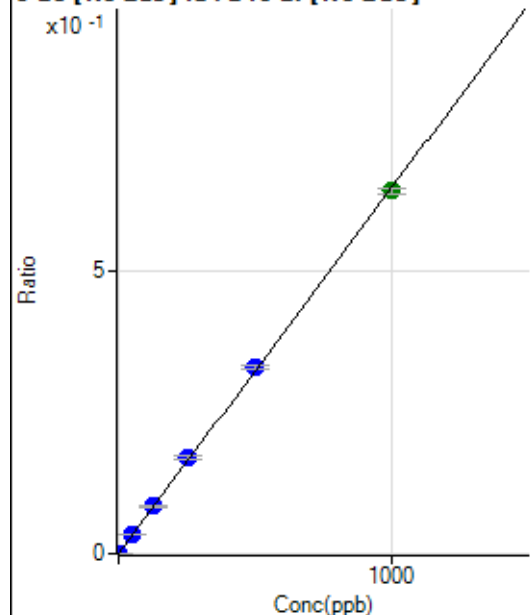


Batch Folder: D:\Agilent\ICPMH\1\DATA\P7120322MS.b\
Analysis File: P7120322MS.batch.bin
DA Date-Time: 2022-12-03 16:31:38
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S0	2022-12-03 12:14:45
2	005CALS.d	S02	2022-12-03 12:17:36
3	006CALS.d	S03	2022-12-03 12:20:29
4	007CALS.d	S04	2022-12-03 12:23:14
5	008CALS.d	S05	2022-12-03 12:26:00
6	009CALS.d	S06	2022-12-03 12:28:44
7	010CALS.d	S07	2022-12-03 12:31:30
8	011CALS.d	S08	2022-12-03 12:34:14

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	42.22	0.0000	P	13.2
2	☐	1.000	1.055	1730.11	0.0007	P	7.1
3	☐	50.000	52.822	89081.20	0.0342	P	1.6
4	☐	125.000	129.939	220410.13	0.0842	P	2.5
5	☐	250.000	261.021	437137.21	0.1691	P	3.6
6	☐	500.000	508.867	852133.50	0.3296	P	2.0
7	☐	1000.000	992.053	1625835.39	0.6426	A	1.6
8	☐			657.81	0.0003	P	26.0

$$y = 6.4769\text{E-}004 * x + 1.6752\text{E-}005$$

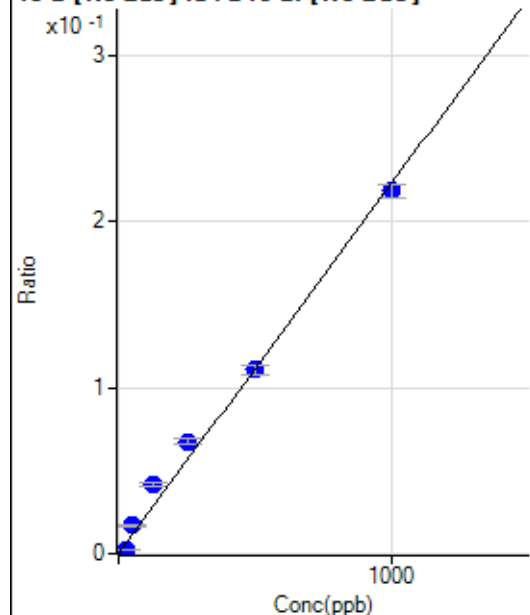
$$R = 0.9999$$

$$DL = 0.01024$$

$$BEC = 0.02586$$

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	216.67	0.0001	P	25.8
2	☐	25.000	8.604	4945.35	0.0020	P	7.5
3	☐	50.000	75.469	43943.82	0.0169	P	6.7
4	☐	125.000	187.204	109312.86	0.0418	P	5.6
5	☐	250.000	302.196	174083.22	0.0674	P	6.0
6	☐	500.000	496.819	286192.07	0.1107	P	5.0
7	☐	1000.000	979.903	552076.51	0.2182	P	3.7
8	☐			17727.25	0.0074	P	11.6

$$y = 2.2259\text{E-}004 * x + 8.5983\text{E-}005$$

$$R = 0.9963$$

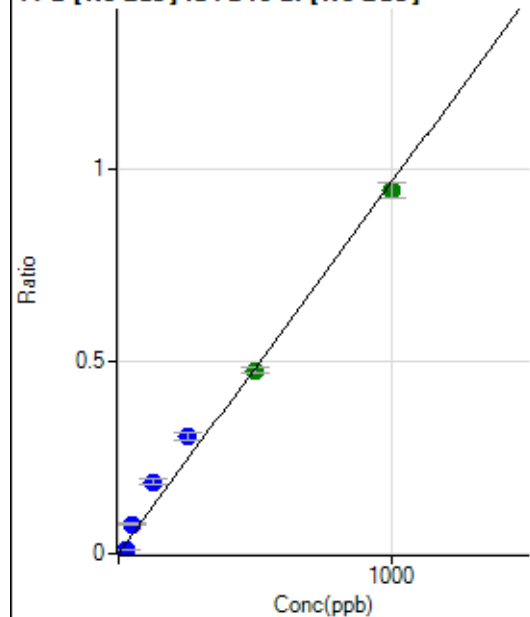
$$DL = 0.2993$$

$$BEC = 0.3863$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	880.60	0.0003	P	11.3
2	☐	25.000	9.086	22472.35	0.0091	P	4.2
3	☐	50.000	78.135	196660.10	0.0756	P	6.7
4	☐	125.000	193.948	489705.30	0.1871	P	5.5
5	☐	250.000	317.313	790455.32	0.3058	P	6.6
6	☐	500.000	492.562	1227138.49	0.4745	A	3.0
7	☐	1000.000	977.263	2381168.26	0.9411	A	4.3
8	☐			80692.11	0.0339	P	7.8

$$y = 9.6266E-004 * x + 3.4876E-004$$

$$R = 0.9948$$

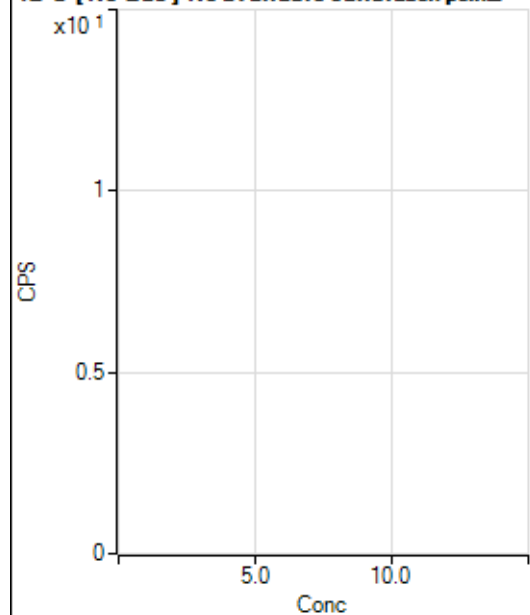
$$DL = 0.1224$$

$$BEC = 0.3623$$

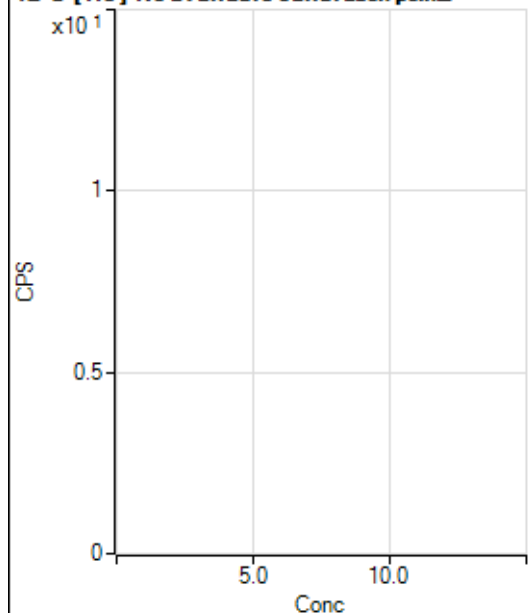
Weight: <None>

Min Conc: 0

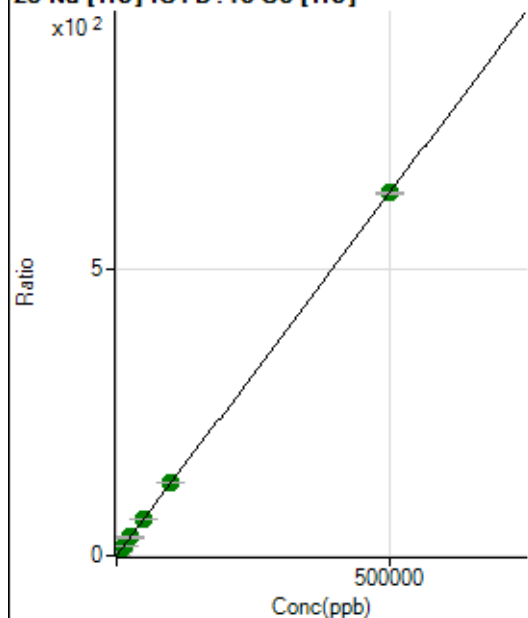
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	15656.28	0.0367	P	0.3
2	☐	500.000	491.396	276155.49	0.6569	P	0.2
3	☐	5000.000	5102.488	2699931.14	6.4761	A	1.3
4	☐	12500.000	12840.937	6630946.91	16.2421	A	1.0
5	☐	25000.000	25169.919	12865578.53	31.8013	A	0.5
6	☐	50000.000	49688.344	24888790.60	62.7437	A	0.8
7	☐	100000.00	99683.498	49733448.80	125.8379	A	0.3
8	☐	500000.00	500076.43	252875553.8	631.1362	A	0.7

$$y = 0.0013 * x + 0.0367$$

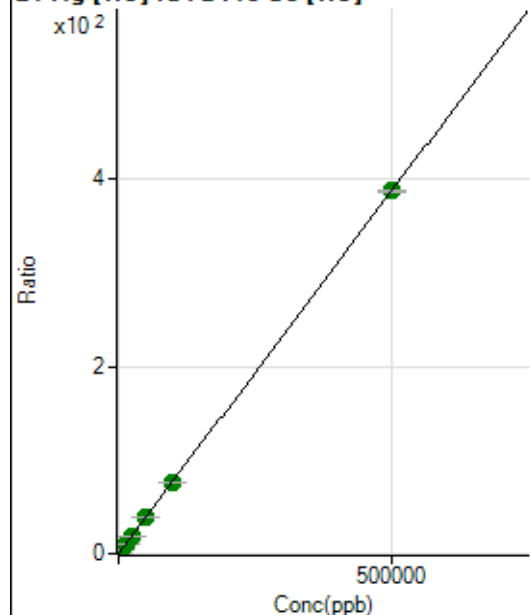
$$R = 1.0000$$

$$DL = 0.2573$$

$$BEC = 29.1$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	337.05	0.0008	P	4.7
2	☐	500.000	480.861	157074.18	0.3736	P	1.1
3	☐	5000.000	5140.535	1662049.31	3.9866	A	1.3
4	☐	12500.000	12763.258	4040668.06	9.8970	A	0.8
5	☐	25000.000	25003.561	7843425.93	19.3876	A	0.6
6	☐	50000.000	49461.983	15213332.17	38.3518	A	0.3
7	☐	100000.00	98603.199	30215980.54	76.4541	A	0.2
8	☐	500000.00	500325.01	155429566.4	387.9345	A	0.6

$$y = 7.7536\text{E-}004 * x + 7.9061\text{E-}004$$

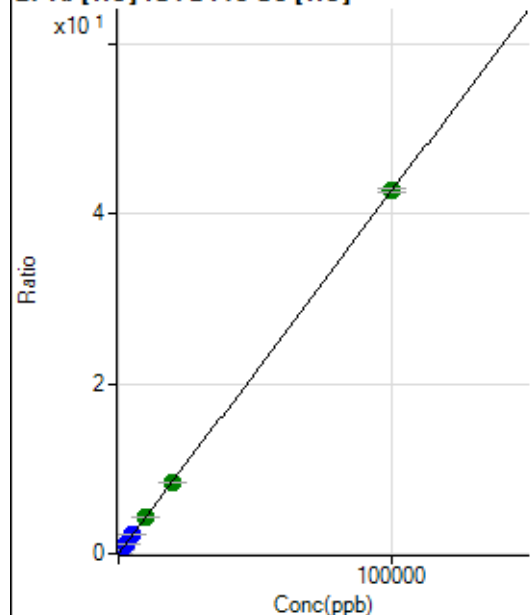
$$R = 1.0000$$

$$DL = 0.144$$

$$BEC = 1.02$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.85	0.0002	P	46.3
2	☐	20.000	20.819	3835.73	0.0091	P	2.3
3	☐	1000.000	1100.626	195944.80	0.4700	P	0.1
4	☐	2500.000	2615.892	455906.42	1.1167	P	0.3
5	☐	5000.000	5063.659	874414.97	2.1614	P	0.0
6	☐	10000.000	9851.320	1667912.51	4.2047	A	0.5
7	☐	20000.000	19707.296	3324218.07	8.4112	A	0.4
8	☐	100000.00	100066.32	17111173.42	42.7079	A	0.9

$$y = 4.2679\text{E-}004 * x + 2.3887\text{E-}004$$

$$R = 1.0000$$

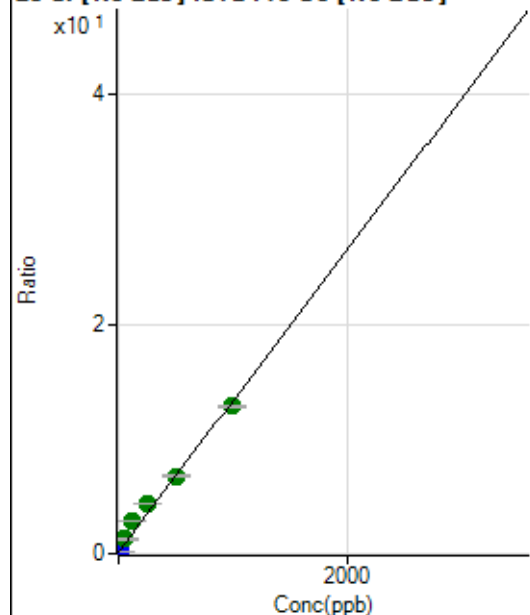
$$DL = 0.7774$$

$$BEC = 0.5597$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	784604.56	0.1358	P	1.0
2	☐	10.000	1.022	843281.73	0.1492	P	1.7
3	☐	50.000	85.353	7248902.42	1.2576	A	1.2
4	☐	125.000	210.239	16349064.95	2.8990	A	2.2
5	☐	250.000	323.715	24969015.32	4.3905	A	1.5
6	☐	500.000	505.297	37916792.86	6.7771	A	1.3
7	☐	1000.000	966.590	71877832.16	12.8400	A	1.7
8	☐			1246316.13	0.2270	A	1.2

$$y = 0.0131 * x + 0.1358$$

$$R = 0.9935$$

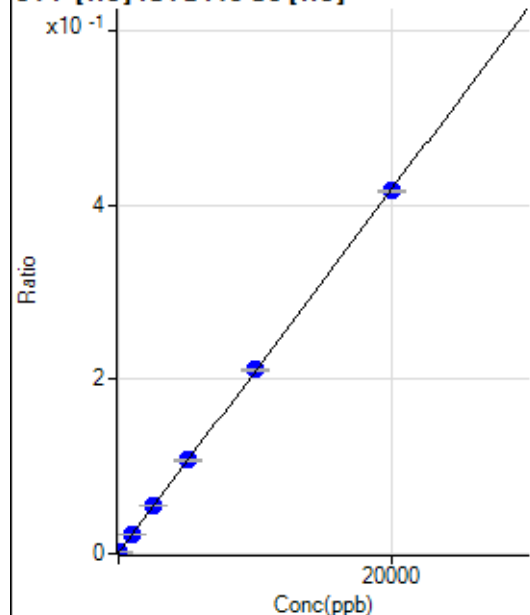
$$DL = 0.3174$$

$$BEC = 10.33$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-9.128	327.79	0.0008	P	7.5
2	☐	0.000	9.128	483.35	0.0011	P	2.3
3	☐	1000.000	1017.026	9247.45	0.0222	P	4.7
4	☐	2500.000	2606.537	22597.67	0.0554	P	1.2
5	☐	5000.000	5103.218	43470.63	0.1075	P	1.4
6	☐	10000.000	10069.886	83734.48	0.2111	P	0.9
7	☐	20000.000	19925.084	164707.20	0.4167	P	0.7
8	☐			391.68	0.0010	P	10.8

$$y = 2.0868E-005 * x + 9.5931E-004$$

$$R = 1.0000$$

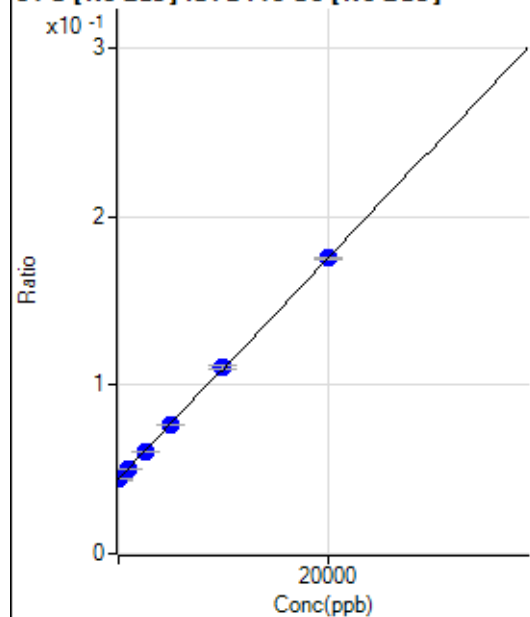
$$DL = 6.025$$

$$BEC = 45.97$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-70.113	254311.08	0.0440	P	1.4
2	☐	0.000	70.113	253930.15	0.0449	P	0.8
3	☐	1000.000	941.888	291910.54	0.0506	P	0.6
4	☐	2500.000	2491.781	342898.40	0.0608	P	0.7
5	☐	5000.000	4901.940	435609.58	0.0766	P	1.0
6	☐	10000.000	10106.086	619380.42	0.1107	P	1.3
7	☐	20000.000	19975.405	981882.41	0.1754	P	1.1
8	☐			227870.49	0.0415	P	2.3

$$y = 6.5543\text{E-}006 * x + 0.0445$$

R = 0.9999

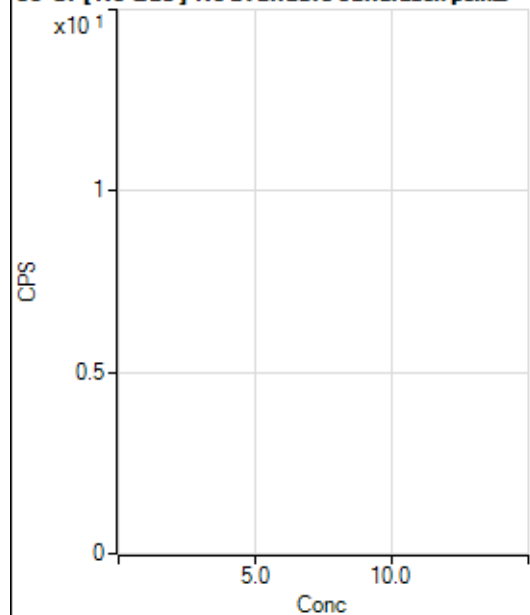
DL = 215.4

BEC = 6785

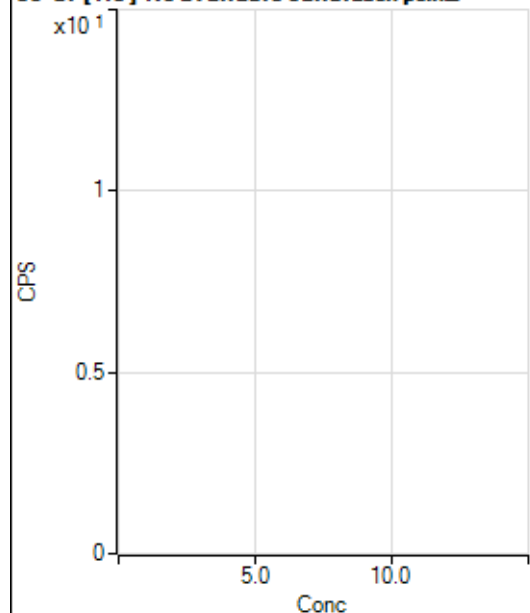
Weight: <None>

Min Conc: 0

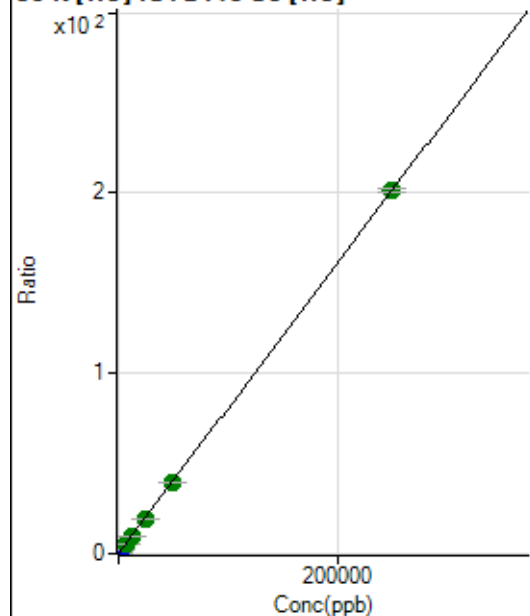
35 Cl [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	62810.74	0.1473	P	3.0
2	☐	500.000	509.664	234052.91	0.5567	P	0.4
3	☐	2500.000	2708.075	968373.92	2.3227	P	0.6
4	☐	6250.000	6235.618	2105195.34	5.1564	A	0.3
5	☐	12500.000	12256.489	4042767.75	9.9929	A	0.2
6	☐	25000.000	24246.461	7784752.69	19.6244	A	0.4
7	☐	50000.000	49189.655	15674627.09	39.6612	A	0.8
8	☐	250000.00	250247.85	80600096.94	201.1706	A	0.9

$$y = 8.0330E-004 * x + 0.1473$$

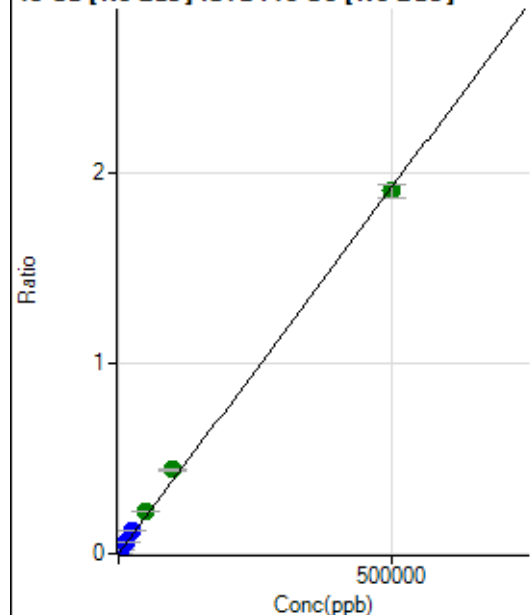
$$R = 1.0000$$

$$DL = 16.69$$

$$BEC = 183.4$$

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	125.00	0.0000	P	47.8
2	☐	500.000	533.688	11688.08	0.0021	P	1.6
3	☐	5000.000	6190.988	136966.95	0.0238	P	1.7
4	☐	12500.000	15628.489	338090.71	0.0600	P	1.3
5	☐	25000.000	30802.760	671868.43	0.1181	P	1.3
6	☐	50000.000	57710.682	1238286.56	0.2213	A	1.5
7	☐	100000.00	114976.78	2468163.05	0.4409	A	2.4
8	☐	500000.00	495853.28	10438491.82	1.9014	A	3.7

$$y = 3.8346\text{E-}006 * x + 2.1628\text{E-}005$$

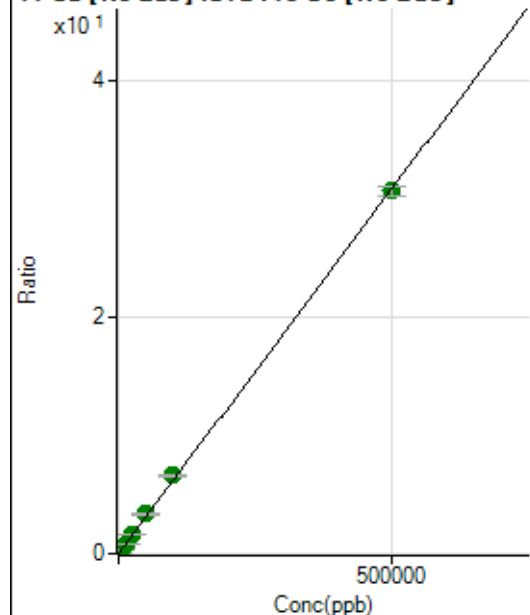
$$R = 0.9995$$

$$DL = 8.096$$

$$BEC = 5.64$$

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	16690.24	0.0029	P	1.4
2	☐	500.000	525.184	198945.37	0.0352	P	0.8
3	☐	5000.000	5523.623	1975400.43	0.3427	A	1.5
4	☐	12500.000	13812.687	4808782.62	0.8527	A	1.3
5	☐	25000.000	27219.706	9539895.96	1.6775	A	1.8
6	☐	50000.000	54304.003	18707396.08	3.3437	A	1.1
7	☐	100000.00	108091.99	37241169.58	6.6528	A	2.4
8	☐	500000.00	497802.13	168162792.6	30.6282	A	2.3

$$y = 6.1521\text{E-}005 * x + 0.0029$$

$$R = 0.9998$$

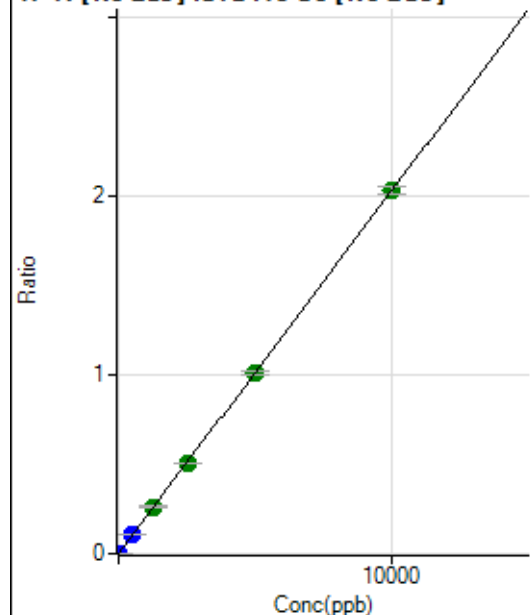
$$DL = 1.942$$

$$BEC = 46.95$$

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	83.34	0.0000	P	9.2
2	☐	5.000	4.473	5203.80	0.0009	P	4.5
3	☐	500.000	526.294	614773.11	0.1067	P	2.4
4	☐	1250.000	1282.904	1465976.94	0.2600	A	2.9
5	☐	2500.000	2496.318	2876689.04	0.5058	A	1.8
6	☐	5000.000	4983.309	5649393.18	1.0098	A	1.5
7	☐	10000.000	10003.839	11347353.20	2.0271	A	2.1
8	☐			3050.55	0.0006	P	20.6

$$y = 2.0263\text{E-}004 * x + 1.4414\text{E-}005$$

$$R = 1.0000$$

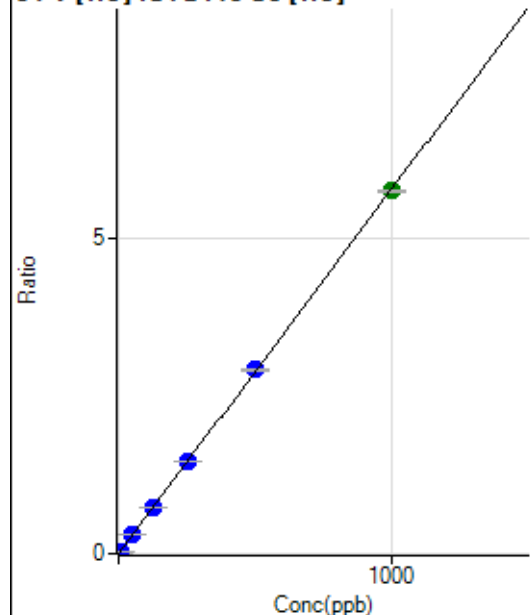
$$DL = 0.01967$$

$$BEC = 0.07113$$

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	3.33	0.0000	P	0.6
2	☐	5.000	4.868	11849.17	0.0282	P	1.1
3	☐	50.000	51.142	123433.89	0.2961	P	0.1
4	☐	125.000	128.328	303288.35	0.7429	P	0.5
5	☐	250.000	253.083	592697.08	1.4651	P	0.5
6	☐	500.000	505.687	1161183.42	2.9273	P	0.6
7	☐	1000.000	995.913	2278459.24	5.7651	A	0.4
8	☐			720.02	0.0018	P	8.8

$$y = 0.0058 * x + 7.8100\text{E-}006$$

$$R = 1.0000$$

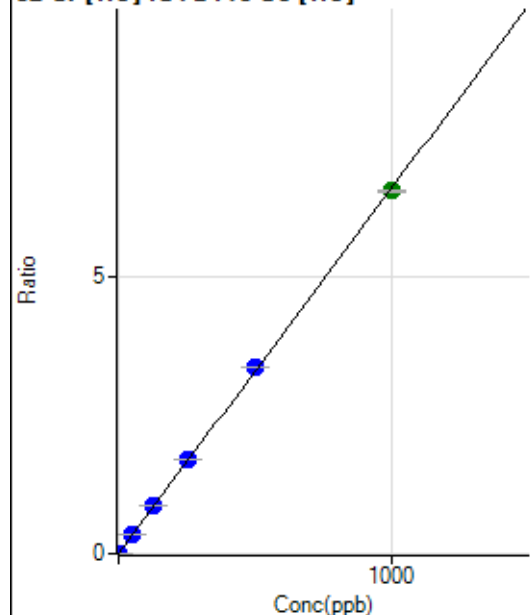
$$DL = 2.37\text{E-}05$$

$$BEC = 0.001349$$

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	785.59	0.0018	P	6.2
2	☐	2.000	2.002	6341.40	0.0151	P	1.9
3	☐	50.000	51.985	144082.61	0.3456	P	0.1
4	☐	125.000	130.142	352080.49	0.8624	P	0.3
5	☐	250.000	257.029	688305.25	1.7014	P	1.0
6	☐	500.000	508.905	1335561.91	3.3669	P	0.4
7	☐	1000.000	993.048	2595894.60	6.5682	A	0.6
8	☐			16484.63	0.0411	P	1.0

$$y = 0.0066 * x + 0.0018$$

$$R = 0.9999$$

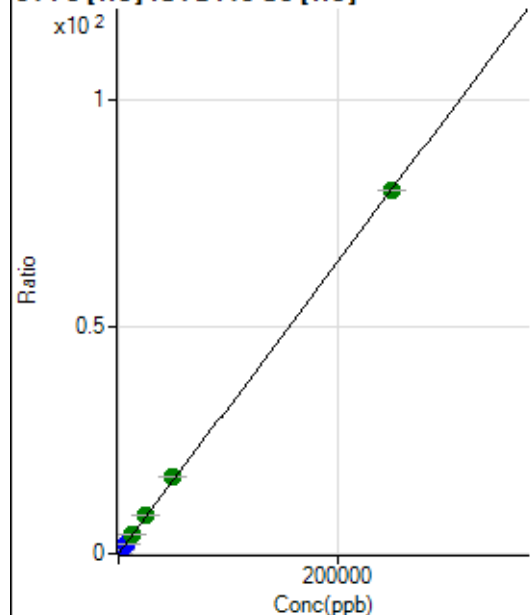
$$DL = 0.0516$$

$$BEC = 0.2786$$

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	1478.27	0.0035	P	11.3
2	☐	50.000	53.612	8681.43	0.0207	P	3.5
3	☐	2500.000	2841.367	381190.82	0.9143	P	0.5
4	☐	6250.000	7072.406	927001.97	2.2706	P	0.4
5	☐	12500.000	13174.288	1709875.71	4.2266	A	1.1
6	☐	25000.000	26227.232	3336301.62	8.4109	A	0.9
7	☐	50000.000	52513.415	6654471.53	16.8371	A	0.4
8	☐	250000.00	249316.90	32022998.75	79.9244	A	0.2

$$y = 3.2056E-004 * x + 0.0035$$

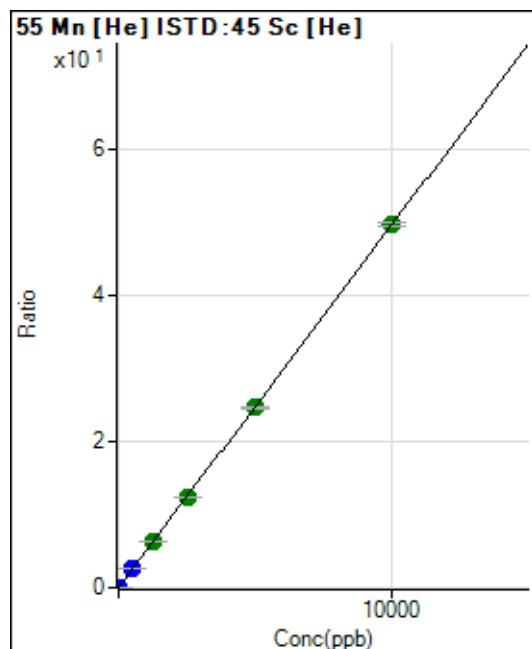
$$R = 0.9999$$

$$DL = 3.67$$

$$BEC = 10.81$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	120.00	0.0003	P	28.3
2	☐	1.000	1.100	2411.33	0.0057	P	5.6
3	☐	500.000	520.433	1075679.76	2.5800	P	0.2
4	☐	1250.000	1270.416	2571106.30	6.2976	A	0.7
5	☐	2500.000	2506.445	5026403.29	12.4246	A	0.8
6	☐	5000.000	4964.660	9761637.77	24.6098	A	1.3
7	☐	10000.000	10012.485	19616065.68	49.6315	A	1.0
8	☐			24269.61	0.0606	P	0.6

$$y = 0.0050 * x + 2.8175E-004$$

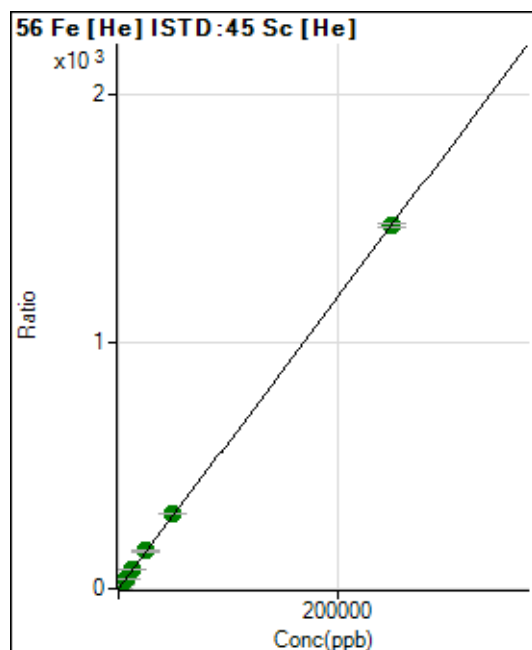
$$R = 1.0000$$

$$DL = 0.04833$$

$$BEC = 0.05684$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7642.80	0.0179	P	1.2
2	☐	50.000	51.864	136029.08	0.3236	P	0.6
3	☐	2500.000	2633.555	6478067.85	15.5376	A	0.5
4	☐	6250.000	6612.445	15916372.23	38.9853	A	0.3
5	☐	12500.000	13115.692	31276223.85	77.3092	A	0.7
6	☐	25000.000	25831.903	60390017.55	152.2464	A	1.3
7	☐	50000.000	51542.867	120050338.8	303.7622	A	0.6
8	☐	250000.00	249567.05	589255857.6	1,470.726	A	1.0

$$y = 0.0059 * x + 0.0179$$

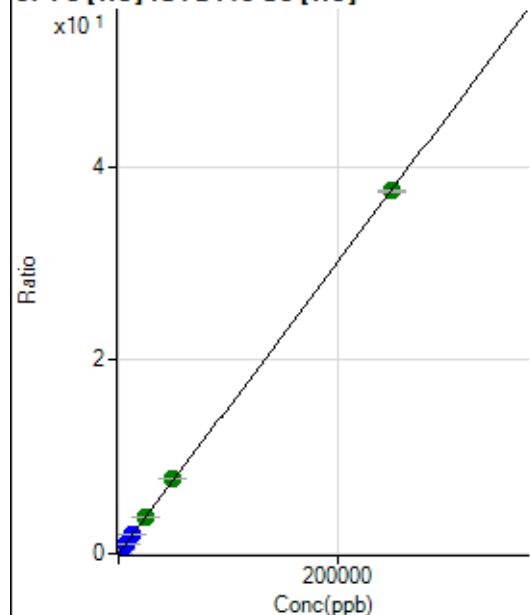
$$R = 1.0000$$

$$DL = 0.1069$$

$$BEC = 3.042$$

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	1301.93	0.0031	P	2.9
2	☐	50.000	54.447	4719.33	0.0112	P	3.6
3	☐	2500.000	2728.220	172029.80	0.4126	P	0.5
4	☐	6250.000	6807.903	418497.12	1.0251	P	0.3
5	☐	12500.000	13479.478	819877.45	2.0266	P	0.6
6	☐	25000.000	25507.350	1520099.21	3.8322	A	1.6
7	☐	50000.000	51549.656	3059649.40	7.7417	A	1.3
8	☐	250000.00	249574.12	15012471.52	37.4694	A	0.8

$$y = 1.5012\text{E-}004 * x + 0.0031$$

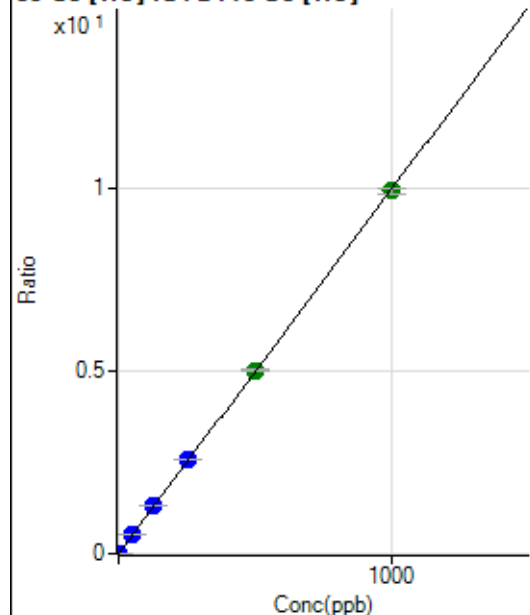
$$R = 1.0000$$

$$DL = 1.778$$

$$BEC = 20.34$$

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	51.11	0.0001	P	10.0
2	☐	1.000	1.006	4277.32	0.0102	P	4.5
3	☐	50.000	52.634	219379.45	0.5262	P	0.4
4	☐	125.000	131.000	534604.23	1.3094	P	0.5
5	☐	250.000	257.801	1042469.11	2.5768	P	0.6
6	☐	500.000	502.760	1993450.06	5.0252	A	1.0
7	☐	1000.000	995.788	3933384.39	9.9529	A	1.4
8	☐			7026.15	0.0175	P	1.9

$$y = 0.0100 * x + 1.1988\text{E-}004$$

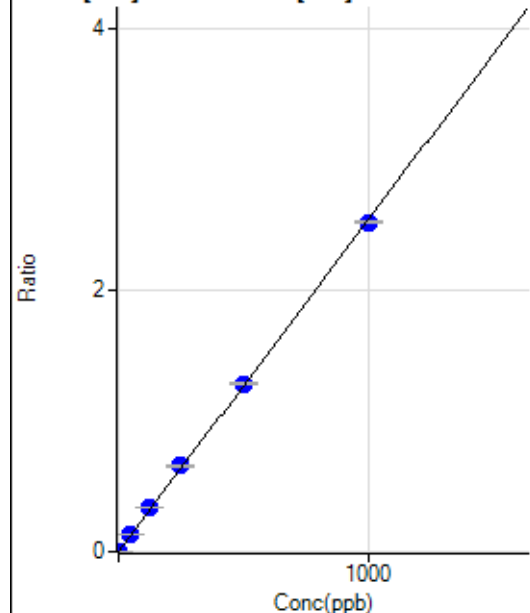
$$R = 1.0000$$

$$DL = 0.003609$$

$$BEC = 0.01199$$

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	168.89	0.0004	P	1.9
2	☐	1.000	1.009	1243.40	0.0030	P	2.6
3	☐	50.000	54.676	58055.04	0.1392	P	0.5
4	☐	125.000	131.819	136835.02	0.3352	P	0.4
5	☐	250.000	258.744	265991.18	0.6575	P	0.7
6	☐	500.000	505.866	509743.19	1.2851	P	1.0
7	☐	1000.000	993.795	997599.97	2.5242	P	0.3
8	☐			4015.02	0.0100	P	0.9

$$y = 0.0025 * x + 3.9609E-004$$

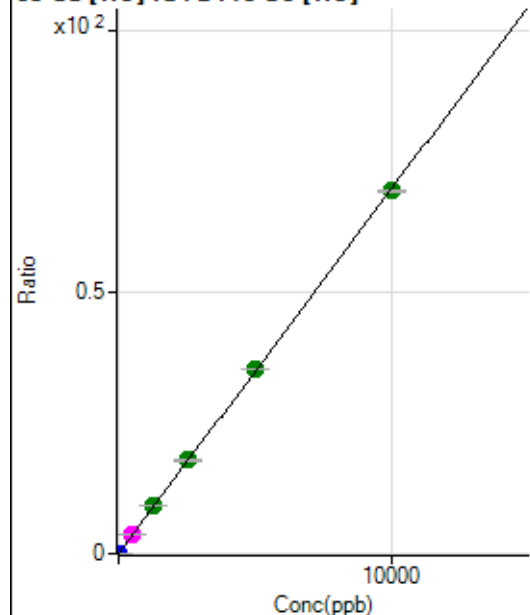
$$R = 0.9999$$

$$DL = 0.008777$$

$$BEC = 0.156$$

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	803.36	0.0019	P	3.5
2	☐	2.000	2.106	6969.46	0.0166	P	2.5
3	☐	500.000	529.663	1541352.39	3.6971	M	1.7
4	☐	1250.000	1314.868	3745817.24	9.1750	A	0.6
5	☐	2500.000	2565.407	7241303.99	17.8994	A	0.9
6	☐	5000.000	5055.348	13990838.82	35.2704	A	0.6
7	☐	10000.000	9946.383	27425020.70	69.3926	A	0.4
8	☐			6675.98	0.0167	P	3.3

$$y = 0.0070 * x + 0.0019$$

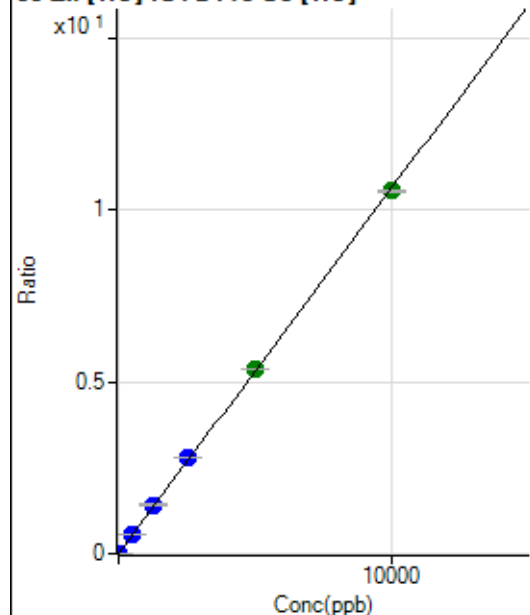
$$R = 0.9999$$

$$DL = 0.02836$$

$$BEC = 0.2701$$

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	645.58	0.0015	P	5.9
2	☐	2.000	2.223	1631.22	0.0039	P	4.6
3	☐	500.000	540.624	240551.88	0.5770	P	1.1
4	☐	1250.000	1339.333	582662.96	1.4271	P	0.3
5	☐	2500.000	2633.336	1134601.69	2.8045	P	0.5
6	☐	5000.000	5053.951	2134706.72	5.3811	A	0.8
7	☐	10000.000	9926.493	4176660.91	10.5676	A	0.8
8	☐			4855.27	0.0121	P	0.5

$$y = 0.0011 * x + 0.0015$$

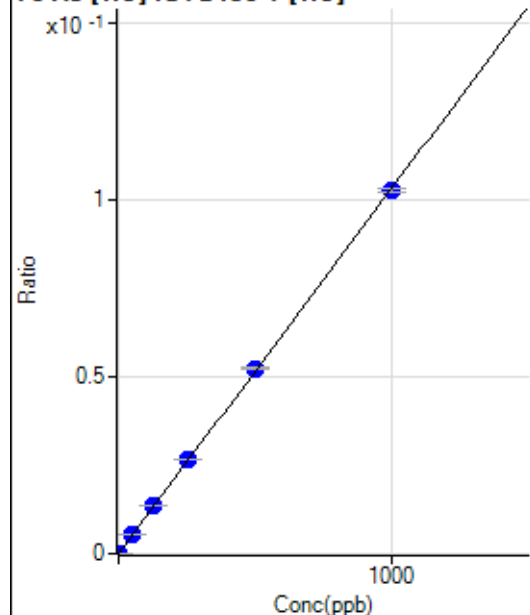
$$R = 0.9999$$

$$DL = 0.2497$$

$$BEC = 1.422$$

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	2.47	0.0000	P	42.9
2	☐	1.000	1.121	334.57	0.0001	P	4.4
3	☐	50.000	52.238	15199.14	0.0054	P	0.7
4	☐	125.000	129.390	37405.46	0.0133	P	0.4
5	☐	250.000	257.636	73456.46	0.0265	P	0.7
6	☐	500.000	507.207	143310.96	0.0522	P	0.7
7	☐	1000.000	993.827	284181.76	0.1024	P	1.2
8	☐			109.26	0.0000	P	14.1

$$y = 1.0299E-004 * x + 8.4752E-007$$

$$R = 0.9999$$

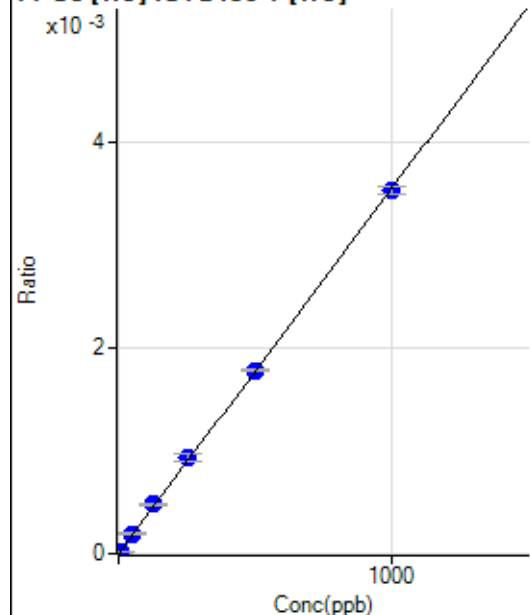
$$DL = 0.01058$$

$$BEC = 0.008229$$

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	173.
2	☐	5.000	5.245	55.55	0.0000	P	24.7
3	☐	50.000	54.676	548.90	0.0002	P	3.9
4	☐	125.000	135.106	1344.52	0.0005	P	3.3
5	☐	250.000	263.762	2586.92	0.0009	P	7.0
6	☐	500.000	501.509	4873.07	0.0018	P	1.3
7	☐	1000.000	994.307	9775.52	0.0035	P	2.0
8	☐			6.67	0.0000	P	50.1

$$y = 3.5403\text{E-}006 * x + 7.6139\text{E-}007$$

$$R = 0.9999$$

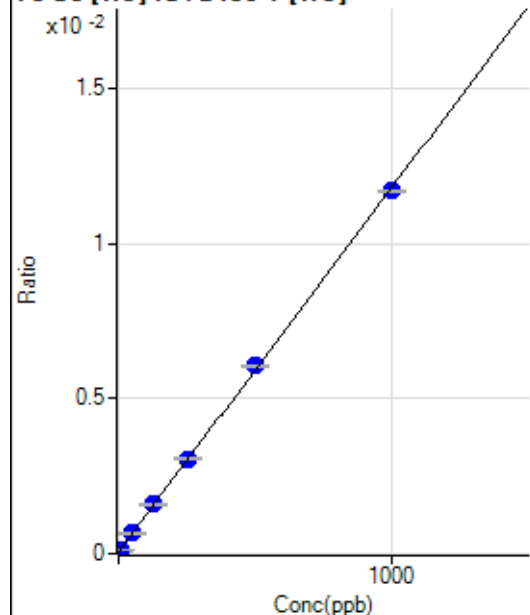
$$DL = 1.117$$

$$BEC = 0.2151$$

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	174.70	0.0001	P	15.6
2	☐	5.000	3.999	308.03	0.0001	P	6.4
3	☐	50.000	51.637	1882.23	0.0007	P	5.2
4	☐	125.000	129.996	4453.77	0.0016	P	1.4
5	☐	250.000	255.818	8483.95	0.0031	P	0.8
6	☐	500.000	511.273	16638.99	0.0061	P	1.2
7	☐	1000.000	992.207	32523.79	0.0117	P	0.6
8	☐			170.37	0.0001	P	8.2

$$y = 1.1745\text{E-}005 * x + 6.0086\text{E-}005$$

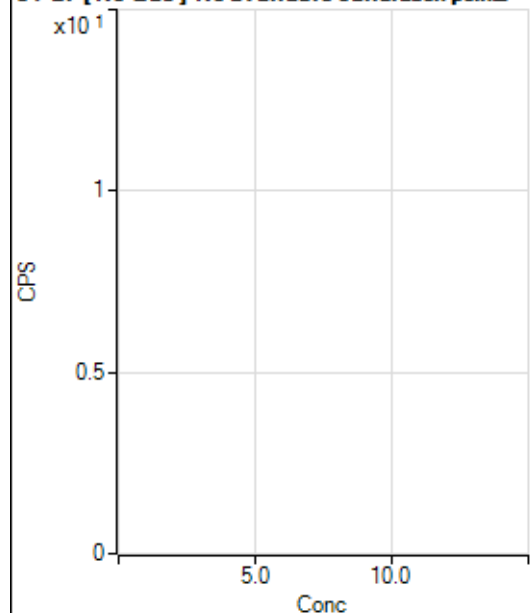
$$R = 0.9999$$

$$DL = 2.393$$

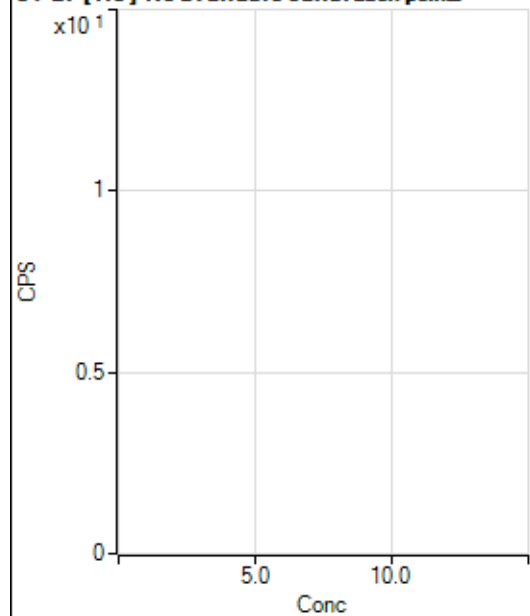
$$BEC = 5.116$$

Weight: <None>

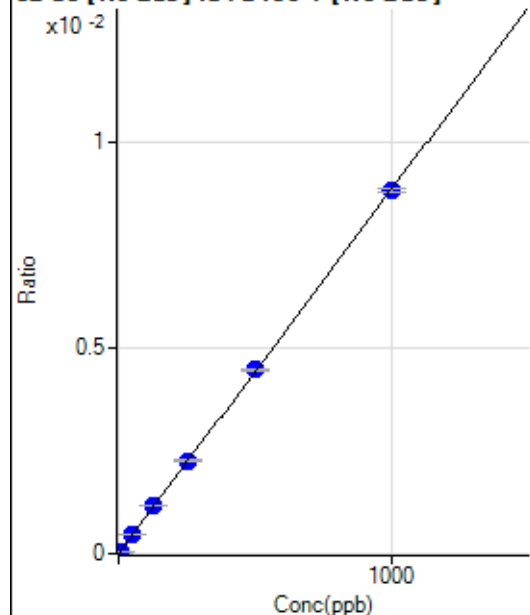
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22743.10		P	2.1
2	☐			22820.98		P	0.1
3	☐			22072.67		P	1.0
4	☐			22467.51		P	0.6
5	☐			22005.72		P	1.7
6	☐			22787.60		P	3.3
7	☐			22754.18		P	1.8
8	☐			22679.04		P	2.3

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53.39		P	39.0
2	☐			66.73		P	45.8
3	☐			76.75		P	45.8
4	☐			50.05		P	52.9
5	☐			70.07		P	28.6
6	☐			60.06		P	44.1
7	☐			103.44		P	5.6
8	☐			76.75		P	65.7

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.83	0.0000	P	92.5
2	☐	5.000	5.114	639.86	0.0000	P	8.0
3	☐	50.000	51.968	6381.26	0.0005	P	2.3
4	☐	125.000	131.388	15844.30	0.0012	P	0.5
5	☐	250.000	254.476	31172.52	0.0023	P	2.2
6	☐	500.000	504.283	60933.69	0.0045	P	1.4
7	☐	1000.000	995.842	118474.06	0.0088	P	1.1
8	☐			217.33	0.0000	P	30.4

$$y = 8.8492\text{E-}006 * x + 1.9591\text{E-}006$$

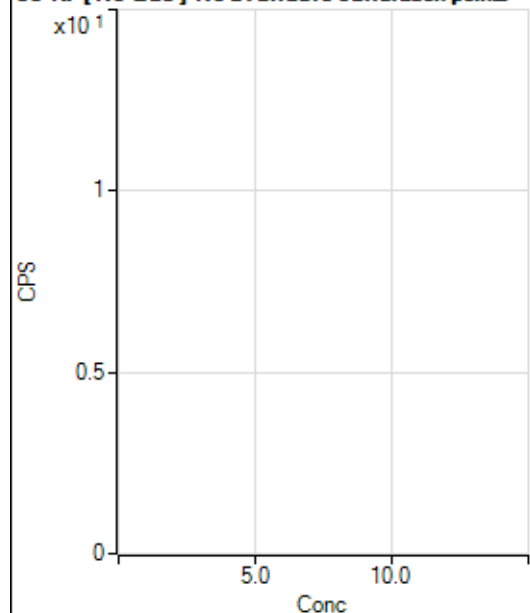
$$R = 1.0000$$

$$DL = 0.6146$$

$$BEC = 0.2214$$

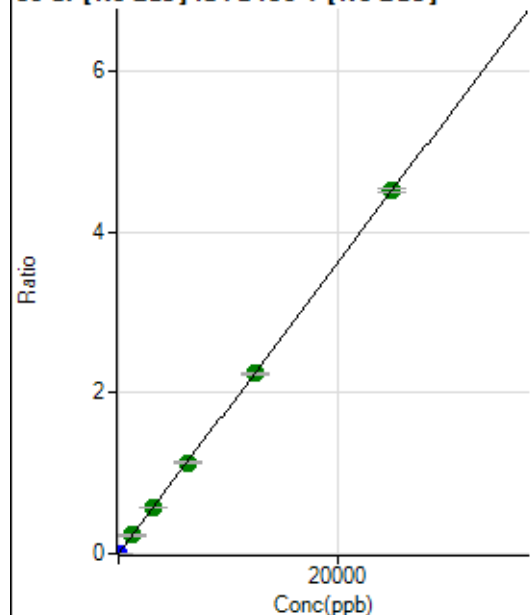
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			326.67		P	6.7
2	☐			284.45		P	13.5
3	☐			284.45		P	7.6
4	☐			301.12		P	12.2
5	☐			326.67		P	3.7
6	☐			341.12		P	16.8
7	☐			335.56		P	10.5
8	☐			341.12		P	11.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	519.47	0.0000	P	23.5
2	☐	1.000	0.991	2930.94	0.0002	P	7.8
3	☐	1250.000	1262.261	3141304.39	0.2274	A	1.6
4	☐	3125.000	3160.830	7744542.80	0.5693	A	1.1
5	☐	6250.000	6281.127	15645224.31	1.1312	A	1.4
6	☐	12500.000	12434.198	30563872.21	2.2392	A	0.8
7	☐	25000.000	25020.028	60562540.24	4.5057	A	1.1
8	☐			20476.72	0.0016	P	11.0

$$y = 1.8008\text{E-}004 * x + 3.7799\text{E-}005$$

$$R = 1.0000$$

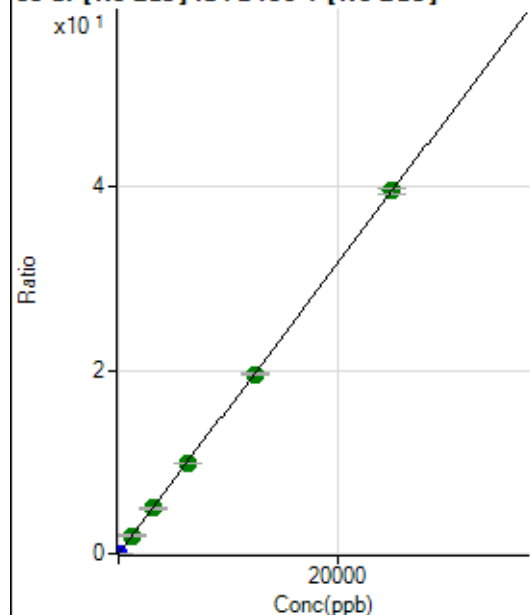
$$DL = 0.1477$$

$$BEC = 0.2099$$

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	194.45	0.0000	P	9.4
2	☐	1.000	1.000	21569.03	0.0016	P	1.2
3	☐	1250.000	1254.584	27357024.57	1.9800	A	1.6
4	☐	3125.000	3142.102	67466320.26	4.9588	A	1.6
5	☐	6250.000	6255.678	136546823.8	9.8725	A	1.4
6	☐	12500.000	12395.530	267010892.0	19.5623	A	1.8
7	☐	25000.000	25048.449	531342872.9	39.5308	A	1.4
8	☐			175072.79	0.0133	P	5.3

$$y = 0.0016 * x + 1.4145\text{E-}005$$

$$R = 1.0000$$

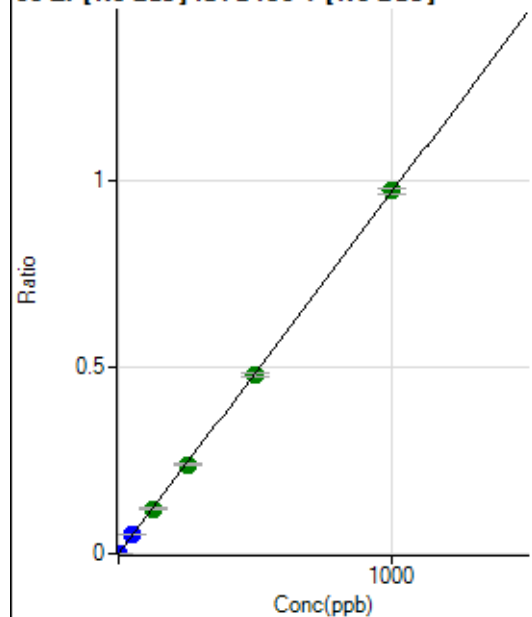
$$DL = 0.002534$$

$$BEC = 0.008963$$

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	561.14	0.0000	P	7.6
2	☐	1.000	0.922	12683.56	0.0009	P	4.7
3	☐	50.000	51.814	695609.46	0.0503	P	1.8
4	☐	125.000	124.782	1648742.60	0.1212	A	1.3
5	☐	250.000	246.198	3306290.91	0.2391	A	3.0
6	☐	500.000	494.079	6547488.82	0.4797	A	1.4
7	☐	1000.000	1003.848	13100242.65	0.9746	A	1.5
8	☐			4095.12	0.0003	P	4.3

$$y = 9.7084\text{E-}004 * x + 4.0820\text{E-}005$$

$$R = 1.0000$$

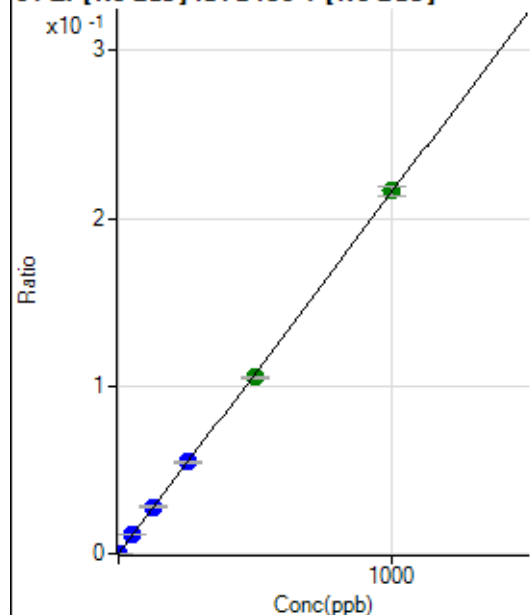
$$DL = 0.009532$$

$$BEC = 0.04205$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	31.2
2	☐	1.000	0.864	2611.41	0.0002	P	4.5
3	☐	50.000	52.007	154788.81	0.0112	P	1.7
4	☐	125.000	129.297	378803.91	0.0278	P	2.1
5	☐	250.000	253.299	754293.29	0.0545	P	2.0
6	☐	500.000	487.363	1432204.53	0.1049	A	2.0
7	☐	1000.000	1004.857	2907881.14	0.2163	A	2.5
8	☐			1036.17	0.0001	P	7.9

$$y = 2.1528\text{E-}004 * x + 6.6629\text{E-}006$$

$$R = 0.9999$$

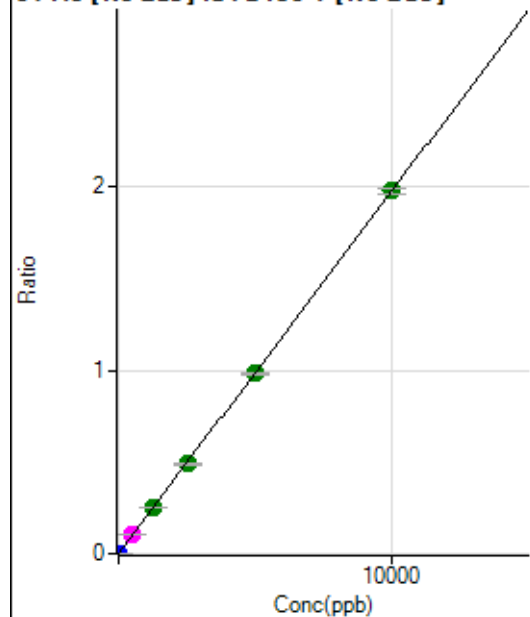
$$DL = 0.02901$$

$$BEC = 0.03095$$

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	147.23	0.0000	P	35.2
2	☐	5.000	5.372	14518.69	0.0011	P	1.6
3	☐	500.000	516.558	1409743.61	0.1020	M	2.6
4	☐	1250.000	1281.992	3444811.75	0.2532	A	0.5
5	☐	2500.000	2474.036	6758153.75	0.4886	A	2.5
6	☐	5000.000	4969.296	13395427.30	0.9815	A	1.6
7	☐	10000.000	10017.016	26592473.51	1.9784	A	1.5
8	☐			9162.19	0.0007	P	16.1

$$y = 1.9750E-004 * x + 1.0689E-005$$

$$R = 1.0000$$

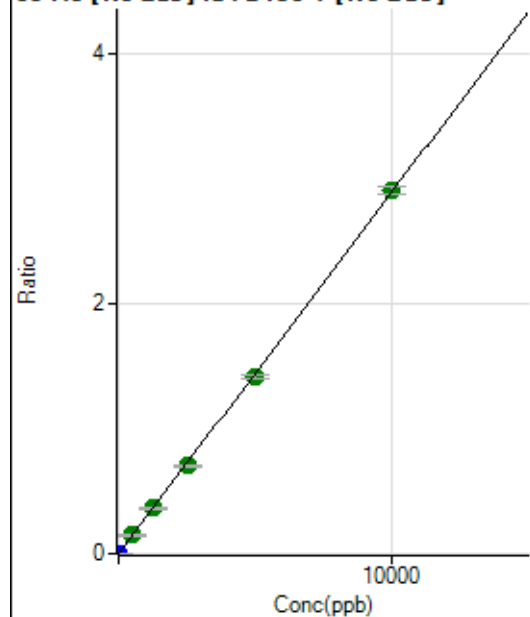
$$DL = 0.0571$$

$$BEC = 0.05412$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	56.7
2	☐	5.000	4.627	18133.91	0.0013	P	1.4
3	☐	500.000	509.477	2034234.99	0.1472	A	2.6
4	☐	1250.000	1257.134	4942406.32	0.3633	A	1.4
5	☐	2500.000	2441.225	9756792.93	0.7054	A	1.7
6	☐	5000.000	4926.459	19430424.22	1.4236	A	2.1
7	☐	10000.000	10050.099	39035915.46	2.9042	A	2.1
8	☐			12052.50	0.0009	P	7.5

$$y = 2.8897E-004 * x + 1.6099E-006$$

$$R = 0.9999$$

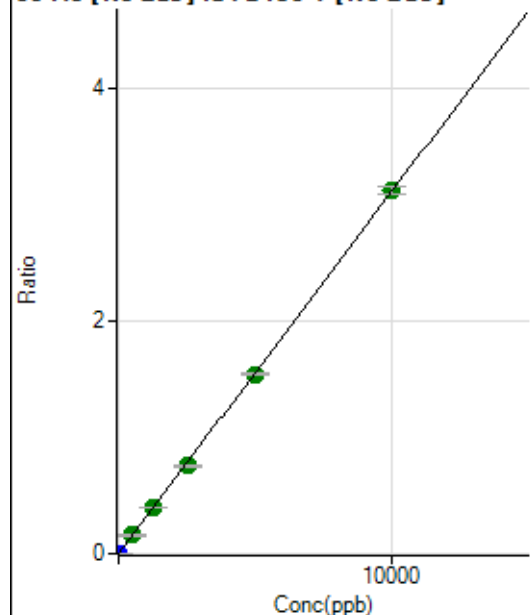
$$DL = 0.00948$$

$$BEC = 0.005571$$

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	30.3
2	☐	5.000	4.593	19441.13	0.0014	P	4.8
3	☐	500.000	508.251	2187060.29	0.1583	A	1.3
4	☐	1250.000	1259.724	5337429.16	0.3923	A	1.1
5	☐	2500.000	2440.090	10510164.82	0.7599	A	2.4
6	☐	5000.000	4965.378	21106889.36	1.5464	A	1.7
7	☐	10000.000	10030.661	41987744.69	3.1238	A	2.1
8	☐			23580.79	0.0018	P	2.4

$$y = 3.1143\text{E-}004 * x + 4.6483\text{E-}006$$

$$R = 1.0000$$

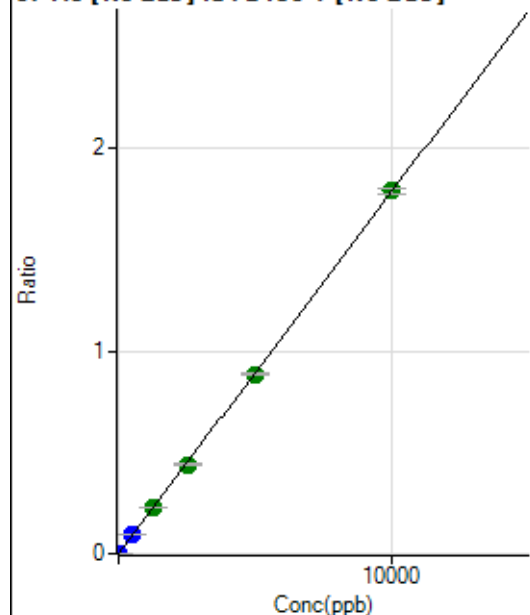
$$DL = 0.01358$$

$$BEC = 0.01493$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	57.3
2	☐	5.000	4.550	11023.81	0.0008	P	4.0
3	☐	500.000	522.425	1288081.03	0.0932	P	2.0
4	☐	1250.000	1270.704	3085020.05	0.2267	A	1.9
5	☐	2500.000	2460.295	6071858.64	0.4390	A	2.5
6	☐	5000.000	4948.809	12053450.53	0.8831	A	1.1
7	☐	10000.000	10031.812	24061002.62	1.7901	A	1.3
8	☐			7699.42	0.0006	P	5.9

$$y = 1.7844\text{E-}004 * x + 1.8113\text{E-}006$$

$$R = 1.0000$$

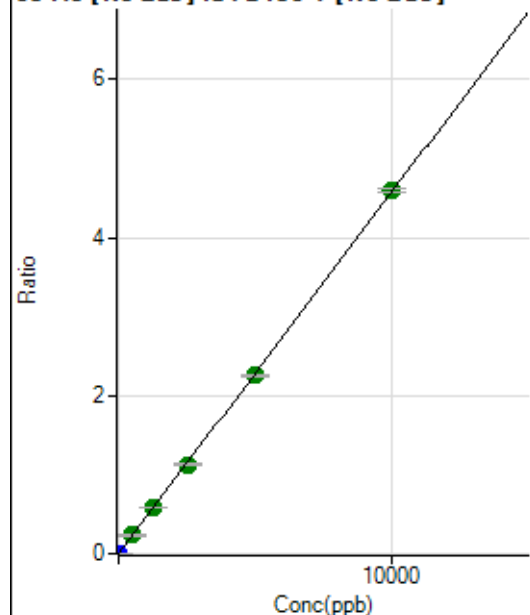
$$DL = 0.01746$$

$$BEC = 0.01015$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	1.0
2	☐	5.000	4.606	28550.86	0.0021	P	1.0
3	☐	500.000	507.430	3205390.72	0.2320	A	1.3
4	☐	1250.000	1268.038	7887074.83	0.5797	A	0.5
5	☐	2500.000	2467.655	15603381.77	1.1282	A	2.1
6	☐	5000.000	4927.525	30748894.78	2.2528	A	1.0
7	☐	10000.000	10041.698	61707538.88	4.5909	A	1.1
8	☐			19099.12	0.0015	P	9.5

$$y = 4.5718\text{E-}004 * x + 1.8180\text{E-}006$$

$$R = 0.9999$$

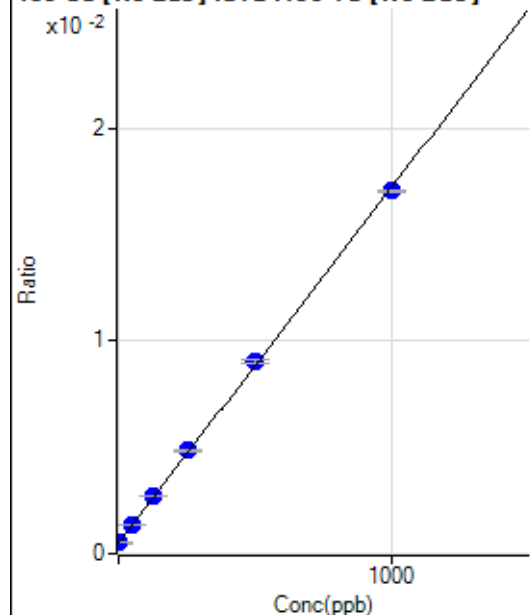
$$DL = 0.0001152$$

$$BEC = 0.003977$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5542.85	0.0005	P	1.4
2	☐	1.000	0.395	5548.43	0.0005	P	0.8
3	☐	50.000	51.062	15255.63	0.0014	P	1.1
4	☐	125.000	132.850	30145.79	0.0027	P	1.3
5	☐	250.000	260.994	54600.79	0.0049	P	2.2
6	☐	500.000	511.621	102592.56	0.0091	P	2.6
7	☐	1000.000	990.407	192169.28	0.0171	P	0.4
8	☐			5306.66	0.0005	P	4.5

$$y = 1.6718\text{E-}005 * x + 4.9796\text{E-}004$$

$$R = 0.9998$$

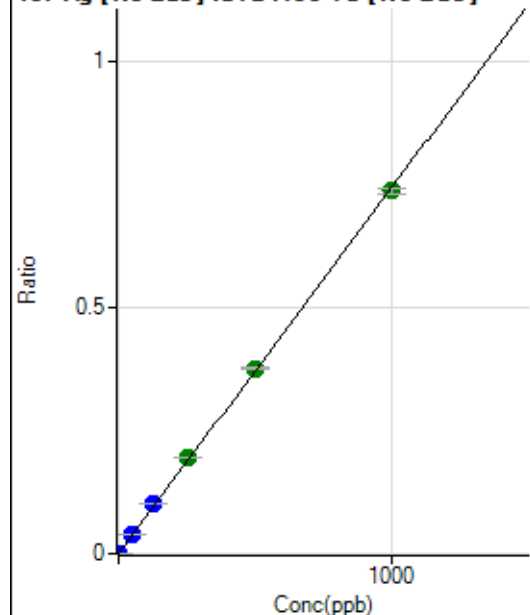
$$DL = 1.286$$

$$BEC = 29.79$$

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	58.33	0.0000	P	37.9
2	☐	1.000	1.011	8319.27	0.0008	P	2.2
3	☐	50.000	53.929	452534.79	0.0401	P	2.6
4	☐	125.000	135.573	1117482.73	0.1008	P	1.1
5	☐	250.000	262.534	2191966.96	0.1952	A	1.5
6	☐	500.000	506.951	4271220.76	0.3768	A	1.9
7	☐	1000.000	991.873	8307519.55	0.7373	A	1.3
8	☐			4386.90	0.0004	P	5.5

$$y = 7.4335\text{E-}004 * x + 5.2398\text{E-}006$$

$$R = 0.9998$$

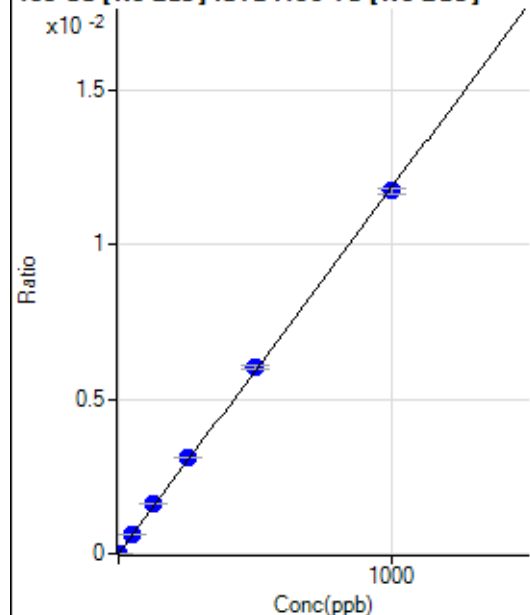
$$DL = 0.00801$$

$$BEC = 0.007049$$

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	16.66	0.0000	P	42.9
2	☐	1.000	1.092	158.34	0.0000	P	23.0
3	☐	50.000	52.921	7083.77	0.0006	P	3.7
4	☐	125.000	136.297	17895.88	0.0016	P	2.0
5	☐	250.000	261.981	34827.96	0.0031	P	0.4
6	☐	500.000	508.397	68185.76	0.0060	P	2.3
7	☐	1000.000	991.248	132148.23	0.0117	P	1.8
8	☐			75.00	0.0000	P	33.9

$$y = 1.1831\text{E-}005 * x + 1.4943\text{E-}006$$

$$R = 0.9998$$

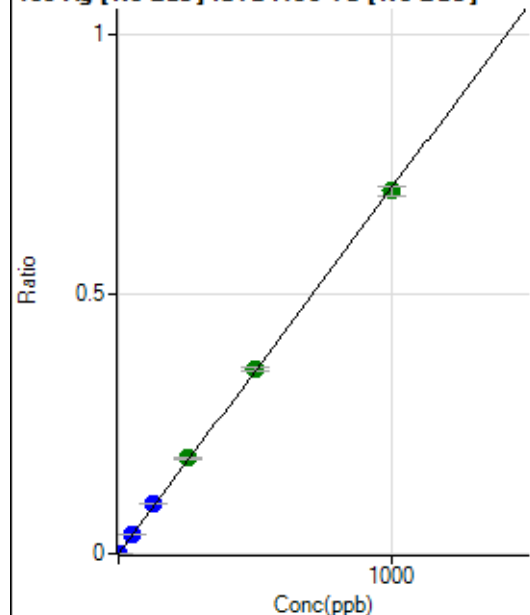
$$DL = 0.1627$$

$$BEC = 0.1263$$

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	38.89	0.0000	P	68.9
2	☐	1.000	1.061	8255.34	0.0008	P	4.5
3	☐	50.000	54.053	429475.74	0.0380	P	2.1
4	☐	125.000	136.668	1066663.10	0.0962	P	1.0
5	☐	250.000	260.370	2058416.34	0.1833	A	0.6
6	☐	500.000	506.726	4042851.00	0.3567	A	1.8
7	☐	1000.000	992.383	7869668.06	0.6985	A	2.3
8	☐			4161.83	0.0004	P	3.1

$$y = 7.0387\text{E-}004 * x + 3.4854\text{E-}006$$

$$R = 0.9999$$

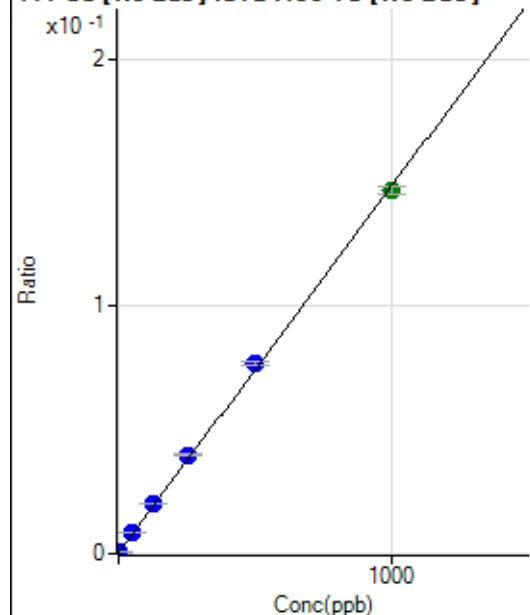
$$DL = 0.01023$$

$$BEC = 0.004952$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3872.49	0.0003	P	1.5
2	☐	1.000	1.028	5502.36	0.0005	P	1.8
3	☐	50.000	54.179	94576.66	0.0084	P	1.3
4	☐	125.000	135.872	227173.74	0.0205	P	0.4
5	☐	250.000	265.815	446477.29	0.0398	P	2.2
6	☐	500.000	514.474	868352.18	0.0766	P	2.1
7	☐	1000.000	987.241	1652717.97	0.1467	A	2.2
8	☐			4299.69	0.0004	P	4.2

$$y = 1.4824\text{E-}004 * x + 3.4790\text{E-}004$$

$$R = 0.9997$$

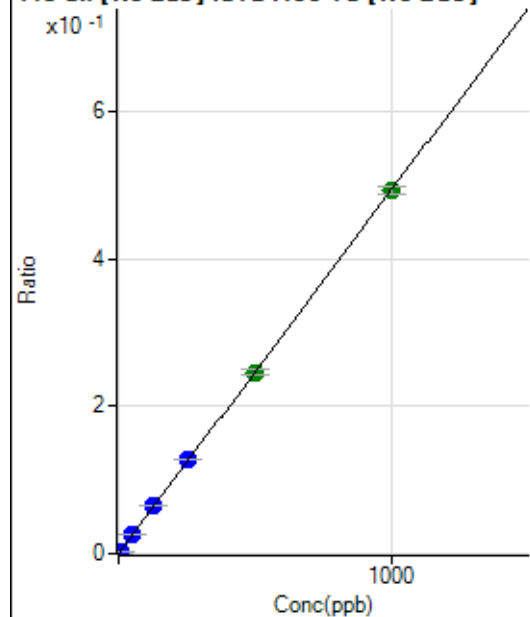
$$DL = 0.1052$$

$$BEC = 2.347$$

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	1013.95	0.0001	P	3.5
2	☐	5.000	5.071	28576.20	0.0026	P	3.0
3	☐	50.000	52.568	294445.27	0.0261	P	1.2
4	☐	125.000	131.120	719986.99	0.0649	P	1.7
5	☐	250.000	258.903	1439042.31	0.1281	P	1.5
6	☐	500.000	499.335	2799795.24	0.2470	A	2.4
7	☐	1000.000	997.213	5557821.22	0.4932	A	2.0
8	☐			7496.54	0.0007	P	3.4

$$y = 4.9452\text{E-}004 * x + 9.1105\text{E-}005$$

$$R = 0.9999$$

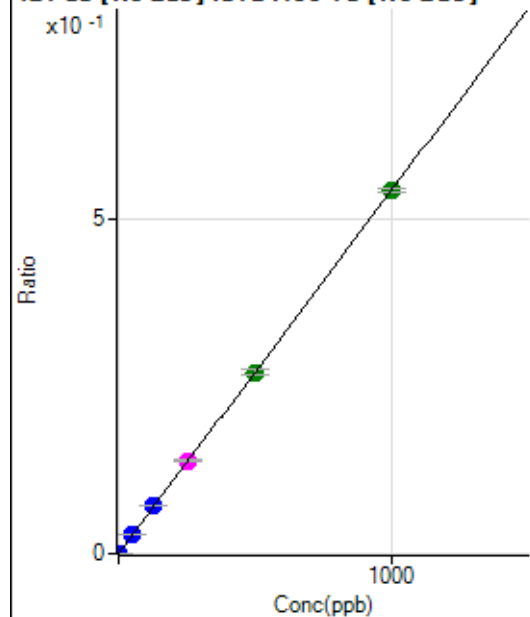
$$DL = 0.01934$$

$$BEC = 0.1842$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	42.4
2	☐	2.000	2.015	12044.26	0.0011	P	1.9
3	☐	50.000	51.349	314692.44	0.0279	P	1.1
4	☐	125.000	131.152	789583.78	0.0712	P	1.3
5	☐	250.000	255.526	1558278.13	0.1387	M	1.1
6	☐	500.000	498.565	3068003.17	0.2707	A	3.0
7	☐	1000.000	998.499	6108552.18	0.5421	A	1.2
8	☐			4625.86	0.0004	P	3.2

$$y = 5.4295\text{E-}004 * x + 9.9567\text{E-}007$$

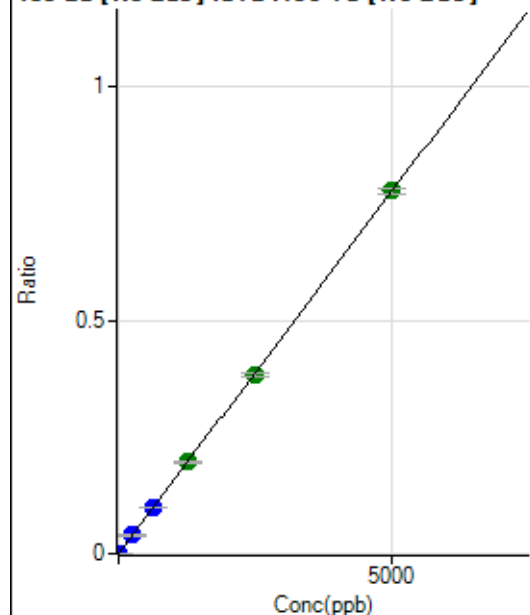
$$R = 1.0000$$

$$DL = 0.002332$$

$$BEC = 0.001834$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	86.6
2	☐	10.000	9.667	16496.07	0.0015	P	2.9
3	☐	250.000	253.499	443645.07	0.0393	P	1.9
4	☐	625.000	643.604	1106454.54	0.0998	P	0.8
5	☐	1250.000	1265.852	2204450.81	0.1963	A	2.1
6	☐	2500.000	2463.718	4329698.75	0.3820	A	1.8
7	☐	5000.000	5011.678	8755098.55	0.7770	A	1.8
8	☐			5053.80	0.0005	P	2.4

$$y = 1.5505\text{E-}004 * x + 1.4954\text{E-}006$$

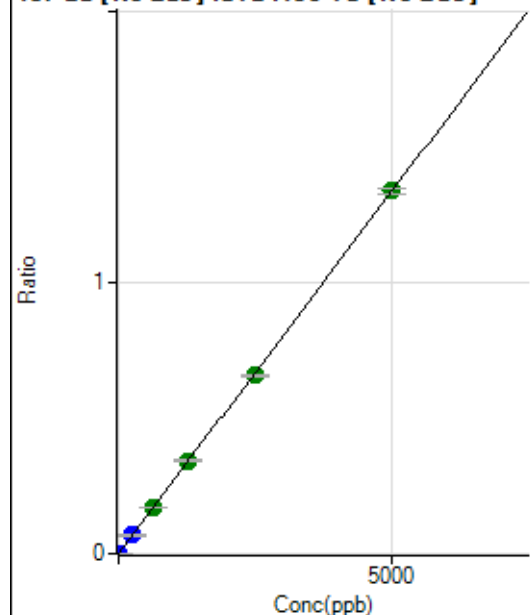
$$R = 0.9999$$

$$DL = 0.02506$$

$$BEC = 0.009645$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	34.2
2	☐	10.000	9.613	28286.94	0.0026	P	3.1
3	☐	250.000	254.963	769575.34	0.0682	P	2.1
4	☐	625.000	635.256	1883571.48	0.1699	A	1.4
5	☐	1250.000	1279.344	3842483.12	0.3421	A	2.2
6	☐	2500.000	2458.060	7450624.82	0.6573	A	1.0
7	☐	5000.000	5012.105	15100654.50	1.3403	A	1.4
8	☐			8883.57	0.0008	P	5.3

$$y = 2.6741\text{E-}004 * x + 2.4918\text{E-}006$$

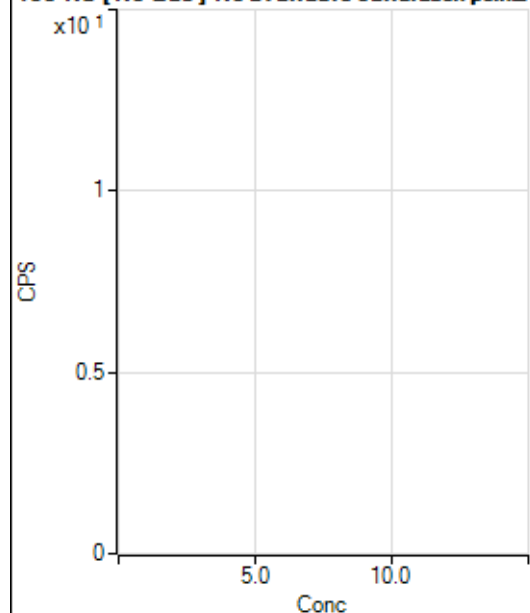
$$R = 0.9999$$

$$DL = 0.009557$$

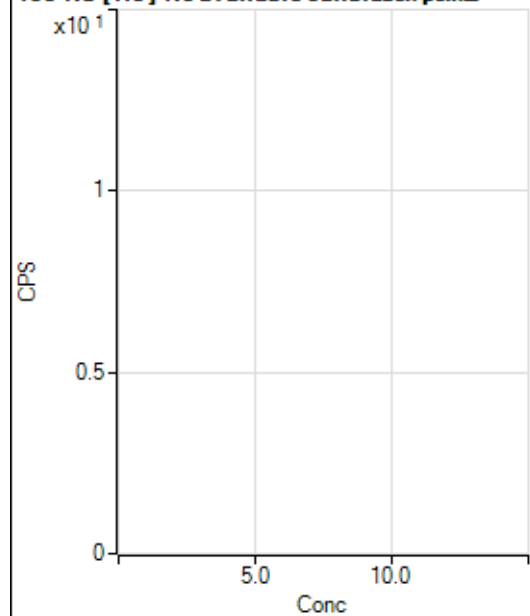
$$BEC = 0.009318$$

Weight: <None>

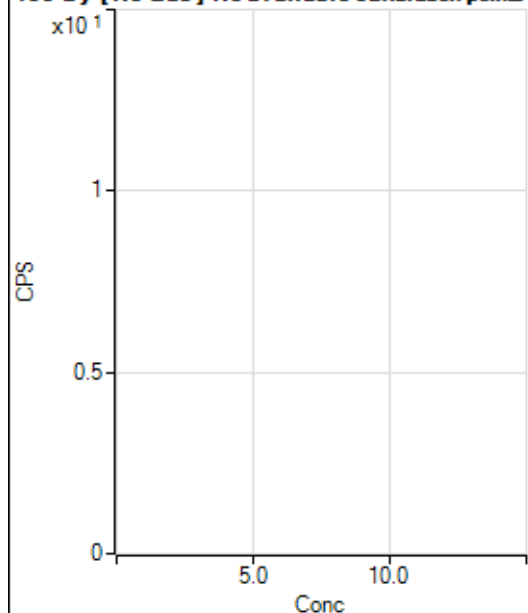
Min Conc: 0

150 Nd [No Gas] No available calibration points

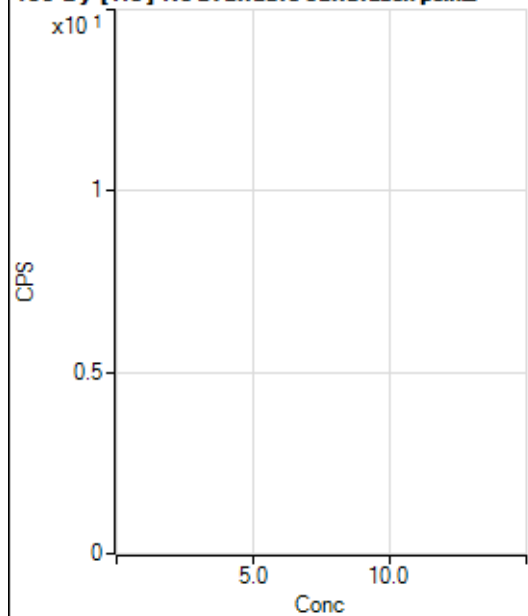
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐			4.45		P	86.6
3	☐			46.66		P	24.7
4	☐			142.23		P	24.1
5	☐			304.45		P	11.0
6	☐			522.24		P	19.6
7	☐			1060.07		P	5.1
8	☐			77.78		P	17.8

150 Nd [He] No available calibration points

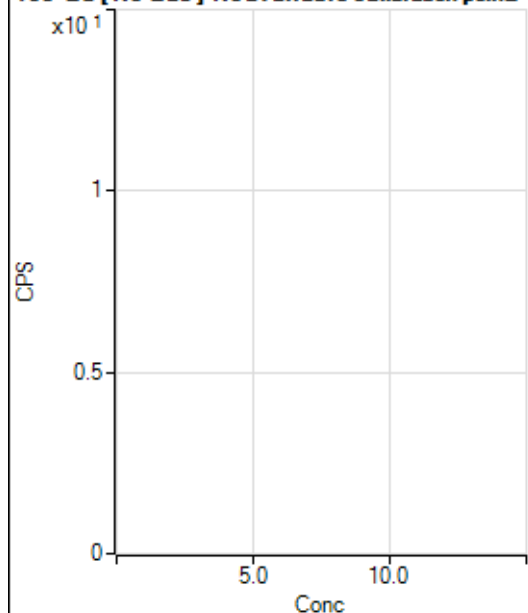
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			4.44		P	43.4
3	☐			11.11		P	62.5
4	☐			20.00		P	33.4
5	☐			54.44		P	30.2
6	☐			108.89		P	7.1
7	☐			198.89		P	5.1
8	☐			22.22		P	52.7

156 Dy [No Gas] No available calibration points

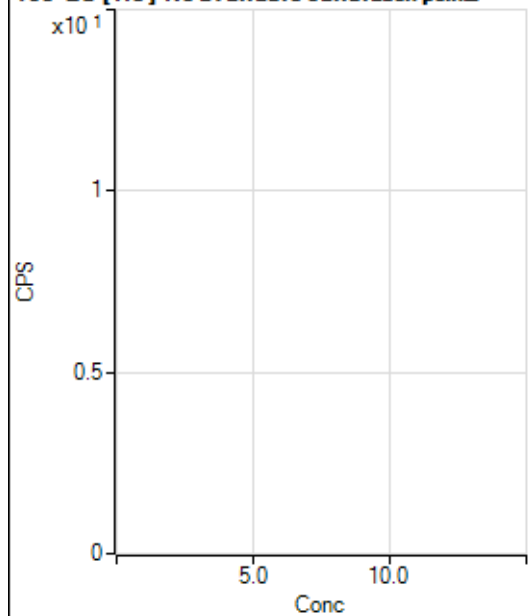
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.78		P	173.
2	☐			5.56		P	173.
3	☐			25.00		P	33.3
4	☐			30.56		P	41.7
5	☐			111.12		P	37.0
6	☐			272.23		P	12.7
7	☐			550.03		P	10.9
8	☐			1394.56		P	6.9

156 Dy [He] No available calibration points

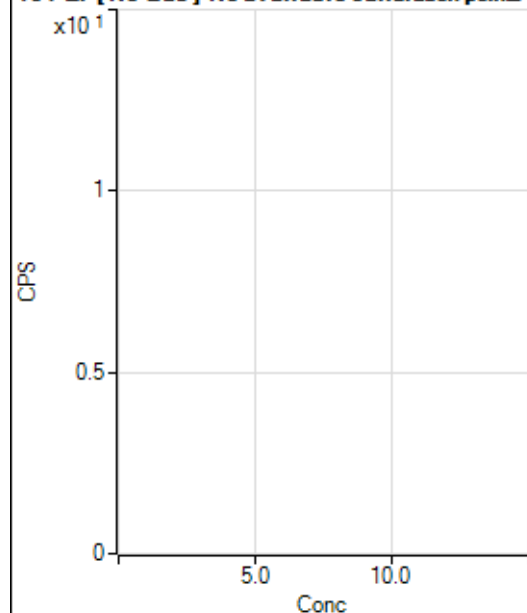
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	173.
2	☐			7.78		P	49.5
3	☐			51.11		P	18.8
4	☐			153.34		P	17.8
5	☐			248.89		P	12.9
6	☐			495.57		P	5.0
7	☐			1000.04		P	3.5
8	☐			964.49		P	8.9

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

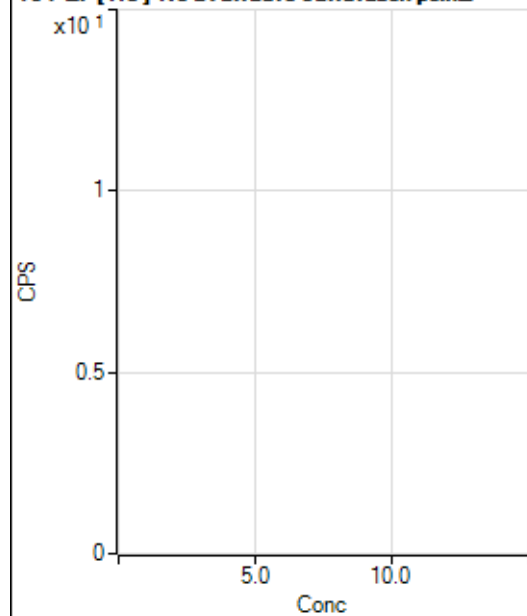
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	24.1
2	☐			41.67		P	34.6
3	☐			80.56		P	31.6
4	☐			91.67		P	31.5
5	☐			105.56		P	12.1
6	☐			197.23		P	16.0
7	☐			333.35		P	17.3
8	☐			1716.82		P	6.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			750.03		P	2.5
2	☐			794.47		P	7.4
3	☐			787.81		P	7.0
4	☐			784.47		P	3.9
5	☐			844.48		P	8.9
6	☐			878.93		P	2.2
7	☐			987.82		P	4.4
8	☐			1676.78		P	2.5

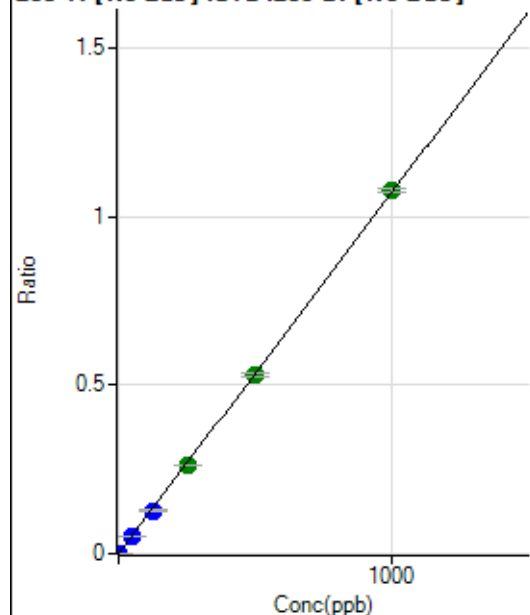
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	16.7
2	☐			47.22		P	20.4
3	☐			38.89		P	65.5
4	☐			63.89		P	19.9
5	☐			80.56		P	21.5
6	☐			100.00		P	43.3
7	☐			194.45		P	17.3
8	☐			102.78		P	9.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.56		P	32.8
2	☐			25.56		P	30.1
3	☐			25.56		P	7.5
4	☐			43.33		P	30.8
5	☐			60.00		P	9.6
6	☐			83.33		P	30.2
7	☐			105.56		P	7.3
8	☐			61.11		P	43.8

203 Tl [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	32.3
2	☐	1.000	0.922	6782.43	0.0010	P	3.8
3	☐	50.000	47.809	357026.78	0.0513	P	2.3
4	☐	125.000	119.673	891111.38	0.1283	P	1.3
5	☐	250.000	244.927	1828584.94	0.2626	A	1.0
6	☐	500.000	493.837	3652078.21	0.5295	A	2.5
7	☐	1000.000	1005.125	7223671.43	1.0778	A	1.1
8	☐			1544.57	0.0003	P	13.2

$$y = 0.0011 * x + 9.5811E-006$$

$$R = 1.0000$$

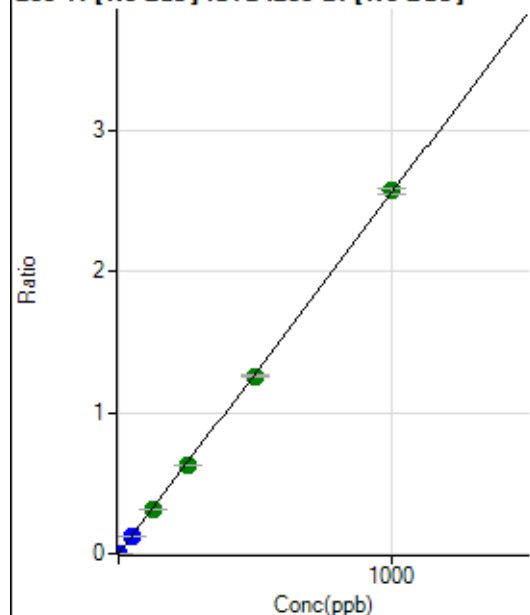
$$DL = 0.008658$$

$$BEC = 0.008935$$

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	161.12	0.0000	P	10.1
2	☐	1.000	0.906	15876.34	0.0023	P	1.7
3	☐	50.000	47.317	840701.08	0.1207	P	2.2
4	☐	125.000	121.219	2147471.60	0.3093	A	1.2
5	☐	250.000	244.676	4346470.89	0.6242	A	1.1
6	☐	500.000	491.450	8647717.99	1.2538	A	1.4
7	☐	1000.000	1006.213	17204906.29	2.5670	A	1.5
8	☐			3689.50	0.0006	P	10.7

$$y = 0.0026 * x + 2.3177E-005$$

$$R = 0.9999$$

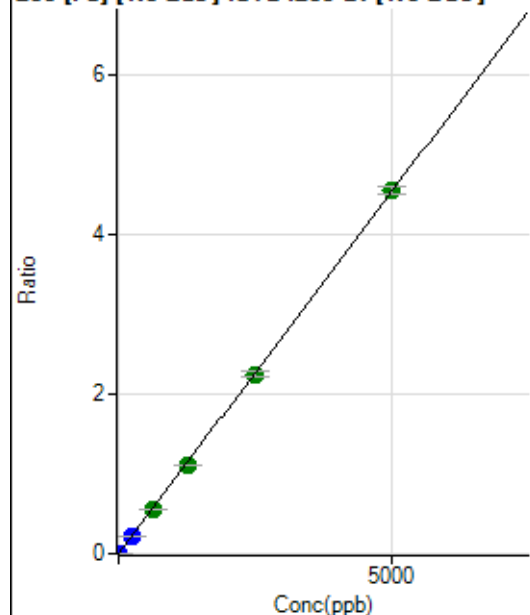
$$DL = 0.002743$$

$$BEC = 0.009085$$

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	212.97	0.0000	P	13.1
2	☐	1.000	0.868	5558.64	0.0008	P	2.5
3	☐	250.000	232.305	1466430.86	0.2106	P	2.6
4	☐	625.000	608.854	3832364.96	0.5519	A	2.5
5	☐	1250.000	1226.728	7742617.01	1.1119	A	0.7
6	☐	2500.000	2485.424	15538195.02	2.2528	A	2.5
7	☐	5000.000	5016.009	30472944.20	4.5466	A	2.0
8	☐			6981.54	0.0012	P	5.9

$$y = 9.0641\text{E-}004 * x + 3.0673\text{E-}005$$

$$R = 1.0000$$

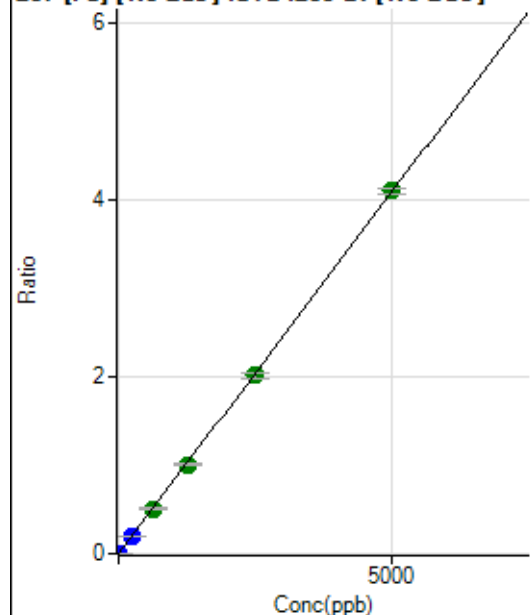
$$DL = 0.01327$$

$$BEC = 0.03384$$

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	227.79	0.0000	P	11.9
2	☐	1.000	0.837	4867.63	0.0007	P	3.0
3	☐	250.000	232.625	1322322.95	0.1899	P	1.9
4	☐	625.000	622.469	3527906.18	0.5081	A	2.4
5	☐	1250.000	1230.310	6991950.91	1.0042	A	1.4
6	☐	2500.000	2469.273	13898635.49	2.0154	A	3.6
7	☐	5000.000	5021.471	27469405.71	4.0984	A	1.5
8	☐			6242.28	0.0011	P	5.2

$$y = 8.1618\text{E-}004 * x + 3.2765\text{E-}005$$

$$R = 1.0000$$

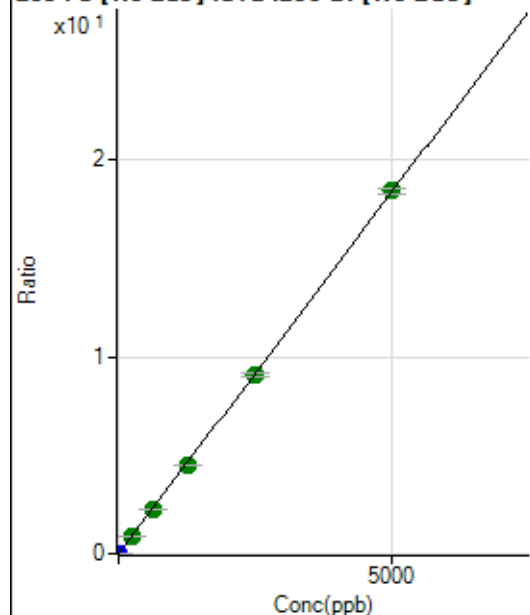
$$DL = 0.01431$$

$$BEC = 0.04014$$

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	903.74	0.0001	P	3.1
2	☐	1.000	0.860	22344.59	0.0033	P	1.0
3	☐	250.000	238.403	6094251.72	0.8752	A	1.6
4	☐	625.000	614.023	15650552.69	2.2539	A	1.8
5	☐	1250.000	1224.157	31288573.50	4.4933	A	1.4
6	☐	2500.000	2467.539	62467284.26	9.0571	A	2.3
7	☐	5000.000	5024.643	123611860.1	18.4428	A	1.4
8	☐			28732.96	0.0049	P	4.7

$$y = 0.0037 * x + 1.3008E-004$$

$$R = 1.0000$$

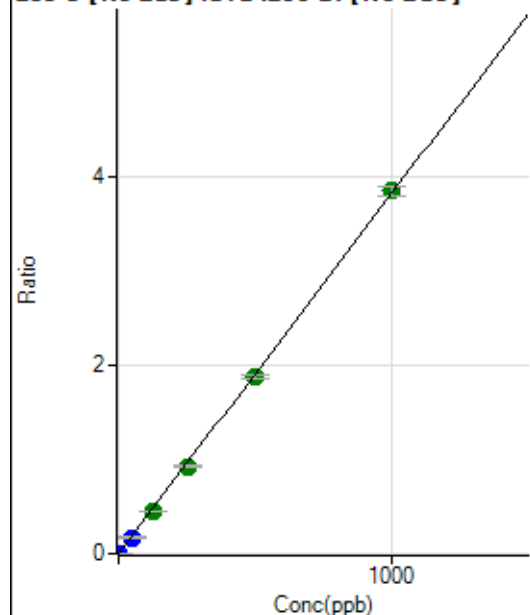
$$DL = 0.003244$$

$$BEC = 0.03544$$

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	13.89	0.0000	P	34.2
2	☐	1.000	0.865	22455.55	0.0033	P	1.1
3	☐	50.000	45.245	1202471.33	0.1727	P	2.1
4	☐	125.000	118.520	3140994.75	0.4523	A	2.2
5	☐	250.000	242.286	6438414.94	0.9247	A	2.1
6	☐	500.000	489.802	12893405.76	1.8694	A	2.5
7	☐	1000.000	1008.075	25787297.28	3.8474	A	2.7
8	☐			3469.02	0.0006	P	45.3

$$y = 0.0038 * x + 1.9962E-006$$

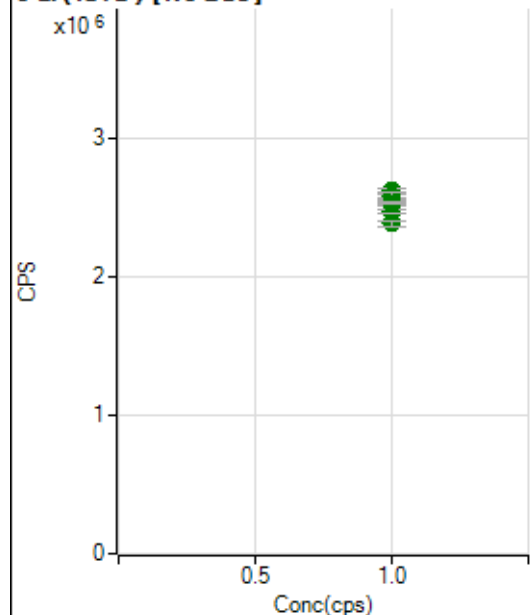
$$R = 0.9999$$

$$DL = 0.0005368$$

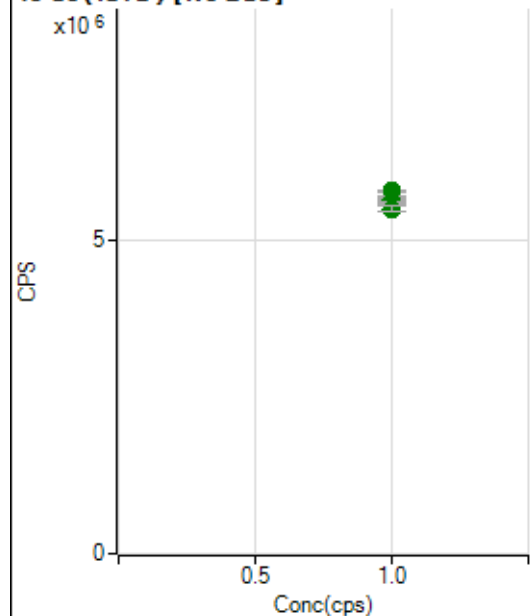
$$BEC = 0.000523$$

Weight: <None>

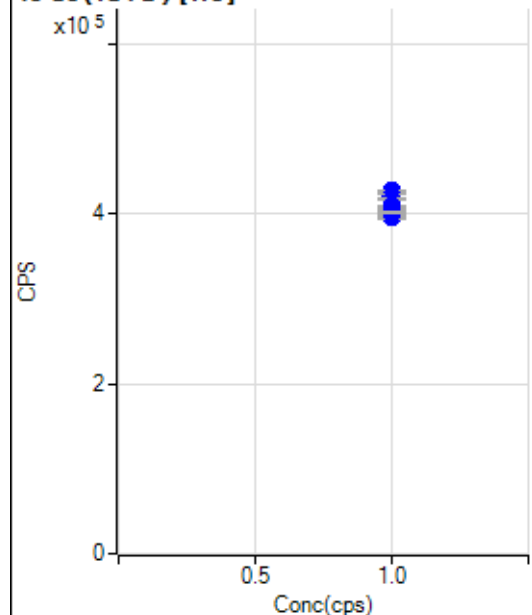
Min Conc: 0

6 Li (ISTD) [No Gas]

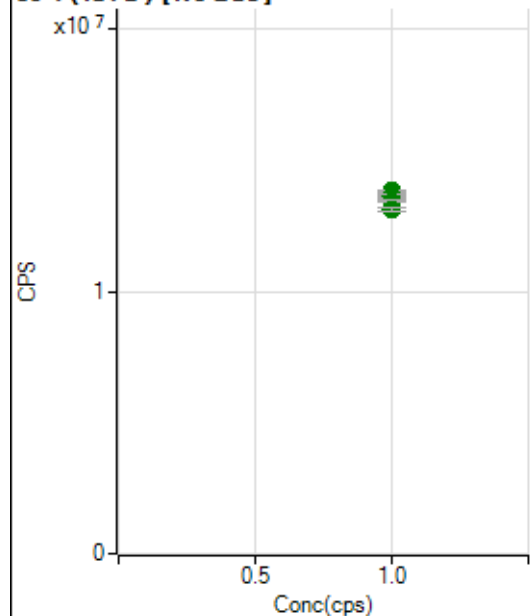
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2523207.65		A	1.2
2	☐	1.000		2470584.09		A	0.9
3	☐	1.000		2602484.16		A	0.5
4	☐	1.000		2618819.44		A	0.9
5	☐	1.000		2586227.43		A	1.9
6	☐	1.000		2585830.99		A	2.0
7	☐	1.000		2530314.61		A	0.3
8	☐	1.000		2382243.58		A	1.4

45 Sc (ISTD) [No Gas]

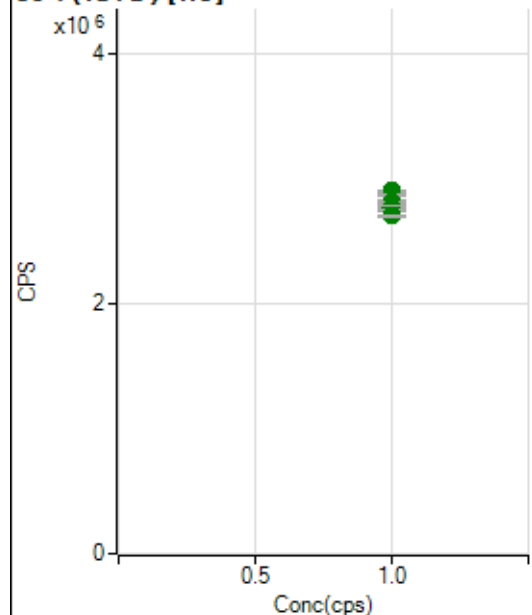
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5778925.05		A	0.9
2	☐	1.000		5651962.90		A	0.7
3	☐	1.000		5764051.58		A	0.2
4	☐	1.000		5639878.11		A	0.9
5	☐	1.000		5687016.58		A	0.3
6	☐	1.000		5594958.59		A	0.5
7	☐	1.000		5598326.72		A	0.6
8	☐	1.000		5491633.46		A	1.4

45 Sc (ISTD) [He]

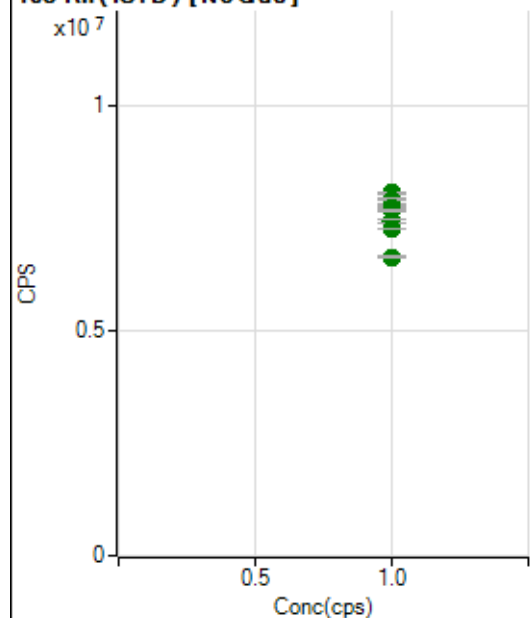
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		426386.35		P	0.6
2	☐	1.000		420415.47		P	0.6
3	☐	1.000		416923.10		P	0.4
4	☐	1.000		408268.04		P	0.4
5	☐	1.000		404563.50		P	0.4
6	☐	1.000		396684.82		P	0.8
7	☐	1.000		395219.51		P	0.5
8	☐	1.000		400668.69		P	0.6

89 Y (ISTD) [No Gas]

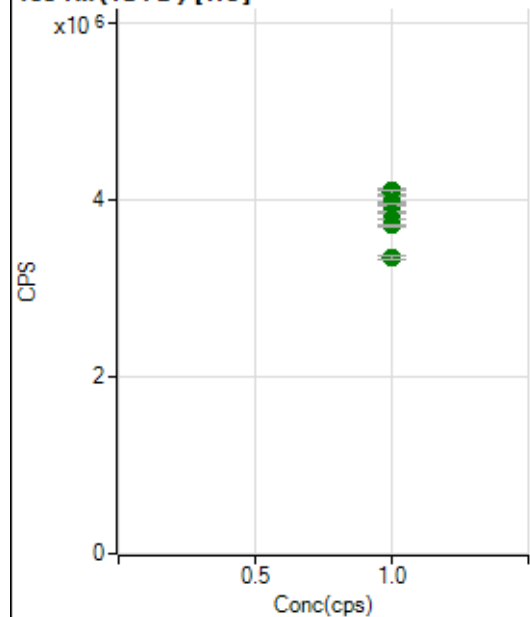
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13751992.16		A	1.0
2	☐	1.000		13547179.24		A	0.7
3	☐	1.000		13816564.24		A	0.3
4	☐	1.000		13604447.99		A	0.7
5	☐	1.000		13831534.93		A	0.4
6	☐	1.000		13649202.57		A	0.7
7	☐	1.000		13440797.99		A	0.5
8	☐	1.000		13131162.86		A	1.1

89 Y (ISTD) [He]

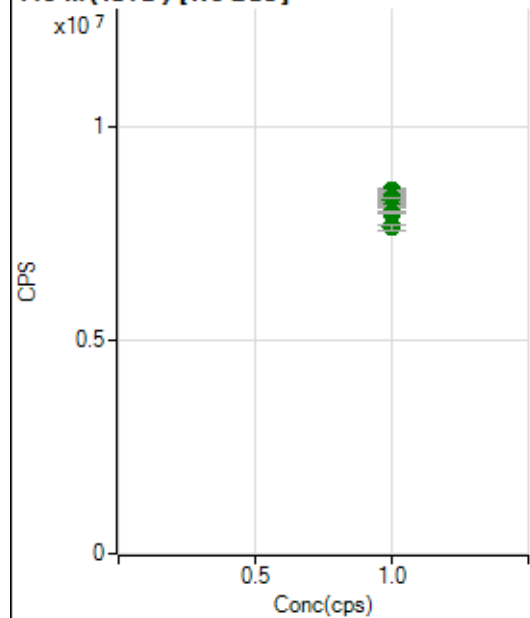
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2907293.19		A	0.4
2	☐	1.000		2876373.67		A	0.8
3	☐	1.000		2824772.49		A	0.9
4	☐	1.000		2806862.01		A	0.6
5	☐	1.000		2768454.51		A	0.6
6	☐	1.000		2743555.97		A	0.5
7	☐	1.000		2776730.48		A	1.0
8	☐	1.000		2707620.88		A	0.5

103 Rh (ISTD) [No Gas]

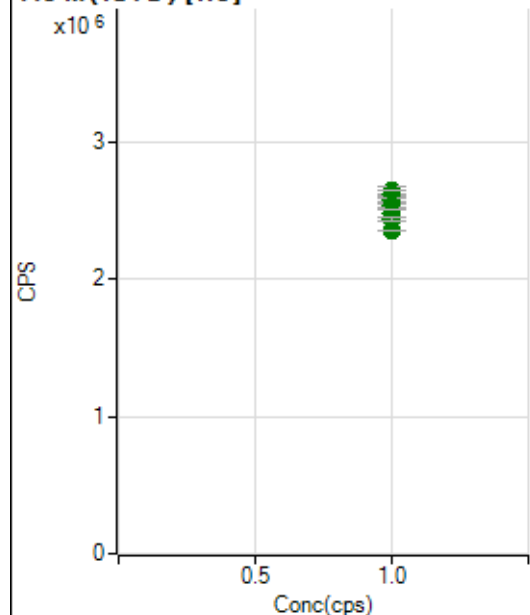
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8063225.78		A	0.4
2	☐	1.000		7801021.48		A	0.7
3	☐	1.000		7921116.96		A	0.5
4	☐	1.000		7747152.52		A	0.4
5	☐	1.000		7674931.55		A	0.6
6	☐	1.000		7448969.40		A	1.1
7	☐	1.000		7254775.59		A	0.1
8	☐	1.000		6640601.08		A	0.4

103 Rh (ISTD) [He]

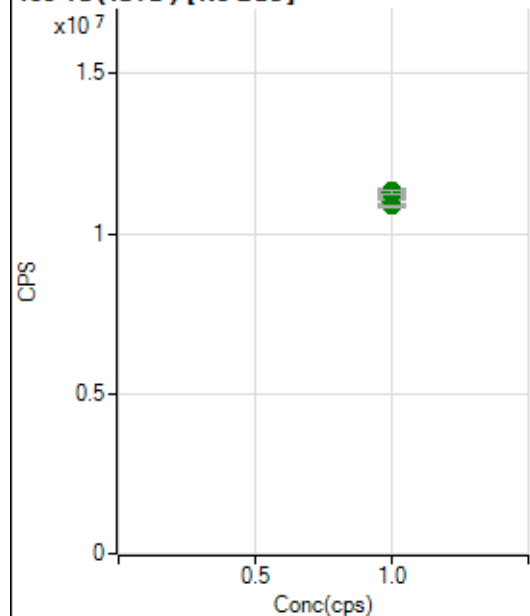
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4102687.68		A	1.4
2	☐	1.000		4078960.95		A	1.5
3	☐	1.000		3970614.77		A	0.8
4	☐	1.000		3943659.80		A	0.3
5	☐	1.000		3858853.14		A	0.7
6	☐	1.000		3784105.57		A	0.3
7	☐	1.000		3710539.35		A	0.9
8	☐	1.000		3352855.26		A	1.1

115 In (ISTD) [No Gas]

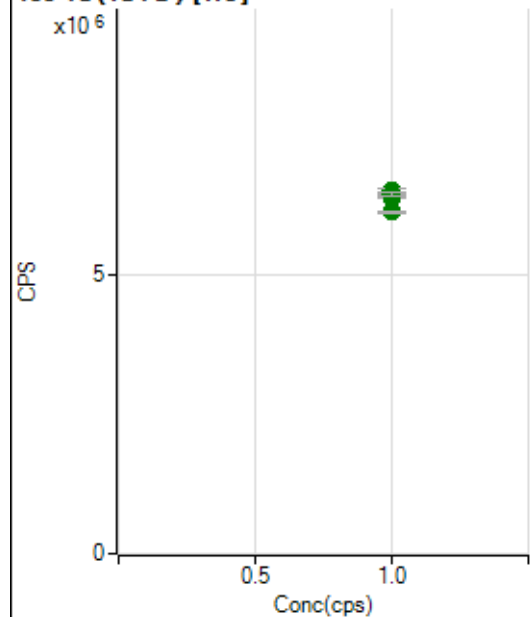
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8491394.12		A	1.4
2	☐	1.000		8253376.93		A	1.3
3	☐	1.000		8470123.63		A	0.6
4	☐	1.000		8318845.50		A	0.8
5	☐	1.000		8295753.68		A	1.2
6	☐	1.000		8112508.23		A	0.4
7	☐	1.000		7973480.73		A	0.6
8	☐	1.000		7639079.42		A	1.5

115 In (ISTD) [He]

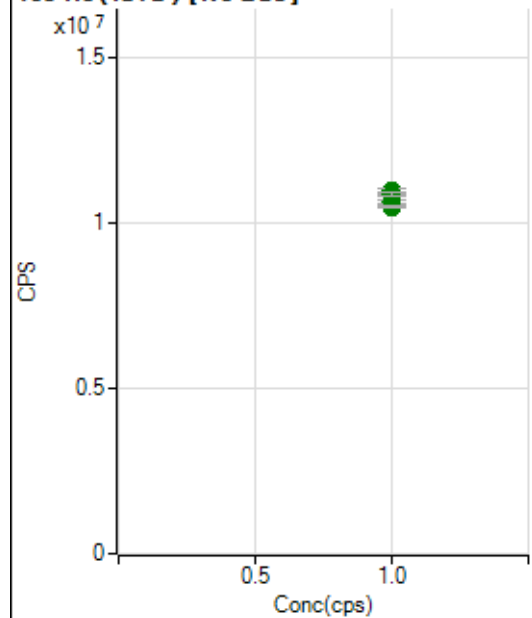
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2645960.94		A	2.0
2	☐	1.000		2626808.34		A	1.5
3	☐	1.000		2583583.17		A	0.8
4	☐	1.000		2537199.36		A	0.7
5	☐	1.000		2521088.88		A	0.2
6	☐	1.000		2480708.29		A	2.0
7	☐	1.000		2438300.82		A	1.4
8	☐	1.000		2352049.03		A	0.1

159 Tb (ISTD) [No Gas]

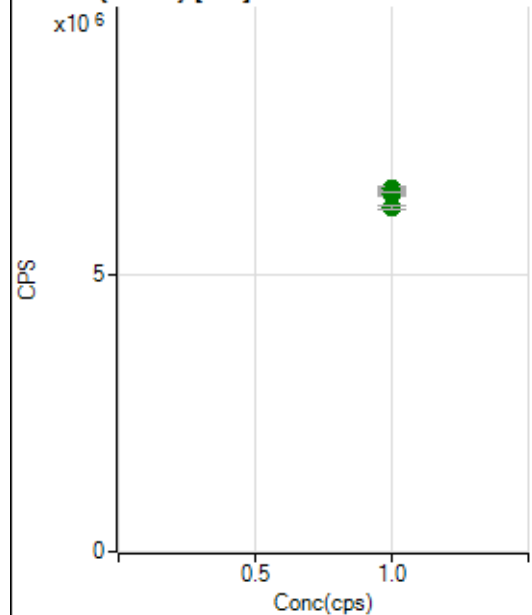
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11131781.64		A	0.9
2	☐	1.000		10995998.66		A	1.1
3	☐	1.000		11286904.55		A	0.2
4	☐	1.000		11087536.64		A	0.6
5	☐	1.000		11231593.86		A	0.3
6	☐	1.000		11336181.71		A	1.7
7	☐	1.000		11267088.72		A	1.1
8	☐	1.000		10857787.54		A	0.8

159 Tb (ISTD) [He]

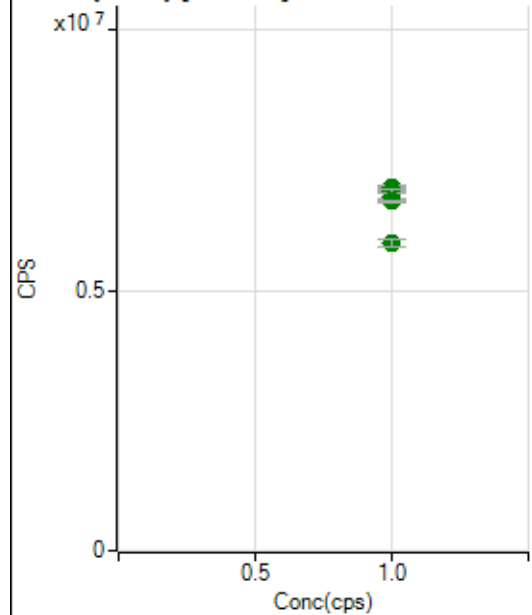
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6512764.83		A	1.3
2	☐	1.000		6422497.47		A	0.5
3	☐	1.000		6397386.36		A	0.6
4	☐	1.000		6437462.75		A	1.0
5	☐	1.000		6434352.06		A	1.6
6	☐	1.000		6443227.33		A	1.5
7	☐	1.000		6452935.04		A	0.9
8	☐	1.000		6136191.99		A	0.6

165 Ho (ISTD) [No Gas]

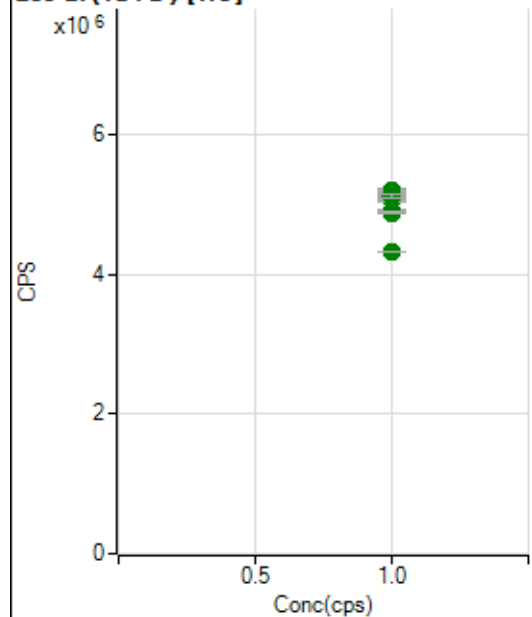
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10901068.45		A	0.1
2	☐	1.000		10641385.61		A	1.4
3	☐	1.000		10898888.73		A	0.6
4	☐	1.000		10850831.02		A	0.9
5	☐	1.000		10941024.42		A	0.3
6	☐	1.000		10977224.84		A	1.3
7	☐	1.000		10888207.34		A	0.8
8	☐	1.000		10492725.95		A	0.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6514811.92		A	0.5
2	☐	1.000		6493899.90		A	1.4
3	☐	1.000		6514354.49		A	0.5
4	☐	1.000		6492838.51		A	0.7
5	☐	1.000		6537973.44		A	0.9
6	☐	1.000		6428507.34		A	1.1
7	☐	1.000		6480149.14		A	0.3
8	☐	1.000		6200977.75		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6948141.63		A	0.8
2	☐	1.000		6799980.94		A	1.6
3	☐	1.000		6963819.97		A	0.6
4	☐	1.000		6943909.76		A	0.6
5	☐	1.000		6963160.87		A	1.5
6	☐	1.000		6898366.21		A	1.4
7	☐	1.000		6702511.50		A	0.3
8	☐	1.000		5911759.50		A	2.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5195674.09		A	1.0
2	☐	1.000		5181521.94		A	1.3
3	☐	1.000		5147744.12		A	1.3
4	☐	1.000		5058946.17		A	0.5
5	☐	1.000		5125079.79		A	0.8
6	☐	1.000		4898631.39		A	1.1
7	☐	1.000		4882925.17		A	0.6
8	☐	1.000		4327529.31		A	0.3

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7120322MS.b

Acq. Date-Time 2022-12-03 11:21:44

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		8888	88876.72			0.510	5.000
24		249382	2493819.13			0.500	5.000
25		34924	349235.59			0.176	5.000
26		39851	398508.36			0.192	5.000
59		71468	714681.04			0.295	5.000
113		8416	84155.33			0.417	5.000
115		104531	1045311.05			0.582	5.000
206		24849	248490.07			0.393	5.000
207		22751	227509.89			0.131	5.000
208		52630	526299.07			0.111	5.000
220		0	2.10			54.294	

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

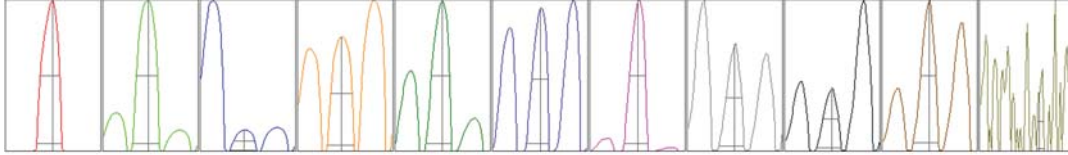
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	8899	8908	8935	8814	8882
24	250954	249716	247613	249815	248811
25	34922	35020	34933	34860	34882
26	39833	39877	39840	39747	39957
59	71651	71292	71210	71507	71680
113	8457	8432	8423	8401	8364
115	105267	104921	104227	104542	103698
206	24888	24682	24845	24904	24925
207	22781	22783	22726	22746	22719
208	52584	52726	52583	52619	52637

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	15513.66	9.00	8.90 - 9.10	
24	396540.01	23.95	23.90 - 24.10	
25	54812.55	24.90	24.90 - 25.10	
26	61458.24	25.90	25.90 - 26.10	
59	130895.38	59.00	58.90 - 59.10	
113	17133.25	113.05	112.90 - 113.10	
115	214176.34	115.05	114.90 - 115.10	
206	50784.06	206.00	205.90 - 206.10	
207	46476.45	207.00	206.90 - 207.10	
208	110096.11	208.00	207.90 - 208.10	
220	0.25	220.40	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.789	0.900	
24	0.68	0.838	0.900	
25	0.67	0.834	0.900	
26	0.68	0.840	0.900	
59	0.57	0.811	0.900	
113	0.50	0.725	0.900	
115	0.50	0.755	0.900	
206	0.49	0.788	0.900	
207	0.49	0.778	0.900	
208	0.48	0.809	0.900	
220	0.21	0.246		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.78 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	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	15.4 V
Extract 2	-115.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-65 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0002	QP Bias	-3.0 V
Mass Offset	124	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm
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EM

Discriminator	3.1 mV	Analog HV	2240 V	Pulse HV	1473 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		22585	225846.31			1.153	
89		72007	720070.88			1.992	
205		24701	247008.67			0.536	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	22798	22832	22645	22434	22214
89	73738	72812	72070	71483	69932
205	24696	24843	24815	24626	24524

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.2 V	Deflect	3.4 V
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US EPA Tune Check Report

Extract 2	-145.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0002	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	-0.4 mm	Torch V	0.8 mm
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EM

Discriminator	3.1 mV	Analog HV	2240 V	Pulse HV	1473 V
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