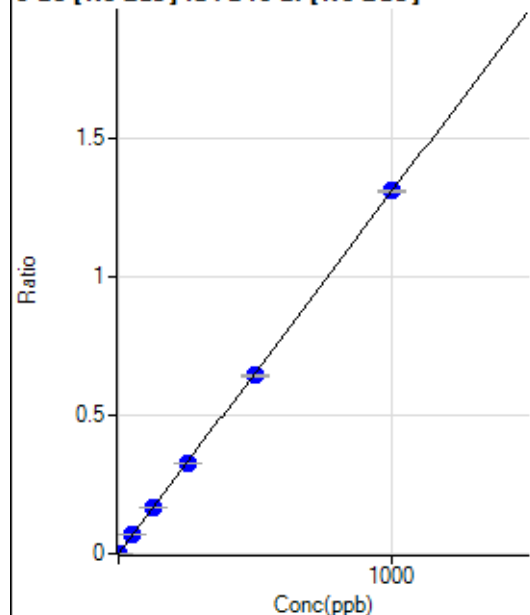


Batch Folder: D:\P8100517MS .b\
Analysis File: P8100517MS .batch.bin
DA Date-Time: 2017-10-06 10:37:16
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P8100517MS.D	S00	2017-10-05 13:00:20
2			
3	005CALS P8100517MS.D	S02	2017-10-05 13:07:30
4	006CALS P8100517MS.D	S03	2017-10-05 13:10:59
5	009CALS P8100517MS.D	S04	2017-10-05 13:22:11
6	010CALS P8100517MS.D	S05	2017-10-05 13:25:30
7	011CALS P8100517MS.D	S06	2017-10-05 13:28:47
8	012CALS P8100517MS.D	S07	2017-10-05 13:32:02
9	013CALS P8100517MS.D	S08	2017-10-05 13:35:13

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.70	0.0001	P	41.2
2	☐	0.100					
3	☐	1.000	0.963	946.36	0.0013	P	10.9
4	☐	50.000	52.116	47549.24	0.0682	P	1.6
5	☐	125.000	128.232	117921.34	0.1676	P	0.9
6	☐	250.000	250.012	228669.22	0.3268	P	0.7
7	☐	500.000	493.094	443748.26	0.6444	P	0.7
8	☐	1000.000	1002.940	907080.81	1.3107	P	0.4
9	☐			131.49	0.0002	P	25.9

$$y = 0.0013 * x + 7.5801E-005$$

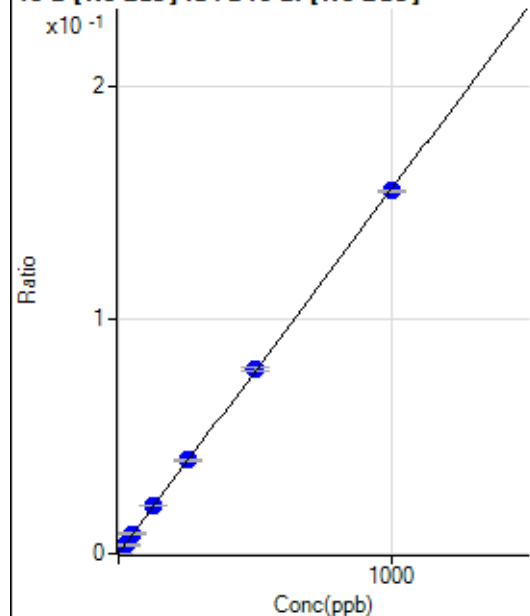
$$R = 1.0000$$

$$DL = 0.07174$$

$$BEC = 0.05801$$

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	166.68	0.0002	P	23.1
2	☐	2.500					
3	☐	25.000	22.676	2669.81	0.0038	P	5.4
4	☐	50.000	53.319	5948.73	0.0085	P	5.9
5	☐	125.000	129.959	14385.57	0.0205	P	1.7
6	☐	250.000	255.644	27994.85	0.0400	P	2.1
7	☐	500.000	505.138	54275.88	0.0788	P	1.8
8	☐	1000.000	995.292	107309.81	0.1551	P	0.6
9	☐			4798.24	0.0065	P	7.9

$$y = 1.5555E-004 * x + 2.3590E-004$$

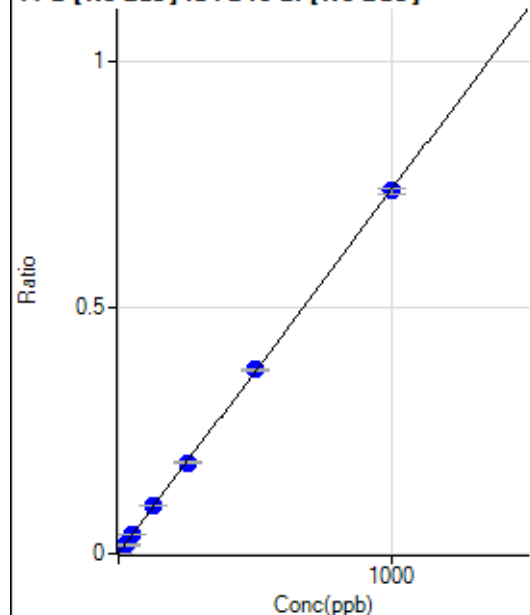
$$R = 0.9999$$

$$DL = 1.053$$

$$BEC = 1.517$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	811.17	0.0011	P	1.6
2	☐	2.500					
3	☐	25.000	22.453	12586.60	0.0177	P	3.5
4	☐	50.000	52.039	27621.95	0.0396	P	2.1
5	☐	125.000	131.251	69033.17	0.0981	P	3.0
6	☐	250.000	248.968	129567.04	0.1851	P	1.6
7	☐	500.000	505.008	257808.88	0.3744	P	1.4
8	☐	1000.000	996.934	510705.40	0.7379	P	1.8
9	☐			23183.51	0.0316	P	6.9

$$y = 7.3904\text{E-}004 * x + 0.0011$$

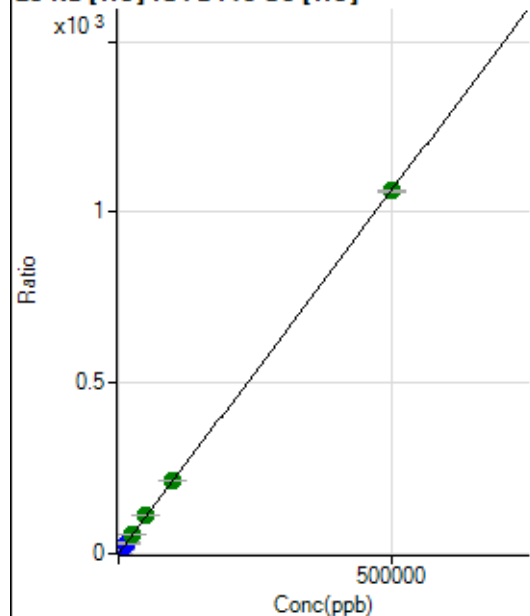
$$R = 1.0000$$

$$DL = 0.0747$$

$$BEC = 1.553$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13732.21	0.4450	P	5.1
2	☐	50.000					
3	☐	500.000	461.494	46075.46	1.4260	P	1.5
4	☐	5000.000	5710.372	369312.19	12.5834	P	10.6
5	☐	12500.000	14015.089	858145.04	30.2366	P	6.6
6	☐	25000.000	26473.582	1659494.28	56.7193	A	1.0
7	☐	50000.000	52620.472	3066373.48	112.2992	A	2.8
8	☐	100000.00	100476.13	6392395.54	214.0249	A	2.0
9	☐	500000.00	499524.10	30607365.96	1,062.272	A	0.4

$$y = 0.0021 * x + 0.4450$$

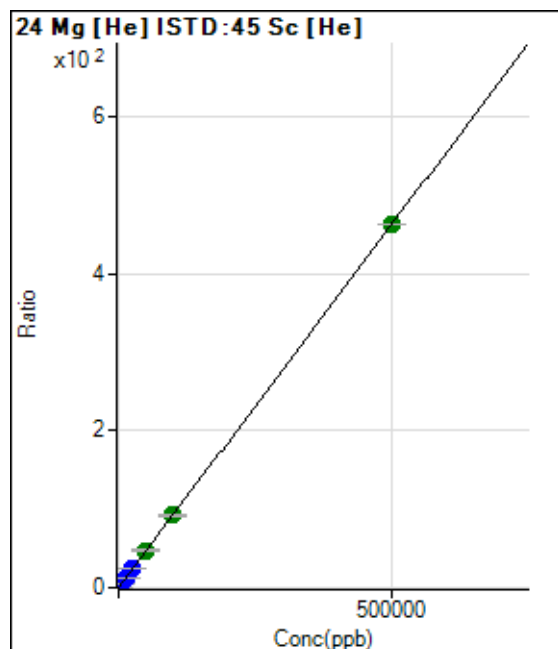
$$R = 1.0000$$

$$DL = 31.82$$

$$BEC = 209.3$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0045	P	4.9
2	☐	50.000					
3	☐	500.000	463.814	14015.84	0.4337	P	0.6
4	☐	5000.000	5593.272	152054.47	5.1807	P	10.5
5	☐	12500.000	13679.684	359433.73	12.6642	P	6.5
6	☐	25000.000	25380.790	687354.01	23.4929	P	0.9
7	☐	50000.000	51617.269	1304555.25	47.7731	A	1.8
8	☐	100000.00	99868.020	2760476.10	92.4262	A	2.2
9	☐	500000.00	499810.24	13327835.54	462.5483	A	0.1

$$y = 9.2544\text{E-}004 * x + 0.0045$$

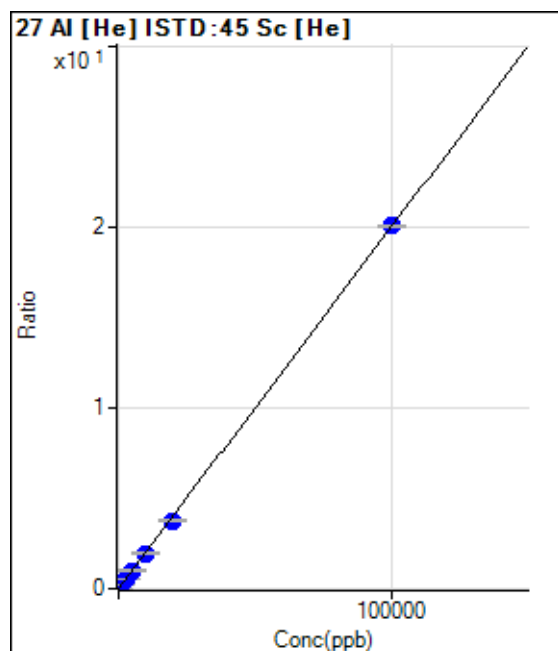
$$R = 1.0000$$

$$DL = 0.7172$$

$$BEC = 4.865$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0005	P	125.1
2	☐	2.000					
3	☐	20.000	22.203	158.34	0.0049	P	11.6
4	☐	1000.000	1122.942	6596.24	0.2255	P	16.9
5	☐	2500.000	2645.258	15064.13	0.5306	P	6.0
6	☐	5000.000	5031.832	29517.81	1.0089	P	0.8
7	☐	10000.000	9740.850	53320.55	1.9526	P	2.2
8	☐	20000.000	18840.171	112789.41	3.7762	P	1.8
9	☐	100000.00	100251.42	578908.74	20.0918	P	0.3

$$y = 2.0041\text{E-}004 * x + 4.5456\text{E-}004$$

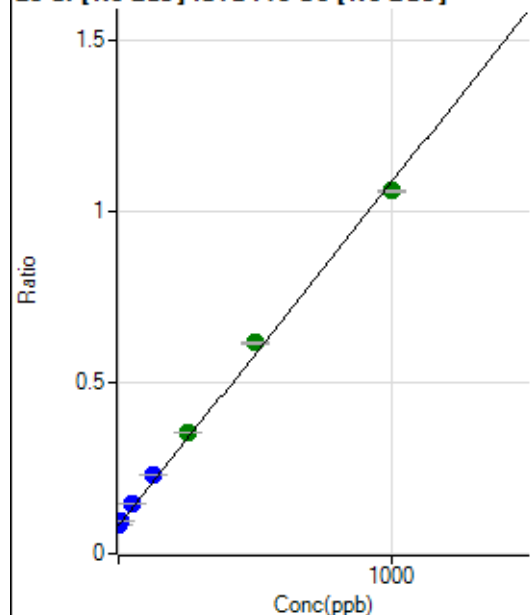
$$R = 0.9999$$

$$DL = 8.512$$

$$BEC = 2.268$$

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	273721.48	0.0819	P	1.1
2	☐	1.000					
3	☐	10.000	14.613	324189.47	0.0965	P	0.7
4	☐	50.000	62.124	479462.98	0.1441	P	1.1
5	☐	125.000	148.918	762785.22	0.2310	P	0.4
6	☐	250.000	270.669	1144876.59	0.3528	A	1.2
7	☐	500.000	532.375	1946767.34	0.6148	A	0.3
8	☐	1000.000	975.003	3433258.06	1.0580	A	0.8
9	☐			316449.68	0.0995	P	1.3

$$y = 0.0010 * x + 0.0819$$

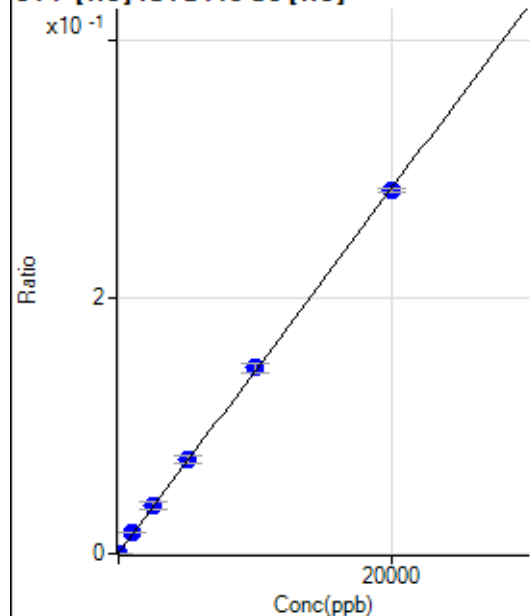
$$R = 0.9989$$

$$DL = 2.591$$

$$BEC = 81.77$$

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	0.281	8.33	0.0003	P	99.3
2	☐	0.000					
3	☐	0.000	-0.281	8.33	0.0003	P	100.7
4	☐	1000.000	1148.537	488.92	0.0166	P	5.5
5	☐	2500.000	2591.620	1050.08	0.0371	P	16.9
6	☐	5000.000	5145.529	2147.48	0.0734	P	6.2
7	☐	10000.000	10153.737	3947.97	0.1446	P	5.3
8	☐	20000.000	19867.870	8444.57	0.2827	P	1.2
9	☐			8.33	0.0003	P	99.1

$$y = 1.4215E-005 * x + 2.6349E-004$$

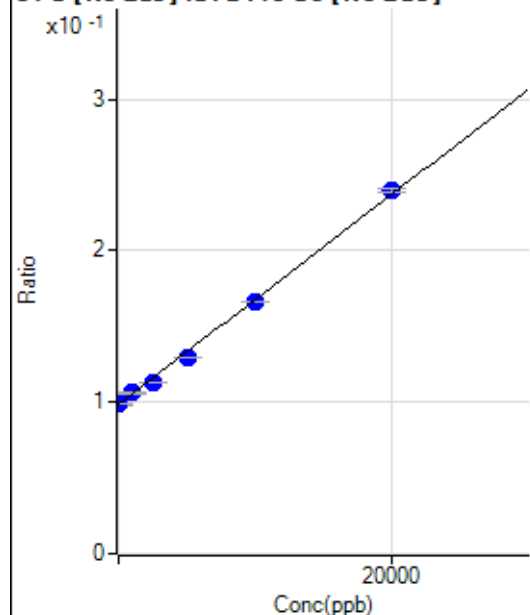
$$R = 0.9999$$

$$DL = 55.6$$

$$BEC = 18.54$$

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	19.992	330467.77	0.0988	P	1.1
2	☐	0.000					
3	☐	0.000	-19.992	331145.66	0.0986	P	0.4
4	☐	1000.000	1081.470	353443.20	0.1062	P	0.8
5	☐	2500.000	2107.551	374212.95	0.1133	P	0.3
6	☐	5000.000	4426.353	419738.91	0.1294	P	0.7
7	☐	10000.000	9726.977	525854.47	0.1661	P	0.5
8	☐	20000.000	20324.906	777172.35	0.2395	P	1.0
9	☐			319101.25	0.1003	P	0.8

$$y = 6.9269\text{E-}006 * x + 0.0987$$

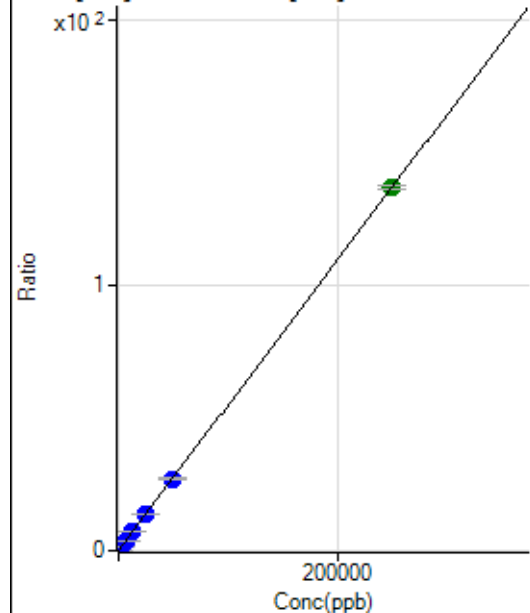
$$R = 0.9992$$

$$DL = 313.5$$

$$BEC = 1.425\text{E}+04$$

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	3011.58	0.0976	P	4.8
2	☐	50.000					
3	☐	500.000	435.278	10832.42	0.3353	P	2.7
4	☐	2500.000	2858.785	48662.96	1.6588	P	11.2
5	☐	6250.000	6848.863	108938.48	3.8377	P	6.1
6	☐	12500.000	12637.313	204767.03	6.9987	P	0.9
7	☐	25000.000	25449.219	382170.81	13.9952	P	1.8
8	☐	50000.000	49235.797	805926.13	26.9849	P	2.5
9	☐	250000.00	250082.62	3937551.87	136.6656	A	0.9

$$y = 5.4609\text{E-}004 * x + 0.0976$$

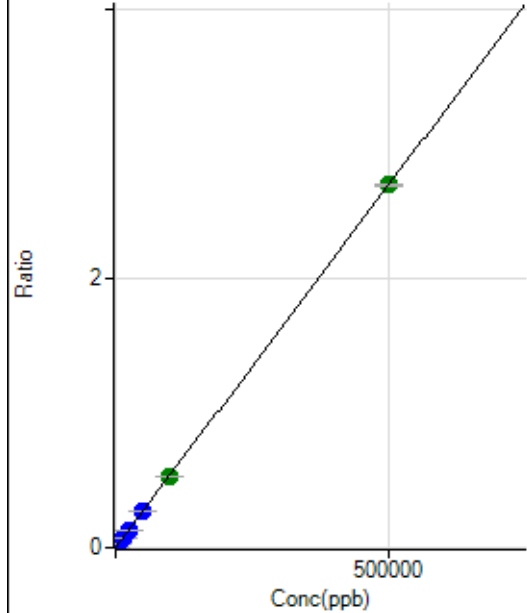
$$R = 1.0000$$

$$DL = 25.53$$

$$BEC = 178.7$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1277.89	0.0004	P	11.0
2	☐	50.000					
3	☐	500.000	447.872	9381.32	0.0028	P	2.1
4	☐	5000.000	4937.066	89697.10	0.0270	P	2.1
5	☐	12500.000	12369.577	221115.12	0.0669	P	0.6
6	☐	25000.000	24591.848	430630.69	0.1327	P	1.0
7	☐	50000.000	49326.031	841681.45	0.2658	P	0.9
8	☐	100000.00	98747.358	1725682.31	0.5318	A	1.1
9	☐	500000.00	500342.27	8568719.64	2.6929	A	0.7

$$y = 5.3814\text{E-}006 * x + 3.8215\text{E-}004$$

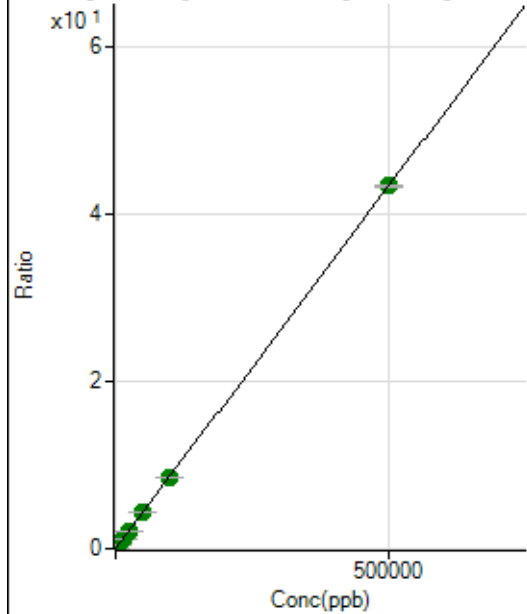
$$R = 1.0000$$

$$DL = 23.38$$

$$BEC = 71.01$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18913.47	0.0057	P	3.0
2	☐	50.000					
3	☐	500.000	449.537	149839.30	0.0446	P	1.0
4	☐	5000.000	5059.075	1477296.14	0.4439	A	2.2
5	☐	12500.000	12530.303	3603613.67	1.0911	A	0.3
6	☐	25000.000	24423.202	6882706.75	2.1213	A	1.0
7	☐	50000.000	49560.469	13611074.96	4.2987	A	1.0
8	☐	100000.00	97617.293	27459133.60	8.4616	A	0.6
9	☐	500000.00	500548.03	137984089.1	43.3647	A	0.8

$$y = 8.6623\text{E-}005 * x + 0.0057$$

$$R = 1.0000$$

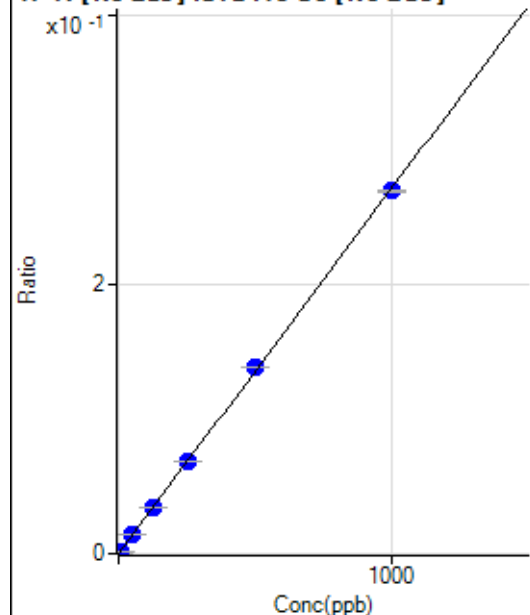
$$DL = 5.937$$

$$BEC = 65.32$$

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	116.68	0.0000	P	23.8
2	☐	0.500					
3	☐	5.000	4.532	4239.74	0.0013	P	3.2
4	☐	50.000	51.360	46403.01	0.0139	P	0.4
5	☐	125.000	126.636	113368.18	0.0343	P	0.9
6	☐	250.000	252.982	222371.13	0.0685	P	0.3
7	☐	500.000	510.435	437711.65	0.1382	P	0.7
8	☐	1000.000	993.767	873291.92	0.2691	P	0.8
9	☐			447.25	0.0001	P	13.1

$$y = 2.7076E-004 * x + 3.4850E-005$$

$$R = 0.9999$$

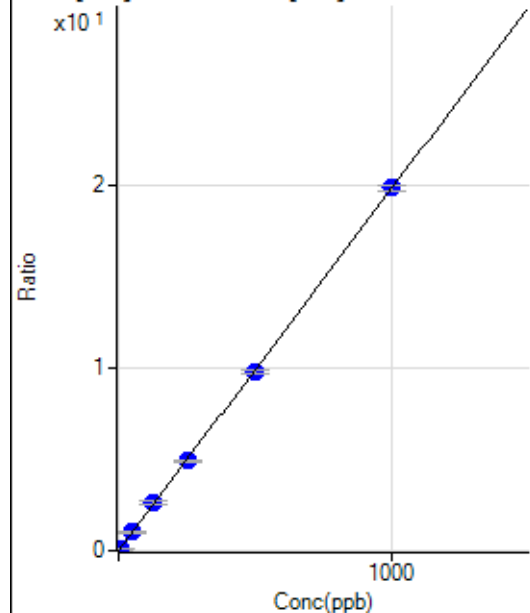
$$DL = 0.092$$

$$BEC = 0.1287$$

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	12.22	0.0004	P	32.1
2	☐	0.500					
3	☐	5.000	4.659	2998.15	0.0928	P	3.8
4	☐	50.000	52.677	30679.24	1.0448	P	9.8
5	☐	125.000	131.826	74191.87	2.6140	P	6.5
6	☐	250.000	247.332	143485.63	4.9041	P	0.4
7	☐	500.000	495.022	268011.68	9.8148	P	2.0
8	☐	1000.000	1002.170	593485.22	19.8696	P	1.7
9	☐			83.34	0.0029	P	8.3

$$y = 0.0198 * x + 3.9650E-004$$

$$R = 0.9999$$

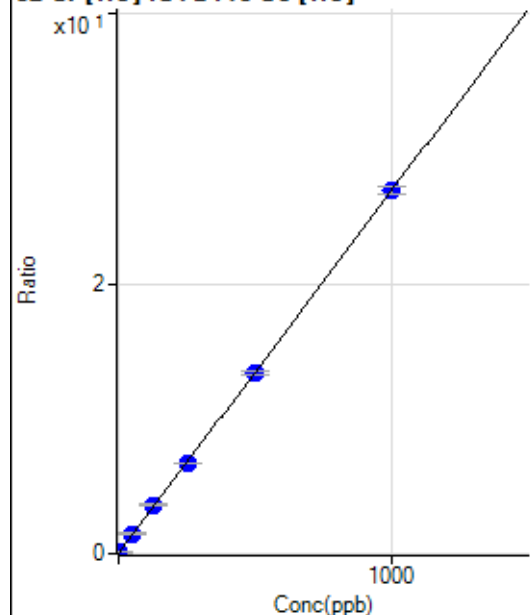
$$DL = 0.01925$$

$$BEC = 0.02$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	671.14	0.0217	P	5.1
2	☐	0.200					
3	☐	2.000	2.005	2443.59	0.0756	P	3.7
4	☐	50.000	54.326	43521.04	1.4823	P	10.0
5	☐	125.000	134.222	102995.33	3.6304	P	7.5
6	☐	250.000	249.435	196847.27	6.7280	P	0.4
7	☐	500.000	498.118	366289.31	13.4140	P	2.1
8	☐	1000.000	999.713	803437.33	26.8998	P	2.0
9	☐			8130.28	0.2821	P	2.1

$$y = 0.0269 * x + 0.0217$$

$$R = 0.9999$$

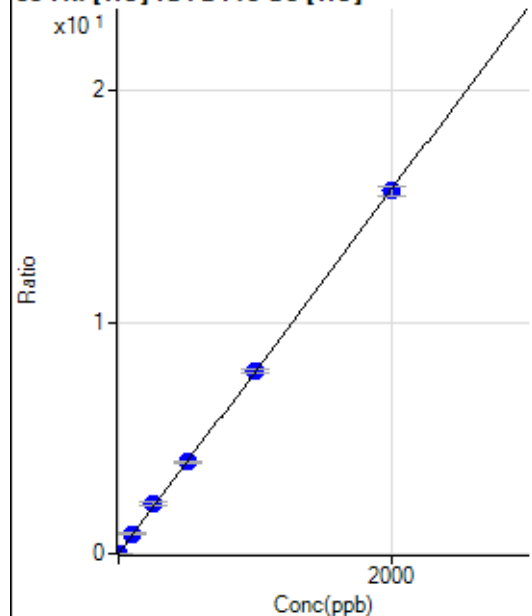
$$DL = 0.1237$$

$$BEC = 0.8084$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28.89	0.0009	P	31.7
2	☐	0.100					
3	☐	1.000	1.019	288.90	0.0089	P	4.7
4	☐	100.000	108.736	25094.94	0.8552	P	10.9
5	☐	250.000	271.638	60533.90	2.1350	P	8.8
6	☐	500.000	503.093	115667.38	3.9534	P	0.7
7	☐	1000.000	1006.391	215925.74	7.9074	P	2.1
8	☐	2000.000	1992.890	467637.09	15.6576	P	2.4
9	☐			1431.21	0.0497	P	3.7

$$y = 0.0079 * x + 9.3297E-004$$

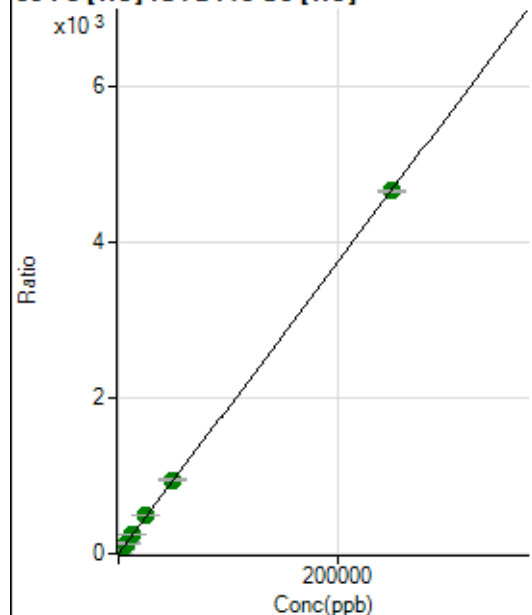
$$R = 0.9999$$

$$DL = 0.1128$$

$$BEC = 0.1188$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1398.26	0.0453	P	4.2
2	☐	5.000					
3	☐	50.000	47.165	29934.47	0.9265	P	1.9
4	☐	2500.000	2908.299	1595333.95	54.3845	A	11.5
5	☐	6250.000	7110.301	3770934.49	132.8955	A	7.1
6	☐	12500.000	13160.954	7195807.40	245.9470	A	1.2
7	☐	25000.000	26396.362	13468345.79	493.2399	A	2.4
8	☐	50000.000	50746.083	28320957.35	948.1947	A	1.8
9	☐	250000.00	249652.51	134402258.5	4,664.600	A	0.4

$$y = 0.0187 * x + 0.0453$$

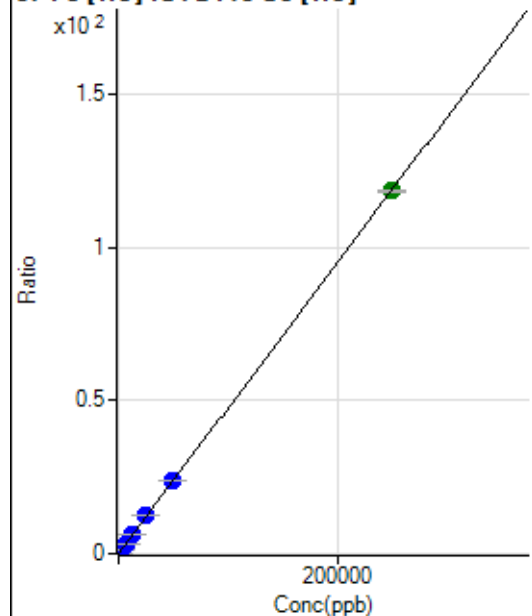
$$R = 1.0000$$

$$DL = 0.303$$

$$BEC = 2.424$$

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	46.30	0.0015	P	26.3
2	☐	5.000					
3	☐	50.000	46.550	761.15	0.0236	P	7.5
4	☐	2500.000	2785.788	38804.41	1.3211	P	9.5
5	☐	6250.000	6961.749	93633.30	3.2993	P	6.7
6	☐	12500.000	13038.827	180757.54	6.1781	P	0.7
7	☐	25000.000	26082.708	337433.96	12.3570	P	1.9
8	☐	50000.000	50210.373	710450.12	23.7865	P	2.0
9	☐	250000.00	249802.06	3409696.57	118.3343	A	0.3

$$y = 4.7371E-004 * x + 0.0015$$

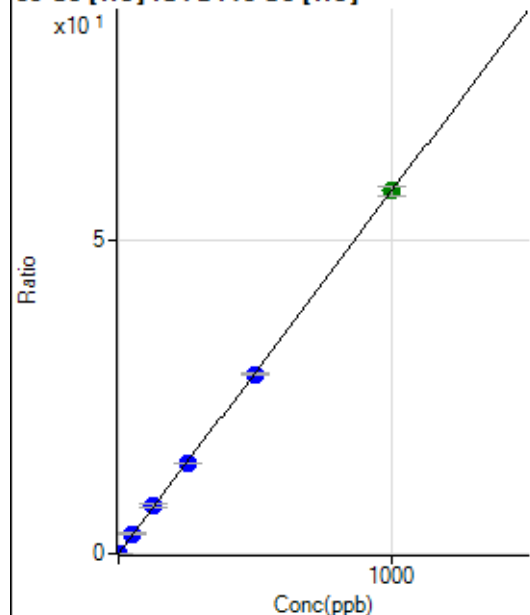
$$R = 1.0000$$

$$DL = 2.5$$

$$BEC = 3.175$$

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	73.34	0.0024	P	6.0
2	☐	0.100					
3	☐	1.000	0.889	1733.47	0.0537	P	1.8
4	☐	50.000	53.526	90665.85	3.0896	P	10.8
5	☐	125.000	133.536	218617.26	7.7044	P	7.0
6	☐	250.000	249.313	420794.46	14.3821	P	0.5
7	☐	500.000	495.975	781221.50	28.6089	P	2.0
8	☐	1000.000	1000.941	1724364.71	57.7340	A	2.4
9	☐			1690.13	0.0586	P	2.2

$$y = 0.0577 * x + 0.0024$$

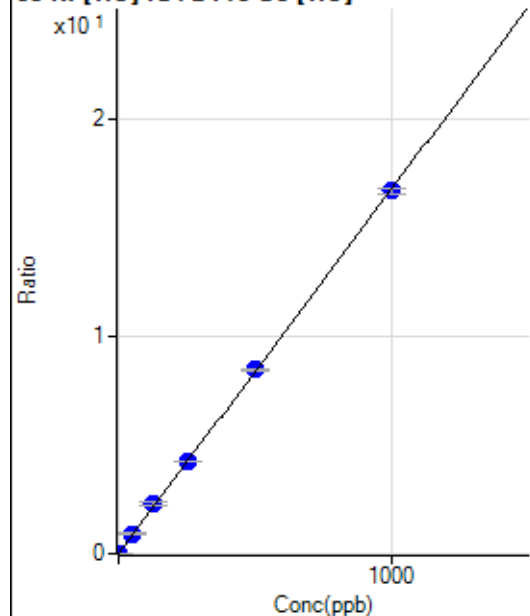
$$R = 0.9999$$

$$DL = 0.007376$$

$$BEC = 0.04122$$

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	76.67	0.0025	P	20.8
2	☐	0.100					
3	☐	1.000	0.974	608.91	0.0188	P	3.4
4	☐	50.000	54.807	27095.43	0.9233	P	10.7
5	☐	125.000	137.371	65542.34	2.3103	P	7.5
6	☐	250.000	253.258	124558.23	4.2573	P	1.1
7	☐	500.000	504.089	231330.12	8.4713	P	1.9
8	☐	1000.000	995.354	499530.28	16.7247	P	1.9
9	☐			2248.00	0.0780	P	4.4

$$y = 0.0168 * x + 0.0025$$

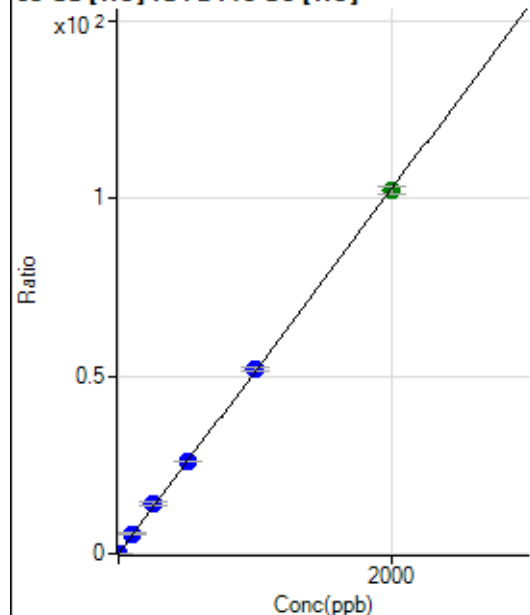
$$R = 0.9999$$

$$DL = 0.09243$$

$$BEC = 0.1481$$

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	207.78	0.0067	P	12.1
2	☐	0.200					
3	☐	2.000	1.901	3366.02	0.1042	P	3.1
4	☐	100.000	108.591	163596.24	5.5729	P	10.2
5	☐	250.000	272.534	396500.47	13.9763	P	7.5
6	☐	500.000	506.191	759340.28	25.9532	P	0.5
7	☐	1000.000	1010.898	1415130.83	51.8236	P	2.1
8	☐	2000.000	1989.757	3046470.20	101.9983	A	2.0
9	☐			3127.07	0.1086	P	3.6

$$y = 0.0513 * x + 0.0067$$

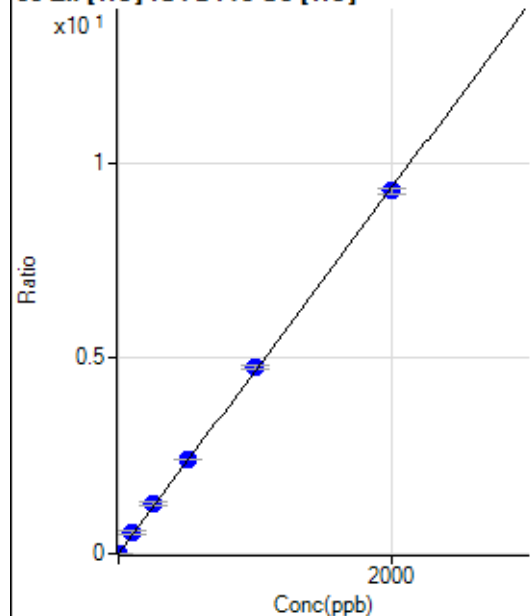
$$R = 0.9999$$

$$DL = 0.04746$$

$$BEC = 0.1312$$

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	75.56	0.0024	P	6.4
2	☐	0.200					
3	☐	2.000	2.143	402.24	0.0125	P	15.8
4	☐	100.000	115.166	15871.50	0.5406	P	10.2
5	☐	250.000	276.491	36738.67	1.2945	P	6.7
6	☐	500.000	512.445	70136.19	2.3972	P	0.9
7	☐	1000.000	1017.748	129941.71	4.7585	P	1.8
8	☐	2000.000	1983.945	276989.21	9.2737	P	1.9
9	☐			625.58	0.0217	P	5.0

$$y = 0.0047 * x + 0.0024$$

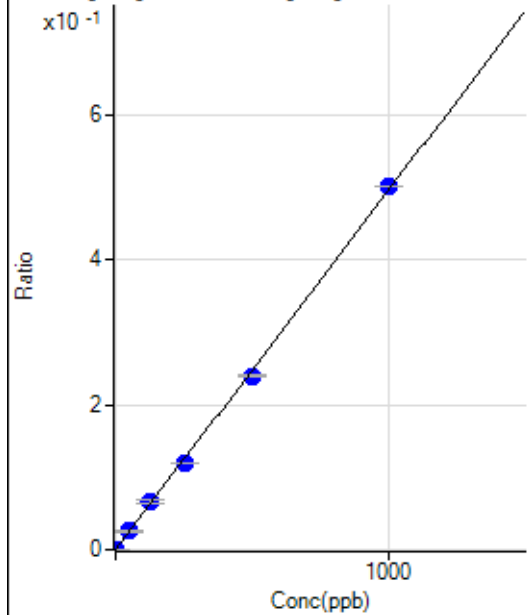
$$R = 0.9999$$

$$DL = 0.1007$$

$$BEC = 0.5238$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.17	0.0000	P	35.3
2	☐	0.100					
3	☐	1.000	0.887	104.32	0.0005	P	9.6
4	☐	50.000	51.523	5296.13	0.0255	P	10.8
5	☐	125.000	132.016	13042.65	0.0654	P	8.0
6	☐	250.000	240.201	24845.26	0.1189	P	0.9
7	☐	500.000	483.588	46605.39	0.2394	P	1.2
8	☐	1000.000	1009.703	103987.93	0.4999	P	0.1
9	☐			39.51	0.0002	P	38.4

$$y = 4.9505E-004 * x + 2.8998E-005$$

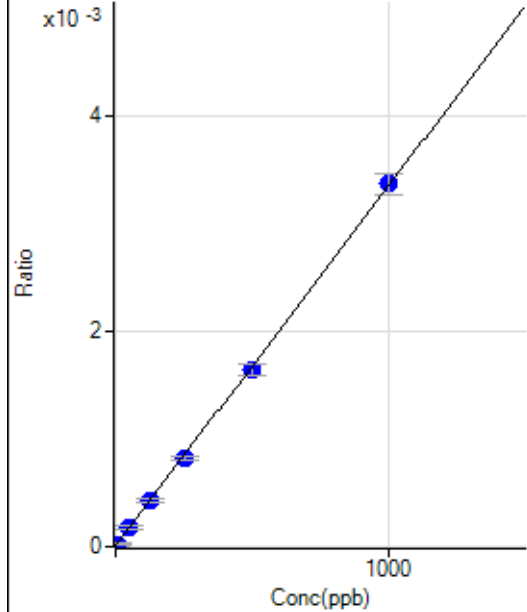
$$R = 0.9997$$

$$DL = 0.06208$$

$$BEC = 0.05858$$

Weight: <None>

Min Conc: 0

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

	R _{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	5.878	5.56	0.0000	P	91.7
4	☐	50.000	51.218	36.67	0.0002	P	14.1
5	☐	125.000	125.932	85.56	0.0004	P	9.2
6	☐	250.000	244.492	172.23	0.0008	P	4.2
7	☐	500.000	490.586	321.12	0.0016	P	6.8
8	☐	1000.000	1005.902	702.25	0.0034	P	5.5
9	☐			0.00	0.0000	P	

$$y = 3.3512E-006 * x + 5.2160E-006$$

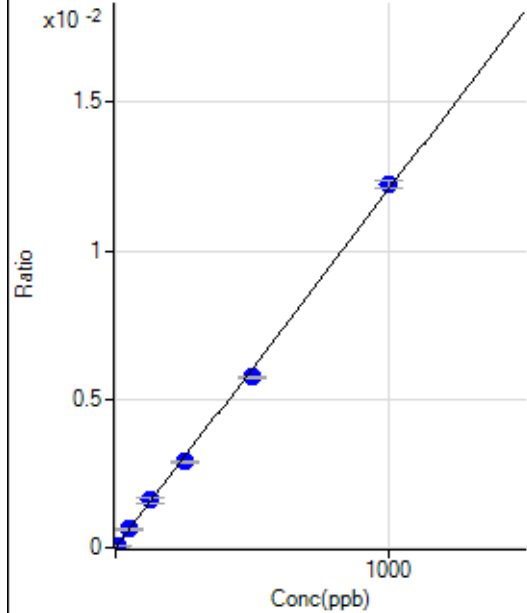
$$R = 0.9999$$

$$DL = 8.088$$

$$BEC = 1.556$$

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	1.23	0.0000	P	173.2
2	☐	0.500					
3	☐	5.000	5.730	16.67	0.0001	P	51.1
4	☐	50.000	50.954	128.40	0.0006	P	18.3
5	☐	125.000	132.258	318.52	0.0016	P	12.4
6	☐	250.000	240.963	608.05	0.0029	P	2.5
7	☐	500.000	475.613	1117.34	0.0057	P	1.9
8	☐	1000.000	1013.494	2542.86	0.0122	P	2.0
9	☐			5.56	0.0000	P	88.1

$$y = 1.2056\text{E-}005 * x + 5.7233\text{E-}006$$

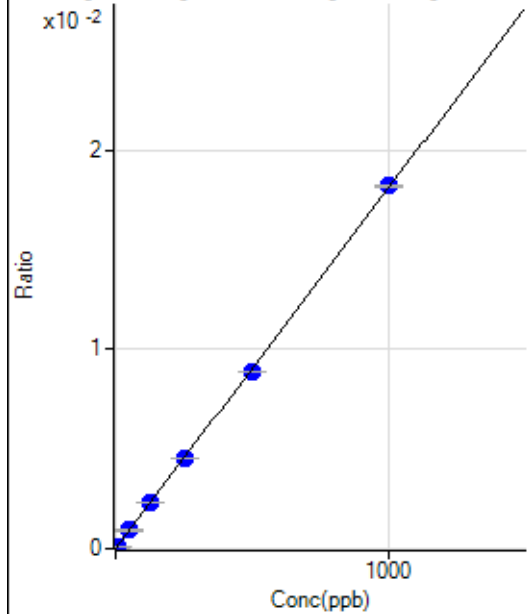
$$R = 0.9995$$

$$DL = 2.467$$

$$BEC = 0.4747$$

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	-25.93	0.0000	P	-127.
2	☐	0.500					
3	☐	5.000	4.962	520.27	0.0001	P	6.7
4	☐	50.000	50.799	5516.12	0.0009	P	1.1
5	☐	125.000	127.062	13913.89	0.0023	P	2.1
6	☐	250.000	249.289	26989.73	0.0045	P	0.5
7	☐	500.000	488.608	52888.56	0.0089	P	0.3
8	☐	1000.000	1005.576	109993.89	0.0182	P	0.5
9	☐			60.82	0.0000	P	37.8

$$y = 1.8132\text{E-}005 * x - 4.2974\text{E-}006$$

$$R = 0.9999$$

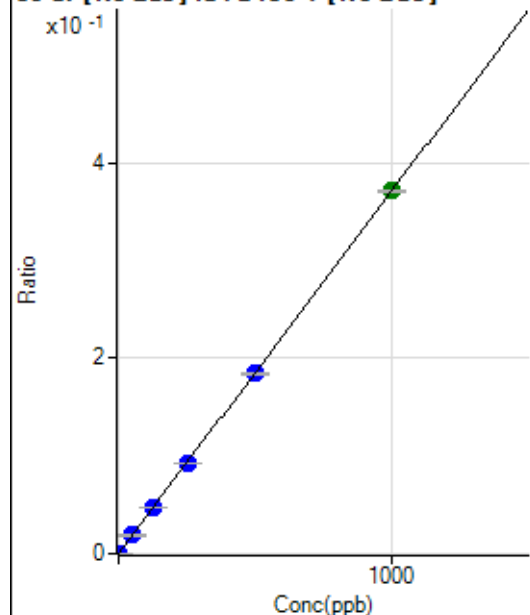
$$DL = 0.9057$$

$$BEC = -0.237$$

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	672.27	0.0001	P	9.6
2	☐	0.100					
3	☐	1.000	0.861	2614.25	0.0004	P	3.4
4	☐	50.000	50.416	113043.22	0.0188	P	1.6
5	☐	125.000	125.746	282541.60	0.0467	P	0.8
6	☐	250.000	250.113	554450.74	0.0928	P	0.6
7	☐	500.000	496.972	1100281.32	0.1842	P	0.6
8	☐	1000.000	1001.372	2239185.92	0.3711	A	0.4
9	☐			73442.54	0.0125	P	2.8

$$y = 3.7047\text{E-}004 * x + 1.1120\text{E-}004$$

$$R = 1.0000$$

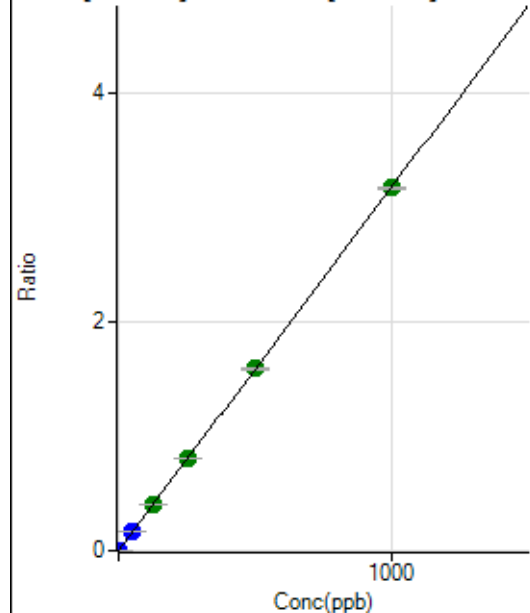
$$DL = 0.08669$$

$$BEC = 0.3002$$

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	188.90	0.0000	P	25.6
2	☐	0.100					
3	☐	1.000	0.937	18237.86	0.0030	P	1.3
4	☐	50.000	50.877	970957.68	0.1614	P	0.3
5	☐	125.000	129.177	2478898.95	0.4097	A	0.4
6	☐	250.000	254.467	4823232.66	0.8070	A	0.1
7	☐	500.000	500.191	9473943.96	1.5863	A	0.3
8	☐	1000.000	998.222	19101315.18	3.1657	A	0.6
9	☐			633567.65	0.1081	P	0.2

$$y = 0.0032 * x + 3.1293\text{E-}005$$

$$R = 1.0000$$

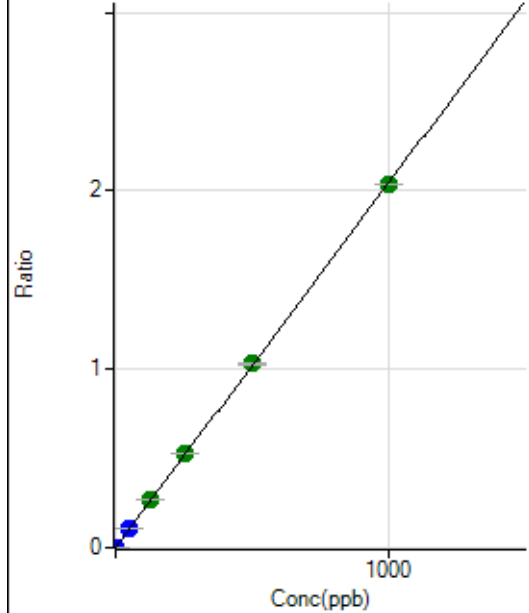
$$DL = 0.00759$$

$$BEC = 0.009868$$

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	397.25	0.0001	P	19.2
2	☐	0.100					
3	☐	1.000	0.915	11752.80	0.0019	P	2.3
4	☐	50.000	51.078	628102.30	0.1044	P	0.3
5	☐	125.000	129.537	1601295.18	0.2646	A	0.2
6	☐	250.000	257.789	3147265.17	0.5266	A	0.5
7	☐	500.000	504.546	6155388.72	1.0306	A	1.1
8	☐	1000.000	995.159	12265242.46	2.0327	A	0.0
9	☐			1611.29	0.0003	P	5.4

$$y = 0.0020 * x + 6.5597E-005$$

$$R = 0.9999$$

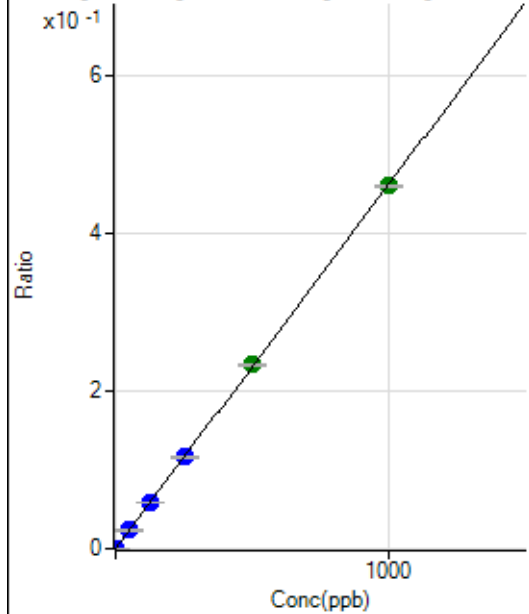
$$DL = 0.01845$$

$$BEC = 0.03212$$

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	75.00	0.0000	P	39.5
2	☐	0.100					
3	☐	1.000	0.904	2608.70	0.0004	P	7.1
4	☐	50.000	50.289	139648.04	0.0232	P	1.3
5	☐	125.000	125.790	351175.97	0.0580	P	0.4
6	☐	250.000	252.207	695368.04	0.1164	P	1.1
7	☐	500.000	505.074	1391589.27	0.2330	A	0.6
8	☐	1000.000	996.798	2774586.87	0.4598	A	0.2
9	☐			394.47	0.0001	P	22.9

$$y = 4.6129E-004 * x + 1.2378E-005$$

$$R = 1.0000$$

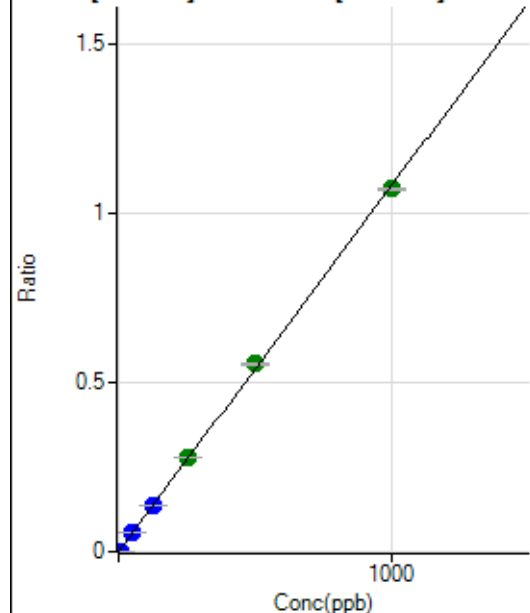
$$DL = 0.03184$$

$$BEC = 0.02683$$

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	163.90	0.0000	P	23.1
2	☐	0.500					
3	☐	5.000	2.037	13565.61	0.0022	P	3.1
4	☐	50.000	50.977	332375.67	0.0552	P	0.9
5	☐	125.000	127.337	834692.29	0.1380	P	0.5
6	☐	250.000	258.286	1672172.17	0.2798	A	0.3
7	☐	500.000	512.408	3314971.56	0.5550	A	0.5
8	☐	1000.000	991.398	6479535.61	1.0739	A	0.7
9	☐			3789.59	0.0006	P	4.3

$$y = 0.0011 * x + 2.7113E-005$$

$$R = 0.9998$$

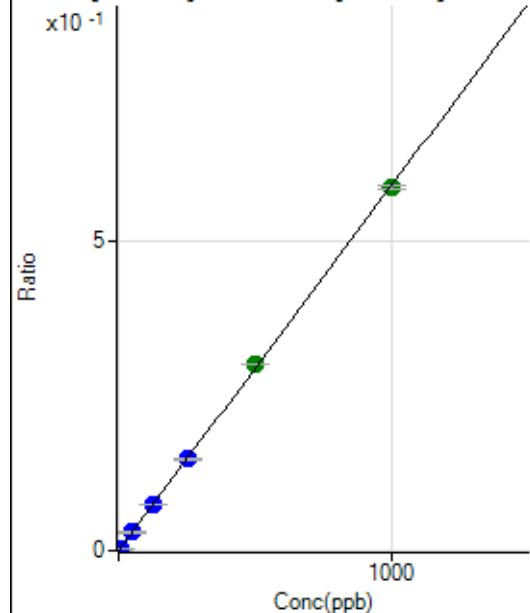
$$DL = 0.01738$$

$$BEC = 0.02503$$

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	55.56	0.0000	P	82.2
2	☐	0.500					
3	☐	5.000	4.444	16004.57	0.0026	P	1.5
4	☐	50.000	50.037	177918.91	0.0296	P	1.9
5	☐	125.000	125.514	448762.98	0.0742	P	0.5
6	☐	250.000	251.366	887633.36	0.1485	P	1.4
7	☐	500.000	511.997	1806747.20	0.3025	A	0.2
8	☐	1000.000	993.597	3542193.44	0.5871	A	1.0
9	☐			5498.59	0.0009	P	8.2

$$y = 5.9083E-004 * x + 9.1734E-006$$

$$R = 0.9999$$

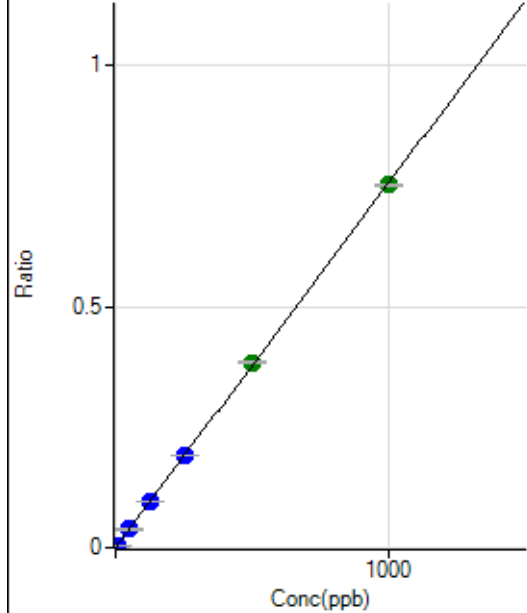
$$DL = 0.03829$$

$$BEC = 0.01553$$

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	94.45	0.0000	P	11.0
2	☐	0.500					
3	☐	5.000	3.911	18057.20	0.0030	P	3.9
4	☐	50.000	50.114	228074.50	0.0379	P	1.3
5	☐	125.000	126.276	577824.03	0.0955	P	0.5
6	☐	250.000	252.389	1140605.56	0.1909	P	1.2
7	☐	500.000	508.007	2294267.67	0.3841	A	1.0
8	☐	1000.000	995.239	4540805.44	0.7525	A	0.6
9	☐			7435.72	0.0013	P	3.7

$$y = 7.5613\text{E-}004 * x + 1.5625\text{E-}005$$

$$R = 0.9999$$

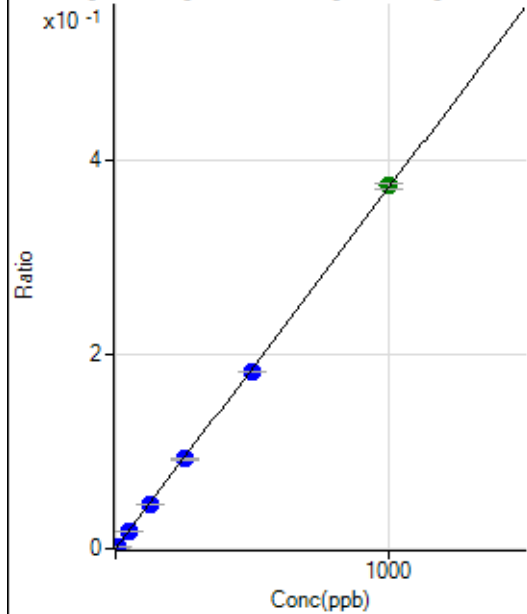
$$DL = 0.006835$$

$$BEC = 0.02066$$

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	88.89	0.0000	P	61.6
2	☐	0.500					
3	☐	5.000	4.546	10346.08	0.0017	P	1.7
4	☐	50.000	49.401	110491.71	0.0184	P	0.1
5	☐	125.000	124.386	279637.75	0.0462	P	0.5
6	☐	250.000	248.454	551603.75	0.0923	P	1.3
7	☐	500.000	490.517	1088238.67	0.1822	P	0.2
8	☐	1000.000	1005.237	2252993.54	0.3734	A	1.4
9	☐			3470.05	0.0006	P	1.5

$$y = 3.7143\text{E-}004 * x + 1.4765\text{E-}005$$

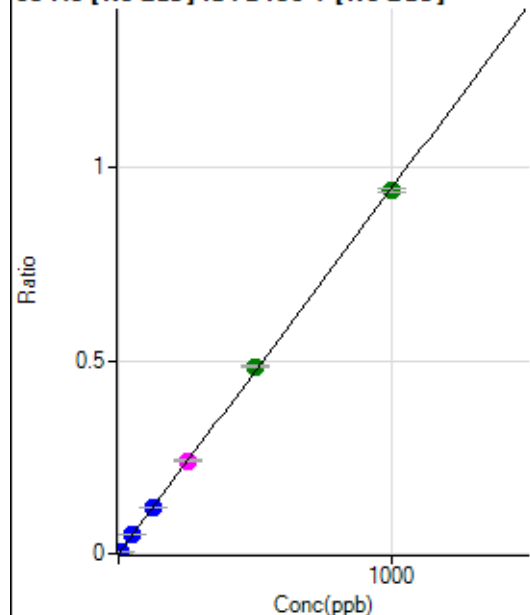
$$R = 0.9999$$

$$DL = 0.07343$$

$$BEC = 0.03975$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.23	0.0000	P	69.4
2	☐	0.500					
3	☐	5.000	4.465	25758.73	0.0042	P	1.1
4	☐	50.000	50.539	287773.23	0.0478	P	1.2
5	☐	125.000	125.870	720625.74	0.1191	P	0.4
6	☐	250.000	254.066	1436618.26	0.2404	M	1.2
7	☐	500.000	511.409	2889771.87	0.4838	A	0.8
8	☐	1000.000	993.146	5669402.47	0.9396	A	1.1
9	☐			8050.01	0.0014	P	2.5

$$y = 9.4608\text{E-}004 * x + 1.6059\text{E-}005$$

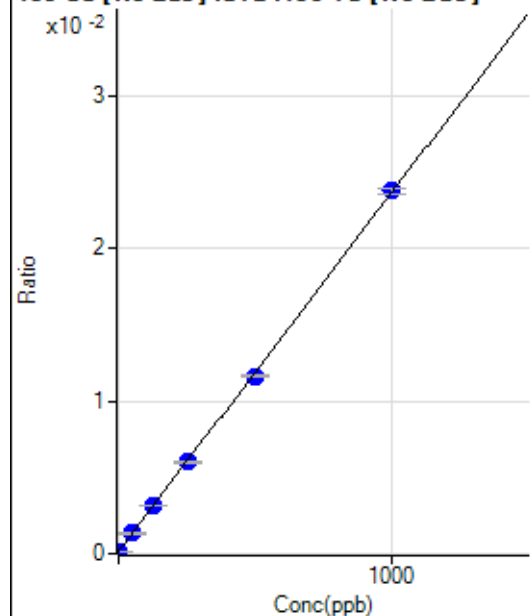
$$R = 0.9999$$

$$DL = 0.03535$$

$$BEC = 0.01697$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1111.21	0.0002	P	15.3
2	☐	0.100					
3	☐	1.000	0.618	1230.67	0.0002	P	5.2
4	☐	50.000	50.636	9962.38	0.0013	P	5.1
5	☐	125.000	126.340	23565.92	0.0031	P	1.6
6	☐	250.000	248.443	45778.92	0.0060	P	0.6
7	☐	500.000	489.647	89449.42	0.0117	P	1.6
8	☐	1000.000	1005.367	183420.95	0.0238	P	1.3
9	☐			1155.66	0.0002	P	11.2

$$y = 2.3492\text{E-}005 * x + 1.5006\text{E-}004$$

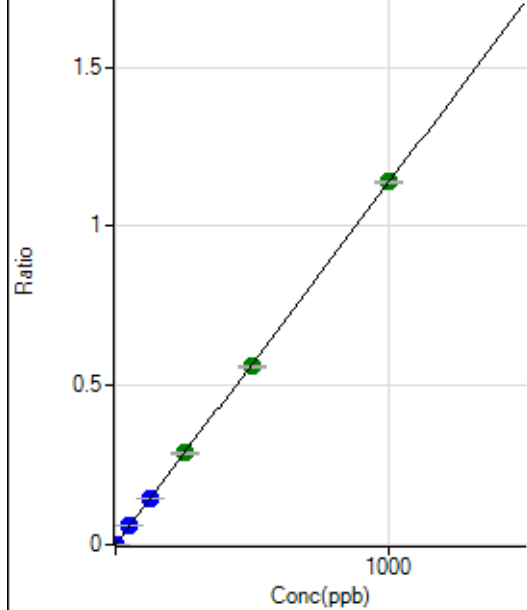
$$R = 0.9999$$

$$DL = 2.938$$

$$BEC = 6.387$$

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	122.23	0.0000	P	15.4
2	☐	0.100					
3	☐	1.000	0.973	8397.42	0.0011	P	3.2
4	☐	50.000	52.075	440448.87	0.0592	P	1.0
5	☐	125.000	129.896	1116287.26	0.1477	P	0.3
6	☐	250.000	253.122	2200558.49	0.2878	A	1.0
7	☐	500.000	492.353	4297056.52	0.5598	A	0.4
8	☐	1000.000	1002.327	8794513.91	1.1396	A	0.6
9	☐			847.29	0.0001	P	12.6

$$y = 0.0011 * x + 1.6503E-005$$

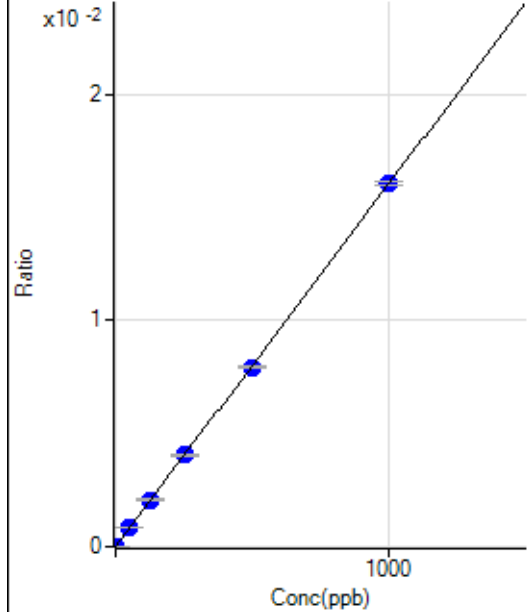
$$R = 0.9999$$

$$DL = 0.006709$$

$$BEC = 0.01452$$

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	4.17	0.0000	P	99.6
2	☐	0.100					
3	☐	1.000	0.824	102.78	0.0000	P	6.3
4	☐	50.000	51.564	6147.39	0.0008	P	3.5
5	☐	125.000	129.033	15623.21	0.0021	P	1.7
6	☐	250.000	252.640	30939.97	0.0040	P	2.5
7	☐	500.000	495.257	60896.61	0.0079	P	1.5
8	☐	1000.000	1001.129	123740.46	0.0160	P	0.9
9	☐			18.06	0.0000	P	57.5

$$y = 1.6016E-005 * x + 5.5697E-007$$

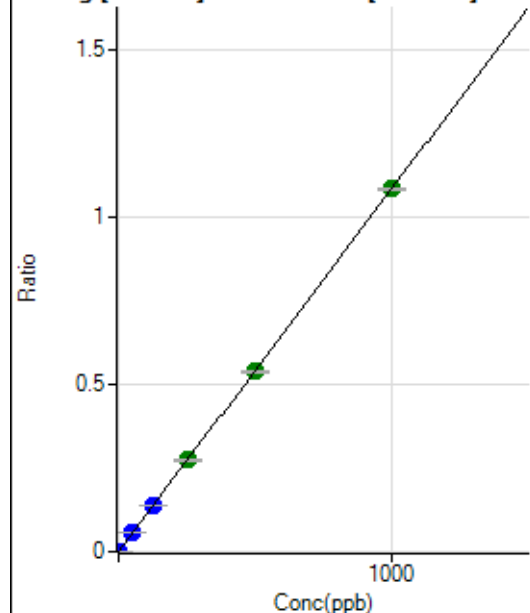
$$R = 1.0000$$

$$DL = 0.1039$$

$$BEC = 0.03478$$

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	113.90	0.0000	P	22.5
2	☐	0.100					
3	☐	1.000	0.973	7997.19	0.0011	P	1.7
4	☐	50.000	51.911	418486.43	0.0563	P	0.7
5	☐	125.000	128.704	1054133.36	0.1395	P	1.2
6	☐	250.000	252.705	2093934.18	0.2738	A	0.9
7	☐	500.000	496.549	4130543.67	0.5381	A	0.8
8	☐	1000.000	1000.491	8366546.02	1.0842	A	0.6
9	☐			769.51	0.0001	P	11.1

$$y = 0.0011 * x + 1.5368E-005$$

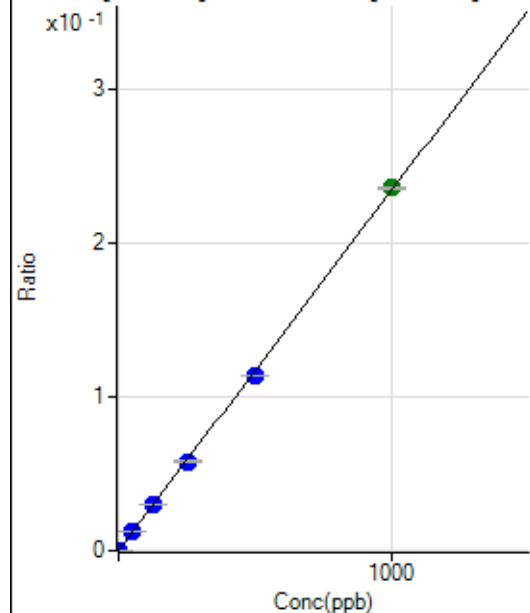
$$R = 1.0000$$

$$DL = 0.009575$$

$$BEC = 0.01418$$

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	794.38	0.0001	P	15.8
2	☐	0.100					
3	☐	1.000	0.921	2410.49	0.0003	P	6.3
4	☐	50.000	51.333	89993.30	0.0121	P	1.2
5	☐	125.000	128.443	227606.99	0.0301	P	0.5
6	☐	250.000	247.362	442698.95	0.0579	P	1.4
7	☐	500.000	486.443	873226.88	0.1138	P	0.5
8	☐	1000.000	1006.941	1816335.92	0.2354	A	0.5
9	☐			912.99	0.0001	P	7.5

$$y = 2.3363E-004 * x + 1.0727E-004$$

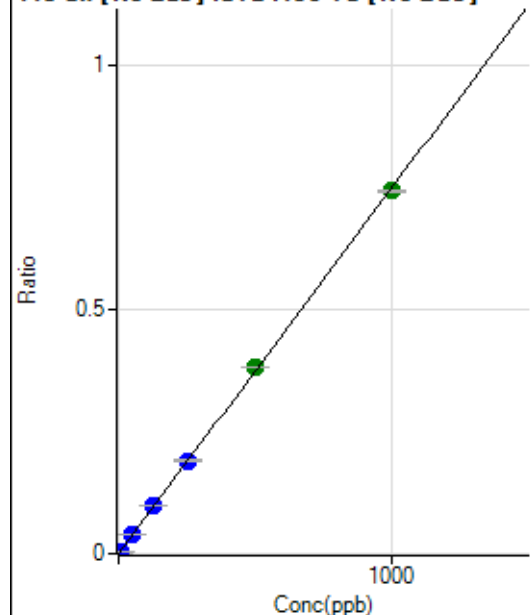
$$R = 0.9998$$

$$DL = 0.218$$

$$BEC = 0.4592$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	666.71	0.0001	P	6.0
2	☐	0.500					
3	☐	5.000	4.674	26850.04	0.0036	P	2.0
4	☐	50.000	51.999	290331.86	0.0390	P	0.9
5	☐	125.000	129.762	735225.63	0.0973	P	0.4
6	☐	250.000	254.183	1456281.40	0.1905	P	1.8
7	☐	500.000	510.364	2934988.95	0.3823	A	0.5
8	☐	1000.000	993.079	5740711.07	0.7439	A	0.5
9	☐			2761.52	0.0004	P	8.0

$$y = 7.4898E-004 * x + 8.9949E-005$$

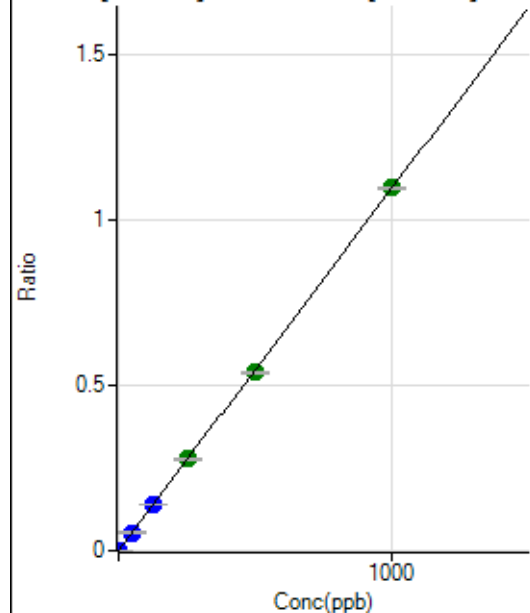
$$R = 0.9999$$

$$DL = 0.0215$$

$$BEC = 0.1201$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	105.56	0.0000	P	38.0
2	☐	0.200					
3	☐	2.000	1.866	15367.81	0.0021	P	2.9
4	☐	50.000	50.251	409041.71	0.0550	P	1.3
5	☐	125.000	126.625	1047274.81	0.1386	P	0.4
6	☐	250.000	252.755	2114760.96	0.2766	A	1.2
7	☐	500.000	492.730	4138822.14	0.5392	A	0.9
8	☐	1000.000	1002.731	8467161.39	1.0972	A	0.7
9	☐			10115.34	0.0014	P	2.7

$$y = 0.0011 * x + 1.4190E-005$$

$$R = 1.0000$$

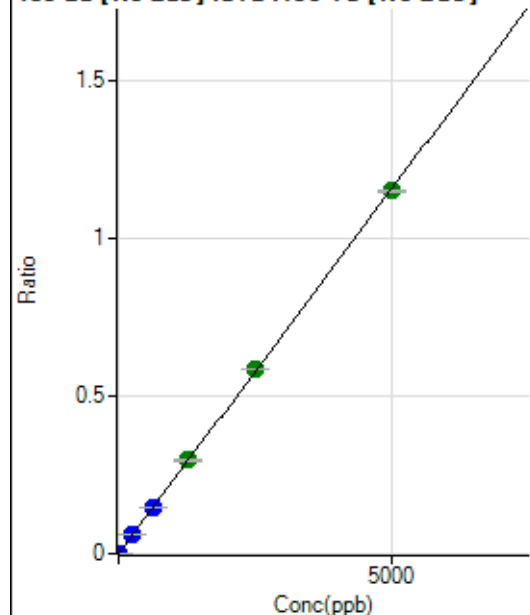
$$DL = 0.01479$$

$$BEC = 0.01297$$

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	30.56	0.0000	P	58.1
2	☐	1.000					
3	☐	10.000	9.093	15762.80	0.0021	P	1.8
4	☐	250.000	256.330	441134.49	0.0593	P	1.8
5	☐	625.000	643.127	1124710.41	0.1488	P	0.6
6	☐	1250.000	1283.770	2271223.23	0.2970	A	1.5
7	☐	2500.000	2524.062	4483273.32	0.5840	A	0.2
8	☐	5000.000	4976.946	8886959.66	1.1516	A	0.5
9	☐			2097.49	0.0003	P	4.5

$$y = 2.3138\text{E-}004 * x + 4.1423\text{E-}006$$

$$R = 1.0000$$

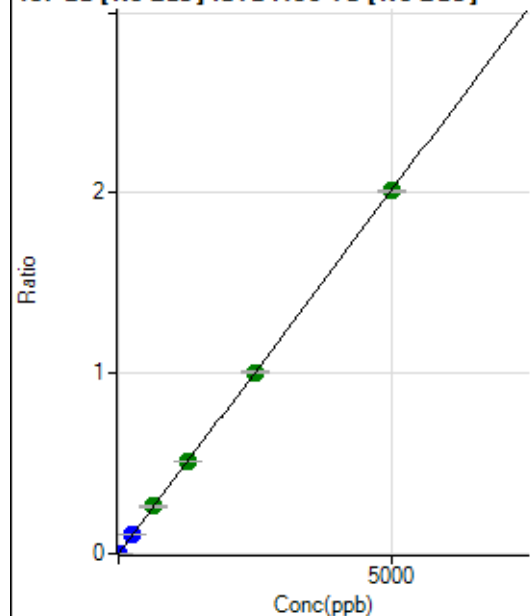
$$DL = 0.0312$$

$$BEC = 0.0179$$

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	38.89	0.0000	P	68.4
2	☐	1.000					
3	☐	10.000	9.282	27994.62	0.0037	P	2.0
4	☐	250.000	256.390	768168.64	0.1033	P	1.3
5	☐	625.000	652.281	1985856.45	0.2628	A	1.3
6	☐	1250.000	1269.474	3910100.74	0.5114	A	1.2
7	☐	2500.000	2498.134	7724920.74	1.0063	A	0.4
8	☐	5000.000	4992.336	15519869.44	2.0111	A	0.3
9	☐			3628.46	0.0005	P	5.9

$$y = 4.0283\text{E-}004 * x + 5.2135\text{E-}006$$

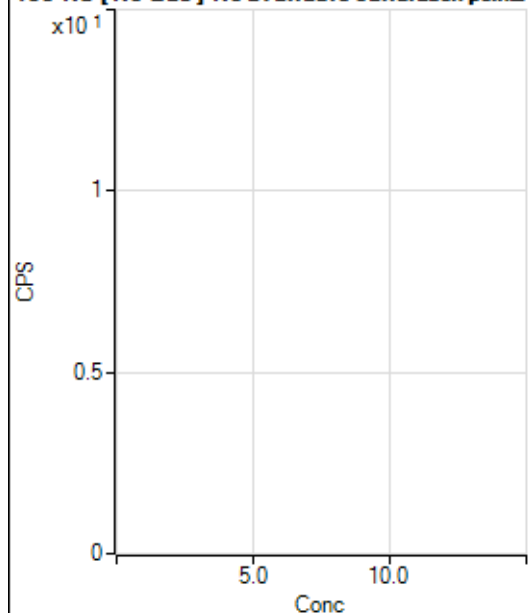
$$R = 1.0000$$

$$DL = 0.02656$$

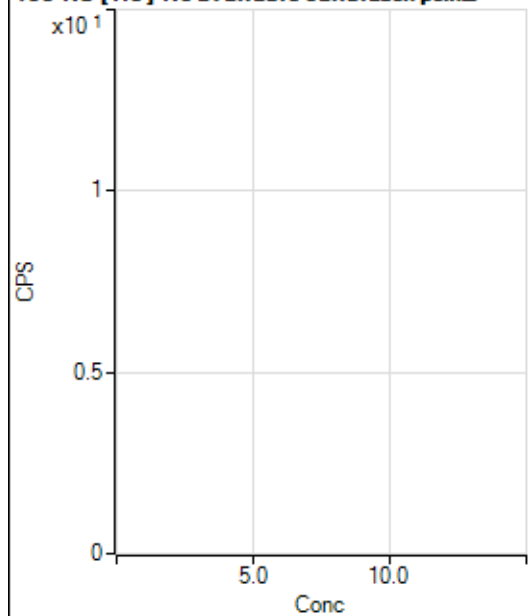
$$BEC = 0.01294$$

Weight: <None>

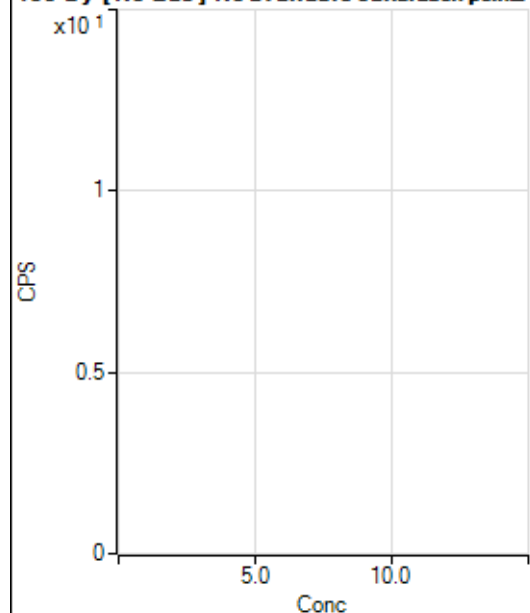
Min Conc: 0

150 Nd [No Gas] No available calibration points

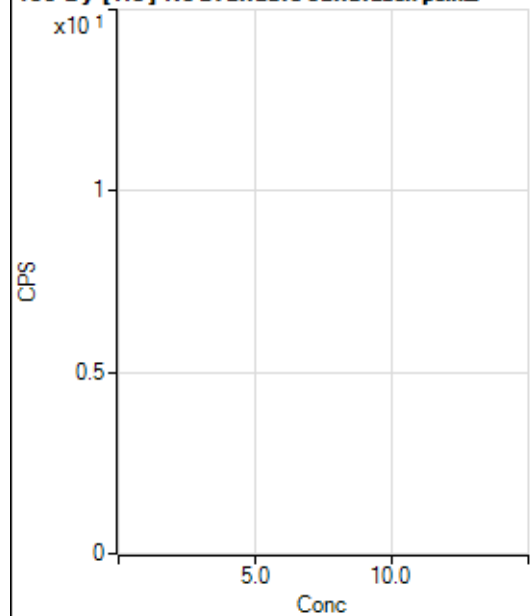
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	50.0
2	☐						
3	☐			2.22		P	173.2
4	☐			31.11		P	65.5
5	☐			51.11		P	27.2
6	☐			97.78		P	20.8
7	☐			164.45		P	4.7
8	☐			311.13		P	14.3
9	☐			75.56		P	28.4

150 Nd [He] No available calibration points

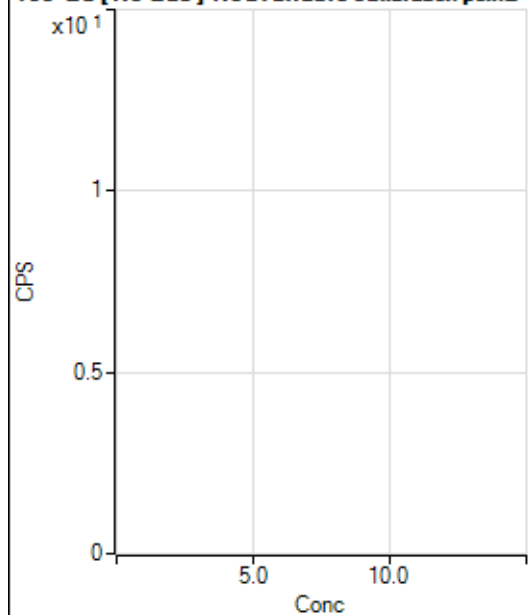
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.2
4	☐			2.22		P	173.2
5	☐			2.22		P	86.6
6	☐			3.33		P	173.2
7	☐			6.67		P	132.3
8	☐			12.22		P	41.7
9	☐			10.00		P	33.3

156 Dy [No Gas] No available calibration points

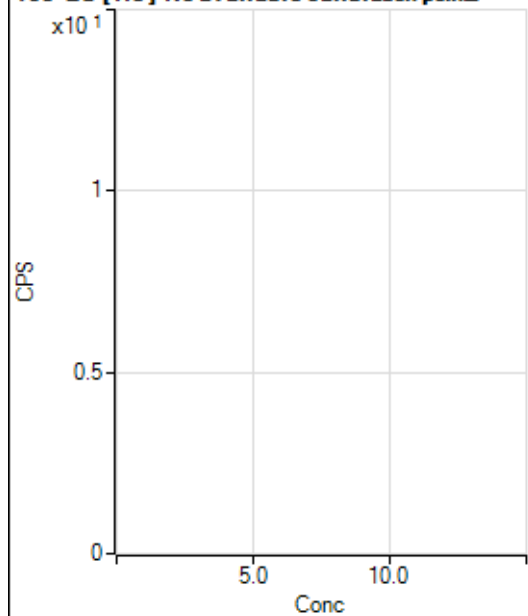
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	88.2
2	☐						
3	☐			5.56		P	173.2
4	☐			33.33		P	25.0
5	☐			33.33		P	25.0
6	☐			38.89		P	12.4
7	☐			72.23		P	26.7
8	☐			102.79		P	20.4
9	☐			72.22		P	35.2

156 Dy [He] No available calibration points

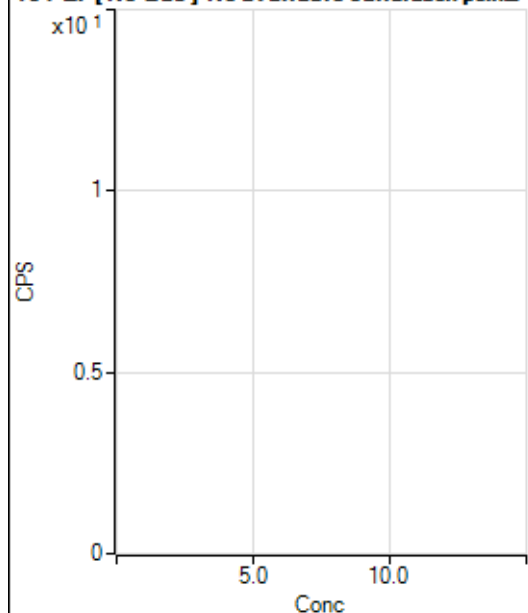
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.2
5	☐			6.67		P	100.0
6	☐			6.67		P	0.0
7	☐			8.89		P	57.3
8	☐			13.33		P	66.1
9	☐			8.89		P	21.6

160 Gd [No Gas] Noavailable calibration poin_

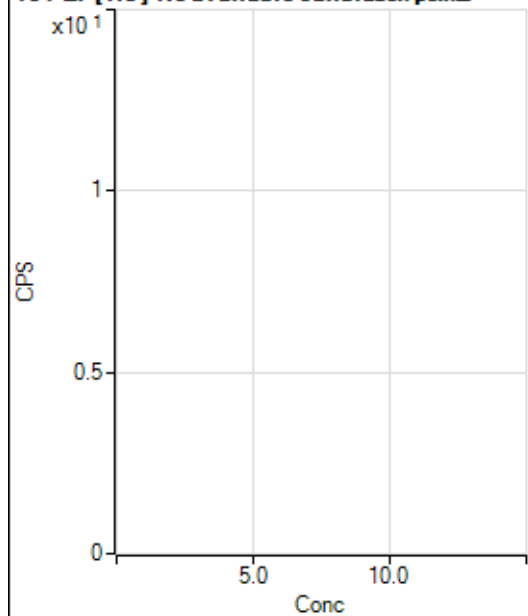
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	20.0
2	☐						
3	☐			69.45		P	30.2
4	☐			47.22		P	44.4
5	☐			55.56		P	17.3
6	☐			80.56		P	41.8
7	☐			100.01		P	16.7
8	☐			102.78		P	24.8
9	☐			80.56		P	52.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐						
3	☐			4.44		P	114.6
4	☐			7.78		P	49.5
5	☐			3.33		P	100.1
6	☐			10.00		P	57.7
7	☐			16.67		P	40.0
8	☐			20.00		P	44.1
9	☐			22.22		P	45.8

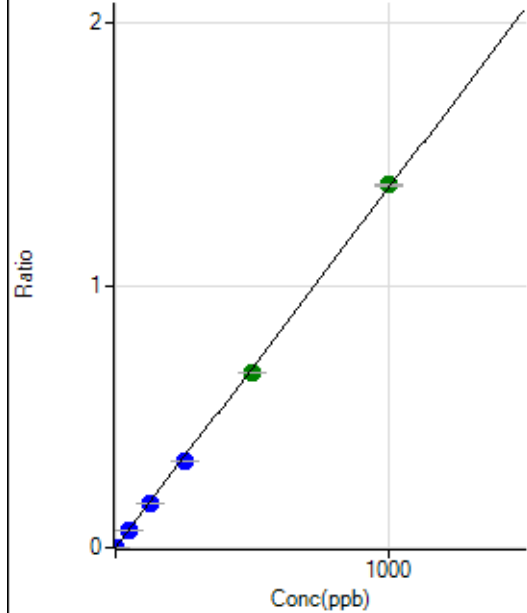
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	17.3
2	☐						
3	☐			50.00		P	28.9
4	☐			33.33		P	25.0
5	☐			25.00		P	88.2
6	☐			16.67		P	100.0
7	☐			36.11		P	53.3
8	☐			36.11		P	35.3
9	☐			66.67		P	33.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	124.9
2	☐						
3	☐			5.55		P	124.9
4	☐			6.67		P	132.3
5	☐			5.56		P	34.7
6	☐			10.00		P	88.2
7	☐			6.67		P	50.0
8	☐			10.00		P	66.7
9	☐			10.00		P	66.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.79	0.0000	P	15.4
2	☐	0.100					
3	☐	1.000	0.906	6051.75	0.0013	P	3.0
4	☐	50.000	47.769	308663.54	0.0655	P	0.4
5	☐	125.000	121.183	802059.44	0.1662	P	0.8
6	☐	250.000	241.299	1604245.18	0.3309	P	0.6
7	☐	500.000	487.703	3272651.05	0.6688	A	0.2
8	☐	1000.000	1008.912	6702493.73	1.3836	A	0.8
9	☐			2186.41	0.0005	P	11.1

$$y = 0.0014 * x + 4.2148E-005$$

$$R = 0.9998$$

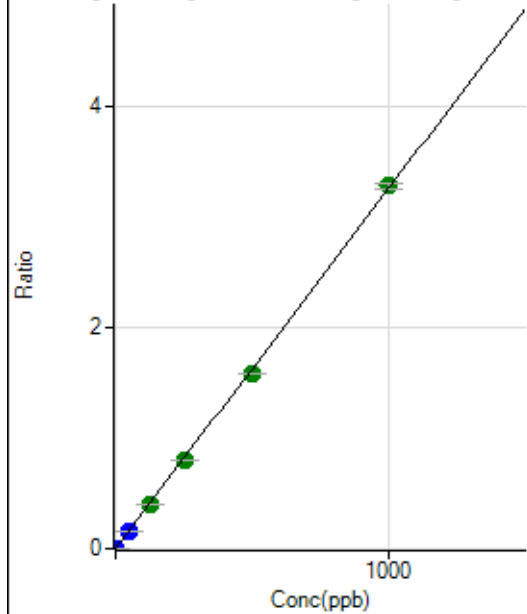
$$DL = 0.0142$$

$$BEC = 0.03074$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.36	0.0001	P	11.9
2	☐	0.100					
3	☐	1.000	0.933	14692.58	0.0031	P	2.5
4	☐	50.000	48.577	744015.89	0.1580	P	1.2
5	☐	125.000	124.780	1957779.36	0.4057	A	0.6
6	☐	250.000	247.397	3899237.98	0.8044	A	0.3
7	☐	500.000	485.730	7726941.06	1.5792	A	0.7
8	☐	1000.000	1007.884	15872862.86	3.2767	A	1.4
9	☐			5437.54	0.0012	P	3.9

$$y = 0.0033 * x + 8.5048E-005$$

$$R = 0.9998$$

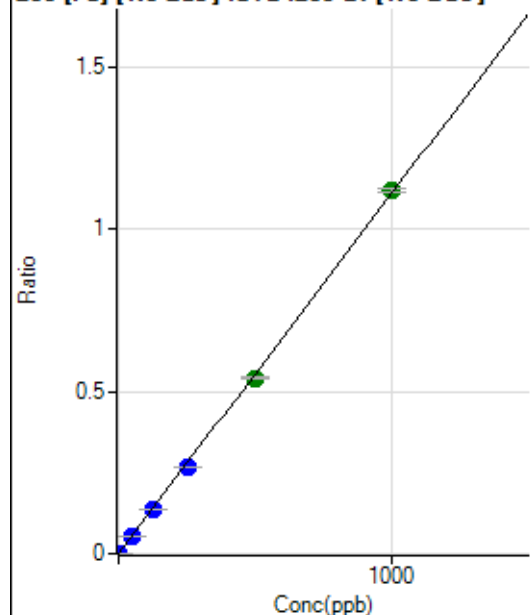
$$DL = 0.009344$$

$$BEC = 0.02616$$

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	485.21	0.0001	P	6.0
2	☐	0.100					
3	☐	1.000	0.893	5149.35	0.0011	P	4.4
4	☐	50.000	47.942	251152.52	0.0533	P	0.6
5	☐	125.000	121.503	651490.44	0.1350	P	0.1
6	☐	250.000	242.077	1303549.93	0.2689	P	0.4
7	☐	500.000	488.780	2656138.48	0.5428	A	0.4
8	☐	1000.000	1008.131	5423308.11	1.1195	A	0.9
9	☐			5953.44	0.0014	P	3.7

$$y = 0.0011 * x + 1.0094E-004$$

$$R = 0.9999$$

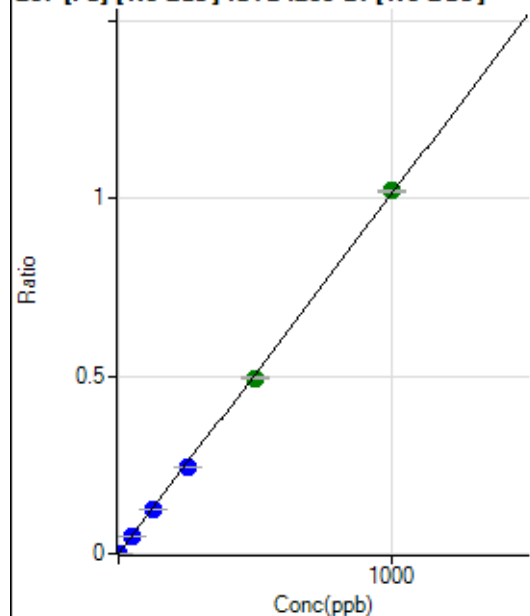
$$DL = 0.0163$$

$$BEC = 0.0909$$

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	440.77	0.0001	P	7.5
2	☐	0.100					
3	☐	1.000	0.918	4802.91	0.0010	P	4.9
4	☐	50.000	48.020	229007.77	0.0486	P	0.2
5	☐	125.000	121.269	591939.63	0.1227	P	0.2
6	☐	250.000	240.571	1179277.62	0.2433	P	0.3
7	☐	500.000	488.251	2415381.42	0.4936	A	0.9
8	☐	1000.000	1008.797	4940398.14	1.0198	A	0.5
9	☐			4932.60	0.0011	P	1.0

$$y = 0.0010 * x + 9.1721E-005$$

$$R = 0.9998$$

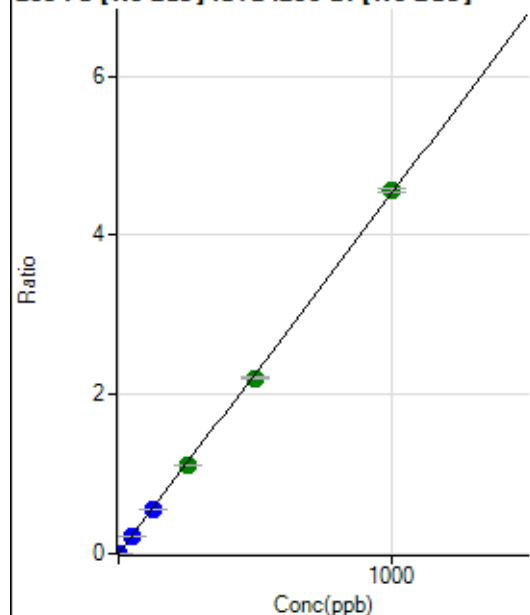
$$DL = 0.02046$$

$$BEC = 0.09074$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1987.17	0.0004	P	3.4
2	☐	0.100					
3	☐	1.000	0.897	21066.74	0.0045	P	2.0
4	☐	50.000	48.187	1028491.52	0.2184	P	0.3
5	☐	125.000	121.463	2653512.39	0.5499	P	0.1
6	☐	250.000	244.938	5373595.35	1.1085	A	0.4
7	☐	500.000	488.229	10809810.89	2.2092	A	0.4
8	☐	1000.000	1007.684	22086446.10	4.5592	A	0.9
9	☐			23064.45	0.0052	P	0.9

$$y = 0.0045 * x + 4.1355E-004$$

$$R = 0.9999$$

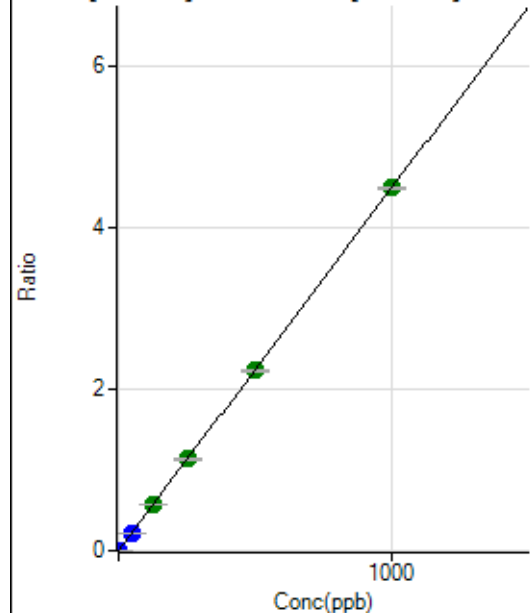
$$DL = 0.009375$$

$$BEC = 0.09141$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.23	0.0000	P	16.4
2	☐	0.100					
3	☐	1.000	0.851	18194.62	0.0039	P	1.5
4	☐	50.000	48.921	1034400.63	0.2197	P	0.7
5	☐	125.000	127.248	2756806.73	0.5713	A	0.4
6	☐	250.000	251.965	5483679.16	1.1312	A	0.5
7	☐	500.000	497.349	10926057.10	2.2329	A	0.9
8	☐	1000.000	1000.607	21762536.25	4.4923	A	0.5
9	☐			1633.53	0.0004	P	9.6

$$y = 0.0045 * x + 4.1059E-005$$

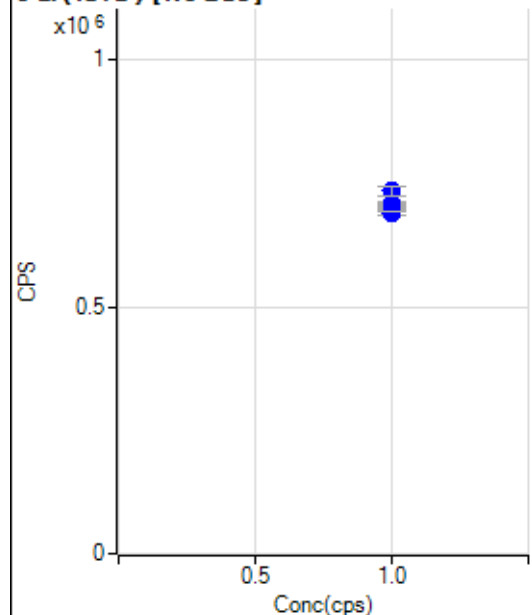
$$R = 1.0000$$

$$DL = 0.004496$$

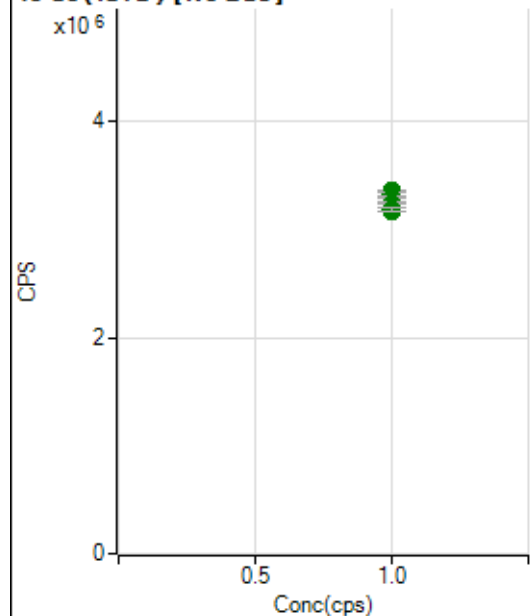
$$BEC = 0.009146$$

Weight: <None>

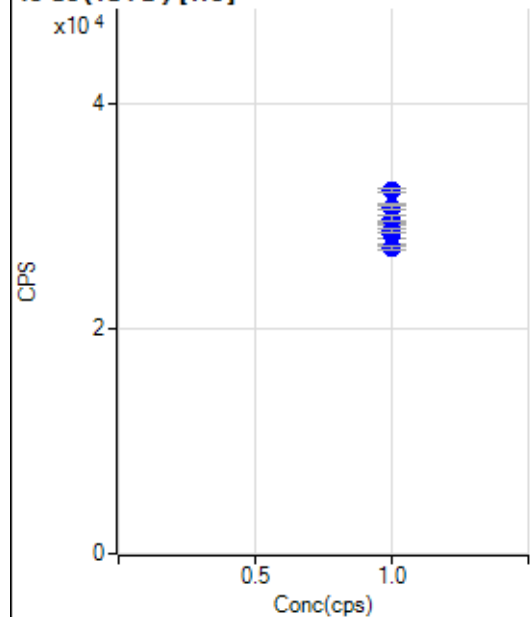
Min Conc: 0

6 Li (ISTD) [No Gas]

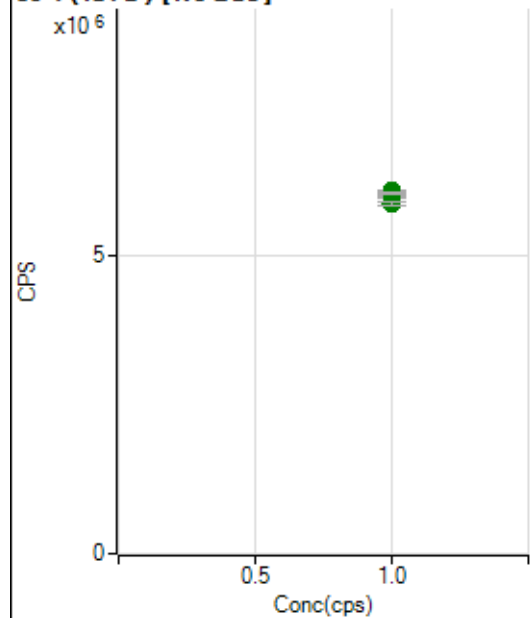
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		706993.29		P	1.1
2	☐	1.000					
3	☐	1.000		709444.84		P	0.4
4	☐	1.000		697438.52		P	0.3
5	☐	1.000		703425.13		P	0.4
6	☐	1.000		699779.14		P	0.7
7	☐	1.000		688615.13		P	1.0
8	☐	1.000		692073.59		P	0.2
9	☐	1.000		734321.79		P	2.5

45 Sc (ISTD) [No Gas]

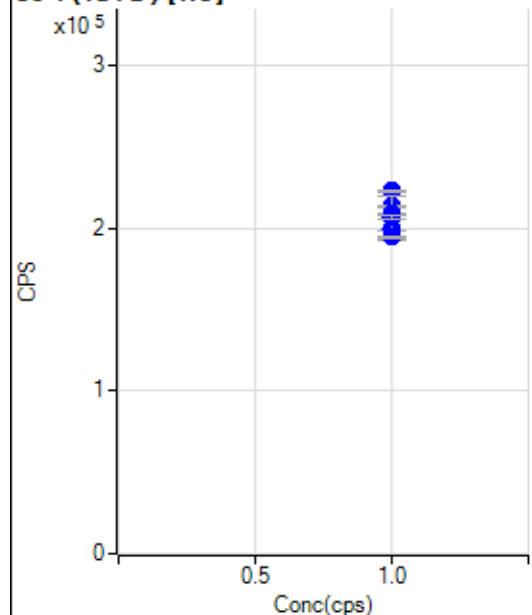
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3343878.85		A	1.7
2	☐	1.000					
3	☐	1.000		3359757.67		A	0.2
4	☐	1.000		3328476.44		A	0.9
5	☐	1.000		3302859.93		A	0.6
6	☐	1.000		3244776.02		A	0.7
7	☐	1.000		3166290.09		A	0.1
8	☐	1.000		3245226.20		A	0.6
9	☐	1.000		3182089.15		A	1.1

45 Sc (ISTD) [He]

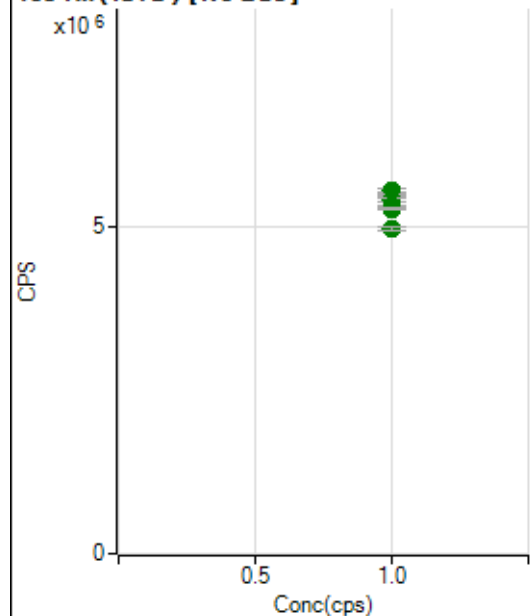
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		30865.18		P	1.5
2	☐	1.000					
3	☐	1.000		32312.83		P	1.1
4	☐	1.000		29548.35		P	9.5
5	☐	1.000		28463.88		P	6.7
6	☐	1.000		29258.36		P	0.3
7	☐	1.000		27311.17		P	1.2
8	☐	1.000		29875.26		P	1.9
9	☐	1.000		28814.10		P	1.5

89 Y (ISTD) [No Gas]

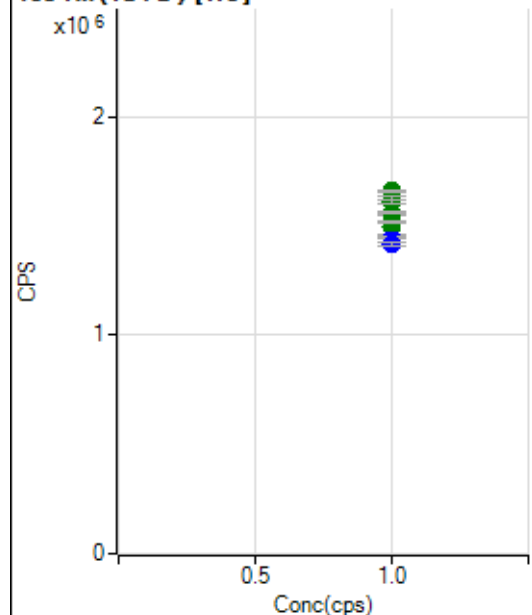
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6048960.88		A	1.2
2	☐	1.000					
3	☐	1.000		6075122.06		A	0.8
4	☐	1.000		6016729.91		A	0.5
5	☐	1.000		6050693.87		A	0.4
6	☐	1.000		5976637.20		A	0.7
7	☐	1.000		5972477.69		A	0.3
8	☐	1.000		6034000.67		A	0.5
9	☐	1.000		5858435.26		A	0.8

89 Y(ISTD) [He]

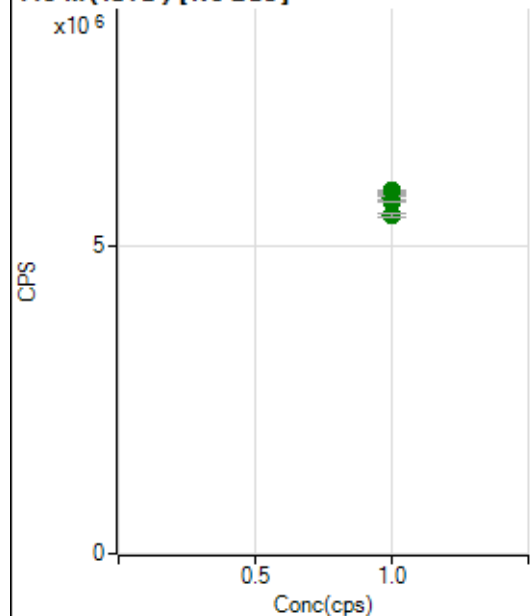
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		213327.76		P	0.9
2	☐	1.000					
3	☐	1.000		222941.13		P	0.2
4	☐	1.000		208971.16		P	10.4
5	☐	1.000		200263.53		P	7.3
6	☐	1.000		208885.05		P	0.4
7	☐	1.000		194660.51		P	0.8
8	☐	1.000		208025.98		P	0.3
9	☐	1.000		206479.29		P	0.9

103 Rh(ISTD) [No Gas]

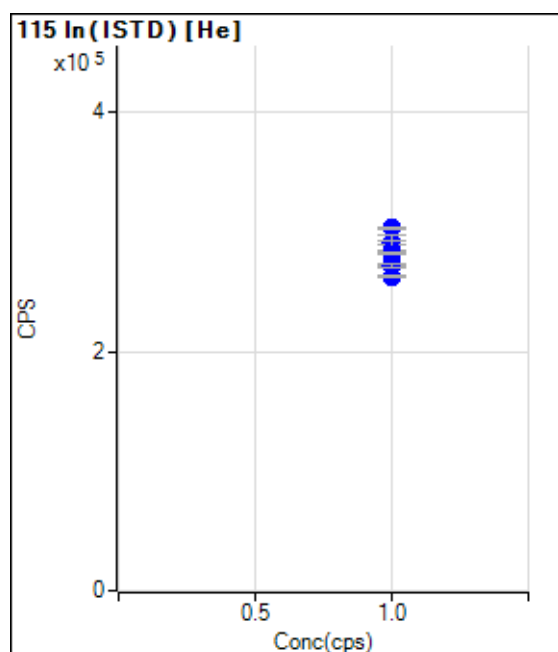
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5547413.58		A	1.8
2	☐	1.000					
3	☐	1.000		5531755.46		A	0.4
4	☐	1.000		5471422.95		A	0.6
5	☐	1.000		5485903.60		A	0.2
6	☐	1.000		5415015.49		A	0.9
7	☐	1.000		5307929.42		A	0.7
8	☐	1.000		5277012.58		A	0.1
9	☐	1.000		4961868.64		A	1.1

103 Rh (ISTD) [He]

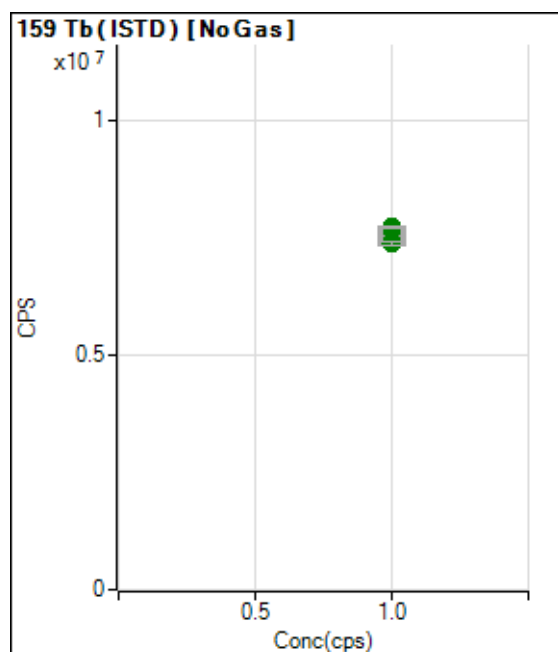
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1607843.95		A	1.0
2	☐	1.000					
3	☐	1.000		1659082.39		A	0.5
4	☐	1.000		1547454.07		A	11.0
5	☐	1.000		1497360.85		A	7.3
6	☐	1.000		1559583.48		A	0.8
7	☐	1.000		1446303.92		P	0.9
8	☐	1.000		1514763.26		A	0.8
9	☐	1.000		1411677.88		P	1.2

115 In (ISTD) [No Gas]

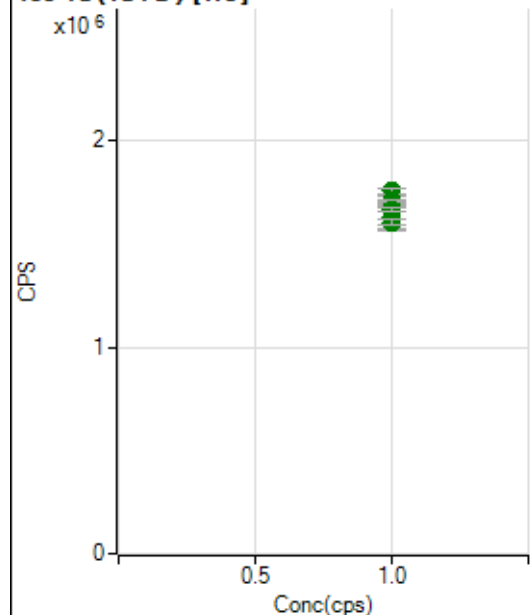
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5864411.41		A	1.1
2	☐	1.000					
3	☐	1.000		5858024.37		A	0.6
4	☐	1.000		5789637.04		A	1.0
5	☐	1.000		5891403.56		A	0.3
6	☐	1.000		5829493.98		A	0.6
7	☐	1.000		5763077.93		A	1.5
8	☐	1.000		5708949.62		A	0.2
9	☐	1.000		5488639.92		A	0.9



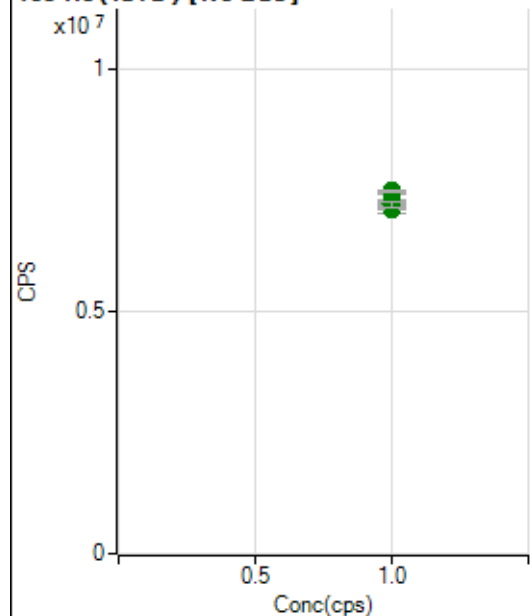
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		291305.22		P	1.2
2	☐	1.000					
3	☐	1.000		303422.11		P	0.5
4	☐	1.000		284166.70		P	9.8
5	☐	1.000		273839.47		P	7.5
6	☐	1.000		282075.92		P	0.3
7	☐	1.000		262869.29		P	0.9
8	☐	1.000		271607.21		P	0.4
9	☐	1.000		272497.75		P	1.2



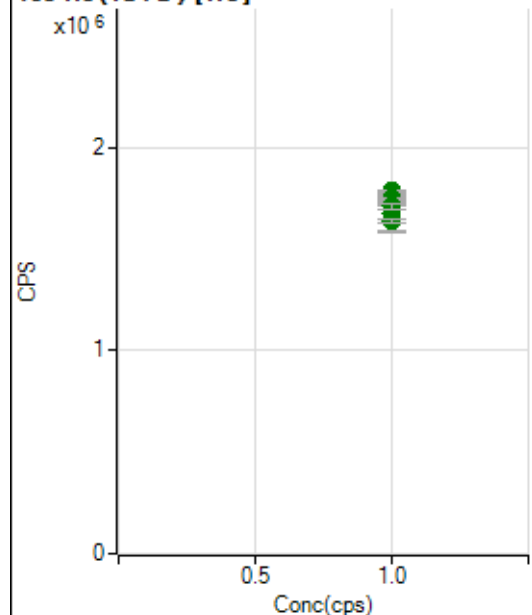
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7415093.15		A	1.3
2	☐	1.000					
3	☐	1.000		7476878.71		A	0.3
4	☐	1.000		7437673.29		A	0.6
5	☐	1.000		7558005.37		A	0.7
6	☐	1.000		7646869.40		A	1.2
7	☐	1.000		7676387.66		A	0.5
8	☐	1.000		7717230.51		A	0.4
9	☐	1.000		7353496.83		A	1.0

159 Tb (ISTD) [He]

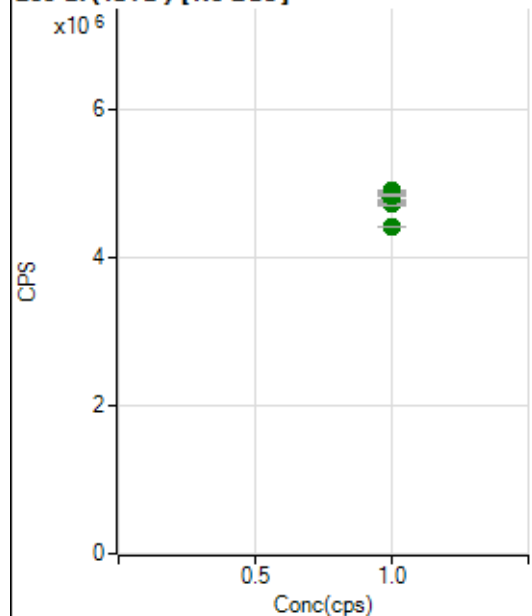
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1701178.33		A	1.8
2	☐	1.000					
3	☐	1.000		1756156.40		A	1.3
4	☐	1.000		1652738.60		A	9.5
5	☐	1.000		1626858.48		A	7.8
6	☐	1.000		1698902.87		A	1.1
7	☐	1.000		1604208.22		A	1.4
8	☐	1.000		1709614.37		A	0.2
9	☐	1.000		1668319.49		A	1.3

165 Ho (ISTD) [No Gas]

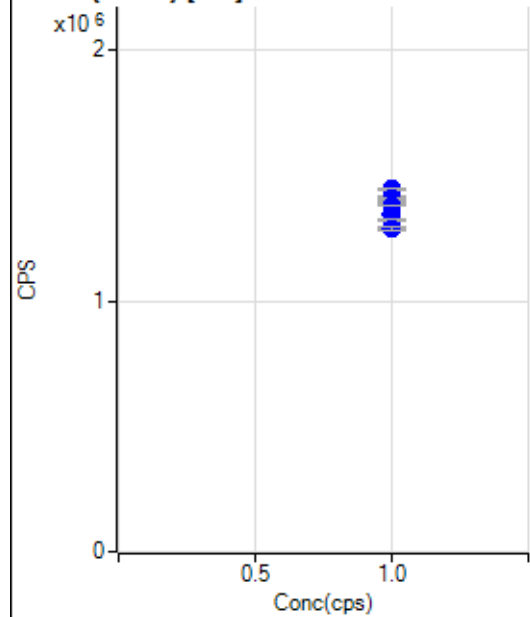
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7127896.69		A	2.3
2	☐	1.000					
3	☐	1.000		7179148.43		A	0.5
4	☐	1.000		7125598.68		A	0.5
5	☐	1.000		7259984.88		A	0.8
6	☐	1.000		7449464.14		A	0.2
7	☐	1.000		7433643.66		A	0.0
8	☐	1.000		7494726.38		A	0.5
9	☐	1.000		7210818.74		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1731149.89		A	1.9
2	☐	1.000					
3	☐	1.000		1785721.31		A	0.3
4	☐	1.000		1678939.06		A	10.3
5	☐	1.000		1650740.91		A	7.9
6	☐	1.000		1747497.49		A	1.3
7	☐	1.000		1640745.06		A	1.3
8	☐	1.000		1744418.39		A	0.4
9	☐	1.000		1708868.46		A	1.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4806008.75		A	1.2
2	☐	1.000					
3	☐	1.000		4713462.64		A	1.2
4	☐	1.000		4708963.47		A	0.7
5	☐	1.000		4825264.82		A	0.2
6	☐	1.000		4847602.26		A	0.8
7	☐	1.000		4893069.34		A	0.8
8	☐	1.000		4844370.52		A	0.6
9	☐	1.000		4405736.33		A	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1398709.89		P	0.8
2	☐	1.000					
3	☐	1.000		1446091.33		P	0.3
4	☐	1.000		1352568.06		P	9.2
5	☐	1.000		1340506.04		P	7.5
6	☐	1.000		1407254.75		P	0.2
7	☐	1.000		1322865.92		P	0.7
8	☐	1.000		1377368.24		P	0.2
9	☐	1.000		1287818.69		P	1.4

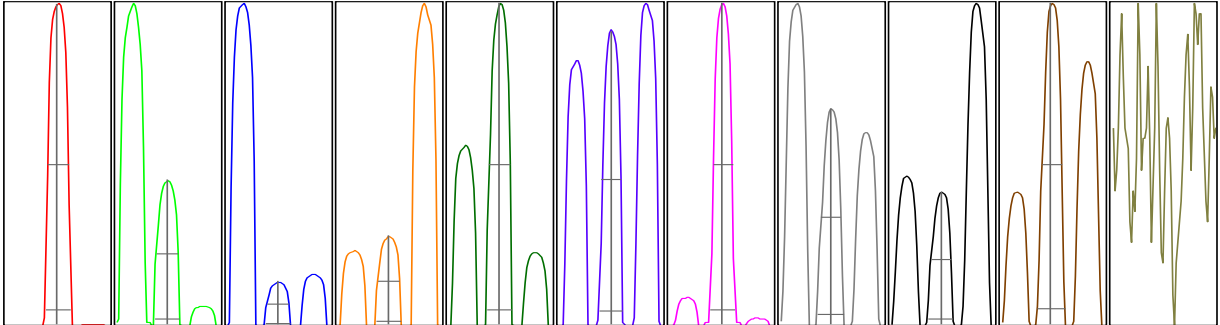
US EPA Tune Check Sample Report

Batch Folder D:\P8100517MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5492	0.45	5.00	
24	38064	0.87	5.00	
25	5184	0.89	5.00	
26	6125	1.44	5.00	
59	68945	1.88	5.00	
113	9452	1.24	5.00	
115	120113	0.81	5.00	
206	27049	1.69	5.00	
207	24198	1.37	5.00	
208	58353	1.65	5.00	
220	1	18.13		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5498	5448	5499	5510	5505
24	38226	37597	38048	37952	38496
25	5210	5113	5185	5175	5236
26	6144	5991	6154	6104	6231
59	69129	66999	69727	68489	70381
113	9587	9293	9537	9386	9457
115	121749	119663	120158	119226	119767
206	26686	26460	27339	27540	27217
207	23924	23806	24310	24629	24323
208	57698	57375	58214	59848	58632
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	9078	9.00	8.9 - 9.1		0.741	0.900	
24	62665	24.00	23.9 - 24.1		0.741	0.900	
25	8500	25.00	24.9 - 25.1		0.742	0.900	
26	10049	26.00	25.9 - 26.1		0.740	0.900	
59	117625	59.00	58.9 - 59.1		0.737	0.900	
113	17527	113.05	112.9 - 113.1		0.690	0.900	
115	220554	115.05	114.9 - 115.1		0.731	0.900	
206	48806	206.00	205.9 - 206.1		0.775	0.900	
207	43648	207.00	206.9 - 207.1		0.740	0.900	
208	105685	207.95	207.9 - 208.1		0.789	0.900	
220			-				

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	10.6	V	Deflect	13.6	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-115	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	9740	0.72	
89	2256	0.83	
205	14928	0.60	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9839	9762	9740	9713	9646
89	2282	2253	2243	2267	2236
205	15056	14918	14877	14970	14822

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	10.6	V	Deflect	1.8	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-115	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	200	V			