9441	P	1.4
4	☐	1250.000	1312.468	267578.49	2.2836	P	1.7
5	☐	2500.000	2629.771	525304.11	4.5744	P	0.4
6	☐	5000.000	5111.779	1041661.03	8.8907	P	0.6
7	☐	10000.000	9901.749	2023717.78	17.2205	A	2.1
8	☐			2222.42	0.0195	P	2.7

$$y = 0.0017 * x + 0.0012$$

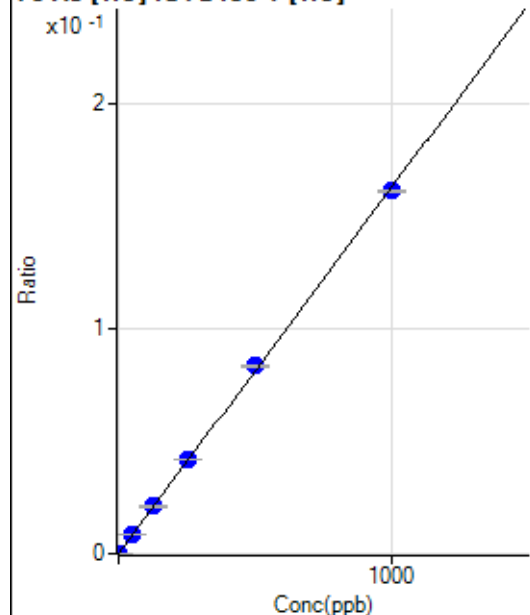
$$R = 0.9998$$

$$DL = 0.2882$$

$$BEC = 0.6883$$

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	4.67	0.0000	P	27.1
2	☐	1.000	1.013	134.35	0.0002	P	4.9
3	☐	50.000	50.987	6443.46	0.0083	P	2.7
4	☐	125.000	129.012	16174.21	0.0210	P	2.1
5	☐	250.000	257.729	32484.43	0.0419	P	1.4
6	☐	500.000	512.716	64844.75	0.0833	P	0.5
7	☐	1000.000	991.159	127721.21	0.1610	P	0.2
8	☐			39.34	0.0001	P	21.6

$$y = 1.6248E-004 * x + 5.9393E-006$$

$$R = 0.9998$$

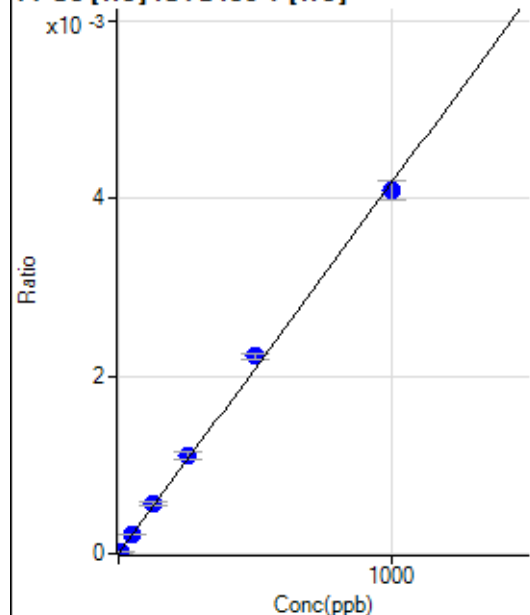
$$DL = 0.02977$$

$$BEC = 0.03655$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	4.372	15.56	0.0000	P	52.8
3	☐	50.000	51.378	167.78	0.0002	P	9.0
4	☐	125.000	136.229	440.01	0.0006	P	7.7
5	☐	250.000	264.230	856.70	0.0011	P	9.3
6	☐	500.000	532.370	1731.24	0.0022	P	2.8
7	☐	1000.000	978.788	3241.53	0.0041	P	5.4
8	☐			6.67	0.0000	P	1.0

$$y = 4.1756\text{E-}006 * x + 1.4021\text{E-}006$$

$$R = 0.9990$$

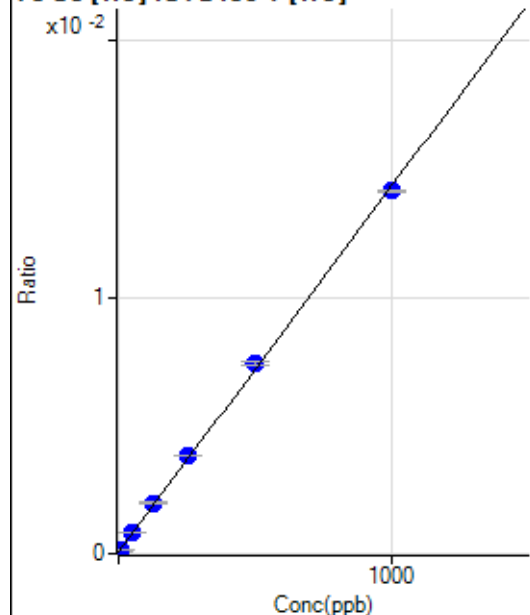
$$DL = 1.745$$

$$BEC = 0.3358$$

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	50.34	0.0001	P	17.9
2	☐	5.000	5.001	106.34	0.0001	P	1.7
3	☐	50.000	52.397	630.41	0.0008	P	4.2
4	☐	125.000	132.438	1506.57	0.0020	P	4.1
5	☐	250.000	264.690	2978.29	0.0038	P	1.0
6	☐	500.000	515.699	5776.44	0.0074	P	1.3
7	☐	1000.000	987.428	11222.26	0.0142	P	0.7
8	☐			59.68	0.0001	P	14.8

$$y = 1.4267\text{E-}005 * x + 6.3644\text{E-}005$$

$$R = 0.9997$$

$$DL = 2.391$$

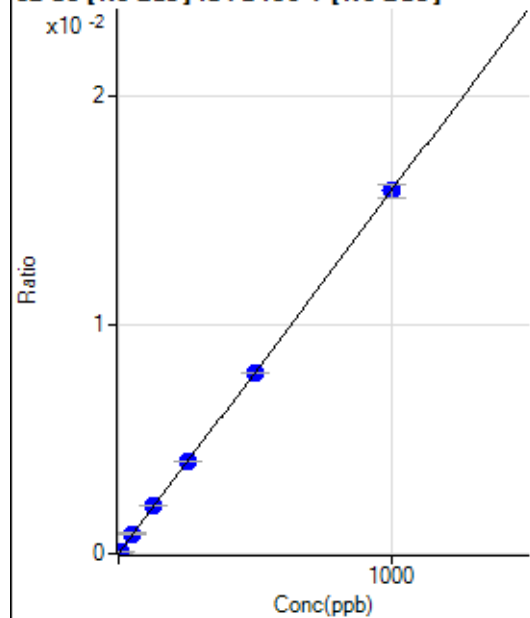
$$BEC = 4.461$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			42689.29		P	0.7
2	☐			43281.73		P	0.9
3	☐			43188.39		P	3.1
4	☐			42870.02		P	3.3
5	☐			43810.29		P	4.0
6	☐			43482.78		P	4.0
7	☐			44078.87		P	1.0
8	☐			43716.78		P	0.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	46.66	0.0000	P	40.7
2	☐	5.000	4.404	463.71	0.0001	P	5.5
3	☐	50.000	53.971	5051.64	0.0009	P	4.4
4	☐	125.000	130.676	12234.91	0.0021	P	1.6
5	☐	250.000	252.685	24055.10	0.0040	P	1.0
6	☐	500.000	497.577	47203.48	0.0079	P	0.7
7	☐	1000.000	999.635	92820.47	0.0158	P	3.4
8	☐			159.99	0.0000	P	21.0

$$y = 1.5821\text{E-}005 * x + 7.8524\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.6054$$

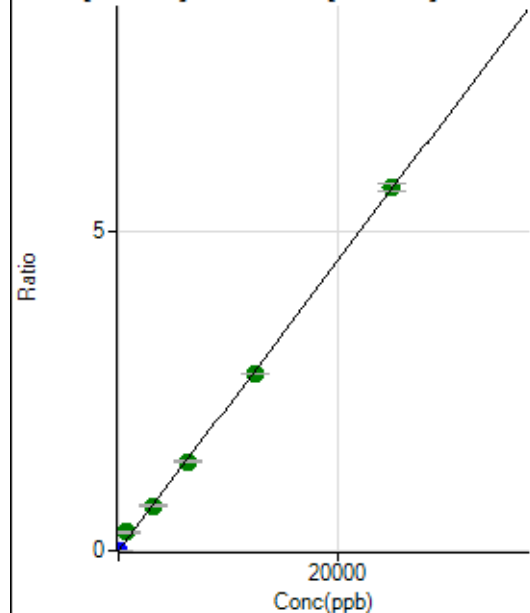
$$BEC = 0.4963$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			289.97		P	5.7
2	☐			303.72		P	5.3
3	☐			297.89		P	2.4
4	☐			308.72		P	8.1
5	☐			279.55		P	3.2
6	☐			300.39		P	4.3
7	☐			350.38		P	5.6
8	☐			314.13		P	7.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	488.91	0.0001	P	7.8
2	☐	1.000	1.020	1872.40	0.0003	P	3.9
3	☐	625.000	1268.014	1683357.35	0.2871	A	2.0
4	☐	3125.000	3120.377	4165118.63	0.7065	A	2.5
5	☐	6250.000	6163.632	8380652.09	1.3954	A	0.9
6	☐	12500.000	12291.205	16668472.60	2.7826	A	0.2
7	☐	25000.000	25110.492	33355166.02	5.6846	A	2.0
8	☐			9036.47	0.0015	P	3.2

$$y = 2.2638E-004 * x + 8.2270E-005$$

$$R = 0.9996$$

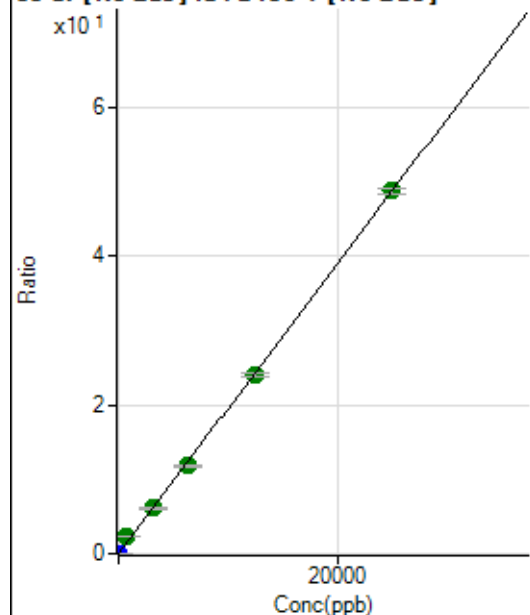
$$DL = 0.08479$$

$$BEC = 0.3634$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	219.45	0.0000	P	23.7
2	☐	1.000	0.909	10787.79	0.0018	P	3.6
3	☐	625.000	1227.570	13995285.21	2.3871	A	1.3
4	☐	3125.000	3144.868	36052636.57	6.1155	A	2.5
5	☐	6250.000	6082.961	71029121.03	11.8288	A	2.9
6	☐	12500.000	12392.449	144349612.9	24.0981	A	2.0
7	☐	25000.000	25077.987	286173917.5	48.7661	A	1.3
8	☐			76884.86	0.0131	P	3.7

$$y = 0.0019 * x + 3.6946E-005$$

$$R = 0.9996$$

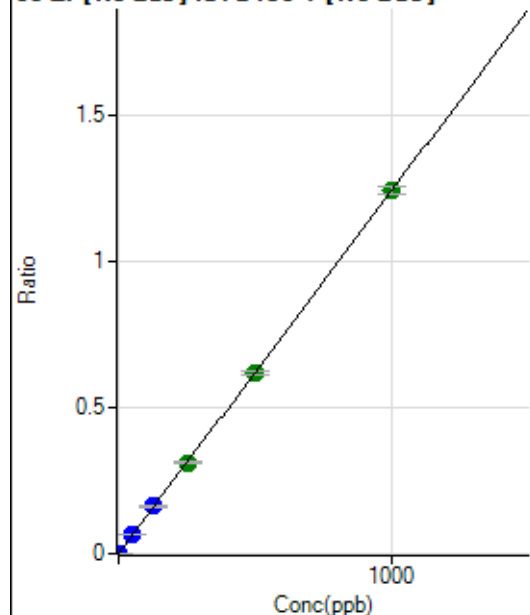
$$DL = 0.01352$$

$$BEC = 0.019$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	313.90	0.0001	P	8.3
2	☐	1.000	0.866	6740.70	0.0011	P	1.2
3	☐	50.000	51.098	371767.40	0.0634	P	1.2
4	☐	125.000	130.304	952772.78	0.1616	P	2.3
5	☐	250.000	251.063	1869786.28	0.3114	A	1.5
6	☐	500.000	498.115	3700023.13	0.6177	A	1.5
7	☐	1000.000	999.959	7275700.94	1.2399	A	2.1
8	☐			2094.65	0.0004	P	6.7

$$y = 0.0012 * x + 5.2764E-005$$

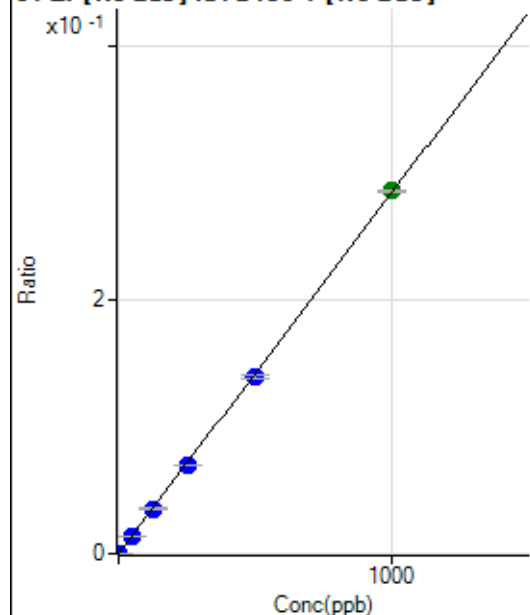
$$R = 1.0000$$

$$DL = 0.01053$$

$$BEC = 0.04255$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	45.0
2	☐	1.000	0.829	1458.45	0.0002	P	6.8
3	☐	50.000	49.661	82791.33	0.0141	P	2.7
4	☐	125.000	124.728	208990.29	0.0355	P	2.9
5	☐	250.000	245.031	418260.79	0.0696	P	0.9
6	☐	500.000	489.841	833956.52	0.1392	P	2.0
7	☐	1000.000	1006.373	1678971.00	0.2860	A	0.8
8	☐			438.91	0.0001	P	17.6

$$y = 2.8420E-004 * x + 8.4302E-006$$

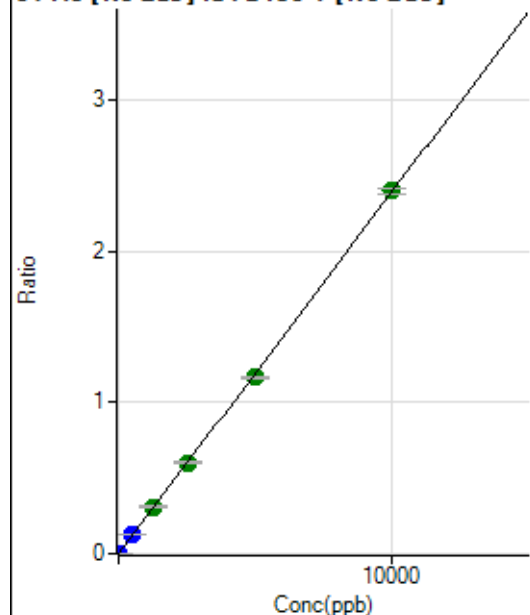
$$R = 0.9999$$

$$DL = 0.04007$$

$$BEC = 0.02966$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	150.01	0.0000	P	15.4
2	☐	5.000	5.502	8010.83	0.0013	P	1.9
3	☐	500.000	524.652	734797.28	0.1253	P	2.7
4	☐	1250.000	1294.711	1822539.56	0.3093	A	4.5
5	☐	2500.000	2524.024	3620632.59	0.6029	A	1.1
6	☐	5000.000	4876.611	6977357.71	1.1648	A	1.4
7	☐	10000.000	10048.867	14085732.09	2.4002	A	1.3
8	☐			4648.14	0.0008	P	3.7

$$y = 2.3885E-004 * x + 2.5257E-005$$

$$R = 0.9999$$

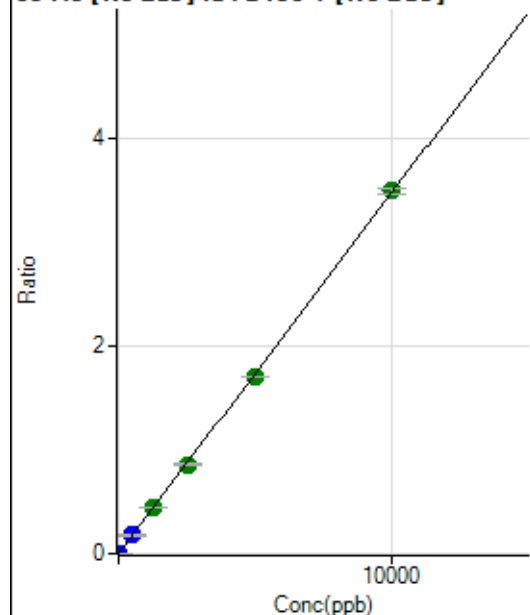
$$DL = 0.04881$$

$$BEC = 0.1057$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	10.3
2	☐	5.000	4.632	9661.95	0.0016	P	3.8
3	☐	500.000	510.453	1038081.16	0.1771	P	2.7
4	☐	1250.000	1291.245	2640474.30	0.4479	A	1.8
5	☐	2500.000	2463.257	5131222.08	0.8545	A	1.3
6	☐	5000.000	4894.569	10170495.45	1.6978	A	0.6
7	☐	10000.000	10056.223	20468850.11	3.4883	A	1.7
8	☐			6540.60	0.0011	P	2.2

$$y = 3.4688\text{E-}004 * x + 9.3594\text{E-}006$$

$$R = 0.9999$$

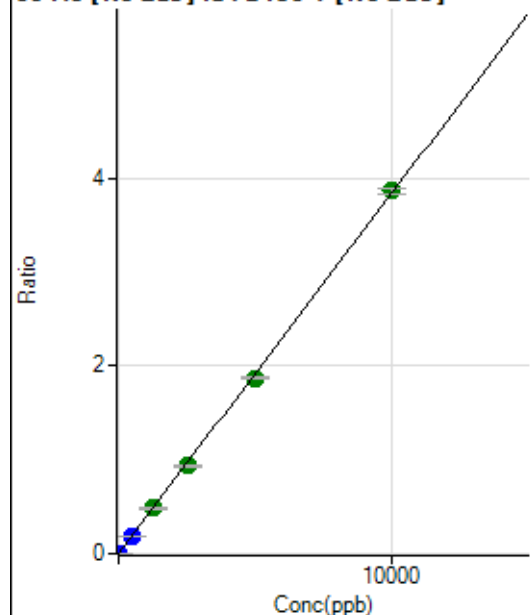
$$DL = 0.008347$$

$$BEC = 0.02698$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	130.56	0.0000	P	9.7
2	☐	5.000	4.629	10754.44	0.0018	P	2.2
3	☐	500.000	502.634	1130956.18	0.1929	P	1.6
4	☐	1250.000	1257.240	2844466.73	0.4825	A	2.7
5	☐	2500.000	2451.823	5650592.84	0.9409	A	2.0
6	☐	5000.000	4882.462	11223732.37	1.8737	A	0.7
7	☐	10000.000	10069.777	22675747.56	3.8643	A	1.7
8	☐			14530.23	0.0025	P	3.8

$$y = 3.8375\text{E-}004 * x + 2.1968\text{E-}005$$

$$R = 0.9999$$

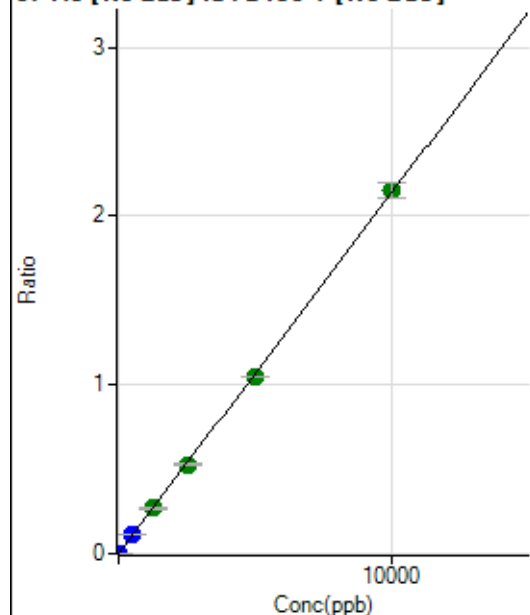
$$DL = 0.01674$$

$$BEC = 0.05725$$

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	33.33	0.0000	P	25.4
2	☐	5.000	4.632	5954.21	0.0010	P	1.8
3	☐	500.000	515.520	646049.13	0.1102	P	1.5
4	☐	1250.000	1261.901	1589820.36	0.2697	A	3.1
5	☐	2500.000	2466.460	3166539.42	0.5272	A	2.8
6	☐	5000.000	4907.465	6283647.67	1.0490	A	0.8
7	☐	10000.000	10052.389	12604055.23	2.1487	A	4.4
8	☐			4134.08	0.0007	P	1.8

$$y = 2.1375E-004 * x + 5.6103E-006$$

$$R = 0.9999$$

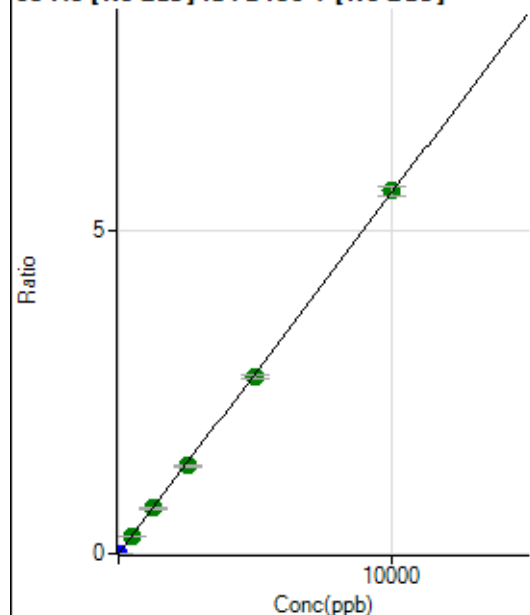
$$DL = 0.01999$$

$$BEC = 0.02625$$

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	102.78	0.0000	P	27.1
2	☐	5.000	4.489	15050.28	0.0025	P	2.4
3	☐	500.000	503.524	1643668.42	0.2804	A	1.0
4	☐	1250.000	1265.818	4154439.37	0.7048	A	2.1
5	☐	2500.000	2427.868	8117035.95	1.3517	A	2.1
6	☐	5000.000	4901.012	16345403.49	2.7286	A	1.7
7	☐	10000.000	10065.374	32878431.64	5.6039	A	3.0
8	☐			9806.49	0.0017	P	2.0

$$y = 5.5675E-004 * x + 1.7328E-005$$

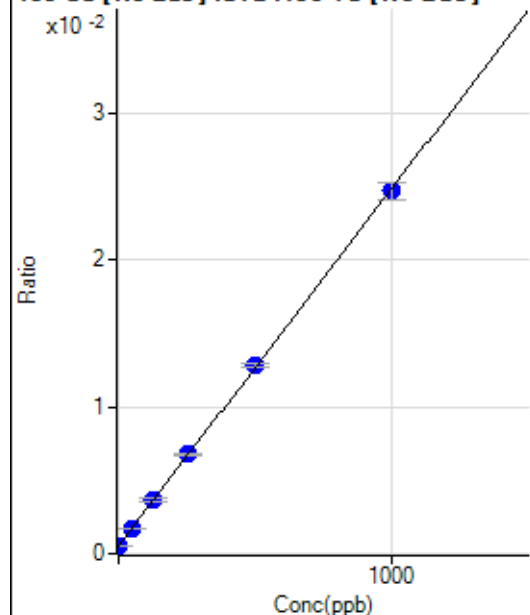
$$R = 0.9999$$

$$DL = 0.02532$$

$$BEC = 0.03112$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2733.67	0.0005	P	8.4
2	☐	1.000	1.477	2950.41	0.0006	P	2.5
3	☐	50.000	50.395	9119.96	0.0018	P	0.7
4	☐	125.000	129.117	19072.00	0.0037	P	3.8
5	☐	250.000	256.565	35159.31	0.0068	P	2.6
6	☐	500.000	506.614	66463.62	0.0128	P	2.0
7	☐	1000.000	994.517	128345.50	0.0247	P	4.8
8	☐			2436.39	0.0005	P	3.5

$$y = 2.4311\text{E-}005 * x + 5.2689\text{E-}004$$

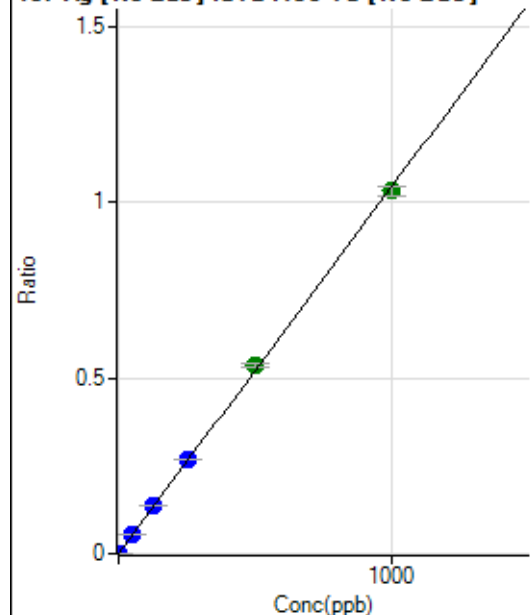
$$R = 0.9999$$

$$DL = 5.429$$

$$BEC = 21.67$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	34.8
2	☐	1.000	1.010	5612.44	0.0011	P	1.1
3	☐	50.000	52.530	285254.97	0.0548	P	2.3
4	☐	125.000	131.275	712454.63	0.1369	P	1.3
5	☐	250.000	258.169	1399561.93	0.2692	P	0.5
6	☐	500.000	515.192	2780221.96	0.5373	A	2.0
7	☐	1000.000	989.451	5363362.70	1.0319	A	2.6
8	☐			2350.27	0.0005	P	3.1

$$y = 0.0010 * x + 1.7743\text{E-}005$$

$$R = 0.9998$$

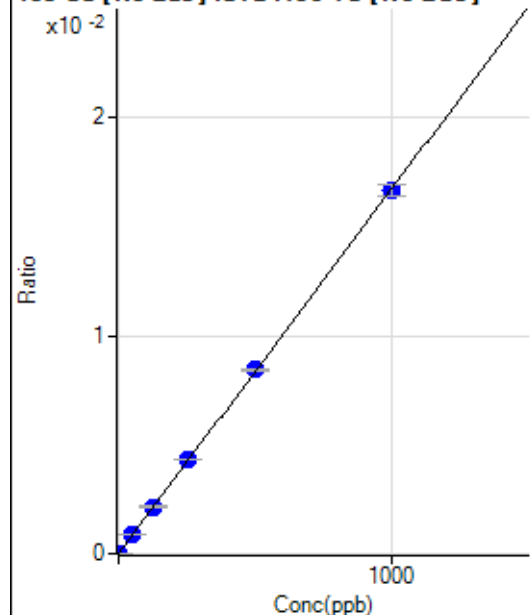
$$DL = 0.01778$$

$$BEC = 0.01701$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	19.8
2	☐	1.000	1.155	115.28	0.0000	P	11.9
3	☐	50.000	52.387	4571.65	0.0009	P	2.1
4	☐	125.000	128.601	11192.16	0.0022	P	4.7
5	☐	250.000	258.139	22439.20	0.0043	P	0.8
6	☐	500.000	504.182	43623.04	0.0084	P	1.1
7	☐	1000.000	995.305	86466.63	0.0166	P	3.1
8	☐			62.50	0.0000	P	44.8

$$y = 1.6713E-005 * x + 2.6817E-006$$

$$R = 0.9999$$

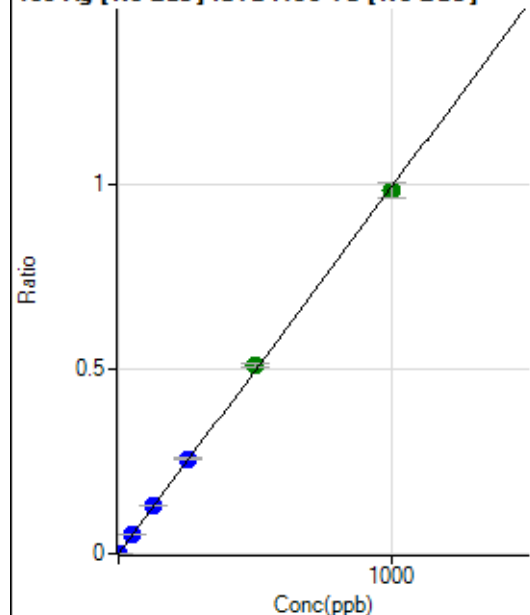
$$DL = 0.09553$$

$$BEC = 0.1605$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	29.0
2	☐	1.000	0.966	5120.54	0.0010	P	2.0
3	☐	50.000	52.468	271878.90	0.0522	P	1.3
4	☐	125.000	130.821	677597.75	0.1302	P	0.7
5	☐	250.000	258.128	1335304.40	0.2569	P	1.3
6	☐	500.000	514.752	2650673.82	0.5123	A	2.8
7	☐	1000.000	989.741	5117863.40	0.9850	A	4.2
8	☐			2222.47	0.0004	P	7.9

$$y = 9.9518E-004 * x + 1.5023E-005$$

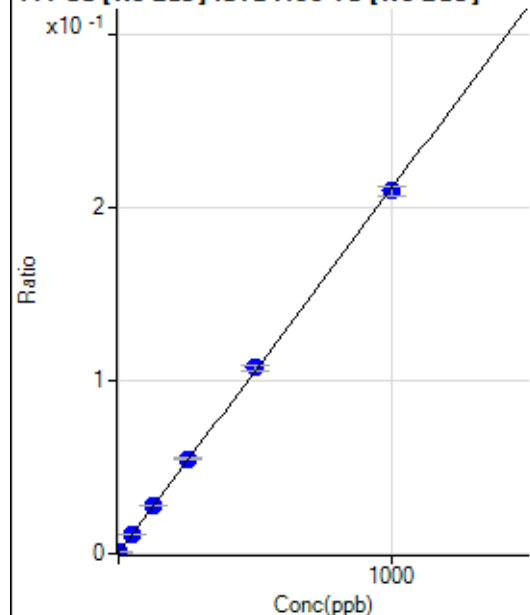
$$R = 0.9998$$

$$DL = 0.01314$$

$$BEC = 0.0151$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1920.52	0.0004	P	8.7
2	☐	1.000	1.038	3087.42	0.0006	P	0.9
3	☐	50.000	52.679	59714.76	0.0115	P	1.7
4	☐	125.000	130.790	145343.34	0.0279	P	0.9
5	☐	250.000	258.392	284969.98	0.0548	P	1.0
6	☐	500.000	507.718	555545.24	0.1074	P	2.6
7	☐	1000.000	993.185	1089779.34	0.2097	P	2.6
8	☐			2063.13	0.0004	P	3.2

$$y = 2.1074\text{E-}004 * x + 3.7019\text{E-}004$$

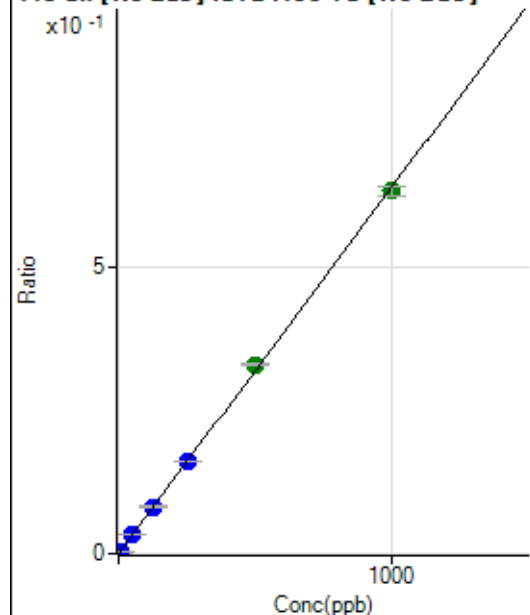
$$R = 0.9999$$

$$DL = 0.4608$$

$$BEC = 1.757$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	258.34	0.0000	P	27.5
2	☐	5.000	4.622	15762.22	0.0030	P	4.2
3	☐	50.000	50.985	170112.82	0.0327	P	1.2
4	☐	125.000	127.809	425834.48	0.0818	P	1.9
5	☐	250.000	253.538	843704.65	0.1623	P	0.2
6	☐	500.000	515.581	1707926.88	0.3300	A	1.3
7	☐	1000.000	990.927	3296486.43	0.6342	A	3.0
8	☐			4434.17	0.0009	P	9.8

$$y = 6.4000\text{E-}004 * x + 4.9878\text{E-}005$$

$$R = 0.9998$$

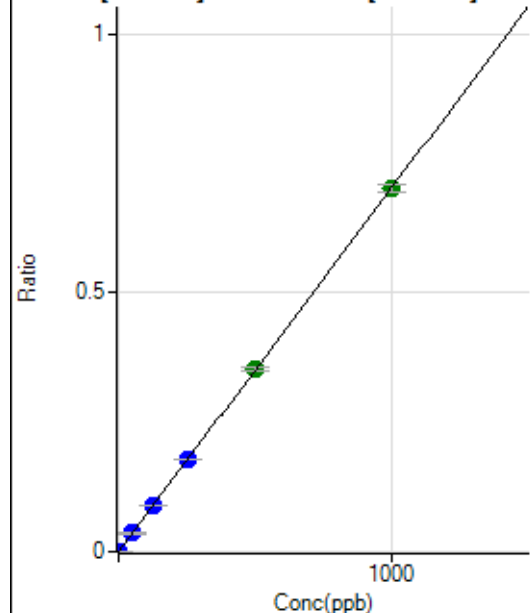
$$DL = 0.06437$$

$$BEC = 0.07793$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.11	0.0000	P	42.9
2	☐	2.000	1.843	6868.57	0.0013	P	2.7
3	☐	50.000	50.239	183668.71	0.0353	P	1.3
4	☐	125.000	125.517	458641.14	0.0881	P	1.4
5	☐	250.000	252.727	922301.21	0.1774	P	0.9
6	☐	500.000	502.652	1826138.02	0.3529	A	1.6
7	☐	1000.000	997.916	3641679.90	0.7006	A	2.1
8	☐			2658.67	0.0005	P	17.6

$$y = 7.0202\text{E-}004 * x + 1.6693\text{E-}005$$

$$R = 1.0000$$

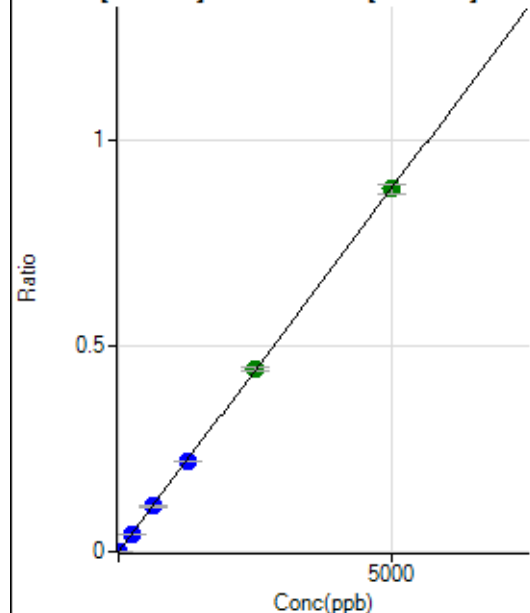
$$DL = 0.03057$$

$$BEC = 0.02378$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	11.6
2	☐	10.000	8.722	8119.31	0.0015	P	1.4
3	☐	250.000	248.182	228017.30	0.0438	P	1.5
4	☐	625.000	623.581	572585.30	0.1100	P	1.5
5	☐	1250.000	1244.146	1141251.83	0.2196	P	1.4
6	☐	2500.000	2510.624	2292595.17	0.4430	A	2.2
7	☐	5000.000	4996.422	4582553.83	0.8817	A	2.9
8	☐			2642.01	0.0005	P	10.2

$$y = 1.7646\text{E-}004 * x + 1.0177\text{E-}005$$

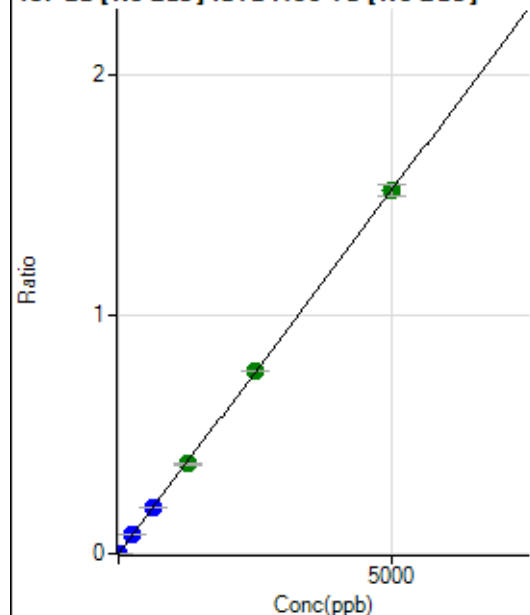
$$R = 1.0000$$

$$DL = 0.02002$$

$$BEC = 0.05767$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	34.3
2	☐	10.000	8.838	14168.92	0.0027	P	1.9
3	☐	250.000	253.875	401526.31	0.0771	P	1.8
4	☐	625.000	634.872	1003667.39	0.1929	P	0.5
5	☐	1250.000	1236.165	1951914.35	0.3755	A	1.2
6	☐	2500.000	2512.517	3950424.35	0.7632	A	0.8
7	☐	5000.000	4995.775	7886836.38	1.5176	A	3.2
8	☐			4764.85	0.0009	P	5.7

$$y = 3.0377E-004 * x + 1.8082E-005$$

$$R = 1.0000$$

$$DL = 0.06131$$

$$BEC = 0.05952$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.22		P	173.
2	☐			13.33		P	NaN
3	☐			44.44		P	31.2
4	☐			75.56		P	27.0
5	☐			142.22		P	14.3
6	☐			306.68		P	10.0
7	☐			600.03		P	19.8
8	☐			46.67		P	14.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			1.11		P	173.
3	☐			6.67		P	100.
4	☐			4.45		P	86.6
5	☐			16.67		P	20.0
6	☐			27.78		P	18.3
7	☐			51.11		P	39.3
8	☐			8.89		P	43.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.45		P	24.7
2	☐			19.44		P	137.
3	☐			27.78		P	62.5
4	☐			41.67		P	20.0
5	☐			83.34		P	0.0
6	☐			152.78		P	32.0
7	☐			305.57		P	34.5
8	☐			822.27		P	11.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			0.00		P	
3	☐			8.89		P	86.6
4	☐			25.56		P	19.9
5	☐			38.89		P	35.7
6	☐			77.78		P	21.1
7	☐			188.89		P	8.7
8	☐			373.34		P	15.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	16.7
2	☐			44.44		P	21.7
3	☐			63.89		P	32.8
4	☐			61.11		P	41.7
5	☐			116.67		P	12.4
6	☐			105.56		P	22.8
7	☐			238.90		P	21.3
8	☐			886.17		P	3.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			95.56		P	2.0
2	☐			97.78		P	11.0
3	☐			96.67		P	15.0
4	☐			106.67		P	3.1
5	☐			130.00		P	21.9
6	☐			118.89		P	9.8
7	☐			194.45		P	23.3
8	☐			484.46		P	11.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	36.7
2	☐			63.89		P	41.9
3	☐			27.78		P	62.5
4	☐			47.22		P	50.9
5	☐			66.67		P	25.0
6	☐			77.78		P	52.9
7	☐			100.00		P	22.0
8	☐			72.22		P	33.3

164 Er [He] No available calibration points

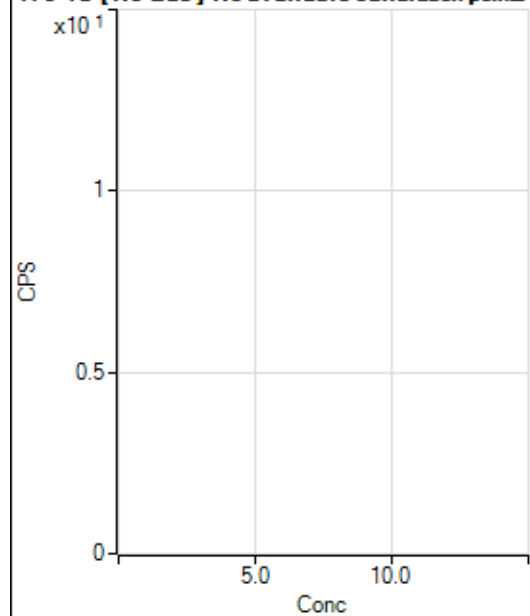
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	22.9
2	☐			20.00		P	60.1
3	☐			16.66		P	34.6
4	☐			16.67		P	20.0
5	☐			31.11		P	44.6
6	☐			32.22		P	26.0
7	☐			52.22		P	9.7
8	☐			30.00		P	61.9

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐			27.78		P	17.3
3	☐			36.11		P	13.3
4	☐			52.78		P	9.1
5	☐			77.78		P	32.7
6	☐			94.45		P	53.2
7	☐			147.23		P	11.8
8	☐			352.79		P	3.6

172 Yb [He] No available calibration points

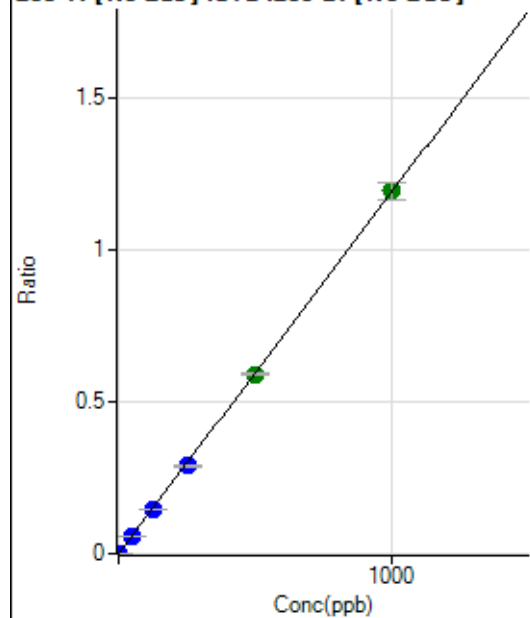
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			9.26		P	34.6
2	☐			22.22		P	25.0
3	☐			9.26		P	69.2
4	☐			37.04		P	22.9
5	☐			22.22		P	25.0
6	☐			59.26		P	5.4
7	☐			72.22		P	33.5
8	☐			138.89		P	30.2

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1025.07		P	5.3
2	☐			1108.41		P	3.4
3	☐			1747.39		P	2.6
4	☐			2847.63		P	7.7
5	☐			5014.99		P	2.6
6	☐			8911.55		P	1.9
7	☐			17016.99		P	0.9
8	☐			1175.09		P	1.9

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6699.97		P	3.4
2	☐			6622.15		P	1.1
3	☐			7285.47		P	2.5
4	☐			7424.43		P	2.4
5	☐			8612.20		P	2.0
6	☐			10667.46		P	2.5
7	☐			14374.73		P	1.3
8	☐			6900.05		P	2.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	177.78	0.0001	P	17.4
2	☐	1.000	0.886	3561.69	0.0011	P	9.5
3	☐	50.000	47.889	176094.15	0.0569	P	5.2
4	☐	125.000	122.424	453090.37	0.1454	P	2.0
5	☐	250.000	243.123	897945.10	0.2887	P	1.2
6	☐	500.000	496.863	1815469.46	0.5899	A	1.5
7	☐	1000.000	1003.715	3604181.29	1.1916	A	5.0
8	☐			1147.31	0.0004	P	6.7

$$y = 0.0012 * x + 5.5374E-005$$

$$R = 1.0000$$

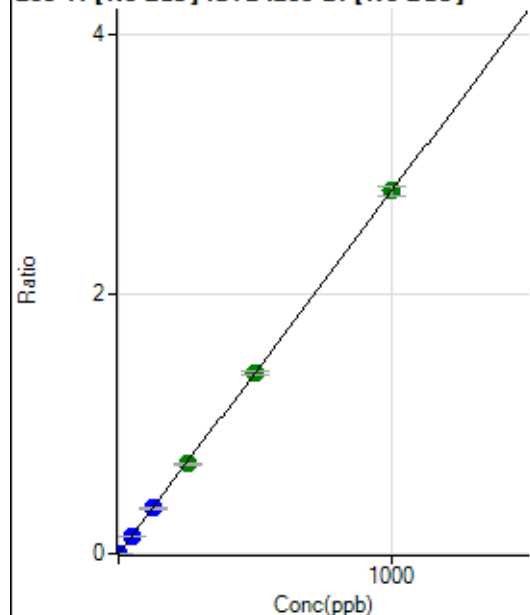
$$DL = 0.02439$$

$$BEC = 0.04664$$

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	408.35	0.0001	P	3.2
2	☐	1.000	0.849	8036.07	0.0025	P	3.8
3	☐	50.000	49.306	425702.96	0.1375	P	3.8
4	☐	125.000	125.021	1086111.72	0.3485	P	2.9
5	☐	250.000	249.052	2159099.94	0.6942	A	1.9
6	☐	500.000	498.067	4271290.94	1.3882	A	2.2
7	☐	1000.000	1001.236	8443612.26	2.7904	A	2.8
8	☐			2650.35	0.0010	P	6.5

$$y = 0.0028 * x + 1.2738E-004$$

$$R = 1.0000$$

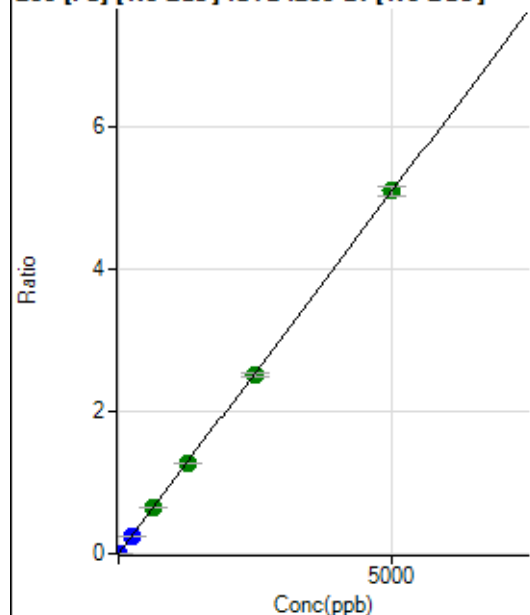
$$DL = 0.004321$$

$$BEC = 0.04571$$

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	500.02	0.0002	P	16.5
2	☐	1.000	0.816	3168.98	0.0010	P	9.6
3	☐	250.000	238.768	751052.05	0.2427	P	4.3
4	☐	625.000	630.018	1994575.05	0.6401	A	1.2
5	☐	1250.000	1241.439	3922971.44	1.2611	A	0.9
6	☐	2500.000	2475.902	7740008.16	2.5149	A	1.7
7	☐	5000.000	5014.124	15412446.52	5.0929	A	2.3
8	☐			4343.39	0.0016	P	5.3

$$y = 0.0010 * x + 1.5618E-004$$

$$R = 1.0000$$

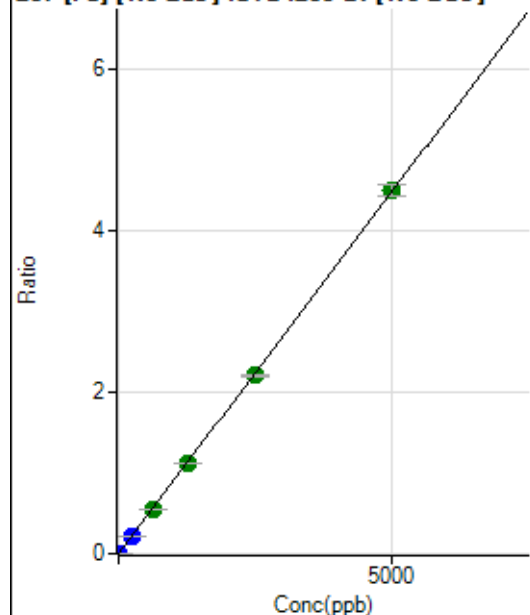
$$DL = 0.07627$$

$$BEC = 0.1538$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	453.72	0.0001	P	12.2
2	☐	1.000	0.809	2792.95	0.0009	P	2.9
3	☐	250.000	241.068	669297.71	0.2162	P	3.2
4	☐	625.000	619.465	1730551.56	0.5553	A	1.4
5	☐	1250.000	1252.966	3493889.95	1.1231	A	1.2
6	☐	2500.000	2465.019	6798653.68	2.2094	A	1.2
7	☐	5000.000	5017.887	13608021.95	4.4974	A	3.1
8	☐			3824.72	0.0014	P	5.2

$$y = 8.9625E-004 * x + 1.4166E-004$$

$$R = 1.0000$$

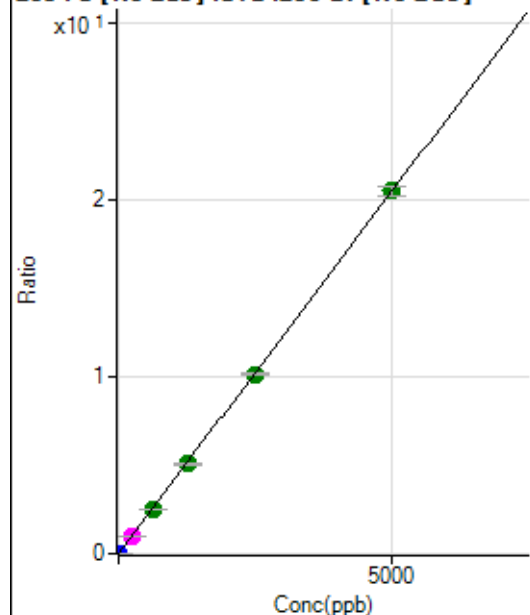
$$DL = 0.05781$$

$$BEC = 0.1581$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1974.18	0.0006	P	6.4
2	☐	1.000	0.804	12584.11	0.0039	P	5.1
3	☐	250.000	241.007	3056506.30	0.9874	M	3.2
4	☐	625.000	619.051	7900354.73	2.5352	A	1.2
5	☐	1250.000	1239.722	15789112.39	5.0765	A	2.6
6	☐	2500.000	2479.162	31240148.33	10.1511	A	0.6
7	☐	5000.000	5014.182	62127007.40	20.5304	A	2.5
8	☐			17493.89	0.0063	P	2.9

$$y = 0.0041 * x + 6.1625E-004$$

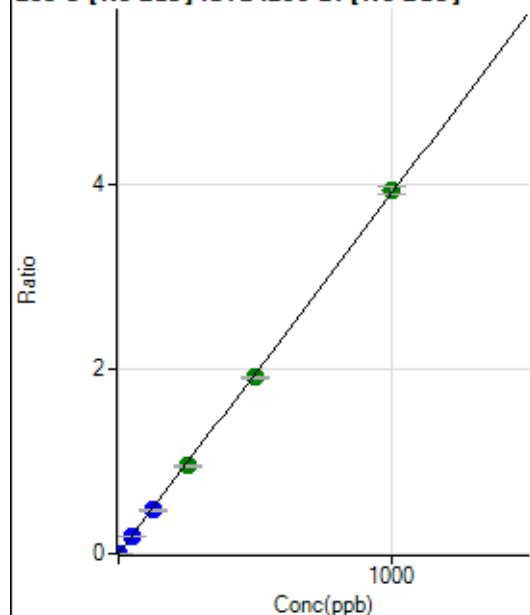
$$R = 1.0000$$

$$DL = 0.02899$$

$$BEC = 0.1505$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	386.14	0.0001	P	32.3
2	☐	1.000	0.842	10932.80	0.0034	P	8.2
3	☐	50.000	47.554	572984.06	0.1851	P	4.6
4	☐	125.000	120.455	1460961.35	0.4688	P	1.8
5	☐	250.000	243.491	2946752.11	0.9475	A	2.6
6	☐	500.000	489.328	5859706.77	1.9041	A	1.1
7	☐	1000.000	1007.654	11866114.59	3.9208	A	2.0
8	☐			875.06	0.0003	P	4.6

$$y = 0.0039 * x + 1.2039E-004$$

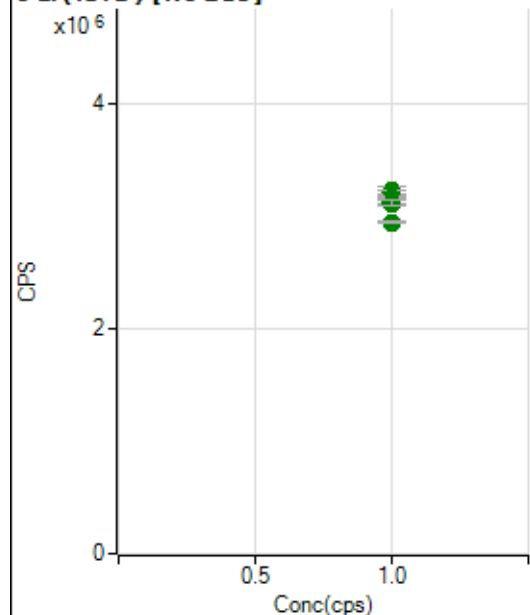
$$R = 0.9999$$

$$DL = 0.02998$$

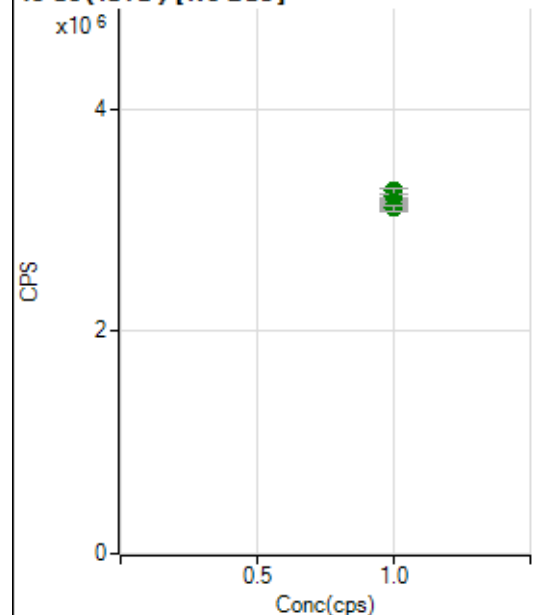
$$BEC = 0.03094$$

Weight: <None>

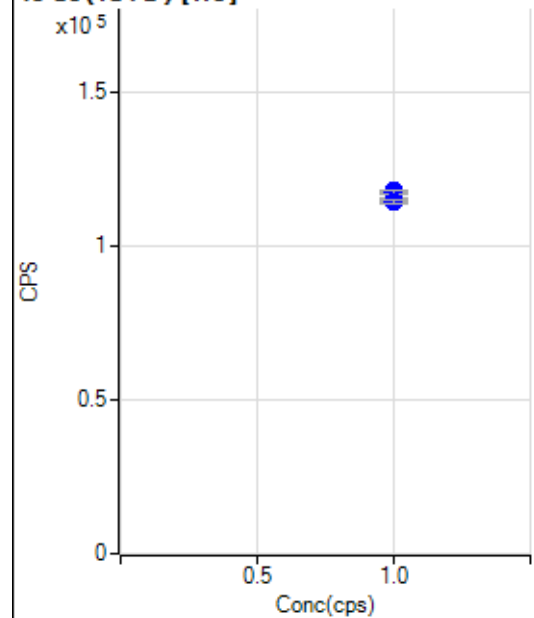
Min Conc: 0

6 Li (ISTD) [No Gas]

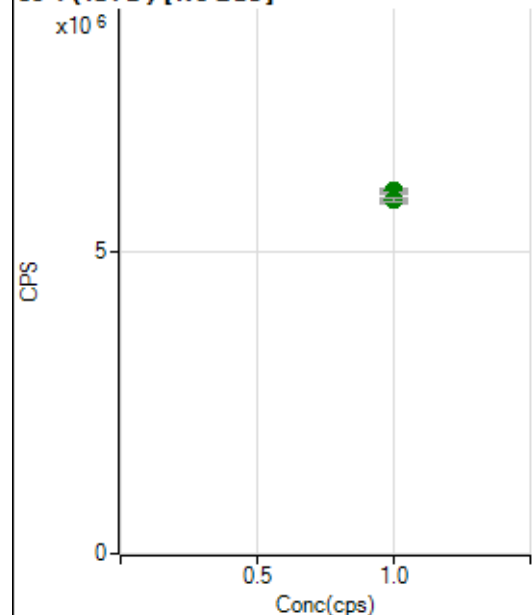
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3190898.28		A	1.8
2	☐	1.000		3219698.12		A	2.0
3	☐	1.000		3204117.41		A	1.5
4	☐	1.000		3164978.03		A	1.1
5	☐	1.000		3117745.81		A	2.1
6	☐	1.000		3128906.13		A	2.0
7	☐	1.000		3113374.19		A	1.2
8	☐	1.000		2942766.33		A	0.7

45 Sc (ISTD) [No Gas]

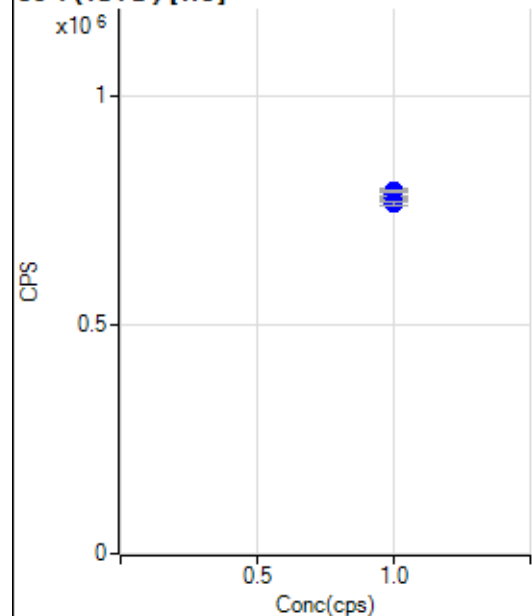
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3220180.19		A	1.0
2	☐	1.000		3261456.27		A	1.9
3	☐	1.000		3130025.82		A	1.1
4	☐	1.000		3167461.13		A	0.7
5	☐	1.000		3134222.28		A	2.3
6	☐	1.000		3138689.95		A	1.6
7	☐	1.000		3159035.61		A	0.3
8	☐	1.000		3104192.66		A	1.9

45 Sc (ISTD) [He]

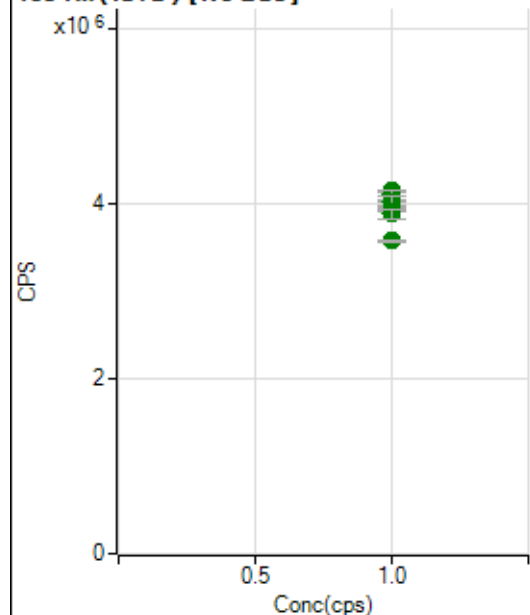
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		117846.89		P	0.5
2	☐	1.000		117636.63		P	0.9
3	☐	1.000		115118.80		P	0.7
4	☐	1.000		117180.73		P	0.6
5	☐	1.000		114832.16		P	1.4
6	☐	1.000		117168.10		P	1.1
7	☐	1.000		117532.28		P	0.9
8	☐	1.000		114101.30		P	1.0

89 Y (ISTD) [No Gas]

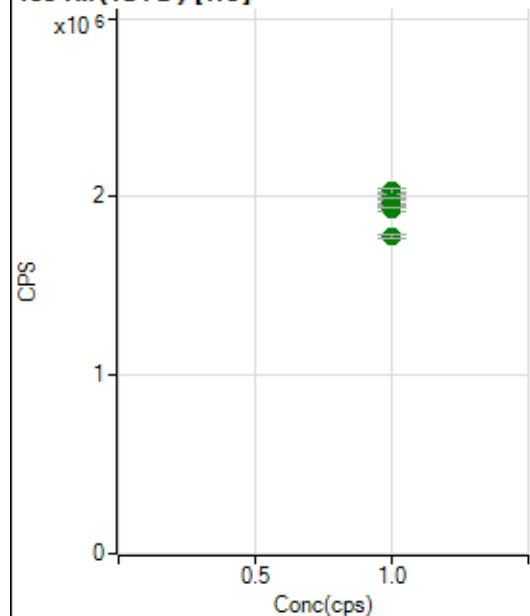
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5943447.27		A	1.8
2	☐	1.000		5980085.67		A	1.2
3	☐	1.000		5863015.74		A	0.6
4	☐	1.000		5896523.94		A	2.1
5	☐	1.000		6005825.33		A	1.1
6	☐	1.000		5990332.27		A	0.3
7	☐	1.000		5869627.48		A	2.6
8	☐	1.000		5860488.52		A	1.1

89 Y (ISTD) [He]

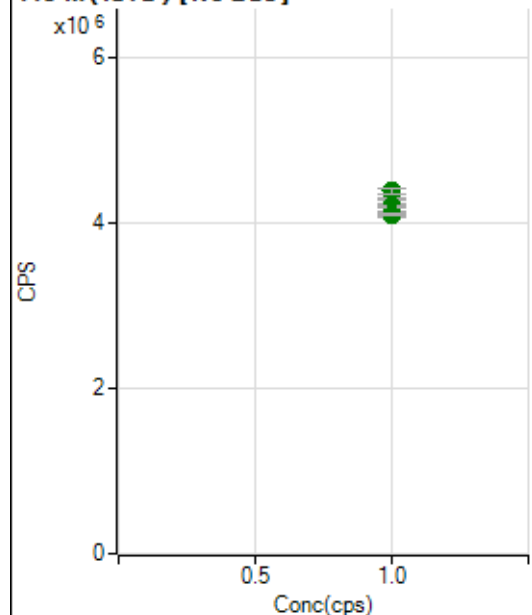
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		788832.56		P	2.3
2	☐	1.000		787835.00		P	1.4
3	☐	1.000		777349.90		P	0.9
4	☐	1.000		771498.19		P	1.0
5	☐	1.000		775627.14		P	1.0
6	☐	1.000		778343.24		P	1.0
7	☐	1.000		793069.66		P	0.8
8	☐	1.000		763498.36		P	1.0

103 Rh (ISTD) [No Gas]

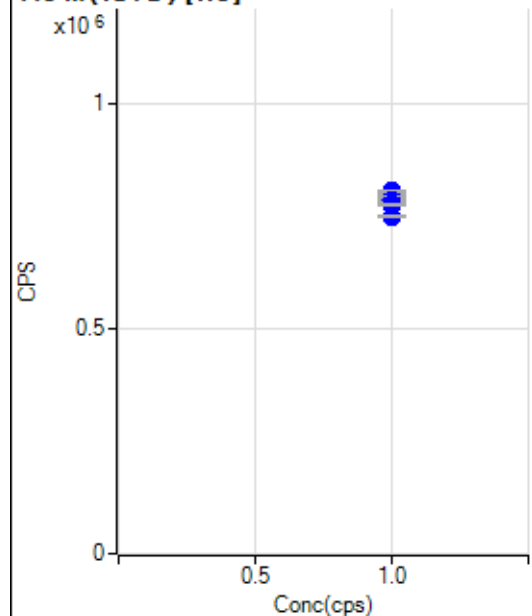
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4140468.45		A	0.7
2	☐	1.000		4111611.33		A	1.7
3	☐	1.000		4006526.39		A	1.5
4	☐	1.000		4014724.83		A	0.4
5	☐	1.000		4005425.31		A	3.3
6	☐	1.000		3905440.80		A	0.3
7	☐	1.000		3873616.97		A	2.9
8	☐	1.000		3576219.61		A	0.6

103 Rh (ISTD) [He]

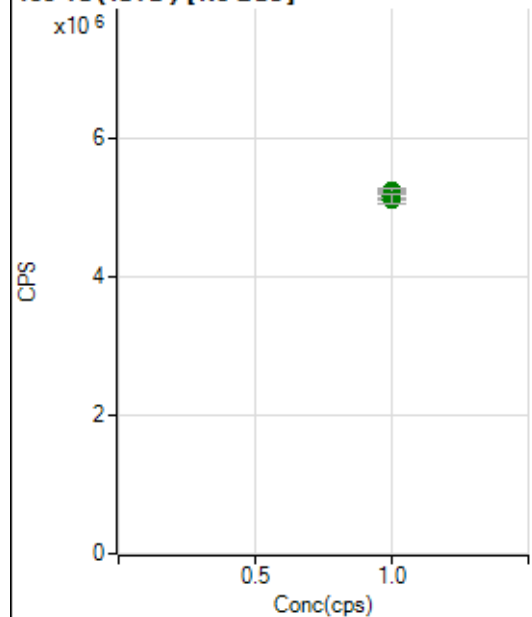
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2005586.67		A	2.3
2	☐	1.000		2033425.84		A	1.7
3	☐	1.000		1971142.03		A	0.9
4	☐	1.000		1967336.86		A	1.4
5	☐	1.000		1963891.62		A	2.7
6	☐	1.000		1932171.06		A	1.3
7	☐	1.000		1941125.41		A	0.4
8	☐	1.000		1775783.86		A	1.3

115 In (ISTD) [No Gas]

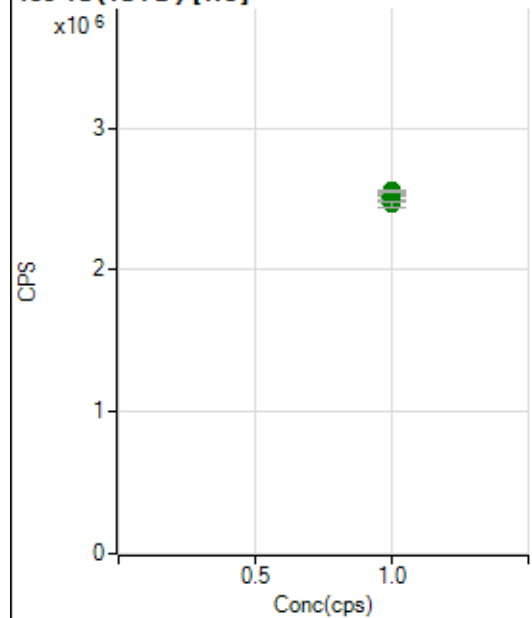
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4275392.49		A	0.5
2	☐	1.000		4381410.59		A	1.3
3	☐	1.000		4190872.07		A	0.8
4	☐	1.000		4210439.88		A	0.9
5	☐	1.000		4169387.25		A	1.2
6	☐	1.000		4121626.57		A	0.9
7	☐	1.000		4120999.29		A	2.5
8	☐	1.000		4088938.95		A	0.6

115 In (ISTD) [He]

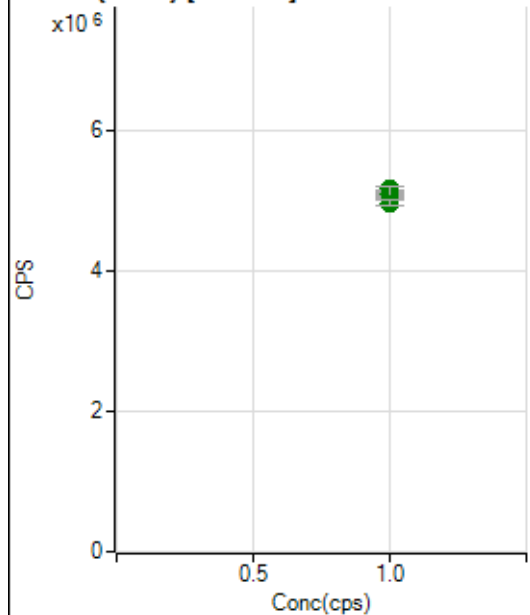
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		805118.68		P	0.8
2	☐	1.000		807792.31		P	0.5
3	☐	1.000		789170.08		P	0.9
4	☐	1.000		789950.73		P	1.2
5	☐	1.000		780549.95		P	1.2
6	☐	1.000		777479.68		P	0.7
7	☐	1.000		776642.31		P	0.3
8	☐	1.000		751192.39		P	0.7

159 Tb (ISTD) [No Gas]

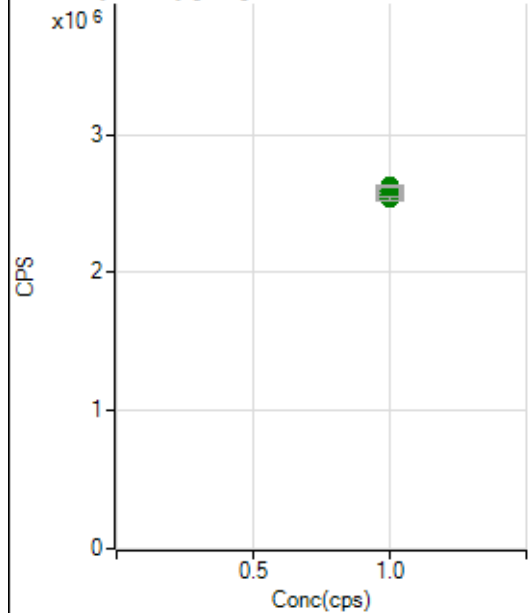
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5195550.06		A	2.5
2	☐	1.000		5241848.36		A	1.7
3	☐	1.000		5205341.62		A	0.3
4	☐	1.000		5204072.39		A	2.1
5	☐	1.000		5197943.50		A	0.4
6	☐	1.000		5175846.17		A	1.8
7	☐	1.000		5200355.16		A	3.1
8	☐	1.000		5123576.31		A	2.5

159 Tb (ISTD) [He]

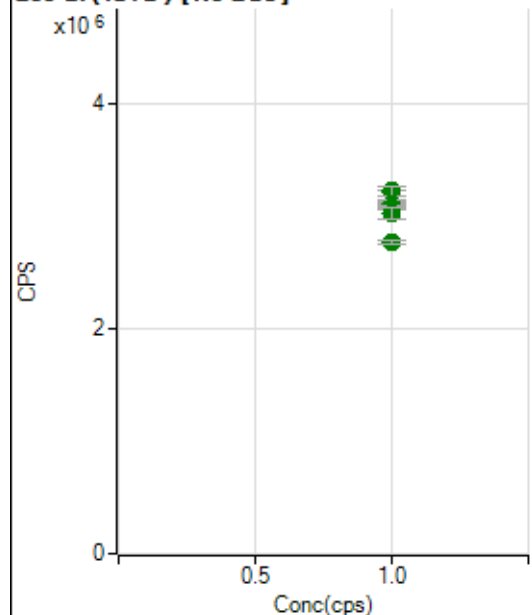
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2539889.72		A	1.9
2	☐	1.000		2548176.59		A	1.4
3	☐	1.000		2520933.90		A	2.7
4	☐	1.000		2519379.10		A	2.2
5	☐	1.000		2507504.63		A	2.0
6	☐	1.000		2540380.39		A	0.6
7	☐	1.000		2556404.67		A	0.8
8	☐	1.000		2460814.84		A	1.2

165 Ho (ISTD) [No Gas]

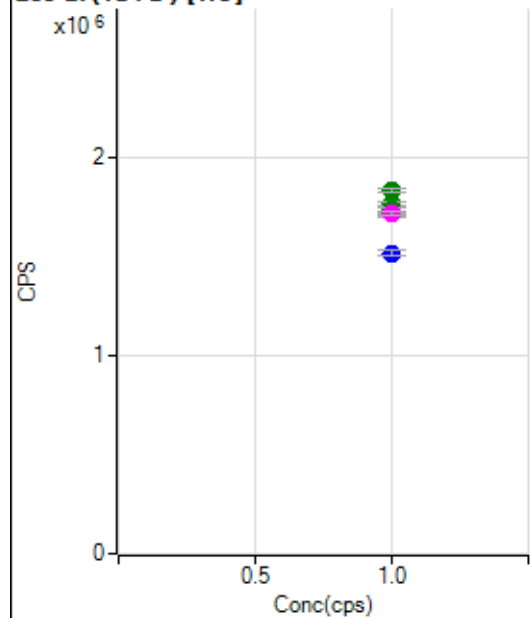
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5032879.41		A	0.9
2	☐	1.000		5115022.16		A	0.4
3	☐	1.000		5050153.24		A	0.8
4	☐	1.000		5110620.82		A	1.2
5	☐	1.000		5100992.00		A	2.3
6	☐	1.000		5167555.11		A	1.7
7	☐	1.000		5108191.00		A	3.4
8	☐	1.000		4965532.49		A	1.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2554672.74		A	0.7
2	☐	1.000		2547781.51		A	2.0
3	☐	1.000		2541477.84		A	1.2
4	☐	1.000		2561107.01		A	2.2
5	☐	1.000		2588022.56		A	2.6
6	☐	1.000		2561698.09		A	3.5
7	☐	1.000		2627937.31		A	0.9
8	☐	1.000		2534834.27		A	1.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3205361.72		A	1.4
2	☐	1.000		3224007.28		A	2.8
3	☐	1.000		3097521.07		A	3.0
4	☐	1.000		3116420.75		A	0.7
5	☐	1.000		3110941.72		A	1.9
6	☐	1.000		3077377.14		A	1.0
7	☐	1.000		3027675.13		A	3.1
8	☐	1.000		2769129.16		A	1.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1832824.92		A	1.1
2	☐	1.000		1770113.88		A	1.3
3	☐	1.000		1741240.86		A	0.8
4	☐	1.000		1737641.83		A	1.1
5	☐	1.000		1714697.60		M	0.9
6	☐	1.000		1716203.62		M	1.5
7	☐	1.000		1719343.90		M	1.3
8	☐	1.000		1519043.28		P	1.6

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8022323-MS.b

Acq. Date-Time 2023-02-23 08:16:59

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		10827	108272.36			1.858	5.000
24		60491	604911.37			0.903	5.000
25		8598	85980.00			1.040	5.000
26		10488	104884.69			1.520	5.000
59		40335	403346.90			1.356	5.000
113		4380	43796.14			1.624	5.000
115		55402	554024.91			1.770	5.000
206		12040	120396.92			1.961	5.000
207		10794	107938.00			1.570	5.000
208		26055	260549.32			1.240	5.000
220		0	4.90			49.149	

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

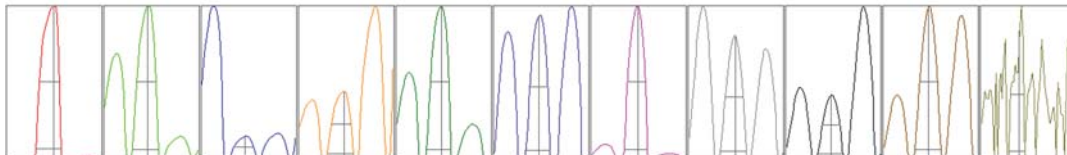
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	10841	10487	10867	11008	10933
24	60905	59606	60971	60423	60551
25	8687	8457	8598	8662	8586
26	10610	10299	10552	10644	10337
59	40522	39411	40765	40683	40293
113	4455	4276	4433	4383	4351
115	56849	54487	55884	55189	54603
206	12056	11720	12287	12238	11897
207	10880	10512	10930	10886	10761
208	26112	25588	26375	26312	25888

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	18379.22	9.00	8.90 - 9.10	
24	107162.94	23.90	23.90 - 24.10	
25	14343.82	24.90	24.90 - 25.10	
26	16563.02	25.95	25.90 - 26.10	
59	72105.96	58.95	58.90 - 59.10	
113	8120.03	112.95	112.90 - 113.10	
115	104864.82	115.00	114.90 - 115.10	
206	22358.70	206.00	205.90 - 206.10	
207	20261.41	206.95	206.90 - 207.10	
208	48597.62	207.95	207.90 - 208.10	
220	0.75	219.75	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.786	0.900	
24	0.62	0.826	0.900	
25	0.63	0.788	0.900	
26	0.63	0.828	0.900	
59	0.59	0.774	0.900	
113	0.55	0.766	0.900	
115	0.55	0.738	0.900	
206	0.55	0.822	0.900	
207	0.55	0.784	0.900	
208	0.55	0.822	0.900	
220	0.43	0.493		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 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	15.6 V
Extract 2	-175.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	150 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9995	QP Bias	-4.0 V
Mass Offset	124	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.9 mm
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EM

Discriminator	4.3 mV	Analog HV	2317 V	Pulse HV	1712 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		9389	93892.29			1.967	
89		11588	115876.10			1.762	
205		8289	82885.56			1.820	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9065	9506	9496	9463	9417
89	11241	11704	11748	11572	11673
205	8115	8409	8471	8275	8173

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 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	3.8 V
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Extract 2	-175.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-90 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	0.9995	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.9 mm
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EM

Discriminator	4.3 mV	Analog HV	2317 V	Pulse HV	1712 V
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