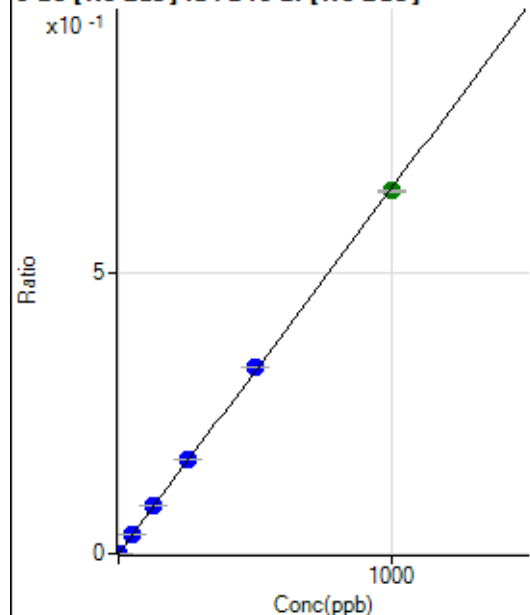


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\P7020120 MS.b\
 Analysis File: P7020120 MS.batch.bin
 DA Date-Time: 2020-02-02 21:15:37
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-02-01 14:23:39
2	004CALS.d	S02	2020-02-01 14:27:20
3	005CALS.d	S03	2020-02-01 14:32:18
4	006CALS.d	S04	2020-02-01 14:36:35
5	007CALS.d	S05	2020-02-01 14:40:28
6	008CALS.d	S06	2020-02-01 14:44:19
7	009CALS.d	S07	2020-02-01 14:48:12
8	010CALS.d	S08	2020-02-01 14:52:06

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	177.78	0.0000	P	20.0
2	☐	1.000	0.990	5571.52	0.0007	P	3.1
3	☐	50.000	53.345	283008.97	0.0348	P	0.0
4	☐	125.000	129.551	673026.25	0.0845	P	0.4
5	☐	250.000	256.954	1292385.80	0.1675	P	0.5
6	☐	500.000	508.761	2488435.01	0.3316	P	0.2
7	☐	1000.000	993.145	4746722.91	0.6473	A	0.6
8	☐			974.14	0.0002	P	16.3

$$y = 6.5178\text{E-}004 * x + 2.0752\text{E-}005$$

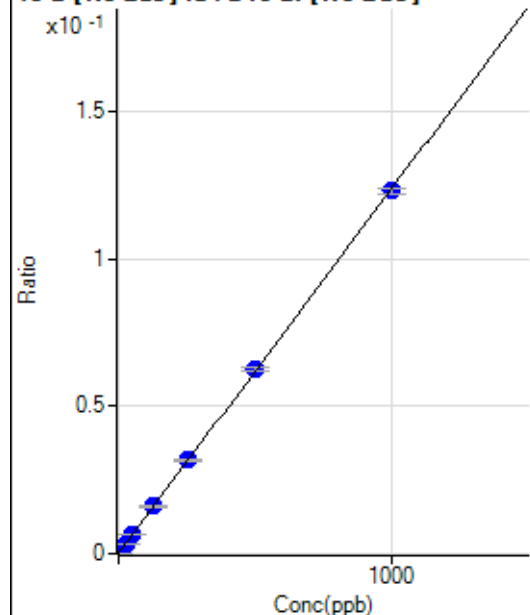
$$R = 0.9999$$

$$DL = 0.01908$$

$$BEC = 0.03184$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1216.76	0.0001	P	6.5
2	☐	25.000	24.146	26151.28	0.0031	P	0.7
3	☐	50.000	52.203	53654.51	0.0066	P	0.6
4	☐	125.000	128.682	127896.68	0.0160	P	1.4
5	☐	250.000	256.800	246035.40	0.0319	P	1.6
6	☐	500.000	506.450	470837.58	0.0627	P	1.8
7	☐	1000.000	994.526	902411.88	0.1231	P	1.8
8	☐			21621.74	0.0034	P	10.2

$$y = 1.2362\text{E-}004 * x + 1.4215\text{E-}004$$

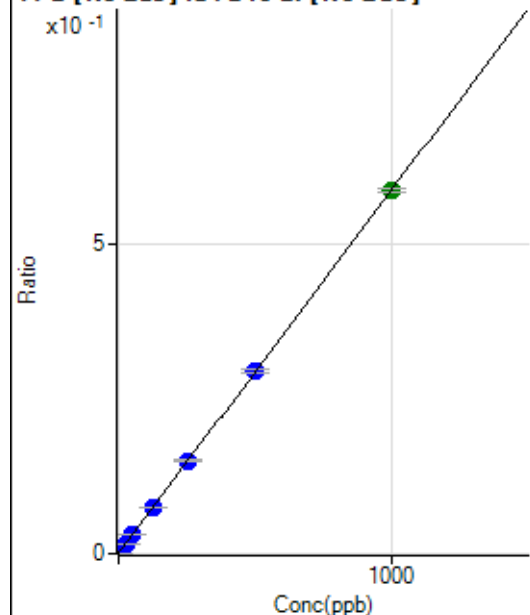
$$R = 0.9999$$

$$DL = 0.2246$$

$$BEC = 1.15$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	5704.10	0.0007	P	2.6
2	☐	25.000	24.474	125835.94	0.0150	P	1.2
3	☐	50.000	52.475	256217.71	0.0315	P	1.5
4	☐	125.000	127.684	603115.57	0.0757	P	1.4
5	☐	250.000	255.103	1161654.80	0.1506	P	1.7
6	☐	500.000	500.411	2211195.62	0.2947	P	2.1
7	☐	1000.000	998.073	4304696.58	0.5871	A	1.2
8	☐			101871.83	0.0158	P	9.2

$$y = 5.8757\text{E-}004 * x + 6.6632\text{E-}004$$

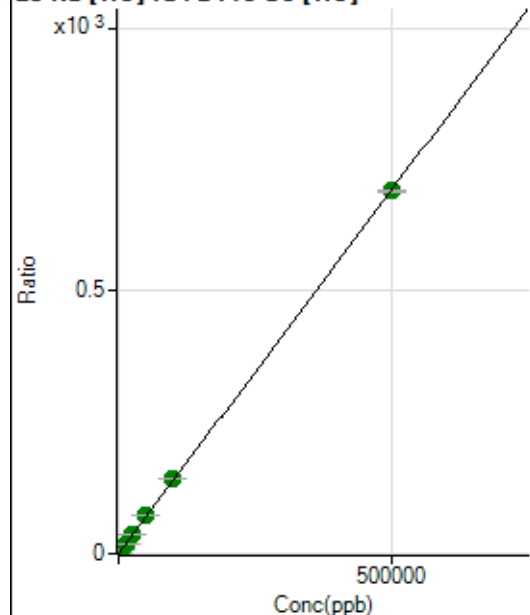
$$R = 1.0000$$

$$DL = 0.08923$$

$$BEC = 1.134$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33399.25	0.0457	P	0.3
2	☐	500.000	518.616	583639.72	0.7639	P	1.8
3	☐	5000.000	5480.039	5335171.87	7.6345	A	0.4
4	☐	12500.000	13245.697	12922962.35	18.3885	A	0.3
5	☐	25000.000	26335.961	25220815.84	36.5161	A	0.2
6	☐	50000.000	52122.619	49760268.47	72.2258	A	0.3
7	☐	100000.00	103424.56	100991401.57	143.2694	A	0.4
8	☐	500000.00	499012.56	472235899.44	691.0851	A	0.3

$$y = 0.0014 * x + 0.0457$$

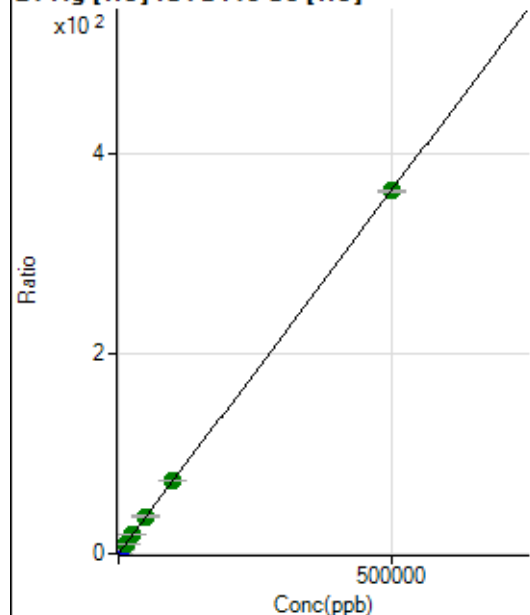
$$R = 1.0000$$

$$DL = 0.293$$

$$BEC = 32.99$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	255.57	0.0003	P	20.5
2	☐	500.000	516.823	287363.51	0.3760	P	1.2
3	☐	5000.000	5485.400	2786586.00	3.9875	P	0.1
4	☐	12500.000	13258.541	6773054.75	9.6376	A	0.3
5	☐	25000.000	26260.142	13183772.43	19.0882	A	0.3
6	☐	50000.000	51503.518	25792504.57	37.4369	A	0.5
7	☐	100000.00	101592.91	52054051.86	73.8456	A	0.4
8	☐	500000.00	499444.22	248071724.99	363.0336	A	0.3

$$y = 7.2687\text{E-}004 * x + 3.4984\text{E-}004$$

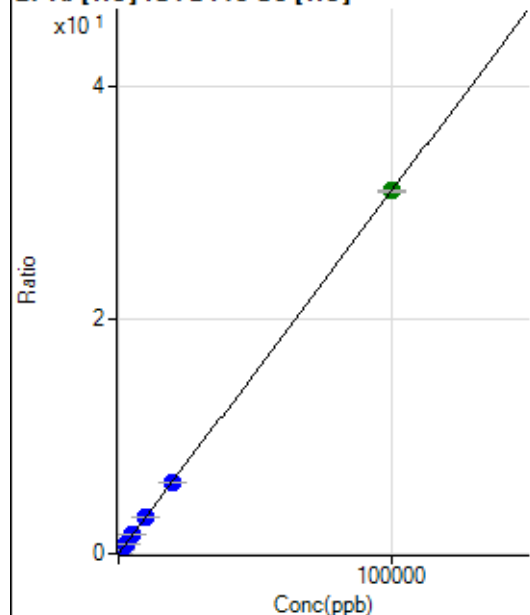
$$R = 1.0000$$

$$DL = 0.2966$$

$$BEC = 0.4813$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	52.78	0.0001	P	18.9
2	☐	20.000	19.061	4573.10	0.0060	P	4.2
3	☐	1000.000	1079.593	234035.69	0.3349	P	0.5
4	☐	2500.000	2586.755	563849.49	0.8023	P	0.6
5	☐	5000.000	5083.673	1089019.44	1.5767	P	0.8
6	☐	10000.000	9964.920	2129290.80	3.0906	P	0.2
7	☐	20000.000	19841.510	4337812.99	6.1538	P	0.3
8	☐	100000.00	100028.05	21199197.69	31.0230	A	0.3

$$y = 3.1014\text{E-}004 * x + 7.2263\text{E-}005$$

$$R = 1.0000$$

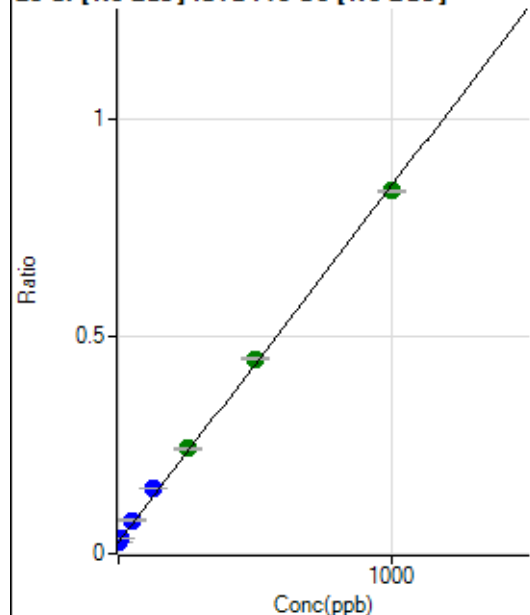
$$DL = 0.132$$

$$BEC = 0.233$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	544922.79	0.0264	P	0.7
2	☐	10.000	8.623	699157.19	0.0334	P	1.4
3	☐	50.000	61.701	1553495.12	0.0769	P	1.2
4	☐	125.000	149.910	2958447.72	0.1492	P	0.7
5	☐	250.000	262.073	4724243.51	0.2412	A	0.7
6	☐	500.000	514.669	8689107.23	0.4482	A	0.6
7	☐	1000.000	985.962	16084006.61	0.8345	A	0.6
8	☐			908498.33	0.0521	P	2.3

$$y = 8.1965\text{E-}004 * x + 0.0264$$

$$R = 0.9995$$

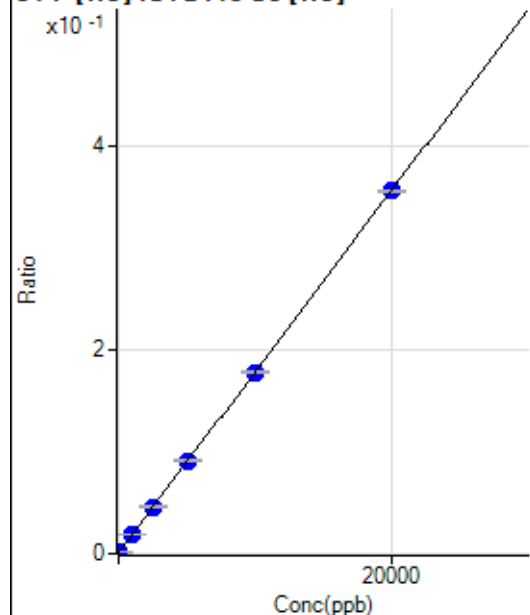
$$DL = 0.632$$

$$BEC = 32.16$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-20.863	275.01	0.0004	P	9.1
2	☐	0.000	20.863	855.62	0.0011	P	11.0
3	☐	1000.000	1038.191	13417.68	0.0192	P	2.7
4	☐	2500.000	2526.267	32074.27	0.0457	P	4.9
5	☐	5000.000	5080.987	62892.21	0.0911	P	1.8
6	☐	10000.000	9984.279	122782.66	0.1782	P	0.8
7	☐	20000.000	19982.421	250890.26	0.3559	P	0.8
8	☐			413.91	0.0006	P	14.6

$$y = 1.7774\text{E-}005 * x + 7.4721\text{E-}004$$

$$R = 1.0000$$

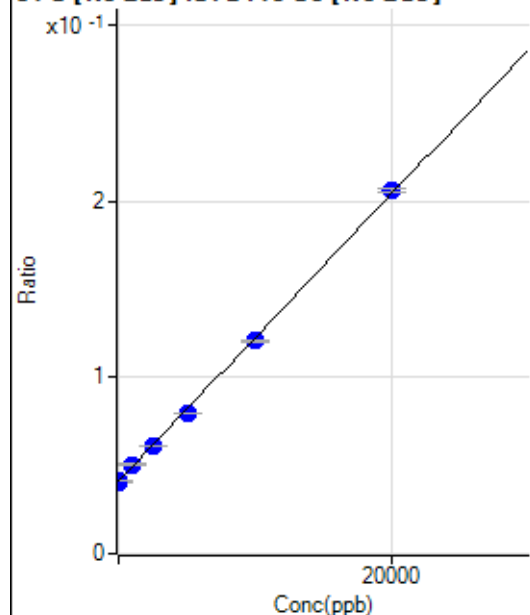
$$DL = 13.23$$

$$BEC = 42.04$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-35.070	845513.59	0.0409	P	1.4
2	☐	0.000	35.070	867446.23	0.0415	P	1.0
3	☐	1000.000	1160.160	1022917.01	0.0507	P	0.8
4	☐	2500.000	2426.378	1209077.25	0.0610	P	0.9
5	☐	5000.000	4763.073	1568350.14	0.0801	P	0.3
6	☐	10000.000	9742.266	2339991.02	0.1207	P	0.7
7	☐	20000.000	20189.294	3969756.82	0.2060	P	0.9
8	☐			658269.64	0.0377	P	0.4

$$y = 8.1622\text{E-}006 * x + 0.0412$$

$$R = 0.9997$$

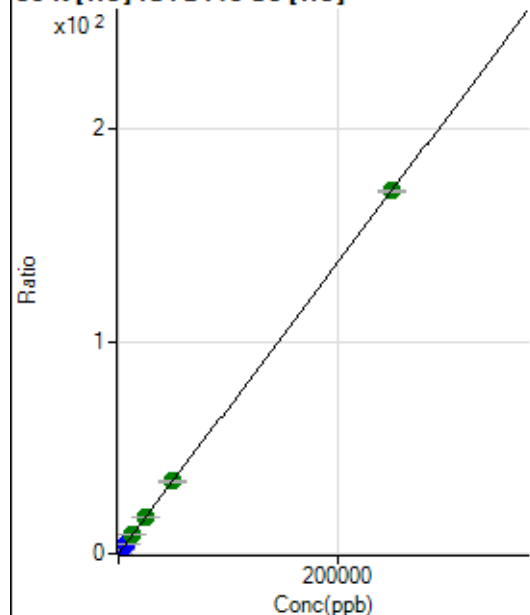
$$DL = 178.5$$

$$BEC = 5046$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	32689.75	0.0447	P	0.6
2	☐	500.000	489.929	289753.29	0.3792	P	1.9
3	☐	2500.000	2618.899	1280806.84	1.8328	P	0.6
4	☐	6250.000	6360.262	3083369.99	4.3873	P	0.3
5	☐	12500.000	12547.232	5947834.33	8.6116	A	0.2
6	☐	25000.000	24985.251	11783655.73	17.1040	A	0.4
7	☐	50000.000	49699.968	23951598.80	33.9785	A	0.3
8	☐	250000.00	250055.19	116693233.16	170.7755	A	0.3

$$y = 6.8277\text{E-}004 * x + 0.0447$$

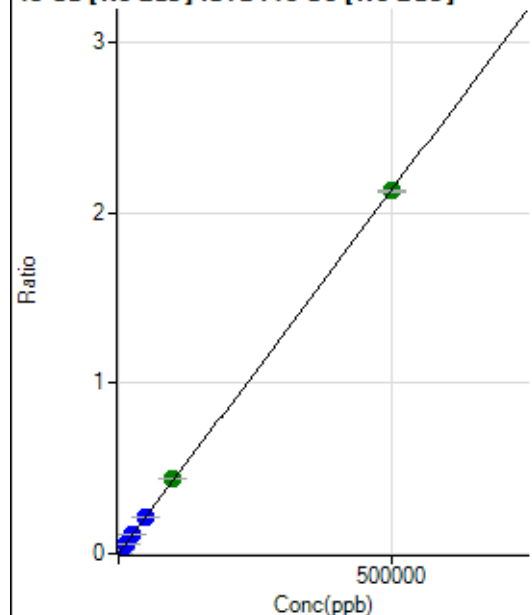
$$R = 1.0000$$

$$DL = 1.243$$

$$BEC = 65.49$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	322.24	0.0000	P	7.9
2	☐	500.000	495.840	44531.94	0.0021	P	3.0
3	☐	5000.000	5335.908	459609.37	0.0228	P	1.3
4	☐	12500.000	13119.673	1108981.42	0.0559	P	0.3
5	☐	25000.000	26087.250	2178631.84	0.1112	P	0.1
6	☐	50000.000	51266.734	4236835.08	0.2185	P	0.6
7	☐	100000.00	103354.77	8491549.58	0.4406	A	0.7
8	☐	500000.00	499129.16	37113628.61	2.1276	A	0.6

$$y = 4.2626\text{E-}006 * x + 1.5584\text{E-}005$$

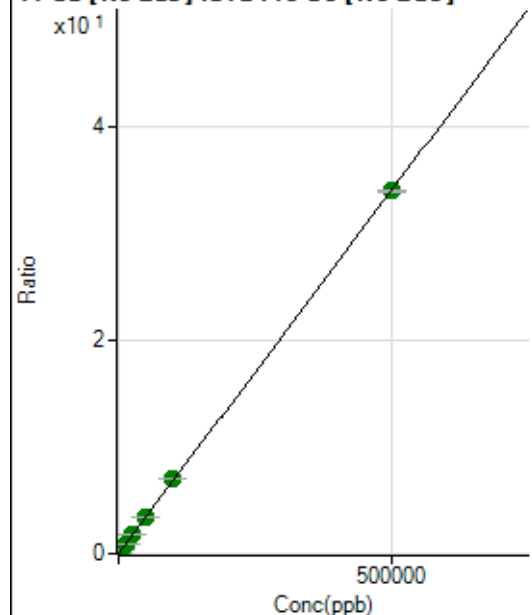
$$R = 1.0000$$

$$DL = 0.8714$$

$$BEC = 3.656$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	18659.82	0.0009	P	1.6
2	☐	500.000	508.283	743993.80	0.0356	P	0.9
3	☐	5000.000	5293.422	7309023.95	0.3619	A	0.2
4	☐	12500.000	12942.114	17516794.32	0.8836	A	0.5
5	☐	25000.000	25835.311	34534713.62	1.7630	A	0.3
6	☐	50000.000	51227.446	67750508.46	3.4948	A	0.1
7	☐	100000.00	102513.40	134773636.34	6.9926	A	0.5
8	☐	500000.00	499318.81	594062085.50	34.0560	A	0.6

$$y = 6.8203\text{E-}005 * x + 9.0255\text{E-}004$$

$$R = 1.0000$$

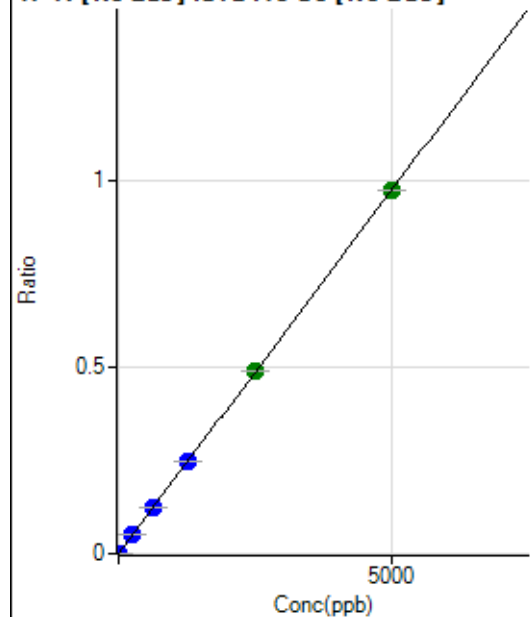
$$DL = 0.6335$$

$$BEC = 13.23$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	294.46	0.0000	P	8.3
2	☐	5.000	4.996	20631.71	0.0010	P	1.8
3	☐	250.000	258.057	1014223.82	0.0502	P	0.7
4	☐	625.000	635.786	2452647.71	0.1237	P	0.2
5	☐	1250.000	1264.357	4819348.33	0.2460	P	0.8
6	☐	2500.000	2504.921	9448758.89	0.4874	A	0.3
7	☐	5000.000	4992.199	18721963.09	0.9713	A	0.1
8	☐			5862.54	0.0003	P	7.4

$$y = 1.9457\text{E-}004 * x + 1.4240\text{E-}005$$

$$R = 1.0000$$

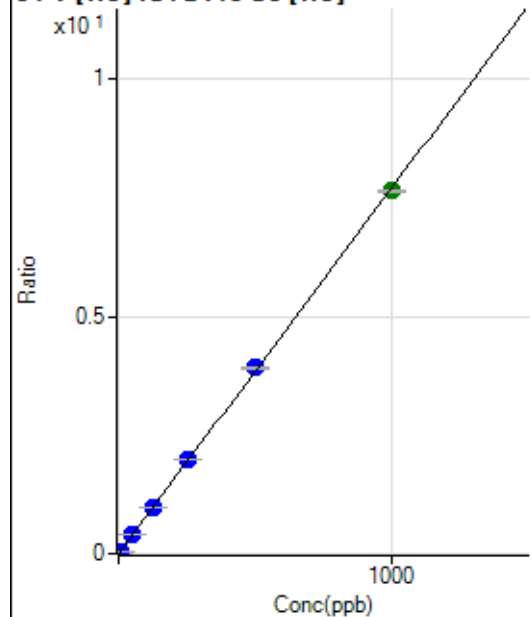
$$DL = 0.01816$$

$$BEC = 0.07319$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	15.56	0.0000	P	13.1
2	☐	5.000	5.073	29839.27	0.0390	P	0.3
3	☐	50.000	51.976	279378.38	0.3998	P	0.2
4	☐	125.000	128.324	693638.63	0.9870	P	0.3
5	☐	250.000	256.149	1360726.59	1.9701	P	0.5
6	☐	500.000	509.508	2699747.11	3.9188	P	0.8
7	☐	1000.000	993.194	5384776.17	7.6389	A	0.2
8	☐			2067.95	0.0030	P	4.8

$$y = 0.0077 * x + 2.1292\text{E-}005$$

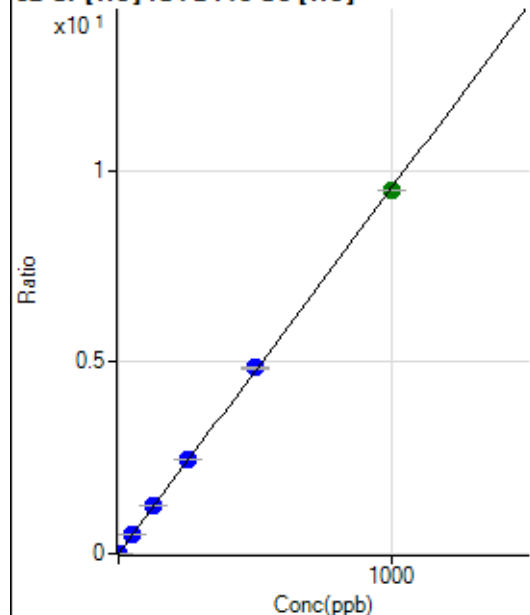
$$R = 0.9999$$

$$DL = 0.001087$$

$$BEC = 0.002768$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2269.10	0.0031	P	4.8
2	☐	2.000	1.990	16862.06	0.0221	P	2.9
3	☐	50.000	53.013	355109.45	0.5082	P	0.5
4	☐	125.000	129.784	871104.87	1.2395	P	0.5
5	☐	250.000	257.887	1699038.92	2.4599	P	1.1
6	☐	500.000	509.415	3345528.91	4.8562	P	1.2
7	☐	1000.000	992.572	6667900.87	9.4592	A	0.1
8	☐			112937.31	0.1653	P	0.2

$$y = 0.0095 * x + 0.0031$$

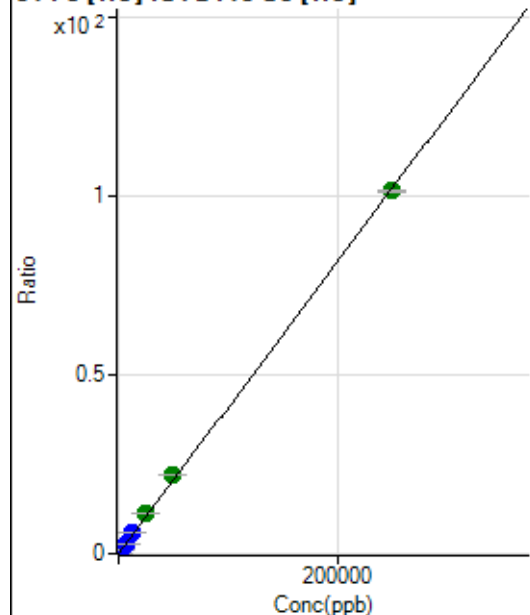
$$R = 0.9999$$

$$DL = 0.04703$$

$$BEC = 0.3257$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	931.01	0.0013	P	5.6
2	☐	50.000	58.291	19118.92	0.0250	P	2.3
3	☐	2500.000	2936.757	837085.14	1.1978	P	0.5
4	☐	6250.000	7119.696	2039522.00	2.9022	P	0.6
5	☐	12500.000	14199.325	3996781.46	5.7867	P	1.2
6	☐	25000.000	27126.489	7615504.40	11.0538	A	0.2
7	☐	50000.000	53664.212	15414064.77	21.8665	A	0.5
8	☐	250000.00	248943.43	69308231.62	101.4321	A	0.6

$$y = 4.0745E-004 * x + 0.0013$$

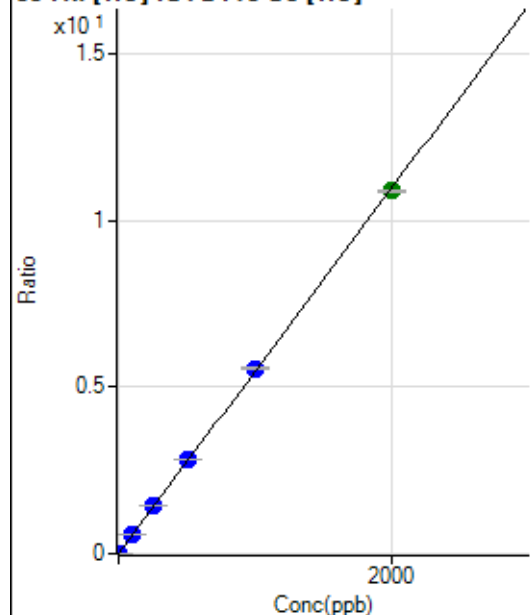
$$R = 0.9999$$

$$DL = 0.525$$

$$BEC = 3.125$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	260.01	0.0004	P	10.3
2	☐	1.000	1.026	4569.67	0.0060	P	1.8
3	☐	100.000	107.082	410343.88	0.5872	P	0.4
4	☐	250.000	259.601	1000066.57	1.4230	P	0.4
5	☐	500.000	518.954	1964518.37	2.8443	P	0.8
6	☐	1000.000	1014.732	3831359.29	5.5613	P	0.7
7	☐	2000.000	1986.341	7673540.79	10.8859	A	0.3
8	☐			36571.22	0.0535	P	0.6

$$y = 0.0055 * x + 3.5539E-004$$

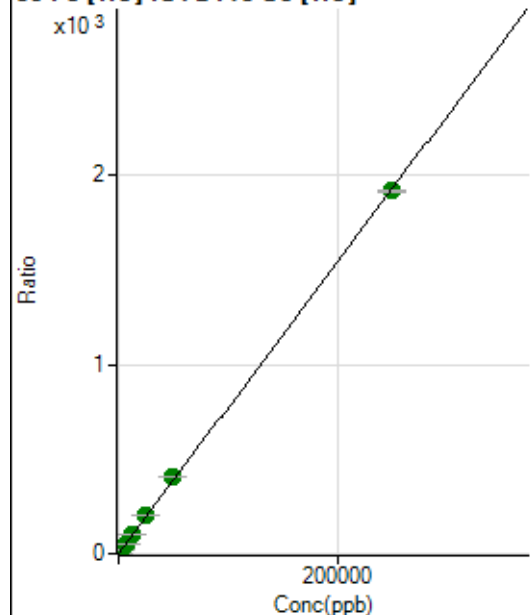
$$R = 0.9999$$

$$DL = 0.02006$$

$$BEC = 0.06485$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	8089.48	0.0111	P	0.9
2	☐	50.000	54.823	330640.28	0.4326	P	2.0
3	☐	2500.000	2816.435	15141187.38	21.6668	A	0.3
4	☐	6250.000	6870.516	37133047.59	52.8389	A	0.6
5	☐	12500.000	13685.867	72688951.62	105.2426	A	0.7
6	☐	25000.000	26764.885	141791358.72	205.8079	A	0.5
7	☐	50000.000	52985.140	287188150.86	407.4171	A	0.5
8	☐	250000.00	249148.51	1308988873.7	1,915.729	A	0.8

$$y = 0.0077 * x + 0.0111$$

$$R = 0.9999$$

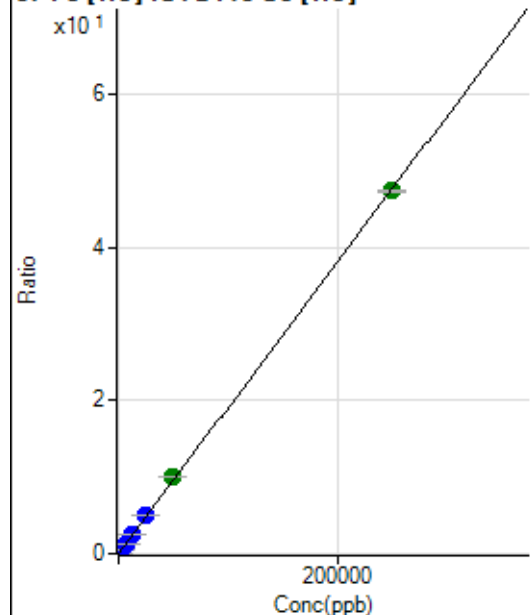
$$DL = 0.03923$$

$$BEC = 1.439$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	309.27	0.0004	P	9.8
2	☐	50.000	56.153	8480.44	0.0111	P	0.1
3	☐	2500.000	2832.518	376532.46	0.5388	P	0.6
4	☐	6250.000	6878.600	919127.26	1.3079	P	0.6
5	☐	12500.000	13653.850	1792779.27	2.5957	P	0.6
6	☐	25000.000	26909.965	3524148.89	5.1153	P	0.4
7	☐	50000.000	52603.770	7048422.90	9.9991	A	0.4
8	☐	250000.00	249211.51	32367566.23	47.3693	A	0.5

$$y = 1.9008\text{E-}004 * x + 4.2288\text{E-}004$$

R = 0.9999

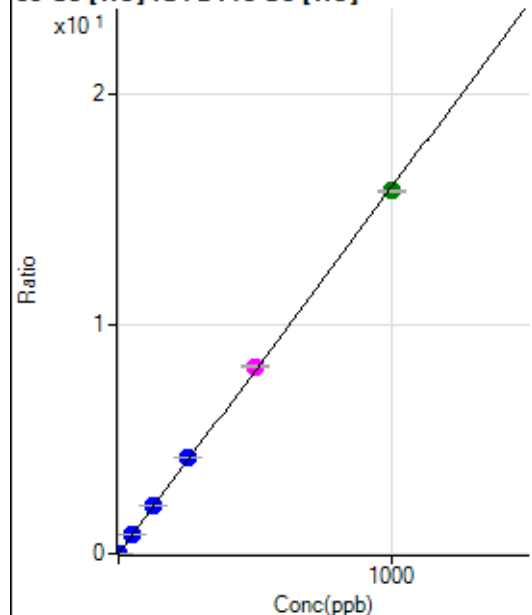
DL = 0.652

BEC = 2.225

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	298.90	0.0004	P	5.3
2	☐	1.000	0.994	12430.99	0.0163	P	1.9
3	☐	50.000	54.405	606874.45	0.8684	P	0.8
4	☐	125.000	132.202	1482632.15	2.1097	P	0.3
5	☐	250.000	261.749	2884635.17	4.1765	P	0.9
6	☐	500.000	510.787	5614744.85	8.1498	M	0.5
7	☐	1000.000	990.549	11140626.92	15.8043	A	0.4
8	☐			19618.86	0.0287	P	0.8

$$y = 0.0160 * x + 4.0895\text{E-}004$$

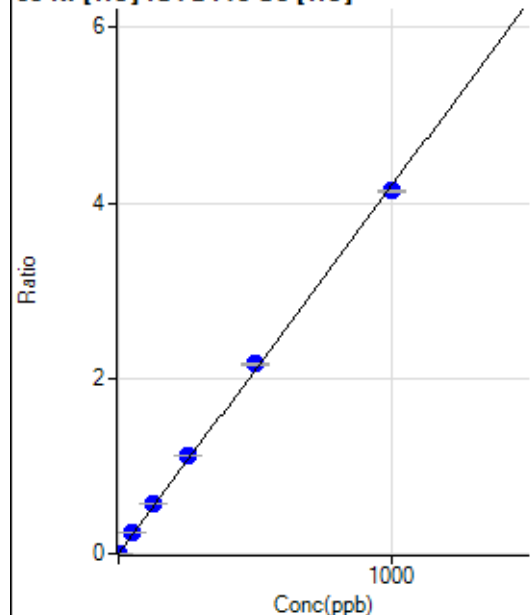
R = 0.9998

DL = 0.004041

BEC = 0.02563

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	148.89	0.0002	P	29.0
2	☐	1.000	1.151	3842.79	0.0050	P	1.3
3	☐	50.000	56.046	164400.30	0.2353	P	0.2
4	☐	125.000	134.634	396950.22	0.5648	P	0.3
5	☐	250.000	266.000	770632.21	1.1158	P	1.0
6	☐	500.000	515.452	1489428.59	2.1619	P	0.5
7	☐	1000.000	986.767	2917240.72	4.1386	P	0.8
8	☐			32398.17	0.0474	P	1.5

$$y = 0.0042 * x + 2.0348E-004$$

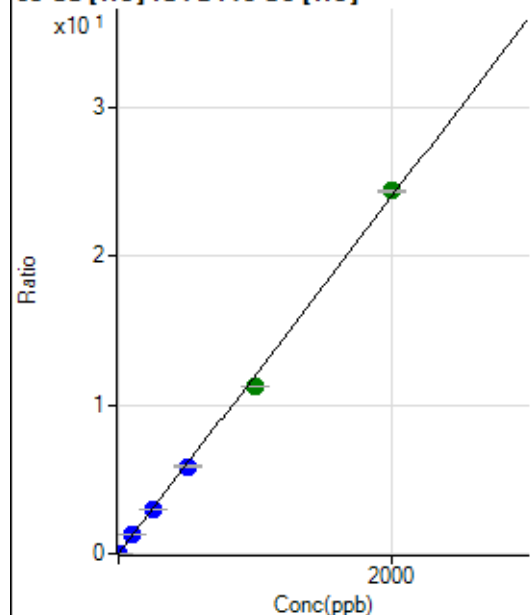
$$R = 0.9997$$

$$DL = 0.04218$$

$$BEC = 0.04852$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1667.90	0.0023	P	5.4
2	☐	2.000	1.931	19416.47	0.0254	P	1.5
3	☐	100.000	103.246	865757.29	1.2389	P	1.2
4	☐	250.000	247.511	2085005.59	2.9668	P	0.4
5	☐	500.000	489.988	4055041.95	5.8711	P	0.4
6	☐	1000.000	938.309	7744324.61	11.2409	A	0.4
7	☐	2000.000	2033.497	17170279.88	24.3585	A	0.6
8	☐			36560.17	0.0535	P	1.1

$$y = 0.0120 * x + 0.0023$$

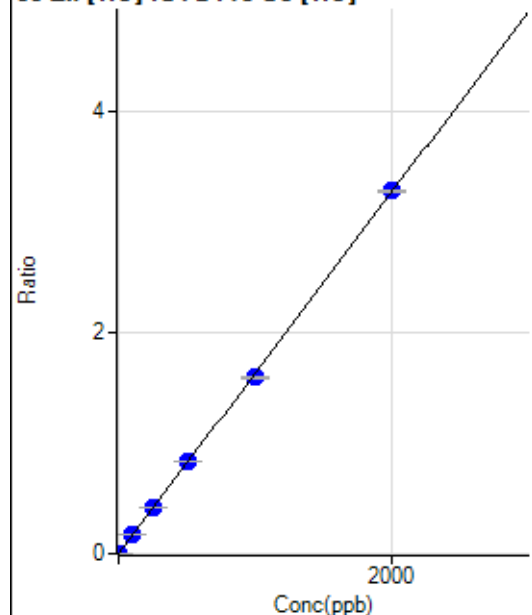
$$R = 0.9993$$

$$DL = 0.03095$$

$$BEC = 0.1905$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	388.90	0.0005	P	5.0
2	☐	2.000	2.119	3051.48	0.0040	P	6.9
3	☐	100.000	109.153	125097.35	0.1790	P	1.0
4	☐	250.000	257.031	295746.31	0.4208	P	0.4
5	☐	500.000	510.519	576934.77	0.8353	P	0.6
6	☐	1000.000	975.410	1099174.08	1.5955	P	0.8
7	☐	2000.000	2008.329	2315231.72	3.2845	P	0.7
8	☐			25482.44	0.0373	P	0.4

$$y = 0.0016 * x + 5.3203E-004$$

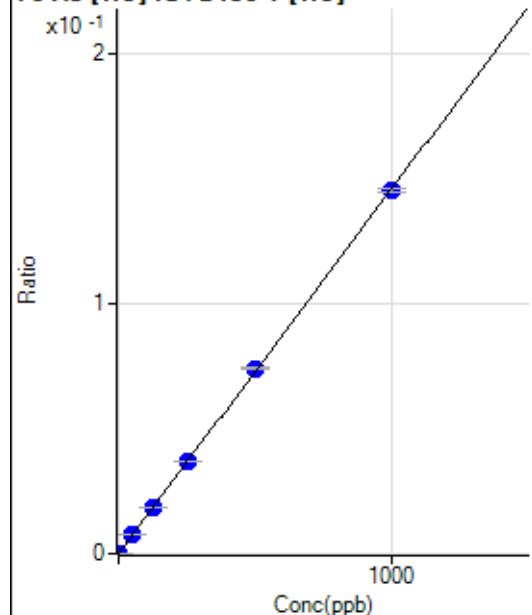
$$R = 0.9999$$

$$DL = 0.04897$$

$$BEC = 0.3254$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	29.63	0.0000	P	12.8
2	☐	1.000	1.018	769.78	0.0002	P	3.9
3	☐	50.000	52.353	35553.28	0.0077	P	0.3
4	☐	125.000	128.393	87180.80	0.0188	P	0.9
5	☐	250.000	253.188	171044.98	0.0370	P	0.3
6	☐	500.000	507.016	336984.60	0.0741	P	0.8
7	☐	1000.000	995.153	672023.91	0.1454	P	1.0
8	☐			353.09	0.0001	P	6.1

$$y = 1.4609E-004 * x + 6.2270E-006$$

$$R = 1.0000$$

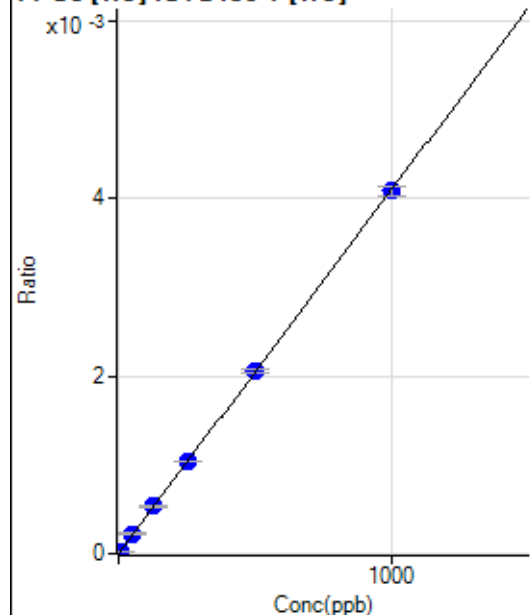
$$DL = 0.01631$$

$$BEC = 0.04262$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.070	103.33	0.0000	P	30.0
3	☐	50.000	54.545	1037.83	0.0002	P	6.1
4	☐	125.000	129.804	2471.36	0.0005	P	2.8
5	☐	250.000	254.132	4815.32	0.0010	P	0.2
6	☐	500.000	502.253	9363.17	0.0021	P	1.5
7	☐	1000.000	997.012	18884.77	0.0041	P	2.6
8	☐			7.78	0.0000	P	23.3

$$y = 4.0982\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 1.0000$$

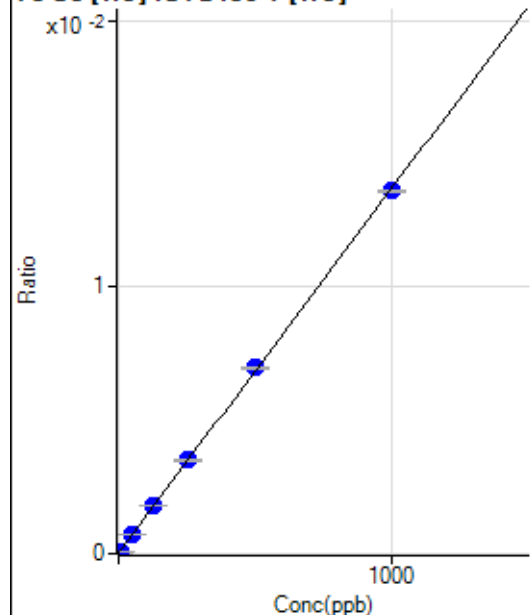
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	113.58	0.0000	P	4.3
2	☐	5.000	5.017	458.66	0.0001	P	4.6
3	☐	50.000	51.916	3409.07	0.0007	P	2.3
4	☐	125.000	130.225	8385.20	0.0018	P	3.6
5	☐	250.000	255.777	16283.90	0.0035	P	2.1
6	☐	500.000	507.689	31693.84	0.0070	P	1.2
7	☐	1000.000	993.962	62946.28	0.0136	P	0.3
8	☐			120.99	0.0000	P	7.2

$$y = 1.3677\text{E-}005 * x + 2.3861\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.2237$$

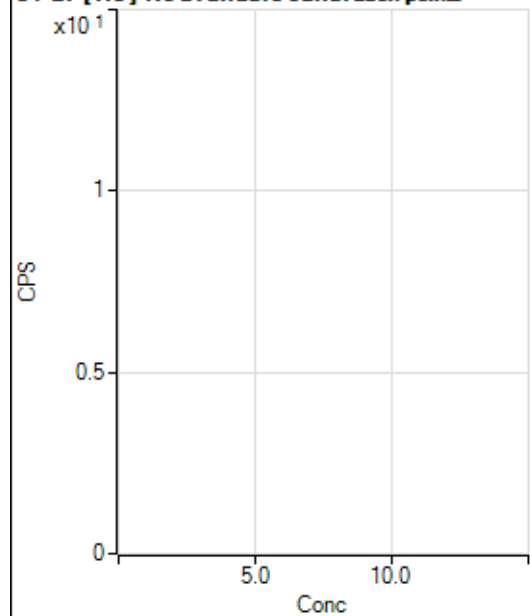
$$BEC = 1.745$$

Weight: <None>

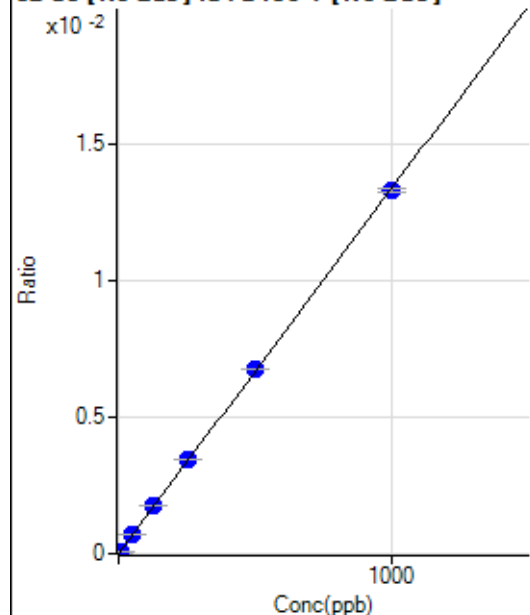
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			77351.80		P	1.2
2	☐			78999.40		P	3.1
3	☐			76228.53		P	1.2
4	☐			74041.48		P	1.2
5	☐			73246.42		P	1.4
6	☐			73961.26		P	0.4
7	☐			74105.42		P	1.4
8	☐			69379.85		P	1.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			80.08		P	33.1
2	☐			103.44		P	36.6
3	☐			96.77		P	33.3
4	☐			90.09		P	55.6
5	☐			73.41		P	55.1
6	☐			100.10		P	26.5
7	☐			123.47		P	9.4
8	☐			103.44		P	55.9

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-1.65	0.0000	P	-4192.
2	☐	5.000	5.723	3279.88	0.0001	P	6.0
3	☐	50.000	53.778	30280.42	0.0007	P	1.1
4	☐	125.000	131.042	72840.16	0.0018	P	0.3
5	☐	250.000	257.652	142368.39	0.0034	P	0.3
6	☐	500.000	506.396	277591.12	0.0068	P	0.5
7	☐	1000.000	993.941	540233.80	0.0133	P	1.1
8	☐			413.61	0.0000	P	10.2

$$y = 1.3363\text{E-}005 * x - 3.8234\text{E-}008$$

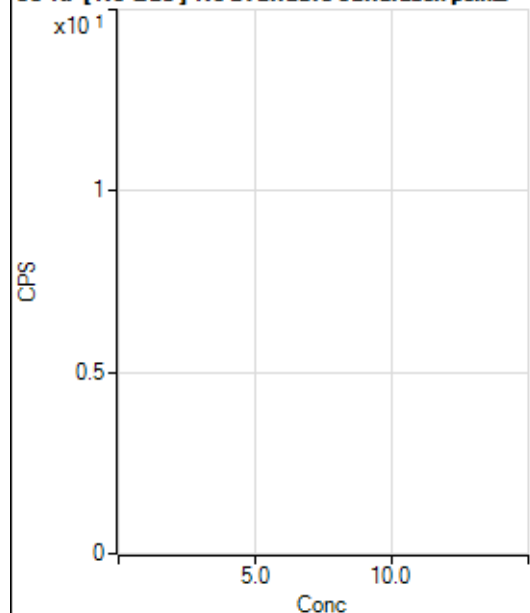
$$R = 0.9999$$

$$DL = 0.3598$$

$$BEC = -0.002861$$

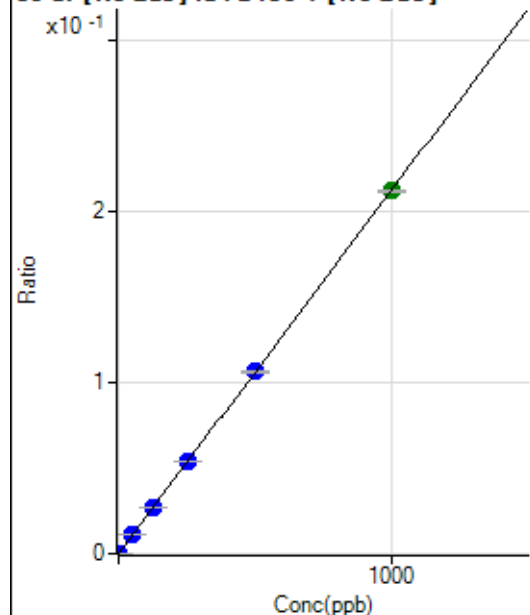
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			766.70		P	3.0
2	☐			717.81		P	2.1
3	☐			667.80		P	8.7
4	☐			686.70		P	4.3
5	☐			706.70		P	5.7
6	☐			722.25		P	7.0
7	☐			757.81		P	6.0
8	☐			800.03		P	2.1

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1188.99	0.0000	P	10.7
2	☐	1.000	0.992	10292.98	0.0002	P	0.2
3	☐	50.000	51.985	466911.72	0.0111	P	0.6
4	☐	125.000	127.077	1124962.99	0.0270	P	0.2
5	☐	250.000	253.799	2232225.22	0.0540	P	0.9
6	☐	500.000	500.779	4368474.84	0.1065	P	0.6
7	☐	1000.000	998.302	8633740.73	0.2123	A	0.2
8	☐			17597.55	0.0005	P	1.4

$$y = 2.1259\text{E-}004 * x + 2.8868\text{E-}005$$

$$R = 1.0000$$

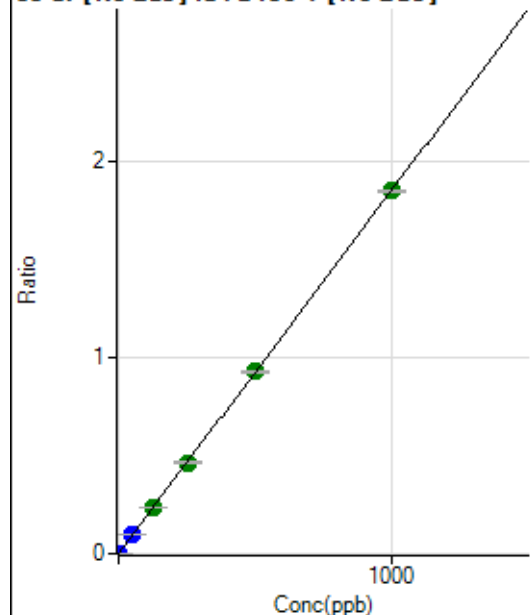
$$DL = 0.04355$$

$$BEC = 0.1358$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	180.57	0.0000	P	28.2
2	☐	1.000	0.962	76786.88	0.0018	P	1.6
3	☐	50.000	51.646	4037170.71	0.0958	P	0.2
4	☐	125.000	125.928	9716857.42	0.2336	A	0.3
5	☐	250.000	251.153	19264391.40	0.4659	A	0.3
6	☐	500.000	500.914	38116672.38	0.9292	A	0.3
7	☐	1000.000	999.057	75382862.80	1.8532	A	0.2
8	☐			144482.21	0.0040	P	1.0

$$y = 0.0019 * x + 4.3838\text{E-}006$$

$$R = 1.0000$$

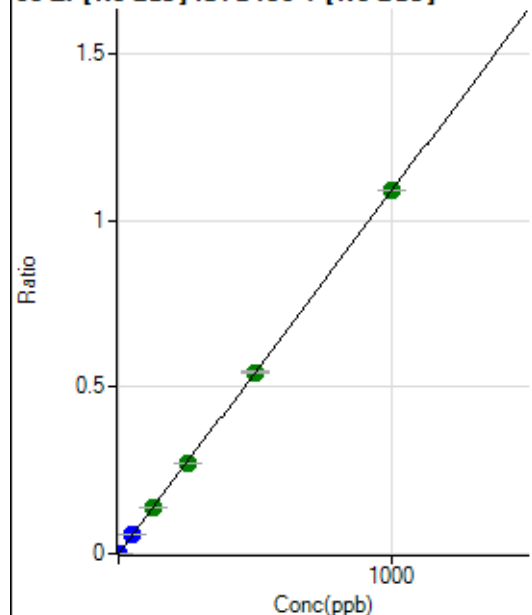
$$DL = 0.002$$

$$BEC = 0.002363$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1958.56	0.0000	P	5.6
2	☐	1.000	0.752	37227.21	0.0009	P	3.5
3	☐	50.000	50.545	2322758.67	0.0551	P	0.3
4	☐	125.000	125.379	5684764.15	0.1367	A	0.5
5	☐	250.000	250.330	11280791.57	0.2728	A	0.2
6	☐	500.000	499.472	22327085.22	0.5443	A	0.7
7	☐	1000.000	1000.107	44328112.10	1.0898	A	0.1
8	☐			16301.43	0.0004	P	4.3

$$y = 0.0011 * x + 4.7549E-005$$

$$R = 1.0000$$

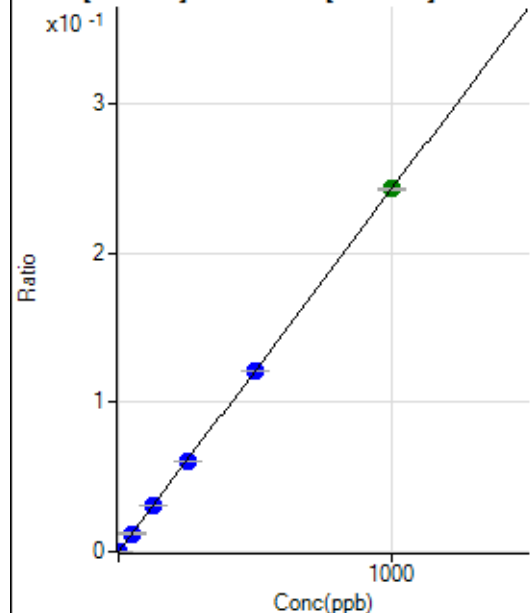
$$DL = 0.007293$$

$$BEC = 0.04364$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	377.80	0.0000	P	16.0
2	☐	1.000	0.756	8263.83	0.0002	P	8.6
3	☐	50.000	50.330	514535.13	0.0122	P	0.5
4	☐	125.000	124.874	1259664.99	0.0303	P	0.3
5	☐	250.000	249.297	2499448.60	0.0604	P	0.3
6	☐	500.000	497.943	4952366.91	0.1207	P	0.3
7	☐	1000.000	1001.204	9873325.65	0.2427	A	0.4
8	☐			3564.48	0.0001	P	1.1

$$y = 2.4243E-004 * x + 9.1725E-006$$

$$R = 1.0000$$

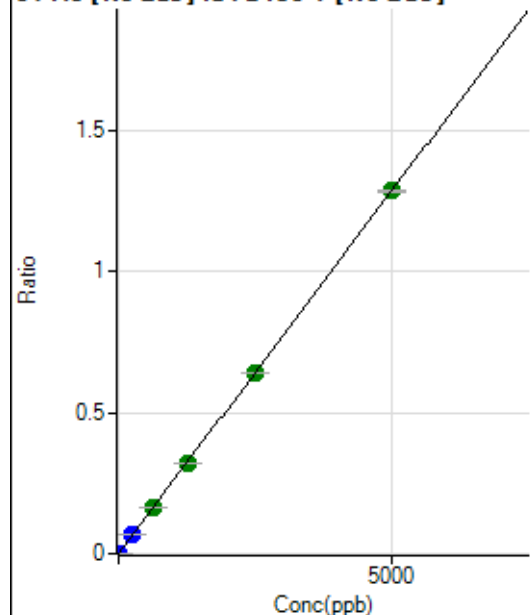
$$DL = 0.01819$$

$$BEC = 0.03784$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	738.94	0.0000	P	10.7
2	☐	5.000	4.735	52957.21	0.0012	P	2.1
3	☐	250.000	253.968	2748959.80	0.0652	P	0.5
4	☐	625.000	625.177	6678912.04	0.1606	A	0.3
5	☐	1250.000	1247.285	13244991.79	0.3203	A	0.6
6	☐	2500.000	2494.949	26283116.39	0.6407	A	0.2
7	☐	5000.000	5002.984	52260505.68	1.2847	A	0.6
8	☐			32365.41	0.0009	P	0.5

$$y = 2.5679E-004 * x + 1.7937E-005$$

R = 1.0000

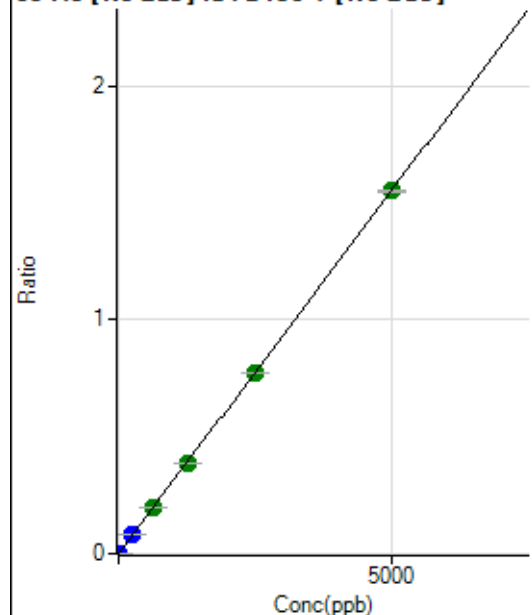
DL = 0.02242

BEC = 0.06985

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	205.57	0.0000	P	19.0
2	☐	5.000	5.043	67435.13	0.0016	P	1.6
3	☐	250.000	256.541	3357275.16	0.0797	P	0.3
4	☐	625.000	628.127	8114322.31	0.1951	A	0.7
5	☐	1250.000	1252.931	16089005.74	0.3891	A	0.4
6	☐	2500.000	2499.681	31843978.14	0.7762	A	0.2
7	☐	5000.000	4998.709	63143522.25	1.5523	A	0.5
8	☐			44988.89	0.0012	P	3.3

$$y = 3.1054E-004 * x + 4.9897E-006$$

R = 1.0000

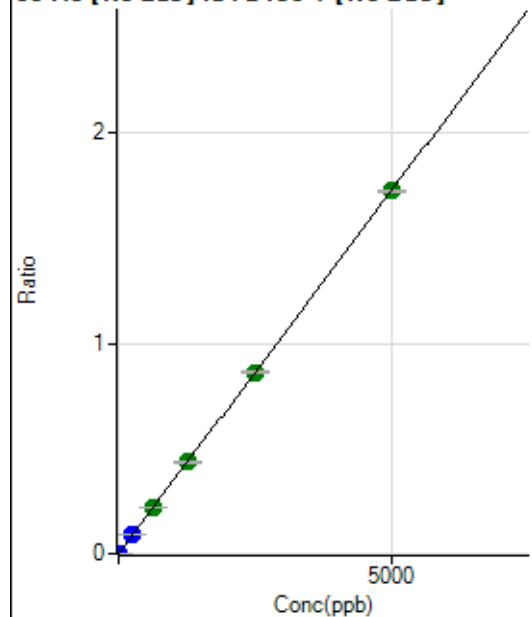
DL = 0.009177

BEC = 0.01607

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	475.03	0.0000	P	12.2
2	☐	5.000	5.026	74960.89	0.0017	P	2.7
3	☐	250.000	256.322	3728806.03	0.0885	P	0.3
4	☐	625.000	627.294	9007468.08	0.2165	A	0.3
5	☐	1250.000	1258.227	17959235.30	0.4343	A	0.4
6	☐	2500.000	2500.359	35404633.77	0.8631	A	0.4
7	☐	5000.000	4997.161	70163627.26	1.7249	A	0.8
8	☐			79323.93	0.0022	P	1.2

$$y = 3.4517\text{E-}004 * x + 1.1533\text{E-}005$$

$$R = 1.0000$$

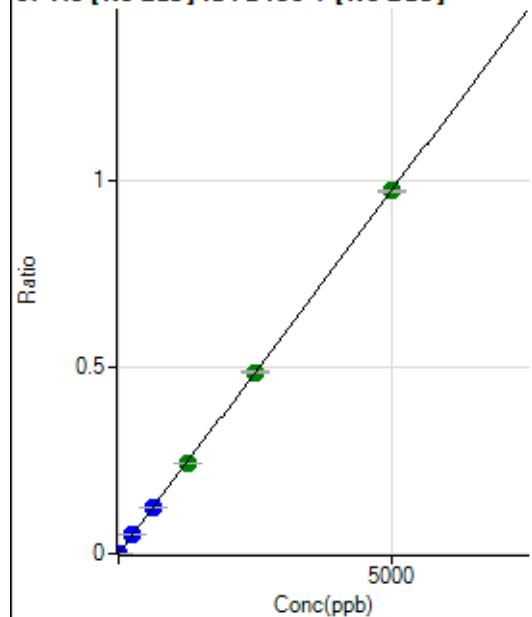
$$DL = 0.01227$$

$$BEC = 0.03341$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	177.78	0.0000	P	15.3
2	☐	5.000	5.085	42589.69	0.0010	P	2.6
3	☐	250.000	255.437	2091401.59	0.0496	P	0.8
4	☐	625.000	628.457	5079069.82	0.1221	P	0.8
5	☐	1250.000	1253.424	10069875.74	0.2435	A	0.1
6	☐	2500.000	2498.748	19914597.49	0.4855	A	0.8
7	☐	5000.000	4999.066	39507716.16	0.9712	A	0.5
8	☐			27254.70	0.0007	P	3.2

$$y = 1.9428\text{E-}004 * x + 4.3167\text{E-}006$$

$$R = 1.0000$$

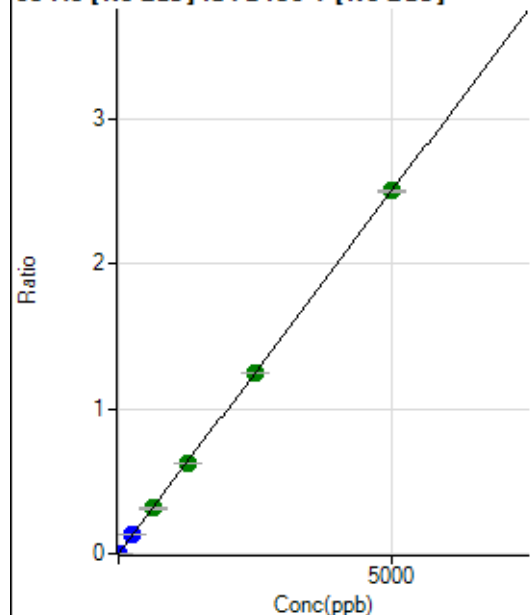
$$DL = 0.01017$$

$$BEC = 0.02222$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	313.90	0.0000	P	14.8
2	☐	5.000	5.066	109147.14	0.0025	P	2.7
3	☐	250.000	253.950	5355600.51	0.1271	P	0.6
4	☐	625.000	624.041	12990716.35	0.3123	A	0.9
5	☐	1250.000	1251.077	25889782.52	0.6261	A	0.4
6	☐	2500.000	2491.716	51152946.28	1.2470	A	0.6
7	☐	5000.000	5003.795	101863859.22	2.5041	A	0.7
8	☐			68381.41	0.0019	P	0.6

$$y = 5.0044\text{E-}004 * x + 7.6216\text{E-}006$$

$$R = 1.0000$$

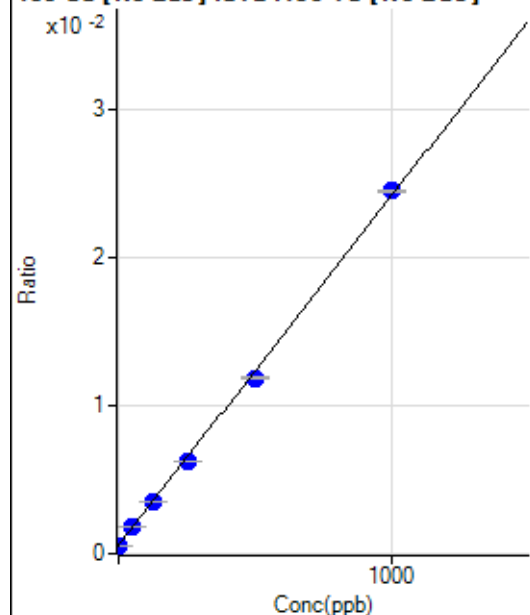
$$DL = 0.006753$$

$$BEC = 0.01523$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	19964.92	0.0006	P	0.9
2	☐	1.000	-0.207	21030.22	0.0006	P	3.7
3	☐	50.000	50.334	64860.36	0.0018	P	0.3
4	☐	125.000	123.296	128764.04	0.0035	P	2.1
5	☐	250.000	240.274	230731.28	0.0063	P	0.6
6	☐	500.000	477.228	431801.24	0.0119	P	0.8
7	☐	1000.000	1014.015	888768.41	0.0246	P	0.7
8	☐			18295.97	0.0006	P	2.7

$$y = 2.3652\text{E-}005 * x + 5.7126\text{E-}004$$

$$R = 0.9996$$

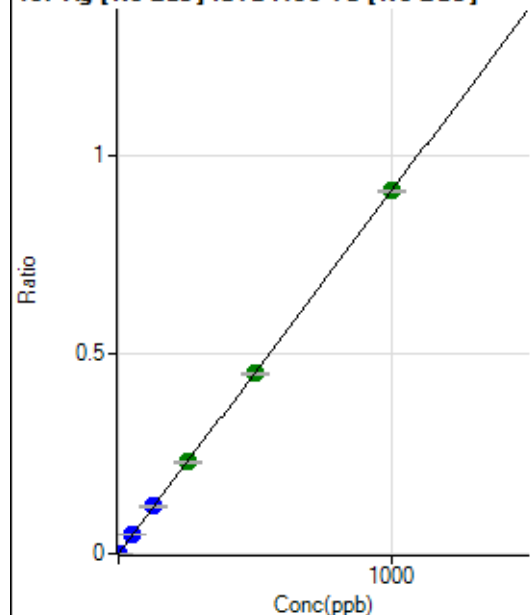
$$DL = 0.6278$$

$$BEC = 24.15$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	383.36	0.0000	P	26.4
2	☐	1.000	1.031	35278.12	0.0010	P	1.2
3	☐	50.000	53.600	1797353.02	0.0488	P	0.4
4	☐	125.000	130.226	4378853.62	0.1186	P	1.9
5	☐	250.000	251.987	8465798.71	0.2295	A	0.3
6	☐	500.000	497.231	16487349.50	0.4528	A	0.7
7	☐	1000.000	1000.055	32963402.82	0.9107	A	0.7
8	☐			9167.23	0.0003	P	4.1

$$y = 9.1061\text{E-}004 * x + 1.0969\text{E-}005$$

$$R = 1.0000$$

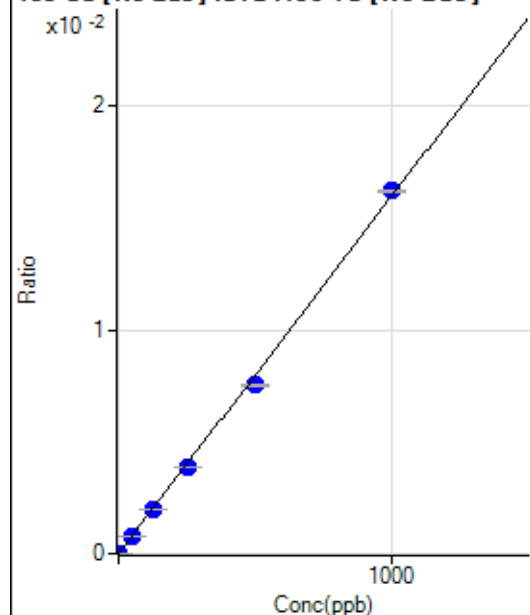
$$DL = 0.009547$$

$$BEC = 0.01205$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	52.78	0.0000	P	25.5
2	☐	1.000	0.948	618.08	0.0000	P	3.4
3	☐	50.000	50.742	29880.41	0.0008	P	1.2
4	☐	125.000	124.466	73429.55	0.0020	P	0.8
5	☐	250.000	242.923	143137.85	0.0039	P	0.5
6	☐	500.000	472.557	274771.67	0.0075	P	1.0
7	☐	1000.000	1015.520	586900.94	0.0162	P	0.3
8	☐			254.18	0.0000	P	13.3

$$y = 1.5966\text{E-}005 * x + 1.5104\text{E-}006$$

$$R = 0.9994$$

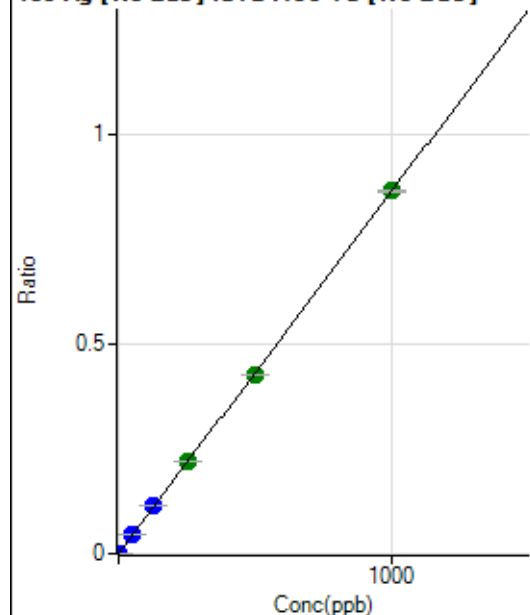
$$DL = 0.07231$$

$$BEC = 0.0946$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	100.01	0.0000	P	36.3
2	☐	1.000	1.037	33309.54	0.0009	P	2.1
3	☐	50.000	54.642	1735086.35	0.0471	P	0.8
4	☐	125.000	130.312	4150083.16	0.1124	P	0.3
5	☐	250.000	253.966	8080817.20	0.2190	A	0.5
6	☐	500.000	493.129	15486452.77	0.4253	A	0.4
7	☐	1000.000	1001.548	31265377.09	0.8638	A	0.2
8	☐			8839.26	0.0003	P	5.2

$$y = 8.6246\text{E-}004 * x + 2.8615\text{E-}006$$

$$R = 0.9999$$

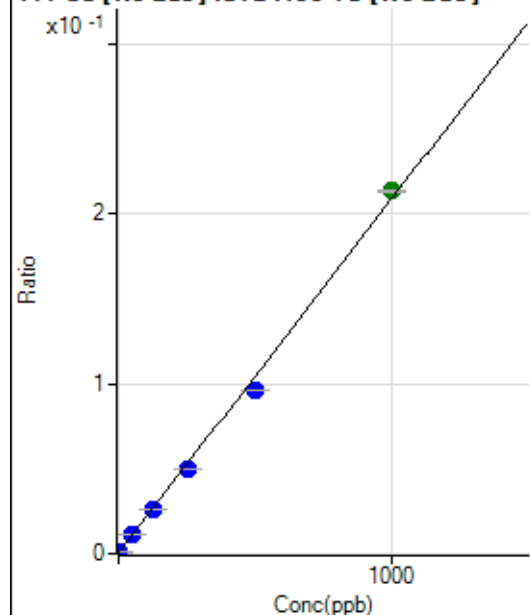
$$DL = 0.003615$$

$$BEC = 0.003318$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	14035.72	0.0004	P	0.6
2	☐	1.000	0.864	21589.11	0.0006	P	2.1
3	☐	50.000	50.272	399920.95	0.0109	P	1.4
4	☐	125.000	121.570	948973.99	0.0257	P	0.6
5	☐	250.000	236.423	1829858.04	0.0496	P	0.5
6	☐	500.000	461.284	3509904.37	0.0964	P	0.3
7	☐	1000.000	1023.167	7721187.69	0.2133	A	0.7
8	☐			14498.87	0.0005	P	1.8

$$y = 2.0810\text{E-}004 * x + 4.0161\text{E-}004$$

$$R = 0.9988$$

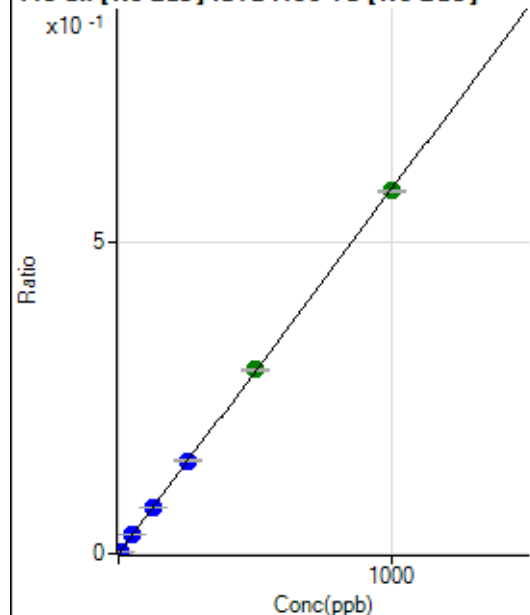
$$DL = 0.03631$$

$$BEC = 1.93$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2472.56	0.0001	P	4.2
2	☐	5.000	5.024	111470.19	0.0030	P	0.9
3	☐	50.000	52.502	1130258.94	0.0307	P	0.6
4	☐	125.000	127.908	2757995.09	0.0747	P	0.6
5	☐	250.000	254.974	5490277.64	0.1488	P	1.6
6	☐	500.000	505.259	10735857.01	0.2948	A	0.5
7	☐	1000.000	995.638	21026486.58	0.5809	A	0.4
8	☐			15539.74	0.0005	P	1.7

$$y = 5.8340\text{E-}004 * x + 7.0750\text{E-}005$$

$$R = 1.0000$$

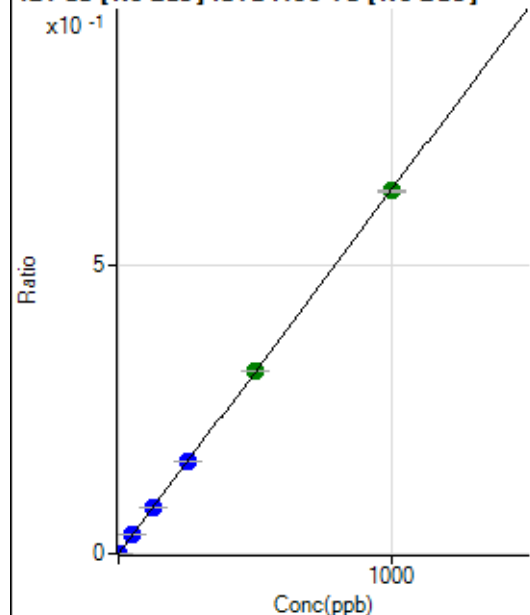
$$DL = 0.01527$$

$$BEC = 0.1213$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	97.22	0.0000	P	39.7
2	☐	2.000	1.945	45616.89	0.0012	P	1.6
3	☐	50.000	51.788	1201463.02	0.0326	P	0.4
4	☐	125.000	127.623	2969351.76	0.0804	P	1.1
5	☐	250.000	254.423	5914388.67	0.1603	P	0.9
6	☐	500.000	502.616	11532040.45	0.3167	A	0.6
7	☐	1000.000	997.169	22742431.76	0.6283	A	0.5
8	☐			29223.18	0.0009	P	7.2

$$y = 6.3011\text{E-}004 * x + 2.7828\text{E-}006$$

$$R = 1.0000$$

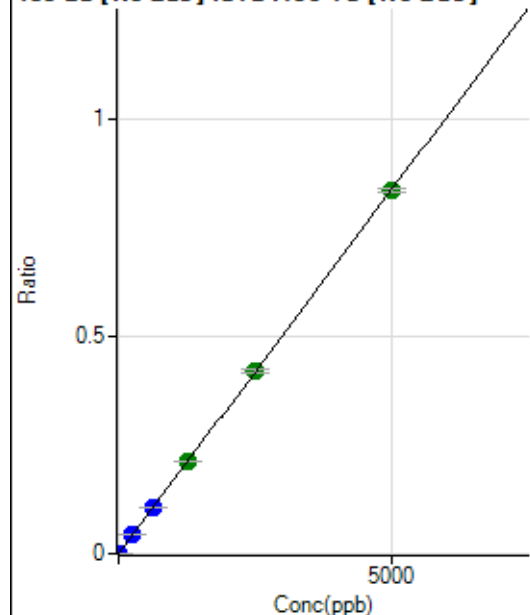
$$DL = 0.005264$$

$$BEC = 0.004416$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	94.45	0.0000	P	28.2
2	☐	10.000	10.167	63278.11	0.0017	P	1.1
3	☐	250.000	261.622	1612040.20	0.0438	P	0.8
4	☐	625.000	641.629	3964974.74	0.1074	P	1.3
5	☐	1250.000	1267.226	7824155.99	0.2121	A	0.5
6	☐	2500.000	2512.089	15308432.98	0.4204	A	1.2
7	☐	5000.000	4986.989	30207998.24	0.8346	A	0.9
8	☐			51822.60	0.0017	P	1.3

$$y = 1.6736\text{E-}004 * x + 2.7019\text{E-}006$$

$$R = 1.0000$$

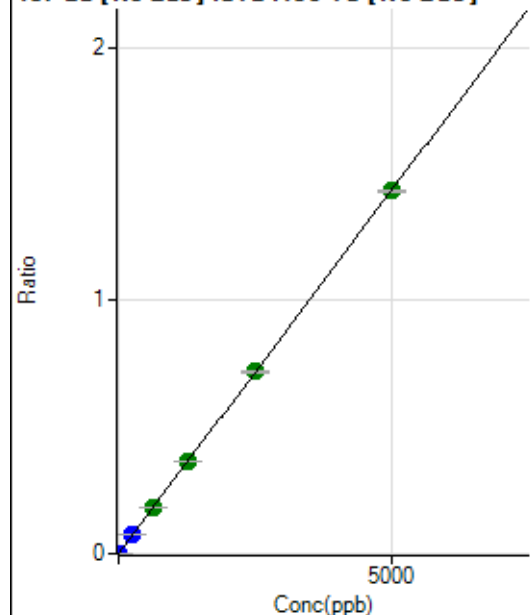
$$DL = 0.01368$$

$$BEC = 0.01614$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	86.11	0.0000	P	11.2
2	☐	10.000	10.105	107700.14	0.0029	P	0.8
3	☐	250.000	261.833	2764539.75	0.0751	P	0.6
4	☐	625.000	632.833	6701306.44	0.1815	A	0.6
5	☐	1250.000	1260.772	13339146.30	0.3616	A	0.4
6	☐	2500.000	2502.887	26136390.86	0.7178	A	0.5
7	☐	5000.000	4994.292	51841722.69	1.4323	A	0.2
8	☐			87324.81	0.0028	P	1.8

$$y = 2.8678\text{E-}004 * x + 2.4640\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.002886$$

$$BEC = 0.008592$$

Weight: <None>

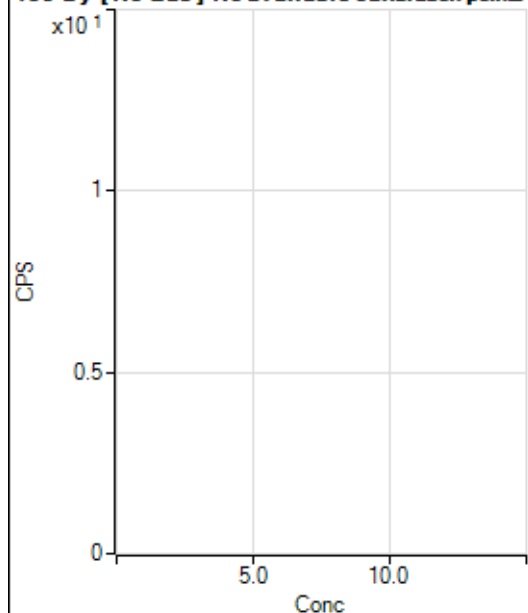
Min Conc: 0

150 Nd [No Gas] No available calibration points

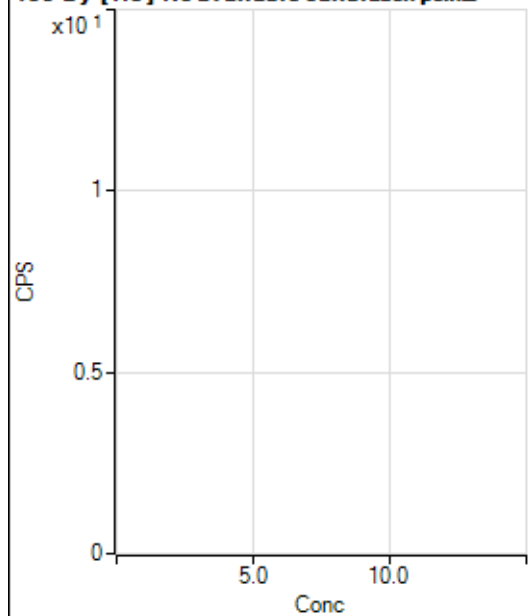
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			4.45		P	86.6
2	☐			26.67		P	90.1
3	☐			237.79		P	21.4
4	☐			437.80		P	28.3
5	☐			913.40		P	10.9
6	☐			1653.49		P	5.1
7	☐			3087.11		P	5.3
8	☐			277.79		P	6.9

150 Nd [He] No available calibration points

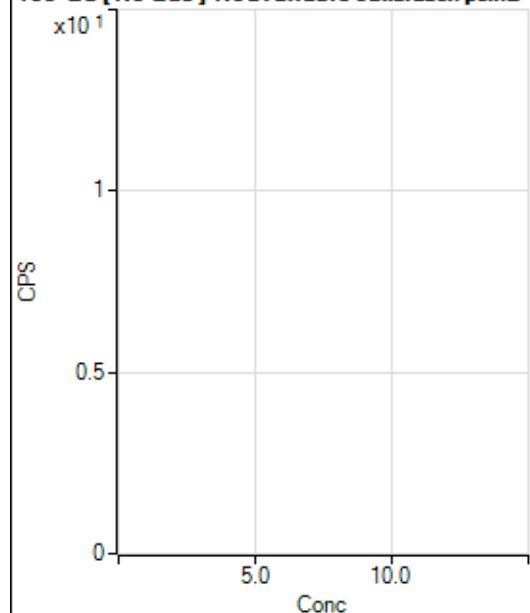
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			7.78		P	65.5
2	☐			5.56		P	34.7
3	☐			15.56		P	32.7
4	☐			45.55		P	8.5
5	☐			70.00		P	29.7
6	☐			123.34		P	11.8
7	☐			236.68		P	24.0
8	☐			87.78		P	24.4

156 Dy [No Gas] No available calibration points

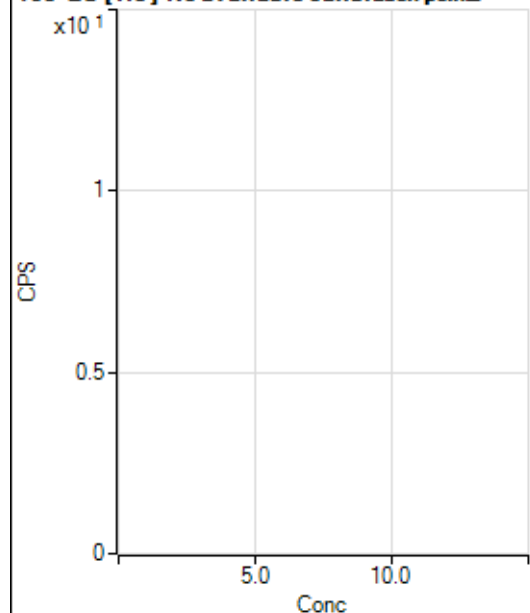
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			41.67		P	20.0
2	☐			61.11		P	20.8
3	☐			80.56		P	23.9
4	☐			150.01		P	22.2
5	☐			252.79		P	10.6
6	☐			363.91		P	19.7
7	☐			977.85		P	0.5
8	☐			1455.71		P	3.8

156 Dy [He] No available calibration points

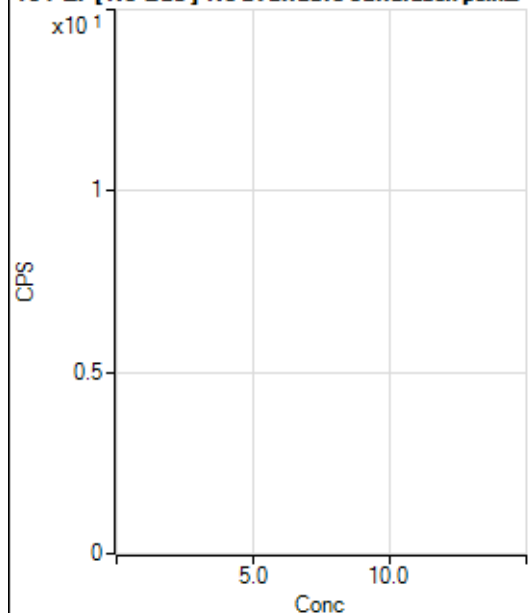
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			24.44		P	20.8
2	☐			25.56		P	49.4
3	☐			53.33		P	22.5
4	☐			93.34		P	18.9
5	☐			166.67		P	10.0
6	☐			324.45		P	7.7
7	☐			638.92		P	9.2
8	☐			732.26		P	4.6

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

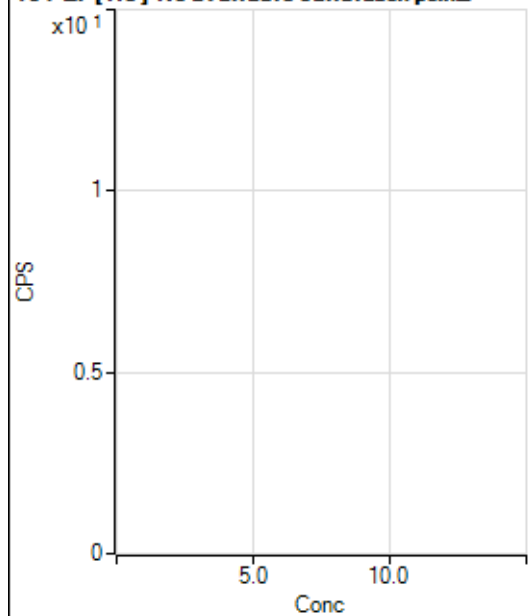
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			297.24		P	9.8
2	☐			286.13		P	11.0
3	☐			308.35		P	9.4
4	☐			316.69		P	14.7
5	☐			325.02		P	14.3
6	☐			313.91		P	21.5
7	☐			516.70		P	25.4
8	☐			1575.16		P	9.0

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			493.35		P	3.5
2	☐			511.13		P	8.4
3	☐			498.91		P	3.7
4	☐			497.80		P	3.0
5	☐			517.80		P	3.5
6	☐			574.47		P	4.7
7	☐			627.81		P	6.9
8	☐			1205.63		P	6.1

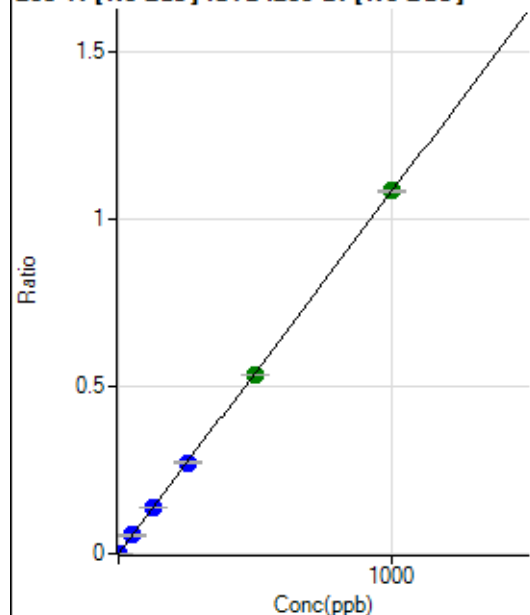
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			169.45		P	7.5
2	☐			194.46		P	27.9
3	☐			197.23		P	20.8
4	☐			225.01		P	6.4
5	☐			213.90		P	12.5
6	☐			183.35		P	15.7
7	☐			255.57		P	13.6
8	☐			308.35		P	4.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			84.45		P	16.0
2	☐			74.45		P	11.3
3	☐			80.00		P	0.0
4	☐			86.67		P	7.7
5	☐			96.67		P	0.0
6	☐			120.00		P	10.0
7	☐			120.00		P	15.5
8	☐			187.78		P	3.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	891.74	0.0000	P	8.6
2	☐	1.000	0.934	23574.49	0.0011	P	2.0
3	☐	50.000	50.507	1200623.73	0.0546	P	0.5
4	☐	125.000	125.550	2968192.06	0.1356	P	0.3
5	☐	250.000	252.045	5857323.31	0.2723	P	1.3
6	☐	500.000	494.204	11174828.98	0.5338	A	0.3
7	☐	1000.000	1002.293	21823506.39	1.0826	A	0.2
8	☐			6507.45	0.0004	P	2.5

$$y = 0.0011 * x + 4.2989E-005$$

$$R = 1.0000$$

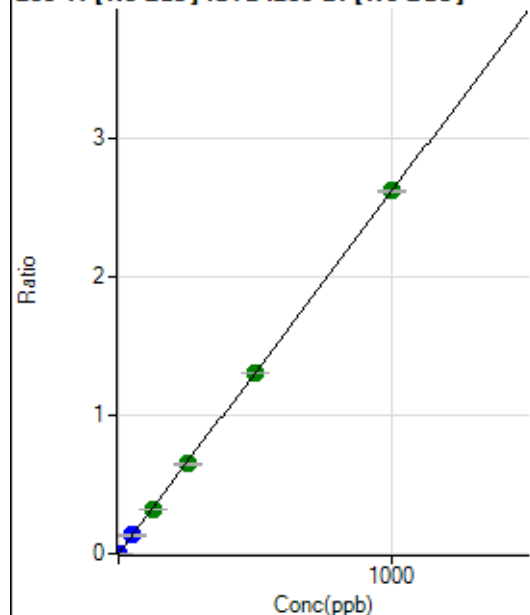
$$DL = 0.01027$$

$$BEC = 0.0398$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1894.67	0.0001	P	11.1
2	☐	1.000	0.931	56613.61	0.0025	P	1.5
3	☐	50.000	50.416	2902293.88	0.1320	P	0.2
4	☐	125.000	123.179	7052497.12	0.3223	A	0.5
5	☐	250.000	248.068	13961448.06	0.6490	A	1.2
6	☐	500.000	498.071	27275828.91	1.3029	A	0.3
7	☐	1000.000	1001.654	52818850.84	2.6202	A	0.3
8	☐			15239.93	0.0010	P	4.7

$$y = 0.0026 * x + 9.1359E-005$$

$$R = 1.0000$$

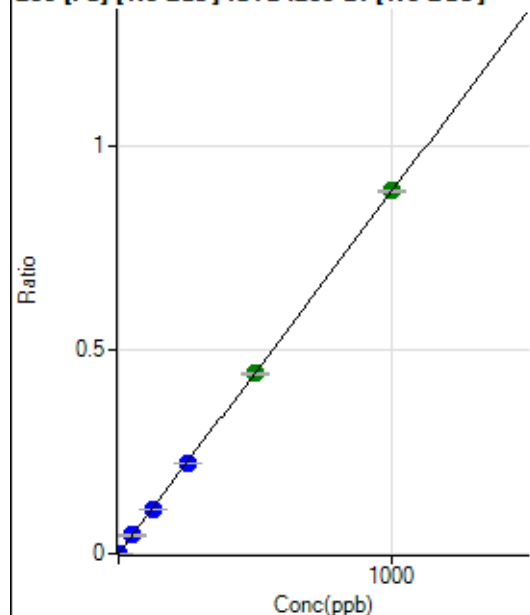
$$DL = 0.01159$$

$$BEC = 0.03493$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1714.98	0.0001	P	5.8
2	☐	1.000	0.917	20084.22	0.0009	P	1.5
3	☐	50.000	50.426	985061.30	0.0448	P	0.8
4	☐	125.000	123.777	2403210.41	0.1098	P	0.4
5	☐	250.000	248.836	4747953.98	0.2207	P	1.4
6	☐	500.000	496.645	9219880.01	0.4404	A	0.5
7	☐	1000.000	1002.100	17911583.97	0.8886	A	0.5
8	☐			70600.22	0.0045	P	0.7

$$y = 8.8663\text{E-}004 * x + 8.2685\text{E-}005$$

$$R = 1.0000$$

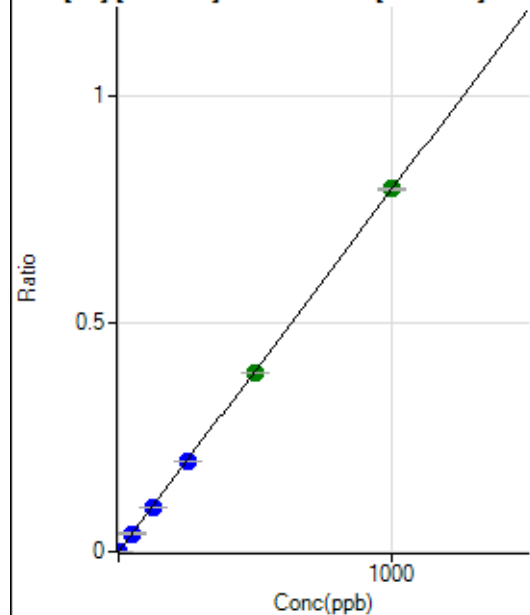
$$DL = 0.01635$$

$$BEC = 0.09326$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1553.84	0.0001	P	11.0
2	☐	1.000	0.929	18196.24	0.0008	P	3.0
3	☐	50.000	50.242	878360.16	0.0399	P	1.0
4	☐	125.000	124.030	2155176.54	0.0985	P	0.7
5	☐	250.000	249.224	4255980.01	0.1978	P	1.1
6	☐	500.000	494.763	8220058.40	0.3927	A	0.3
7	☐	1000.000	1002.922	16044009.96	0.7959	A	0.3
8	☐			64683.24	0.0041	P	1.1

$$y = 7.9350\text{E-}004 * x + 7.4947\text{E-}005$$

$$R = 1.0000$$

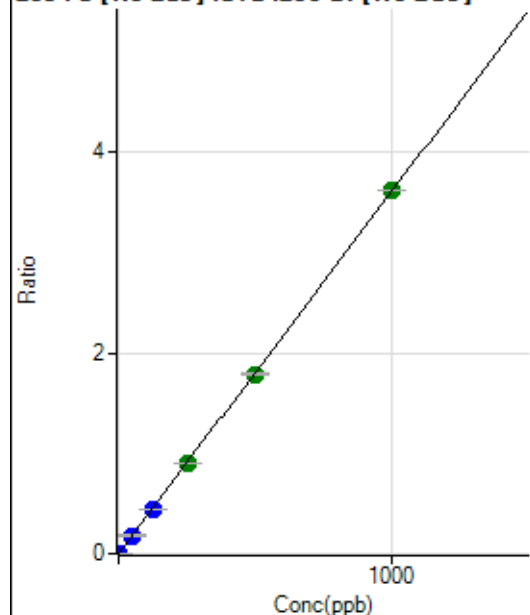
$$DL = 0.03121$$

$$BEC = 0.09445$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	6619.33	0.0003	P	2.0
2	☐	1.000	0.925	81848.66	0.0037	P	1.5
3	☐	50.000	50.246	3989261.64	0.1814	P	0.8
4	☐	125.000	124.141	9796572.25	0.4477	P	0.5
5	☐	250.000	248.324	19259254.37	0.8952	A	1.1
6	☐	500.000	496.423	37458323.58	1.7894	A	0.2
7	☐	1000.000	1002.303	72821954.98	3.6125	A	0.0
8	☐			290374.74	0.0186	P	0.5

$$y = 0.0036 * x + 3.1918E-004$$

$$R = 1.0000$$

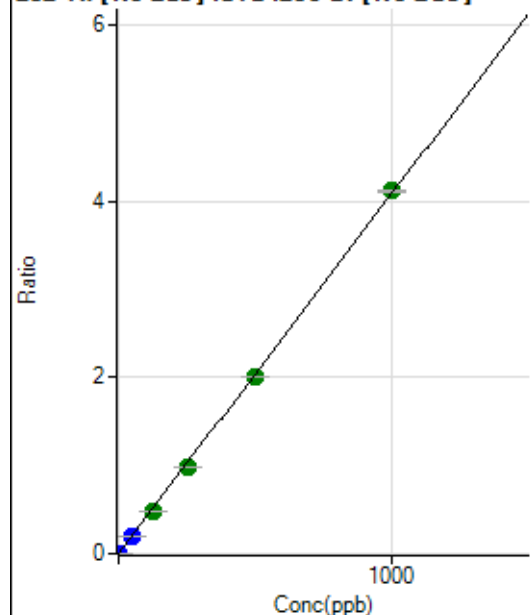
$$DL = 0.005304$$

$$BEC = 0.08857$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2137.27	0.0001	P	2.4
2	☐	1.000	0.634	60350.36	0.0027	P	2.0
3	☐	50.000	46.157	4149946.33	0.1887	P	1.1
4	☐	125.000	117.780	10533482.99	0.4814	A	0.1
5	☐	250.000	239.769	21080550.47	0.9799	A	0.3
6	☐	500.000	490.229	41936849.55	2.0033	A	0.4
7	☐	1000.000	1008.538	83078427.78	4.1212	A	0.7
8	☐			23067.06	0.0015	P	2.6

$$y = 0.0041 * x + 1.0305E-004$$

$$R = 0.9999$$

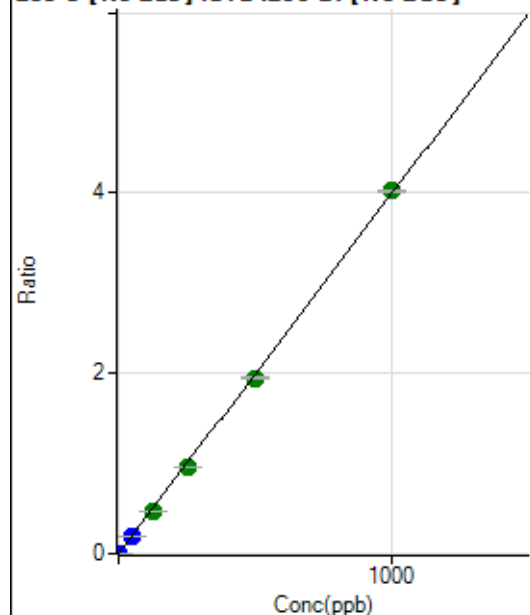
$$DL = 0.001794$$

$$BEC = 0.02522$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1861.33	0.0001	P	4.5
2	☐	1.000	0.867	79495.37	0.0035	P	0.8
3	☐	50.000	47.857	4199126.31	0.1909	P	0.9
4	☐	125.000	119.199	10404005.70	0.4755	A	0.3
5	☐	250.000	240.862	20667258.97	0.9607	A	0.5
6	☐	500.000	489.059	40831507.51	1.9505	A	0.5
7	☐	1000.000	1008.587	81084505.29	4.0224	A	0.3
8	☐			16363.63	0.0010	P	2.7

$$y = 0.0040 * x + 8.9756E-005$$

$$R = 0.9999$$

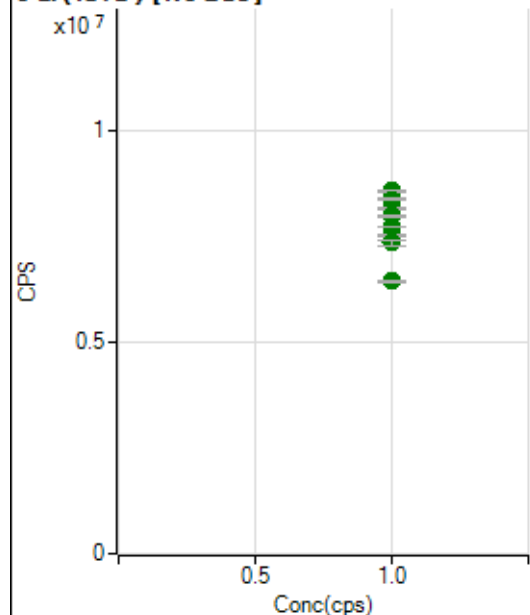
$$DL = 0.003057$$

$$BEC = 0.02251$$

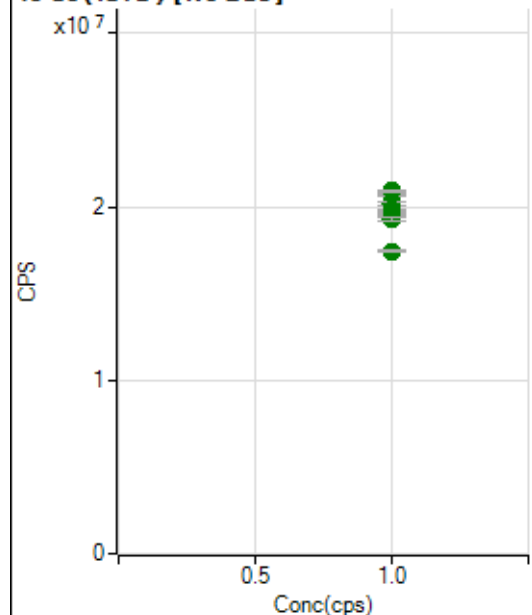
Weight: <None>

Min Conc: 0

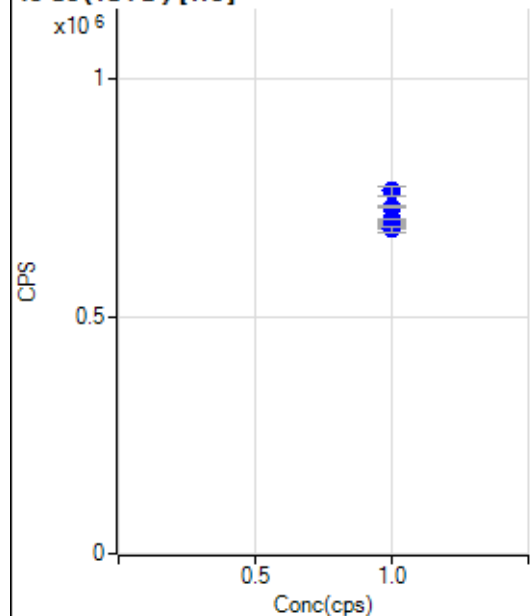
6 Li (ISTD) [No Gas]



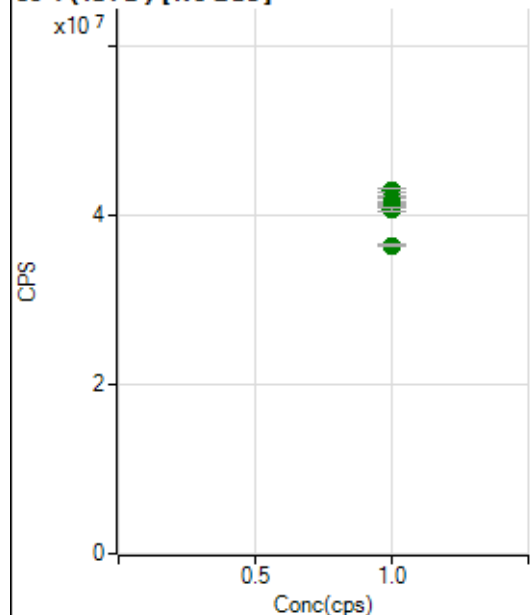
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		8561393.48		A	0.5
2	☐	1.000		8363191.33		A	0.6
3	☐	1.000		8134770.78		A	0.8
4	☐	1.000		7968551.96		A	0.4
5	☐	1.000		7715873.43		A	0.2
6	☐	1.000		7503912.18		A	0.5
7	☐	1.000		7333021.14		A	1.6
8	☐	1.000		6430843.03		A	0.8

45 Sc (ISTD) [No Gas]

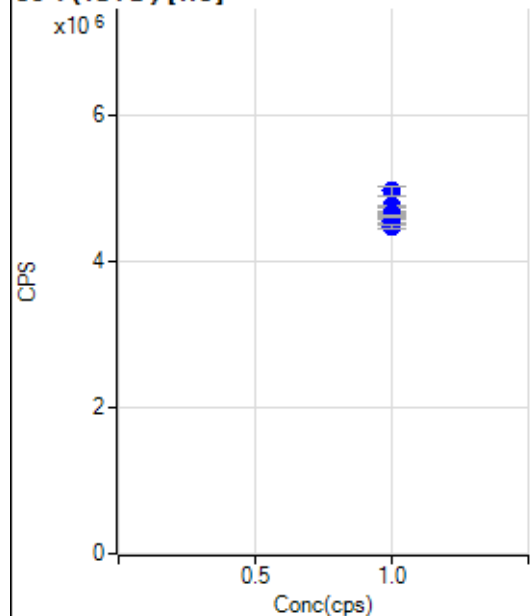
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		20673627.37		A	0.4
2	☐	1.000		20917573.73		A	0.9
3	☐	1.000		20194765.38		A	1.0
4	☐	1.000		19824525.79		A	0.5
5	☐	1.000		19589109.98		A	0.4
6	☐	1.000		19386205.12		A	0.2
7	☐	1.000		19274500.26		A	1.5
8	☐	1.000		17444344.49		A	1.0

45 Sc (ISTD) [He]

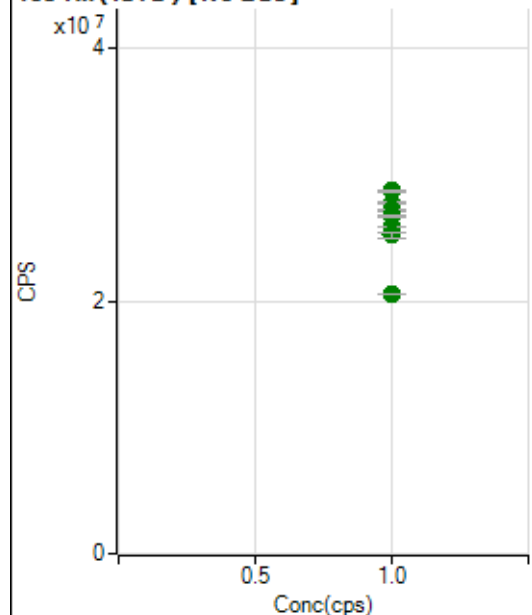
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		731138.88		P	1.0
2	☐	1.000		764285.77		P	2.6
3	☐	1.000		698823.15		P	0.4
4	☐	1.000		702782.39		P	0.8
5	☐	1.000		690676.59		P	0.1
6	☐	1.000		688949.24		P	0.7
7	☐	1.000		704912.40		P	0.5
8	☐	1.000		683337.81		P	1.6

89 Y (ISTD) [No Gas]

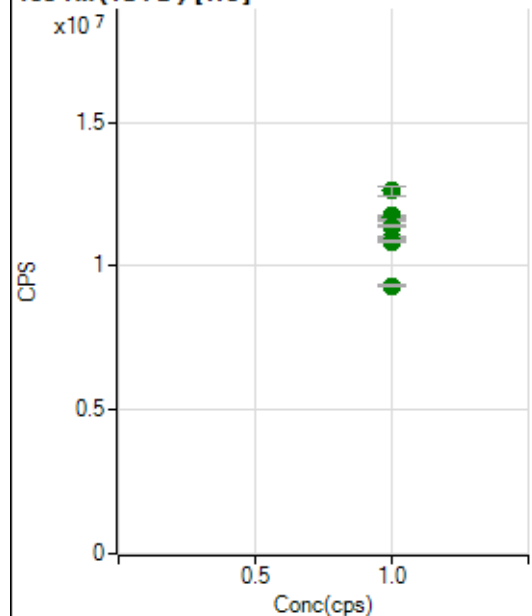
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		41192101.61		A	0.2
2	☐	1.000		42927889.92		A	1.0
3	☐	1.000		42139784.09		A	0.5
4	☐	1.000		41597821.88		A	0.5
5	☐	1.000		41351002.44		A	0.3
6	☐	1.000		41022750.22		A	0.6
7	☐	1.000		40676827.17		A	1.2
8	☐	1.000		36449122.79		A	0.4

89 Y (ISTD) [He]

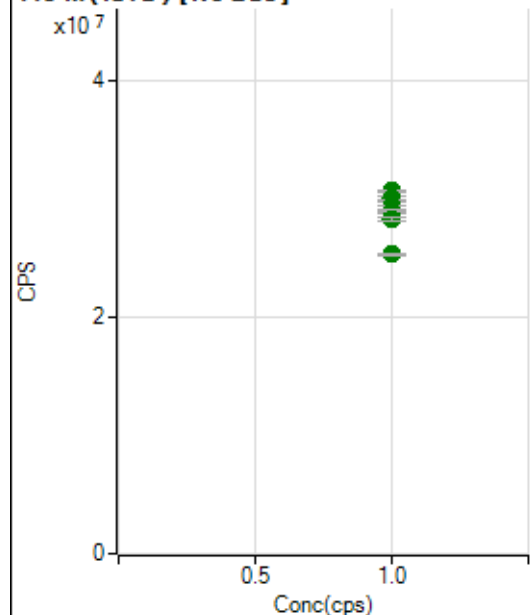
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4759597.47		P	0.5
2	☐	1.000		4962516.70		P	2.8
3	☐	1.000		4644809.31		P	1.1
4	☐	1.000		4646256.25		P	0.6
5	☐	1.000		4623501.42		P	0.7
6	☐	1.000		4549319.76		P	1.0
7	☐	1.000		4622423.12		P	0.8
8	☐	1.000		4474970.53		P	1.4

103 Rh (ISTD) [No Gas]

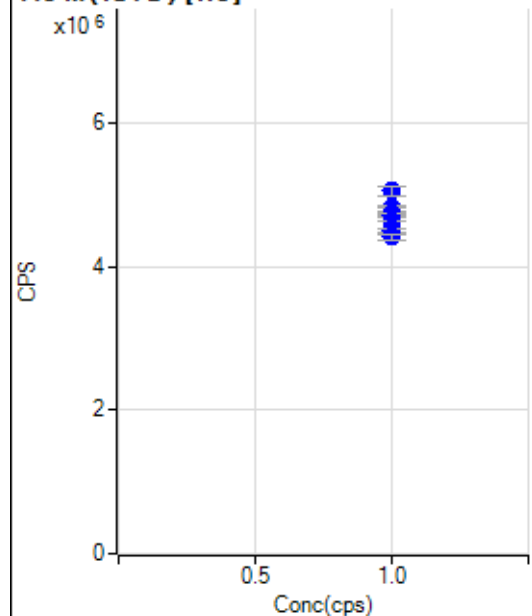
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		27229402.00		A	0.2
2	☐	1.000		28708212.45		A	0.3
3	☐	1.000		27748589.86		A	0.4
4	☐	1.000		27190620.75		A	0.5
5	☐	1.000		26732473.17		A	0.8
6	☐	1.000		25886312.73		A	0.4
7	☐	1.000		25199917.58		A	1.9
8	☐	1.000		20535011.92		A	0.4

103 Rh (ISTD) [He]

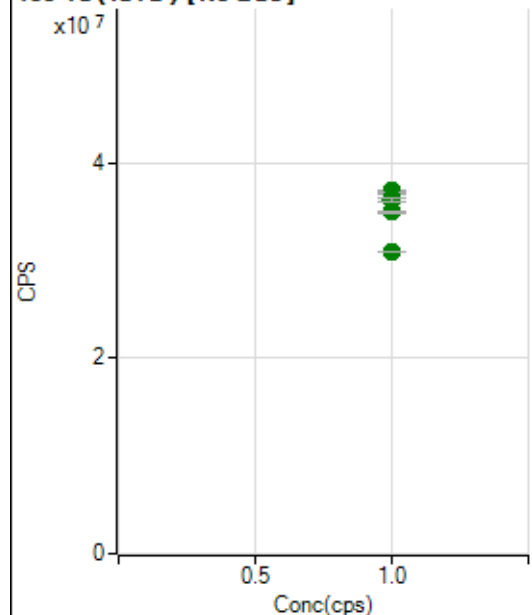
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11743094.27		A	0.8
2	☐	1.000		12610508.70		A	2.4
3	☐	1.000		11705540.38		A	0.9
4	☐	1.000		11602440.80		A	0.9
5	☐	1.000		11388242.33		A	0.7
6	☐	1.000		10973366.78		A	0.7
7	☐	1.000		10848171.23		A	0.8
8	☐	1.000		9321395.00		A	1.2

115 In (ISTD) [No Gas]

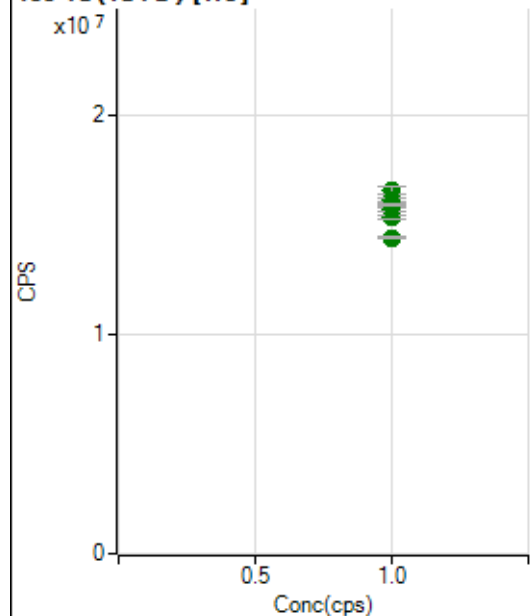
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		29021463.00		A	0.9
2	☐	1.000		30737010.67		A	0.4
3	☐	1.000		30158765.47		A	0.8
4	☐	1.000		29914782.99		A	0.4
5	☐	1.000		29503529.29		A	0.2
6	☐	1.000		29027500.98		A	0.5
7	☐	1.000		28373209.30		A	1.4
8	☐	1.000		25358264.05		A	0.5

115 In (ISTD) [He]

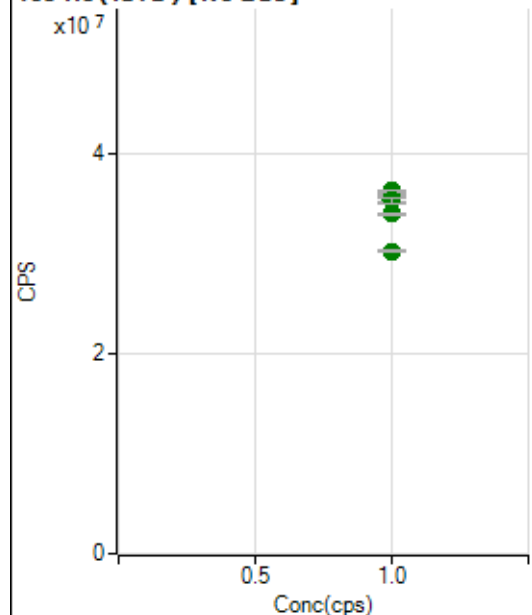
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4831117.80		P	0.9
2	☐	1.000		5054780.33		P	2.6
3	☐	1.000		4739306.65		P	1.3
4	☐	1.000		4713681.49		P	0.7
5	☐	1.000		4637794.68		P	0.2
6	☐	1.000		4532648.20		P	0.3
7	☐	1.000		4490765.78		P	1.3
8	☐	1.000		4407996.66		P	1.5

159 Tb (ISTD) [No Gas]

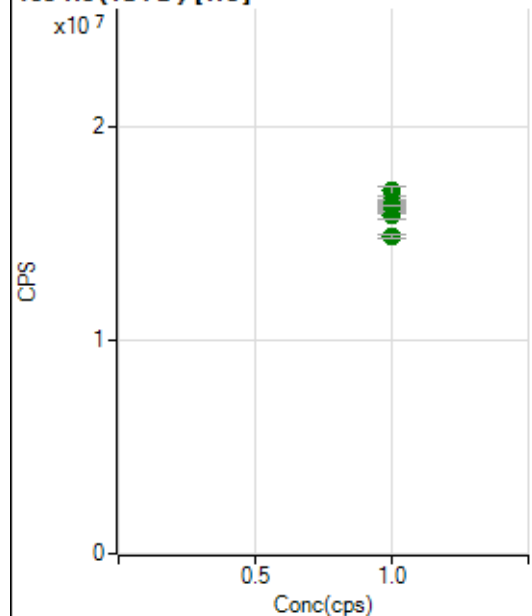
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		34948934.48		A	0.1
2	☐	1.000		37131484.45		A	0.0
3	☐	1.000		36816195.84		A	0.6
4	☐	1.000		36925268.89		A	0.7
5	☐	1.000		36892109.45		A	0.2
6	☐	1.000		36412573.35		A	0.2
7	☐	1.000		36195236.13		A	1.0
8	☐	1.000		30936159.54		A	0.1

159 Tb (ISTD) [He]

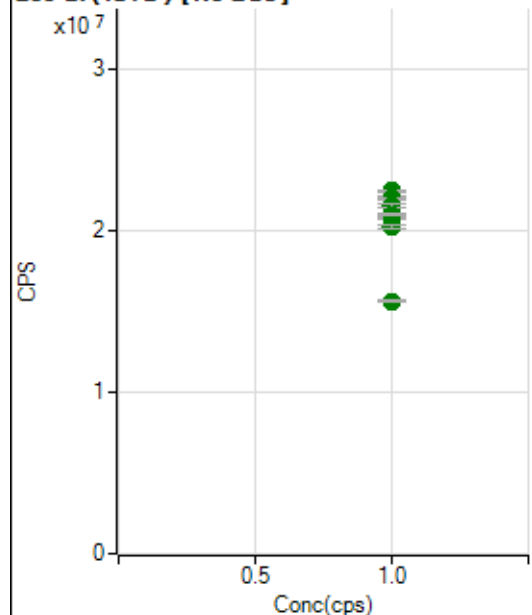
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		15361602.41		A	1.1
2	☐	1.000		16536824.06		A	2.3
3	☐	1.000		15822388.24		A	0.8
4	☐	1.000		16109965.04		A	1.1
5	☐	1.000		15946008.65		A	1.0
6	☐	1.000		15715746.71		A	1.1
7	☐	1.000		15889312.26		A	0.6
8	☐	1.000		14386514.37		A	0.6

165 Ho (ISTD) [No Gas]

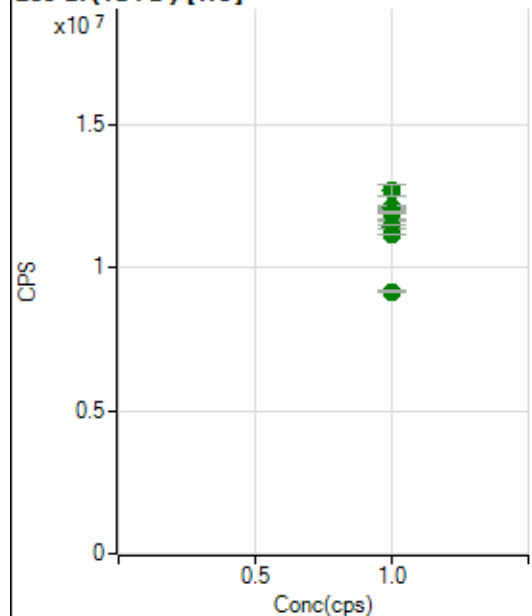
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		34078285.14		A	0.7
2	☐	1.000		36098393.52		A	0.8
3	☐	1.000		35964251.50		A	0.7
4	☐	1.000		36120952.89		A	0.6
5	☐	1.000		36359361.93		A	0.2
6	☐	1.000		35492641.07		A	1.0
7	☐	1.000		35378119.54		A	1.7
8	☐	1.000		30312120.47		A	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		15831002.96		A	1.7
2	☐	1.000		17006557.66		A	3.0
3	☐	1.000		16186359.34		A	1.0
4	☐	1.000		16480273.37		A	0.9
5	☐	1.000		16506286.14		A	0.5
6	☐	1.000		16099939.62		A	0.4
7	☐	1.000		16317792.26		A	0.1
8	☐	1.000		14851743.53		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		20740037.47		A	0.5
2	☐	1.000		22416952.44		A	0.6
3	☐	1.000		21992325.92		A	1.0
4	☐	1.000		21881850.51		A	0.4
5	☐	1.000		21514327.18		A	1.1
6	☐	1.000		20933828.44		A	0.4
7	☐	1.000		20158317.06		A	1.2
8	☐	1.000		15617396.29		A	0.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11662102.60		A	1.0
2	☐	1.000		12681449.81		A	3.1
3	☐	1.000		12060021.35		A	1.1
4	☐	1.000		12086019.54		A	1.0
5	☐	1.000		11923535.93		A	0.5
6	☐	1.000		11429062.05		A	1.0
7	☐	1.000		11177634.07		A	0.1
8	☐	1.000		9173210.14		A	1.0

US EPA Tune Check Sample Report

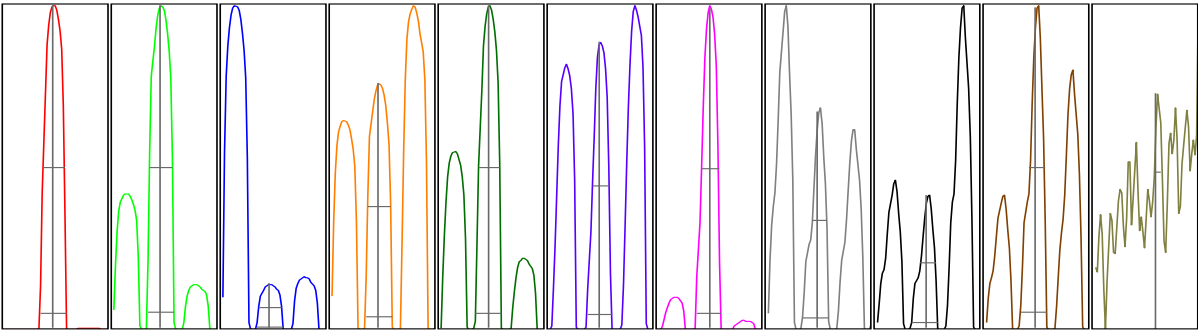
Batch Folder D:\ICP-MS Data\P7020120 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	25414	0.38	5.00	
24	417079	0.37	5.00	
25	57167	0.42	5.00	
26	67168	0.36	5.00	
59	242413	0.33	5.00	
113	28434	0.45	5.00	
115	325067	0.32	5.00	
206	70397	0.45	5.00	
207	64613	0.52	5.00	
208	152639	0.21	5.00	
220	64	2.43		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	25389	25346	25309	25493	25532
24	417647	416020	414949	418761	418021
25	57043	57286	56861	57499	57147
26	67257	67186	66753	67361	67281
59	241860	241702	242128	243641	242736
113	28574	28390	28255	28543	28408
115	326537	324593	323831	325544	324832
206	70303	70404	69915	70634	70728
207	64754	64194	64609	65085	64425
208	152304	152375	152836	153064	152616
220	66	66	62	64	64

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	42508	8.95	8.9 - 9.1		0.775	0.900	
24	665306	23.90	23.9 - 24.1		0.785	0.900	
25	91602	24.90	24.9 - 25.1		0.780	0.900	
26	107583	25.90	25.9 - 26.1		0.784	0.900	
59	420398	58.95	58.9 - 59.1		0.740	0.900	
113	57387	113.00	112.9 - 113.1		0.721	0.900	
115	646127	115.05	114.9 - 115.1		0.724	0.900	
206	151077	206.00	205.9 - 206.1		0.755	0.900	
207	138963	207.00	206.9 - 207.1		0.745	0.900	
208	334278	208.00	207.9 - 208.1		0.758	0.900	
220	71	220.35	-				

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
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.5	V	Deflect	13.0	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	54133	0.35	
89	85161	0.48	
205	59115	0.60	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	54297	54082	54347	53888	54051
89	85801	85091	85275	84864	84773
205	59263	59611	59015	59050	58638

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V	Deflect	2.6	V
Extract 2	-155.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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	4.1	mL/min	OctP RF	200	V			