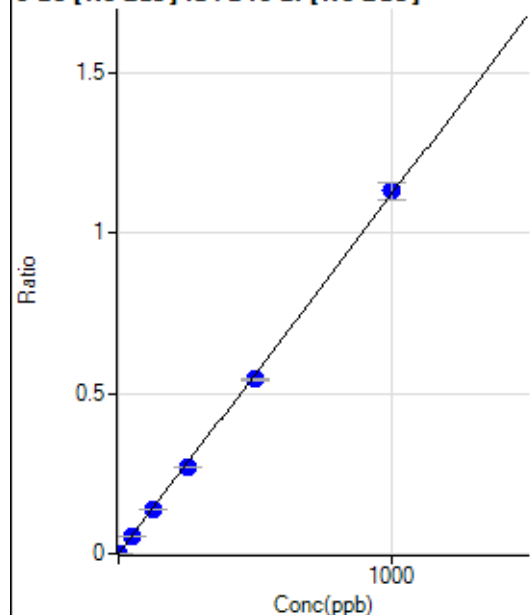


Batch Folder: D:\P8100717 .bS.b\
Analysis File: P8100717 .bS.batch.bin
DA Date-Time: 2017-10-09 08:44:05
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2017-10-07 22:53:09
2			
3	005CAL.S.d	S02	2017-10-07 23:00:15
4	006CAL.S.d	S03	2017-10-07 23:03:43
5	007CAL.S.d	S04	2017-10-07 23:07:11
6	008CAL.S.d	S05	2017-10-07 23:10:34
7	009CAL.S.d	S06	2017-10-07 23:13:50
8	010CAL.S.d	S07	2017-10-07 23:17:03
9	011CAL.S.d	S08	2017-10-07 23:20:14

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.52	0.0000	P	16.6
2	☐	0.100					
3	☐	1.000	0.900	922.28	0.0010	P	15.9
4	☐	50.000	48.678	49633.93	0.0546	P	0.9
5	☐	125.000	121.729	125388.17	0.1364	P	1.1
6	☐	250.000	242.588	247425.52	0.2719	P	0.4
7	☐	500.000	484.526	480381.76	0.5430	P	0.9
8	☐	1000.000	1010.065	943862.88	1.1319	P	4.4
9	☐			148.15	0.0002	P	18.4

$$y = 0.0011 * x + 2.0796E-005$$

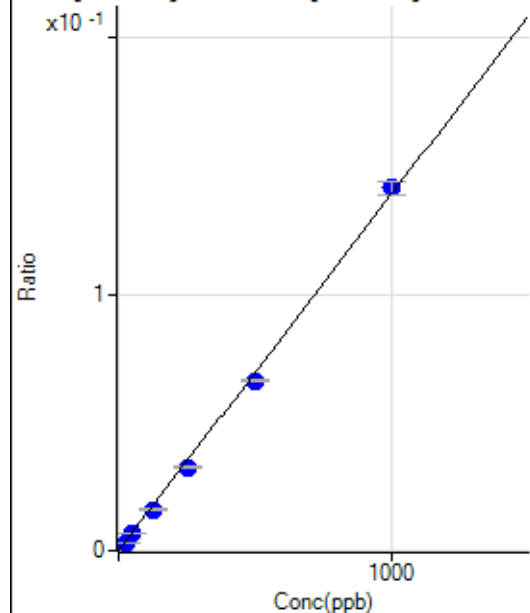
$$R = 0.9998$$

$$DL = 0.009214$$

$$BEC = 0.01856$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0001	P	44.9
2	☐	2.500					
3	☐	25.000	21.598	2750.38	0.0031	P	7.3
4	☐	50.000	47.143	6020.93	0.0066	P	1.3
5	☐	125.000	114.201	14644.00	0.0159	P	2.9
6	☐	250.000	233.094	29525.86	0.0324	P	2.2
7	☐	500.000	476.534	58620.74	0.0663	P	1.7
8	☐	1000.000	1017.537	117934.60	0.1414	P	3.7
9	☐			4075.75	0.0045	P	7.4

$$y = 1.3889E-004 * x + 7.1523E-005$$

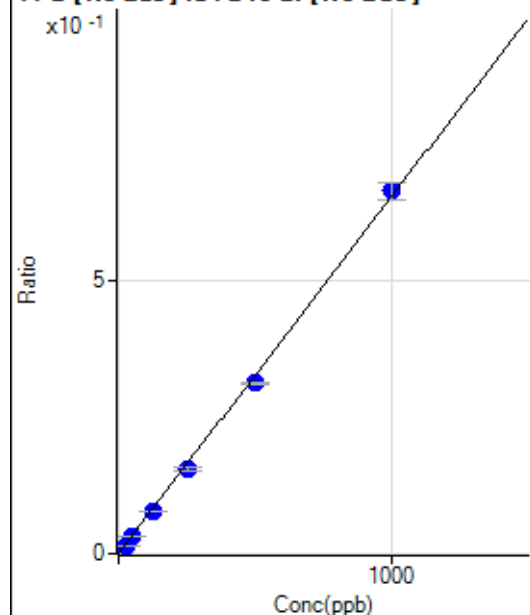
$$R = 0.9994$$

$$DL = 0.6942$$

$$BEC = 0.5149$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0003	P	20.4
2	☐	2.500					
3	☐	25.000	21.184	12631.03	0.0141	P	1.9
4	☐	50.000	45.836	27468.97	0.0302	P	0.6
5	☐	125.000	117.530	70783.32	0.0770	P	1.4
6	☐	250.000	236.474	140756.84	0.1547	P	2.8
7	☐	500.000	476.610	275591.57	0.3115	P	0.4
8	☐	1000.000	1016.314	553645.28	0.6639	P	4.6
9	☐			19227.56	0.0211	P	8.9

$$y = 6.5301\text{E-}004 * x + 2.6888\text{E-}004$$

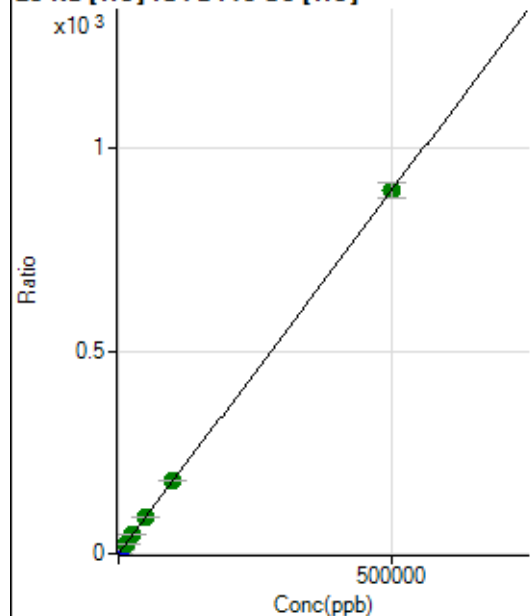
$$R = 0.9995$$

$$DL = 0.2522$$

$$BEC = 0.4118$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11196.54	0.2518	P	1.0
2	☐	50.000					
3	☐	500.000	499.105	49272.37	1.1461	P	6.8
4	☐	5000.000	5127.500	433373.71	9.4394	P	2.5
5	☐	12500.000	13234.780	1090811.21	23.9663	A	3.0
6	☐	25000.000	26117.057	2159778.09	47.0491	A	1.0
7	☐	50000.000	50712.856	4223299.49	91.1205	A	1.1
8	☐	100000.00	100329.93	8646106.53	180.0257	A	0.9
9	☐	500000.00	499787.23	43630302.71	895.7842	A	4.2

$$y = 0.0018 * x + 0.2518$$

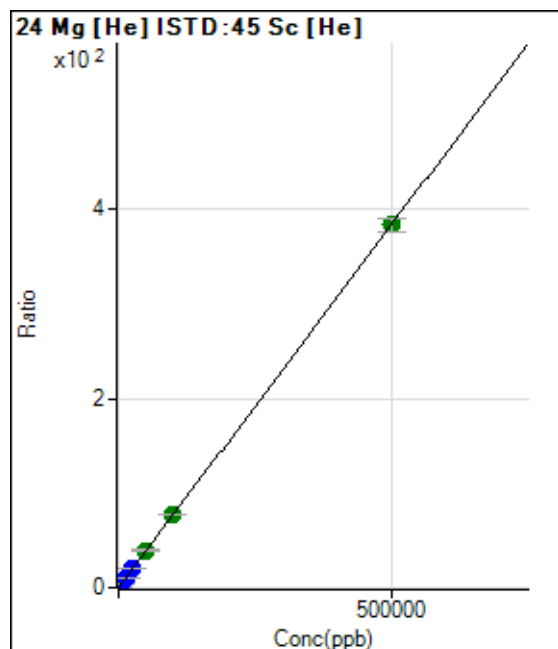
$$R = 1.0000$$

$$DL = 4.182$$

$$BEC = 140.5$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.23	0.0016	P	26.3
2	☐	50.000					
3	☐	500.000	495.415	16415.57	0.3818	P	6.6
4	☐	5000.000	5171.940	182299.86	3.9709	P	2.7
5	☐	12500.000	13069.676	456636.62	10.0321	P	2.4
6	☐	25000.000	25490.117	898037.24	19.5643	P	1.6
7	☐	50000.000	51348.046	1826540.10	39.4092	A	1.4
8	☐	100000.00	100107.21	3689933.63	76.8300	A	0.4
9	☐	500000.00	499803.29	18684544.34	383.5809	A	3.8

$$y = 7.6746\text{E-}004 * x + 0.0016$$

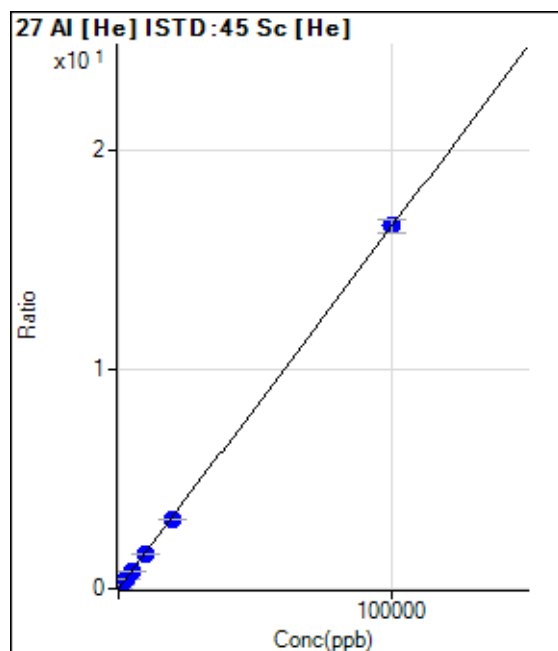
$$R = 1.0000$$

$$DL = 1.669$$

$$BEC = 2.115$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0002	P	99.7
2	☐	2.000					
3	☐	20.000	17.541	133.34	0.0031	P	12.9
4	☐	1000.000	969.163	7366.08	0.1604	P	3.0
5	☐	2500.000	2497.073	18804.84	0.4131	P	1.4
6	☐	5000.000	4893.426	37152.58	0.8093	P	0.6
7	☐	10000.000	9556.796	73253.20	1.5804	P	0.2
8	☐	20000.000	19120.377	151843.00	3.1617	P	1.5
9	☐	100000.00	100225.95	807300.30	16.5726	P	3.6

$$y = 1.6535\text{E-}004 * x + 1.8666\text{E-}004$$

$$R = 1.0000$$

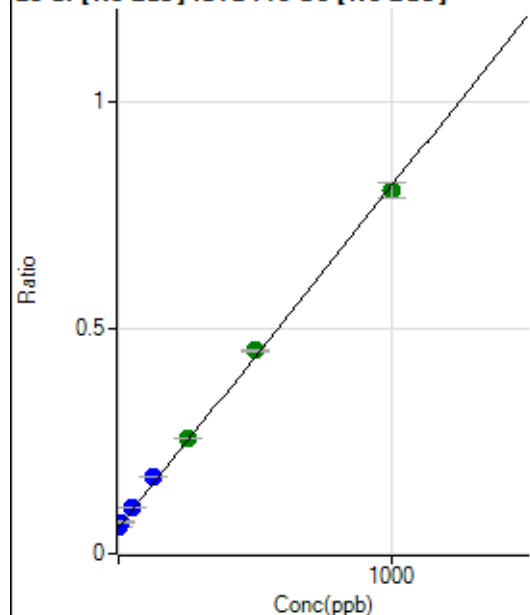
$$DL = 3.377$$

$$BEC = 1.129$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	274189.47	0.0581	P	1.3
2	☐	1.000					
3	☐	10.000	15.860	337707.15	0.0701	P	0.5
4	☐	50.000	58.271	500026.18	0.1022	P	0.4
5	☐	125.000	149.604	837291.53	0.1712	P	0.3
6	☐	250.000	260.907	1253742.69	0.2554	A	1.5
7	☐	500.000	517.037	2170282.51	0.4490	A	1.0
8	☐	1000.000	985.207	3851515.58	0.8030	A	4.4
9	☐			339649.75	0.0687	P	1.3

$$y = 7.5602\text{E-}004 * x + 0.0581$$

$$R = 0.9995$$

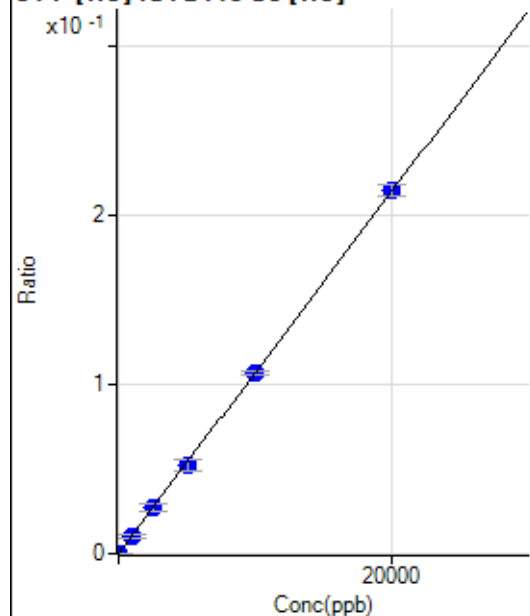
$$DL = 3.029$$

$$BEC = 76.89$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	5.900	8.33	0.0002	P	100.3
2	☐	0.000					
3	☐	0.000	-5.900	2.78	0.0001	P	173.2
4	☐	1000.000	926.222	458.36	0.0100	P	25.0
5	☐	2500.000	2543.953	1238.99	0.0273	P	18.3
6	☐	5000.000	4844.121	2378.10	0.0518	P	12.5
7	☐	10000.000	9971.693	4937.20	0.1065	P	2.9
8	☐	20000.000	20051.318	10281.94	0.2141	P	3.1
9	☐			13.89	0.0003	P	91.5

$$y = 1.0670\text{E-}005 * x + 1.2427\text{E-}004$$

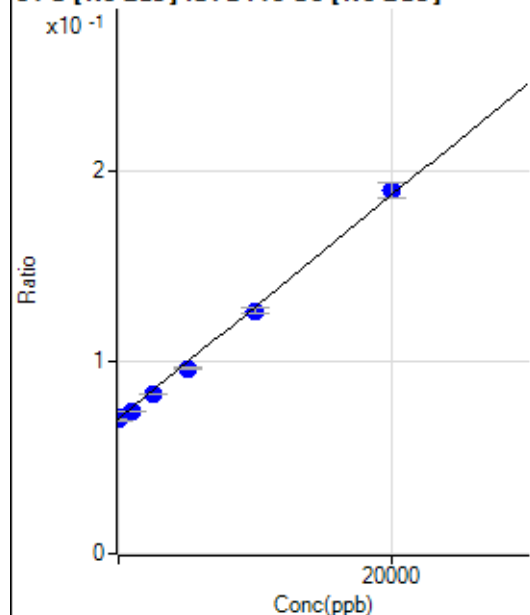
$$R = 1.0000$$

$$DL = 41.34$$

$$BEC = 11.65$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	79.825	335647.65	0.0712	P	0.6
2	☐	0.000					
3	☐	0.000	-79.825	338195.69	0.0702	P	1.3
4	☐	1000.000	625.853	363794.85	0.0743	P	0.7
5	☐	2500.000	2193.011	408282.22	0.0835	P	0.9
6	☐	5000.000	4480.610	475504.13	0.0969	P	0.8
7	☐	10000.000	9656.955	614160.86	0.1271	P	1.8
8	☐	20000.000	20358.451	909335.82	0.1896	P	4.1
9	☐			339503.25	0.0687	P	0.2

$$y = 5.8389\text{E-}006 * x + 0.0707$$

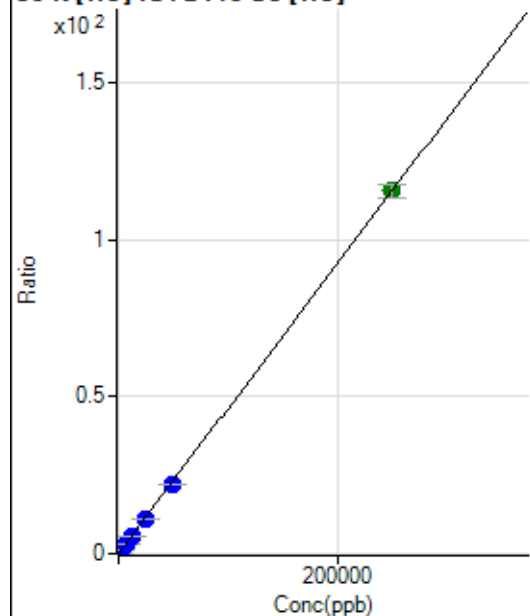
$$R = 0.9994$$

$$DL = 331.5$$

$$BEC = 1.211\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2569.80	0.0578	P	3.9
2	☐	50.000					
3	☐	500.000	485.921	12114.09	0.2819	P	7.7
4	☐	2500.000	2475.337	55061.35	1.1994	P	3.4
5	☐	6250.000	6137.845	131469.86	2.8884	P	2.7
6	☐	12500.000	12138.193	259603.49	5.6556	P	1.8
7	☐	25000.000	24113.945	518121.69	11.1785	P	0.8
8	☐	50000.000	47957.194	1064956.90	22.1743	P	0.8
9	☐	250000.00	250518.33	5630755.94	115.5899	A	3.6

$$y = 4.6117\text{E-}004 * x + 0.0578$$

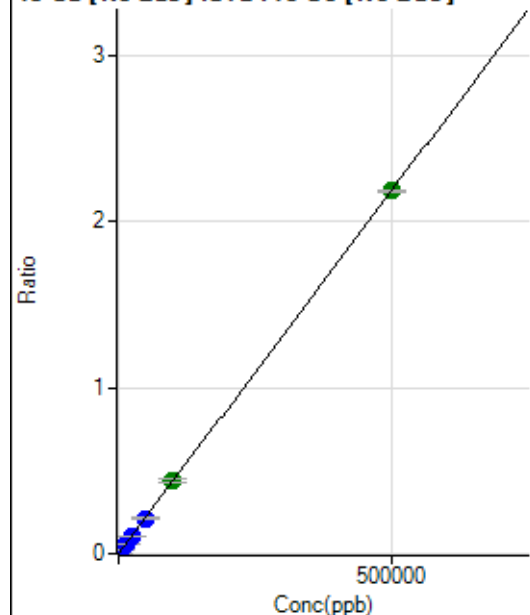
$$R = 1.0000$$

$$DL = 14.52$$

$$BEC = 125.3$$

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	1200.10	0.0003	P	12.4
2	☐	50.000					
3	☐	500.000	429.232	10262.53	0.0021	P	3.4
4	☐	5000.000	4840.364	104803.45	0.0214	P	1.0
5	☐	12500.000	12198.732	262049.30	0.0536	P	0.6
6	☐	25000.000	24200.835	520746.62	0.1061	P	0.3
7	☐	50000.000	48552.609	1027194.69	0.2125	P	1.9
8	☐	100000.00	101351.07	2126671.94	0.4434	A	4.6
9	☐	500000.00	499923.68	10803046.51	2.1861	A	0.5

$$y = 4.3724\text{E-}006 * x + 2.5460\text{E-}004$$

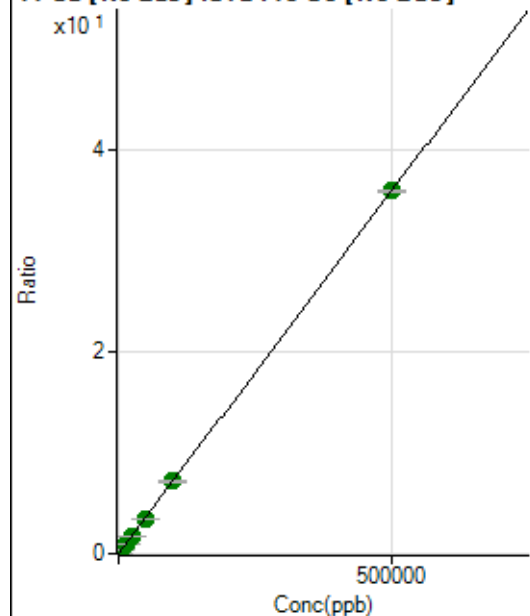
$$R = 1.0000$$

$$DL = 21.59$$

$$BEC = 58.23$$

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	14663.91	0.0031	P	3.3
2	☐	50.000					
3	☐	500.000	433.485	165066.76	0.0343	P	0.7
4	☐	5000.000	4935.062	1751335.74	0.3579	A	0.8
5	☐	12500.000	12287.362	4334778.14	0.8865	A	1.1
6	☐	25000.000	24164.514	8544575.89	1.7404	A	0.7
7	☐	50000.000	48459.199	16852571.91	3.4871	A	1.8
8	☐	100000.00	99511.585	34328038.96	7.1575	A	4.8
9	☐	500000.00	500299.56	177762131.7	35.9723	A	0.9

$$y = 7.1895\text{E-}005 * x + 0.0031$$

$$R = 1.0000$$

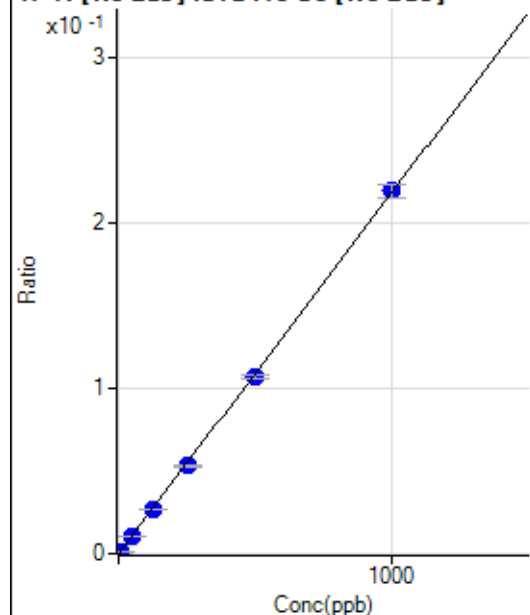
$$DL = 4.267$$

$$BEC = 43.25$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.79	0.0000	P	46.6
2	☐	0.500					
3	☐	5.000	4.401	4753.79	0.0010	P	3.5
4	☐	50.000	49.188	52635.90	0.0108	P	1.5
5	☐	125.000	123.144	131490.04	0.0269	P	0.9
6	☐	250.000	243.528	260945.58	0.0532	P	0.8
7	☐	500.000	491.404	518209.89	0.1072	P	1.9
8	☐	1000.000	1006.192	1053118.04	0.2195	P	3.9
9	☐			744.50	0.0002	P	18.6

$$y = 2.1815E-004 * x + 2.7007E-005$$

$$R = 0.9999$$

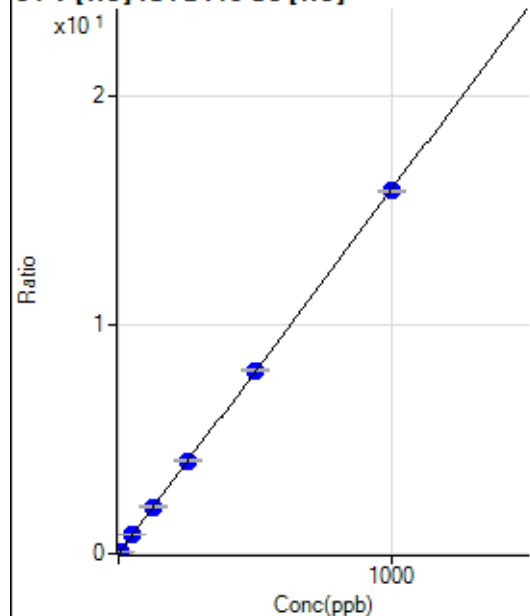
$$DL = 0.1731$$

$$BEC = 0.1238$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0002	P	64.9
2	☐	0.500					
3	☐	5.000	4.835	3314.89	0.0772	P	9.8
4	☐	50.000	51.197	37476.87	0.8162	P	1.6
5	☐	125.000	128.837	93473.97	2.0537	P	2.9
6	☐	250.000	254.605	186285.18	4.0582	P	1.3
7	☐	500.000	504.057	372390.99	8.0342	P	0.9
8	☐	1000.000	996.282	762642.52	15.8796	P	0.5
9	☐			171.11	0.0035	P	14.4

$$y = 0.0159 * x + 1.7450E-004$$

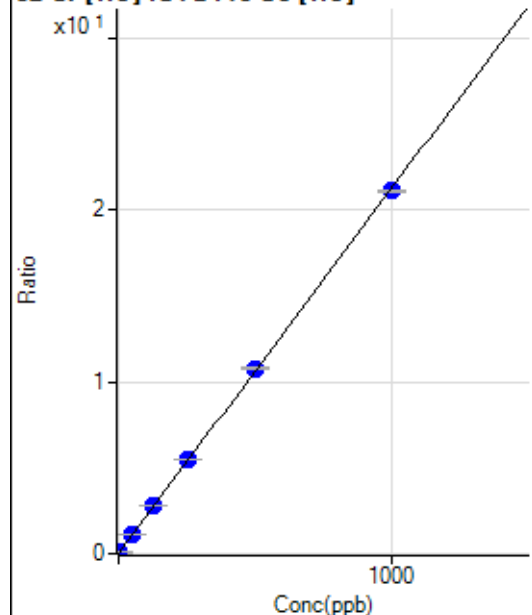
$$R = 1.0000$$

$$DL = 0.0213$$

$$BEC = 0.01095$$

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	676.70	0.0152	P	5.8
2	☐	0.200					
3	☐	2.000	2.281	2743.65	0.0637	P	3.8
4	☐	50.000	51.588	51077.33	1.1123	P	1.0
5	☐	125.000	131.960	128433.52	2.8214	P	2.0
6	☐	250.000	258.203	252757.46	5.5060	P	0.7
7	☐	500.000	507.341	500764.53	10.8041	P	0.8
8	☐	1000.000	993.329	1015233.80	21.1389	P	0.4
9	☐			15185.11	0.3117	P	3.4

$$y = 0.0213 * x + 0.0152$$

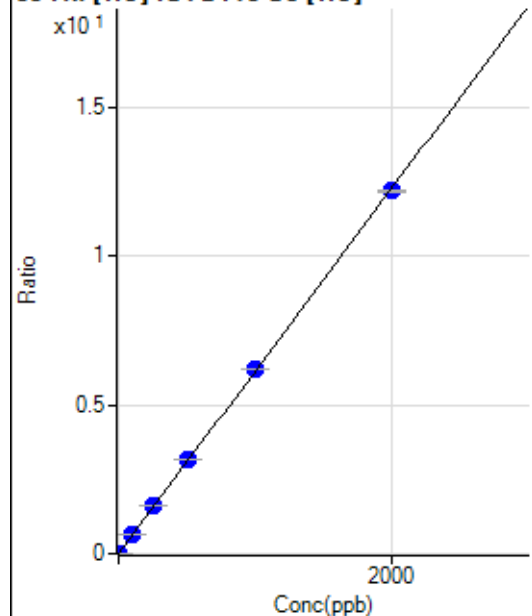
$$R = 0.9999$$

$$DL = 0.1242$$

$$BEC = 0.7158$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	21.11	0.0005	P	24.5
2	☐	0.100					
3	☐	1.000	0.998	282.23	0.0066	P	22.2
4	☐	100.000	103.594	29229.62	0.6366	P	2.2
5	☐	250.000	264.134	73843.88	1.6225	P	3.2
6	☐	500.000	517.282	145835.10	3.1770	P	1.4
7	☐	1000.000	1011.921	288043.24	6.2145	P	0.6
8	☐	2000.000	1987.773	586269.26	12.2071	P	0.7
9	☐			2227.99	0.0458	P	9.7

$$y = 0.0061 * x + 4.7508E-004$$

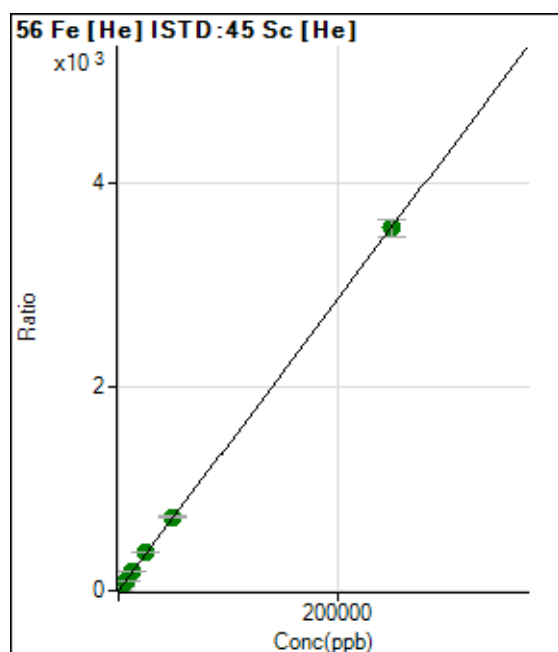
$$R = 0.9999$$

$$DL = 0.0568$$

$$BEC = 0.07736$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1114.90	0.0251	P	9.7
2	☐	5.000					
3	☐	50.000	51.686	32674.13	0.7604	P	7.7
4	☐	2500.000	2714.789	1774576.98	38.6497	A	2.0
5	☐	6250.000	6820.577	4417765.00	97.0648	A	3.1
6	☐	12500.000	13329.862	8706397.88	189.6757	A	1.9
7	☐	25000.000	26115.825	17222682.67	371.5879	A	1.0
8	☐	50000.000	50841.103	34740257.26	723.3668	A	1.1
9	☐	250000.00	249662.29	172997007.5	3,552.094	A	4.5

$$y = 0.0142 * x + 0.0251$$

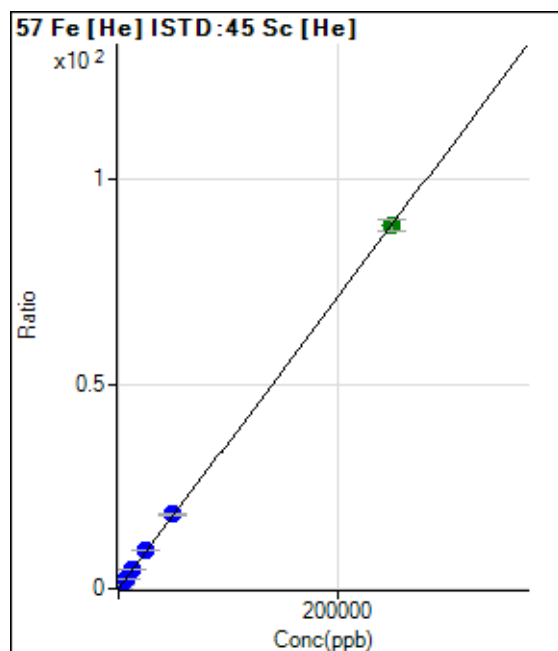
$$R = 1.0000$$

$$DL = 0.5107$$

$$BEC = 1.763$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0009	P	50.9
2	☐	5.000					
3	☐	50.000	52.336	831.53	0.0195	P	19.8
4	☐	2500.000	2720.827	44441.77	0.9680	P	2.5
5	☐	6250.000	6850.352	110865.22	2.4358	P	2.7
6	☐	12500.000	13340.344	217707.07	4.7425	P	0.9
7	☐	25000.000	26206.427	431782.65	9.3157	P	0.7
8	☐	50000.000	51075.300	871911.92	18.1550	P	1.0
9	☐	250000.00	249605.06	4322376.46	88.7202	A	3.2

$$y = 3.5544E-004 * x + 8.7270E-004$$

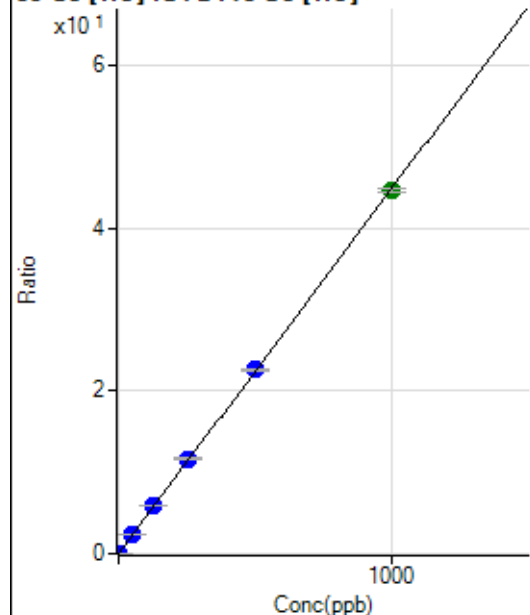
$$R = 1.0000$$

$$DL = 3.746$$

$$BEC = 2.455$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0014	P	48.9
2	☐	0.100					
3	☐	1.000	1.049	2083.53	0.0484	P	5.9
4	☐	50.000	51.735	106665.22	2.3234	P	2.8
5	☐	125.000	131.164	268037.00	5.8885	P	2.2
6	☐	250.000	259.561	534843.39	11.6515	P	1.5
7	☐	500.000	504.592	1049800.82	22.6495	P	0.7
8	☐	1000.000	994.456	2143729.90	44.6366	A	0.9
9	☐			2346.90	0.0482	P	7.5

$$y = 0.0449 * x + 0.0014$$

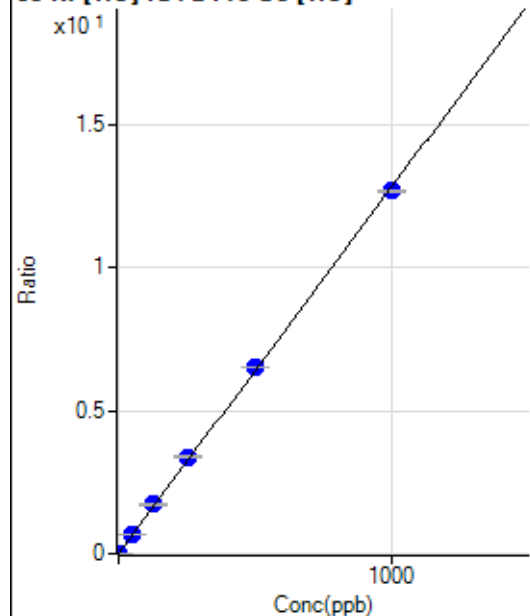
$$R = 0.9999$$

$$DL = 0.04422$$

$$BEC = 0.03012$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	45.56	0.0010	P	18.6
2	☐	0.100					
3	☐	1.000	1.134	667.81	0.0156	P	9.1
4	☐	50.000	53.940	31772.01	0.6920	P	2.2
5	☐	125.000	134.605	78537.86	1.7253	P	1.8
6	☐	250.000	264.173	155381.19	3.3851	P	1.7
7	☐	500.000	509.617	302636.28	6.5292	P	0.2
8	☐	1000.000	990.250	609273.15	12.6861	P	0.4
9	☐			5931.35	0.1217	P	2.8

$$y = 0.0128 * x + 0.0010$$

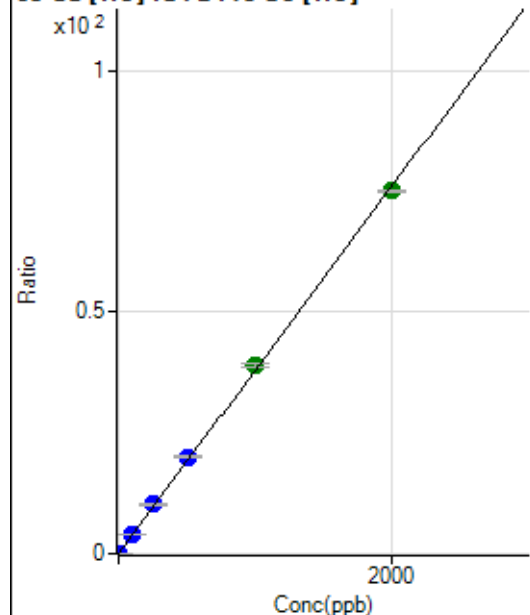
$$R = 0.9998$$

$$DL = 0.04455$$

$$BEC = 0.08$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	123.34	0.0028	P	9.6
2	☐	0.200					
3	☐	2.000	2.049	3461.60	0.0807	P	10.0
4	☐	100.000	106.588	186165.25	4.0548	P	2.5
5	☐	250.000	268.367	464521.52	10.2050	P	2.1
6	☐	500.000	526.760	919364.92	20.0281	P	1.1
7	☐	1000.000	1027.903	1811263.72	39.0795	A	1.3
8	☐	2000.000	1976.733	3609227.80	75.1502	A	0.4
9	☐			3909.51	0.0802	P	4.9

$$y = 0.0380 * x + 0.0028$$

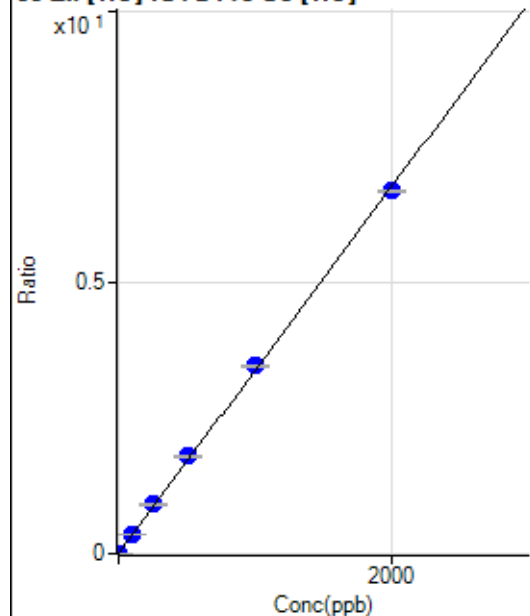
$$R = 0.9997$$

$$DL = 0.02093$$

$$BEC = 0.07298$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.56	0.0028	P	12.9
2	☐	0.200					
3	☐	2.000	2.082	423.35	0.0099	P	9.1
4	☐	100.000	106.124	16578.98	0.3612	P	4.9
5	☐	250.000	268.736	41441.89	0.9105	P	2.3
6	☐	500.000	529.280	82188.47	1.7904	P	0.9
7	☐	1000.000	1024.384	160483.32	3.4626	P	1.4
8	☐	2000.000	1977.839	320953.31	6.6828	P	0.2
9	☐			810.04	0.0166	P	5.2

$$y = 0.0034 * x + 0.0028$$

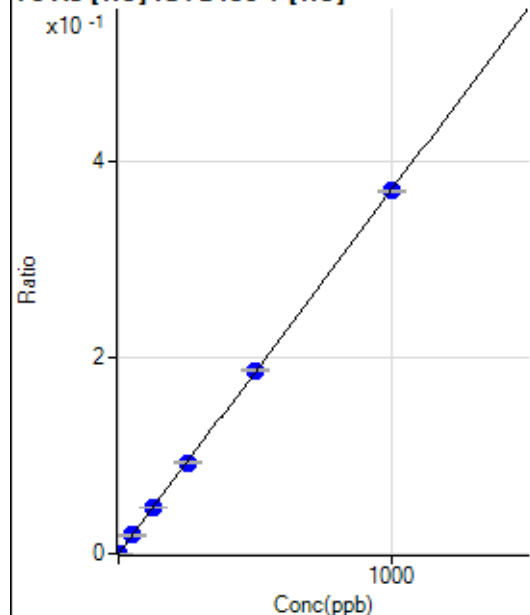
$$R = 0.9997$$

$$DL = 0.3246$$

$$BEC = 0.8364$$

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	1.23	0.0000	P	86.6
2	☐	0.100					
3	☐	1.000	0.923	101.85	0.0003	P	18.7
4	☐	50.000	50.613	5854.99	0.0188	P	2.2
5	☐	125.000	127.966	14801.21	0.0476	P	1.1
6	☐	250.000	250.323	29100.40	0.0930	P	0.7
7	☐	500.000	503.729	58045.82	0.1872	P	0.9
8	☐	1000.000	997.654	119380.18	0.3708	P	0.4
9	☐			40.12	0.0001	P	12.7

$$y = 3.7166\text{E-}004 * x + 4.0308\text{E-}006$$

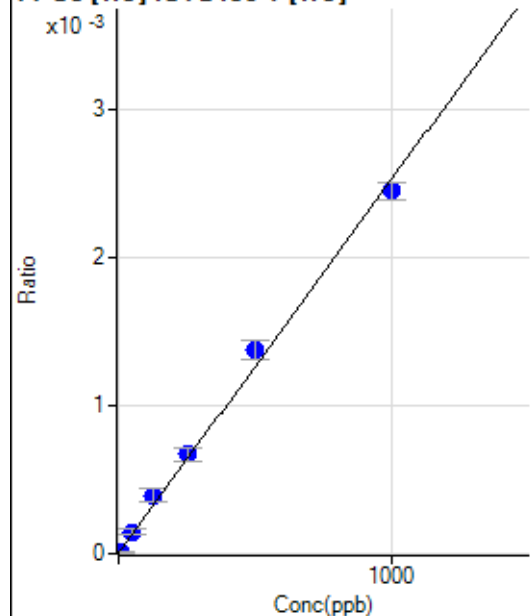
$$R = 1.0000$$

$$DL = 0.02818$$

$$BEC = 0.01085$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	0.500					
3	☐	5.000	1.866	2.22	0.0000	P	173.2
4	☐	50.000	56.558	45.55	0.0001	P	29.5
5	☐	125.000	155.318	123.34	0.0004	P	24.8
6	☐	250.000	264.683	210.01	0.0007	P	13.3
7	☐	500.000	545.227	427.79	0.0014	P	9.0
8	☐	1000.000	969.614	788.93	0.0025	P	5.1
9	☐			0.00	0.0000	P	

$$y = 2.5238\text{E-}006 * x + 3.6138\text{E-}006$$

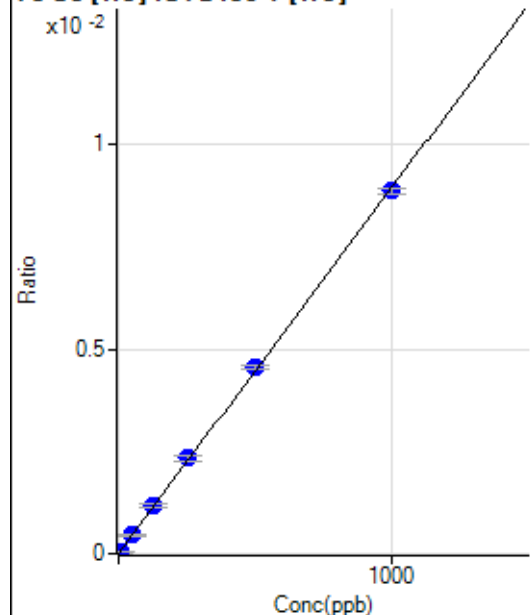
$$R = 0.9979$$

$$DL = 7.44$$

$$BEC = 1.432$$

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	0.62	0.0000	P	173.2
2	☐	0.500					
3	☐	5.000	3.845	10.49	0.0000	P	46.2
4	☐	50.000	50.420	140.74	0.0005	P	12.9
5	☐	125.000	130.276	362.97	0.0012	P	8.7
6	☐	250.000	260.129	727.19	0.0023	P	6.5
7	☐	500.000	509.861	1412.43	0.0046	P	1.4
8	☐	1000.000	991.863	2852.79	0.0089	P	1.4
9	☐			2.47	0.0000	P	47.9

$$y = 8.9311\text{E-}006 * x + 2.0231\text{E-}006$$

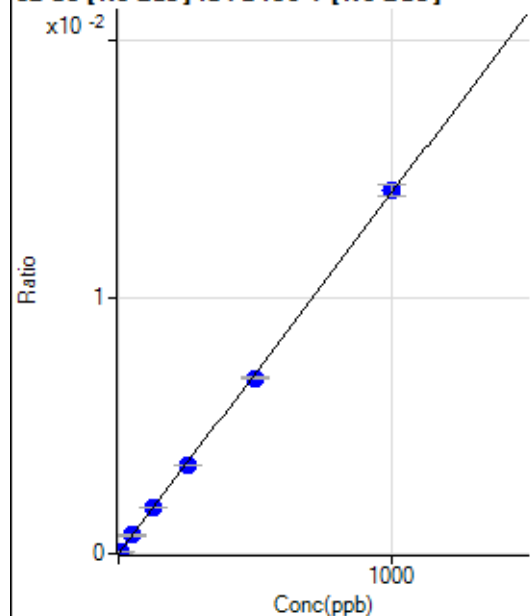
$$R = 0.9999$$

$$DL = 1.177$$

$$BEC = 0.2265$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-51.20	0.0000	P	-116.
2	☐	0.500					
3	☐	5.000	4.469	513.69	0.0001	P	9.6
4	☐	50.000	50.717	6390.33	0.0007	P	0.9
5	☐	125.000	127.275	16224.47	0.0018	P	0.7
6	☐	250.000	247.013	31802.48	0.0035	P	0.4
7	☐	500.000	487.942	62247.56	0.0069	P	1.8
8	☐	1000.000	1006.458	124518.28	0.0141	P	3.3
9	☐			98.68	0.0000	P	5.2

$$y = 1.4054\text{E-}005 * x - 5.8111\text{E-}006$$

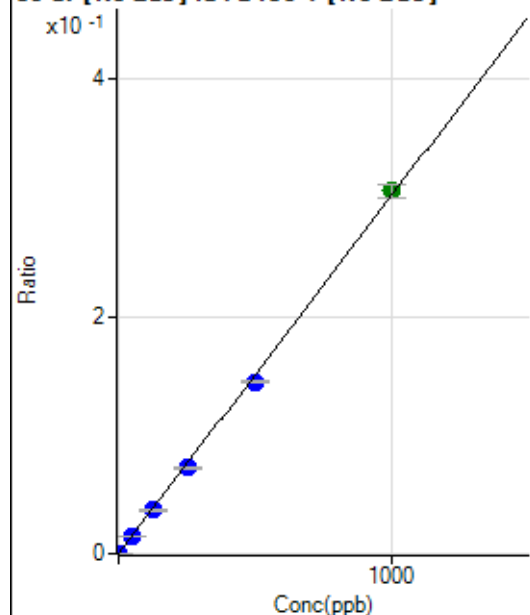
$$R = 0.9999$$

$$DL = 1.444$$

$$BEC = -0.4135$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	619.49	0.0001	P	9.5
2	☐	0.100					
3	☐	1.000	0.931	3164.41	0.0004	P	6.6
4	☐	50.000	47.577	130513.05	0.0144	P	1.5
5	☐	125.000	121.082	333403.16	0.0366	P	0.8
6	☐	250.000	239.468	664254.59	0.0724	P	0.8
7	☐	500.000	480.206	1318103.74	0.1451	P	1.9
8	☐	1000.000	1013.141	2694918.79	0.3060	A	3.8
9	☐			88925.49	0.0101	P	0.1

$$y = 3.0199\text{E-}004 * x + 7.0111\text{E-}005$$

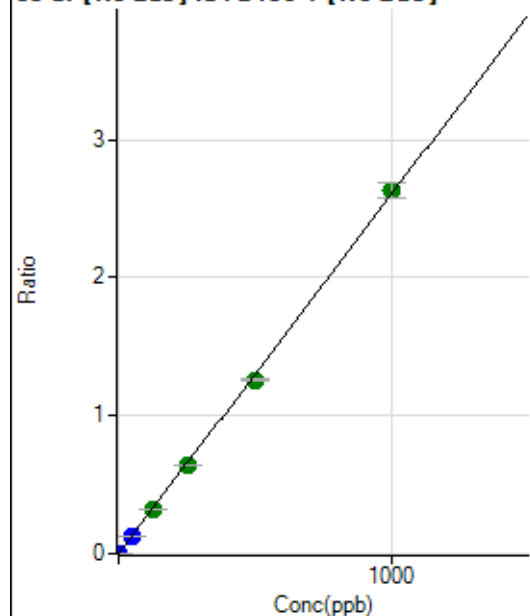
$$R = 0.9997$$

$$DL = 0.0664$$

$$BEC = 0.2322$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	336.13	0.0000	P	17.6
2	☐	0.100					
3	☐	1.000	0.899	21420.37	0.0024	P	1.7
4	☐	50.000	48.775	1147958.43	0.1270	P	0.5
5	☐	125.000	124.382	2946589.26	0.3238	A	0.8
6	☐	250.000	244.624	5843472.35	0.6368	A	0.3
7	☐	500.000	483.973	11445669.44	1.2598	A	1.5
8	☐	1000.000	1009.496	23137595.14	2.6277	A	4.2
9	☐			770971.31	0.0878	P	0.5

$$y = 0.0026 * x + 3.8085\text{E-}005$$

$$R = 0.9998$$

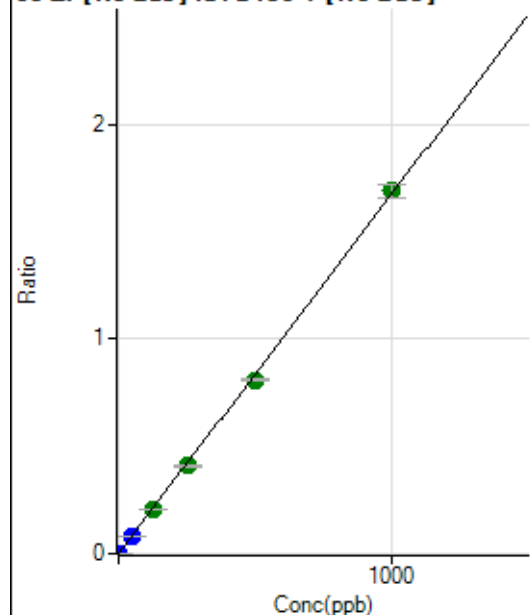
$$DL = 0.007729$$

$$BEC = 0.01463$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.25	0.0001	P	15.2
2	☐	0.100					
3	☐	1.000	0.830	12995.59	0.0014	P	3.0
4	☐	50.000	47.996	725995.05	0.0803	P	0.1
5	☐	125.000	125.016	1902987.76	0.2091	A	0.5
6	☐	250.000	243.677	3739808.98	0.4075	A	0.4
7	☐	500.000	483.604	7347981.85	0.8088	A	1.2
8	☐	1000.000	1009.877	14872218.22	1.6888	A	3.6
9	☐			2083.59	0.0002	P	6.0

$$y = 0.0017 * x + 5.3486E-005$$

$$R = 0.9998$$

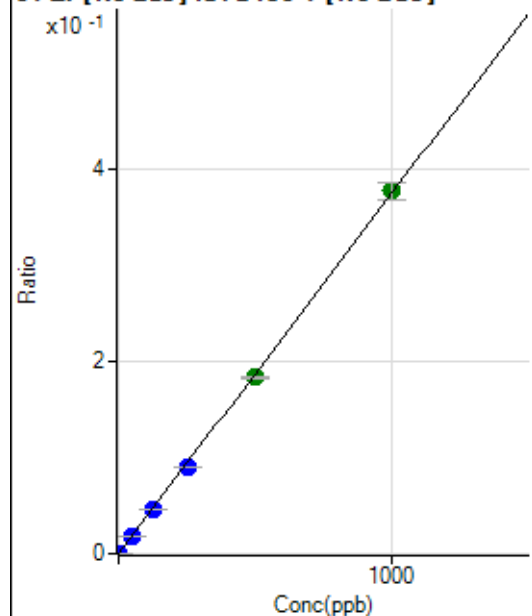
$$DL = 0.01459$$

$$BEC = 0.03198$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	11.7
2	☐	0.100					
3	☐	1.000	0.785	2780.97	0.0003	P	8.1
4	☐	50.000	48.226	163177.68	0.0181	P	1.2
5	☐	125.000	121.821	414766.43	0.0456	P	1.0
6	☐	250.000	241.371	828554.99	0.0903	P	0.7
7	☐	500.000	489.037	1661998.94	0.1829	A	0.7
8	☐	1000.000	1008.125	3319657.80	0.3771	A	4.9
9	☐			522.26	0.0001	P	12.3

$$y = 3.7402E-004 * x + 1.5085E-005$$

$$R = 0.9999$$

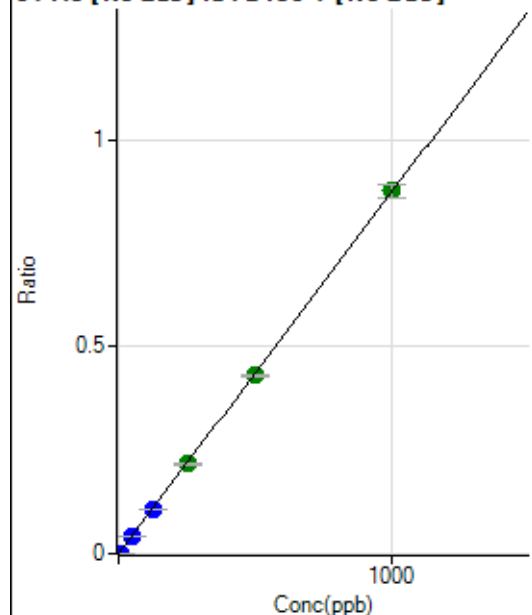
$$DL = 0.01413$$

$$BEC = 0.04033$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.79	0.0000	P	19.5
2	☐	0.500					
3	☐	5.000	1.925	15339.74	0.0017	P	1.6
4	☐	50.000	48.981	386584.50	0.0428	P	0.8
5	☐	125.000	123.987	984857.98	0.1082	P	0.9
6	☐	250.000	247.756	1984257.58	0.2162	A	1.0
7	☐	500.000	493.546	3913354.43	0.4307	A	1.4
8	☐	1000.000	1003.981	7715315.71	0.8762	A	4.0
9	☐			6312.85	0.0007	P	1.3

$$y = 8.7269\text{E-}004 * x + 2.2956\text{E-}005$$

$$R = 1.0000$$

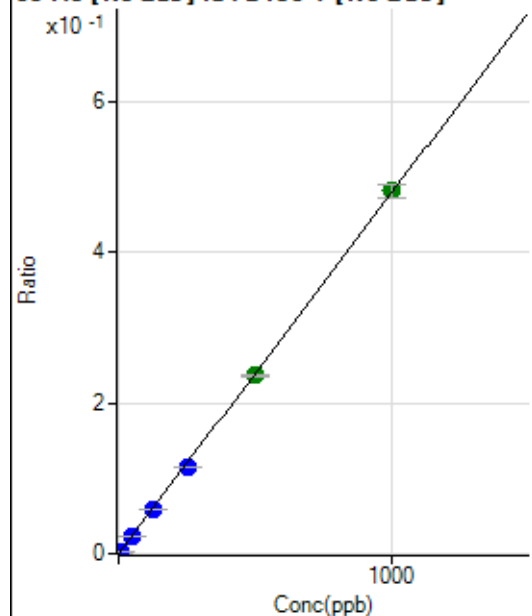
$$DL = 0.01535$$

$$BEC = 0.02631$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	32.7
2	☐	0.500					
3	☐	5.000	4.388	18969.56	0.0021	P	2.8
4	☐	50.000	48.526	209826.13	0.0232	P	0.2
5	☐	125.000	121.263	527736.33	0.0580	P	1.6
6	☐	250.000	239.892	1052788.46	0.1147	P	0.1
7	☐	500.000	493.500	2144068.97	0.2360	A	2.1
8	☐	1000.000	1006.321	4237726.14	0.4812	A	3.9
9	☐			10198.73	0.0012	P	0.7

$$y = 4.7821\text{E-}004 * x + 7.2286\text{E-}006$$

$$R = 0.9999$$

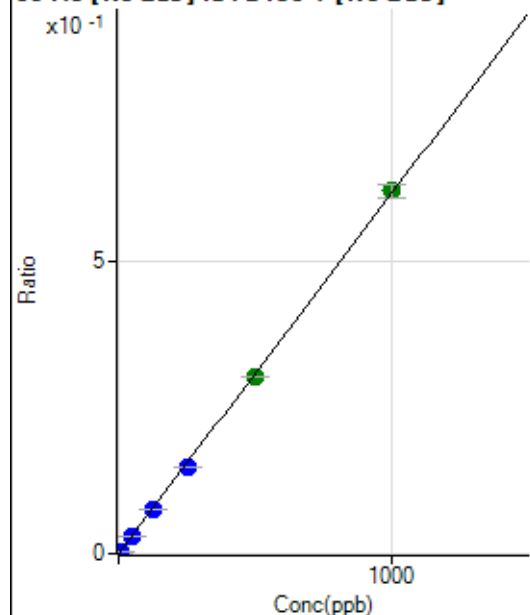
$$DL = 0.01484$$

$$BEC = 0.01512$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0000	P	5.0
2	☐	0.500					
3	☐	5.000	3.799	21209.00	0.0024	P	1.6
4	☐	50.000	48.000	267495.16	0.0296	P	0.7
5	☐	125.000	120.724	677129.97	0.0744	P	0.9
6	☐	250.000	238.900	1351102.25	0.1472	P	0.7
7	☐	500.000	492.082	2755383.68	0.3033	A	0.7
8	☐	1000.000	1007.375	5466670.39	0.6208	A	4.0
9	☐			12584.13	0.0014	P	2.5

$$y = 6.1626\text{E-}004 * x + 1.2582\text{E-}005$$

$$R = 0.9999$$

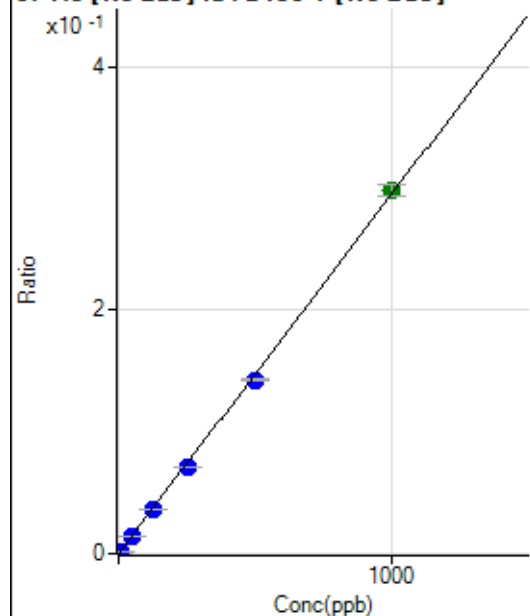
$$DL = 0.003047$$

$$BEC = 0.02042$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.11	0.0000	P	31.3
2	☐	0.500					
3	☐	5.000	4.402	11777.91	0.0013	P	1.5
4	☐	50.000	49.463	131891.91	0.0146	P	0.8
5	☐	125.000	122.879	329724.42	0.0362	P	0.5
6	☐	250.000	242.702	656615.84	0.0716	P	0.3
7	☐	500.000	484.327	1297225.31	0.1428	P	1.2
8	☐	1000.000	1009.956	2622188.47	0.2977	A	3.1
9	☐			5857.09	0.0007	P	0.7

$$y = 2.9478\text{E-}004 * x + 9.7510\text{E-}006$$

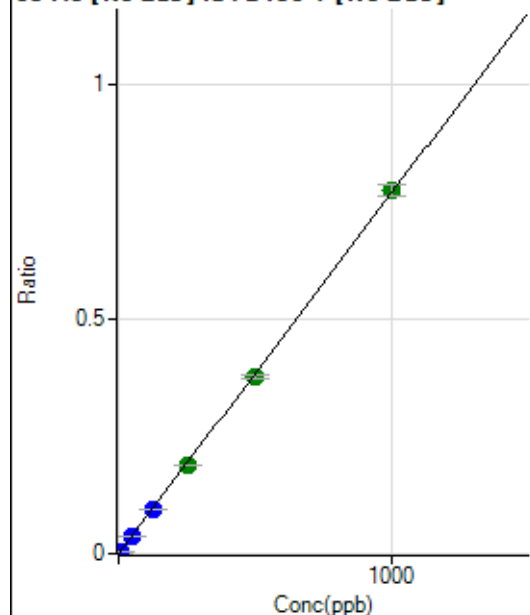
$$R = 0.9998$$

$$DL = 0.03106$$

$$BEC = 0.03308$$

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	83.34	0.0000	P	26.1
2	☐	0.500					
3	☐	5.000	4.425	30696.89	0.0034	P	2.2
4	☐	50.000	48.604	337459.53	0.0373	P	0.4
5	☐	125.000	121.699	850501.49	0.0935	P	1.1
6	☐	250.000	246.739	1738779.01	0.1895	A	0.5
7	☐	500.000	489.594	3415729.59	0.3760	A	2.1
8	☐	1000.000	1006.504	6807235.05	0.7729	A	3.2
9	☐			15064.57	0.0017	P	3.1

$$y = 7.6791\text{E-}004 * x + 9.4268\text{E-}006$$

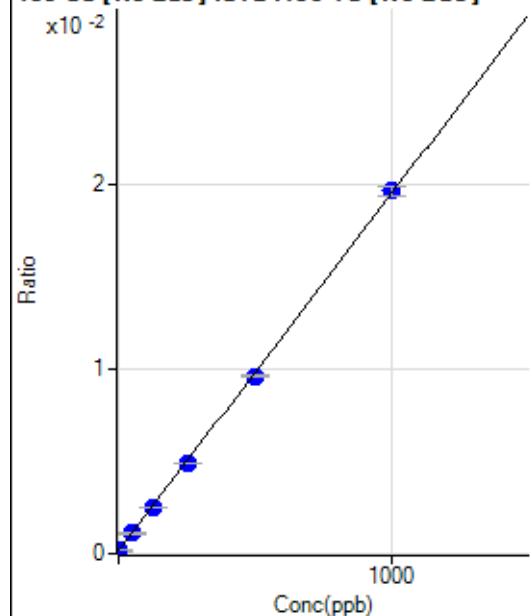
$$R = 0.9999$$

$$DL = 0.009625$$

$$BEC = 0.01228$$

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	1819.66	0.0002	P	9.3
2	☐	0.100					
3	☐	1.000	0.905	2069.71	0.0002	P	1.1
4	☐	50.000	48.982	13159.77	0.0011	P	3.0
5	☐	125.000	122.017	29962.24	0.0025	P	1.5
6	☐	250.000	244.312	58600.40	0.0049	P	1.6
7	☐	500.000	488.437	112960.34	0.0096	P	1.5
8	☐	1000.000	1007.627	222423.82	0.0197	P	2.7
9	☐			1900.22	0.0002	P	8.6

$$y = 1.9348\text{E-}005 * x + 1.5909\text{E-}004$$

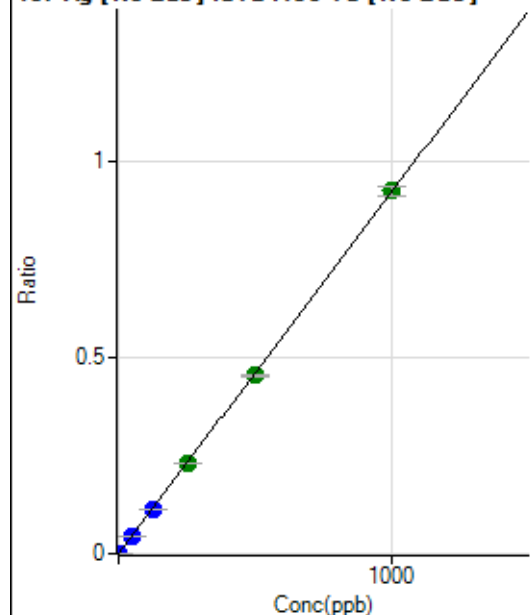
$$R = 0.9999$$

$$DL = 2.295$$

$$BEC = 8.222$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	34.1
2	☐	0.100					
3	☐	1.000	0.924	10015.25	0.0009	P	2.3
4	☐	50.000	49.446	541222.25	0.0455	P	0.6
5	☐	125.000	124.563	1363370.61	0.1147	P	0.6
6	☐	250.000	250.973	2770854.77	0.2310	A	1.0
7	☐	500.000	492.738	5331835.71	0.4536	A	1.2
8	☐	1000.000	1003.470	10452806.22	0.9237	A	2.8
9	☐			997.30	0.0001	P	4.5

$$y = 9.2050\text{E-}004 * x + 4.3818\text{E-}006$$

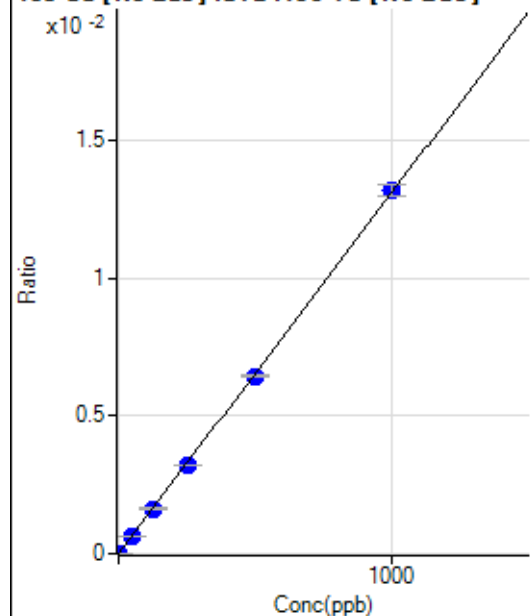
$$R = 1.0000$$

$$DL = 0.004876$$

$$BEC = 0.00476$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9.72	0.0000	P	24.1
2	☐	0.100					
3	☐	1.000	0.703	118.06	0.0000	P	26.2
4	☐	50.000	49.128	7673.17	0.0006	P	0.5
5	☐	125.000	124.862	19486.63	0.0016	P	3.2
6	☐	250.000	245.657	38662.50	0.0032	P	1.4
7	☐	500.000	491.757	75845.53	0.0065	P	1.3
8	☐	1000.000	1005.269	149235.70	0.0132	P	3.2
9	☐			30.55	0.0000	P	28.2

$$y = 1.3119\text{E-}005 * x + 8.4934\text{E-}007$$

$$R = 0.9999$$

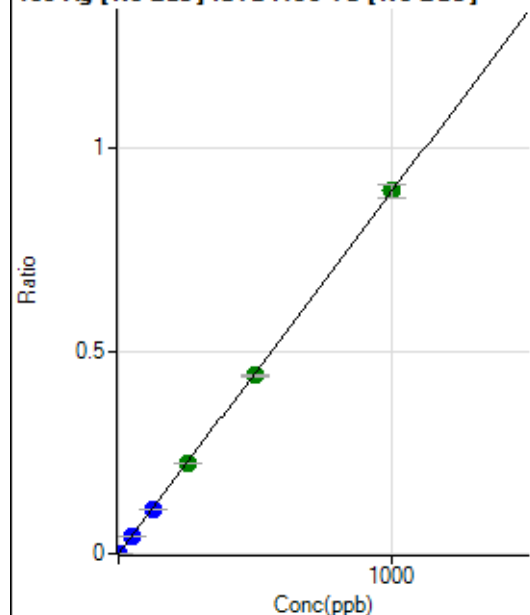
$$DL = 0.04673$$

$$BEC = 0.06474$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	32.0
2	☐	0.100					
3	☐	1.000	0.939	9848.54	0.0008	P	1.3
4	☐	50.000	49.127	520724.44	0.0438	P	0.6
5	☐	125.000	123.175	1305523.28	0.1098	P	0.9
6	☐	250.000	251.607	2690024.21	0.2243	A	0.7
7	☐	500.000	493.274	5168880.28	0.4397	A	1.2
8	☐	1000.000	1003.233	10118015.42	0.8943	A	3.7
9	☐			988.99	0.0001	P	15.1

$$y = 8.9140\text{E-}004 * x + 3.3956\text{E-}006$$

$$R = 1.0000$$

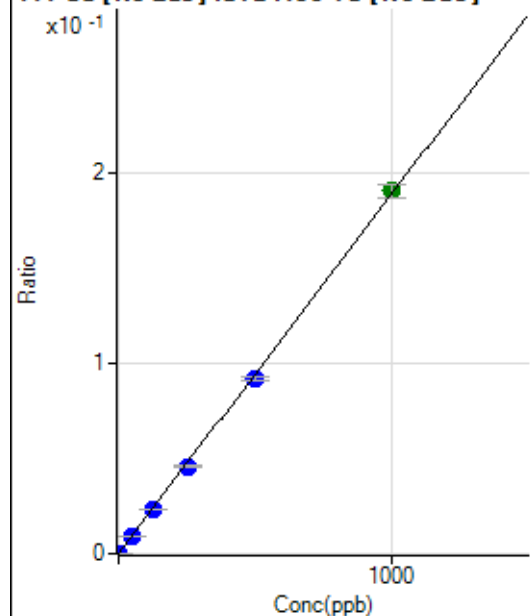
$$DL = 0.00366$$

$$BEC = 0.003809$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1280.85	0.0001	P	9.6
2	☐	0.100					
3	☐	1.000	0.923	3349.68	0.0003	P	0.8
4	☐	50.000	49.206	111476.38	0.0094	P	0.3
5	☐	125.000	123.373	277495.85	0.0233	P	0.6
6	☐	250.000	242.744	549455.12	0.0458	P	0.4
7	☐	500.000	485.276	1075189.11	0.0915	P	2.0
8	☐	1000.000	1009.419	2151472.08	0.1901	A	3.6
9	☐			1424.05	0.0001	P	10.2

$$y = 1.8826\text{E-}004 * x + 1.1198\text{E-}004$$

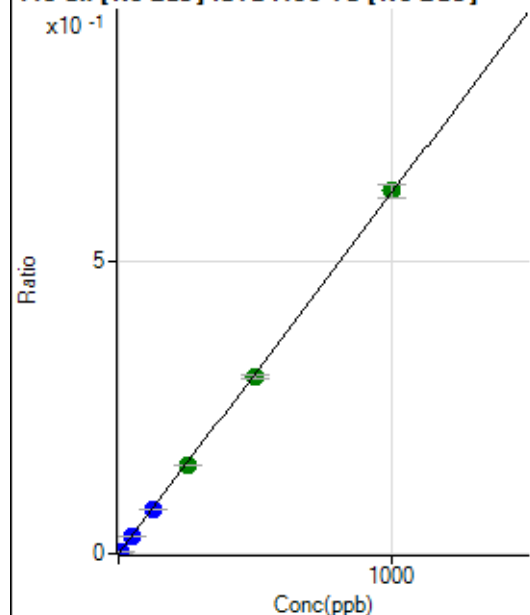
$$R = 0.9998$$

$$DL = 0.1707$$

$$BEC = 0.5948$$

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	700.05	0.0001	P	8.3
2	☐	0.500					
3	☐	5.000	4.358	32147.95	0.0027	P	0.8
4	☐	50.000	48.101	352680.33	0.0297	P	0.1
5	☐	125.000	122.264	895337.88	0.0753	P	0.8
6	☐	250.000	246.886	1822987.37	0.1520	A	0.4
7	☐	500.000	492.067	3559991.74	0.3029	A	2.2
8	☐	1000.000	1005.185	6999775.85	0.6186	A	3.4
9	☐			7218.92	0.0007	P	3.8

$$y = 6.1539\text{E-}004 * x + 6.1262\text{E-}005$$

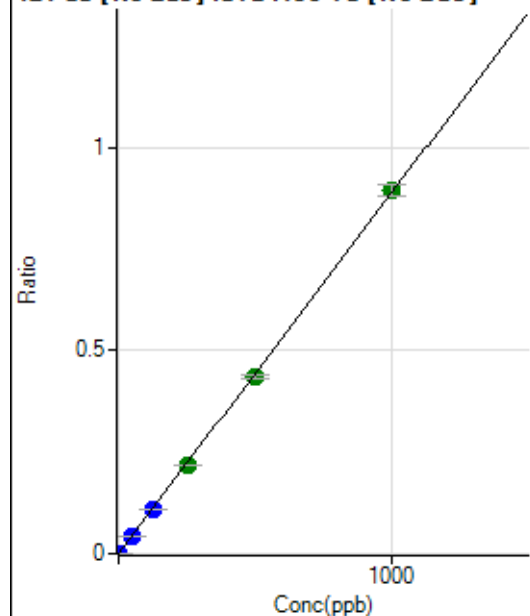
$$R = 0.9999$$

$$DL = 0.02479$$

$$BEC = 0.09955$$

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	33.34	0.0000	P	66.0
2	☐	0.200					
3	☐	2.000	1.714	17865.54	0.0015	P	2.8
4	☐	50.000	47.888	505423.37	0.0425	P	0.3
5	☐	125.000	121.593	1283277.49	0.1079	P	0.7
6	☐	250.000	245.361	2612060.00	0.2178	A	0.8
7	☐	500.000	491.632	5129456.67	0.4364	A	1.8
8	☐	1000.000	1005.876	10103047.27	0.8928	A	3.0
9	☐			11591.60	0.0011	P	1.9

$$y = 8.8760\text{E-}004 * x + 2.9162\text{E-}006$$

$$R = 0.9999$$

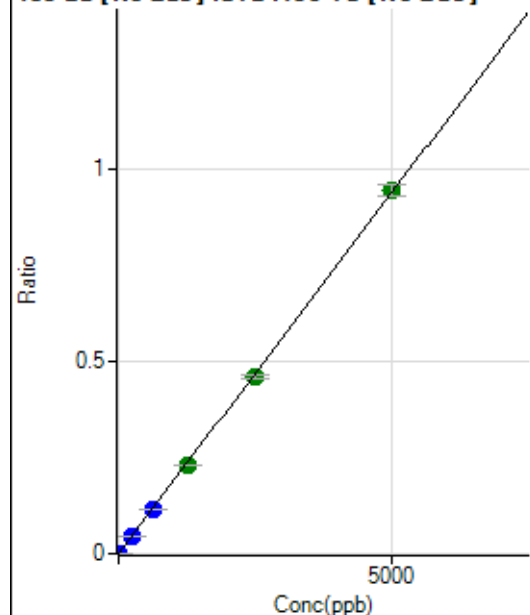
$$DL = 0.006503$$

$$BEC = 0.003286$$

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	25.00	0.0000	P	145.0
2	☐	1.000					
3	☐	10.000	8.771	19323.19	0.0016	P	1.1
4	☐	250.000	241.313	538688.19	0.0453	P	1.0
5	☐	625.000	614.727	1372208.78	0.1154	P	1.1
6	☐	1250.000	1229.246	2767910.11	0.2308	A	1.6
7	☐	2500.000	2460.979	5430600.38	0.4620	A	2.4
8	☐	5000.000	5026.420	10677954.06	0.9437	A	3.1
9	☐			2586.49	0.0002	P	8.3

$$y = 1.8774\text{E-}004 * x + 2.1857\text{E-}006$$

$$R = 0.9999$$

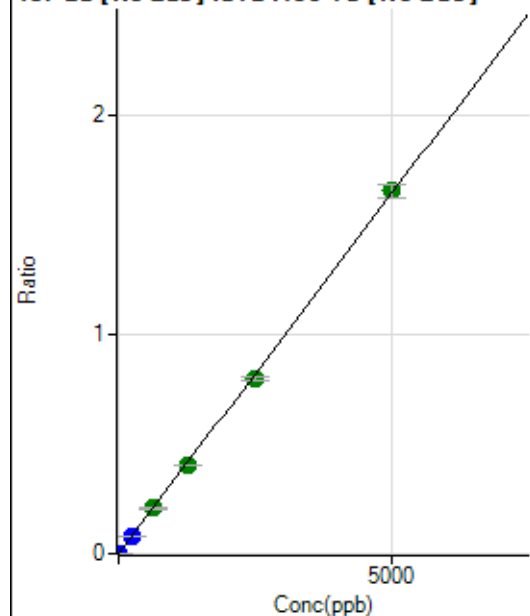
$$DL = 0.05066$$

$$BEC = 0.01164$$

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	55.56	0.0000	P	30.5
2	☐	1.000					
3	☐	10.000	8.709	33588.17	0.0029	P	3.8
4	☐	250.000	241.556	943882.37	0.0794	P	0.2
5	☐	625.000	628.887	2457246.69	0.2067	A	1.6
6	☐	1250.000	1225.537	4830445.16	0.4027	A	0.7
7	☐	2500.000	2430.840	9390045.61	0.7988	A	1.7
8	☐	5000.000	5040.635	18742470.90	1.6565	A	3.5
9	☐			4670.50	0.0004	P	5.8

$$y = 3.2862\text{E-}004 * x + 4.8521\text{E-}006$$

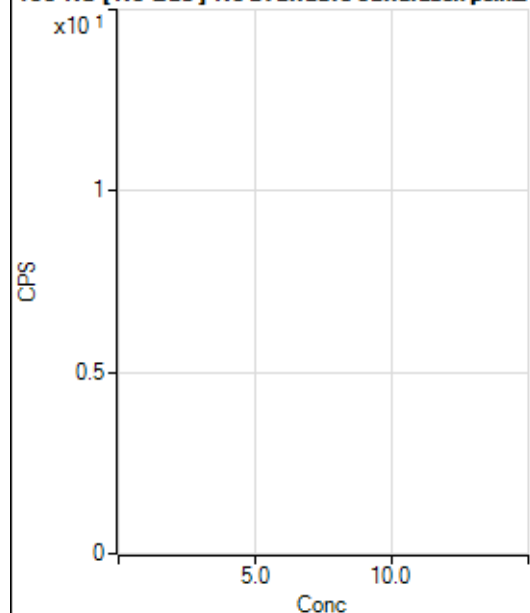
$$R = 0.9998$$

$$DL = 0.01349$$

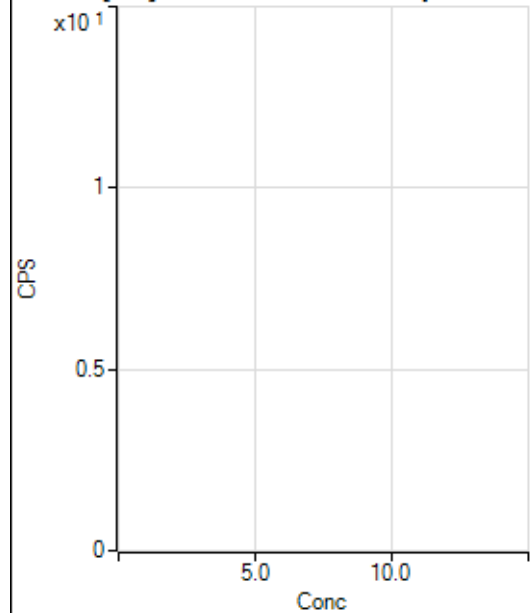
$$BEC = 0.01477$$

Weight: <None>

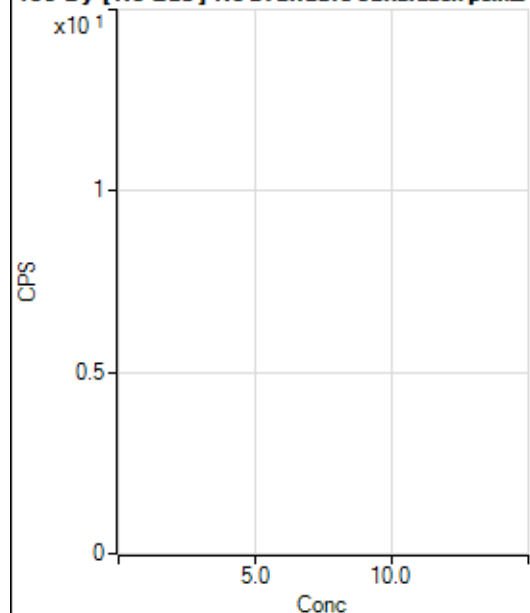
Min Conc: 0

150 Nd [No Gas] No available calibration points

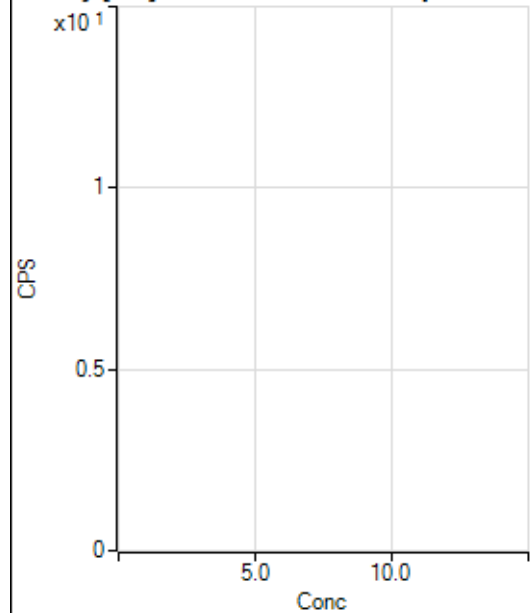
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.0
2	☐						
3	☐			13.33		P	173.2
4	☐			33.34		P	20.0
5	☐			106.67		P	34.8
6	☐			115.56		P	12.0
7	☐			184.45		P	21.2
8	☐			391.13		P	21.4
9	☐			100.00		P	26.7

150 Nd [He] No available calibration points

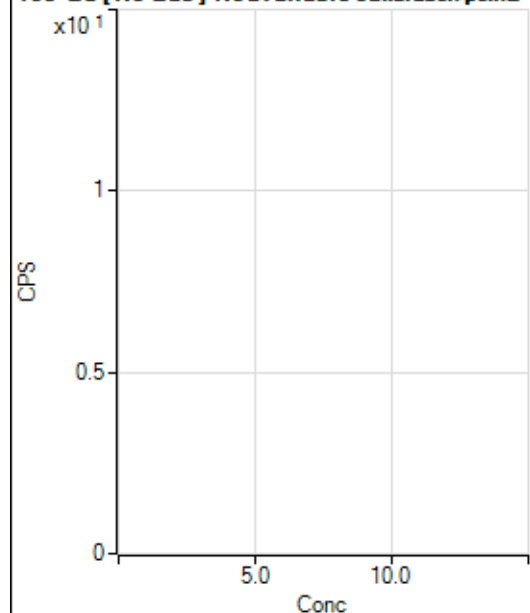
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.2
5	☐			0.00		P	
6	☐			0.00		P	
7	☐			4.44		P	114.6
8	☐			7.78		P	65.5
9	☐			14.44		P	66.6

156 Dy [No Gas] No available calibration points

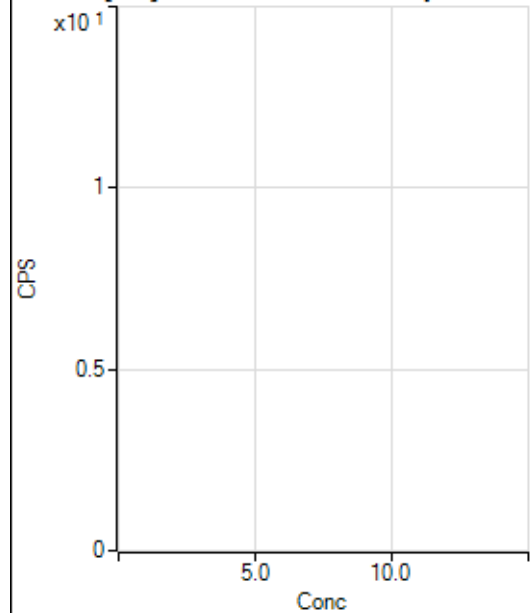
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐						
3	☐			5.56		P	173.2
4	☐			16.67		P	50.0
5	☐			19.45		P	24.7
6	☐			61.11		P	41.7
7	☐			75.01		P	19.2
8	☐			150.01		P	14.7
9	☐			63.89		P	39.8

156 Dy [He] No available calibration points

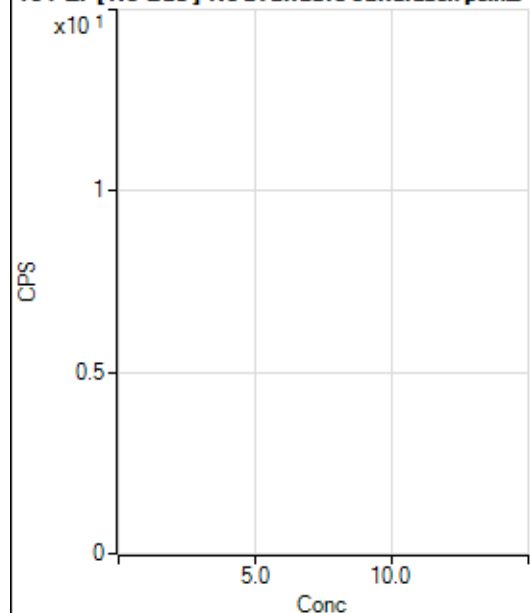
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			2.22		P	173.2
5	☐			7.78		P	137.8
6	☐			5.56		P	34.7
7	☐			7.78		P	107.8
8	☐			33.33		P	36.1
9	☐			11.11		P	45.8

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

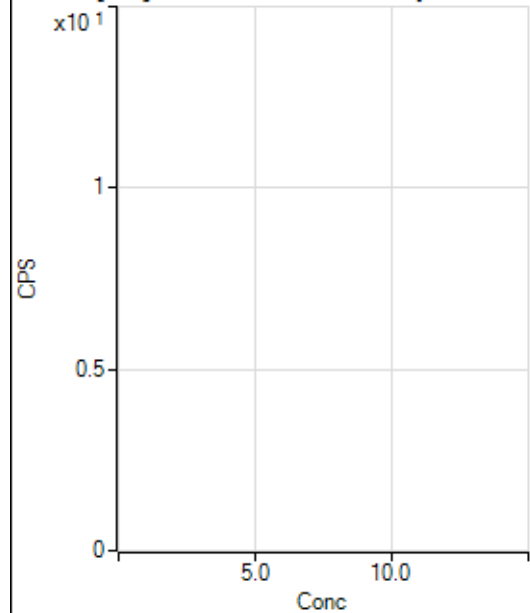
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	24.7
2	☐						
3	☐			52.78		P	24.1
4	☐			38.89		P	32.7
5	☐			55.56		P	37.8
6	☐			88.89		P	19.5
7	☐			75.00		P	40.1
8	☐			108.34		P	15.4
9	☐			102.78		P	12.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.5
2	☐						
3	☐			11.11		P	34.6
4	☐			4.44		P	43.4
5	☐			6.67		P	50.0
6	☐			11.11		P	62.5
7	☐			12.22		P	56.8
8	☐			15.56		P	32.7
9	☐			22.22		P	22.9

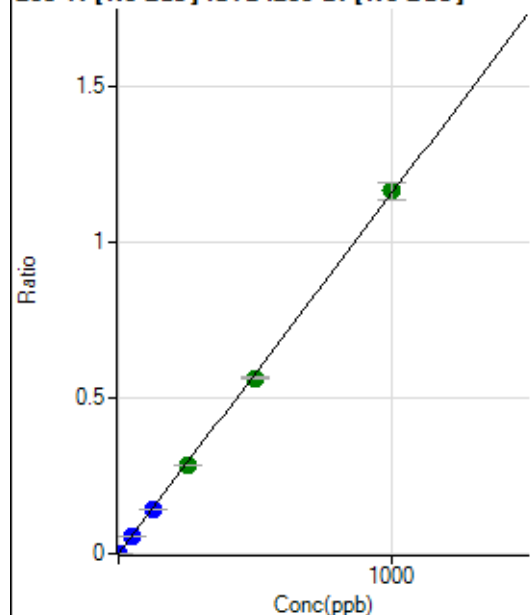
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	9.1
2	☐						
3	☐			58.34		P	37.8
4	☐			30.56		P	41.7
5	☐			44.45		P	10.8
6	☐			22.22		P	21.6
7	☐			63.89		P	39.8
8	☐			41.67		P	40.0
9	☐			86.12		P	24.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			6.67		P	100.0
4	☐			11.11		P	96.4
5	☐			2.22		P	86.6
6	☐			11.11		P	34.6
7	☐			11.11		P	91.7
8	☐			14.44		P	58.1
9	☐			13.33		P	25.0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	47.6
2	☐	0.100					
3	☐	1.000	0.864	7330.23	0.0010	P	8.2
4	☐	50.000	48.327	406185.98	0.0560	P	0.7
5	☐	125.000	121.623	1025593.87	0.1408	P	1.6
6	☐	250.000	247.829	2093476.46	0.2870	A	0.3
7	☐	500.000	487.787	4032485.03	0.5648	A	1.1
8	☐	1000.000	1007.155	7774407.64	1.1662	A	4.5
9	☐			2605.96	0.0004	P	3.8

$$y = 0.0012 * x + 1.0905E-005$$

$$R = 0.9999$$

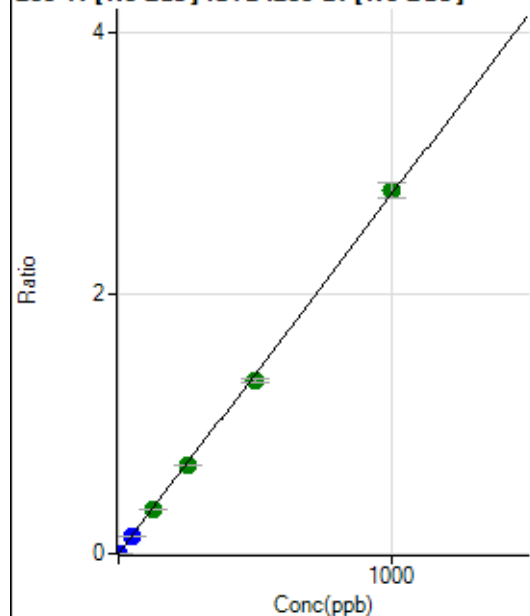
$$DL = 0.01345$$

$$BEC = 0.009418$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	191.68	0.0000	P	26.2
2	☐	0.100					
3	☐	1.000	0.900	18186.06	0.0025	P	2.1
4	☐	50.000	48.186	965048.69	0.1330	P	0.1
5	☐	125.000	124.442	2500538.49	0.3434	A	1.2
6	☐	250.000	246.179	4955180.75	0.6793	A	0.3
7	☐	500.000	481.710	9488682.33	1.3291	A	1.4
8	☐	1000.000	1010.261	18583129.93	2.7874	A	4.3
9	☐			6071.15	0.0010	P	5.2

$$y = 0.0028 * x + 2.6876E-005$$

$$R = 0.9997$$

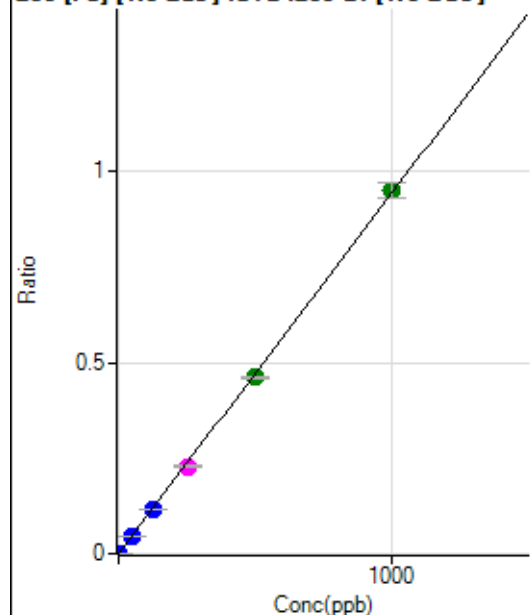
$$DL = 0.007653$$

$$BEC = 0.009741$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	512.99	0.0001	P	9.2
2	☐	0.100					
3	☐	1.000	0.877	6520.42	0.0009	P	3.7
4	☐	50.000	48.125	329944.80	0.0455	P	0.5
5	☐	125.000	121.338	833956.60	0.1145	P	0.9
6	☐	250.000	242.429	1668573.04	0.2287	M	0.8
7	☐	500.000	490.420	3302860.92	0.4626	A	1.2
8	☐	1000.000	1007.234	6334232.43	0.9501	A	4.2
9	☐			6566.72	0.0011	P	1.7

$$y = 9.4319\text{E-}004 * x + 7.2072\text{E-}005$$

$$R = 0.9999$$

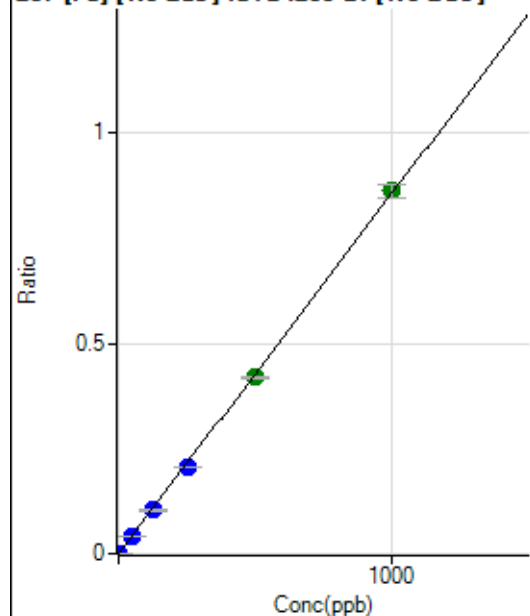
$$DL = 0.02113$$

$$BEC = 0.07641$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	494.47	0.0001	P	10.0
2	☐	0.100					
3	☐	1.000	0.859	5831.14	0.0008	P	4.5
4	☐	50.000	47.672	296567.57	0.0409	P	0.7
5	☐	125.000	120.206	749600.16	0.1029	P	1.2
6	☐	250.000	239.548	1495932.06	0.2051	P	0.6
7	☐	500.000	489.582	2991472.43	0.4190	A	1.6
8	☐	1000.000	1008.538	5755170.79	0.8631	A	3.7
9	☐			5745.91	0.0010	P	4.5

$$y = 8.5574\text{E-}004 * x + 6.9433\text{E-}005$$

$$R = 0.9999$$

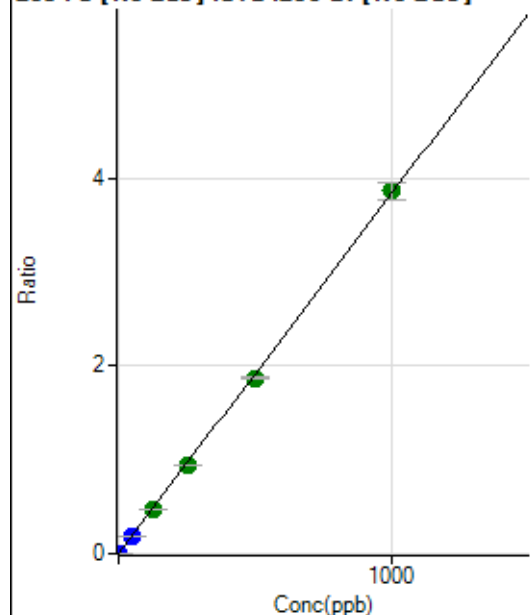
$$DL = 0.02431$$

$$BEC = 0.08114$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2189.03	0.0003	P	1.6
2	☐	0.100					
3	☐	1.000	0.886	26852.83	0.0037	P	0.6
4	☐	50.000	47.979	1336964.98	0.1842	P	0.2
5	☐	125.000	122.470	3420933.96	0.4698	A	1.2
6	☐	250.000	243.788	6819442.13	0.9348	A	0.4
7	☐	500.000	488.158	13360802.55	1.8715	A	1.6
8	☐	1000.000	1007.891	25758254.91	3.8638	A	4.4
9	☐			25920.27	0.0043	P	1.0

$$y = 0.0038 * x + 3.0741E-004$$

$$R = 0.9999$$

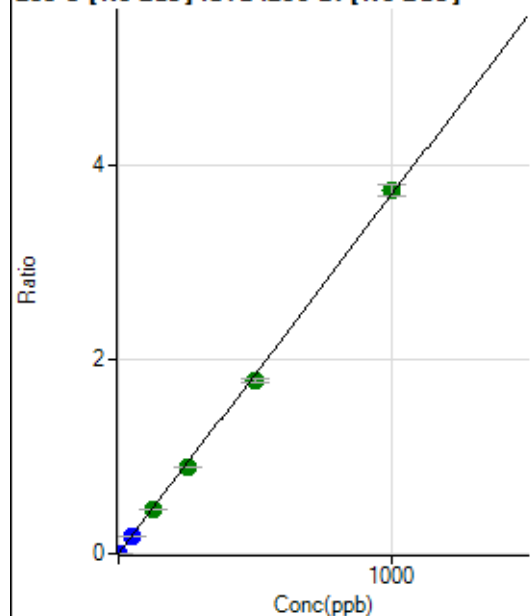
$$DL = 0.003854$$

$$BEC = 0.0802$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	100.00	0.0000	P	15.7
2	☐	0.100					
3	☐	1.000	0.868	23328.28	0.0032	P	0.9
4	☐	50.000	47.885	1283042.28	0.1768	P	0.4
5	☐	125.000	123.110	3310038.46	0.4545	A	0.2
6	☐	250.000	241.277	6497987.99	0.8907	A	0.8
7	☐	500.000	483.797	12750322.94	1.7861	A	1.9
8	☐	1000.000	1010.625	24880902.47	3.7310	A	3.3
9	☐			1411.26	0.0002	P	13.5

$$y = 0.0037 * x + 1.4031E-005$$

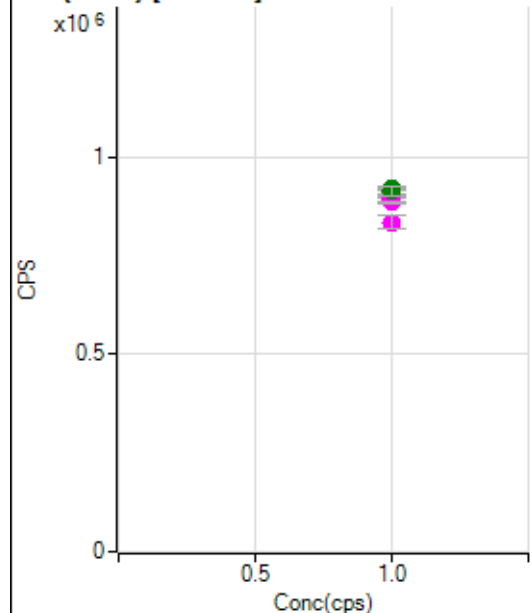
$$R = 0.9998$$

$$DL = 0.001792$$

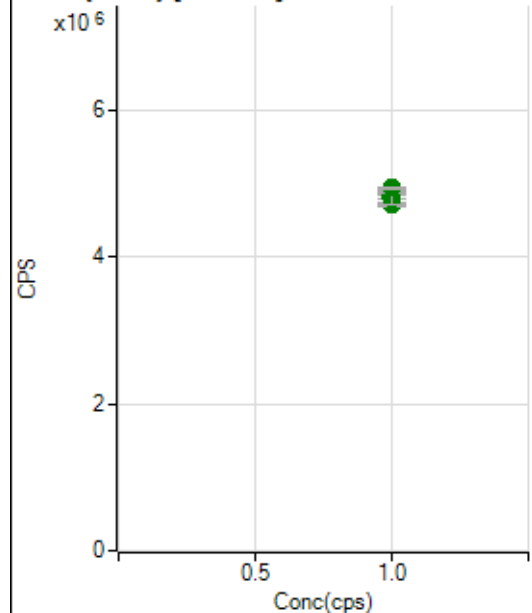
$$BEC = 0.003801$$

Weight: <None>

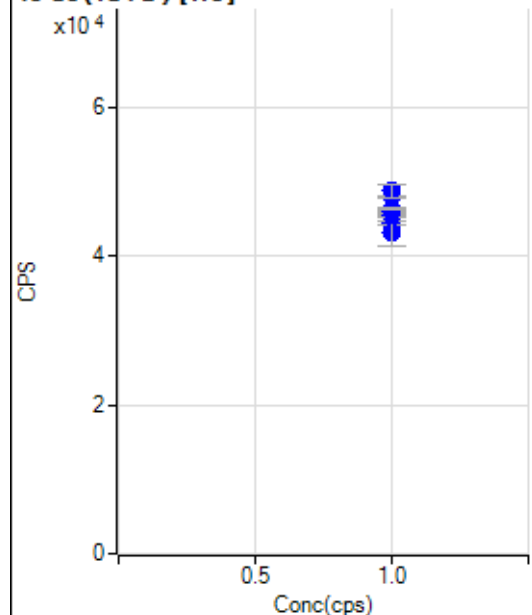
Min Conc: 0

6 Li (ISTD) [No Gas]

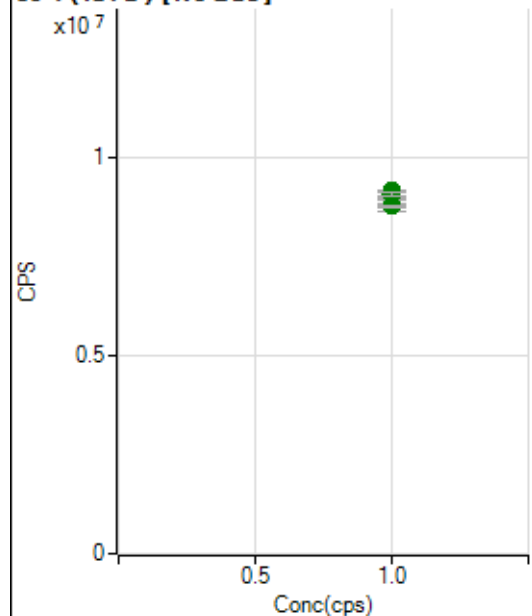
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		889920.80		M	1.4
2	☐	1.000					
3	☐	1.000		895816.59		M	1.9
4	☐	1.000		909604.39		A	1.1
5	☐	1.000		919063.56		A	0.1
6	☐	1.000		910130.64		A	1.2
7	☐	1.000		884716.32		M	0.2
8	☐	1.000		834805.91		M	3.8
9	☐	1.000		913696.61		A	2.3

45 Sc (ISTD) [No Gas]

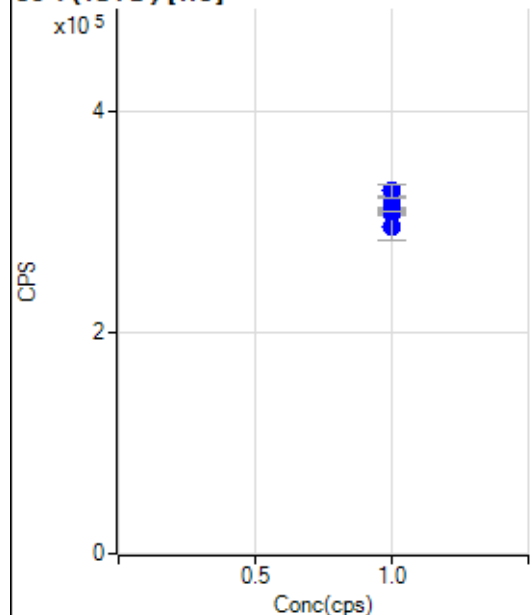
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4716985.48		A	1.0
2	☐	1.000					
3	☐	1.000		4816029.19		A	0.9
4	☐	1.000		4893232.66		A	0.4
5	☐	1.000		4889686.44		A	0.3
6	☐	1.000		4909580.93		A	0.9
7	☐	1.000		4833837.70		A	1.7
8	☐	1.000		4802029.84		A	3.9
9	☐	1.000		4941763.13		A	0.5

45 Sc (ISTD) [He]

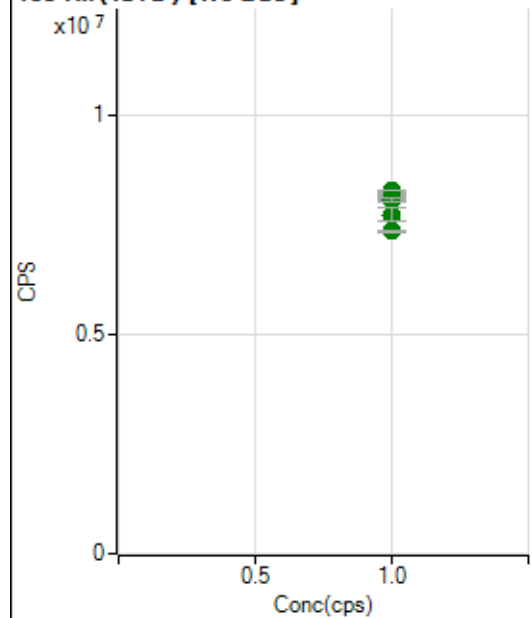
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		44462.49		P	0.6
2	☐	1.000					
3	☐	1.000		43138.17		P	7.7
4	☐	1.000		45928.36		P	2.3
5	☐	1.000		45530.33		P	1.8
6	☐	1.000		45908.21		P	1.3
7	☐	1.000		46350.72		P	0.6
8	☐	1.000		48027.36		P	0.5
9	☐	1.000		48756.90		P	3.7

89 Y (ISTD) [No Gas]

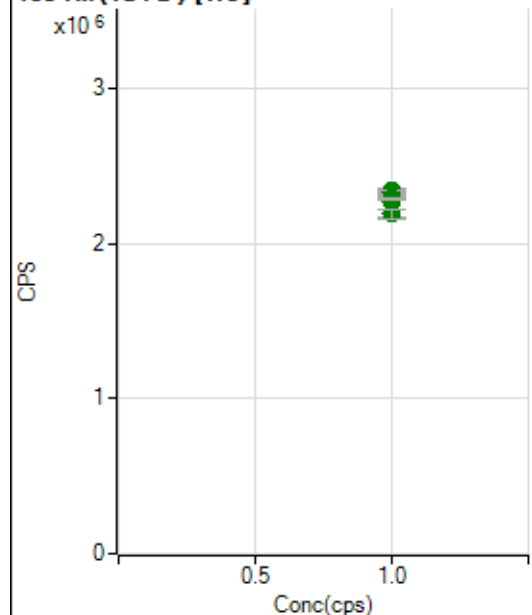
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8833515.43		A	0.9
2	☐	1.000					
3	☐	1.000		9009535.00		A	0.8
4	☐	1.000		9039307.30		A	0.5
5	☐	1.000		9100600.77		A	1.2
6	☐	1.000		9176557.16		A	0.5
7	☐	1.000		9086167.43		A	1.0
8	☐	1.000		8813764.38		A	3.5
9	☐	1.000		8783010.98		A	0.7

89 Y(ISTD) [He]

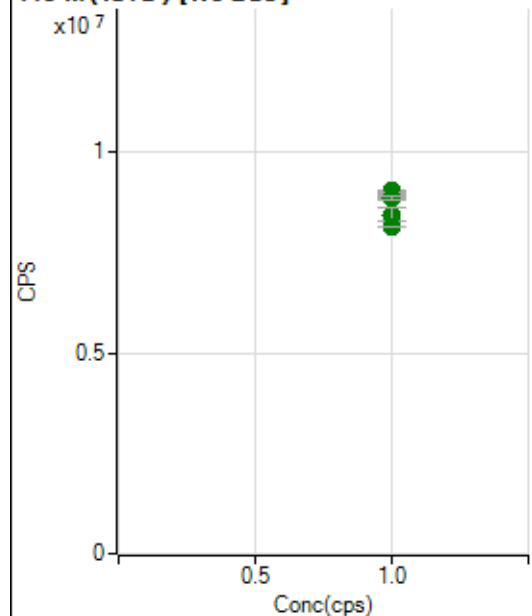
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		307083.42		P	0.7
2	☐	1.000					
3	☐	1.000		296136.72		P	8.5
4	☐	1.000		311225.95		P	0.7
5	☐	1.000		311208.89		P	1.2
6	☐	1.000		312784.55		P	0.5
7	☐	1.000		310046.03		P	0.1
8	☐	1.000		321966.63		P	0.5
9	☐	1.000		328180.21		P	4.0

103 Rh(ISTD) [No Gas]

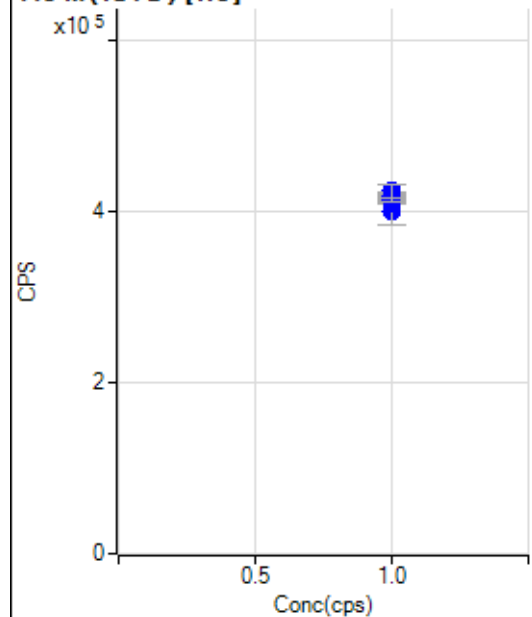
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8130269.80		A	0.9
2	☐	1.000					
3	☐	1.000		8260509.21		A	1.1
4	☐	1.000		8260196.80		A	0.2
5	☐	1.000		8228624.66		A	0.3
6	☐	1.000		8280171.37		A	0.1
7	☐	1.000		8088316.67		A	1.3
8	☐	1.000		7728659.20		A	3.9
9	☐	1.000		7360718.30		A	0.5

103 Rh (ISTD) [He]

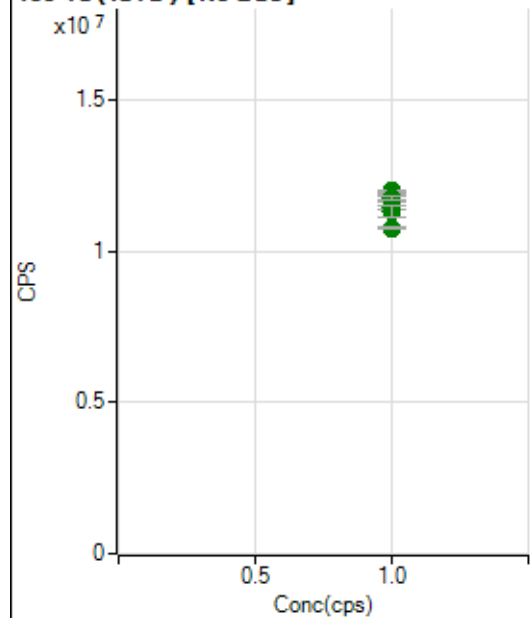
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2320896.60		A	0.5
2	☐	1.000					
3	☐	1.000		2264440.24		A	8.1
4	☐	1.000		2336832.00		A	1.5
5	☐	1.000		2324596.74		A	2.0
6	☐	1.000		2326448.77		A	1.6
7	☐	1.000		2288187.27		A	0.9
8	☐	1.000		2286323.16		A	0.8
9	☐	1.000		2188540.51		A	2.9

115 In (ISTD) [No Gas]

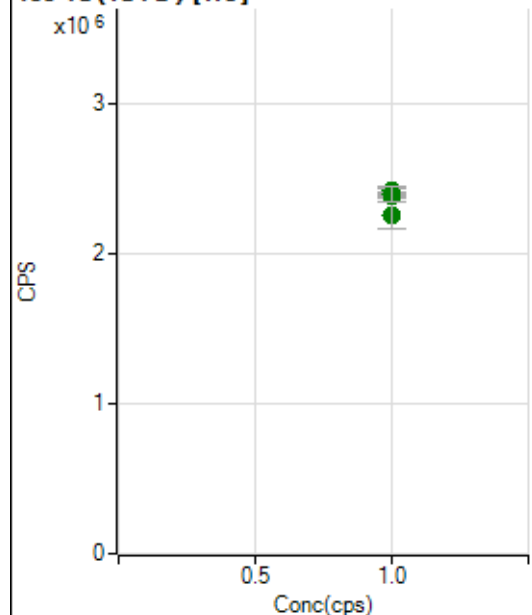
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8899543.70		A	0.4
2	☐	1.000					
3	☐	1.000		8948820.44		A	0.5
4	☐	1.000		9044654.15		A	0.5
5	☐	1.000		8966386.16		A	0.5
6	☐	1.000		9003590.24		A	0.7
7	☐	1.000		8858994.17		A	1.0
8	☐	1.000		8459808.39		A	3.6
9	☐	1.000		8149792.49		A	0.3

115 In (ISTD) [He]

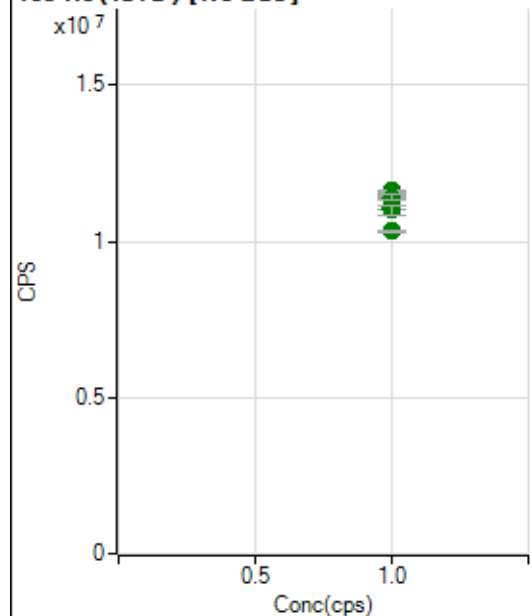
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		413518.84		P	0.3
2	☐	1.000					
3	☐	1.000		399307.05		P	8.2
4	☐	1.000		419775.77		P	0.7
5	☐	1.000		416655.31		P	1.2
6	☐	1.000		416127.16		P	0.1
7	☐	1.000		409515.96		P	0.9
8	☐	1.000		412389.96		P	1.0
9	☐	1.000		423593.76		P	3.7

159 Tb (ISTD) [No Gas]

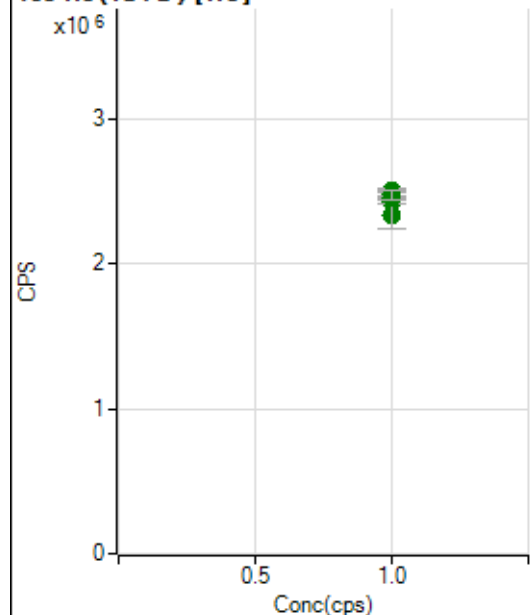
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11432463.58		A	0.8
2	☐	1.000					
3	☐	1.000		11720320.80		A	1.2
4	☐	1.000		11889976.21		A	0.1
5	☐	1.000		11890277.46		A	0.5
6	☐	1.000		11993951.49		A	0.4
7	☐	1.000		11756599.83		A	1.4
8	☐	1.000		11322593.44		A	3.0
9	☐	1.000		10752622.34		A	0.5

159 Tb (ISTD) [He]

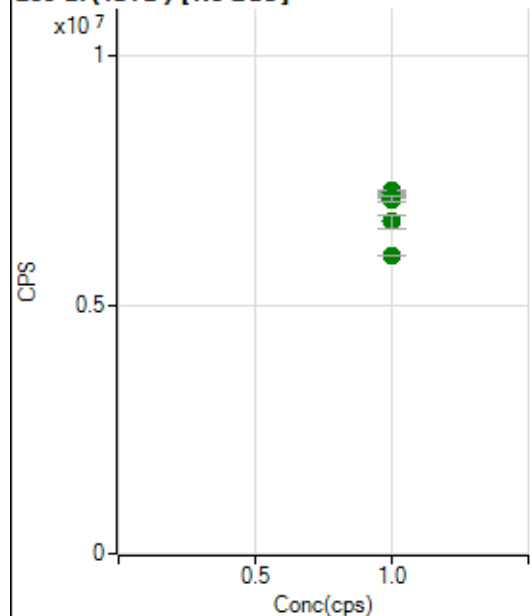
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2379987.62		A	0.3
2	☐	1.000					
3	☐	1.000		2261232.35		A	7.9
4	☐	1.000		2402257.22		A	0.6
5	☐	1.000		2391570.55		A	1.3
6	☐	1.000		2410200.04		A	0.4
7	☐	1.000		2378978.40		A	0.9
8	☐	1.000		2419306.77		A	1.0
9	☐	1.000		2404075.10		A	4.3

165 Ho (ISTD) [No Gas]

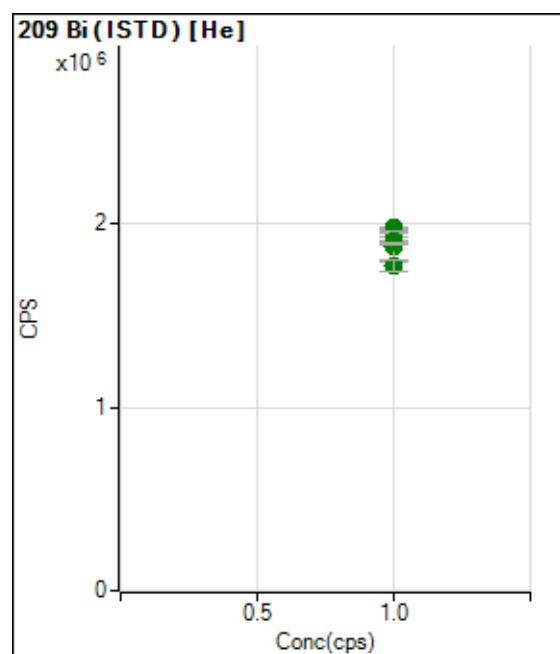
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11073134.97		A	0.9
2	☐	1.000					
3	☐	1.000		11399318.31		A	0.2
4	☐	1.000		11548344.01		A	0.0
5	☐	1.000		11477525.08		A	0.8
6	☐	1.000		11613910.59		A	0.3
7	☐	1.000		11416592.09		A	1.2
8	☐	1.000		11010990.70		A	2.9
9	☐	1.000		10313709.61		A	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2430169.24		A	1.2
2	☐	1.000					
3	☐	1.000		2340886.88		A	8.8
4	☐	1.000		2462697.10		A	0.5
5	☐	1.000		2460326.82		A	1.1
6	☐	1.000		2492677.19		A	0.4
7	☐	1.000		2464636.13		A	0.2
8	☐	1.000		2503104.30		A	0.9
9	☐	1.000		2475424.29		A	3.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7120356.21		A	1.0
2	☐	1.000					
3	☐	1.000		7247812.95		A	0.6
4	☐	1.000		7257358.57		A	0.3
5	☐	1.000		7282800.38		A	1.0
6	☐	1.000		7295064.27		A	0.2
7	☐	1.000		7140112.95		A	1.5
8	☐	1.000		6674301.91		A	3.9
9	☐	1.000		5989143.17		A	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1956035.11		A	0.4
2	☐	1.000					
3	☐	1.000		1877826.00		A	8.8
4	☐	1.000		1979516.36		A	0.2
5	☐	1.000		1952871.62		A	2.2
6	☐	1.000		1959922.12		A	0.4
7	☐	1.000		1909745.13		A	0.2
8	☐	1.000		1896360.89		A	0.4
9	☐	1.000		1775362.37		A	3.8

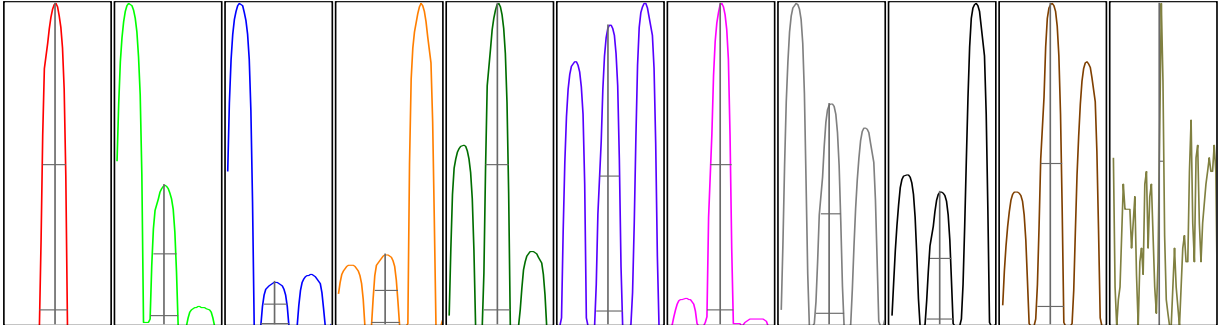
US EPA Tune Check Sample Report

Batch Folder D:\P8100717 .bS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5596	0.80	5.00	
24	32396	0.73	5.00	
25	4458	1.02	5.00	
26	5125	0.97	5.00	
59	76147	0.76	5.00	
113	11269	0.71	5.00	
115	144781	0.49	5.00	
206	33650	1.46	5.00	
207	30222	1.38	5.00	
208	71122	0.96	5.00	
220	1	14.21		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5528	5597	5600	5654	5602
24	32144	32164	32448	32677	32546
25	4415	4409	4464	4512	4489
26	5069	5099	5124	5202	5131
59	75787	75370	76195	76793	76590
113	11319	11132	11314	11261	11317
115	144675	143718	144681	145321	145509
206	33263	33054	33733	33952	34248
207	29915	29701	30236	30594	30663
208	70514	70368	71175	71622	71931
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	8949	8.95	8.9 - 9.1		0.785	0.900	
24	51098	23.90	23.9 - 24.1		0.787	0.900	
25	6897	24.90	24.9 - 25.1		0.789	0.900	
26	8073	25.90	25.9 - 26.1		0.786	0.900	
59	126369	58.95	58.9 - 59.1		0.779	0.900	
113	20112	112.95	112.9 - 113.1		0.770	0.900	
115	258322	115.00	114.9 - 115.1		0.738	0.900	
206	58515	205.95	205.9 - 206.1		0.812	0.900	
207	52206	206.95	206.9 - 207.1		0.782	0.900	
208	125404	207.95	207.9 - 208.1		0.775	0.900	
220	2	219.90	-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.6	V	Deflect	13.8	V
Extract 2	-210.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	11226	1.81	
89	2420	2.30	
205	15624	1.98	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	11410	10878	11271	11308	11261
89	2478	2330	2448	2427	2419
205	15915	15096	15734	15705	15671

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.6	V	Deflect	0.8	V
Extract 2	-210.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	5.0	mL/min	OctP RF	190	V			