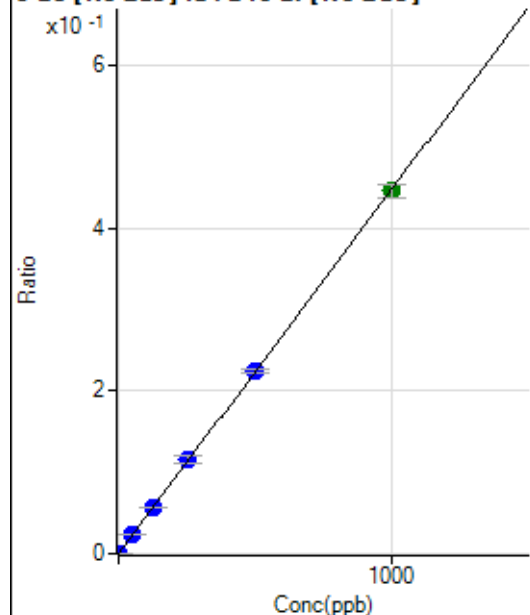


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8041823MS.b\
Analysis File: P8041823MS.batch.bin
DA Date-Time: 2023-04-18 23:58:15
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-04-18 12:09:39
2	006CALS.d	S02	2023-04-18 12:15:49
3	007CALS.d	S03	2023-04-18 12:18:52
4	008CALS.d	S04	2023-04-18 12:21:54
5	009CALS.d	S05	2023-04-18 12:24:52
6	010CALS.d	S06	2023-04-18 12:27:53
7	011CALS.d	S07	2023-04-18 12:30:52
8	012CALS.d	S08	2023-04-18 12:33:53

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.91	0.0000	P	7.3
2	☐	1.000	1.126	1990.72	0.0005	P	3.7
3	☐	50.000	52.781	88198.02	0.0236	P	1.6
4	☐	125.000	125.726	217120.37	0.0563	P	2.0
5	☐	250.000	260.612	434514.93	0.1166	P	8.5
6	☐	500.000	501.052	848888.39	0.2242	P	2.7
7	☐	1000.000	996.591	1686500.54	0.4458	A	3.9
8	☐			651.18	0.0002	P	3.7

$$y = 4.4733\text{E-}004 * x + 1.9364\text{E-}005$$

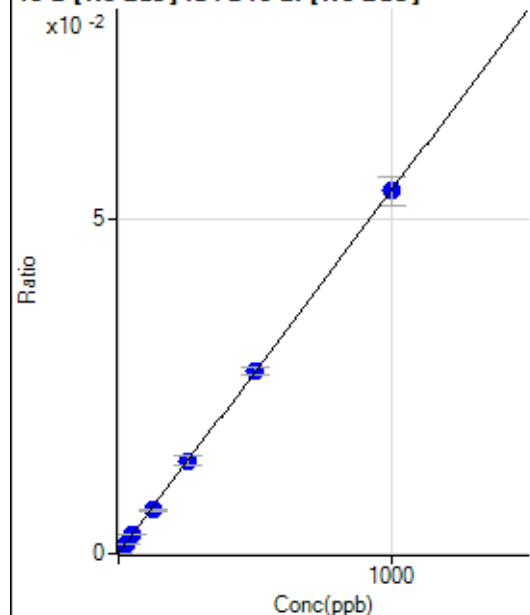
$$R = 0.9999$$

$$DL = 0.009527$$

$$BEC = 0.04329$$

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	424.59	0.0001	P	8.8
2	☐	25.000	23.752	5329.26	0.0014	P	2.8
3	☐	50.000	51.161	10769.17	0.0029	P	5.9
4	☐	125.000	118.451	25214.68	0.0065	P	5.3
5	☐	250.000	253.921	51671.76	0.0139	P	11.2
6	☐	500.000	502.141	103455.24	0.0273	P	5.0
7	☐	1000.000	998.741	205082.99	0.0542	P	7.9
8	☐			14314.84	0.0039	P	6.0

$$y = 5.4188\text{E-}005 * x + 1.1283\text{E-}004$$

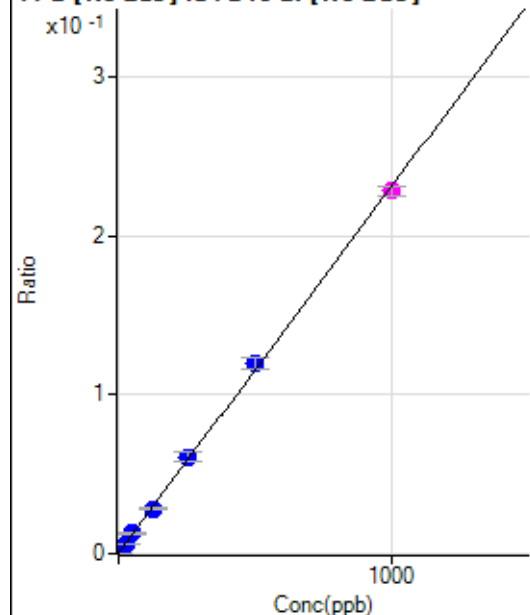
$$R = 1.0000$$

$$DL = 0.5523$$

$$BEC = 2.082$$

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	1822.43	0.0005	P	2.4
2	☐	25.000	25.113	23861.29	0.0063	P	3.4
3	☐	50.000	53.552	47844.06	0.0128	P	4.8
4	☐	125.000	120.914	109366.72	0.0283	P	5.1
5	☐	250.000	262.948	227494.80	0.0610	P	10.7
6	☐	500.000	517.848	453388.35	0.1198	P	6.4
7	☐	1000.000	988.169	863130.26	0.2281	M	2.9
8	☐			62110.37	0.0171	P	6.3

$$y = 2.3032\text{E-}004 * x + 4.8370\text{E-}004$$

$$R = 0.9996$$

$$DL = 0.1481$$

$$BEC = 2.1$$

Weight: <None>

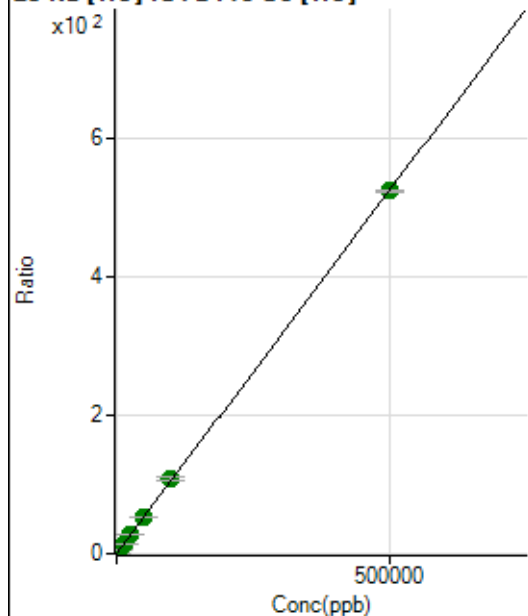
Min Conc: 0

12 C [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			5062888.91		A	0.7
2	☐			4997746.90		A	0.5
3	☐			5491486.76		A	1.6
4	☐			5476847.74		A	1.9
5	☐			5216173.95		A	0.8
6	☐			6180601.14		A	2.2
7	☐			6464246.06		A	3.2
8	☐			5036598.90		A	1.9

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58023.60		P	0.7
2	☐			57013.98		P	0.3
3	☐			62438.57		P	0.7
4	☐			63548.76		P	2.1
5	☐			61007.42		P	1.7
6	☐			72814.09		P	1.0
7	☐			79123.94		P	0.8
8	☐			64215.68		P	1.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22598.56	0.1105	P	1.3
2	☐	500.000	509.912	131996.98	0.6460	P	1.5
3	☐	5000.000	5203.744	1138509.28	5.5754	A	3.6
4	☐	12500.000	12983.586	2793707.03	13.7457	A	3.1
5	☐	25000.000	25589.690	5491463.01	26.9844	A	2.1
6	☐	50000.000	50653.257	10755674.81	53.3058	A	2.2
7	☐	100000.00	102513.93	21742821.15	107.7691	A	4.2
8	☐	500000.00	499388.26	105970196.8	524.5603	A	0.6

$$y = 0.0011 * x + 0.1105$$

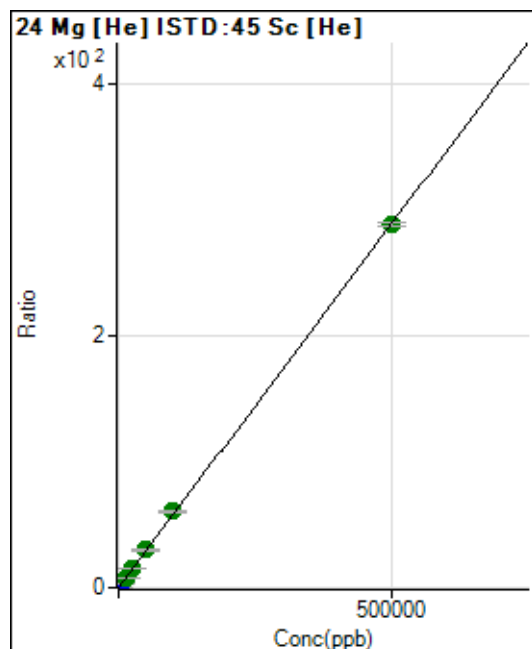
$$R = 1.0000$$

$$DL = 4.15$$

$$BEC = 105.3$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	261.12	0.0013	P	20.4
2	☐	500.000	520.387	61756.47	0.3023	P	3.7
3	☐	5000.000	5161.837	610067.86	2.9876	P	3.4
4	☐	12500.000	13464.289	1583465.88	7.7910	A	2.0
5	☐	25000.000	26528.093	3123644.82	15.3490	A	1.8
6	☐	50000.000	51840.007	6051882.13	29.9932	A	2.0
7	☐	100000.00	104878.15	12243238.82	60.6783	A	2.2
8	☐	500000.00	498738.21	58291855.47	288.5450	A	1.1

$$y = 5.7855\text{E-}004 * x + 0.0013$$

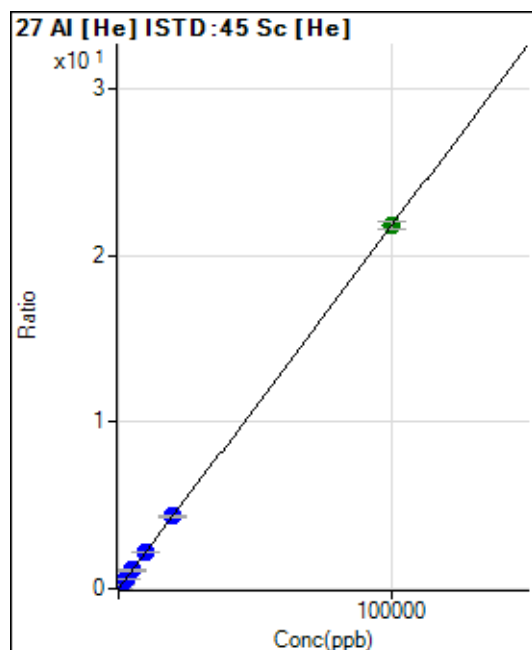
$$R = 0.9999$$

$$DL = 1.348$$

$$BEC = 2.205$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.66	0.0004	P	9.0
2	☐	20.000	20.682	991.58	0.0049	P	4.5
3	☐	1000.000	1000.557	44523.31	0.2180	P	2.8
4	☐	2500.000	2528.825	111888.39	0.5505	P	1.9
5	☐	5000.000	5055.141	223934.60	1.1001	P	2.4
6	☐	10000.000	9955.509	437086.77	2.1662	P	2.7
7	☐	20000.000	20083.577	881605.18	4.3697	P	2.6
8	☐	100000.00	99984.250	4394557.30	21.7527	A	2.0

$$y = 2.1756\text{E-}004 * x + 3.5064\text{E-}004$$

$$R = 1.0000$$

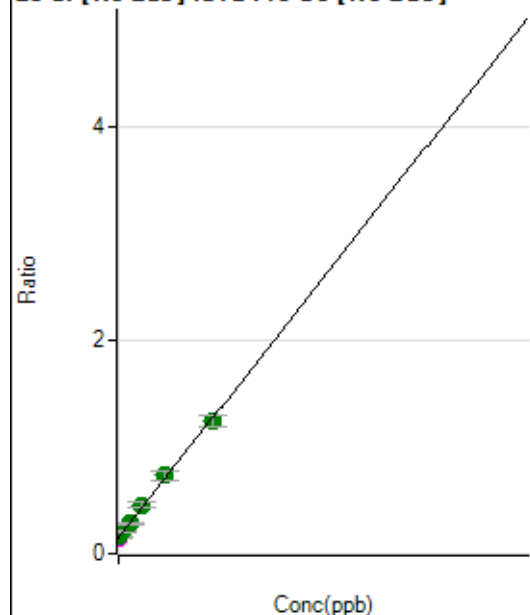
$$DL = 0.4371$$

$$BEC = 1.612$$

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	881506.82	0.1511	M	2.5
2	☐	10.000	5.133	915397.29	0.1568	A	1.3
3	☐	50.000	51.150	1206282.75	0.2079	A	3.7
4	☐	125.000	118.879	1678943.99	0.2831	A	5.0
5	☐	250.000	272.917	2599470.74	0.4542	A	10.4
6	☐	500.000	523.016	4320425.84	0.7319	A	12.6
7	☐	1000.000	983.519	7347367.61	1.2434	A	9.6
8	☐			1881463.54	0.3263	A	4.1

$$y = 0.0011 * x + 0.1511$$

$$R = 0.9992$$

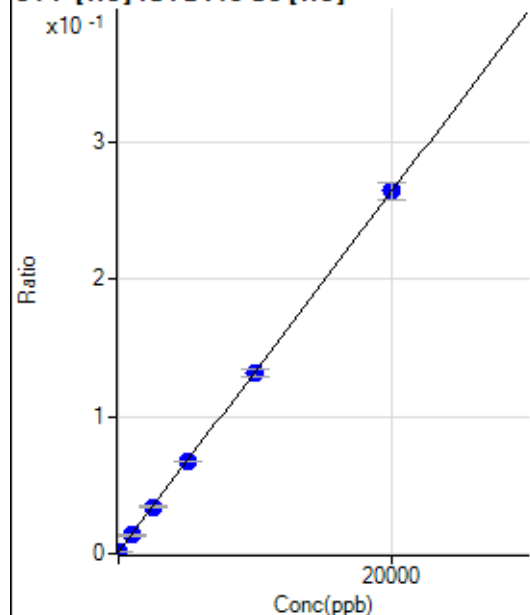
$$DL = 10.4$$

$$BEC = 136.1$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-5.807	272.23	0.0013	P	17.6
2	☐	0.000	5.807	302.79	0.0015	P	12.9
3	☐	1000.000	934.377	2797.57	0.0137	P	7.2
4	☐	2500.000	2474.915	6899.06	0.0339	P	3.1
5	☐	5000.000	5016.602	13709.64	0.0674	P	1.5
6	☐	10000.000	9940.898	26655.69	0.1321	P	4.3
7	☐	20000.000	20031.817	53396.51	0.2648	P	5.1
8	☐			302.79	0.0015	P	1.1

$$y = 1.3147E-005 * x + 0.0014$$

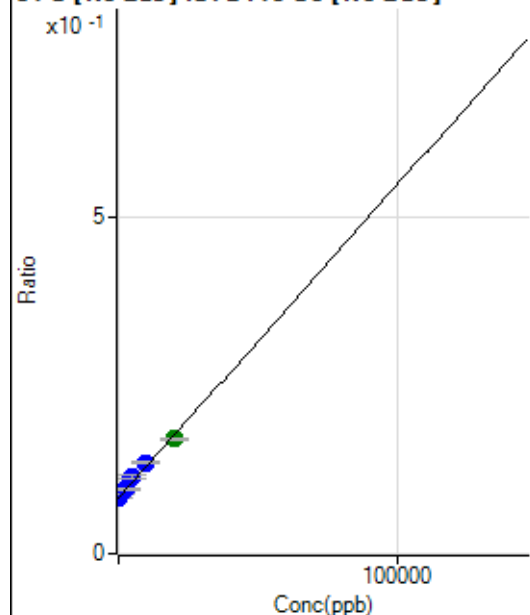
$$R = 1.0000$$

$$DL = 48.6$$

$$BEC = 107.1$$

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	-52.540	481442.00	0.0825	P	2.1
2	☐	0.000	52.540	484678.07	0.0830	P	0.8
3	☐	1000.000	1388.473	517656.43	0.0892	P	1.8
4	☐	2500.000	2961.158	572040.94	0.0965	P	2.6
5	☐	5000.000	6549.098	648426.66	0.1131	P	4.7
6	☐	10000.000	11310.391	799583.11	0.1352	P	2.8
7	☐	20000.000	18880.461	1007203.97	0.1703	A	1.5
8	☐			436869.43	0.0758	P	1.8

$$y = 4.6376\text{E-}006 * x + 0.0828$$

$$R = 0.9930$$

$$DL = 766.2$$

$$BEC = 1.785\text{E}+04$$

Weight: <None>

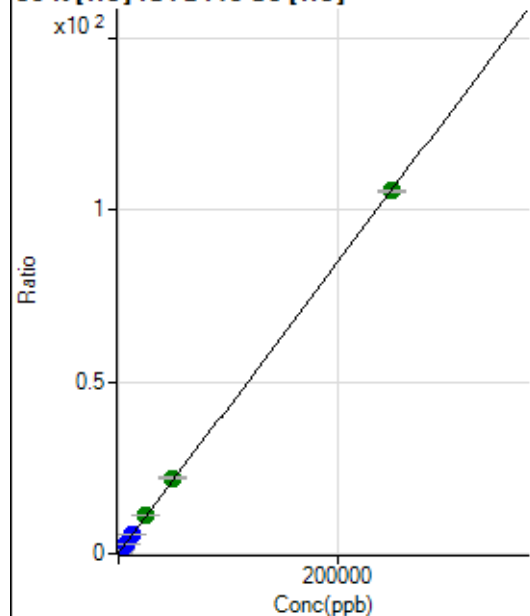
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			241960.62		P	0.5
2	☐			244778.62		P	0.8
3	☐			259572.80		P	0.8
4	☐			260605.86		P	0.6
5	☐			246329.91		P	0.9
6	☐			263027.94		P	0.4
7	☐			240638.55		P	0.4
8	☐			232882.79		P	0.3

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1958.52		P	4.4
2	☐			1816.83		P	6.8
3	☐			1947.40		P	8.9
4	☐			1811.27		P	8.1
5	☐			1861.28		P	4.6
6	☐			1875.17		P	12.4
7	☐			1655.70		P	4.3
8	☐			1755.71		P	3.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30276.80	0.1481	P	1.5
2	☐	500.000	488.754	72426.38	0.3544	P	1.8
3	☐	2500.000	2466.594	242899.57	1.1894	P	1.7
4	☐	6250.000	6263.234	567487.11	2.7922	P	1.7
5	☐	12500.000	12596.225	1112462.06	5.4657	P	2.4
6	☐	25000.000	25827.215	2229651.72	11.0512	A	2.1
7	☐	50000.000	51644.425	4429034.95	21.9502	A	2.8
8	☐	250000.00	249583.60	21314990.24	105.5118	A	0.7

$$y = 4.2216\text{E-}004 * x + 0.1481$$

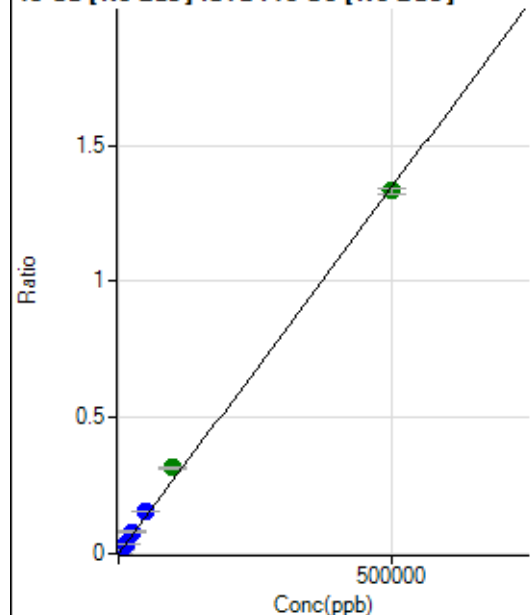
$$R = 1.0000$$

$$DL = 15.78$$

$$BEC = 350.8$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	192.06	0.0000	P	17.2
2	☐	500.000	527.928	8480.62	0.0015	P	2.2
3	☐	5000.000	5912.158	92451.91	0.0159	P	1.1
4	☐	12500.000	14294.682	228089.63	0.0385	P	1.3
5	☐	25000.000	29538.409	455140.23	0.0795	P	6.8
6	☐	50000.000	57133.894	908784.03	0.1537	P	2.2
7	☐	100000.00	117819.99	1873875.34	0.3169	A	2.0
8	☐	500000.00	495441.67	7683290.23	1.3324	A	1.6

$$y = 2.6893\text{E-}006 * x + 3.2977\text{E-}005$$

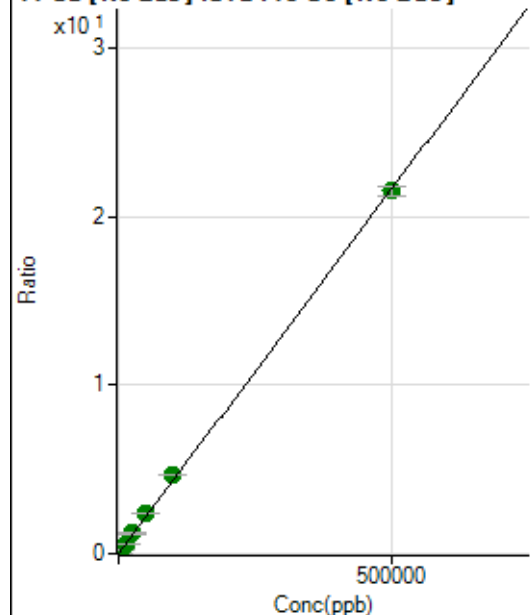
$$R = 0.9993$$

$$DL = 6.332$$

$$BEC = 12.26$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20357.06	0.0035	P	2.0
2	☐	500.000	535.339	155700.82	0.0267	P	1.2
3	☐	5000.000	5717.660	1456913.28	0.2511	A	1.7
4	☐	12500.000	14035.960	3623753.47	0.6113	A	1.1
5	☐	25000.000	28438.897	7073381.31	1.2349	A	6.5
6	☐	50000.000	54682.129	14026502.75	2.3713	A	0.9
7	☐	100000.00	108148.17	27714216.81	4.6864	A	1.4
8	☐	500000.00	497684.59	124285587.0	21.5535	A	2.5

$$y = 4.3300\text{E-}005 * x + 0.0035$$

$$R = 0.9998$$

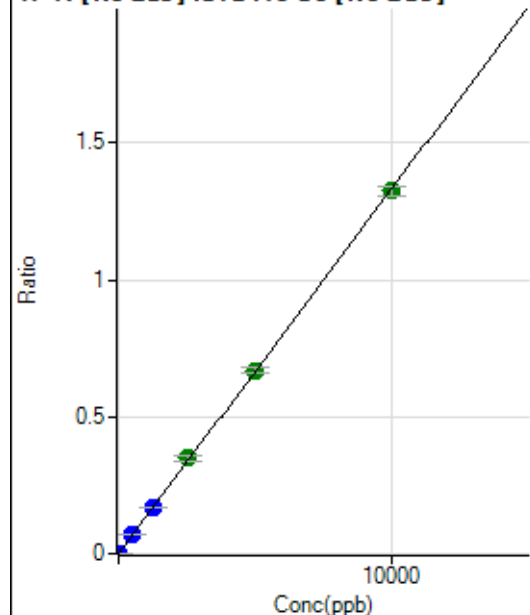
$$DL = 4.874$$

$$BEC = 80.59$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	194.45	0.0000	P	10.5
2	☐	5.000	5.339	4342.44	0.0007	P	8.2
3	☐	500.000	520.364	402189.82	0.0693	P	1.6
4	☐	1250.000	1257.604	992855.50	0.1675	P	0.6
5	☐	2500.000	2627.732	2004270.62	0.3499	A	6.2
6	☐	5000.000	5030.308	3960972.61	0.6697	A	2.6
7	☐	10000.000	9950.944	7834555.47	1.3249	A	2.4
8	☐			1180.64	0.0002	P	4.2

$$y = 1.3314\text{E-}004 * x + 3.3341\text{E-}005$$

$$R = 0.9999$$

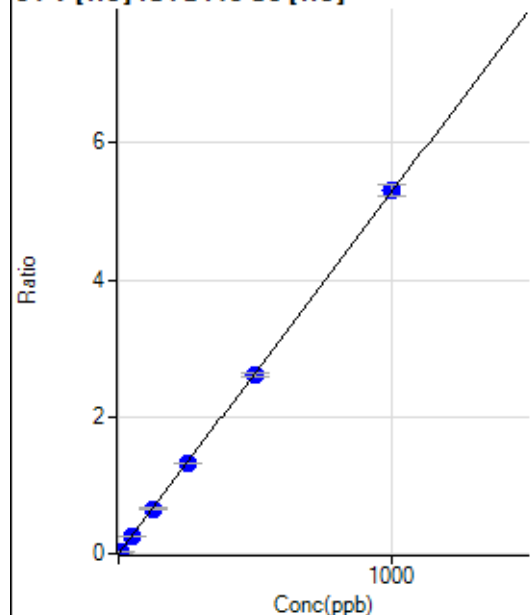
$$DL = 0.07856$$

$$BEC = 0.2504$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15.55	0.0001	P	44.8
2	☐	5.000	5.093	5506.68	0.0270	P	4.0
3	☐	50.000	48.885	52714.57	0.2581	P	2.8
4	☐	125.000	123.352	132364.31	0.6513	P	2.8
5	☐	250.000	249.653	268277.06	1.3180	P	1.4
6	☐	500.000	493.833	525996.02	2.6071	P	1.9
7	☐	1000.000	1003.432	1068759.77	5.2973	P	3.2
8	☐			308.89	0.0015	P	17.6

$$y = 0.0053 * x + 7.6149\text{E-}005$$

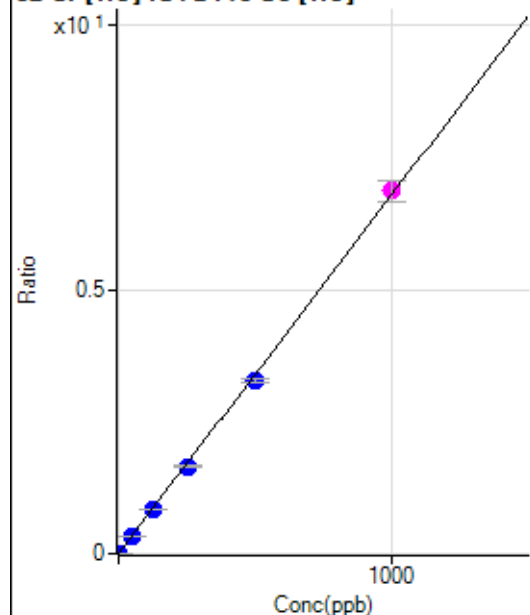
$$R = 1.0000$$

$$DL = 0.0194$$

$$BEC = 0.01442$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	610.02	0.0030	P	4.9
2	☐	2.000	1.980	3357.10	0.0164	P	1.7
3	☐	50.000	48.345	67650.22	0.3313	P	3.6
4	☐	125.000	121.737	168635.15	0.8297	P	1.9
5	☐	250.000	241.664	334622.83	1.6442	P	2.2
6	☐	500.000	481.918	660927.53	3.2758	P	2.8
7	☐	1000.000	1011.616	1386829.74	6.8731	M	5.8
8	☐			10710.78	0.0530	P	2.3

$$y = 0.0068 * x + 0.0030$$

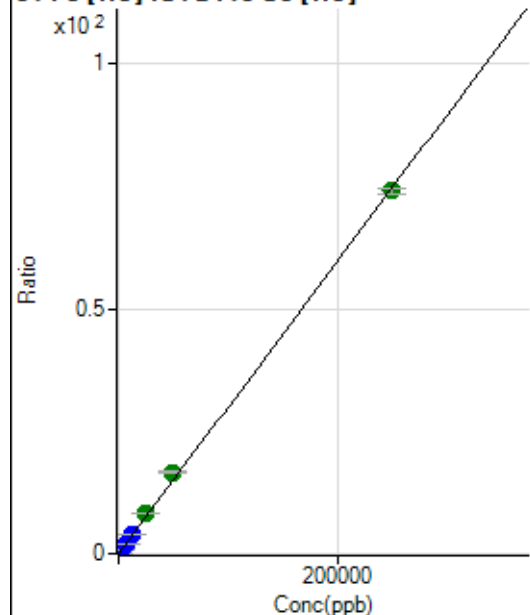
$$R = 0.9997$$

$$DL = 0.06494$$

$$BEC = 0.4394$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	701.88	0.0034	P	4.5
2	☐	50.000	54.503	4024.71	0.0197	P	7.2
3	☐	2500.000	2653.866	162295.84	0.7948	P	2.9
4	☐	6250.000	6699.705	406721.09	2.0012	P	2.3
5	☐	12500.000	13286.812	807094.48	3.9653	P	2.5
6	☐	25000.000	27497.761	1654872.58	8.2027	A	3.4
7	☐	50000.000	55904.387	3364203.61	16.6731	A	2.0
8	☐	250000.00	248517.22	14971476.38	74.1066	A	1.8

$$y = 2.9818E-004 * x + 0.0034$$

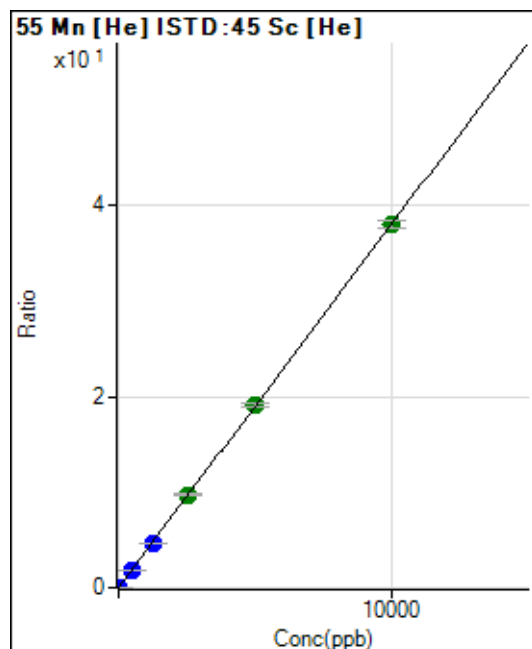
$$R = 0.9997$$

$$DL = 1.549$$

$$BEC = 11.51$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	53.33	0.0003	P	15.7
2	☐	1.000	1.115	918.93	0.0045	P	1.5
3	☐	500.000	479.134	372018.47	1.8218	P	3.1
4	☐	1250.000	1213.842	937966.91	4.6150	P	1.9
5	☐	2500.000	2566.186	1985680.44	9.7563	A	2.3
6	☐	5000.000	5011.827	3844138.24	19.0541	A	2.3
7	☐	10000.000	9983.103	7657837.52	37.9537	A	2.1
8	☐			3601.60	0.0178	P	0.8

$$y = 0.0038 * x + 2.6063E-004$$

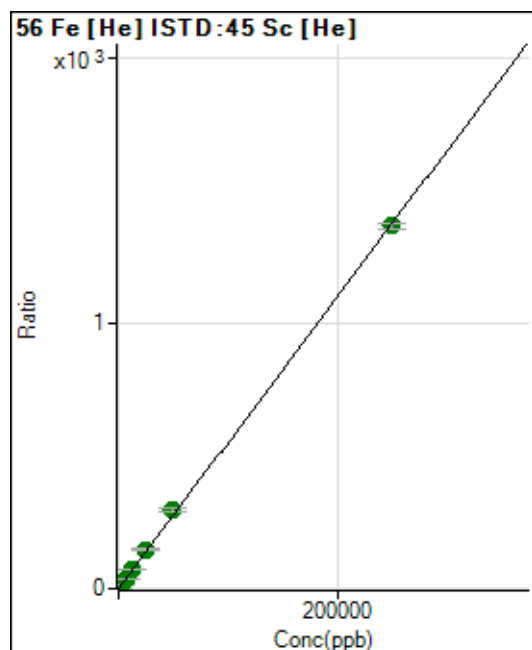
$$R = 1.0000$$

$$DL = 0.03221$$

$$BEC = 0.06855$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3961.73	0.0194	P	7.7
2	☐	50.000	51.800	62066.51	0.3038	P	2.7
3	☐	2500.000	2711.086	3043474.95	14.9049	A	3.7
4	☐	6250.000	6798.597	7590668.34	37.3478	A	2.3
5	☐	12500.000	13465.450	15051835.17	73.9529	A	1.8
6	☐	25000.000	26893.654	29793453.21	147.6819	A	2.8
7	☐	50000.000	54064.443	59903667.54	296.8660	A	3.4
8	☐	250000.00	248933.64	276129470.9	1,366.816	A	1.5

$$y = 0.0055 * x + 0.0194$$

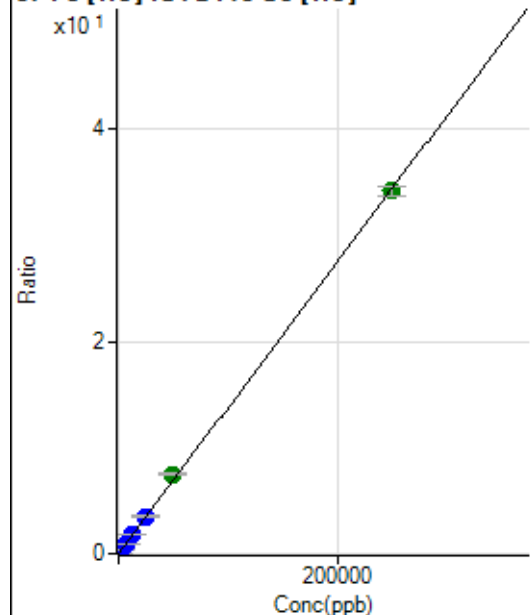
$$R = 0.9998$$

$$DL = 0.8206$$

$$BEC = 3.53$$

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	207.41	0.0010	P	31.1
2	☐	50.000	47.367	1535.30	0.0075	P	3.9
3	☐	2500.000	2555.912	71847.39	0.3518	P	2.4
4	☐	6250.000	6420.103	179301.17	0.8822	P	1.2
5	☐	12500.000	12902.429	360607.52	1.7719	P	3.7
6	☐	25000.000	25494.414	706187.96	3.5002	P	2.9
7	☐	50000.000	54683.623	1514598.62	7.5066	A	3.6
8	☐	250000.00	248988.90	6904226.71	34.1757	A	2.3

$$y = 1.3725\text{E-}004 * x + 0.0010$$

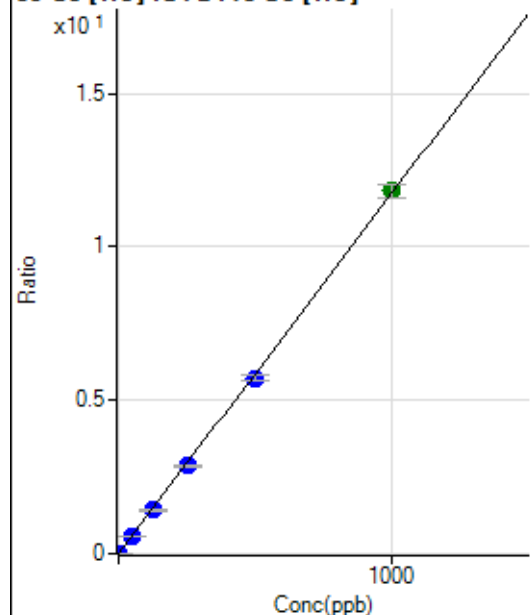
$$R = 0.9998$$

$$DL = 6.896$$

$$BEC = 7.387$$

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	97.78	0.0005	P	11.7
2	☐	1.000	1.014	2528.03	0.0124	P	3.2
3	☐	50.000	48.411	116076.80	0.5684	P	2.7
4	☐	125.000	121.136	288926.65	1.4216	P	2.2
5	☐	250.000	244.360	583584.54	2.8672	P	1.9
6	☐	500.000	488.278	1155844.63	5.7287	P	3.3
7	☐	1000.000	1007.833	2385637.13	11.8238	A	3.7
8	☐			2094.62	0.0104	P	2.8

$$y = 0.0117 * x + 4.7849\text{E-}004$$

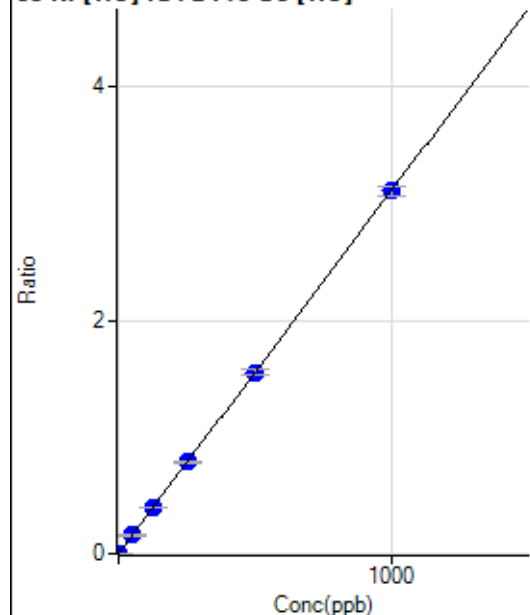
$$R = 0.9999$$

$$DL = 0.01433$$

$$BEC = 0.04079$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.11	0.0005	P	19.3
2	☐	1.000	0.969	727.80	0.0036	P	10.4
3	☐	50.000	50.793	32361.30	0.1585	P	2.9
4	☐	125.000	125.599	79481.93	0.3911	P	1.1
5	☐	250.000	253.742	160699.96	0.7895	P	2.2
6	☐	500.000	499.964	313759.19	1.5551	P	3.1
7	☐	1000.000	998.968	626741.46	3.1066	P	2.6
8	☐			1871.25	0.0093	P	5.6

$$y = 0.0031 * x + 5.4347E-004$$

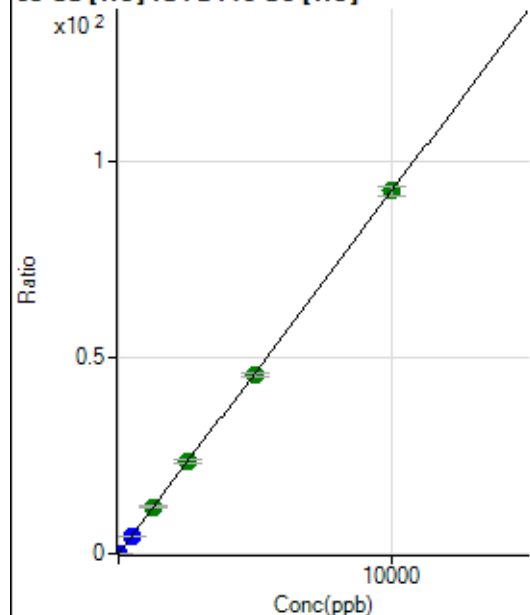
$$R = 1.0000$$

$$DL = 0.1014$$

$$BEC = 0.1748$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	796.70	0.0039	P	4.0
2	☐	2.000	2.079	4725.29	0.0231	P	1.8
3	☐	500.000	490.657	927601.32	4.5423	P	2.5
4	☐	1250.000	1290.479	2426788.19	11.9403	A	2.0
5	☐	2500.000	2546.714	4796318.09	23.5600	A	3.4
6	☐	5000.000	4947.792	9234212.92	45.7691	A	1.8
7	☐	10000.000	10009.832	18681832.22	92.5911	A	2.4
8	☐			3648.29	0.0181	P	1.9

$$y = 0.0092 * x + 0.0039$$

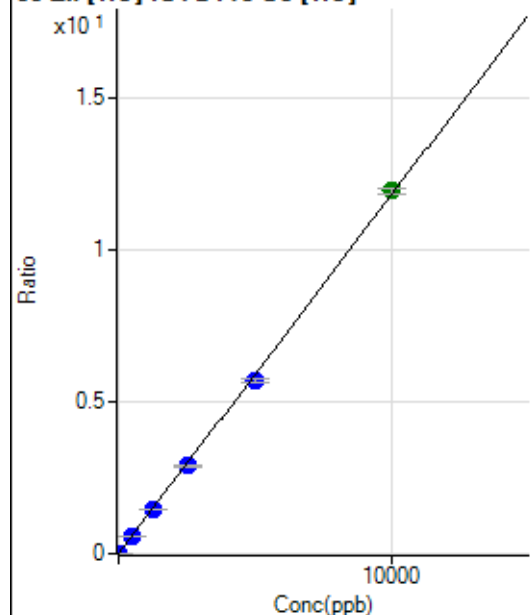
$$R = 1.0000$$

$$DL = 0.05107$$

$$BEC = 0.4214$$

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	141.11	0.0007	P	13.8
2	☐	2.000	2.134	655.58	0.0032	P	6.3
3	☐	500.000	485.499	117229.74	0.5741	P	3.1
4	☐	1250.000	1239.724	297726.64	1.4649	P	1.8
5	☐	2500.000	2444.587	587822.77	2.8879	P	1.7
6	☐	5000.000	4817.495	1148105.91	5.6904	P	2.1
7	☐	10000.000	10107.115	2408565.36	11.9378	A	1.5
8	☐			10030.31	0.0496	P	3.6

$$y = 0.0012 * x + 6.9070E-004$$

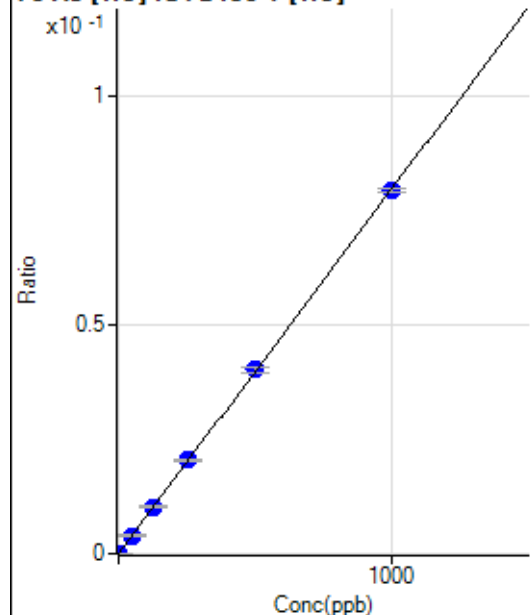
$$R = 0.9997$$

$$DL = 0.2423$$

$$BEC = 0.5848$$

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	3.67	0.0000	P	30.1
2	☐	1.000	1.062	146.35	0.0001	P	6.9
3	☐	50.000	49.967	6760.30	0.0040	P	5.1
4	☐	125.000	128.149	17065.32	0.0102	P	1.9
5	☐	250.000	256.596	33986.08	0.0204	P	3.5
6	☐	500.000	504.490	67510.81	0.0402	P	2.6
7	☐	1000.000	995.714	137040.78	0.0793	P	0.9
8	☐			32.67	0.0000	P	7.4

$$y = 7.9602E-005 * x + 2.2202E-006$$

$$R = 1.0000$$

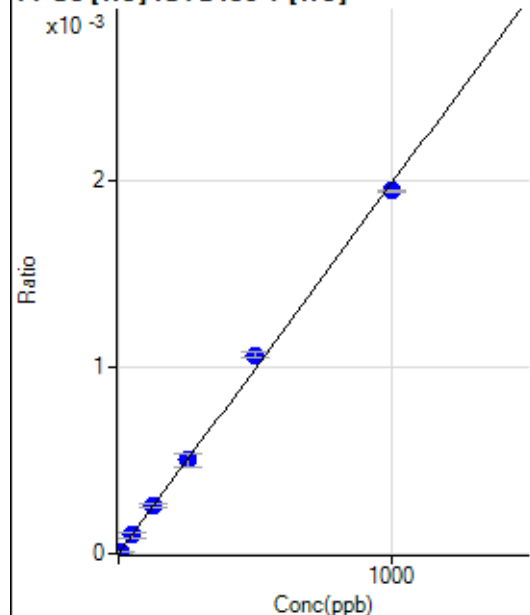
$$DL = 0.0252$$

$$BEC = 0.02789$$

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	2.22	0.0000	P	86.6
2	☐	5.000	3.962	15.56	0.0000	P	13.0
3	☐	50.000	49.150	168.89	0.0001	P	23.5
4	☐	125.000	130.471	435.57	0.0003	P	8.7
5	☐	250.000	251.900	834.48	0.0005	P	14.4
6	☐	500.000	537.333	1795.69	0.0011	P	2.4
7	☐	1000.000	980.222	3367.10	0.0019	P	0.5
8	☐			2.22	0.0000	P	86.6

$$y = 1.9854\text{E-}006 * x + 1.3574\text{E-}006$$

$$R = 0.9989$$

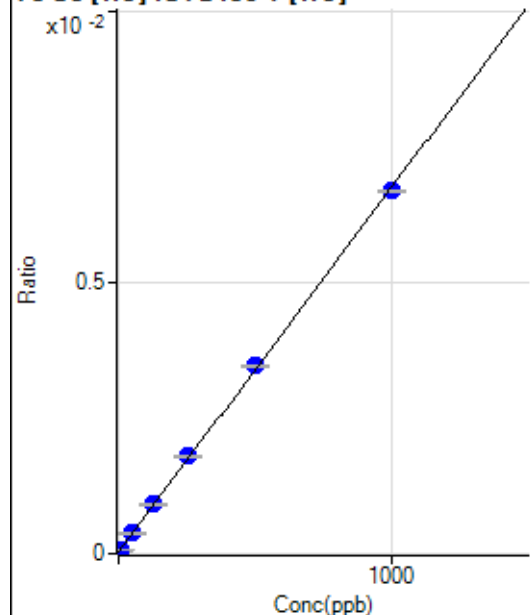
$$DL = 1.776$$

$$BEC = 0.6837$$

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	57.34	0.0000	P	6.9
2	☐	5.000	5.224	118.01	0.0001	P	2.2
3	☐	50.000	50.856	640.08	0.0004	P	5.0
4	☐	125.000	130.658	1526.58	0.0009	P	2.1
5	☐	250.000	263.684	3006.30	0.0018	P	2.1
6	☐	500.000	510.182	5821.80	0.0035	P	0.8
7	☐	1000.000	990.737	11570.59	0.0067	P	0.6
8	☐			65.68	0.0000	P	9.3

$$y = 6.7197\text{E-}006 * x + 3.4828\text{E-}005$$

$$R = 0.9998$$

$$DL = 1.069$$

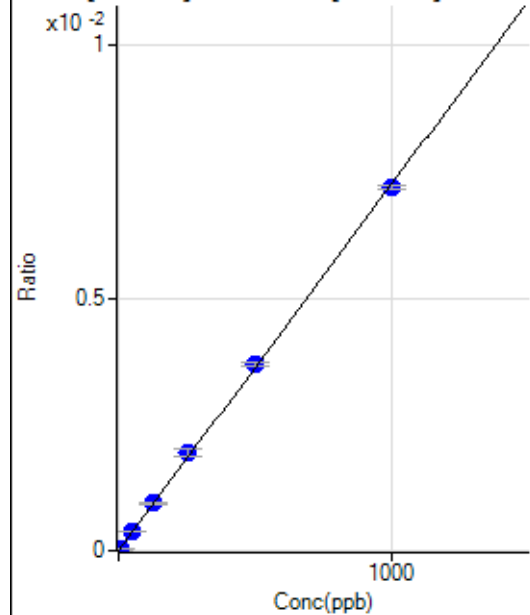
$$BEC = 5.183$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30962.78		P	2.3
2	☐			29251.05		P	1.9
3	☐			30344.75		P	3.9
4	☐			30612.18		P	2.2
5	☐			29852.06		P	1.7
6	☐			30667.74		P	2.2
7	☐			30450.58		P	2.1
8	☐			29696.09		P	3.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	19.58	0.0000	P	299.
2	☐	5.000	5.704	577.04	0.0000	P	9.8
3	☐	50.000	53.398	5183.79	0.0004	P	2.4
4	☐	125.000	129.018	12966.35	0.0009	P	1.5
5	☐	250.000	267.075	25667.90	0.0019	P	8.3
6	☐	500.000	509.656	51032.00	0.0037	P	2.7
7	☐	1000.000	990.228	101103.80	0.0072	P	1.0
8	☐			93.74	0.0000	P	21.0

$$y = 7.2528\text{E-}006 * x + 1.4133\text{E-}006$$

$$R = 0.9998$$

$$DL = 1.751$$

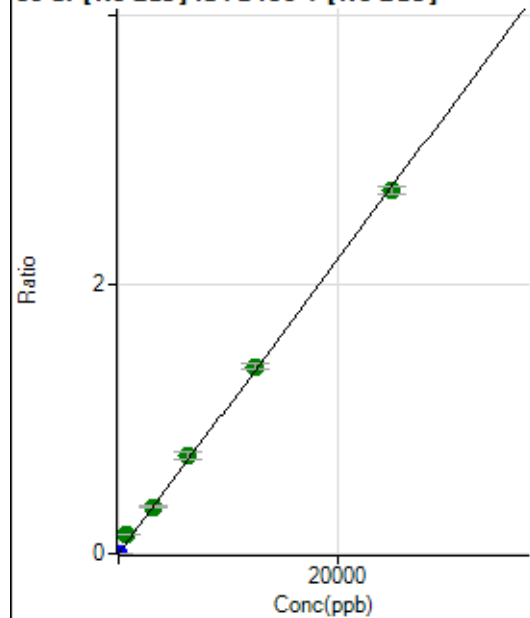
$$BEC = 0.1949$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			334.96		P	9.1
2	☐			327.88		P	4.5
3	☐			359.13		P	3.2
4	☐			329.55		P	4.9
5	☐			354.96		P	5.5
6	☐			343.71		P	5.4
7	☐			362.04		P	6.6
8	☐			349.96		P	2.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	594.47	0.0000	P	20.4
2	☐	1.000	0.979	2027.98	0.0002	P	12.1
3	☐	625.000	1339.748	1945882.90	0.1459	A	3.2
4	☐	3125.000	3186.907	4801173.72	0.3471	A	3.0
5	☐	6250.000	6699.560	9662859.42	0.7295	A	7.6
6	☐	12500.000	12763.200	19176202.51	1.3898	A	3.7
7	☐	25000.000	24730.403	37901888.35	2.6929	A	1.9
8	☐			10140.08	0.0008	P	4.4

$$y = 1.0889E-004 * x + 4.3793E-005$$

$$R = 0.9995$$

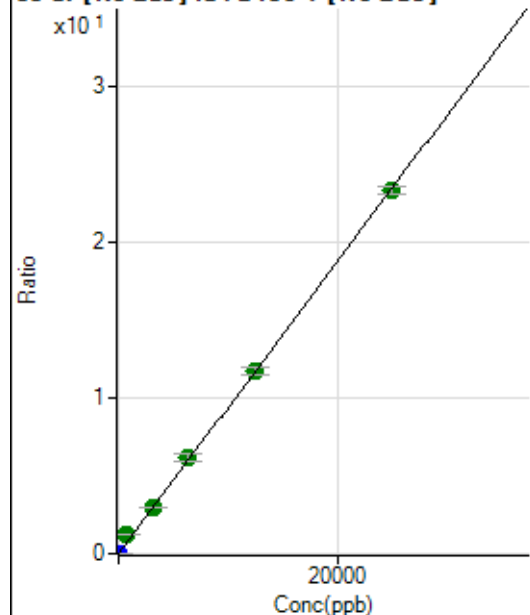
$$DL = 0.2459$$

$$BEC = 0.4022$$

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	430.58	0.0000	P	71.1
2	☐	1.000	1.057	13784.96	0.0010	P	4.3
3	☐	625.000	1307.627	16325065.47	1.2240	A	2.4
4	☐	3125.000	3158.288	40900019.67	2.9563	A	2.2
5	☐	6250.000	6609.561	81986958.08	6.1868	A	6.7
6	☐	12500.000	12529.064	161790414.7	11.7276	A	4.4
7	☐	25000.000	24874.351	327690168.4	23.2832	A	2.1
8	☐			81269.87	0.0060	P	4.0

$$y = 9.3603E-004 * x + 3.1823E-005$$

$$R = 0.9996$$

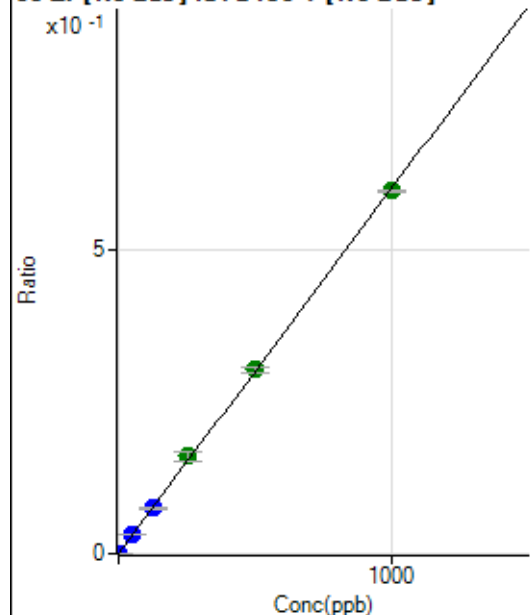
$$DL = 0.07247$$

$$BEC = 0.034$$

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	547.25	0.0000	P	5.9
2	☐	1.000	0.998	8639.02	0.0006	P	3.9
3	☐	50.000	51.606	414263.78	0.0311	P	2.4
4	☐	125.000	123.978	1031756.97	0.0746	P	1.1
5	☐	250.000	266.181	2119499.68	0.1600	A	8.9
6	☐	500.000	504.737	4187606.69	0.3035	A	2.9
7	☐	1000.000	993.634	8408092.03	0.5973	A	0.8
8	☐			1947.43	0.0001	P	3.8

$$y = 6.0113E-004 * x + 4.0280E-005$$

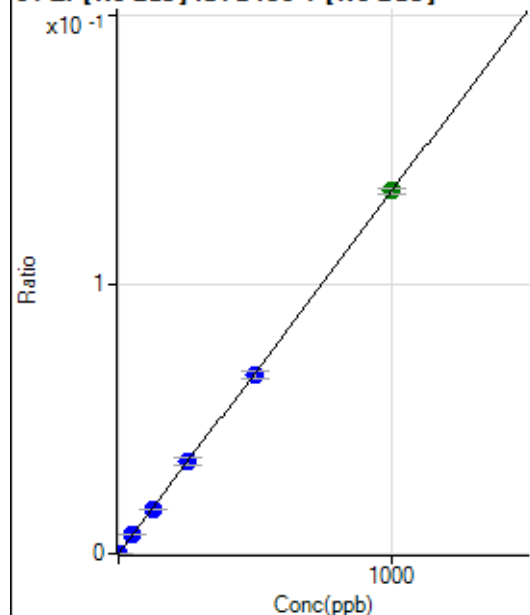
$$R = 0.9998$$

$$DL = 0.01195$$

$$BEC = 0.06701$$

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	133.34	0.0000	P	9.8
2	☐	1.000	1.004	1955.75	0.0001	P	5.4
3	☐	50.000	51.799	93032.93	0.0070	P	1.4
4	☐	125.000	122.770	228547.09	0.0165	P	1.3
5	☐	250.000	256.359	456583.24	0.0345	P	8.3
6	☐	500.000	494.000	916552.89	0.0664	P	4.1
7	☐	1000.000	1001.599	1895694.66	0.1347	A	1.3
8	☐			425.02	0.0000	P	10.3

$$y = 1.3446\text{E-}004 * x + 9.8041\text{E-}006$$

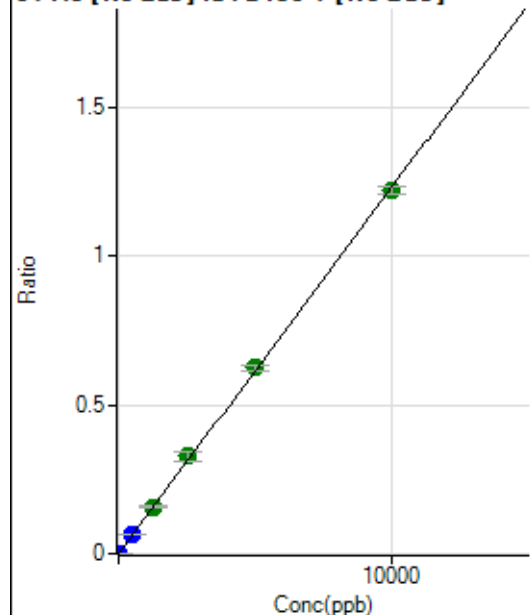
$$R = 0.9999$$

$$DL = 0.02151$$

$$BEC = 0.07291$$

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	133.34	0.0000	P	26.1
2	☐	5.000	5.754	9681.38	0.0007	P	2.6
3	☐	500.000	527.577	865324.26	0.0649	P	1.6
4	☐	1250.000	1276.379	2171130.61	0.1569	A	3.2
5	☐	2500.000	2658.374	4328550.53	0.3269	A	8.6
6	☐	5000.000	5084.139	8625866.86	0.6251	A	3.4
7	☐	10000.000	9913.660	17155556.98	1.2189	A	2.0
8	☐			3494.97	0.0003	P	8.4

$$y = 1.2295\text{E-}004 * x + 9.8297\text{E-}006$$

$$R = 0.9998$$

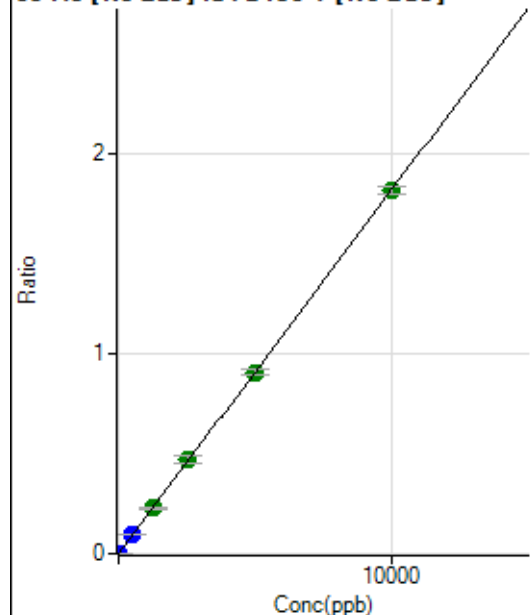
$$DL = 0.06263$$

$$BEC = 0.07995$$

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	19.45	0.0000	P	25.9
2	☐	5.000	5.059	12433.68	0.0009	P	1.2
3	☐	500.000	519.198	1258233.13	0.0944	P	3.1
4	☐	1250.000	1252.178	3148146.34	0.2276	A	2.8
5	☐	2500.000	2601.891	6260892.28	0.4729	A	9.0
6	☐	5000.000	4994.029	12524571.81	0.9076	A	2.9
7	☐	10000.000	9976.280	25515840.67	1.8130	A	2.0
8	☐			4450.85	0.0003	P	4.5

$$y = 1.8173E-004 * x + 1.4333E-006$$

$$R = 0.9999$$

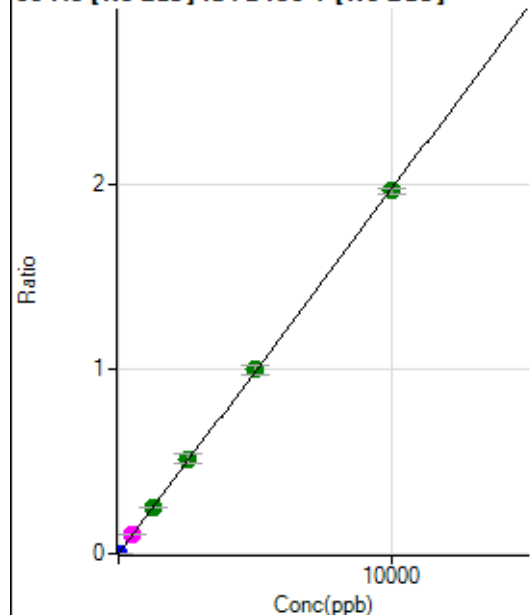
$$DL = 0.006122$$

$$BEC = 0.007887$$

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	63.89	0.0000	P	44.9
2	☐	5.000	5.015	13448.47	0.0010	P	2.1
3	☐	500.000	523.754	1380858.97	0.1036	M	4.1
4	☐	1250.000	1258.265	3442056.11	0.2488	A	2.4
5	☐	2500.000	2606.713	6823226.19	0.5154	A	8.9
6	☐	5000.000	5038.614	13744820.62	0.9963	A	4.3
7	☐	10000.000	9951.794	27695767.28	1.9678	A	1.4
8	☐			9286.76	0.0007	P	4.1

$$y = 1.9773E-004 * x + 4.6844E-006$$

$$R = 0.9999$$

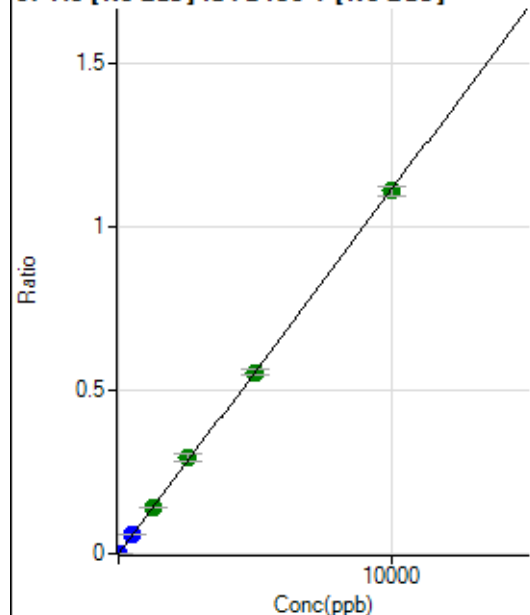
$$DL = 0.0319$$

$$BEC = 0.02369$$

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	25.00	0.0000	P	57.6
2	☐	5.000	5.027	7582.82	0.0006	P	1.9
3	☐	500.000	524.262	778377.75	0.0584	P	3.4
4	☐	1250.000	1267.078	1951931.88	0.1411	A	2.9
5	☐	2500.000	2649.374	3905369.97	0.2950	A	8.7
6	☐	5000.000	4986.167	7661779.77	0.5552	A	2.8
7	☐	10000.000	9966.225	15616427.26	1.1097	A	2.5
8	☐			3200.48	0.0002	P	8.5

$$y = 1.1134\text{E-}004 * x + 1.8392\text{E-}006$$

$$R = 0.9999$$

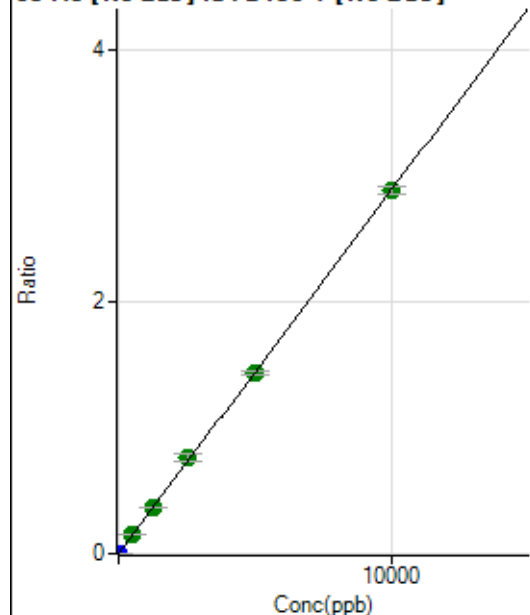
$$DL = 0.02857$$

$$BEC = 0.01652$$

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	41.67	0.0000	P	19.5
2	☐	5.000	4.961	19358.42	0.0014	P	1.1
3	☐	500.000	526.396	2024614.26	0.1518	A	3.3
4	☐	1250.000	1273.236	5080905.41	0.3672	A	1.8
5	☐	2500.000	2651.453	10130156.39	0.7647	A	7.4
6	☐	5000.000	4962.823	19755484.47	1.4314	A	2.3
7	☐	10000.000	9976.501	40496752.99	2.8775	A	1.9
8	☐			7457.80	0.0006	P	12.2

$$y = 2.8843\text{E-}004 * x + 3.0632\text{E-}006$$

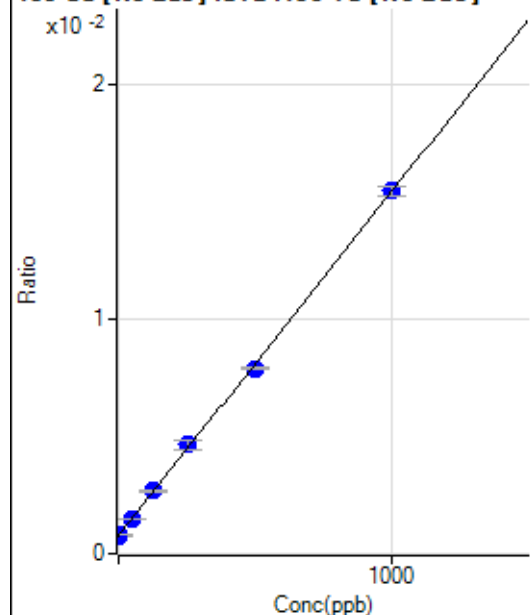
$$R = 0.9999$$

$$DL = 0.006216$$

$$BEC = 0.01062$$

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	6612.87	0.0008	P	3.6
2	☐	1.000	1.178	6735.15	0.0008	P	3.6
3	☐	50.000	48.813	12692.24	0.0015	P	2.0
4	☐	125.000	130.307	23200.75	0.0027	P	3.6
5	☐	250.000	265.273	39390.68	0.0047	P	8.5
6	☐	500.000	486.492	69771.66	0.0079	P	1.7
7	☐	1000.000	1002.332	137417.19	0.0154	P	2.8
8	☐			6196.00	0.0007	P	0.8

$$y = 1.4626\text{E-}005 * x + 7.7726\text{E-}004$$

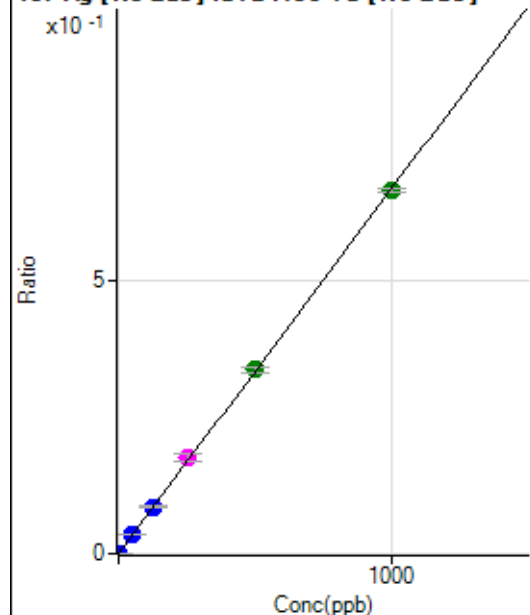
$$R = 0.9997$$

$$DL = 5.774$$

$$BEC = 53.14$$

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	28.8
2	☐	1.000	1.076	6243.28	0.0007	P	8.0
3	☐	50.000	52.341	298239.46	0.0350	P	1.1
4	☐	125.000	128.900	746128.54	0.0863	P	2.2
5	☐	250.000	263.255	1490165.47	0.1762	M	8.2
6	☐	500.000	503.805	2980081.27	0.3372	A	3.5
7	☐	1000.000	994.179	5924808.51	0.6654	A	1.2
8	☐			2108.56	0.0002	P	6.1

$$y = 6.6927\text{E-}004 * x + 1.5351\text{E-}005$$

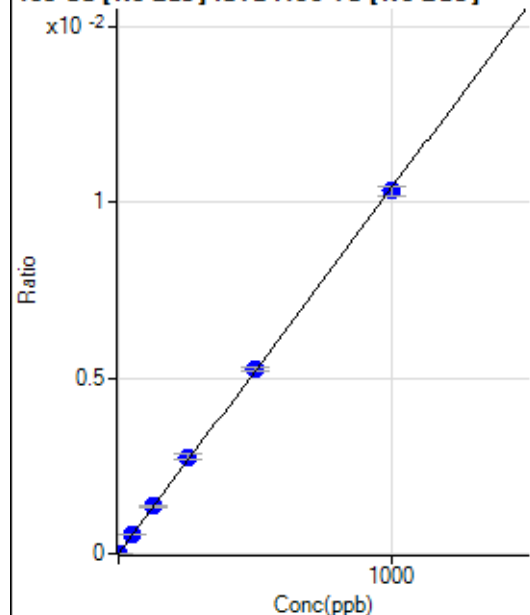
$$R = 0.9999$$

$$DL = 0.01985$$

$$BEC = 0.02294$$

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	31.95	0.0000	P	15.8
2	☐	1.000	0.974	118.06	0.0000	P	21.9
3	☐	50.000	53.177	4741.15	0.0006	P	3.1
4	☐	125.000	128.639	11609.16	0.0013	P	2.2
5	☐	250.000	265.110	23376.95	0.0028	P	6.9
6	☐	500.000	506.447	46619.03	0.0053	P	2.3
7	☐	1000.000	992.386	91966.96	0.0103	P	2.7
8	☐			76.39	0.0000	P	16.2

$$y = 1.0407\text{E-}005 * x + 3.7574\text{E-}006$$

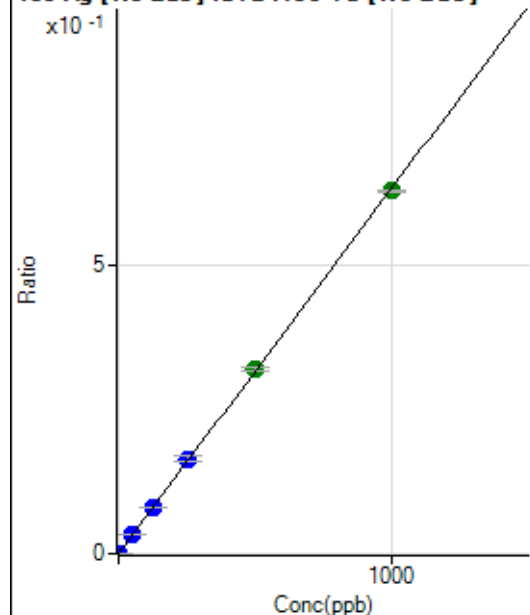
$$R = 0.9998$$

$$DL = 0.1706$$

$$BEC = 0.3611$$

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	55.56	0.0000	P	60.2
2	☐	1.000	1.073	5826.38	0.0007	P	4.2
3	☐	50.000	53.065	286611.27	0.0337	P	1.2
4	☐	125.000	127.239	698289.51	0.0808	P	2.3
5	☐	250.000	260.436	1398118.88	0.1653	P	7.5
6	☐	500.000	506.437	2840847.11	0.3214	A	2.5
7	☐	1000.000	993.739	5615390.01	0.6306	A	0.2
8	☐			2033.53	0.0002	P	4.1

$$y = 6.3461\text{E-}004 * x + 6.5241\text{E-}006$$

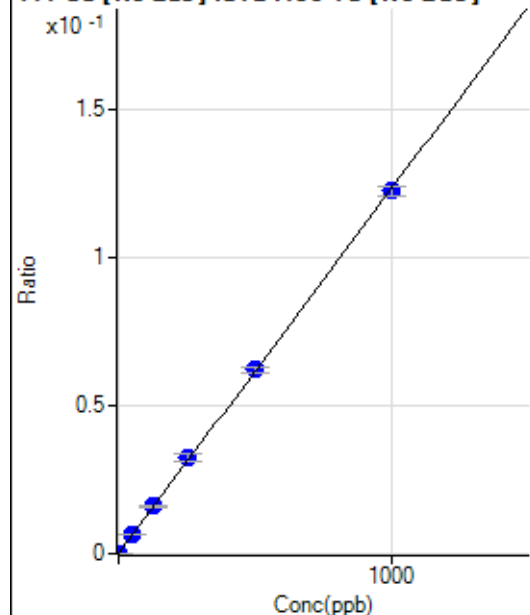
$$R = 0.9999$$

$$DL = 0.01857$$

$$BEC = 0.01028$$

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	658.37	0.0001	P	5.1
2	☐	1.000	1.172	1877.06	0.0002	P	5.5
3	☐	50.000	53.060	56199.58	0.0066	P	1.0
4	☐	125.000	129.664	138582.84	0.0160	P	2.4
5	☐	250.000	264.227	275674.87	0.0326	P	7.1
6	☐	500.000	503.562	548179.49	0.0620	P	2.5
7	☐	1000.000	993.926	1088907.93	0.1223	P	2.8
8	☐			950.86	0.0001	P	3.4

$$y = 1.2300\text{E-}004 * x + 7.7381\text{E-}005$$

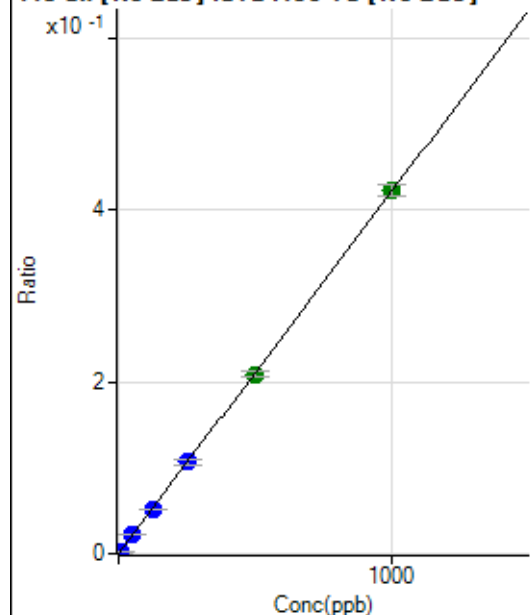
$$R = 0.9999$$

$$DL = 0.09541$$

$$BEC = 0.6291$$

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	633.37	0.0001	P	6.7
2	☐	5.000	5.048	18679.87	0.0022	P	1.8
3	☐	50.000	51.140	184188.35	0.0216	P	0.9
4	☐	125.000	123.120	449691.22	0.0520	P	1.4
5	☐	250.000	253.266	904306.88	0.1069	P	7.2
6	☐	500.000	494.489	1843908.37	0.2086	A	3.1
7	☐	1000.000	1002.117	3763242.44	0.4227	A	3.1
8	☐			1811.28	0.0002	P	1.3

$$y = 4.2176\text{E-}004 * x + 7.4450\text{E-}005$$

$$R = 1.0000$$

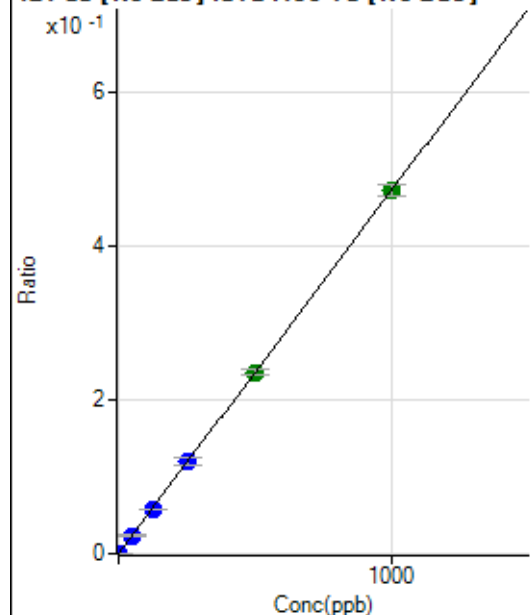
$$DL = 0.03558$$

$$BEC = 0.1765$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	50.6
2	☐	2.000	2.048	8241.59	0.0010	P	0.7
3	☐	50.000	50.030	200863.26	0.0236	P	1.1
4	☐	125.000	121.635	496163.46	0.0574	P	2.7
5	☐	250.000	255.681	1020208.61	0.1206	P	7.9
6	☐	500.000	500.242	2085395.71	0.2360	A	3.6
7	☐	1000.000	998.878	4194216.72	0.4712	A	3.1
8	☐			2091.89	0.0002	P	17.5

$$y = 4.7170\text{E-}004 * x + 5.8893\text{E-}006$$

$$R = 1.0000$$

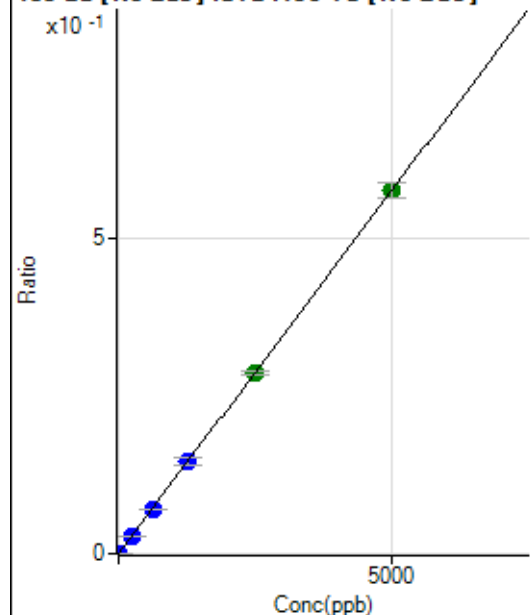
$$DL = 0.01895$$

$$BEC = 0.01249$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0000	P	43.1
2	☐	10.000	9.922	9717.70	0.0011	P	0.4
3	☐	250.000	251.019	246471.55	0.0290	P	0.6
4	☐	625.000	605.842	604460.22	0.0699	P	2.1
5	☐	1250.000	1269.941	1238962.37	0.1465	P	8.8
6	☐	2500.000	2493.839	2543178.16	0.2877	A	2.9
7	☐	5000.000	5000.439	5136211.22	0.5769	A	4.2
8	☐			2980.96	0.0003	P	6.8

$$y = 1.1538\text{E-}004 * x + 1.3051\text{E-}006$$

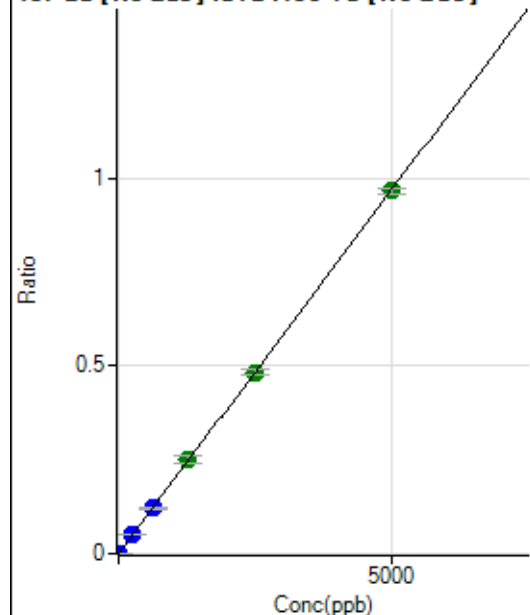
$$R = 1.0000$$

$$DL = 0.01463$$

$$BEC = 0.01131$$

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	25.00	0.0000	P	33.1
2	☐	10.000	10.362	17041.70	0.0020	P	1.7
3	☐	250.000	258.077	425304.97	0.0500	P	0.9
4	☐	625.000	622.861	1043107.54	0.1206	P	1.5
5	☐	1250.000	1307.781	2141968.15	0.2533	A	8.1
6	☐	2500.000	2494.013	4268812.38	0.4830	A	2.9
7	☐	5000.000	4988.411	8600968.94	0.9660	A	1.8
8	☐			5112.22	0.0006	P	4.0

$$y = 1.9365E-004 * x + 2.9376E-006$$

$$R = 0.9999$$

$$DL = 0.01505$$

$$BEC = 0.01517$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			15.56		P	89.2
3	☐			31.11		P	61.9
4	☐			106.67		P	28.6
5	☐			184.45		P	7.5
6	☐			275.57		P	9.8
7	☐			571.13		P	2.4
8	☐			35.55		P	10.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			1.11		P	173.
3	☐			3.33		P	100.
4	☐			2.22		P	173.
5	☐			10.00		P	33.3
6	☐			12.22		P	15.7
7	☐			38.89		P	30.1
8	☐			16.67		P	91.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			13.89		P	69.3
3	☐			19.45		P	24.7
4	☐			38.89		P	81.1
5	☐			91.67		P	31.5
6	☐			141.67		P	25.6
7	☐			302.79		P	8.4
8	☐			866.72		P	2.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.
2	☐			5.55		P	69.3
3	☐			8.89		P	57.3
4	☐			13.33		P	50.0
5	☐			24.44		P	20.8
6	☐			66.67		P	44.4
7	☐			121.11		P	29.2
8	☐			422.23		P	1.6

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			150.00		P	33.8
2	☐			94.45		P	20.4
3	☐			113.89		P	27.7
4	☐			119.45		P	26.4
5	☐			177.78		P	19.5
6	☐			233.34		P	10.7
7	☐			375.02		P	27.3
8	☐			1008.40		P	17.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			144.45		P	9.6
2	☐			137.78		P	3.7
3	☐			144.45		P	25.5
4	☐			131.11		P	20.7
5	☐			156.67		P	13.3
6	☐			181.12		P	9.3
7	☐			205.56		P	7.3
8	☐			604.47		P	4.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	9.1
2	☐			75.00		P	33.3
3	☐			63.89		P	41.9
4	☐			50.00		P	60.1
5	☐			75.00		P	33.3
6	☐			75.00		P	61.9
7	☐			72.22		P	46.6
8	☐			94.45		P	22.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			32.22		P	26.0
2	☐			25.56		P	19.9
3	☐			28.89		P	63.5
4	☐			27.78		P	30.2
5	☐			22.22		P	17.3
6	☐			38.89		P	24.7
7	☐			36.67		P	24.1
8	☐			53.33		P	39.0

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	43.3
2	☐			55.56		P	17.3
3	☐			61.11		P	28.4
4	☐			75.00		P	38.5
5	☐			66.67		P	37.5
6	☐			97.22		P	49.5
7	☐			127.78		P	46.3
8	☐			394.46		P	4.9

172 Yb [He] No available calibration points

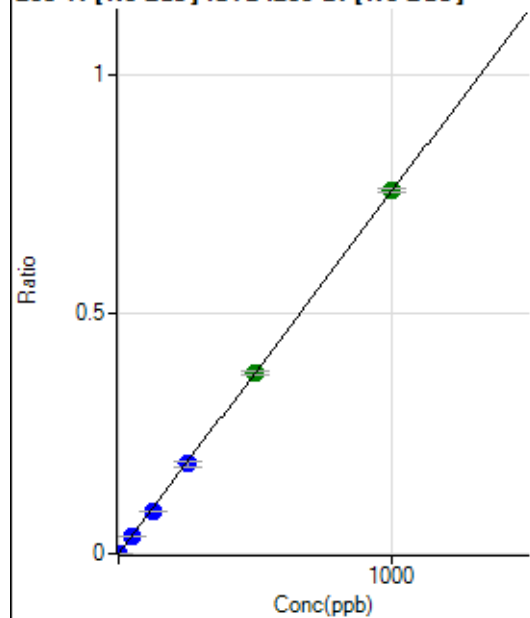
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.48		P	44.4
2	☐			35.19		P	24.1
3	☐			33.33		P	33.3
4	☐			46.30		P	30.2
5	☐			27.78		P	20.0
6	☐			35.19		P	55.5
7	☐			62.97		P	10.2
8	☐			190.75		P	23.7

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1894.63		P	5.3
2	☐			2041.89		P	2.3
3	☐			2669.80		P	10.7
4	☐			3836.78		P	7.7
5	☐			5907.03		P	1.4
6	☐			9442.55		P	2.2
7	☐			17606.64		P	3.5
8	☐			2036.33		P	3.3

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8560.34		P	2.2
2	☐			8582.59		P	6.9
3	☐			8665.99		P	2.4
4	☐			9364.59		P	2.3
5	☐			10148.50		P	2.2
6	☐			12133.57		P	1.4
7	☐			16262.05		P	0.8
8	☐			8591.85		P	7.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	252.79	0.0001	P	2.6
2	☐	1.000	0.976	3847.92	0.0008	P	7.8
3	☐	50.000	48.656	179799.83	0.0368	P	2.8
4	☐	125.000	115.953	440496.51	0.0877	P	1.7
5	☐	250.000	247.038	901613.13	0.1868	P	6.9
6	☐	500.000	500.027	1868270.64	0.3780	A	1.9
7	☐	1000.000	1001.925	3795575.34	0.7574	A	1.2
8	☐			850.05	0.0002	P	12.8

$$y = 7.5593E-004 * x + 5.1327E-005$$

$$R = 1.0000$$

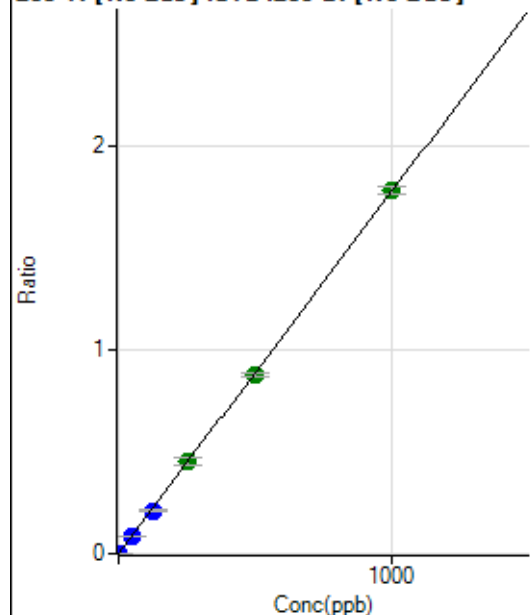
$$DL = 0.005287$$

$$BEC = 0.0679$$

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	538.92	0.0001	P	10.6
2	☐	1.000	0.981	9042.34	0.0019	P	3.5
3	☐	50.000	48.635	422439.28	0.0865	P	1.8
4	☐	125.000	118.335	1056537.03	0.2104	P	2.7
5	☐	250.000	256.326	2197791.07	0.4556	A	7.9
6	☐	500.000	494.184	4339784.82	0.8782	A	2.4
7	☐	1000.000	1002.228	8924276.33	1.7809	A	2.3
8	☐			2041.90	0.0004	P	9.1

$$y = 0.0018 * x + 1.0947E-004$$

$$R = 0.9999$$

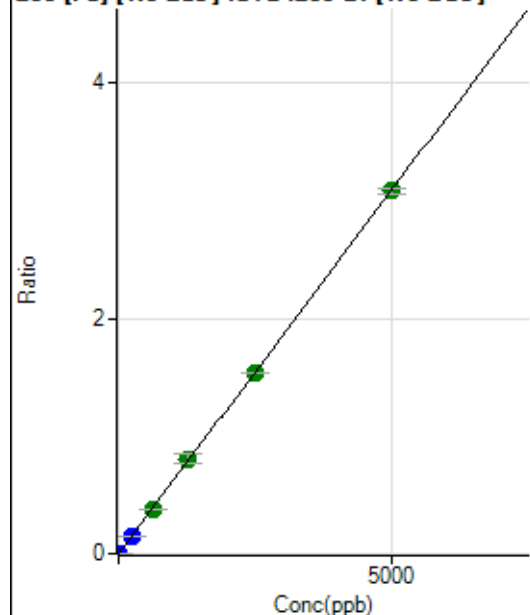
$$DL = 0.01952$$

$$BEC = 0.06161$$

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	446.31	0.0001	P	9.8
2	☐	1.000	0.941	3278.24	0.0007	P	5.2
3	☐	250.000	240.219	724974.95	0.1485	P	1.3
4	☐	625.000	609.623	1891976.69	0.3767	A	0.5
5	☐	1250.000	1305.259	3887964.55	0.8064	A	9.5
6	☐	2500.000	2494.068	7615427.26	1.5407	A	0.1
7	☐	5000.000	4991.562	15451646.53	3.0835	A	1.7
8	☐			3005.97	0.0007	P	6.7

$$y = 6.1773E-004 * x + 9.0673E-005$$

$$R = 0.9999$$

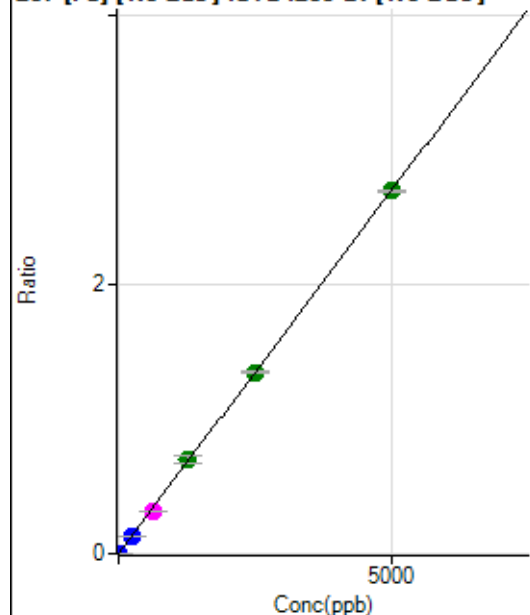
$$DL = 0.04313$$

$$BEC = 0.1468$$

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	364.83	0.0001	P	13.3
2	☐	1.000	0.954	2870.75	0.0006	P	6.3
3	☐	250.000	240.540	633296.43	0.1297	P	1.7
4	☐	625.000	586.287	1587722.02	0.3161	M	2.4
5	☐	1250.000	1289.730	3354158.99	0.6952	A	8.0
6	☐	2500.000	2499.366	6658713.05	1.3471	A	0.8
7	☐	5000.000	4995.697	13492058.64	2.6925	A	0.5
8	☐			2520.66	0.0006	P	9.8

$$y = 5.3895E-004 * x + 7.4061E-005$$

$$R = 0.9999$$

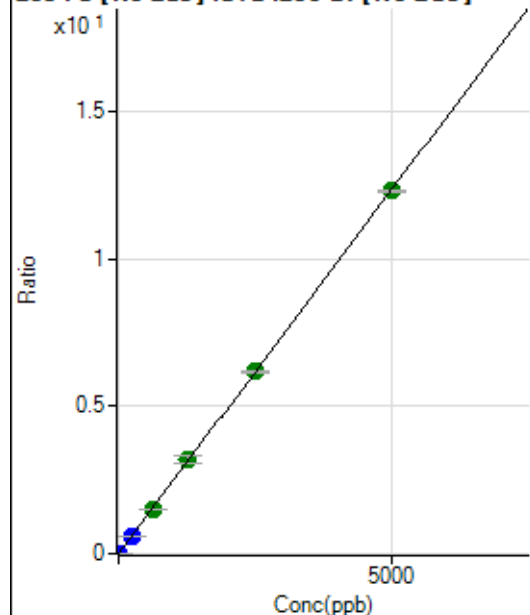
$$DL = 0.05476$$

$$BEC = 0.1374$$

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	1650.07	0.0003	P	13.0
2	☐	1.000	0.964	13241.82	0.0027	P	3.0
3	☐	250.000	241.226	2907200.43	0.5955	P	2.4
4	☐	625.000	604.781	7497109.28	1.4925	A	0.7
5	☐	1250.000	1296.048	15427646.82	3.1981	A	8.5
6	☐	2500.000	2510.057	30614164.75	6.1934	A	1.0
7	☐	5000.000	4986.425	61652188.77	12.3033	A	0.7
8	☐			11546.68	0.0025	P	8.2

$$y = 0.0025 * x + 3.3529E-004$$

$$R = 0.9999$$

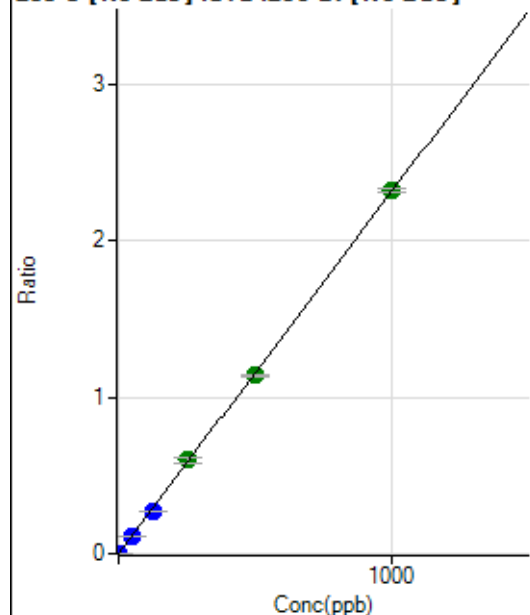
$$DL = 0.05284$$

$$BEC = 0.1359$$

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	66.67	0.0000	P	1.1
2	☐	1.000	0.972	11030.10	0.0023	P	1.6
3	☐	50.000	47.803	539606.48	0.1105	P	2.8
4	☐	125.000	117.149	1360330.87	0.2709	P	1.9
5	☐	250.000	257.999	2878408.92	0.5965	A	7.3
6	☐	500.000	492.310	5625731.03	1.1382	A	0.5
7	☐	1000.000	1002.936	11618981.51	2.3187	A	1.0
8	☐			763.93	0.0002	P	7.4

$$y = 0.0023 * x + 1.3536E-005$$

$$R = 0.9999$$

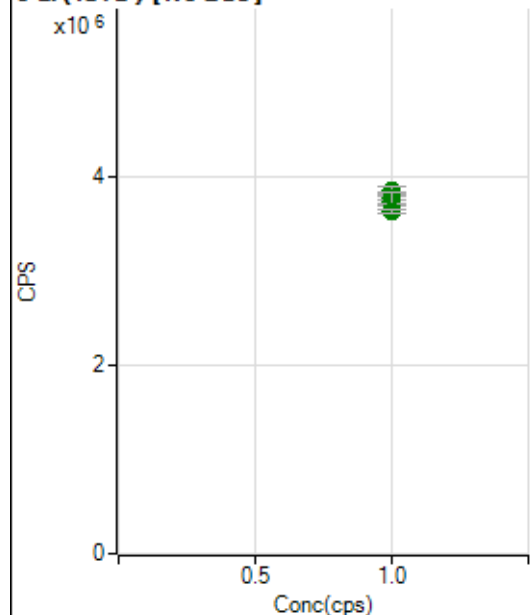
$$DL = 0.0002019$$

$$BEC = 0.005855$$

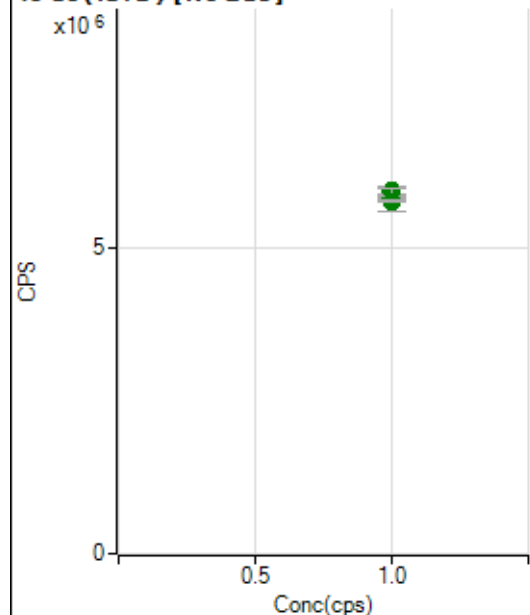
Weight: <None>

Min Conc: 0

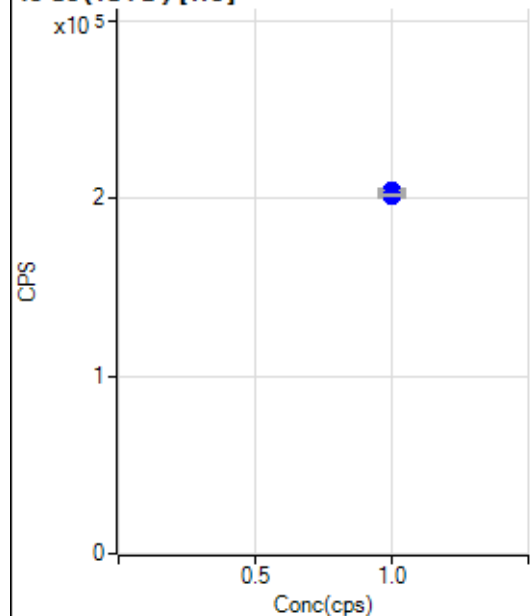
6 Li (ISTD) [No Gas]



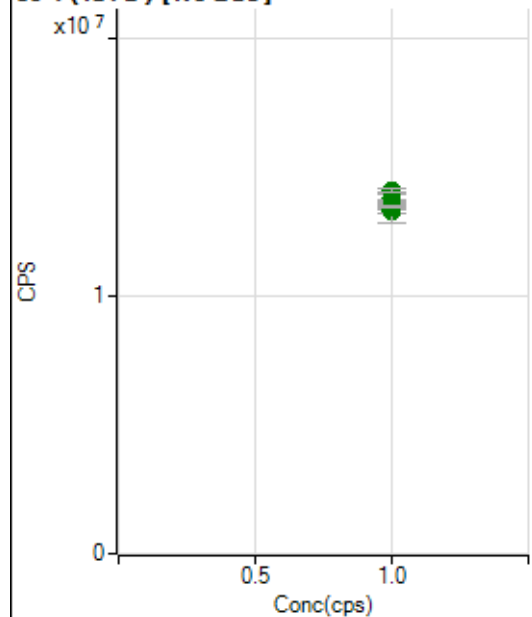
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3767044.08		A	2.0
2	☐	1.000		3806618.14		A	0.4
3	☐	1.000		3732780.59		A	1.4
4	☐	1.000		3860169.64		A	2.0
5	☐	1.000		3739579.74		A	6.2
6	☐	1.000		3788105.69		A	1.6
7	☐	1.000		3785546.06		A	2.9
8	☐	1.000		3636542.42		A	1.0

45 Sc (ISTD) [No Gas]

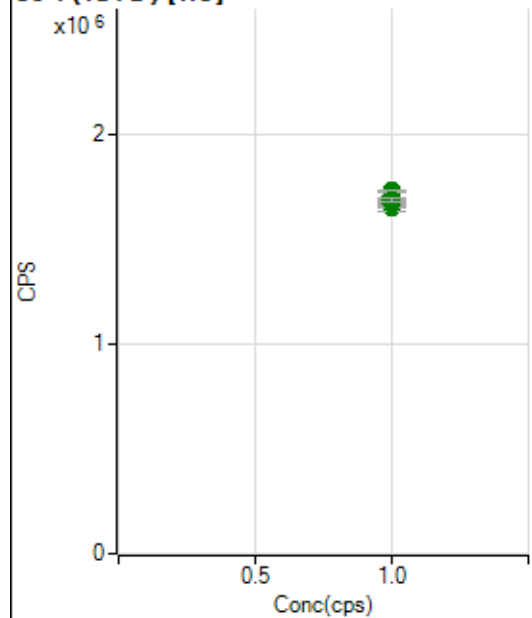
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5834828.18		A	1.6
2	☐	1.000		5838500.61		A	1.0
3	☐	1.000		5803292.13		A	1.2
4	☐	1.000		5929094.56		A	1.7
5	☐	1.000		5739078.73		A	4.6
6	☐	1.000		5915789.77		A	2.6
7	☐	1.000		5914465.81		A	2.3
8	☐	1.000		5766652.14		A	0.3

45 Sc (ISTD) [He]

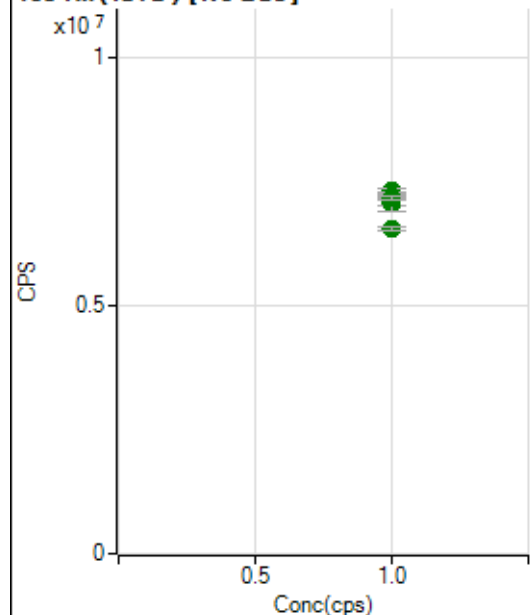
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		204459.73		P	0.8
2	☐	1.000		204314.26		P	2.0
3	☐	1.000		204244.22		P	1.0
4	☐	1.000		203243.68		P	0.0
5	☐	1.000		203534.35		P	1.5
6	☐	1.000		201769.29		P	0.8
7	☐	1.000		201785.42		P	1.8
8	☐	1.000		202014.32		P	0.5

89 Y (ISTD) [No Gas]

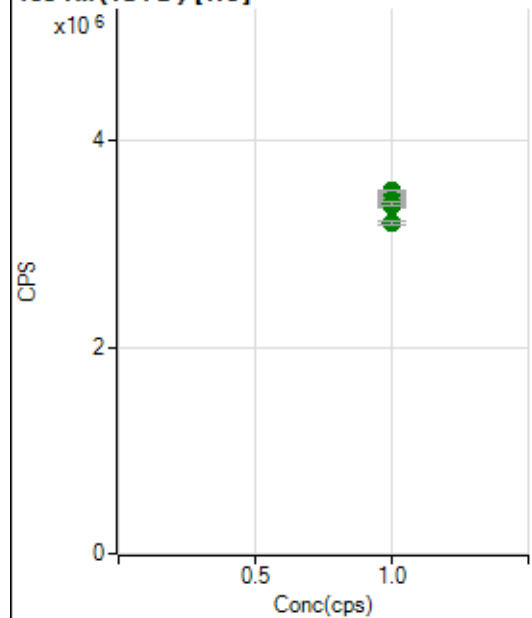
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13591940.08		A	1.2
2	☐	1.000		13502068.27		A	2.4
3	☐	1.000		13340887.30		A	2.2
4	☐	1.000		13837740.77		A	1.4
5	☐	1.000		13286968.55		A	6.3
6	☐	1.000		13807916.88		A	3.1
7	☐	1.000		14075915.62		A	1.2
8	☐	1.000		13447113.27		A	0.8

89 Y (ISTD) [He]

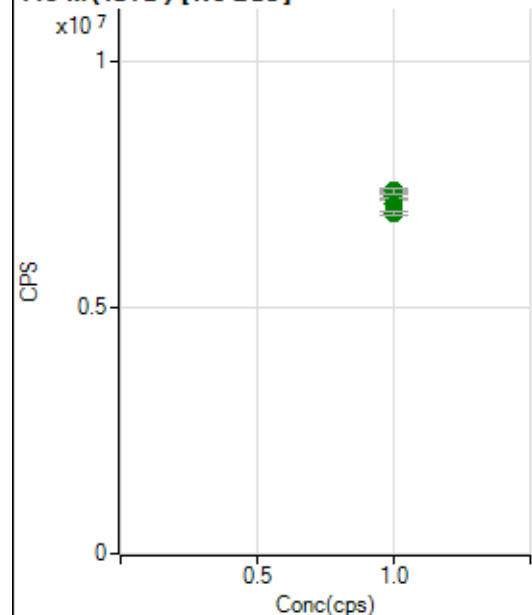
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1647414.30		A	1.5
2	☐	1.000		1687609.70		A	1.0
3	☐	1.000		1700151.31		A	2.6
4	☐	1.000		1672503.39		A	0.5
5	☐	1.000		1663871.35		A	1.7
6	☐	1.000		1681084.35		A	0.4
7	☐	1.000		1728901.45		A	0.6
8	☐	1.000		1688872.66		A	1.0

103 Rh (ISTD) [No Gas]

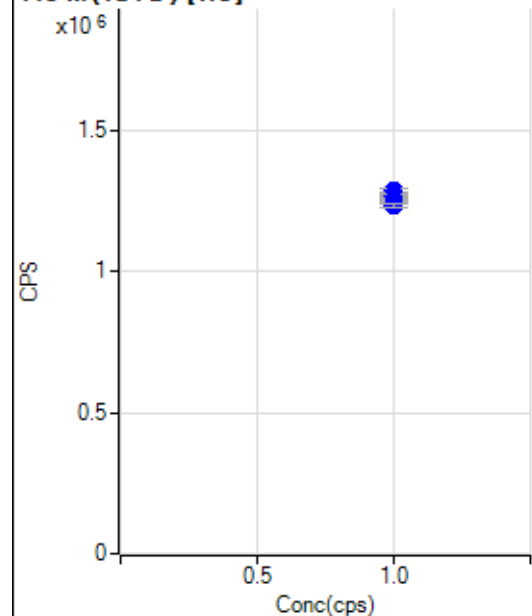
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7227674.38		A	2.2
2	☐	1.000		7322278.81		A	1.1
3	☐	1.000		7076205.63		A	1.6
4	☐	1.000		7227200.77		A	1.2
5	☐	1.000		7105199.85		A	5.4
6	☐	1.000		7199193.74		A	1.4
7	☐	1.000		7177120.13		A	1.0
8	☐	1.000		6552230.14		A	1.2

103 Rh (ISTD) [He]

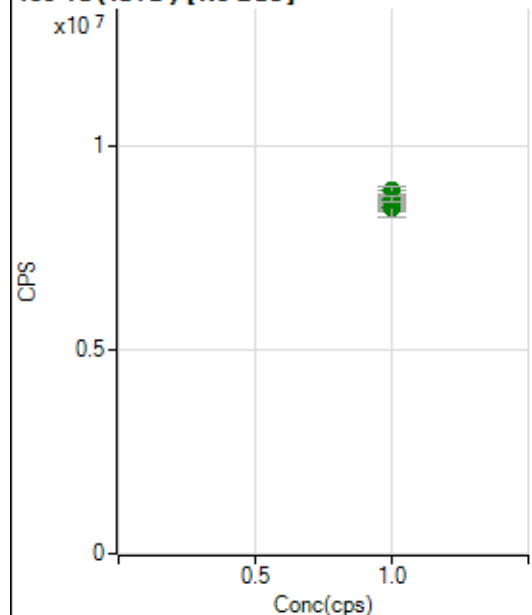
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3469038.42		A	0.9
2	☐	1.000		3442276.61		A	1.0
3	☐	1.000		3503588.98		A	1.4
4	☐	1.000		3516692.76		A	0.4
5	☐	1.000		3372592.21		A	1.2
6	☐	1.000		3438064.36		A	0.8
7	☐	1.000		3393566.37		A	1.2
8	☐	1.000		3210632.87		A	0.9

115 In (ISTD) [No Gas]

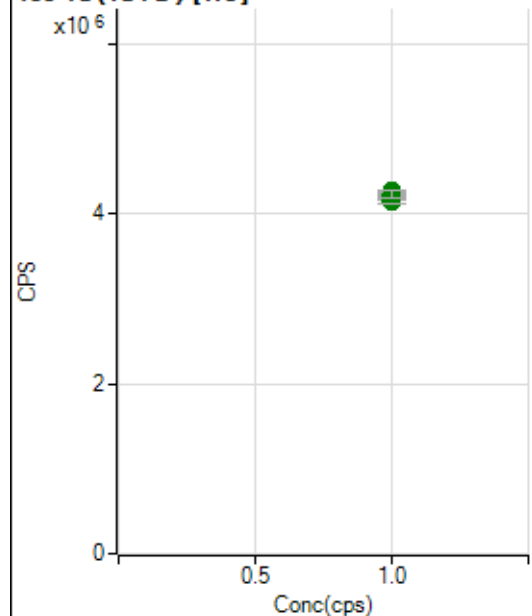
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7211629.40		A	0.3
2	☐	1.000		7293310.60		A	2.2
3	☐	1.000		7254268.00		A	2.0
4	☐	1.000		7297321.40		A	2.0
5	☐	1.000		7121383.07		A	6.8
6	☐	1.000		7269184.08		A	0.8
7	☐	1.000		7379055.77		A	1.5
8	☐	1.000		6932449.27		A	1.2

115 In (ISTD) [He]

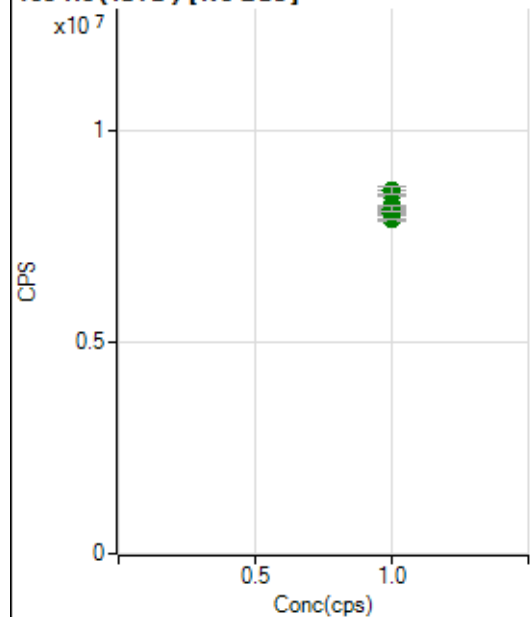
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1263304.28		P	0.7
2	☐	1.000		1283787.01		P	1.5
3	☐	1.000		1274476.78		P	0.6
4	☐	1.000		1264522.03		P	1.1
5	☐	1.000		1264727.08		P	1.1
6	☐	1.000		1254920.25		P	0.9
7	☐	1.000		1243682.51		P	0.5
8	☐	1.000		1233374.23		P	0.9

159 Tb (ISTD) [No Gas]

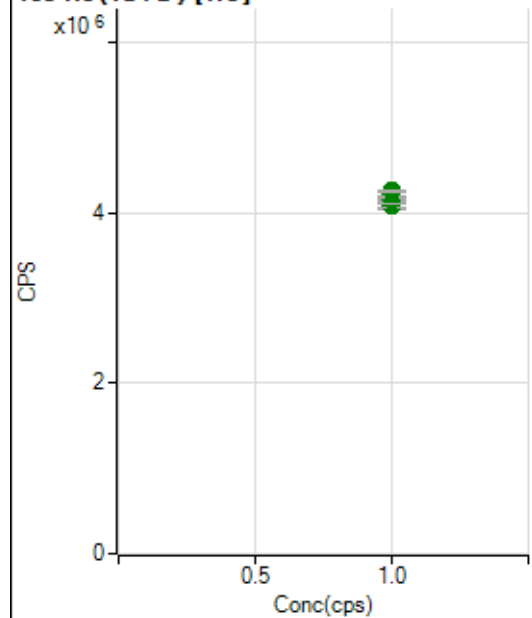
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8508067.72		A	0.7
2	☐	1.000		8479073.97		A	2.0
3	☐	1.000		8510050.29		A	1.2
4	☐	1.000		8648570.01		A	1.1
5	☐	1.000		8480518.48		A	5.2
6	☐	1.000		8841940.91		A	2.1
7	☐	1.000		8904280.29		A	2.0
8	☐	1.000		8704998.41		A	2.0

159 Tb (ISTD) [He]

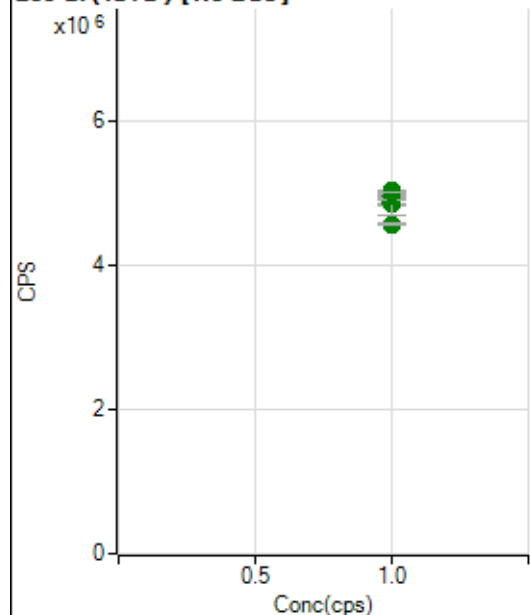
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4167552.06		A	2.6
2	☐	1.000		4182698.41		A	0.9
3	☐	1.000		4144175.64		A	0.8
4	☐	1.000		4209262.13		A	0.9
5	☐	1.000		4275547.06		A	0.7
6	☐	1.000		4174900.11		A	2.5
7	☐	1.000		4266666.08		A	0.3
8	☐	1.000		4237304.14		A	1.9

165 Ho (ISTD) [No Gas]

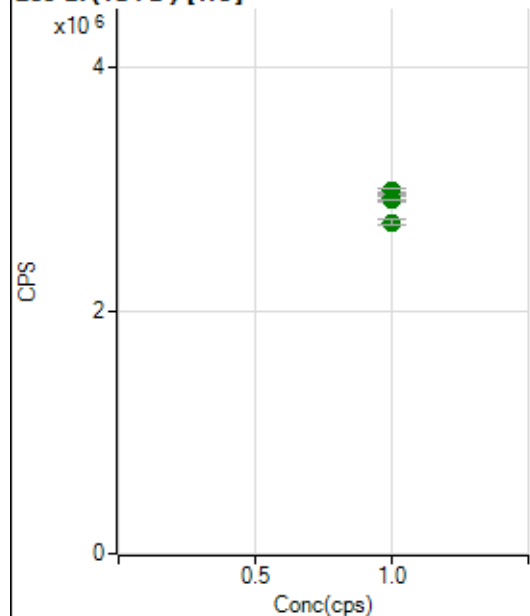
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7892532.21		A	0.4
2	☐	1.000		8083328.48		A	0.9
3	☐	1.000		8047333.78		A	1.5
4	☐	1.000		8203630.65		A	0.2
5	☐	1.000		8033659.55		A	3.4
6	☐	1.000		8500077.80		A	1.6
7	☐	1.000		8567527.19		A	2.2
8	☐	1.000		8147088.20		A	1.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4091984.66		A	1.0
2	☐	1.000		4088351.96		A	2.0
3	☐	1.000		4160144.94		A	0.2
4	☐	1.000		4095580.49		A	1.1
5	☐	1.000		4148834.10		A	2.3
6	☐	1.000		4220645.60		A	2.0
7	☐	1.000		4236777.44		A	1.8
8	☐	1.000		4259466.81		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4925782.57		A	1.2
2	☐	1.000		4880439.03		A	1.6
3	☐	1.000		4883703.02		A	2.5
4	☐	1.000		5022991.00		A	0.9
5	☐	1.000		4839792.78		A	6.0
6	☐	1.000		4942714.75		A	1.2
7	☐	1.000		5010945.00		A	0.3
8	☐	1.000		4558181.01		A	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2923159.36		A	1.6
2	☐	1.000		2974514.05		A	2.3
3	☐	1.000		2970427.25		A	0.5
4	☐	1.000		2958751.52		A	0.9
5	☐	1.000		2987819.26		A	1.7
6	☐	1.000		2926792.84		A	2.0
7	☐	1.000		2917324.79		A	0.3
8	☐	1.000		2731019.30		A	2.1

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8041823MS.b

Acq. Date-Time 2023-04-18 11:30:58

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		12105	121053.37			0.624	5.000
24		92403	924033.89			1.888	5.000
25		12360	123604.69			0.789	5.000
26		13910	139102.13			1.044	5.000
59		69977	699771.83			2.406	5.000
113		6855	68548.13			0.652	5.000
115		84302	843018.80			1.390	5.000
206		16431	164308.10			1.613	5.000
207		15050	150500.45			2.127	5.000
208		35547	355467.28			1.955	5.000
220		1	6.10			29.780	

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

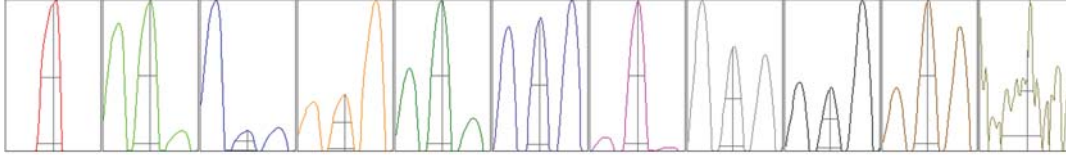
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	12167	12014	12158	12156	12032
24	95335	91585	91002	92637	91458
25	12360	12287	12528	12318	12309
26	13910	13840	14147	13896	13758
59	68683	69183	70109	72840	69071
113	6826	6792	6895	6867	6893
115	85397	84991	82354	84298	84469
206	16147	16467	16178	16610	16751
207	14712	15067	14867	15042	15562
208	34532	35537	35554	35615	36495

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	20917.89	9.05	8.90 - 9.10	
24	162849.23	24.00	23.90 - 24.10	
25	21768.49	25.00	24.90 - 25.10	
26	24822.97	26.00	25.90 - 26.10	
59	131695.28	59.00	58.90 - 59.10	
113	13845.50	113.00	112.90 - 113.10	
115	172982.88	115.05	114.90 - 115.10	
206	33160.57	205.95	205.90 - 206.10	
207	30700.74	206.95	206.90 - 207.10	
208	72702.86	207.95	207.90 - 208.10	
220	0.90	220.05	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.777	0.900	
24	0.60	0.818	0.900	
25	0.59	0.780	0.900	
26	0.60	0.822	0.900	
59	0.56	0.768	0.900	
113	0.51	0.691	0.900	
115	0.50	0.758	0.900	
206	0.50	0.767	0.900	
207	0.49	0.772	0.900	
208	0.49	0.773	0.900	
220	0.40	1.242		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.84 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	10.2 V	Deflect	15.2 V
Extract 2	-180.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	140 V		

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-1.0 mm
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EM

Discriminator	4.5 mV	Analog HV	2316 V	Pulse HV	1698 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		15227	152269.25			0.817	
89		12404	124039.52			0.478	
205		14099	140993.48			0.545	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	15061	15229	15408	15242	15194
89	12316	12402	12448	12386	12467
205	14135	14165	14074	14147	13976

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.84 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	10.2 V	Deflect	3.8 V
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US EPA Tune Check Report

Extract 2	-180.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

Cell Parameters

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

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-1.0 mm
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EM

Discriminator	4.5 mV	Analog HV	2316 V	Pulse HV	1698 V
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