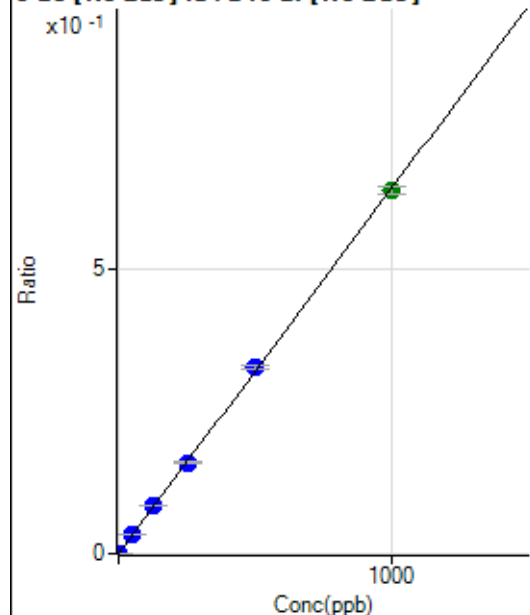


Calibration for 007CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8031623 MS.b\
 Analysis File: P8031623 MS.batch.bin
 DA Date-Time: 2023-03-17 00:04:29
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-03-16 18:01:36
2	006CALB.d	S02	2023-03-16 18:07:42
3	007CALS.d	S03	2023-03-16 18:10:44
4	008CALS.d	S04	2023-03-16 18:13:45
5	009CALS.d	S05	2023-03-16 18:16:44
6	010CALS.d	S06	2023-03-16 18:19:44
7	011CALS.d	S07	2023-03-16 18:22:43
8	012CALS.d	S08	2023-03-16 18:25:45

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.83	0.0000	P	38.3
2	☐	1.000	1.072	2032.39	0.0007	P	2.3
3	☐	50.000	53.963	102695.62	0.0345	P	3.4
4	☐	125.000	131.546	247515.60	0.0842	P	2.0
5	☐	250.000	249.774	479040.72	0.1599	P	3.1
6	☐	500.000	510.729	954328.13	0.3269	P	3.0
7	☐	1000.000	993.676	1802889.60	0.6360	A	2.1
8	☐			617.86	0.0002	P	4.9

$$y = 6.4006\text{E-}004 * x + 5.5072\text{E-}006$$

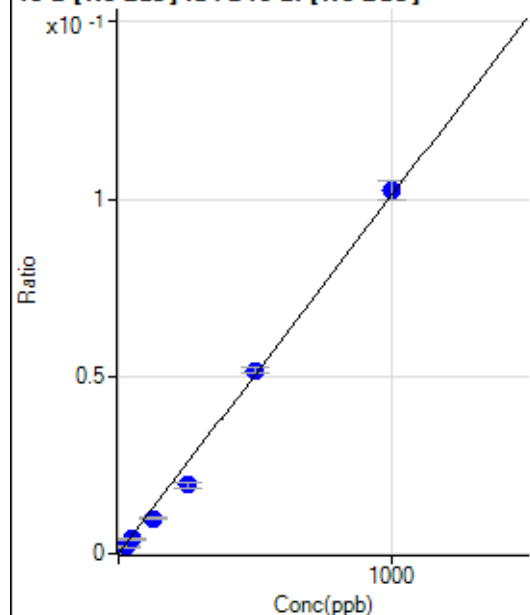
$$R = 0.9999$$

$$DL = 0.009874$$

$$BEC = 0.008604$$

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	137.97	0.0000	P	13.6
2	☐	25.000	19.042	5782.68	0.0020	P	8.7
3	☐	50.000	40.462	12289.41	0.0041	P	8.1
4	☐	125.000	98.526	29392.35	0.0100	P	7.4
5	☐	250.000	190.256	57656.26	0.0193	P	10.1
6	☐	500.000	512.209	151384.18	0.0518	P	3.9
7	☐	1000.000	1012.767	290150.71	0.1023	P	5.4
8	☐			22797.20	0.0082	P	10.2

$$y = 1.0101\text{E-}004 * x + 4.8139\text{E-}005$$

$$R = 0.9980$$

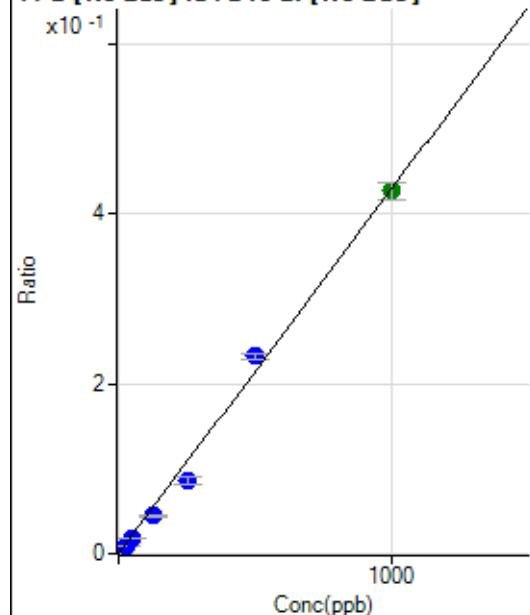
$$DL = 0.194$$

$$BEC = 0.4766$$

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	535.24	0.0002	P	11.2
2	☐	25.000	20.110	25824.97	0.0088	P	8.8
3	☐	50.000	42.629	54864.02	0.0185	P	7.9
4	☐	125.000	102.680	129898.21	0.0442	P	8.4
5	☐	250.000	200.723	258016.27	0.0862	P	10.3
6	☐	500.000	541.613	679048.68	0.2323	P	3.1
7	☐	1000.000	994.793	1209212.36	0.4266	A	4.5
8	☐			100445.47	0.0361	P	9.4

$$y = 4.2861\text{E-}004 * x + 1.8672\text{E-}004$$

$$R = 0.9974$$

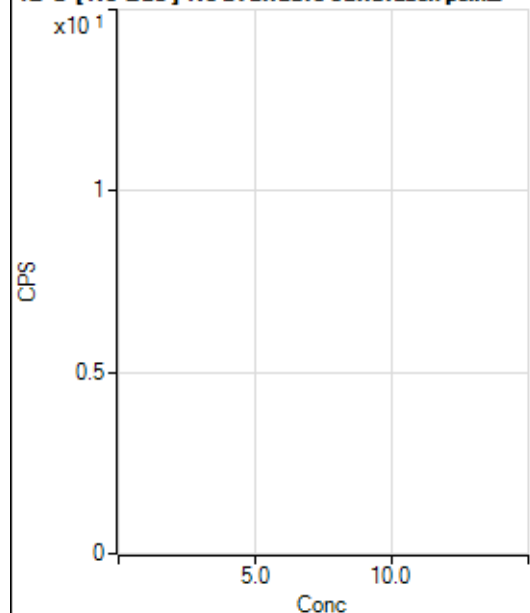
$$DL = 0.1463$$

$$BEC = 0.4356$$

Weight: <None>

Min Conc: 0

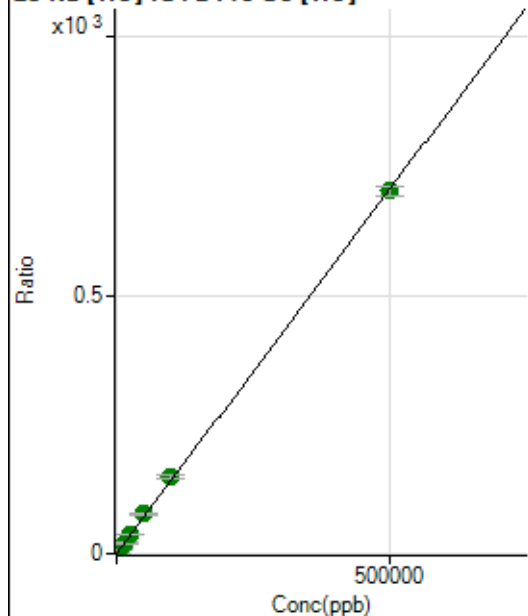
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4068017.80		A	1.6
2	☐			3967361.55		A	1.8
3	☐			4273381.30		A	2.2
4	☐			4253802.00		A	2.8
5	☐			4553303.44		A	3.6
6	☐			4743431.36		A	2.9
7	☐			4566917.46		A	3.5
8	☐			4037186.16		A	0.9

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53734.93		P	0.8
2	☐			50791.13		P	0.7
3	☐			57711.07		P	1.6
4	☐			57125.67		P	1.3
5	☐			60748.29		P	1.3
6	☐			63507.17		P	0.7
7	☐			63301.00		P	0.4
8	☐			57643.91		P	1.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	13576.06	0.0962	P	2.2
2	☐	500.000	502.595	111856.13	0.8037	P	0.5
3	☐	5000.000	5801.617	1149749.90	8.2638	A	1.4
4	☐	12500.000	14351.747	2718650.06	20.3007	A	3.9
5	☐	25000.000	27048.964	5393756.67	38.1760	A	4.0
6	☐	50000.000	54985.513	10797633.31	77.5055	A	4.8
7	☐	100000.00	104962.78	21230339.71	147.8641	A	3.9
8	☐	500000.00	498352.13	100504799.4	701.6827	A	2.9

$$y = 0.0014 * x + 0.0962$$

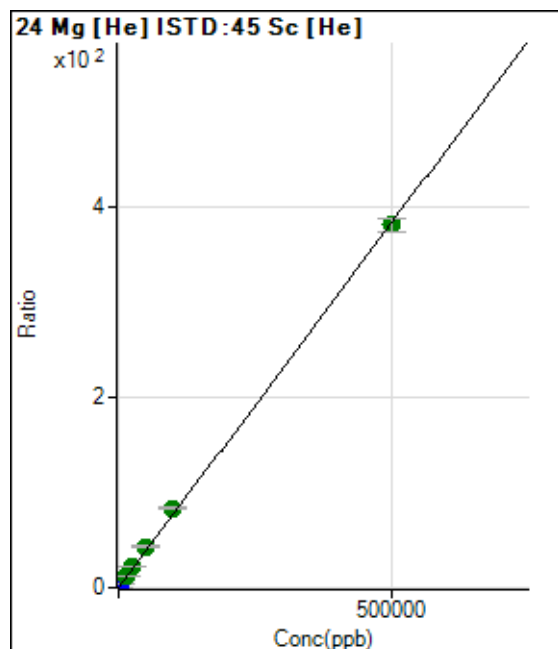
$$R = 0.9999$$

$$DL = 4.589$$

$$BEC = 68.31$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	186.12	0.0013	P	20.6
2	☐	500.000	507.499	54438.72	0.3912	P	0.7
3	☐	5000.000	5891.165	629838.75	4.5269	P	1.0
4	☐	12500.000	15080.494	1551295.53	11.5861	A	4.8
5	☐	25000.000	28255.378	3066774.74	21.7069	A	4.1
6	☐	50000.000	55689.387	5960893.41	42.7815	A	3.8
7	☐	100000.00	109236.58	12048998.53	83.9162	A	3.0
8	☐	500000.00	497347.54	54722194.97	382.0605	A	3.7

$$y = 7.6819\text{E-}004 * x + 0.0013$$

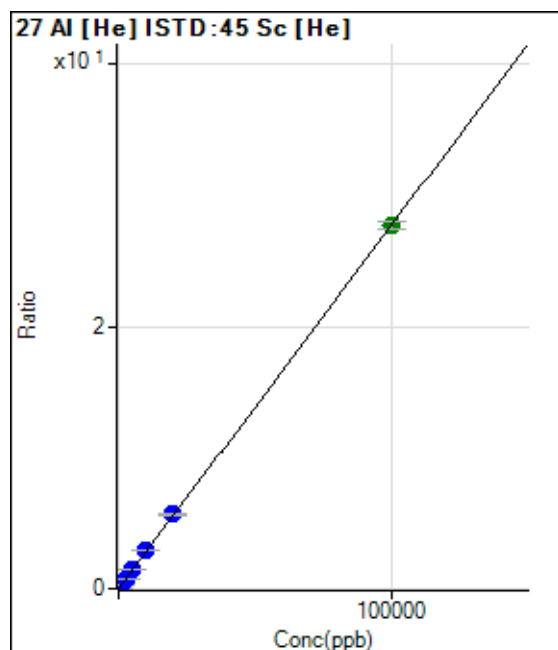
$$R = 0.9998$$

$$DL = 1.058$$

$$BEC = 1.716$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.99	0.0005	P	5.4
2	☐	20.000	19.952	833.26	0.0060	P	7.1
3	☐	1000.000	1109.888	42848.97	0.3080	P	1.7
4	☐	2500.000	2772.119	102898.19	0.7685	P	5.1
5	☐	5000.000	5253.846	205740.45	1.4561	P	3.2
6	☐	10000.000	10643.395	410951.84	2.9493	P	3.8
7	☐	20000.000	20449.365	813554.15	5.6662	P	3.2
8	☐	100000.00	99825.193	3961605.98	27.6580	A	2.1

$$y = 2.7706\text{E-}004 * x + 4.6005\text{E-}004$$

$$R = 1.0000$$

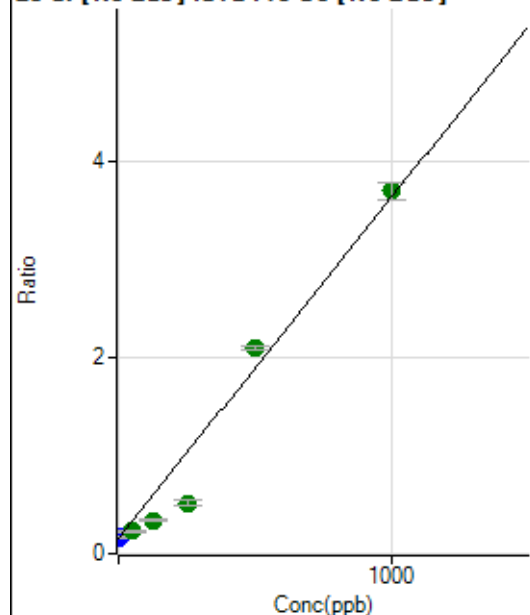
$$DL = 0.2713$$

$$BEC = 1.66$$

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	746941.18	0.1560	P	5.3
2	☐	10.000	3.018	802409.72	0.1664	P	3.5
3	☐	50.000	21.846	1126922.66	0.2318	A	6.9
4	☐	125.000	52.585	1655220.59	0.3385	A	8.0
5	☐	250.000	102.492	2485996.43	0.5118	A	10.4
6	☐	500.000	557.728	10244637.81	2.0924	A	1.9
7	☐	1000.000	1018.543	18073174.36	3.6923	A	4.7
8	☐			1426471.10	0.2990	A	3.0

$$y = 0.0035 * x + 0.1560$$

$$R = 0.9870$$

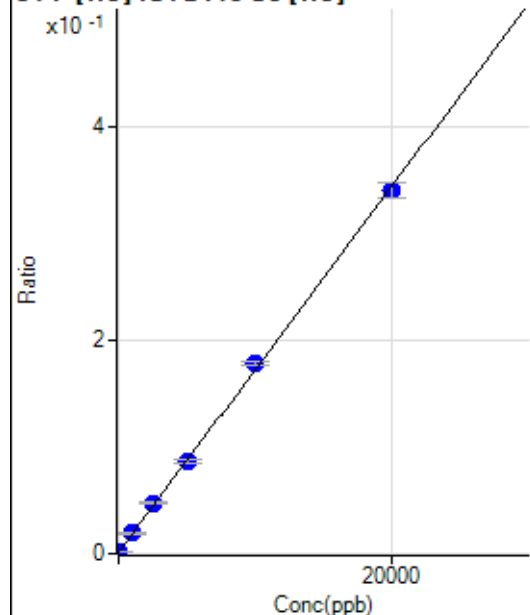
$$DL = 7.17$$

$$BEC = 44.92$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-2.688	166.67	0.0012	P	37.9
2	☐	0.000	2.688	177.78	0.0013	P	10.3
3	☐	1000.000	1056.136	2691.98	0.0193	P	10.3
4	☐	2500.000	2703.667	6376.57	0.0476	P	3.2
5	☐	5000.000	5002.583	12297.23	0.0870	P	4.0
6	☐	10000.000	10388.097	25002.57	0.1794	P	2.0
7	☐	20000.000	19777.040	48883.21	0.3405	P	4.2
8	☐			155.56	0.0011	P	22.1

$$y = 1.7153E-005 * x + 0.0012$$

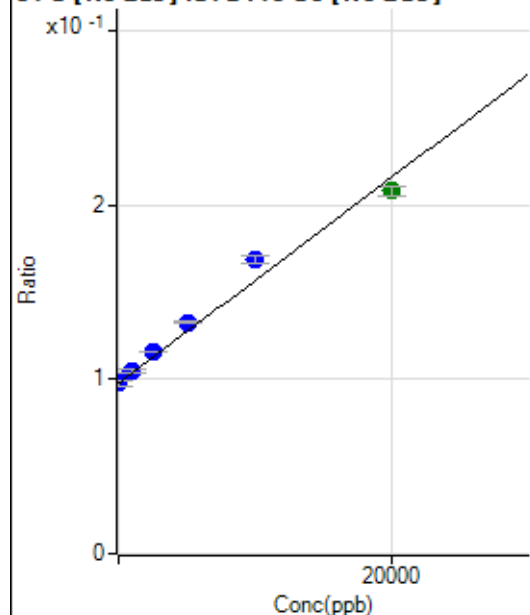
$$R = 0.9997$$

$$DL = 50.74$$

$$BEC = 71.82$$

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	33.030	469222.98	0.0979	P	3.9
2	☐	0.000	-33.030	470319.37	0.0975	P	2.6
3	☐	1000.000	1236.132	510903.45	0.1050	P	1.8
4	☐	2500.000	3025.268	564898.69	0.1156	P	0.3
5	☐	5000.000	5926.290	644384.42	0.1327	P	0.8
6	☐	10000.000	12042.138	825960.04	0.1688	P	2.5
7	☐	20000.000	18669.894	1017937.54	0.2079	A	2.3
8	☐			414918.99	0.0870	P	2.5

$$y = 5.9003E-006 * x + 0.0977$$

$$R = 0.9904$$

$$DL = 1621$$

$$BEC = 1.657E+04$$

Weight: <None>

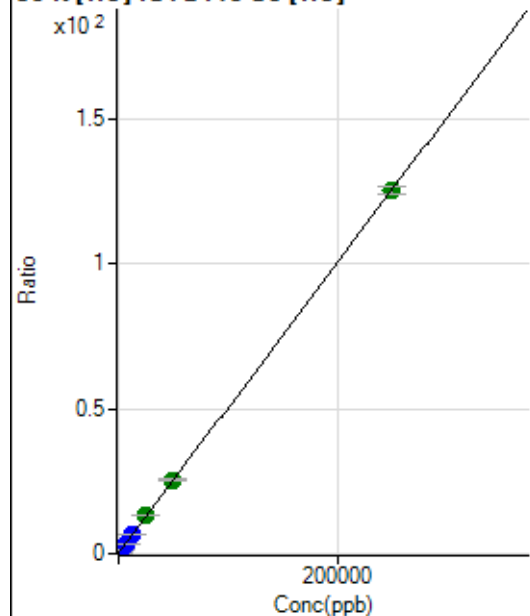
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			277558.16		P	1.4
2	☐			266271.50		P	1.2
3	☐			306843.26		P	2.2
4	☐			281881.00		P	2.4
5	☐			262213.18		P	1.8
6	☐			288714.14		P	2.5
7	☐			242689.43		P	1.8
8	☐			237694.03		P	1.0

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1747.37		P	4.7
2	☐			1539.01		P	6.3
3	☐			1800.15		P	2.9
4	☐			1669.58		P	5.0
5	☐			1461.23		P	8.5
6	☐			1791.83		P	11.7
7	☐			1539.01		P	5.9
8	☐			1625.13		P	5.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	20420.48	0.1447	P	2.9
2	☐	500.000	461.097	52242.49	0.3755	P	2.0
3	☐	2500.000	2693.614	207730.67	1.4930	P	2.9
4	☐	6250.000	6749.226	471808.56	3.5231	P	4.0
5	☐	12500.000	12693.050	918205.38	6.4984	P	2.9
6	☐	25000.000	26645.717	1878889.08	13.4826	A	1.5
7	☐	50000.000	50472.351	3648455.59	25.4095	A	1.8
8	☐	250000.00	249716.96	17924580.26	125.1449	A	2.0

$$y = 5.0057E-004 * x + 0.1447$$

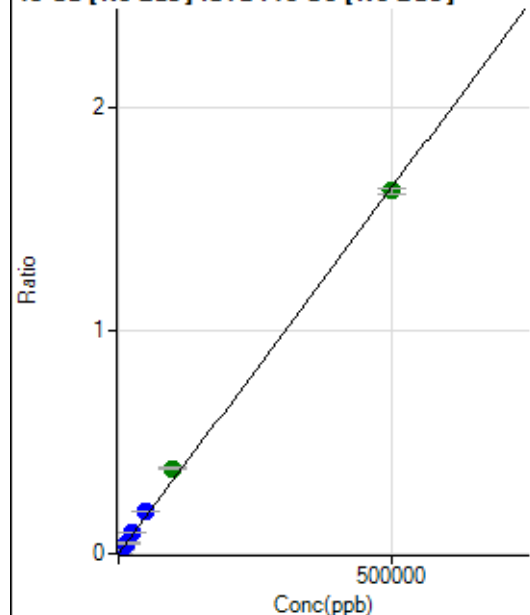
$$R = 1.0000$$

$$DL = 25.18$$

$$BEC = 289$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	122.90	0.0000	P	16.3
2	☐	500.000	510.141	8185.90	0.0017	P	1.4
3	☐	5000.000	6009.475	95897.50	0.0197	P	3.0
4	☐	12500.000	14390.785	230585.23	0.0472	P	1.3
5	☐	25000.000	28334.216	450975.68	0.0929	P	0.5
6	☐	50000.000	57245.666	918300.19	0.1876	P	0.9
7	☐	100000.00	116292.73	1865993.21	0.3811	A	2.5
8	☐	500000.00	495792.80	7749105.49	1.6247	A	1.3

$$y = 3.2768\text{E-}006 * x + 2.5617\text{E-}005$$

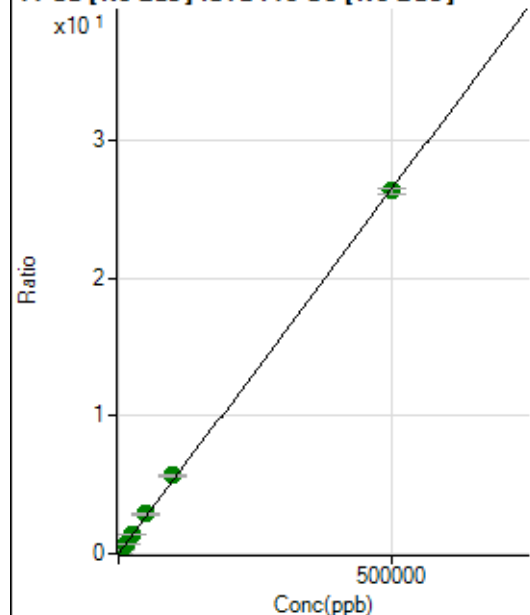
$$R = 0.9994$$

$$DL = 3.815$$

$$BEC = 7.818$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	12483.66	0.0026	P	2.8
2	☐	500.000	507.772	142266.72	0.0295	P	1.1
3	☐	5000.000	5787.308	1503272.37	0.3090	A	2.7
4	☐	12500.000	14151.273	3674911.89	0.7519	A	1.3
5	☐	25000.000	26902.561	6929946.84	1.4271	A	0.8
6	☐	50000.000	54584.487	14156812.71	2.8928	A	2.1
7	☐	100000.00	107743.07	27947012.92	5.7076	A	2.2
8	☐	500000.00	497848.64	125741100.0	26.3636	A	1.7

$$y = 5.2950\text{E-}005 * x + 0.0026$$

$$R = 0.9999$$

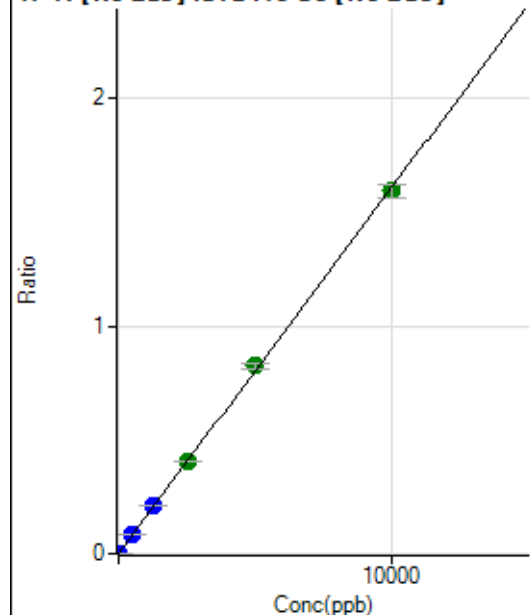
$$DL = 4.192$$

$$BEC = 49.19$$

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	75.00	0.0000	P	22.2
2	☐	5.000	5.093	4028.48	0.0008	P	1.5
3	☐	500.000	534.171	417969.63	0.0859	P	2.3
4	☐	1250.000	1291.371	1015150.59	0.2077	P	0.3
5	☐	2500.000	2522.874	1970603.49	0.4058	A	0.4
6	☐	5000.000	5144.164	4048637.42	0.8274	A	3.2
7	☐	10000.000	9915.320	7807718.49	1.5948	A	3.4
8	☐			1939.08	0.0004	P	7.2

$$y = 1.6084\text{E-}004 * x + 1.5719\text{E-}005$$

$$R = 0.9998$$

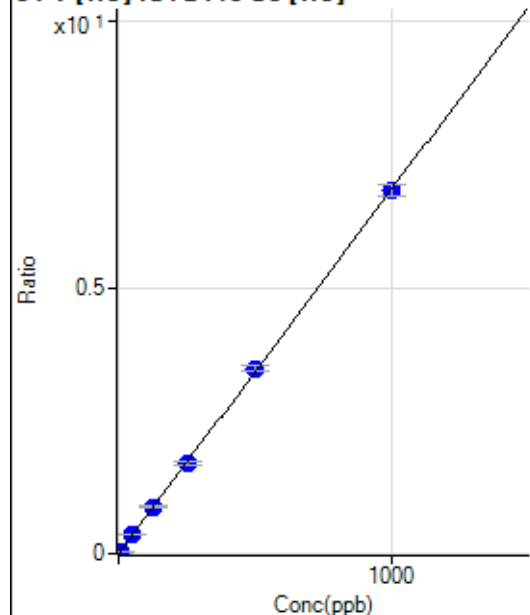
$$DL = 0.06519$$

$$BEC = 0.09773$$

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	7.78	0.0001	P	50.5
2	☐	5.000	4.631	4414.06	0.0317	P	4.0
3	☐	50.000	52.237	49717.23	0.3573	P	1.4
4	☐	125.000	129.044	118170.46	0.8827	P	5.6
5	☐	250.000	248.720	240372.52	1.7012	P	3.4
6	☐	500.000	507.199	483405.74	3.4691	P	3.1
7	☐	1000.000	996.105	978241.72	6.8131	P	3.2
8	☐			261.12	0.0018	P	11.4

$$y = 0.0068 * x + 5.5421\text{E-}005$$

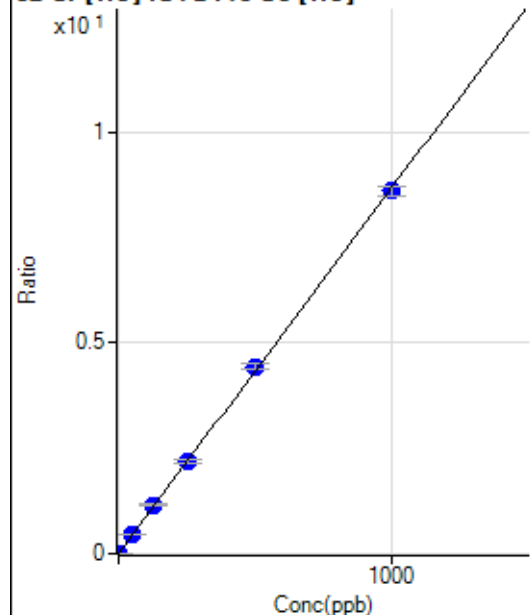
$$R = 1.0000$$

$$DL = 0.01228$$

$$BEC = 0.008103$$

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	526.68	0.0037	P	3.8
2	☐	2.000	1.874	2774.74	0.0199	P	4.1
3	☐	50.000	52.501	63749.59	0.4582	P	0.9
4	☐	125.000	132.591	154151.04	1.1515	P	6.0
5	☐	250.000	252.468	309285.04	2.1892	P	4.3
6	☐	500.000	511.319	617269.14	4.4298	P	3.5
7	☐	1000.000	992.650	1234297.03	8.5964	P	2.6
8	☐			8923.96	0.0623	P	5.7

$$y = 0.0087 * x + 0.0037$$

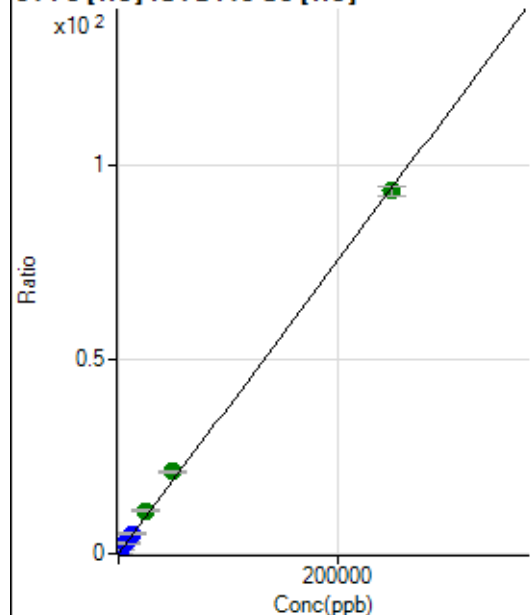
$$R = 0.9999$$

$$DL = 0.04941$$

$$BEC = 0.4308$$

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	492.61	0.0035	P	11.7
2	☐	50.000	50.400	3130.03	0.0225	P	7.0
3	☐	2500.000	2882.470	151721.51	1.0904	P	2.0
4	☐	6250.000	7261.711	366975.21	2.7418	P	7.6
5	☐	12500.000	13689.553	729852.20	5.1657	P	3.4
6	☐	25000.000	29396.979	1544767.11	11.0888	A	5.4
7	☐	50000.000	56033.605	3034329.26	21.1333	A	3.4
8	☐	250000.00	248264.98	13409394.51	93.6221	A	2.3

$$y = 3.7709E-004 * x + 0.0035$$

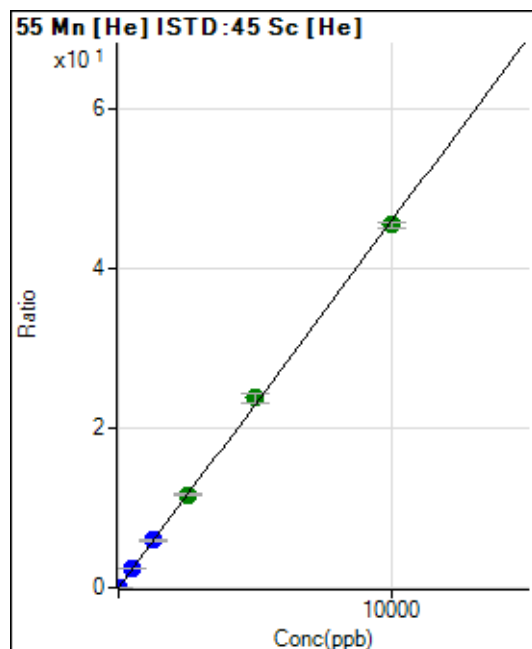
$$R = 0.9996$$

$$DL = 3.264$$

$$BEC = 9.262$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0002	P	11.0
2	☐	1.000	1.046	702.25	0.0050	P	1.4
3	☐	500.000	516.308	330335.52	2.3742	P	2.2
4	☐	1250.000	1294.363	796854.92	5.9516	P	4.9
5	☐	2500.000	2542.406	1651758.01	11.6899	A	3.7
6	☐	5000.000	5176.867	3315796.17	23.8029	A	5.4
7	☐	10000.000	9894.605	6532365.53	45.4945	A	1.9
8	☐			3341.55	0.0233	P	3.7

$$y = 0.0046 * x + 2.3624E-004$$

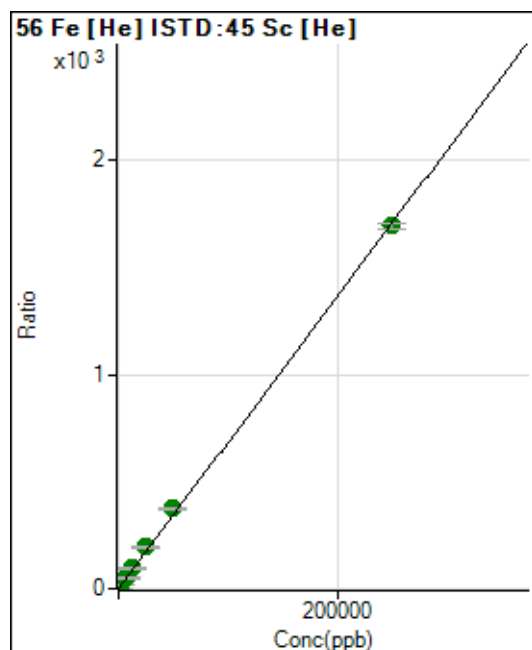
$$R = 0.9998$$

$$DL = 0.01695$$

$$BEC = 0.05138$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2096.49	0.0148	P	1.4
2	☐	50.000	50.932	50394.52	0.3621	P	0.4
3	☐	2500.000	2951.699	2802018.44	20.1378	A	3.4
4	☐	6250.000	7351.020	6711439.73	50.1299	A	5.3
5	☐	12500.000	13837.837	13331877.96	94.3533	A	2.8
6	☐	25000.000	28442.071	27016357.32	193.9165	A	4.5
7	☐	50000.000	54733.282	53579643.79	373.1549	A	2.1
8	☐	250000.00	248610.20	242773149.8	1,694.896	A	1.4

$$y = 0.0068 * x + 0.0148$$

$$R = 0.9998$$

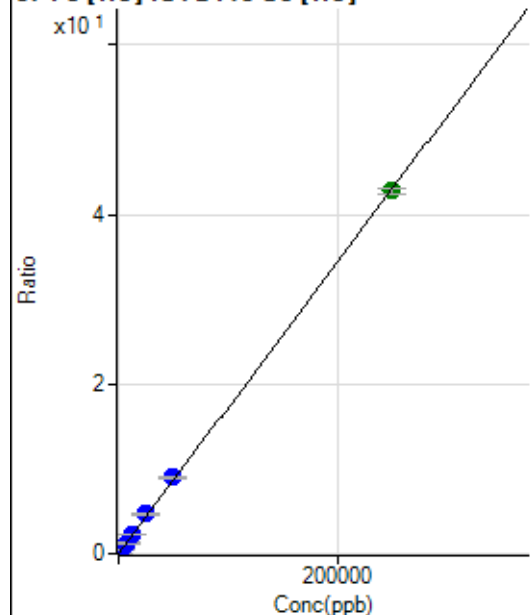
$$DL = 0.09256$$

$$BEC = 2.178$$

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	103.71	0.0007	P	57.2
2	☐	50.000	50.301	1301.93	0.0094	P	10.6
3	☐	2500.000	2825.720	67550.62	0.4855	P	3.1
4	☐	6250.000	7041.996	161797.14	1.2088	P	6.6
5	☐	12500.000	13332.382	323297.32	2.2879	P	2.5
6	☐	25000.000	27329.948	653361.12	4.6891	P	3.7
7	☐	50000.000	52296.818	1288271.83	8.9721	P	2.3
8	☐	250000.00	249242.96	6124407.26	42.7574	A	1.3

$$y = 1.7155E-004 * x + 7.3741E-004$$

$$R = 0.9999$$

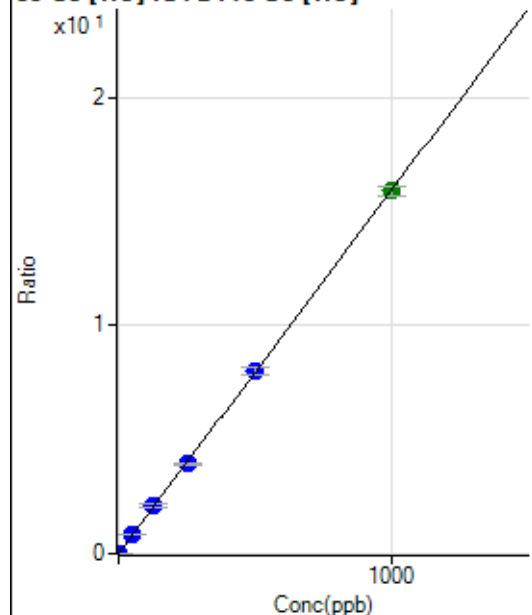
$$DL = 7.375$$

$$BEC = 4.299$$

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	62.22	0.0004	P	12.3
2	☐	1.000	0.928	2115.74	0.0152	P	5.1
3	☐	50.000	51.617	114354.43	0.8219	P	1.8
4	☐	125.000	131.615	280447.14	2.0950	P	6.0
5	☐	250.000	246.690	554741.35	3.9263	P	3.6
6	☐	500.000	503.080	1115521.41	8.0065	P	4.3
7	☐	1000.000	998.380	2281345.68	15.8887	A	3.0
8	☐			1591.22	0.0111	P	1.5

$$y = 0.0159 * x + 4.4068E-004$$

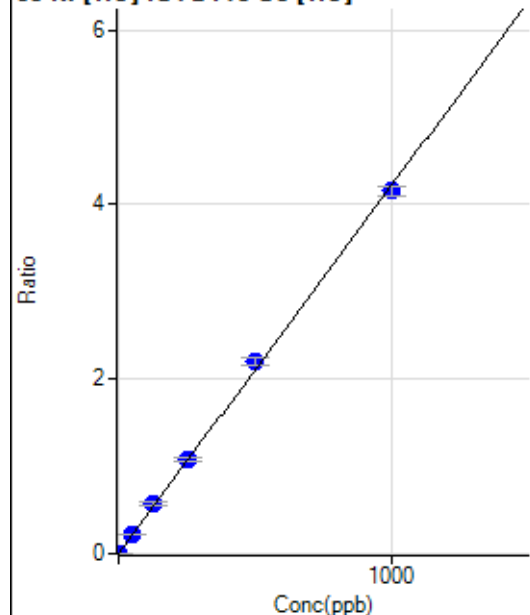
$$R = 1.0000$$

$$DL = 0.01022$$

$$BEC = 0.02769$$

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	40.00	0.0003	P	30.1
2	☐	1.000	0.933	586.68	0.0042	P	9.3
3	☐	50.000	54.288	31878.11	0.2291	P	1.7
4	☐	125.000	136.642	77146.19	0.5763	P	6.0
5	☐	250.000	256.246	152651.84	1.0804	P	3.5
6	☐	500.000	522.219	306754.49	2.2016	P	3.9
7	☐	1000.000	985.659	596608.49	4.1551	P	2.7
8	☐			1138.95	0.0080	P	6.7

$$y = 0.0042 * x + 2.8320E-004$$

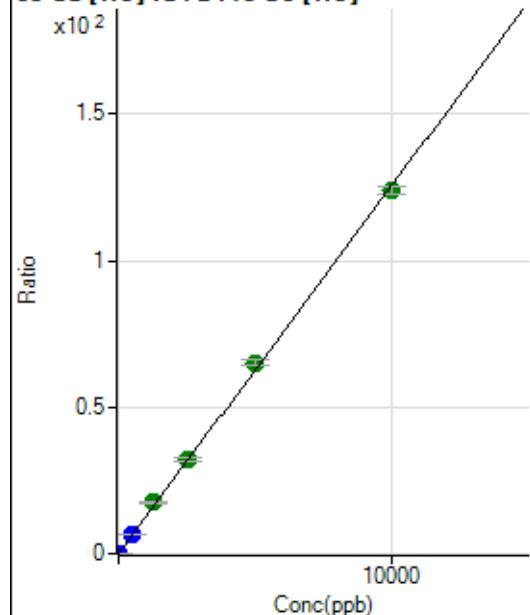
$$R = 0.9996$$

$$DL = 0.06058$$

$$BEC = 0.06718$$

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	537.79	0.0038	P	9.7
2	☐	2.000	1.961	3953.92	0.0284	P	3.9
3	☐	500.000	527.188	921137.55	6.6203	P	2.6
4	☐	1250.000	1386.208	2329442.64	17.4014	A	6.2
5	☐	2500.000	2572.254	4561950.56	32.2869	A	3.8
6	☐	5000.000	5196.949	9088877.71	65.2281	A	3.1
7	☐	10000.000	9865.077	17778505.43	123.8154	A	2.2
8	☐			4815.32	0.0336	P	9.5

$$y = 0.0126 * x + 0.0038$$

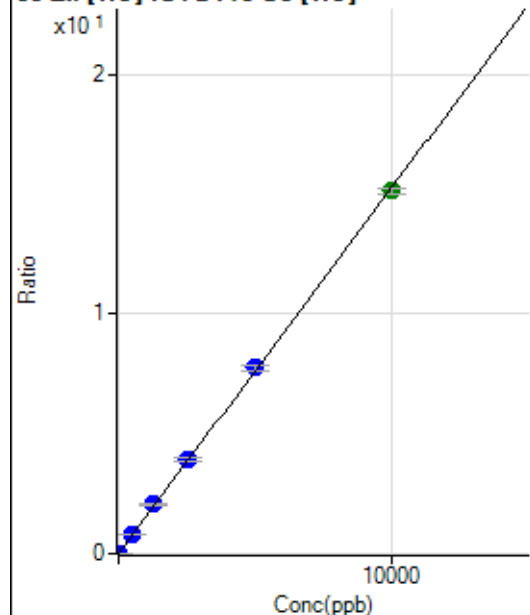
$$R = 0.9996$$

$$DL = 0.08862$$

$$BEC = 0.3035$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0006	P	36.8
2	☐	2.000	2.164	537.79	0.0039	P	7.8
3	☐	500.000	544.555	115664.21	0.8313	P	1.8
4	☐	1250.000	1349.198	275608.60	2.0588	P	5.7
5	☐	2500.000	2568.068	553629.35	3.9182	P	2.9
6	☐	5000.000	5093.831	1082820.98	7.7713	P	3.3
7	☐	10000.000	9921.440	2173305.47	15.1359	A	1.8
8	☐			1251.18	0.0087	P	2.9

$$y = 0.0015 * x + 5.6742E-004$$

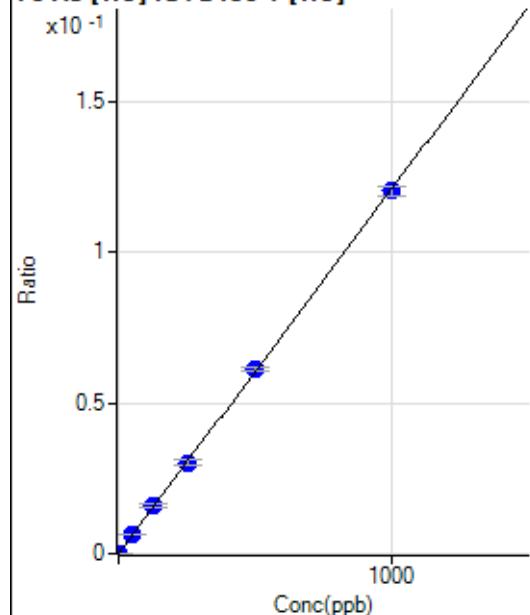
$$R = 0.9999$$

$$DL = 0.4104$$

$$BEC = 0.372$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.67	0.0000	P	173.
2	☐	1.000	1.064	125.01	0.0001	P	8.2
3	☐	50.000	52.369	6237.01	0.0063	P	2.0
4	☐	125.000	133.805	15170.34	0.0162	P	6.8
5	☐	250.000	249.733	30415.30	0.0302	P	5.1
6	☐	500.000	506.650	61025.66	0.0612	P	2.4
7	☐	1000.000	995.523	121203.36	0.1202	P	2.3
8	☐			26.67	0.0000	P	8.4

$$y = 1.2078E-004 * x + 6.6189E-007$$

$$R = 0.9999$$

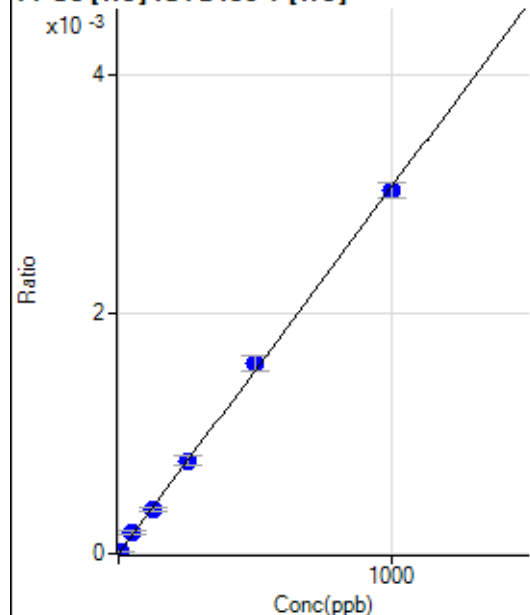
$$DL = 0.02848$$

$$BEC = 0.00548$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	3.756	11.11	0.0000	P	46.0
3	☐	50.000	58.577	176.67	0.0002	P	14.7
4	☐	125.000	121.613	350.01	0.0004	P	6.3
5	☐	250.000	253.087	781.14	0.0008	P	10.7
6	☐	500.000	519.129	1583.44	0.0016	P	9.0
7	☐	1000.000	989.664	3051.48	0.0030	P	4.2
8	☐			0.00	0.0000	P	

$$y = 3.0587\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

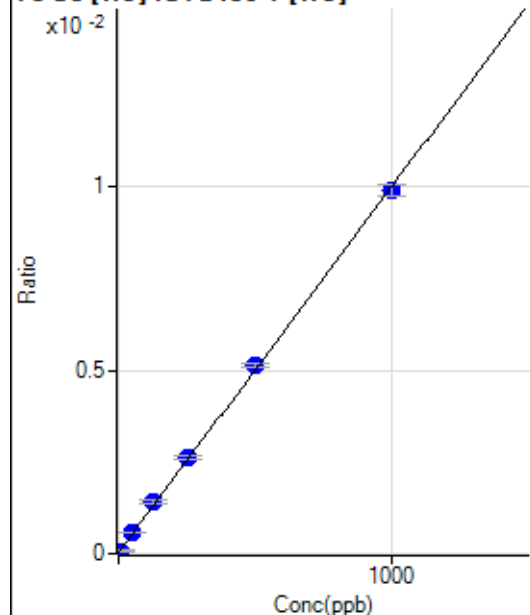
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	35.33	0.0000	P	19.2
2	☐	5.000	4.339	75.68	0.0001	P	12.0
3	☐	50.000	54.613	570.74	0.0006	P	3.1
4	☐	125.000	138.554	1328.20	0.0014	P	6.2
5	☐	250.000	258.568	2632.52	0.0026	P	3.2
6	☐	500.000	512.863	5128.45	0.0051	P	2.7
7	☐	1000.000	989.505	9968.20	0.0099	P	3.2
8	☐			34.67	0.0000	P	15.7

$$y = 9.9587\text{E-}006 * x + 3.4975\text{E-}005$$

$$R = 0.9998$$

$$DL = 2.021$$

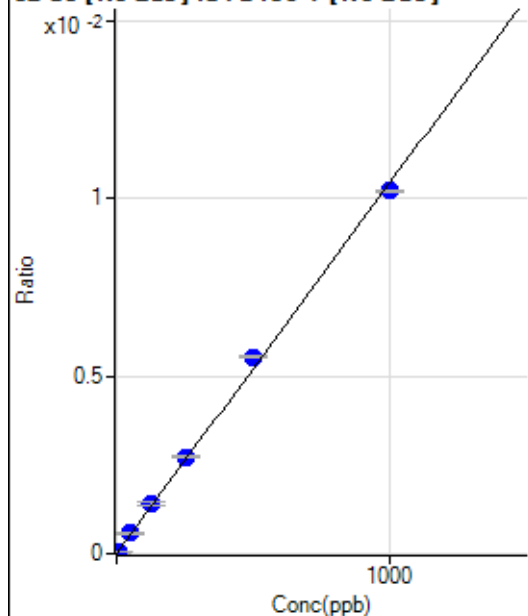
$$BEC = 3.512$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			28129.30		P	1.4
2	☐			27516.74		P	2.3
3	☐			27644.92		P	3.2
4	☐			27266.42		P	6.5
5	☐			27263.52		P	5.4
6	☐			27900.85		P	3.7
7	☐			28198.75		P	2.1
8	☐			28424.40		P	1.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	17.08	0.0000	P	186.
2	☐	5.000	5.306	585.79	0.0001	P	5.2
3	☐	50.000	55.289	6109.89	0.0006	P	4.2
4	☐	125.000	135.093	14843.42	0.0014	P	4.2
5	☐	250.000	261.035	28702.98	0.0027	P	1.3
6	☐	500.000	532.043	58541.78	0.0055	P	1.8
7	☐	1000.000	979.692	111170.00	0.0102	P	0.9
8	☐			126.65	0.0000	P	16.5

$$y = 1.0418E-005 * x + 1.6611E-006$$

$$R = 0.9991$$

$$DL = 0.8918$$

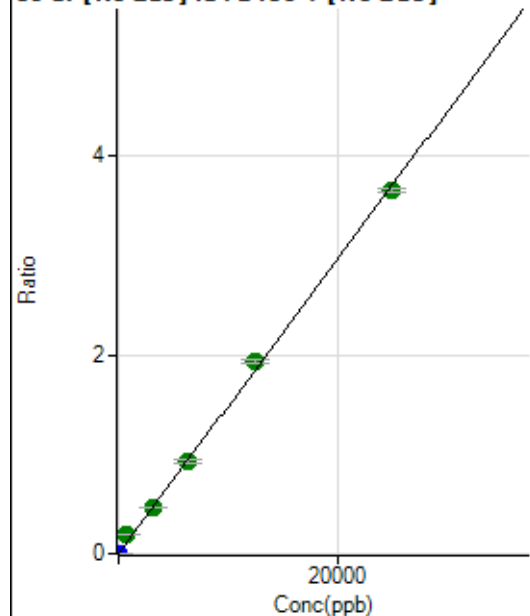
$$BEC = 0.1594$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			324.55		P	3.6
2	☐			326.21		P	6.8
3	☐			329.96		P	5.9
4	☐			323.72		P	3.0
5	☐			343.71		P	3.8
6	☐			326.21		P	3.0
7	☐			332.88		P	9.4
8	☐			323.71		P	4.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	527.80	0.0001	P	10.1
2	☐	1.000	0.982	2022.42	0.0002	P	3.0
3	☐	625.000	1331.913	2081251.26	0.1968	A	1.4
4	☐	3125.000	3160.833	4922257.75	0.4670	A	1.8
5	☐	6250.000	6295.331	9806951.00	0.9300	A	3.3
6	☐	12500.000	13061.400	20373947.15	1.9295	A	1.4
7	☐	25000.000	24685.815	39715694.64	3.6468	A	1.2
8	☐			15125.37	0.0015	P	3.9

$$y = 1.4773E-004 * x + 5.1501E-005$$

$$R = 0.9993$$

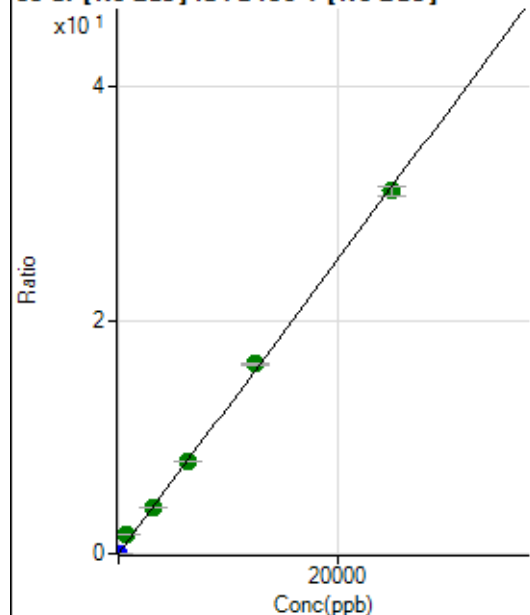
$$DL = 0.1055$$

$$BEC = 0.3486$$

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	283.34	0.0000	P	62.2
2	☐	1.000	0.985	13025.90	0.0013	P	1.4
3	☐	625.000	1311.998	17447841.01	1.6499	A	1.5
4	☐	3125.000	3192.289	42319219.35	4.0144	A	0.7
5	☐	6250.000	6311.889	83737671.32	7.9374	A	0.4
6	☐	12500.000	12941.232	171870181.6	16.2740	A	1.0
7	☐	25000.000	24738.326	338829224.2	31.1092	A	2.6
8	☐			124449.15	0.0120	P	6.0

$$y = 0.0013 * x + 2.7251E-005$$

$$R = 0.9995$$

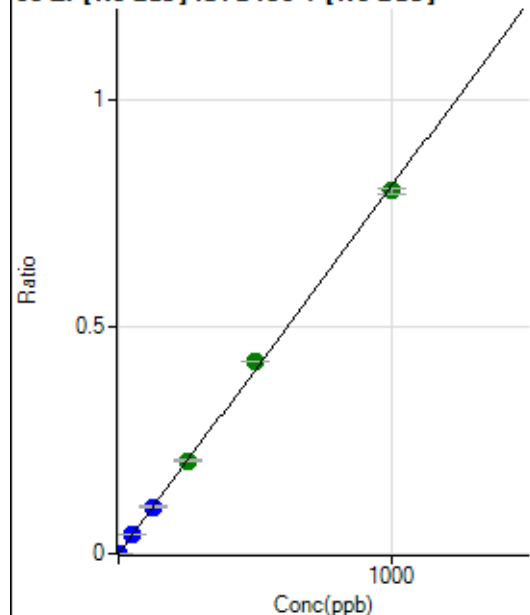
$$DL = 0.0404$$

$$BEC = 0.02167$$

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	430.57	0.0000	P	23.5
2	☐	1.000	0.979	8577.86	0.0008	P	1.4
3	☐	50.000	52.261	447323.33	0.0423	P	1.0
4	☐	125.000	127.898	1090468.45	0.1035	P	1.7
5	☐	250.000	252.970	2158359.60	0.2046	A	0.6
6	☐	500.000	523.210	4468526.75	0.4231	A	0.9
7	☐	1000.000	987.177	8694328.23	0.7983	A	1.4
8	☐			2786.48	0.0003	P	14.3

$$y = 8.0865E-004 * x + 4.1773E-005$$

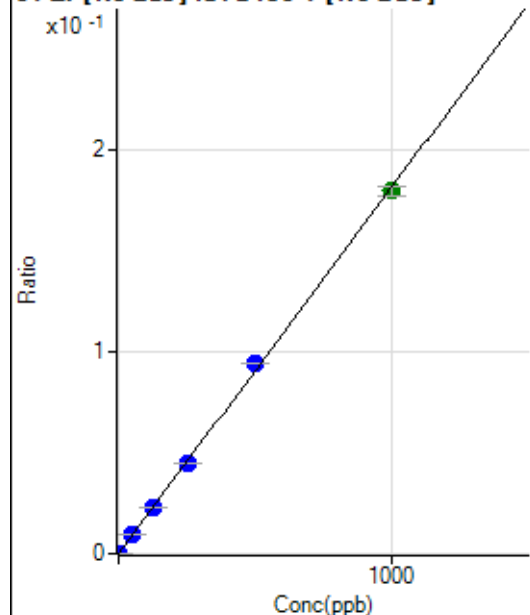
$$R = 0.9996$$

$$DL = 0.03638$$

$$BEC = 0.05166$$

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	66.67	0.0000	P	25.5
2	☐	1.000	0.971	1877.96	0.0002	P	5.9
3	☐	50.000	51.817	99555.76	0.0094	P	1.8
4	☐	125.000	126.680	242410.65	0.0230	P	3.0
5	☐	250.000	246.922	472933.18	0.0448	P	0.9
6	☐	500.000	519.726	996448.40	0.0944	P	0.7
7	☐	1000.000	990.605	1958516.80	0.1798	A	2.3
8	☐			630.59	0.0001	P	10.9

$$y = 1.8155\text{E-}004 * x + 6.5354\text{E-}006$$

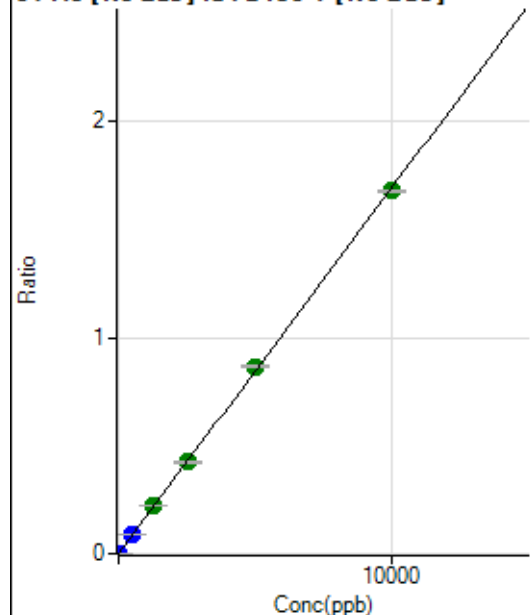
$$R = 0.9997$$

$$DL = 0.02755$$

$$BEC = 0.036$$

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	130.56	0.0000	P	11.6
2	☐	5.000	5.788	10209.59	0.0010	P	0.5
3	☐	500.000	529.149	946999.89	0.0896	P	0.6
4	☐	1250.000	1307.049	2332048.30	0.2212	A	0.7
5	☐	2500.000	2509.474	4478927.62	0.4246	A	1.8
6	☐	5000.000	5123.287	9156575.64	0.8669	A	1.0
7	☐	10000.000	9927.399	18293928.54	1.6799	A	0.5
8	☐			5593.58	0.0005	P	18.9

$$y = 1.6921\text{E-}004 * x + 1.2689\text{E-}005$$

$$R = 0.9999$$

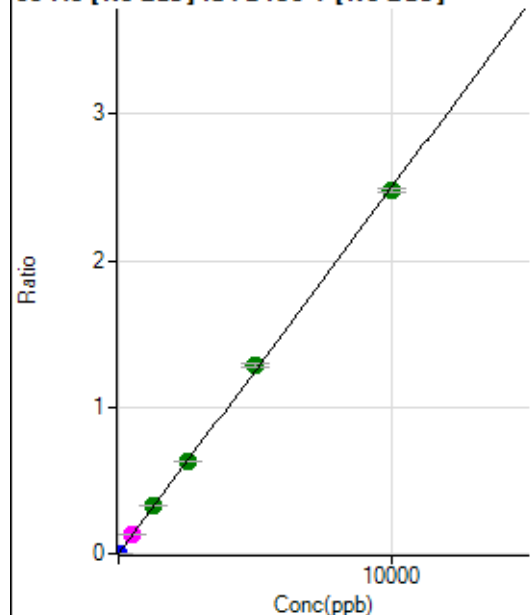
$$DL = 0.02613$$

$$BEC = 0.07499$$

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	13.89	0.0000	P	32.1
2	☐	5.000	4.806	12375.22	0.0012	P	1.4
3	☐	500.000	528.077	1395456.35	0.1320	M	2.0
4	☐	1250.000	1302.820	3431349.32	0.3256	A	1.7
5	☐	2500.000	2505.261	6603747.41	0.6260	A	0.8
6	☐	5000.000	5165.644	13629506.64	1.2908	A	1.9
7	☐	10000.000	9907.856	26962744.53	2.4758	A	0.9
8	☐			7193.84	0.0007	P	14.4

$$y = 2.4988\text{E-}004 * x + 1.3436\text{E-}006$$

$$R = 0.9998$$

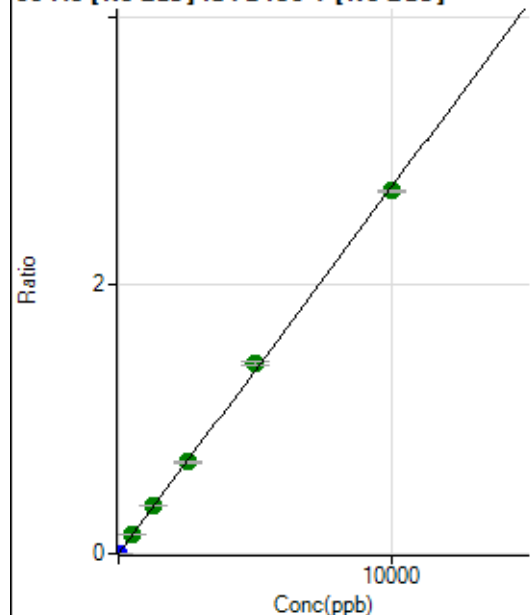
$$DL = 0.005183$$

$$BEC = 0.005377$$

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	83.34	0.0000	P	3.7
2	☐	5.000	4.872	13765.52	0.0013	P	1.8
3	☐	500.000	536.112	1547867.72	0.1464	A	1.9
4	☐	1250.000	1303.929	3752161.19	0.3560	A	1.6
5	☐	2500.000	2502.663	7206810.32	0.6833	A	1.7
6	☐	5000.000	5187.049	14953121.34	1.4162	A	1.7
7	☐	10000.000	9897.263	29427476.35	2.7021	A	0.7
8	☐			12417.02	0.0012	P	6.7

$$y = 2.7302\text{E-}004 * x + 8.1277\text{E-}006$$

$$R = 0.9997$$

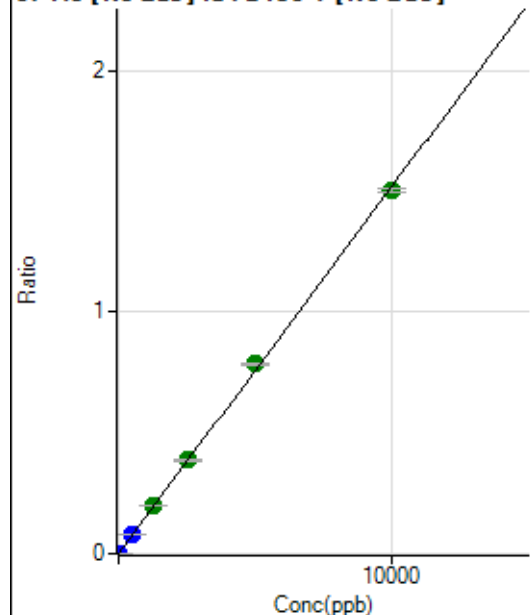
$$DL = 0.003305$$

$$BEC = 0.02977$$

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	2.78	0.0000	P	173.
2	☐	5.000	4.859	7591.17	0.0007	P	4.5
3	☐	500.000	532.516	853780.88	0.0807	P	0.9
4	☐	1250.000	1312.255	2097527.91	0.1990	A	2.1
5	☐	2500.000	2544.241	4069759.64	0.3858	A	0.3
6	☐	5000.000	5167.288	8273295.15	0.7835	A	1.4
7	☐	10000.000	9895.888	16340884.57	1.5004	A	1.2
8	☐			4548.19	0.0004	P	7.9

$$y = 1.5162\text{E-}004 * x + 2.8182\text{E-}007$$

R = 0.9998

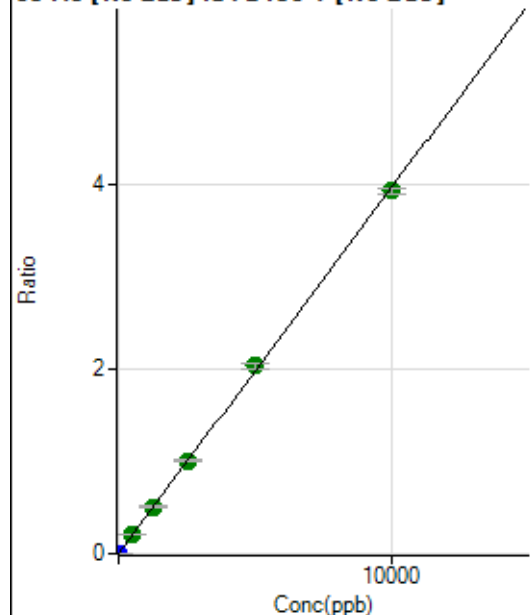
DL = 0.009658

BEC = 0.001859

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	13.89	0.0000	P	93.5
2	☐	5.000	4.800	19575.39	0.0019	P	0.9
3	☐	500.000	533.523	2234864.55	0.2113	A	3.1
4	☐	1250.000	1278.094	5334990.31	0.5063	A	2.6
5	☐	2500.000	2547.359	10643702.84	1.0090	A	1.0
6	☐	5000.000	5136.696	21480033.81	2.0347	A	2.7
7	☐	10000.000	9914.624	42768279.08	3.9273	A	1.9
8	☐			10785.02	0.0010	P	8.5

$$y = 3.9611\text{E-}004 * x + 1.3706\text{E-}006$$

R = 0.9998

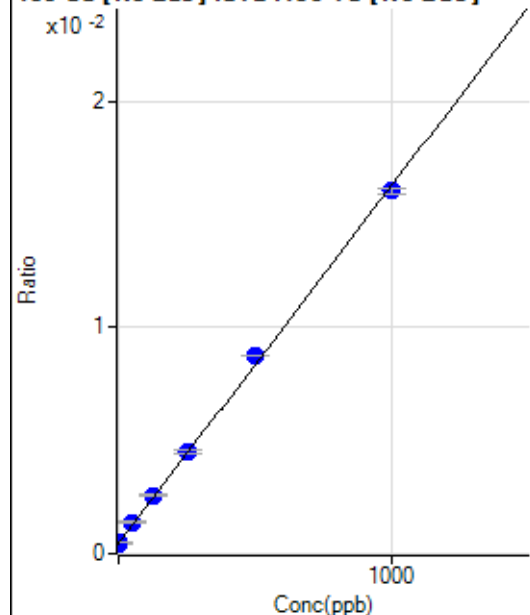
DL = 0.009701

BEC = 0.00346

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	3911.77	0.0005	P	6.4
2	☐	1.000	3.261	4373.04	0.0005	P	6.2
3	☐	50.000	59.280	12183.48	0.0014	P	5.2
4	☐	125.000	133.240	22772.17	0.0026	P	2.8
5	☐	250.000	255.814	40407.16	0.0045	P	4.1
6	☐	500.000	522.814	79582.70	0.0087	P	0.1
7	☐	1000.000	985.643	147576.55	0.0160	P	1.5
8	☐			4034.05	0.0005	P	3.8

$$y = 1.5813\text{E-}005 * x + 4.5456\text{E-}004$$

$$R = 0.9996$$

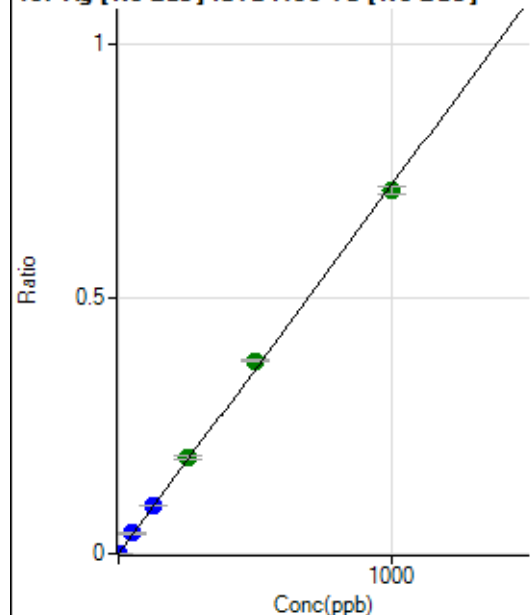
$$DL = 5.536$$

$$BEC = 28.75$$

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	130.56	0.0000	P	19.2
2	☐	1.000	1.028	6537.87	0.0008	P	2.8
3	☐	50.000	55.638	351903.67	0.0402	P	3.5
4	☐	125.000	130.204	835949.40	0.0940	P	1.0
5	☐	250.000	261.542	1696174.95	0.1889	A	3.6
6	☐	500.000	523.487	3449001.90	0.3780	A	0.6
7	☐	1000.000	984.438	6540017.46	0.7109	A	2.1
8	☐			3303.26	0.0004	P	3.9

$$y = 7.2209\text{E-}004 * x + 1.5200\text{E-}005$$

$$R = 0.9995$$

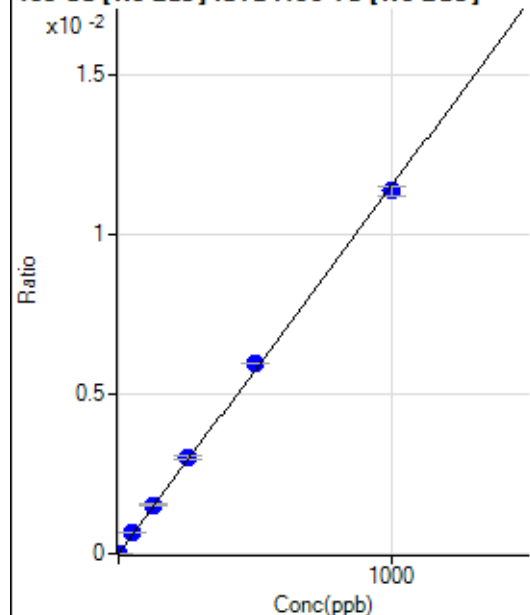
$$DL = 0.01213$$

$$BEC = 0.02105$$

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	15.28	0.0000	P	52.9
2	☐	1.000	0.815	95.84	0.0000	P	28.9
3	☐	50.000	57.685	5833.25	0.0007	P	2.6
4	☐	125.000	132.704	13595.74	0.0015	P	2.9
5	☐	250.000	261.609	27076.73	0.0030	P	2.9
6	☐	500.000	517.482	54389.00	0.0060	P	0.9
7	☐	1000.000	987.009	104582.00	0.0114	P	2.7
8	☐			87.50	0.0000	P	4.2

$$y = 1.1516\text{E-}005 * x + 1.7491\text{E-}006$$

$$R = 0.9997$$

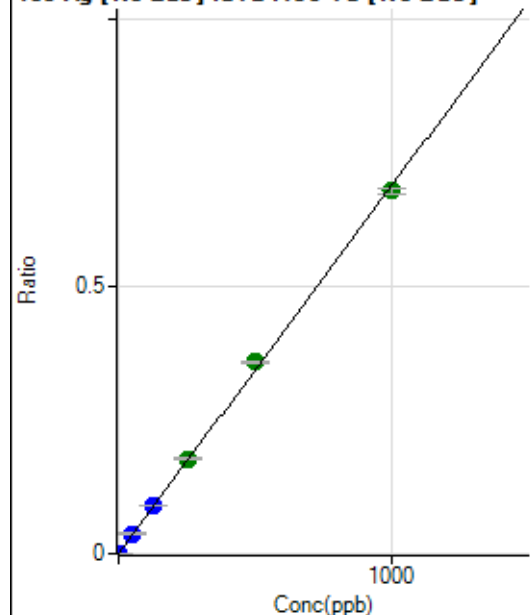
$$DL = 0.2412$$

$$BEC = 0.1519$$

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	36.11	0.0000	P	29.9
2	☐	1.000	1.051	6273.85	0.0007	P	6.0
3	☐	50.000	54.812	330106.30	0.0377	P	1.5
4	☐	125.000	130.202	795530.54	0.0895	P	2.1
5	☐	250.000	258.837	1597847.85	0.1779	A	3.3
6	☐	500.000	520.459	3264268.65	0.3578	A	1.7
7	☐	1000.000	986.670	6240198.97	0.6783	A	1.2
8	☐			3225.48	0.0004	P	4.0

$$y = 6.8743\text{E-}004 * x + 4.2333\text{E-}006$$

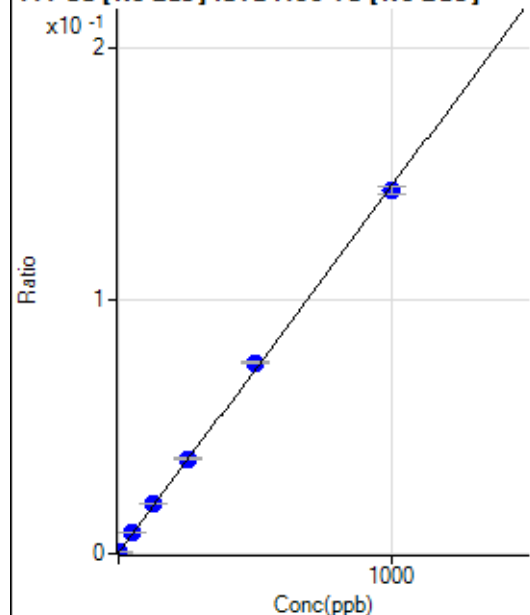
$$R = 0.9996$$

$$DL = 0.005531$$

$$BEC = 0.006158$$

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	2731.72	0.0003	P	6.2
2	☐	1.000	1.226	4274.68	0.0005	P	5.3
3	☐	50.000	56.361	74280.13	0.0085	P	3.2
4	☐	125.000	133.588	174897.30	0.0197	P	0.6
5	☐	250.000	257.114	337453.26	0.0376	P	1.5
6	☐	500.000	519.039	688962.39	0.0755	P	0.9
7	☐	1000.000	987.310	1318840.60	0.1434	P	2.0
8	☐			3263.99	0.0004	P	3.2

$$y = 1.4488\text{E-}004 * x + 3.1747\text{E-}004$$

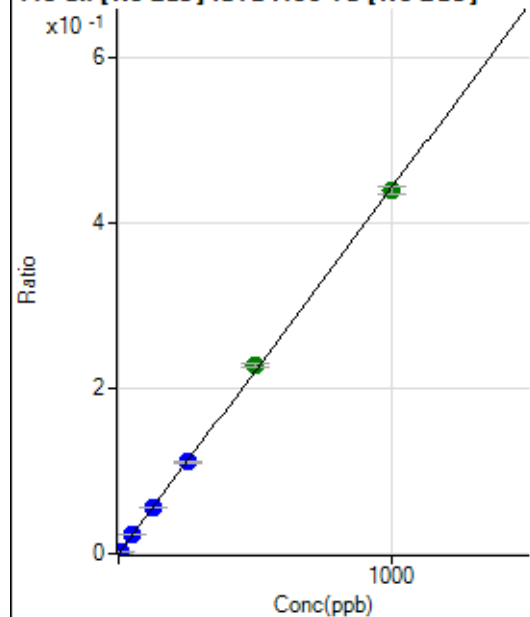
$$R = 0.9997$$

$$DL = 0.4085$$

$$BEC = 2.191$$

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	386.13	0.0000	P	14.9
2	☐	5.000	4.936	19200.10	0.0022	P	1.2
3	☐	50.000	52.855	204834.35	0.0234	P	1.9
4	☐	125.000	126.415	496612.29	0.0559	P	1.2
5	☐	250.000	250.948	995735.42	0.1108	P	2.5
6	☐	500.000	514.064	2071162.03	0.2270	A	1.6
7	☐	1000.000	992.412	4031876.91	0.4382	A	2.2
8	☐			2525.31	0.0003	P	3.6

$$y = 4.4154\text{E-}004 * x + 4.5030\text{E-}005$$

$$R = 0.9999$$

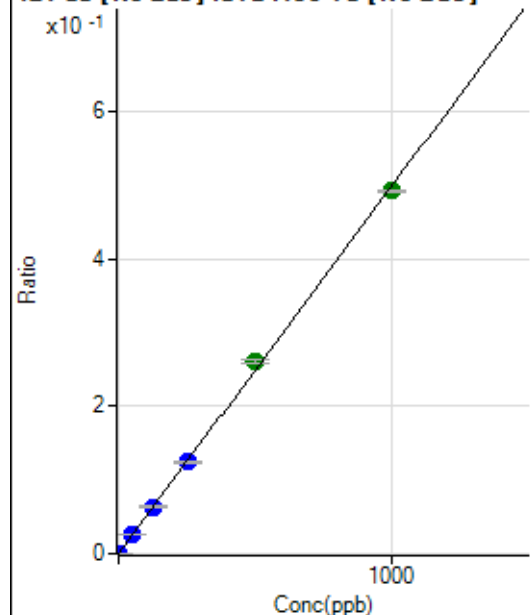
$$DL = 0.04563$$

$$BEC = 0.102$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	72.8
2	☐	2.000	1.938	8350.01	0.0010	P	3.5
3	☐	50.000	53.080	231389.40	0.0264	P	3.0
4	☐	125.000	127.911	565864.66	0.0637	P	2.1
5	☐	250.000	250.376	1119487.52	0.1246	P	1.8
6	☐	500.000	522.792	2374085.60	0.2602	A	2.1
7	☐	1000.000	987.992	4524420.55	0.4918	A	0.8
8	☐			2536.41	0.0003	P	5.9

$$y = 4.9774\text{E-}004 * x + 3.1525\text{E-}006$$

$$R = 0.9996$$

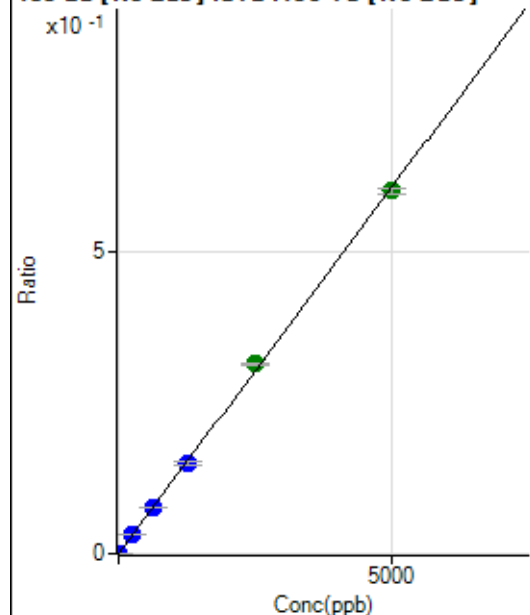
$$DL = 0.01383$$

$$BEC = 0.006334$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	46.2
2	☐	10.000	9.616	10104.06	0.0012	P	3.7
3	☐	250.000	263.269	279740.55	0.0319	P	2.0
4	☐	625.000	632.392	682094.25	0.0767	P	0.5
5	☐	1250.000	1234.451	1344858.31	0.1497	P	2.4
6	☐	2500.000	2590.369	2867015.17	0.3142	A	0.4
7	☐	5000.000	4957.116	5531642.05	0.6013	A	1.9
8	☐			3353.29	0.0004	P	2.8

$$y = 1.2130\text{E-}004 * x + 2.2207\text{E-}006$$

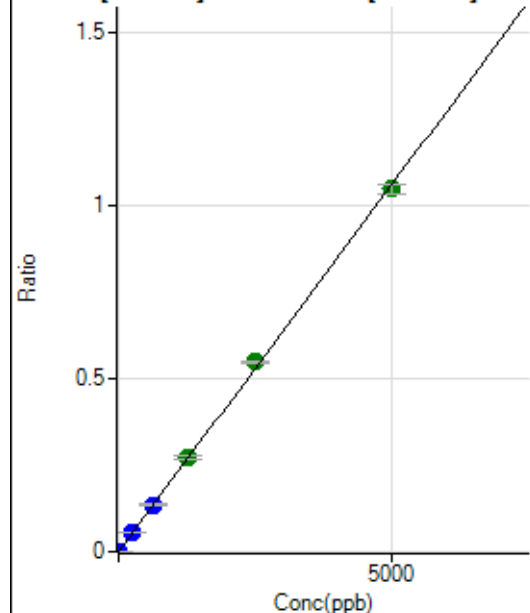
$$R = 0.9998$$

$$DL = 0.02535$$

$$BEC = 0.01831$$

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	22.22	0.0000	P	39.5
2	☐	10.000	9.737	17814.95	0.0021	P	1.8
3	☐	250.000	266.595	494066.50	0.0564	P	2.3
4	☐	625.000	639.292	1202455.29	0.1353	P	1.1
5	☐	1250.000	1278.945	2429694.09	0.2706	A	4.3
6	☐	2500.000	2585.029	4991132.06	0.5470	A	0.8
7	☐	5000.000	4947.634	9630649.78	1.0469	A	2.5
8	☐			5859.79	0.0007	P	5.1

$$y = 2.1159\text{E-}004 * x + 2.5631\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.01436$$

$$BEC = 0.01211$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			11.11		P	69.3
3	☐			31.11		P	24.7
4	☐			95.56		P	31.5
5	☐			166.67		P	35.6
6	☐			317.79		P	22.0
7	☐			642.25		P	6.9
8	☐			46.67		P	49.5

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			1.11		P	173.
3	☐			2.22		P	173.
4	☐			3.33		P	100.
5	☐			8.89		P	86.6
6	☐			21.11		P	9.1
7	☐			24.45		P	28.4
8	☐			12.22		P	63.0

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	69.3
2	☐			5.56		P	173.
3	☐			16.67		P	50.0
4	☐			55.56		P	22.9
5	☐			113.89		P	11.2
6	☐			166.67		P	27.8
7	☐			327.79		P	14.5
8	☐			1177.86		P	12.4

156 Dy [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	☐			3.33		P	100.
4	☐			18.89		P	40.7
5	☐			33.33		P	36.1
6	☐			72.22		P	26.6
7	☐			138.89		P	21.8
8	☐			398.90		P	6.0

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			72.22		P	54.5
2	☐			72.22		P	6.7
3	☐			66.67		P	50.0
4	☐			86.11		P	14.8
5	☐			141.67		P	23.5
6	☐			208.34		P	17.4
7	☐			263.90		P	6.6
8	☐			1241.77		P	16.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			108.89		P	15.1
2	☐			95.56		P	19.2
3	☐			105.56		P	6.6
4	☐			113.33		P	22.2
5	☐			143.34		P	8.4
6	☐			151.12		P	8.9
7	☐			221.11		P	7.0
8	☐			578.91		P	4.1

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	8.7
2	☐			69.45		P	18.3
3	☐			80.56		P	31.6
4	☐			61.12		P	63.0
5	☐			63.89		P	7.5
6	☐			113.89		P	44.7
7	☐			86.11		P	65.9
8	☐			125.00		P	17.6

164 Er [He] No available calibration points

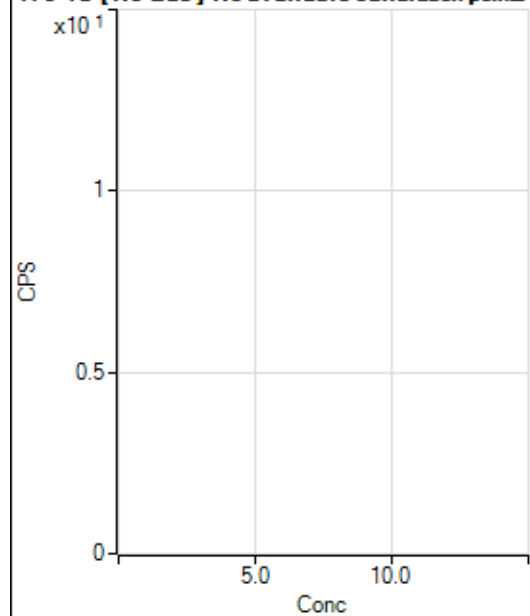
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.44		P	31.5
2	☐			24.44		P	34.3
3	☐			24.45		P	28.4
4	☐			12.22		P	87.7
5	☐			31.11		P	16.4
6	☐			18.89		P	10.2
7	☐			36.67		P	24.0
8	☐			28.89		P	33.3

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.89		P	27.2
2	☐			52.78		P	18.2
3	☐			66.67		P	33.1
4	☐			33.33		P	50.0
5	☐			72.22		P	29.0
6	☐			125.00		P	6.7
7	☐			175.00		P	12.6
8	☐			538.92		P	12.9

172 Yb [He] No available calibration points

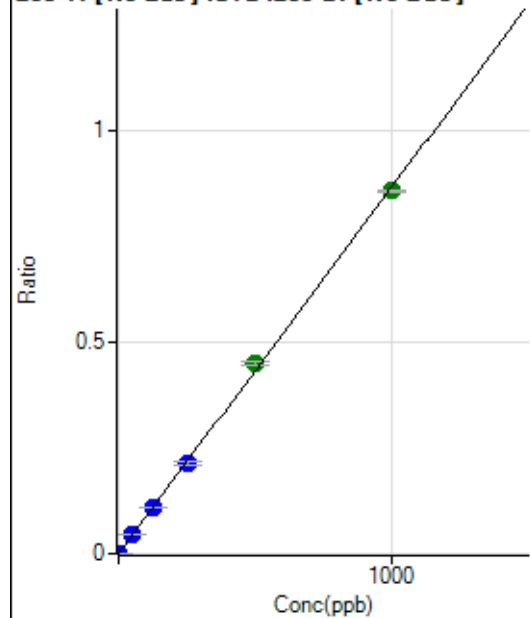
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.93		P	12.4
2	☐			31.48		P	53.9
3	☐			25.93		P	32.7
4	☐			31.48		P	20.4
5	☐			42.59		P	15.1
6	☐			53.70		P	36.3
7	☐			55.56		P	43.6
8	☐			222.23		P	26.3

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1450.13		P	6.6
2	☐			1436.24		P	3.7
3	☐			2603.11		P	3.0
4	☐			3956.26		P	1.6
5	☐			6337.82		P	4.9
6	☐			12114.20		P	4.4
7	☐			21379.04		P	2.7
8	☐			1711.27		P	18.5

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8262.01		P	2.9
2	☐			7845.05		P	4.8
3	☐			8400.96		P	2.7
4	☐			8526.98		P	5.1
5	☐			10018.78		P	2.0
6	☐			11857.36		P	3.6
7	☐			15950.67		P	4.3
8	☐			8204.53		P	3.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	108.34	0.0000	P	23.7
2	☐	1.000	0.921	4548.15	0.0008	P	2.5
3	☐	50.000	50.541	250001.82	0.0439	P	1.5
4	☐	125.000	125.670	610331.54	0.1090	P	1.9
5	☐	250.000	246.648	1216386.53	0.2140	P	2.4
6	☐	500.000	520.013	2596333.82	0.4511	A	2.5
7	☐	1000.000	990.721	4913769.42	0.8595	A	0.5
8	☐			1283.44	0.0002	P	6.3

$$y = 8.6750E-004 * x + 1.9521E-005$$

$$R = 0.9997$$

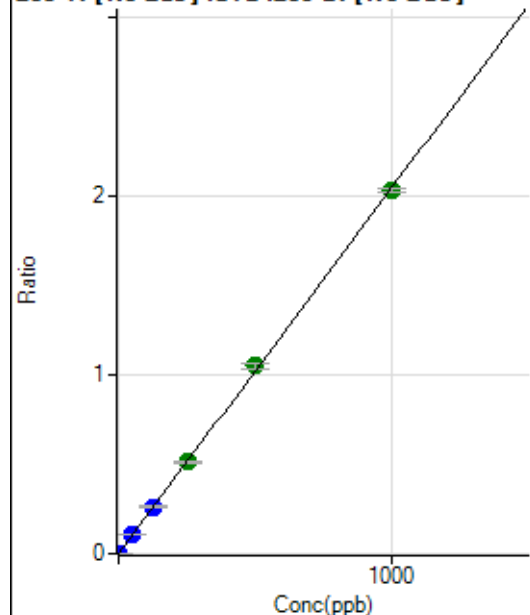
$$DL = 0.01598$$

$$BEC = 0.0225$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	205.56	0.0000	P	34.5
2	☐	1.000	0.992	11466.48	0.0021	P	1.0
3	☐	50.000	50.575	589746.99	0.1035	P	0.6
4	☐	125.000	127.901	1464254.45	0.2616	P	2.4
5	☐	250.000	250.841	2916619.36	0.5131	A	0.9
6	☐	500.000	513.362	6041945.45	1.0500	A	3.8
7	☐	1000.000	992.717	11607614.24	2.0304	A	1.2
8	☐			3111.58	0.0006	P	10.5

$$y = 0.0020 * x + 3.6832E-005$$

$$R = 0.9999$$

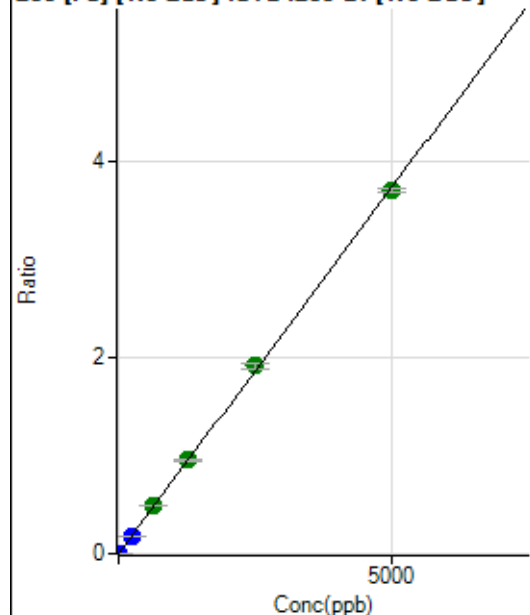
$$DL = 0.01864$$

$$BEC = 0.01801$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	616.69	0.0001	P	13.5
2	☐	1.000	0.891	4311.90	0.0008	P	2.1
3	☐	250.000	246.705	1048450.47	0.1840	P	2.0
4	☐	625.000	662.017	2762274.57	0.4934	A	1.8
5	☐	1250.000	1274.690	5400341.90	0.9500	A	0.7
6	☐	2500.000	2562.612	10992238.32	1.9097	A	2.1
7	☐	5000.000	4958.059	21124041.91	3.6948	A	1.0
8	☐			6351.67	0.0012	P	9.1

$$y = 7.4519E-004 * x + 1.1197E-004$$

$$R = 0.9998$$

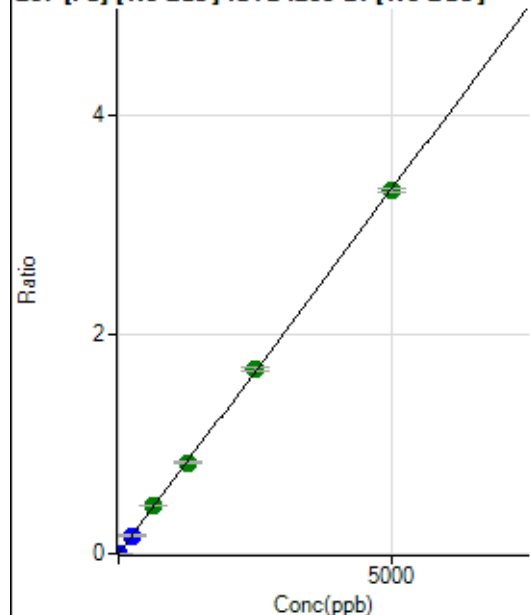
$$DL = 0.06103$$

$$BEC = 0.1503$$

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	570.39	0.0001	P	14.5
2	☐	1.000	0.832	3637.62	0.0007	P	2.1
3	☐	250.000	249.706	944806.55	0.1658	P	1.5
4	☐	625.000	660.116	2452254.97	0.4381	A	3.4
5	☐	1250.000	1246.811	4702833.09	0.8273	A	1.8
6	☐	2500.000	2536.298	9688795.70	1.6829	A	2.3
7	☐	5000.000	4978.274	18882569.64	3.3031	A	1.1
8	☐			5430.90	0.0011	P	9.9

$$y = 6.6348\text{E-}004 * x + 1.0333\text{E-}004$$

R = 0.9999

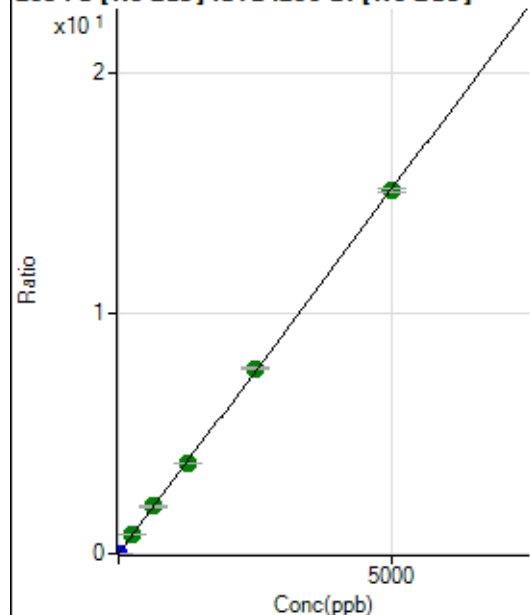
DL = 0.06765

BEC = 0.1557

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	2596.45	0.0005	P	5.6
2	☐	1.000	0.859	17091.76	0.0031	P	0.5
3	☐	250.000	255.313	4418531.64	0.7753	A	1.2
4	☐	625.000	651.061	11064135.17	1.9763	A	2.3
5	☐	1250.000	1238.319	21365011.94	3.7584	A	0.7
6	☐	2500.000	2540.976	44390656.32	7.7116	A	1.5
7	☐	5000.000	4978.909	86381342.67	15.1101	A	0.9
8	☐			25736.99	0.0050	P	6.1

$$y = 0.0030 * x + 4.7038\text{E-}004$$

R = 0.9999

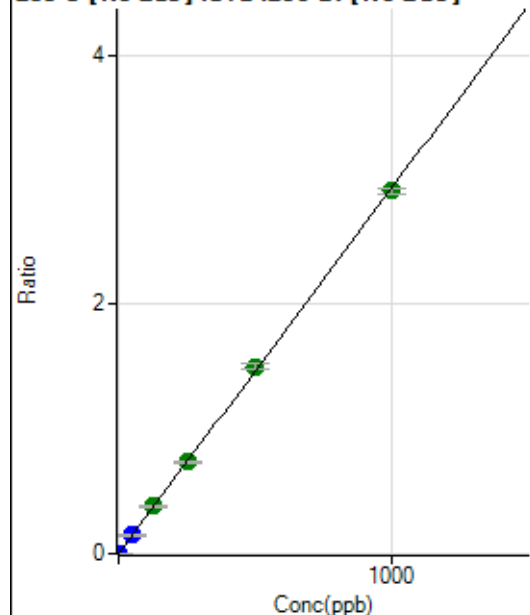
DL = 0.02621

BEC = 0.155

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	52.78	0.0000	P	37.6
2	☐	1.000	0.915	14967.58	0.0027	P	1.8
3	☐	50.000	50.200	839533.56	0.1473	P	1.8
4	☐	125.000	129.700	2130229.23	0.3806	A	2.2
5	☐	250.000	251.181	4189388.77	0.7370	A	2.7
6	☐	500.000	512.142	8648926.41	1.5027	A	3.2
7	☐	1000.000	993.036	16656493.25	2.9137	A	1.8
8	☐			2592.01	0.0005	P	17.2

$$y = 0.0029 * x + 9.4834E-006$$

$$R = 0.9999$$

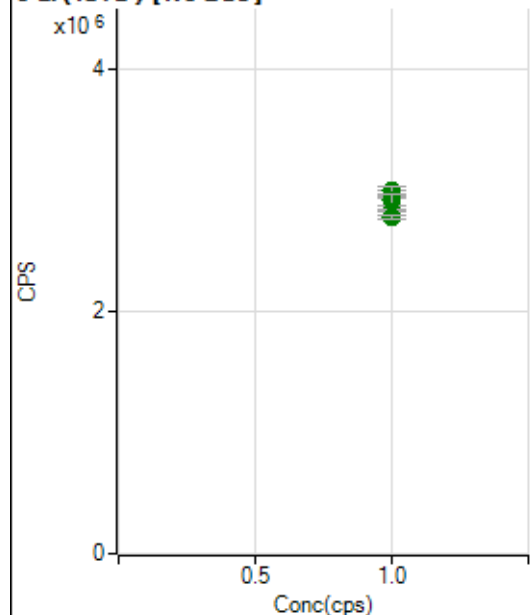
$$DL = 0.003649$$

$$BEC = 0.003232$$

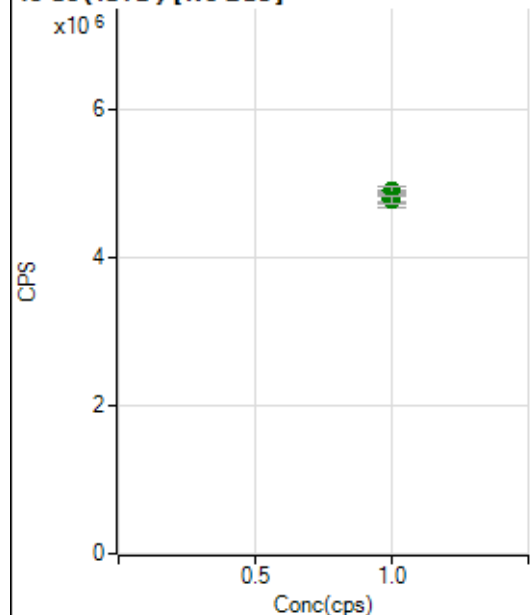
Weight: <None>

Min Conc: 0

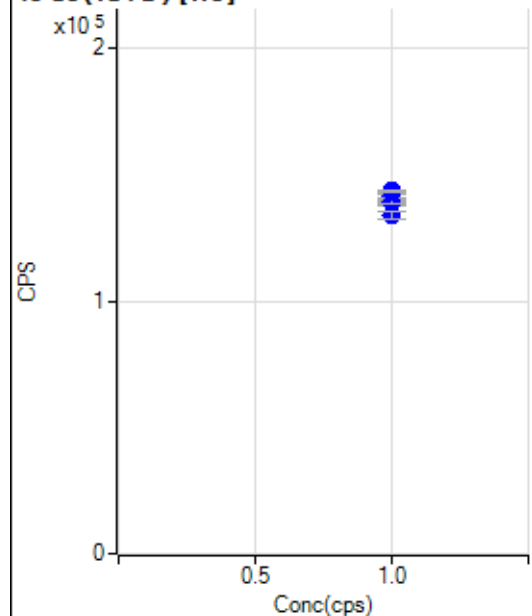
6 Li (ISTD) [No Gas]



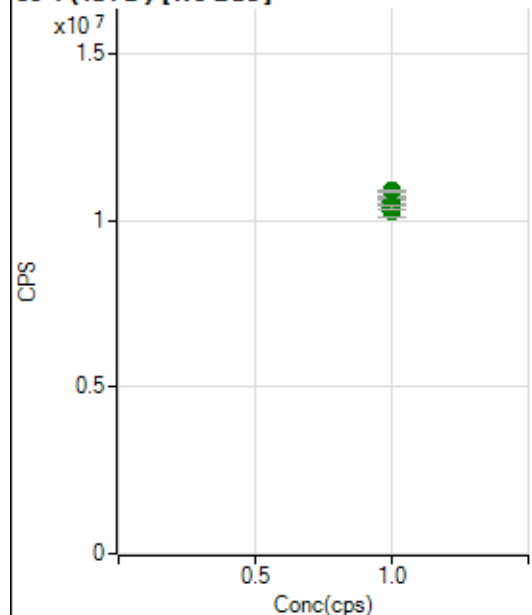
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2877828.56		A	6.1
2	☐	1.000		2937393.12		A	4.1
3	☐	1.000		2974025.02		A	1.8
4	☐	1.000		2939611.98		A	0.4
5	☐	1.000		2997987.16		A	2.7
6	☐	1.000		2921078.65		A	3.1
7	☐	1.000		2834675.77		A	0.3
8	☐	1.000		2781652.92		A	1.6

45 Sc (ISTD) [No Gas]

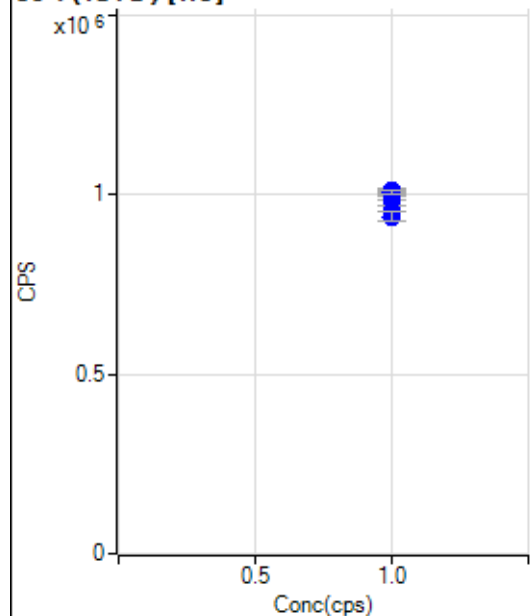
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4797064.23		A	4.8
2	☐	1.000		4824464.58		A	3.4
3	☐	1.000		4865300.90		A	1.9
4	☐	1.000		4887073.40		A	0.8
5	☐	1.000		4856028.68		A	1.4
6	☐	1.000		4895302.43		A	2.5
7	☐	1.000		4897936.25		A	2.1
8	☐	1.000		4770318.75		A	2.0

45 Sc (ISTD) [He]

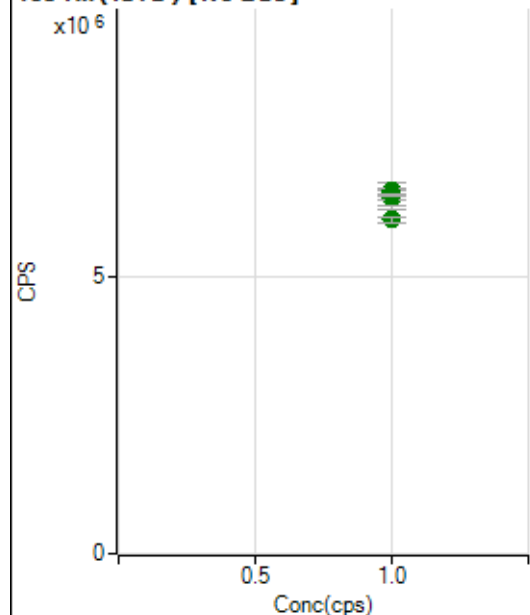
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		141203.16		P	2.0
2	☐	1.000		139179.73		P	2.2
3	☐	1.000		139130.81		P	0.4
4	☐	1.000		134004.08		P	2.7
5	☐	1.000		141323.21		P	1.1
6	☐	1.000		139377.94		P	1.6
7	☐	1.000		143592.73		P	0.4
8	☐	1.000		143240.14		P	0.6

89 Y (ISTD) [No Gas]

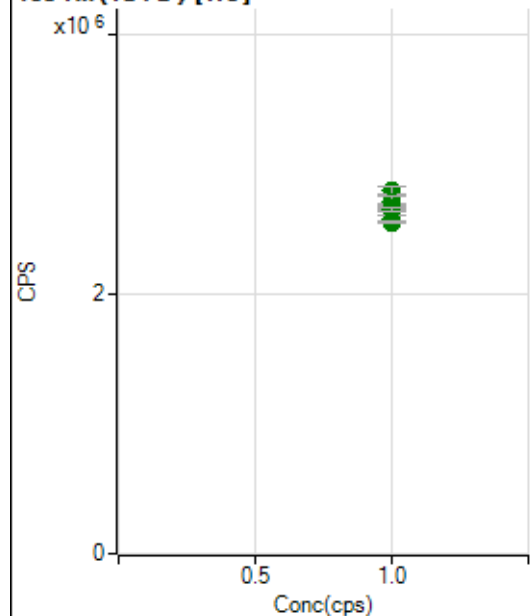
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10263107.97		A	3.7
2	☐	1.000		10290662.07		A	3.4
3	☐	1.000		10574625.40		A	1.0
4	☐	1.000		10543409.01		A	3.6
5	☐	1.000		10549812.41		A	2.2
6	☐	1.000		10560810.05		A	2.1
7	☐	1.000		10890139.56		A	0.8
8	☐	1.000		10370178.11		A	1.1

89 Y (ISTD) [He]

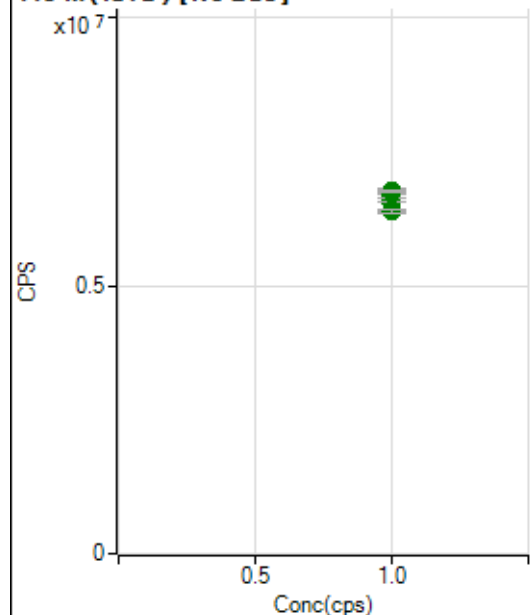
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1010674.79		P	0.4
2	☐	1.000		967975.16		P	0.2
3	☐	1.000		985993.75		P	0.1
4	☐	1.000		939920.64		P	2.9
5	☐	1.000		1008991.10		P	1.8
6	☐	1.000		997284.67		P	0.1
7	☐	1.000		1008062.02		P	0.5
8	☐	1.000		1007480.10		P	0.7

103 Rh (ISTD) [No Gas]

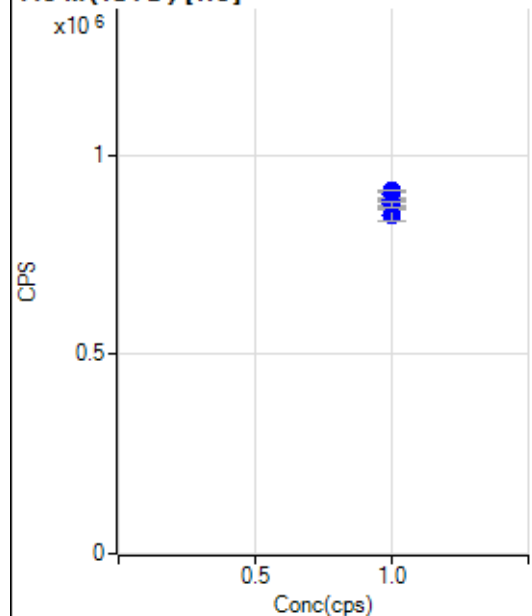
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6424695.02		A	5.7
2	☐	1.000		6496609.74		A	6.3
3	☐	1.000		6550689.69		A	1.9
4	☐	1.000		6492958.39		A	2.4
5	☐	1.000		6563081.53		A	1.6
6	☐	1.000		6465727.23		A	1.8
7	☐	1.000		6488297.15		A	0.5
8	☐	1.000		6036955.17		A	2.1

103 Rh (ISTD) [He]

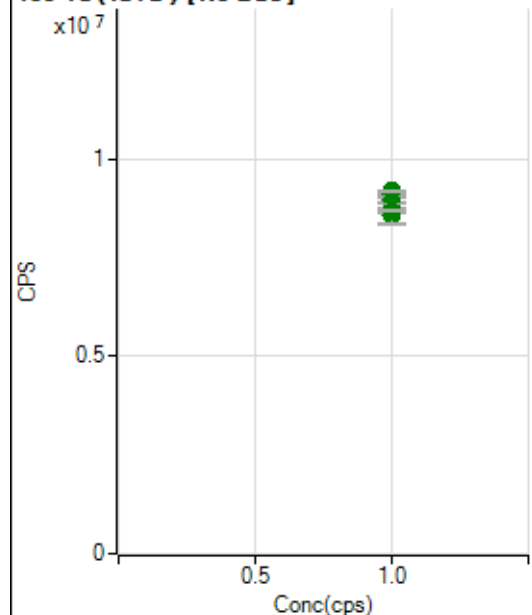
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2792718.43		A	2.0
2	☐	1.000		2642591.70		A	0.3
3	☐	1.000		2685006.11		A	1.2
4	☐	1.000		2577037.17		A	2.5
5	☐	1.000		2715128.43		A	2.8
6	☐	1.000		2665455.52		A	1.2
7	☐	1.000		2651132.36		A	1.5
8	☐	1.000		2552649.89		A	0.8

115 In (ISTD) [No Gas]

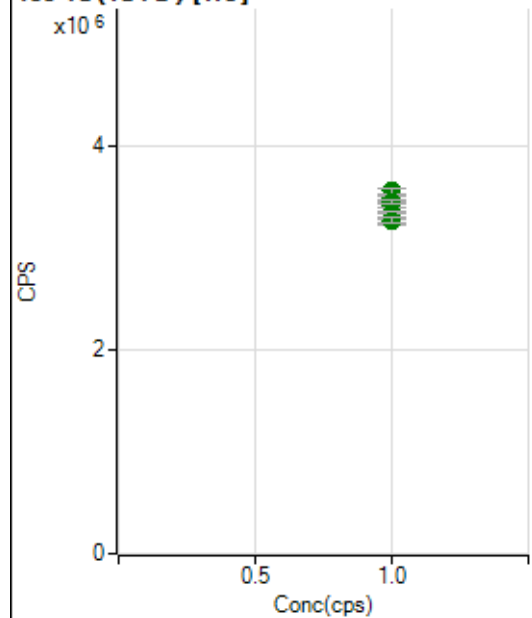
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6590701.22		A	5.7
2	☐	1.000		6540851.76		A	3.3
3	☐	1.000		6656886.14		A	2.3
4	☐	1.000		6648659.26		A	2.4
5	☐	1.000		6766286.57		A	1.7
6	☐	1.000		6689736.82		A	2.1
7	☐	1.000		6756895.16		A	0.9
8	☐	1.000		6391741.36		A	1.2

115 In (ISTD) [He]

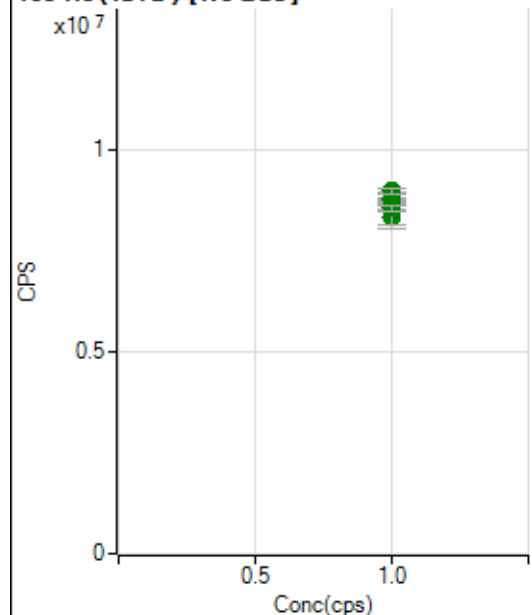
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		910688.43		P	0.4
2	☐	1.000		869177.99		P	0.9
3	☐	1.000		884071.79		P	0.5
4	☐	1.000		851315.80		P	3.9
5	☐	1.000		900468.48		P	2.3
6	☐	1.000		887188.94		P	1.0
7	☐	1.000		878964.22		P	0.9
8	☐	1.000		877807.50		P	1.7

159 Tb (ISTD) [No Gas]

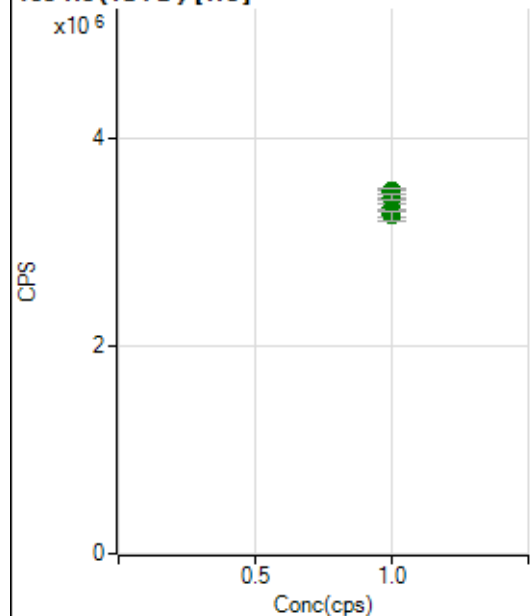
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8603341.61		A	5.8
2	☐	1.000		8635424.04		A	5.2
3	☐	1.000		8762671.60		A	3.3
4	☐	1.000		8891182.51		A	3.0
5	☐	1.000		8984975.63		A	2.6
6	☐	1.000		9124450.63		A	1.5
7	☐	1.000		9200746.04		A	0.8
8	☐	1.000		8701486.74		A	0.9

159 Tb (ISTD) [He]

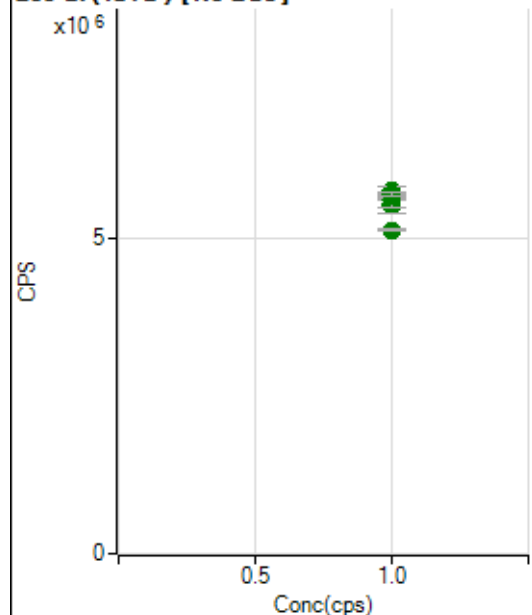
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3410990.96		A	1.5
2	☐	1.000		3254990.06		A	1.8
3	☐	1.000		3341476.13		A	0.8
4	☐	1.000		3260799.19		A	1.7
5	☐	1.000		3496126.54		A	4.1
6	☐	1.000		3481625.02		A	1.2
7	☐	1.000		3551760.37		A	1.6
8	☐	1.000		3440340.78		A	1.0

165 Ho (ISTD) [No Gas]

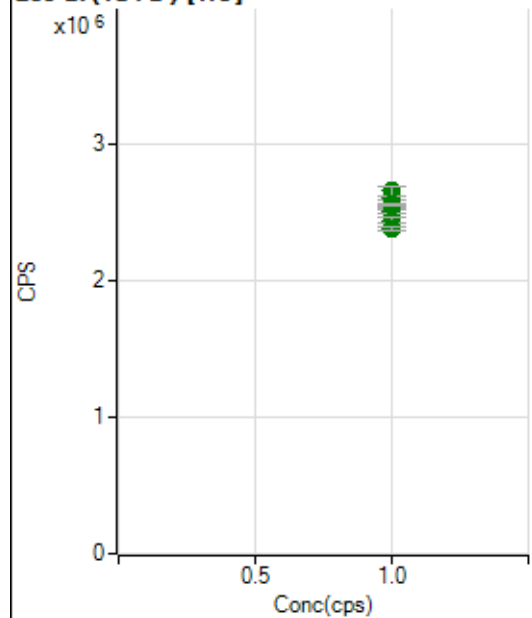
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8323486.47		A	7.0
2	☐	1.000		8319223.88		A	4.3
3	☐	1.000		8592066.34		A	1.0
4	☐	1.000		8663103.23		A	2.9
5	☐	1.000		8759167.56		A	1.4
6	☐	1.000		8792165.82		A	3.3
7	☐	1.000		8990631.19		A	1.7
8	☐	1.000		8558579.71		A	1.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3467151.72		A	2.3
2	☐	1.000		3276814.12		A	1.3
3	☐	1.000		3347406.37		A	1.6
4	☐	1.000		3261876.75		A	2.8
5	☐	1.000		3485543.25		A	0.7
6	☐	1.000		3490185.82		A	1.5
7	☐	1.000		3499286.20		A	1.6
8	☐	1.000		3437541.79		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5528714.29		A	4.2
2	☐	1.000		5554115.89		A	2.7
3	☐	1.000		5699195.40		A	0.6
4	☐	1.000		5600188.87		A	4.0
5	☐	1.000		5684556.51		A	0.5
6	☐	1.000		5757575.05		A	2.5
7	☐	1.000		5717039.50		A	1.0
8	☐	1.000		5137437.70		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2603867.72		A	1.3
2	☐	1.000		2503300.19		A	1.6
3	☐	1.000		2545002.53		A	0.9
4	☐	1.000		2435644.77		A	1.6
5	☐	1.000		2653074.33		A	2.3
6	☐	1.000		2564589.53		A	1.3
7	☐	1.000		2555962.90		A	0.6
8	☐	1.000		2375103.71		A	1.6

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8031623 MS.b
Acq. Date-Time 2023-03-16 11:29:24
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		10685	106850.70			1.476	5.000
24		83082	830816.89			2.437	5.000
25		10920	109202.96			1.203	5.000
26		12673	126728.22			0.954	5.000
59		58932	589321.78			0.885	5.000
113		6052	60523.36			0.749	5.000
115		77091	770909.27			1.800	5.000
206		18796	187958.12			1.459	5.000
207		17193	171933.43			1.143	5.000
208		40534	405338.27			1.414	5.000
220		0	3.60			44.358	

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

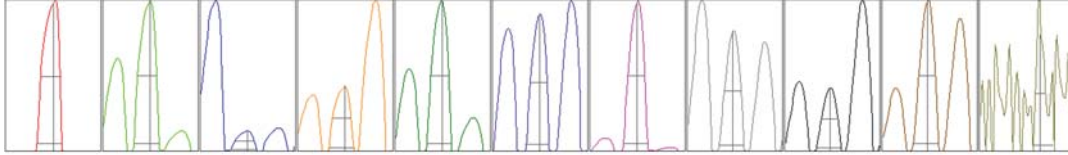
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	10832	10744	10721	10416	10713
24	85887	82270	84420	80899	81933
25	11051	10947	10942	10699	10963
26	12711	12744	12699	12460	12751
59	59456	59315	58780	58132	58977
113	6062	6025	6077	5991	6107
115	76592	78085	77060	75076	78642
206	18870	18600	18944	18440	19126
207	17514	17120	17073	17022	17238
208	41293	40044	40868	39913	40551

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	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	18423.19	9.05	8.90 - 9.10	
24	145250.99	24.00	23.90 - 24.10	
25	19081.01	25.00	24.90 - 25.10	
26	22117.85	26.00	25.90 - 26.10	
59	109329.78	59.00	58.90 - 59.10	
113	12039.49	113.00	112.90 - 113.10	
115	150701.06	115.00	114.90 - 115.10	
206	36549.67	205.95	205.90 - 206.10	
207	33473.71	206.95	206.90 - 207.10	
208	79228.33	207.95	207.90 - 208.10	
220	0.65	220.45	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.781	0.900	
24	0.61	0.788	0.900	
25	0.60	0.825	0.900	
26	0.60	0.782	0.900	
59	0.56	0.780	0.900	
113	0.53	0.722	0.900	
115	0.52	0.769	0.900	
206	0.52	0.780	0.900	
207	0.52	0.781	0.900	
208	0.52	0.800	0.900	
220	0.33	0.640		

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	11.0 V	Deflect	15.2 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	124	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-1.2 mm
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EM

Discriminator	4.5 mV	Analog HV	2317 V	Pulse HV	1730 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		11748	117477.39			0.837	
89		12689	126892.55			1.228	
205		11046	110463.46			2.043	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	11920	11708	11734	11695	11681
89	12871	12562	12833	12650	12529
205	11393	10859	10968	10867	11146

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	11.0 V	Deflect	4.6 V
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US EPA Tune Check Report

Extract 2	-200.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-1.2 mm
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EM

Discriminator	4.5 mV	Analog HV	2317 V	Pulse HV	1730 V
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