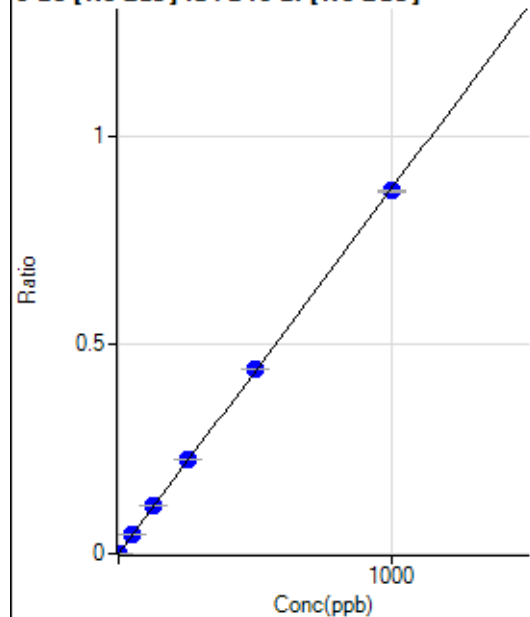


Batch Folder: D:\ICP-MS Data\P7112219 MS.b\
Analysis File: P7112219 MS.batch.bin
DA Date-Time: 2019-11-22 17:17:36
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-11-22 11:47:13
2	004CALS.d	S02	2019-11-22 11:50:46
3	005CALS.d	S03	2019-11-22 11:54:55
4	006CALS.d	S04	2019-11-22 11:58:50
5	007CALS.d	S05	2019-11-22 12:02:40
6	008CALS.d	S06	2019-11-22 12:06:28
7	009CALS.d	S07	2019-11-22 12:10:14
8	010CALS.d	S08	2019-11-22 12:14:00

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.08	0.0000	P	26.4
2	☐	1.000	0.997	1826.09	0.0009	P	3.0
3	☐	50.000	52.434	95647.50	0.0458	P	1.9
4	☐	125.000	130.085	234212.47	0.1137	P	0.6
5	☐	250.000	256.689	441317.94	0.2244	P	0.6
6	☐	500.000	506.763	845259.33	0.4430	P	0.4
7	☐	1000.000	994.189	1628084.37	0.8691	P	0.7
8	☐			240.75	0.0001	P	15.1

$$y = 8.7420\text{E-}004 * x + 1.1438\text{E-}005$$

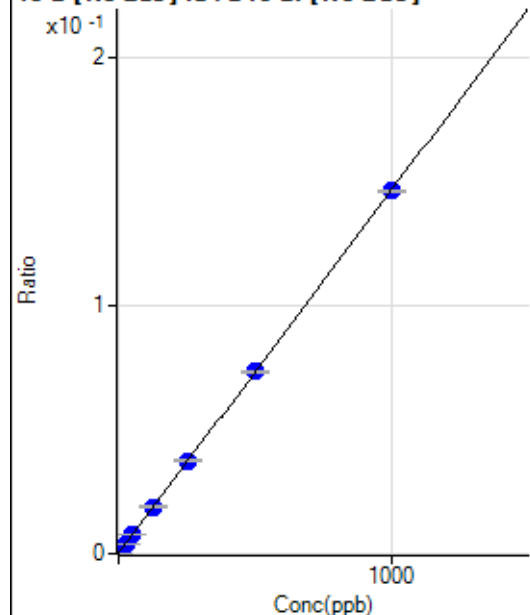
$$R = 0.9999$$

$$DL = 0.01036$$

$$BEC = 0.01308$$

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	258.35	0.0001	P	11.5
2	☐	25.000	23.597	7396.53	0.0036	P	1.0
3	☐	50.000	50.847	15778.19	0.0076	P	2.3
4	☐	125.000	128.681	39031.82	0.0190	P	0.9
5	☐	250.000	255.202	73685.52	0.0375	P	1.1
6	☐	500.000	500.573	140001.24	0.0734	P	1.2
7	☐	1000.000	997.946	273798.46	0.1462	P	0.8
8	☐			3000.42	0.0017	P	10.5

$$y = 1.4634\text{E-}004 * x + 1.2278\text{E-}004$$

$$R = 1.0000$$

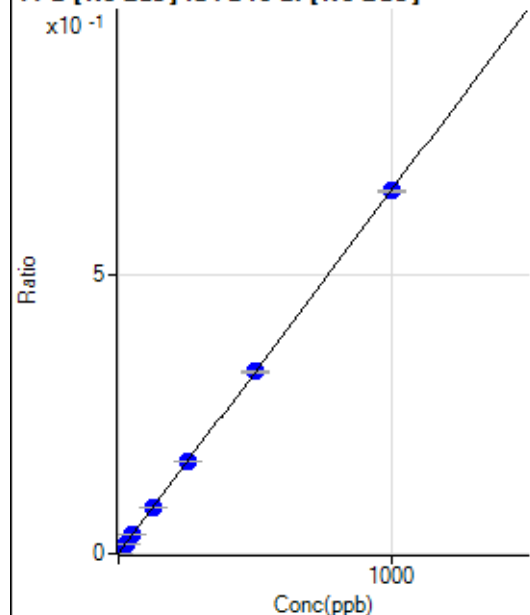
$$DL = 0.2886$$

$$BEC = 0.839$$

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	1130.64	0.0005	P	8.8
2	☐	25.000	23.834	33326.45	0.0161	P	1.2
3	☐	50.000	51.077	70746.91	0.0339	P	1.2
4	☐	125.000	127.877	173189.19	0.0841	P	0.6
5	☐	250.000	254.255	327790.15	0.1667	P	0.9
6	☐	500.000	500.810	625411.35	0.3278	P	0.7
7	☐	1000.000	998.147	1222807.20	0.6528	P	0.2
8	☐			12828.24	0.0074	P	11.7

$$y = 6.5345\text{E-}004 * x + 5.3740\text{E-}004$$

$$R = 1.0000$$

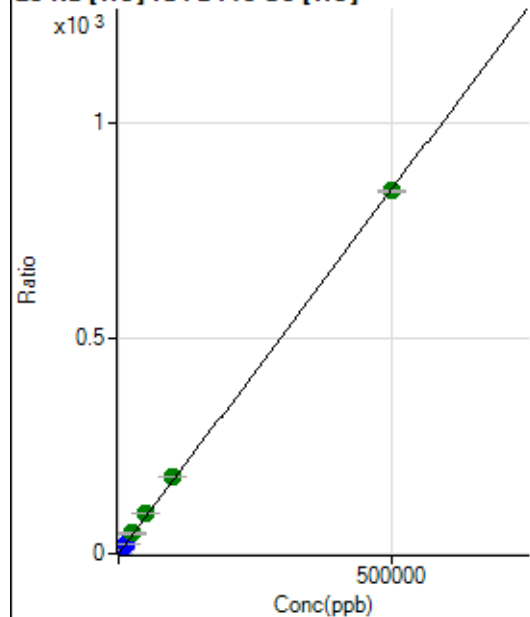
$$DL = 0.2175$$

$$BEC = 0.8224$$

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	10281.70	0.0491	P	1.7
2	☐	500.000	514.108	187609.85	0.9178	P	0.6
3	☐	5000.000	5540.818	1880279.75	9.4124	P	0.5
4	☐	12500.000	13861.941	4432595.63	23.4740	P	0.8
5	☐	25000.000	27728.222	8500385.60	46.9063	A	0.9
6	☐	50000.000	54313.597	16787293.08	91.8323	A	0.4
7	☐	100000.00	105509.01	33585337.21	178.3463	A	1.0
8	☐	500000.00	498290.95	151937443.6	842.0993	A	0.2

$$y = 0.0017 * x + 0.0491$$

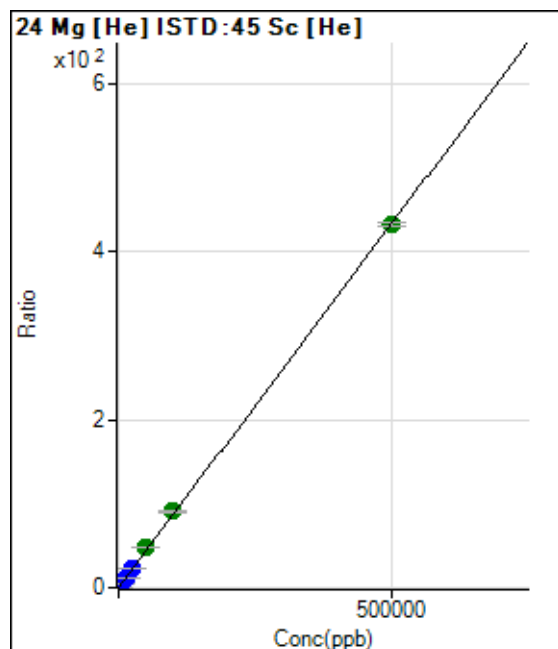
$$R = 0.9999$$

$$DL = 1.474$$

$$BEC = 29.03$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0006	P	19.0
2	☐	500.000	536.632	95089.47	0.4652	P	1.4
3	☐	5000.000	5497.252	950953.03	4.7606	P	1.3
4	☐	12500.000	13766.409	2251021.97	11.9208	P	0.5
5	☐	25000.000	27273.912	4279964.16	23.6169	P	0.8
6	☐	50000.000	54318.849	8598199.50	47.0351	A	0.3
7	☐	100000.00	104779.21	17085381.11	90.7285	A	1.1
8	☐	500000.00	498461.90	77868432.29	431.6171	A	1.0

$$y = 8.6590E-004 * x + 5.5670E-004$$

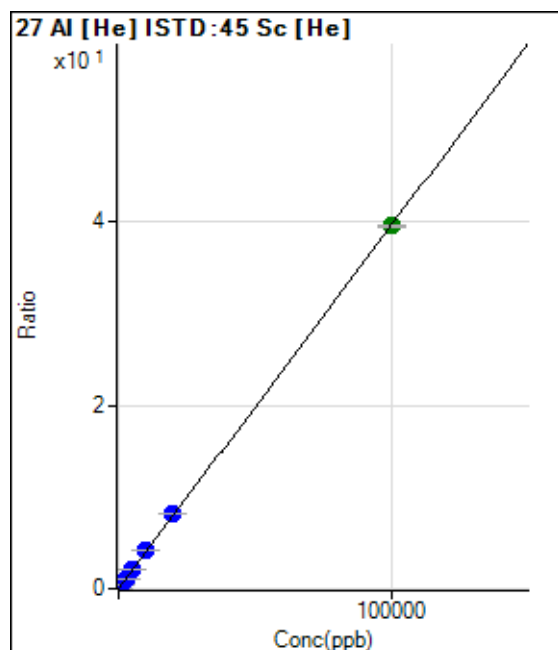
$$R = 0.9999$$

$$DL = 0.3673$$

$$BEC = 0.6429$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0002	P	16.0
2	☐	20.000	20.588	1719.61	0.0084	P	6.8
3	☐	1000.000	1089.024	86393.39	0.4325	P	0.4
4	☐	2500.000	2734.106	204957.81	1.0854	P	0.5
5	☐	5000.000	5445.097	391674.53	2.1614	P	1.3
6	☐	10000.000	10692.605	775848.28	4.2441	P	0.2
7	☐	20000.000	20544.231	1535544.23	8.1542	P	1.1
8	☐	100000.00	99792.895	7145846.95	39.6079	A	0.7

$$y = 3.9690E-004 * x + 2.3841E-004$$

$$R = 1.0000$$

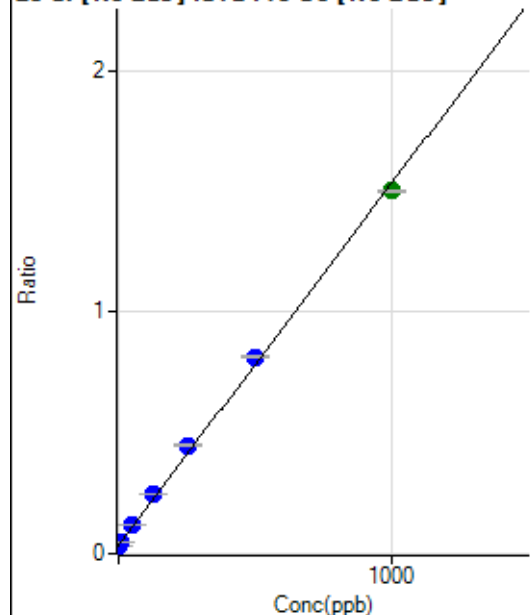
$$DL = 0.2889$$

$$BEC = 0.6007$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	157888.64	0.0347	P	0.4
2	☐	10.000	7.306	203082.96	0.0456	P	0.7
3	☐	50.000	56.642	529391.23	0.1195	P	1.4
4	☐	125.000	142.612	1059108.74	0.2484	P	0.8
5	☐	250.000	277.199	1804992.81	0.4500	P	0.2
6	☐	500.000	521.353	3266006.89	0.8159	P	0.4
7	☐	1000.000	980.017	6122633.21	1.5032	A	0.3
8	☐			590667.17	0.1503	P	1.2

$$y = 0.0015 * x + 0.0347$$

$$R = 0.9991$$

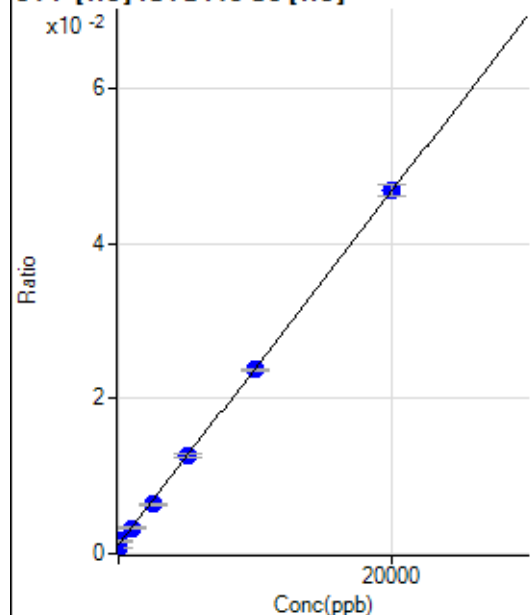
$$DL = 0.2962$$

$$BEC = 23.14$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-209.078	138.90	0.0007	P	11.7
2	☐	0.000	209.078	330.57	0.0016	P	9.0
3	☐	1000.000	950.628	661.15	0.0033	P	10.3
4	☐	2500.000	2291.529	1202.88	0.0064	P	6.2
5	☐	5000.000	5088.926	2311.39	0.0128	P	3.4
6	☐	10000.000	9941.767	4356.36	0.0238	P	1.0
7	☐	20000.000	20035.413	8825.17	0.0469	P	3.3
8	☐			152.79	0.0008	P	20.2

$$y = 2.2824E-006 * x + 0.0011$$

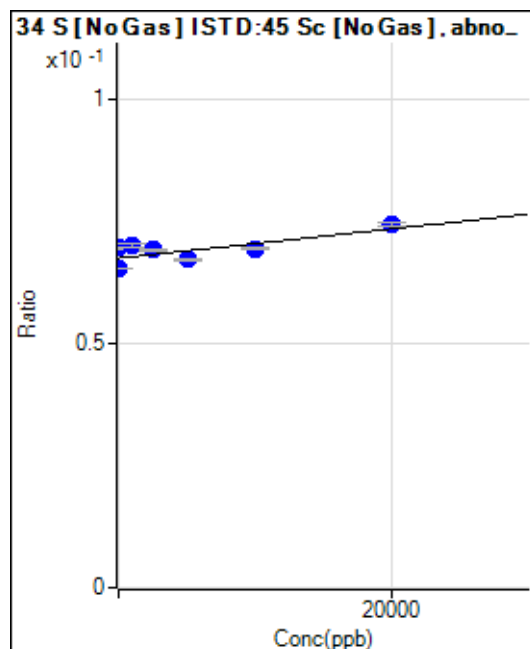
$$R = 0.9998$$

$$DL = 146$$

$$BEC = 499.3$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-7191.312	297214.02	0.0653	P	0.3
2	☐	0.000	7191.312	309752.04	0.0696	P	0.5
3	☐	1000.000	8593.218	309997.53	0.0700	P	1.3
4	☐	2500.000	5432.665	294477.91	0.0691	P	0.2
5	☐	5000.000	-997.708	269227.53	0.0671	P	0.3
6	☐	10000.000	6184.314	277325.92	0.0693	P	0.6
7	☐	20000.000	22661.026	302306.02	0.0742	P	1.0
8	☐			228777.07	0.0582	P	0.5

$$y = 2.9988\text{E-}007 * x + 0.0674$$

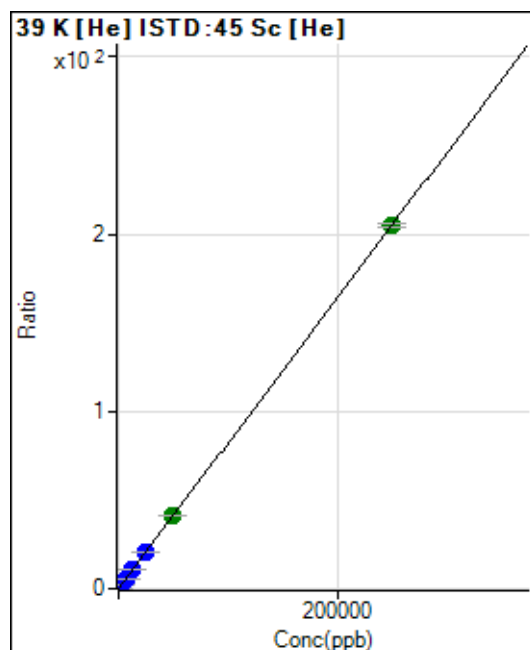
$$R = 0.7475$$

$$DL = 2818$$

$$BEC = 2.248\text{E}+05$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15697.73	0.0749	P	2.7
2	☐	500.000	506.721	100061.13	0.4896	P	1.8
3	☐	2500.000	2628.252	444593.96	2.2256	P	0.8
4	☐	6250.000	6494.762	1017736.73	5.3897	P	0.5
5	☐	12500.000	12908.872	1927992.69	10.6385	P	0.4
6	☐	25000.000	25177.215	3780009.76	20.6779	P	0.4
7	☐	50000.000	49965.497	7713776.65	40.9626	A	1.2
8	☐	250000.00	249961.32	36915995.27	204.6227	A	1.0

$$y = 8.1832\text{E-}004 * x + 0.0749$$

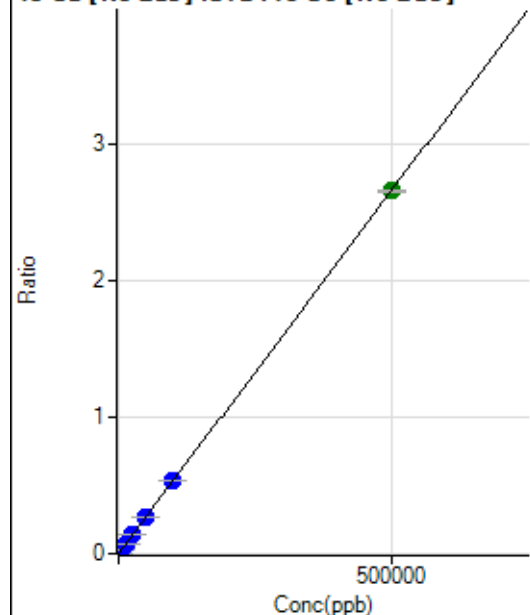
$$R = 1.0000$$

$$DL = 7.363$$

$$BEC = 91.53$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.23	0.0000	P	23.4
2	☐	500.000	483.787	11596.67	0.0026	P	0.9
3	☐	5000.000	5219.248	123053.09	0.0278	P	1.2
4	☐	12500.000	13012.601	295228.59	0.0692	P	1.0
5	☐	25000.000	25983.152	554299.77	0.1382	P	0.2
6	☐	50000.000	51189.546	1089768.23	0.2722	P	1.0
7	☐	100000.00	100670.90	2180647.64	0.5354	P	0.7
8	☐	500000.00	499682.71	10440139.99	2.6572	A	0.3

$$y = 5.3177\text{E-}006 * x + 3.2322\text{E-}005$$

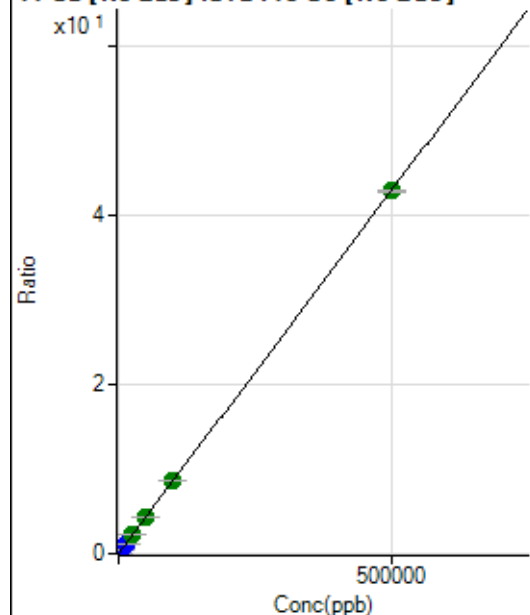
$$R = 1.0000$$

$$DL = 4.26$$

$$BEC = 6.078$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11963.93	0.0026	P	2.2
2	☐	500.000	487.268	197783.68	0.0444	P	0.7
3	☐	5000.000	5138.338	1963694.92	0.4434	P	0.8
4	☐	12500.000	12793.481	4691269.03	1.1001	P	0.3
5	☐	25000.000	25851.928	8905197.77	2.2203	A	0.4
6	☐	50000.000	51257.996	17612296.75	4.3998	A	0.4
7	☐	100000.00	101446.49	35457419.54	8.7052	A	0.5
8	☐	500000.00	499533.59	168377356.5	42.8548	A	0.5

$$y = 8.5784\text{E-}005 * x + 0.0026$$

$$R = 1.0000$$

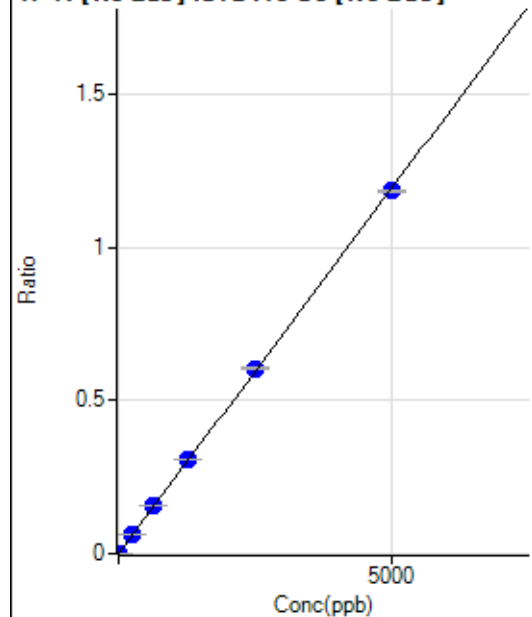
$$DL = 1.979$$

$$BEC = 30.63$$

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	77.78	0.0000	P	16.5
2	☐	5.000	5.173	5565.15	0.0013	P	5.1
3	☐	250.000	256.372	270725.07	0.0611	P	1.5
4	☐	625.000	647.466	658293.66	0.1544	P	0.5
5	☐	1250.000	1286.762	1230418.04	0.3068	P	0.0
6	☐	2500.000	2537.009	2421182.72	0.6048	P	0.7
7	☐	5000.000	4969.178	4825410.87	1.1847	P	0.6
8	☐			1247.33	0.0003	P	9.1

$$y = 2.3840\text{E-}004 * x + 1.7083\text{E-}005$$

R = 0.9999

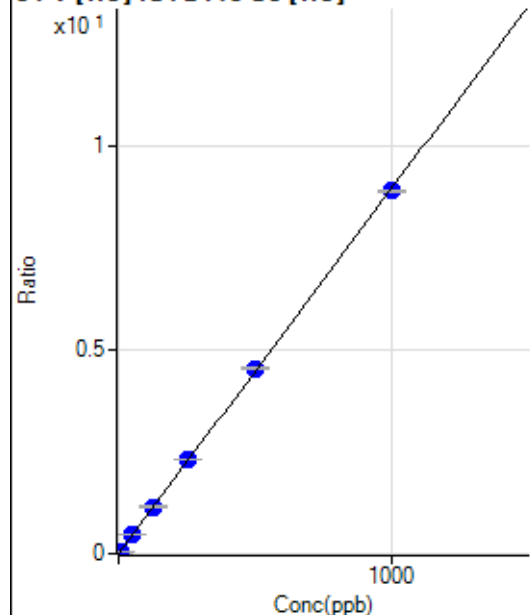
DL = 0.03556

BEC = 0.07166

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	4.44	0.0000	P	43.7
2	☐	5.000	5.310	9743.36	0.0477	P	2.5
3	☐	50.000	51.394	92125.34	0.4612	P	0.6
4	☐	125.000	128.685	218043.24	1.1547	P	1.0
5	☐	250.000	257.565	418828.41	2.3112	P	0.9
6	☐	500.000	507.318	832147.85	4.5522	P	0.8
7	☐	1000.000	993.918	1679481.26	8.9185	P	0.7
8	☐			862.26	0.0048	P	3.3

$$y = 0.0090 * x + 2.1214\text{E-}005$$

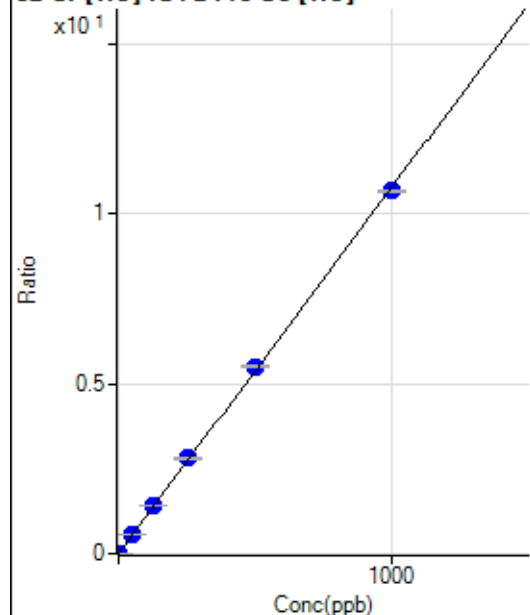
R = 0.9999

DL = 0.003097

BEC = 0.002364

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	802.26	0.0038	P	0.7
2	☐	2.000	2.009	5208.77	0.0255	P	2.0
3	☐	50.000	52.429	113622.72	0.5688	P	0.5
4	☐	125.000	129.929	265095.89	1.4039	P	0.6
5	☐	250.000	260.584	509550.72	2.8118	P	0.8
6	☐	500.000	510.458	1006196.84	5.5043	P	0.7
7	☐	1000.000	991.387	2012436.73	10.6865	P	0.7
8	☐			51260.36	0.2841	P	0.6

$$y = 0.0108 * x + 0.0038$$

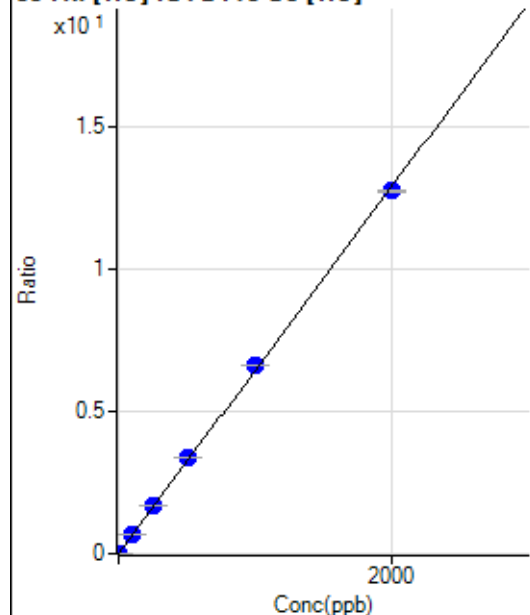
$$R = 0.9999$$

$$DL = 0.007891$$

$$BEC = 0.3552$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	72.22	0.0003	P	17.8
2	☐	1.000	1.010	1402.31	0.0069	P	5.2
3	☐	100.000	105.016	135358.26	0.6776	P	0.8
4	☐	250.000	262.882	320201.51	1.6957	P	0.7
5	☐	500.000	524.257	612764.68	3.3813	P	0.9
6	☐	1000.000	1027.749	1211702.74	6.6284	P	0.3
7	☐	2000.000	1978.200	2402541.14	12.7580	P	0.5
8	☐			8017.85	0.0444	P	2.1

$$y = 0.0064 * x + 3.4472E-004$$

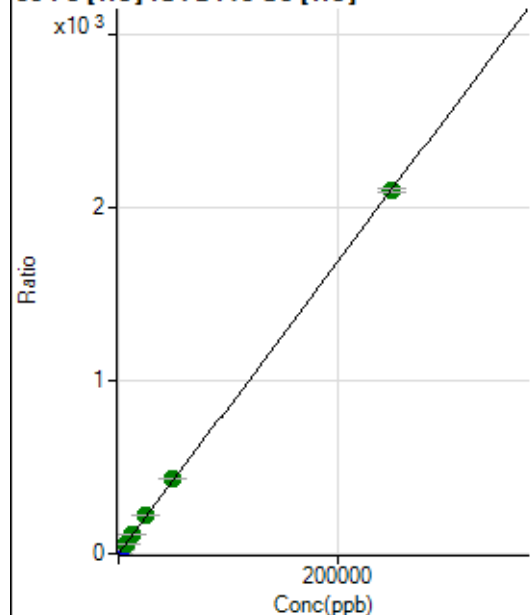
$$R = 0.9998$$

$$DL = 0.02858$$

$$BEC = 0.05345$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3439.39	0.0164	P	3.8
2	☐	50.000	57.110	101477.88	0.4965	P	0.8
3	☐	2500.000	2746.143	4614427.77	23.0995	P	0.3
4	☐	6250.000	6801.538	10798816.44	57.1877	A	0.8
5	☐	12500.000	13615.153	20742782.64	114.4605	A	0.7
6	☐	25000.000	26783.500	41158167.59	225.1488	A	0.3
7	☐	50000.000	52064.775	82417676.84	437.6541	A	0.4
8	☐	250000.00	249336.68	378105801.0	2,095.850	A	1.2

$$y = 0.0084 * x + 0.0164$$

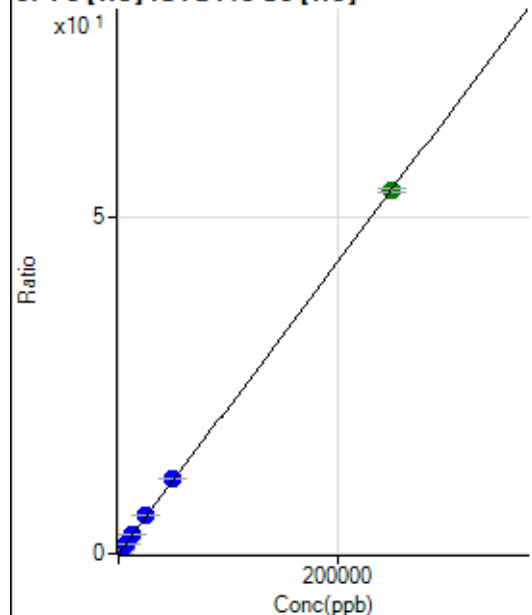
$$R = 0.9999$$

$$DL = 0.2242$$

$$BEC = 1.952$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	229.64	0.0011	P	9.9
2	☐	50.000	58.586	2811.45	0.0138	P	1.4
3	☐	2500.000	2731.035	118090.03	0.5911	P	0.8
4	☐	6250.000	6840.249	279263.68	1.4789	P	0.8
5	☐	12500.000	13670.853	535448.12	2.9547	P	0.7
6	☐	25000.000	26770.979	1057499.47	5.7849	P	0.4
7	☐	50000.000	51387.487	2090906.67	11.1032	P	0.7
8	☐	250000.00	249469.79	9723736.21	53.8985	A	1.1

$$y = 2.1605E-004 * x + 0.0011$$

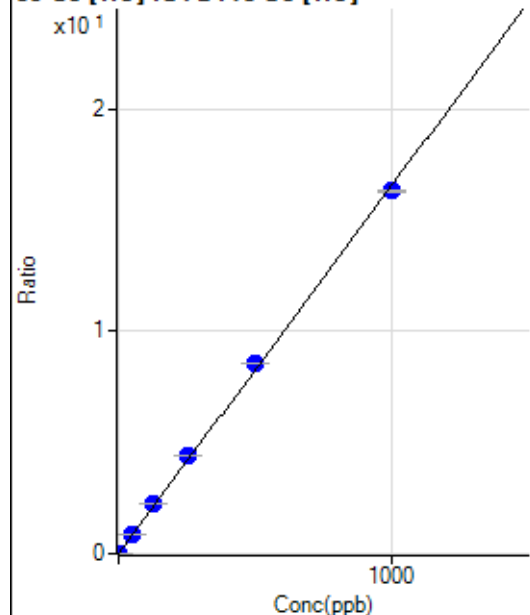
$$R = 1.0000$$

$$DL = 1.512$$

$$BEC = 5.072$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.66	0.0002	P	31.1
2	☐	1.000	1.046	3573.82	0.0175	P	2.0
3	☐	50.000	53.959	178381.09	0.8929	P	0.5
4	☐	125.000	133.996	418669.78	2.2172	P	0.8
5	☐	250.000	265.806	797008.04	4.3980	P	1.0
6	☐	500.000	516.548	1562354.18	8.5466	P	0.3
7	☐	1000.000	986.452	3073597.25	16.3213	P	0.2
8	☐			5593.38	0.0310	P	0.5

$$y = 0.0165 * x + 1.7471E-004$$

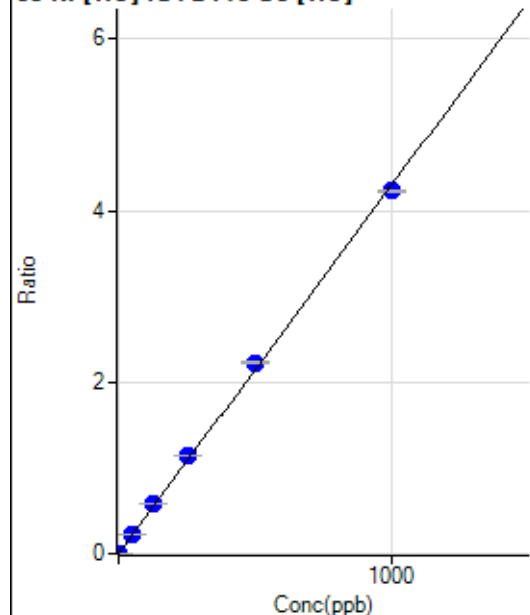
$$R = 0.9996$$

$$DL = 0.009841$$

$$BEC = 0.01056$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.22	0.0001	P	48.7
2	☐	1.000	1.036	931.15	0.0046	P	2.4
3	☐	50.000	54.633	46879.30	0.2347	P	0.5
4	☐	125.000	134.646	109181.61	0.5782	P	0.8
5	☐	250.000	266.294	207203.76	1.1434	P	1.3
6	☐	500.000	518.984	407353.74	2.2283	P	0.3
7	☐	1000.000	984.997	796421.03	4.2291	P	0.3
8	☐			14774.29	0.0819	P	0.9

$$y = 0.0043 * x + 1.0632E-004$$

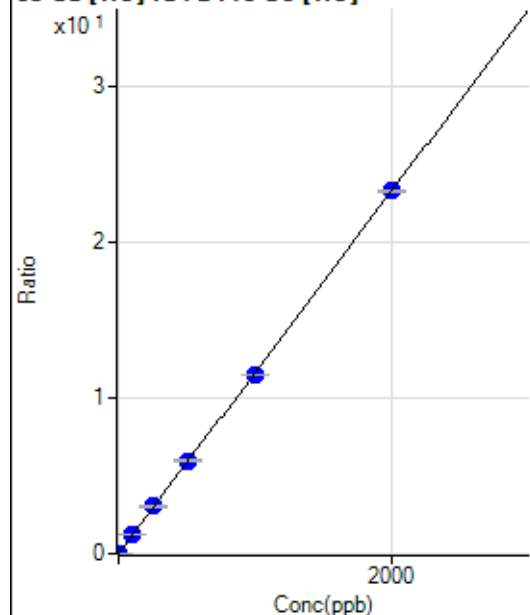
$$R = 0.9996$$

$$DL = 0.0362$$

$$BEC = 0.02476$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	381.12	0.0018	P	3.6
2	☐	2.000	2.022	5176.55	0.0253	P	2.0
3	☐	100.000	105.176	244651.81	1.2247	P	0.7
4	☐	250.000	260.261	571751.35	3.0279	P	0.7
5	☐	500.000	512.661	1080544.14	5.9625	P	0.7
6	☐	1000.000	987.561	2099344.07	11.4841	P	0.3
7	☐	2000.000	2001.513	4382743.76	23.2733	P	0.5
8	☐			6041.35	0.0335	P	1.5

$$y = 0.0116 * x + 0.0018$$

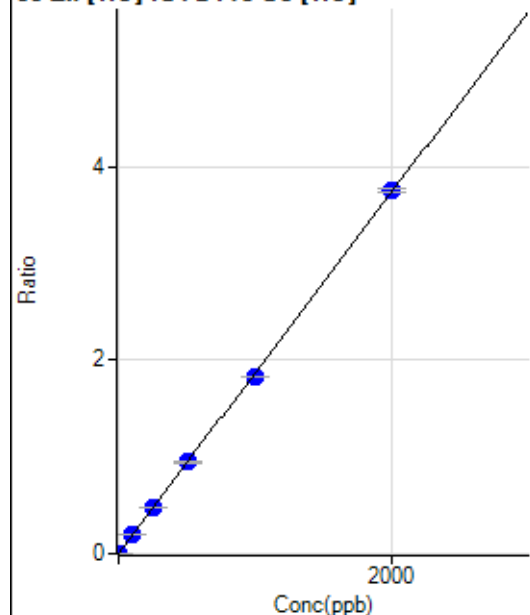
$$R = 0.9999$$

$$DL = 0.0171$$

$$BEC = 0.1564$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	424.46	0.0020	P	14.8
2	☐	2.000	2.302	1292.30	0.0063	P	7.1
3	☐	100.000	102.736	38713.63	0.1938	P	0.8
4	☐	250.000	256.094	90648.03	0.4801	P	0.9
5	☐	500.000	506.533	171706.14	0.9475	P	1.3
6	☐	1000.000	978.657	334310.98	1.8288	P	0.1
7	☐	2000.000	2008.140	706255.55	3.7504	P	1.0
8	☐			7559.84	0.0419	P	2.3

$$y = 0.0019 * x + 0.0020$$

$$R = 0.9999$$

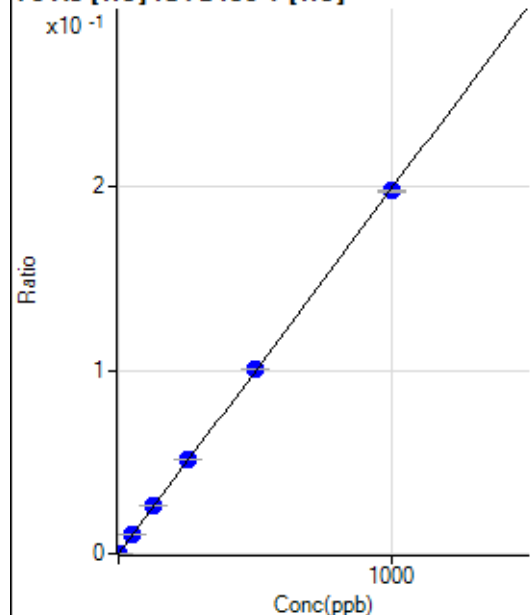
$$DL = 0.4807$$

$$BEC = 1.084$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.70	0.0000	P	50.1
2	☐	1.000	1.013	239.51	0.0002	P	1.5
3	☐	50.000	53.616	12285.50	0.0107	P	1.3
4	☐	125.000	130.102	28644.89	0.0259	P	1.2
5	☐	250.000	257.717	54720.23	0.0513	P	0.4
6	☐	500.000	506.198	108449.90	0.1007	P	0.8
7	☐	1000.000	994.153	216245.90	0.1978	P	0.6
8	☐			83.33	0.0001	P	5.2

$$y = 1.9895\text{E-}004 * x + 3.0826\text{E-}006$$

$$R = 0.9999$$

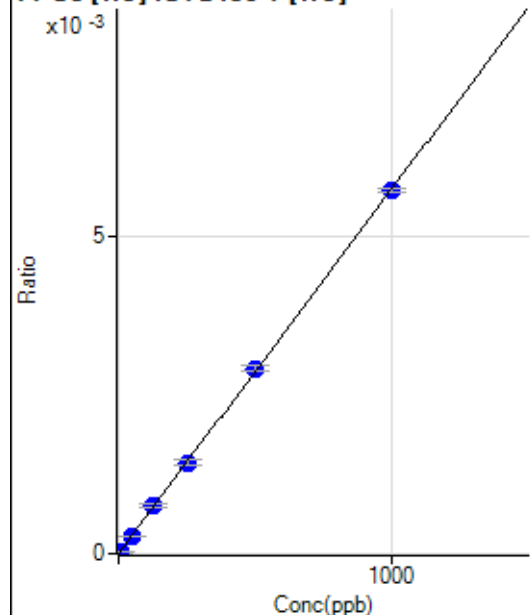
$$DL = 0.02331$$

$$BEC = 0.01549$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.33	0.0000	P	173.
2	☐	5.000	3.996	30.00	0.0000	P	29.2
3	☐	50.000	47.078	313.34	0.0003	P	3.3
4	☐	125.000	132.192	840.04	0.0008	P	5.5
5	☐	250.000	248.816	1522.33	0.0014	P	6.8
6	☐	500.000	507.431	3130.38	0.0029	P	3.0
7	☐	1000.000	995.833	6233.66	0.0057	P	0.9
8	☐			5.56	0.0000	P	91.1

$$y = 5.7226\text{E-}006 * x + 2.7445\text{E-}006$$

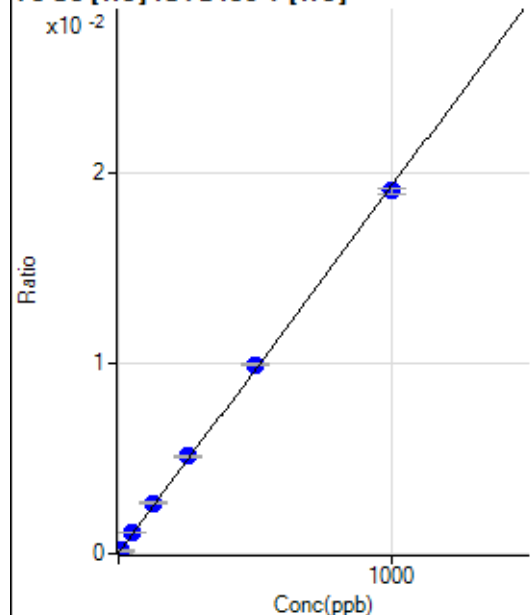
$$R = 0.9999$$

$$DL = 2.492$$

$$BEC = 0.4796$$

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	38.27	0.0000	P	27.3
2	☐	5.000	6.334	180.25	0.0002	P	13.6
3	☐	50.000	55.781	1274.76	0.0011	P	3.5
4	☐	125.000	137.066	2958.97	0.0027	P	3.6
5	☐	250.000	264.729	5480.09	0.0051	P	2.6
6	☐	500.000	514.578	10716.99	0.0100	P	1.5
7	☐	1000.000	987.225	20842.19	0.0191	P	1.3
8	☐			54.32	0.0001	P	11.3

$$y = 1.9278\text{E-}005 * x + 3.1842\text{E-}005$$

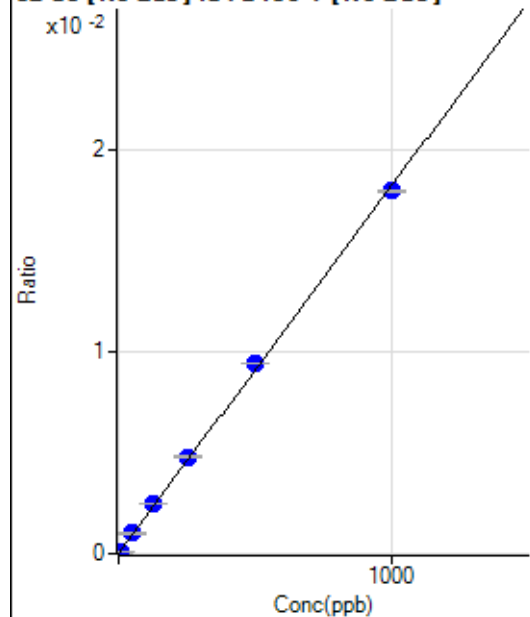
$$R = 0.9997$$

$$DL = 1.354$$

$$BEC = 1.652$$

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	88.19	0.0000	P	40.5
2	☐	5.000	5.408	889.86	0.0001	P	13.9
3	☐	50.000	54.563	8180.66	0.0010	P	2.6
4	☐	125.000	134.775	19779.55	0.0025	P	0.9
5	☐	250.000	262.698	36686.31	0.0048	P	1.1
6	☐	500.000	517.441	72049.17	0.0094	P	0.2
7	☐	1000.000	986.653	141313.83	0.0180	P	0.8
8	☐			190.37	0.0000	P	11.5

$$y = 1.8199\text{E-}005 * x + 1.0387\text{E-}005$$

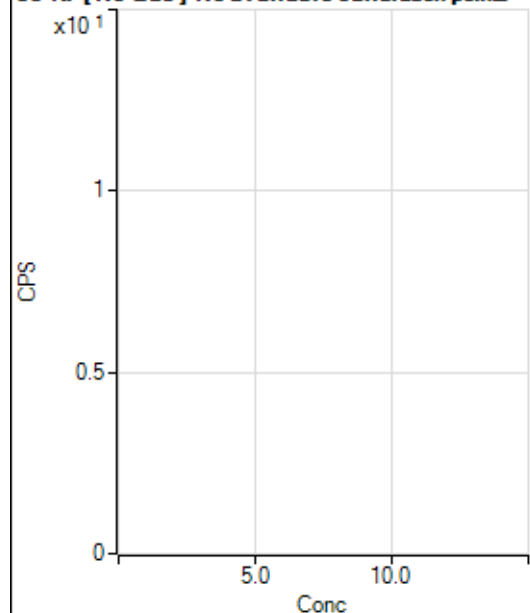
$$R = 0.9997$$

$$DL = 0.6938$$

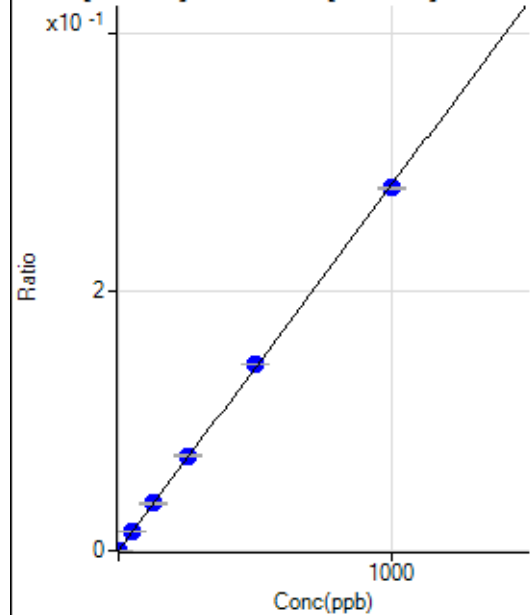
$$BEC = 0.5707$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			578.91		P	8.3
2	☐			604.47		P	5.4
3	☐			535.57		P	12.7
4	☐			532.24		P	1.0
5	☐			518.91		P	12.1
6	☐			525.57		P	1.3
7	☐			540.02		P	8.7
8	☐			546.69		P	4.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1066.76	0.0001	P	13.7
2	☐	1.000	0.906	3117.13	0.0004	P	5.4
3	☐	50.000	50.843	118007.94	0.0145	P	1.1
4	☐	125.000	128.572	292369.57	0.0364	P	0.8
5	☐	250.000	258.623	559803.46	0.0731	P	1.1
6	☐	500.000	510.386	1101734.77	0.1442	P	0.8
7	☐	1000.000	992.163	2203234.10	0.2801	P	0.8
8	☐			10045.56	0.0013	P	3.9

$$y = 2.8221\text{E-}004 * x + 1.2549\text{E-}004$$

$$R = 0.9999$$

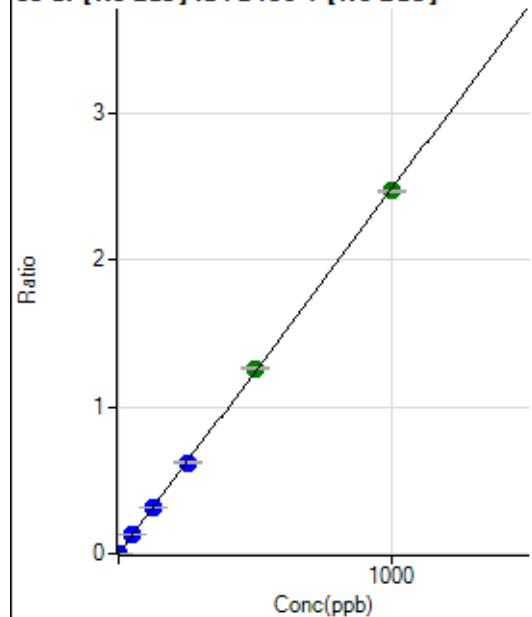
$$DL = 0.1821$$

$$BEC = 0.4447$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	191.67	0.0000	P	4.0
2	☐	1.000	1.004	20565.44	0.0025	P	1.8
3	☐	50.000	50.804	1028209.66	0.1261	P	0.8
4	☐	125.000	126.044	2512238.95	0.3129	P	0.9
5	☐	250.000	250.275	4756663.39	0.6212	P	0.5
6	☐	500.000	508.758	9650501.43	1.2627	A	0.2
7	☐	1000.000	995.382	19431427.52	2.4705	A	0.3
8	☐			77990.00	0.0104	P	1.5

$$y = 0.0025 * x + 2.2547E-005$$

$$R = 0.9999$$

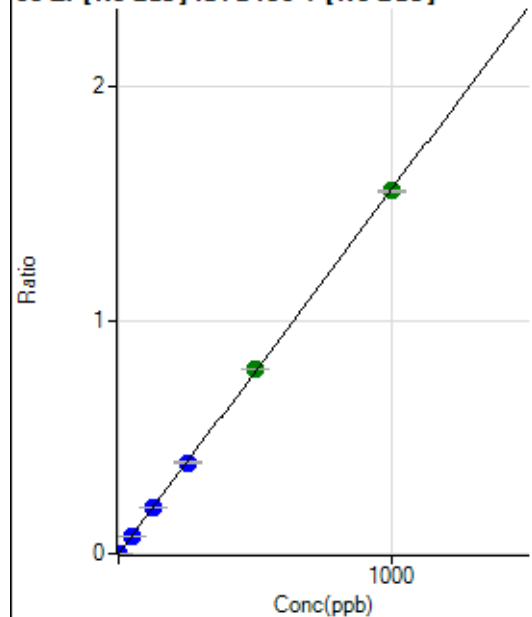
$$DL = 0.001101$$

$$BEC = 0.009085$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	472.25	0.0001	P	14.6
2	☐	1.000	0.858	11404.97	0.0014	P	3.2
3	☐	50.000	49.639	631540.61	0.0775	P	0.3
4	☐	125.000	125.042	1566172.33	0.1950	P	0.5
5	☐	250.000	250.556	2992082.21	0.3908	P	1.0
6	☐	500.000	506.680	6038703.52	0.7902	A	0.2
7	☐	1000.000	996.534	12223109.82	1.5540	A	0.3
8	☐			3439.46	0.0005	P	8.8

$$y = 0.0016 * x + 5.5536E-005$$

$$R = 1.0000$$

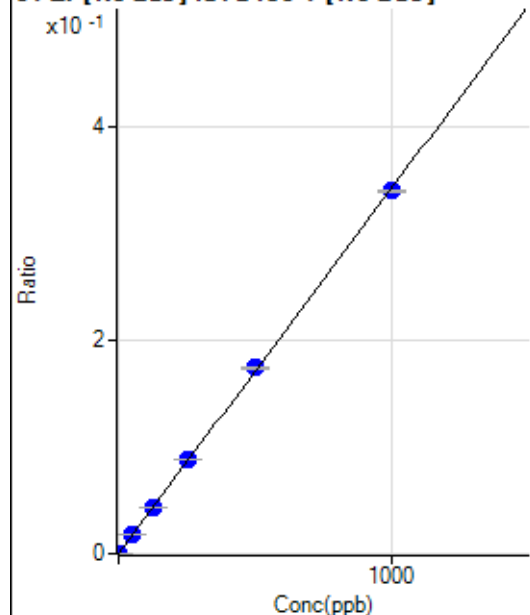
$$DL = 0.01565$$

$$BEC = 0.03561$$

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	94.45	0.0000	P	58.6
2	☐	1.000	0.848	2466.99	0.0003	P	5.4
3	☐	50.000	50.726	141803.59	0.0174	P	1.1
4	☐	125.000	128.160	352733.40	0.0439	P	0.3
5	☐	250.000	257.167	674845.21	0.0881	P	0.4
6	☐	500.000	508.850	1332626.56	0.1744	P	1.1
7	☐	1000.000	993.352	2677292.27	0.3404	P	0.8
8	☐			700.05	0.0001	P	9.8

$$y = 3.4266\text{E-}004 * x + 1.1107\text{E-}005$$

$$R = 0.9999$$

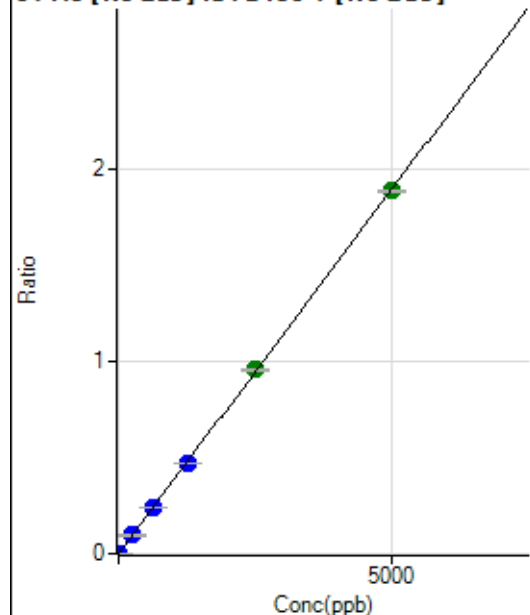
$$DL = 0.05698$$

$$BEC = 0.03241$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	183.34	0.0000	P	19.5
2	☐	5.000	4.590	14391.09	0.0018	P	0.8
3	☐	250.000	251.500	776391.15	0.0952	P	0.9
4	☐	625.000	623.940	1896826.67	0.2362	P	0.3
5	☐	1250.000	1250.984	3626326.51	0.4736	P	0.5
6	☐	2500.000	2531.413	7323723.95	0.9583	A	0.8
7	☐	5000.000	4984.105	14840301.90	1.8868	A	0.3
8	☐			10976.81	0.0015	P	2.6

$$y = 3.7856\text{E-}004 * x + 2.1560\text{E-}005$$

$$R = 1.0000$$

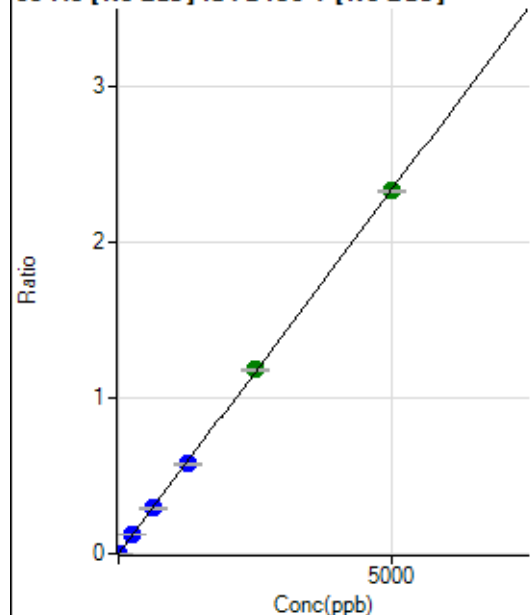
$$DL = 0.03328$$

$$BEC = 0.05695$$

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	63.89	0.0000	P	14.9
2	☐	5.000	4.836	18543.30	0.0023	P	3.2
3	☐	250.000	252.470	961695.81	0.1180	P	0.5
4	☐	625.000	622.850	2336631.72	0.2910	P	0.5
5	☐	1250.000	1233.319	4411870.15	0.5762	P	0.6
6	☐	2500.000	2530.087	9033601.59	1.1820	A	0.9
7	☐	5000.000	4989.272	18332928.02	2.3309	A	0.6
8	☐			16660.29	0.0022	P	1.2

$$y = 4.6718\text{E-}004 * x + 7.5157\text{E-}006$$

$$R = 1.0000$$

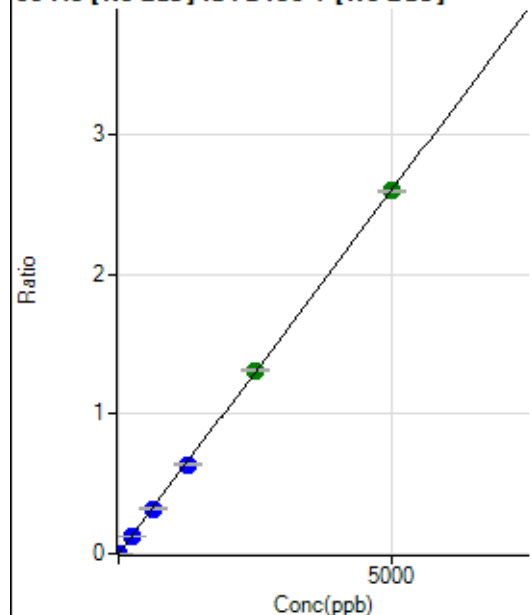
$$DL = 0.007196$$

$$BEC = 0.01609$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.79	0.0000	P	16.8
2	☐	5.000	4.852	20763.20	0.0025	P	3.5
3	☐	250.000	250.509	1062350.54	0.1303	P	0.1
4	☐	625.000	621.509	2595694.98	0.3233	P	1.0
5	☐	1250.000	1229.733	4897317.95	0.6396	P	0.4
6	☐	2500.000	2524.182	10033018.02	1.3128	A	0.7
7	☐	5000.000	4993.387	20426237.96	2.5970	A	0.4
8	☐			25367.96	0.0034	P	2.0

$$y = 5.2008\text{E-}004 * x + 1.5039\text{E-}005$$

$$R = 1.0000$$

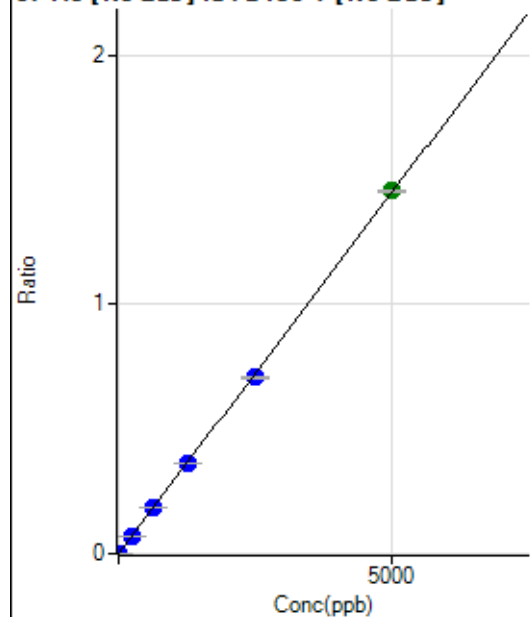
$$DL = 0.01457$$

$$BEC = 0.02892$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	28.4
2	☐	5.000	4.919	11696.92	0.0014	P	0.8
3	☐	250.000	252.001	595090.30	0.0730	P	0.3
4	☐	625.000	629.409	1463805.04	0.1823	P	0.8
5	☐	1250.000	1251.286	2774911.63	0.3624	P	0.4
6	☐	2500.000	2440.186	5400977.72	0.7067	P	0.6
7	☐	5000.000	5028.935	11455658.68	1.4565	A	0.3
8	☐			10593.27	0.0014	P	3.8

$$y = 2.8962\text{E-}004 * x + 5.2263\text{E-}006$$

$$R = 0.9999$$

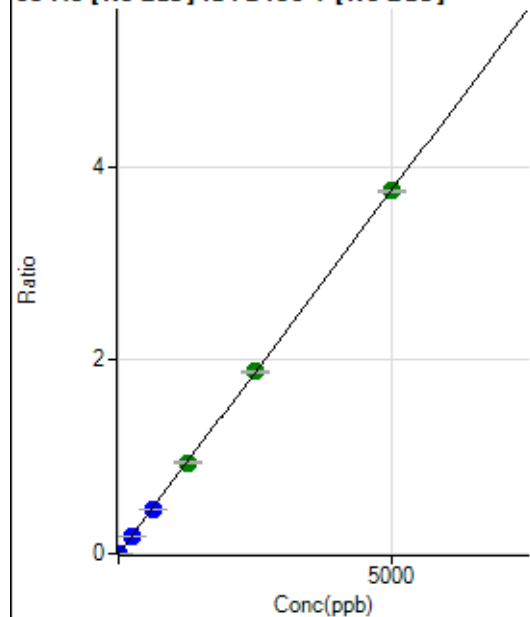
$$DL = 0.01539$$

$$BEC = 0.01805$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	8.8
2	☐	5.000	4.949	30489.17	0.0037	P	0.8
3	☐	250.000	249.009	1523857.89	0.1869	P	1.2
4	☐	625.000	615.233	3708121.09	0.4618	P	0.5
5	☐	1250.000	1256.252	7219696.43	0.9429	A	1.2
6	☐	2500.000	2511.223	14404827.93	1.8848	A	0.8
7	☐	5000.000	4994.096	29482639.90	3.7484	A	0.3
8	☐			27054.43	0.0036	P	2.9

$$y = 7.5056\text{E-}004 * x + 1.2417\text{E-}005$$

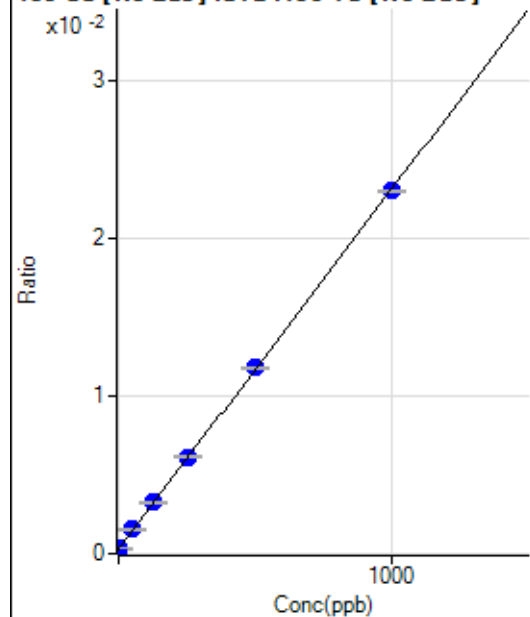
$$R = 1.0000$$

$$DL = 0.004375$$

$$BEC = 0.01654$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2708.70	0.0003	P	2.7
2	☐	1.000	2.053	2986.55	0.0003	P	3.4
3	☐	50.000	54.807	13848.92	0.0015	P	3.1
4	☐	125.000	130.070	29512.18	0.0033	P	1.8
5	☐	250.000	255.812	54028.70	0.0061	P	1.3
6	☐	500.000	503.355	104228.65	0.0118	P	0.8
7	☐	1000.000	995.994	207964.63	0.0230	P	0.5
8	☐			2483.66	0.0003	P	0.5

$$y = 2.2835E-005 * x + 2.8774E-004$$

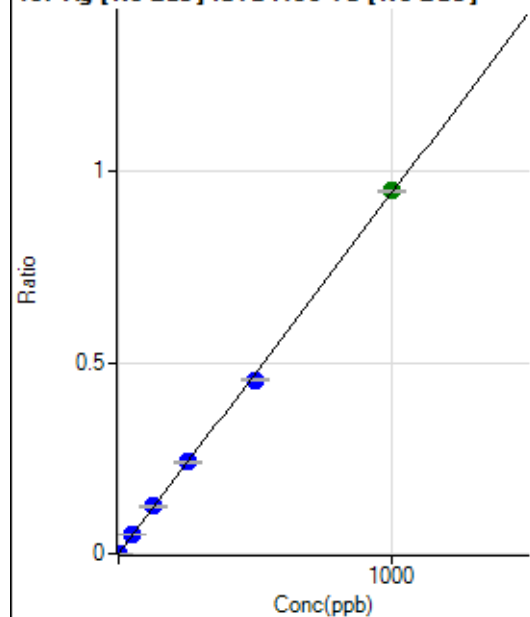
$$R = 1.0000$$

$$DL = 1.029$$

$$BEC = 12.6$$

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	63.89	0.0000	P	39.6
2	☐	1.000	1.058	8961.55	0.0010	P	0.1
3	☐	50.000	53.803	456558.16	0.0507	P	1.0
4	☐	125.000	130.855	1117895.52	0.1234	P	0.3
5	☐	250.000	254.540	2115786.29	0.2400	P	1.1
6	☐	500.000	482.248	4022905.21	0.4547	P	0.7
7	☐	1000.000	1006.819	8572089.51	0.9494	A	0.8
8	☐			1236.22	0.0001	P	8.8

$$y = 9.4293E-004 * x + 6.7824E-006$$

$$R = 0.9997$$

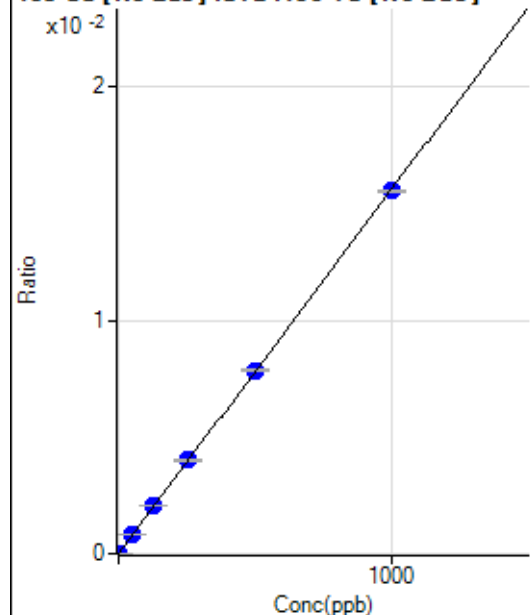
$$DL = 0.008541$$

$$BEC = 0.007193$$

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	8.33	0.0000	P	50.2
2	☐	1.000	0.881	130.56	0.0000	P	9.2
3	☐	50.000	54.354	7636.95	0.0008	P	2.8
4	☐	125.000	131.318	18565.19	0.0020	P	0.7
5	☐	250.000	256.502	35276.17	0.0040	P	1.6
6	☐	500.000	502.845	69401.27	0.0078	P	1.0
7	☐	1000.000	995.945	140288.66	0.0155	P	0.4
8	☐			45.83	0.0000	P	26.3

$$y = 1.5599\text{E-}005 * x + 8.8584\text{E-}007$$

$$R = 1.0000$$

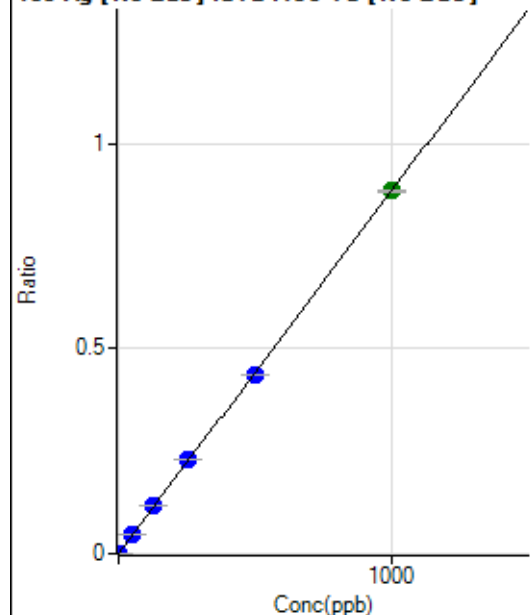
$$DL = 0.08554$$

$$BEC = 0.05679$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.4
2	☐	1.000	1.073	8491.85	0.0010	P	0.8
3	☐	50.000	55.254	439772.87	0.0489	P	0.7
4	☐	125.000	133.656	1071012.25	0.1182	P	1.2
5	☐	250.000	260.083	2027824.74	0.2300	P	0.9
6	☐	500.000	492.125	3850957.81	0.4353	P	0.6
7	☐	1000.000	1000.072	7987111.12	0.8846	A	0.5
8	☐			1211.22	0.0001	P	11.9

$$y = 8.8450\text{E-}004 * x + 2.3598\text{E-}006$$

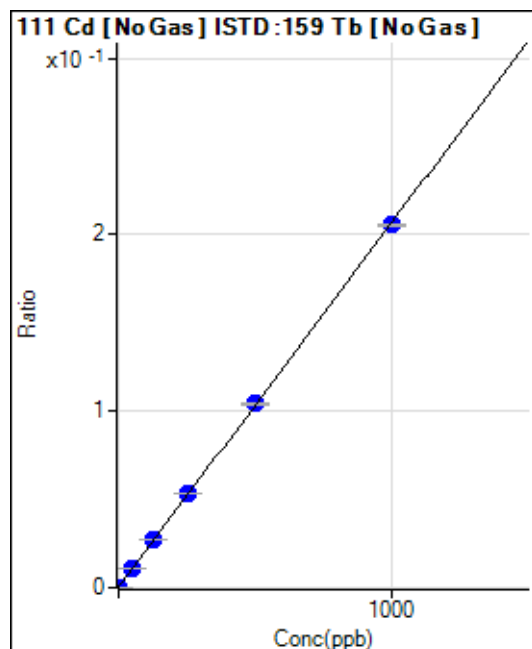
$$R = 0.9999$$

$$DL = 0.001713$$

$$BEC = 0.002668$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1895.82	0.0002	P	2.6
2	☐	1.000	1.120	3859.08	0.0004	P	0.8
3	☐	50.000	53.850	101799.49	0.0113	P	0.8
4	☐	125.000	132.138	248846.99	0.0275	P	0.7
5	☐	250.000	259.564	473938.46	0.0538	P	0.1
6	☐	500.000	503.792	921511.15	0.1042	P	0.7
7	☐	1000.000	994.628	1855045.29	0.2054	P	0.8
8	☐			2091.22	0.0003	P	1.8

$$y = 2.0636\text{E-}004 * x + 2.0139\text{E-}004$$

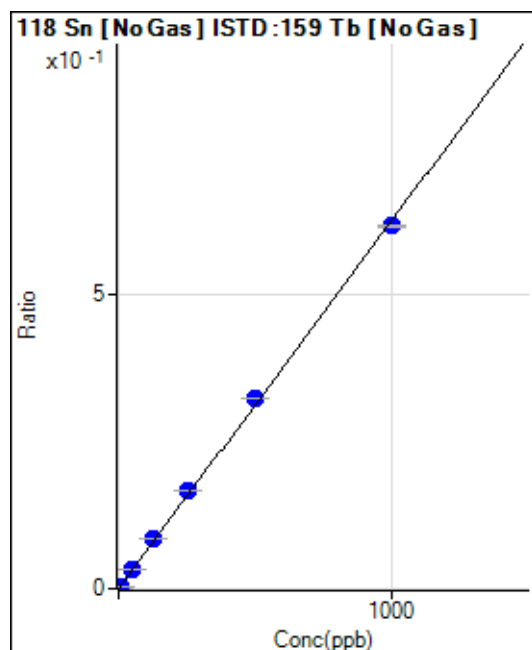
R = 0.9999

DL = 0.07726

BEC = 0.9759

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.03	0.0001	P	4.1
2	☐	5.000	5.312	30094.35	0.0034	P	3.7
3	☐	50.000	54.426	306444.05	0.0341	P	0.8
4	☐	125.000	134.194	760033.12	0.0839	P	0.4
5	☐	250.000	265.015	1460003.63	0.1656	P	0.6
6	☐	500.000	516.485	2855243.27	0.3227	P	0.5
7	☐	1000.000	986.632	5566331.42	0.6165	P	0.7
8	☐			5040.00	0.0006	P	3.9

$$y = 6.2477\text{E-}004 * x + 5.3115\text{E-}005$$

R = 0.9997

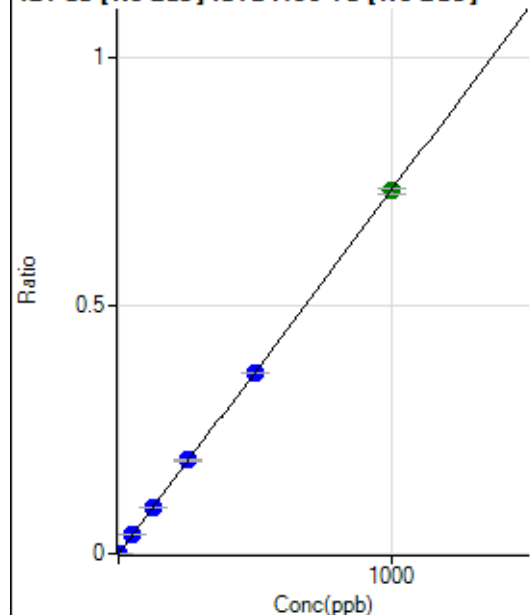
DL = 0.01058

BEC = 0.08501

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.11	0.0000	P	47.8
2	☐	2.000	2.072	13593.23	0.0015	P	0.8
3	☐	50.000	51.912	342502.36	0.0381	P	0.6
4	☐	125.000	129.225	858370.88	0.0947	P	0.5
5	☐	250.000	257.290	1662923.21	0.1886	P	0.7
6	☐	500.000	498.898	3236129.02	0.3658	P	0.1
7	☐	1000.000	998.105	6607454.27	0.7318	A	1.4
8	☐			6257.20	0.0008	P	2.7

$$y = 7.3318\text{E-}004 * x + 3.8327\text{E-}006$$

$$R = 1.0000$$

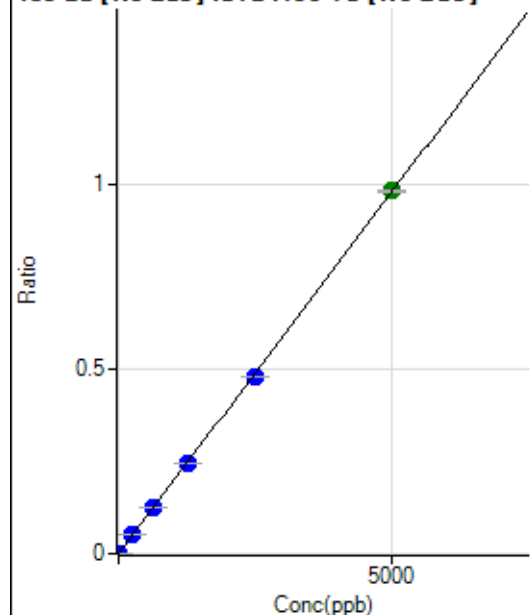
$$DL = 0.007502$$

$$BEC = 0.005227$$

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	38.89	0.0000	P	96.6
2	☐	10.000	10.163	17834.31	0.0020	P	1.9
3	☐	250.000	256.404	452761.11	0.0503	P	0.4
4	☐	625.000	638.376	1134921.78	0.1253	P	1.2
5	☐	1250.000	1253.189	2167741.74	0.2459	P	0.8
6	☐	2500.000	2456.495	4264587.86	0.4820	P	0.3
7	☐	5000.000	5018.963	8892636.40	0.9849	A	0.8
8	☐			1569.59	0.0002	P	11.6

$$y = 1.9623\text{E-}004 * x + 4.1234\text{E-}006$$

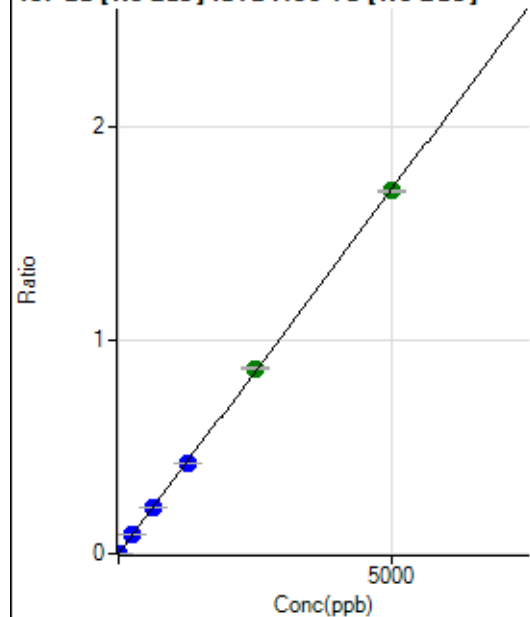
$$R = 0.9999$$

$$DL = 0.06087$$

$$BEC = 0.02101$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	36.11	0.0000	P	48.1
2	☐	10.000	10.144	30960.48	0.0035	P	2.6
3	☐	250.000	256.877	789681.71	0.0878	P	0.3
4	☐	625.000	633.694	1961322.59	0.2165	P	0.2
5	☐	1250.000	1243.740	3745548.91	0.4249	P	0.6
6	☐	2500.000	2537.000	7667799.39	0.8667	A	1.1
7	☐	5000.000	4981.634	15367129.68	1.7019	A	0.5
8	☐			2644.82	0.0003	P	1.3

$$y = 3.4163E-004 * x + 3.8385E-006$$

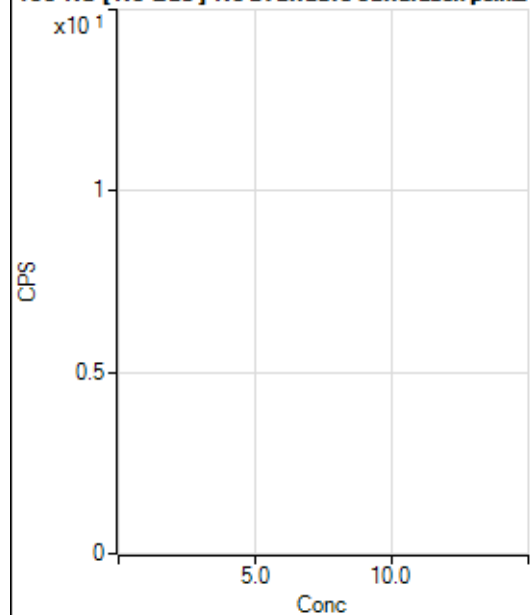
$$R = 1.0000$$

$$DL = 0.01621$$

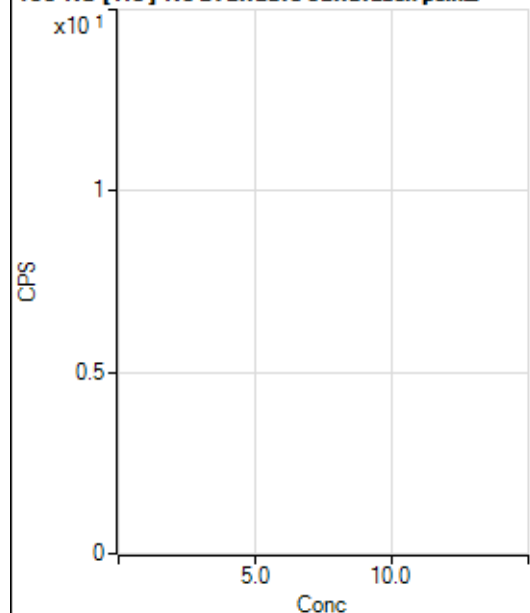
$$BEC = 0.01124$$

Weight: <None>

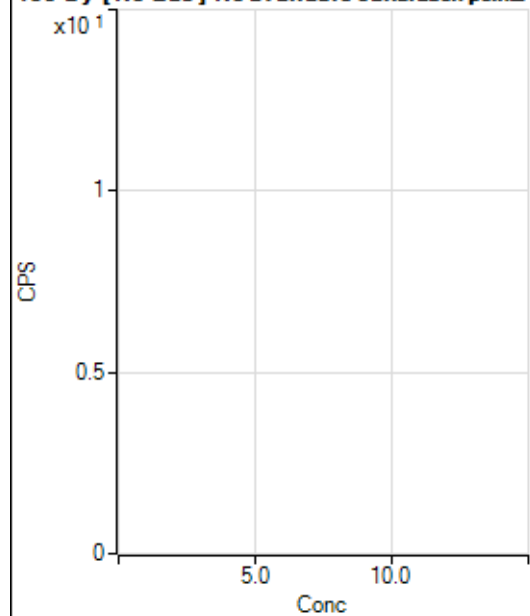
Min Conc: 0

150 Nd [No Gas] No available calibration points

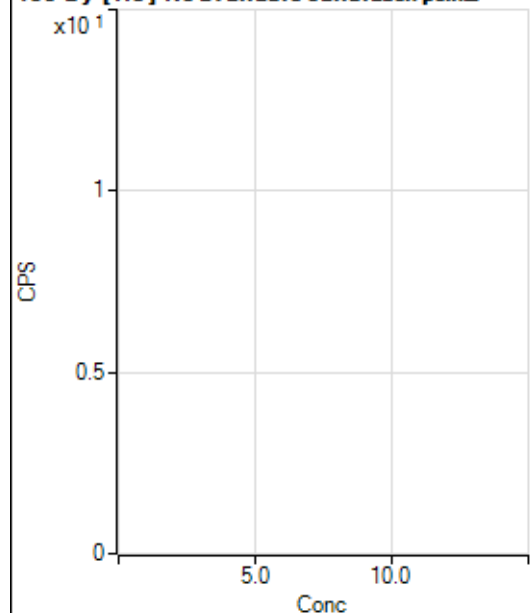
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			2.22		P	173.
3	☐			28.89		P	70.5
4	☐			91.11		P	34.6
5	☐			148.90		P	18.6
6	☐			375.57		P	16.5
7	☐			600.03		P	6.9
8	☐			93.34		P	37.8

150 Nd [He] No available calibration points

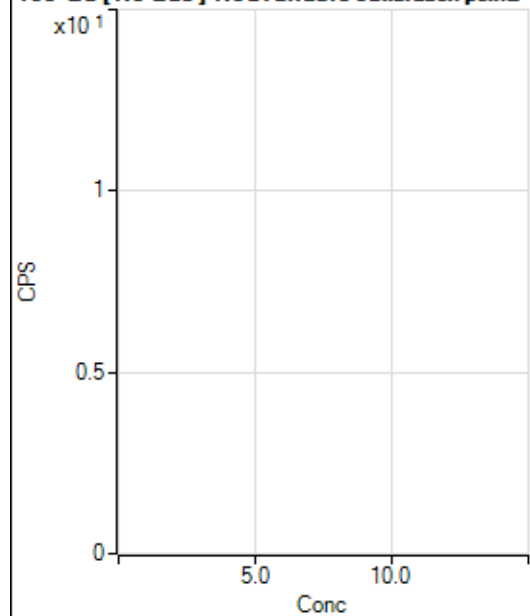
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			4.45		P	86.6
3	☐			10.00		P	57.7
4	☐			20.00		P	33.4
5	☐			28.89		P	13.3
6	☐			60.00		P	22.2
7	☐			62.22		P	27.0
8	☐			28.89		P	73.3

156 Dy [No Gas] No available calibration points

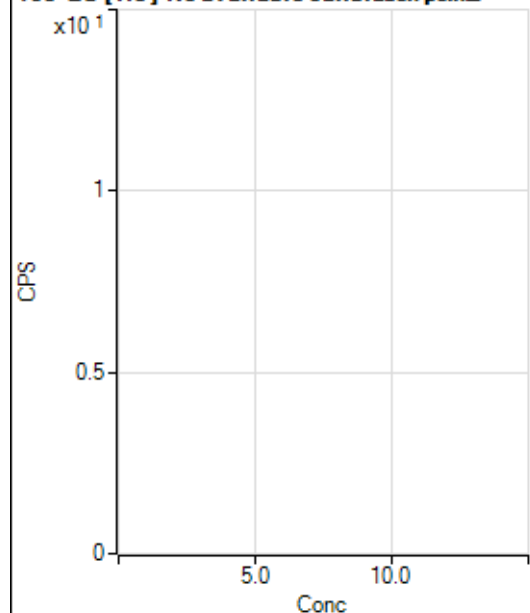
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	86.6
2	☐			13.89		P	91.6
3	☐			13.89		P	173.
4	☐			22.22		P	21.6
5	☐			63.89		P	37.7
6	☐			133.34		P	18.7
7	☐			125.01		P	20.0
8	☐			44.45		P	47.2

156 Dy [He] No available calibration points

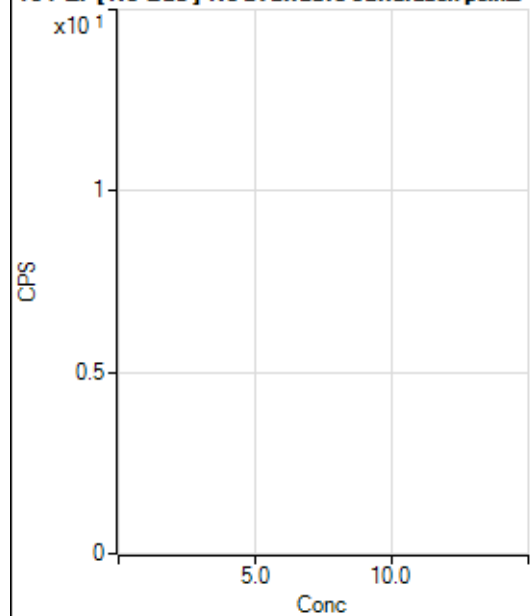
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	78.7
2	☐			8.89		P	86.6
3	☐			14.44		P	35.3
4	☐			37.78		P	10.2
5	☐			60.00		P	14.7
6	☐			116.67		P	15.1
7	☐			168.89		P	11.9
8	☐			22.22		P	34.7

160 Gd [No Gas] Noavailable calibration poin_

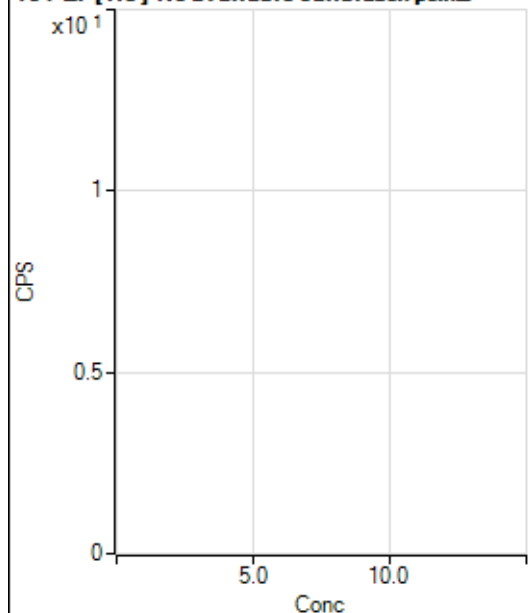
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	46.2
2	☐			77.78		P	16.4
3	☐			50.00		P	44.1
4	☐			55.56		P	8.7
5	☐			69.45		P	25.0
6	☐			133.34		P	27.2
7	☐			97.23		P	13.1
8	☐			72.22		P	6.7

160 Gd [He] No available calibration points

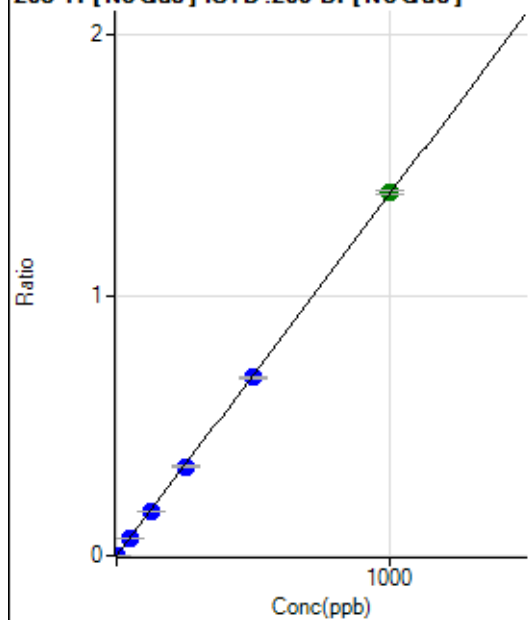
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			178.89		P	15.5
2	☐			168.89		P	2.3
3	☐			168.89		P	19.5
4	☐			176.67		P	17.0
5	☐			164.45		P	13.5
6	☐			175.56		P	22.7
7	☐			171.11		P	4.9
8	☐			163.34		P	22.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	66.8
2	☐			77.78		P	16.4
3	☐			100.01		P	22.0
4	☐			77.78		P	27.0
5	☐			52.78		P	59.8
6	☐			102.78		P	16.9
7	☐			75.00		P	11.1
8	☐			61.12		P	7.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.44		P	17.3
2	☐			40.00		P	36.3
3	☐			33.33		P	10.0
4	☐			40.00		P	28.9
5	☐			43.33		P	23.1
6	☐			70.00		P	14.3
7	☐			51.11		P	7.5
8	☐			51.11		P	26.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	283.35	0.0001	P	30.3
2	☐	1.000	0.946	7266.19	0.0014	P	2.5
3	☐	50.000	49.729	367526.68	0.0690	P	0.7
4	☐	125.000	124.619	933454.51	0.1729	P	0.4
5	☐	250.000	246.895	1800664.30	0.3425	P	0.8
6	☐	500.000	493.890	3525499.82	0.6851	P	1.1
7	☐	1000.000	1003.892	7103416.91	1.3924	A	0.9
8	☐			1769.65	0.0004	P	1.8

$$y = 0.0014 * x + 5.2060E-005$$

$$R = 1.0000$$

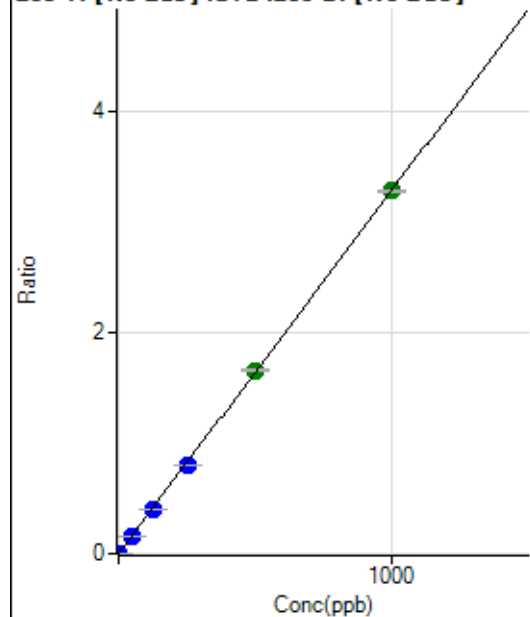
$$DL = 0.03409$$

$$BEC = 0.03754$$

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	433.36	0.0001	P	17.9
2	☐	1.000	0.954	17120.03	0.0032	P	1.6
3	☐	50.000	49.895	873182.30	0.1640	P	0.8
4	☐	125.000	123.255	2186661.14	0.4050	P	0.6
5	☐	250.000	241.927	4179142.46	0.7949	P	0.6
6	☐	500.000	505.275	8542967.03	1.6600	A	0.6
7	☐	1000.000	999.604	16753034.05	3.2840	A	0.5
8	☐			3925.76	0.0009	P	8.0

$$y = 0.0033 * x + 7.9763E-005$$

$$R = 0.9999$$

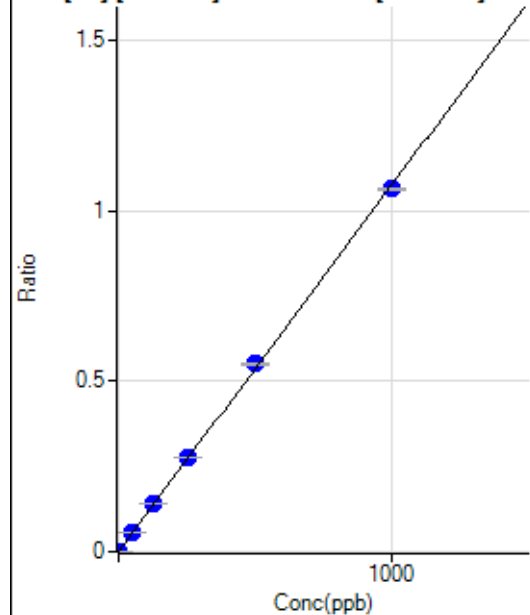
$$DL = 0.01301$$

$$BEC = 0.02428$$

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	901.91	0.0002	P	9.7
2	☐	1.000	1.020	6727.81	0.0013	P	1.0
3	☐	50.000	52.096	298982.10	0.0562	P	0.1
4	☐	125.000	129.058	749703.37	0.1389	P	0.7
5	☐	250.000	259.222	1465526.55	0.2787	P	0.4
6	☐	500.000	513.343	2839884.96	0.5518	P	1.0
7	☐	1000.000	990.411	5430604.98	1.0645	P	0.6
8	☐			18476.19	0.0042	P	1.5

$$y = 0.0011 * x + 1.6588E-004$$

$$R = 0.9998$$

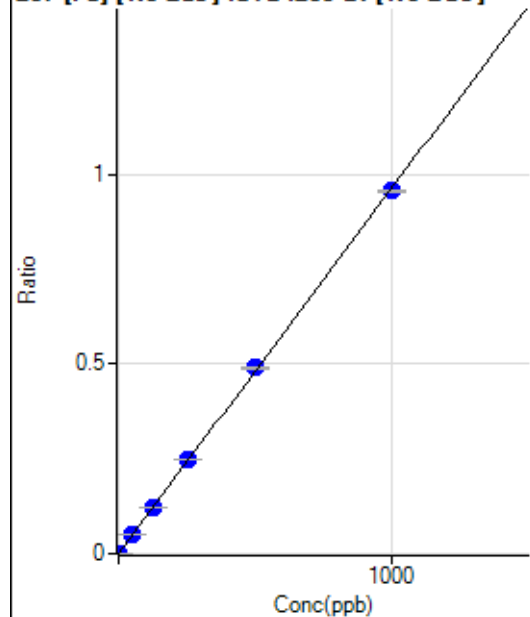
$$DL = 0.04503$$

$$BEC = 0.1544$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	900.06	0.0002	P	6.4
2	☐	1.000	0.976	5884.80	0.0011	P	1.5
3	☐	50.000	51.395	264164.97	0.0496	P	0.7
4	☐	125.000	128.339	667554.24	0.1236	P	0.1
5	☐	250.000	256.729	1299549.22	0.2472	P	0.1
6	☐	500.000	508.600	2519107.26	0.4895	P	0.5
7	☐	1000.000	993.530	4877232.05	0.9561	P	0.5
8	☐			16946.41	0.0039	P	2.1

$$y = 9.6211\text{E-}004 * x + 1.6552\text{E-}004$$

$$R = 0.9999$$

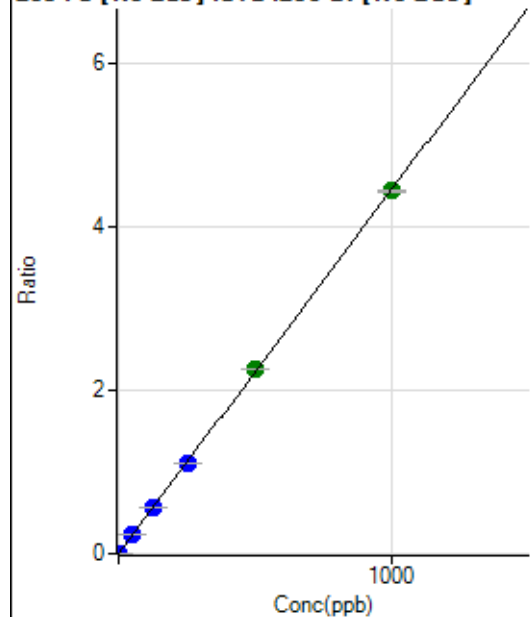
$$DL = 0.03302$$

$$BEC = 0.172$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3374.33	0.0006	P	5.4
2	☐	1.000	0.962	26134.68	0.0049	P	1.7
3	☐	50.000	50.257	1195011.21	0.2244	P	0.7
4	☐	125.000	125.191	3013470.36	0.5581	P	0.1
5	☐	250.000	249.167	5837453.24	1.1103	P	0.3
6	☐	500.000	506.678	11615574.71	2.2571	A	0.2
7	☐	1000.000	996.833	22650100.74	4.4399	A	0.3
8	☐			75204.78	0.0173	P	1.6

$$y = 0.0045 * x + 6.2067\text{E-}004$$

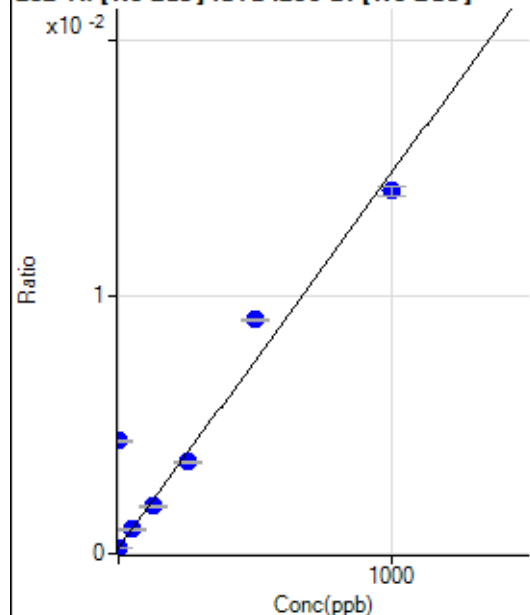
$$R = 1.0000$$

$$DL = 0.02244$$

$$BEC = 0.1394$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1224.17	0.0002	P	0.8
2	☐	1.000	284.804	23343.60	0.0044	P	2.3
3	☐	50.000	49.438	5038.17	0.0009	P	6.4
4	☐	125.000	111.039	9961.42	0.0018	P	1.5
5	☐	250.000	229.310	18771.27	0.0036	P	1.5
6	☐	500.000	608.464	46837.77	0.0091	P	0.8
7	☐	1000.000	952.430	72029.19	0.0141	P	2.3
8	☐			1426.05	0.0003	P	6.3

$$y = 1.4588\text{E-}005 * x + 2.2517\text{E-}004$$

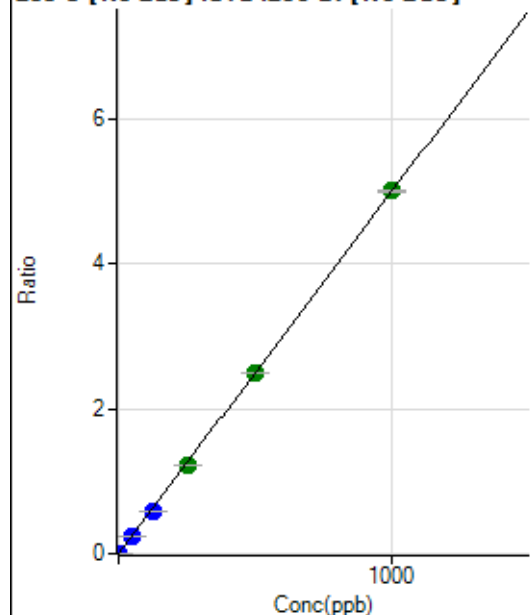
$$R = 0.9477$$

$$DL = 0.3774$$

$$BEC = 15.44$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1514.05	0.0003	P	7.3
2	☐	1.000	0.917	25907.35	0.0049	P	2.3
3	☐	50.000	46.493	1237959.73	0.2325	P	0.5
4	☐	125.000	116.784	3150845.30	0.5836	P	0.2
5	☐	250.000	243.408	6393579.70	1.2160	A	0.5
6	☐	500.000	499.639	12844432.14	2.4958	A	0.8
7	☐	1000.000	1003.031	25559053.52	5.0101	A	0.3
8	☐			4312.00	0.0010	P	9.4

$$y = 0.0050 * x + 2.7857\text{E-}004$$

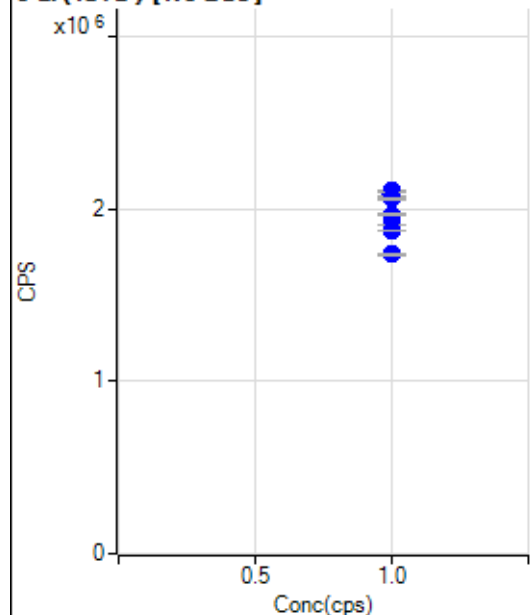
$$R = 1.0000$$

$$DL = 0.01223$$

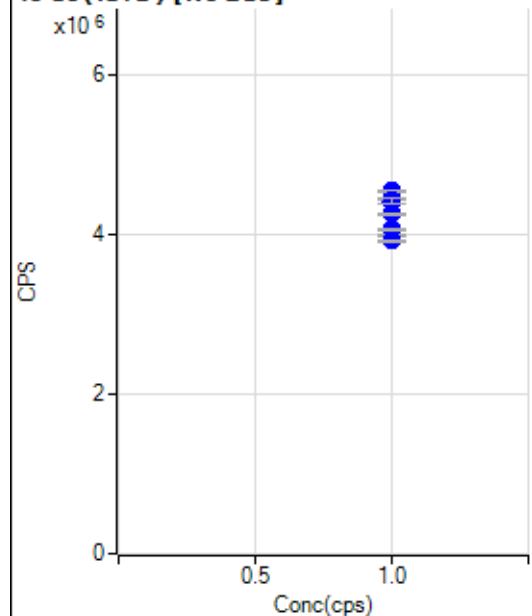
$$BEC = 0.05577$$

Weight: <None>

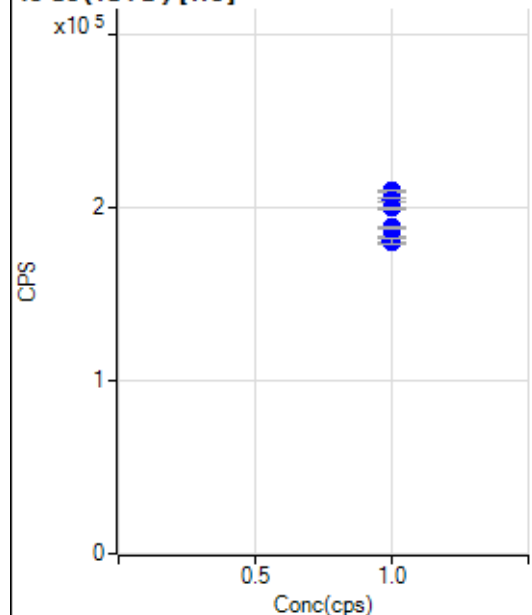
Min Conc: 0

6 Li (ISTD) [No Gas]

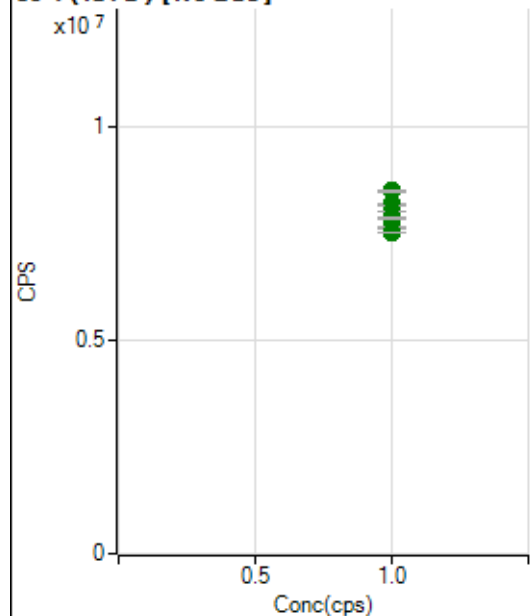
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2103845.92		P	0.5
2	☐	1.000		2068506.24		P	0.4
3	☐	1.000		2086218.27		P	0.7
4	☐	1.000		2059378.53		P	0.5
5	☐	1.000		1966638.65		P	0.7
6	☐	1.000		1907952.87		P	0.3
7	☐	1.000		1873257.70		P	0.2
8	☐	1.000		1735152.20		P	0.4

45 Sc (ISTD) [No Gas]

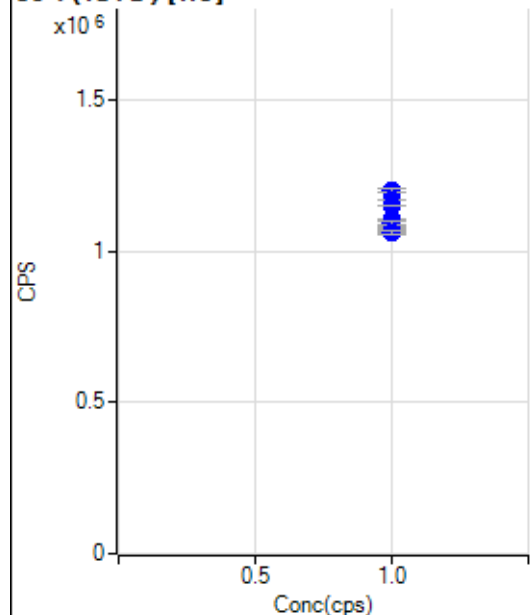
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4553723.41		P	0.4
2	☐	1.000		4451710.17		P	0.6
3	☐	1.000		4428795.72		P	1.2
4	☐	1.000		4264425.88		P	0.7
5	☐	1.000		4010768.19		P	0.2
6	☐	1.000		4003096.23		P	0.8
7	☐	1.000		4073176.91		P	0.5
8	☐	1.000		3929053.69		P	0.6

45 Sc (ISTD) [He]

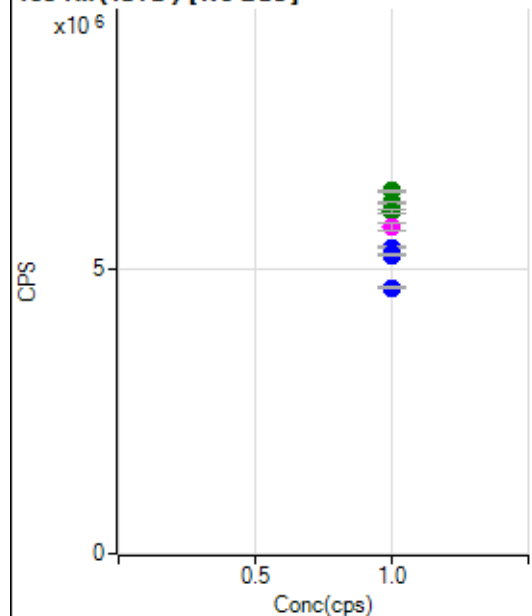
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		209603.22		P	0.8
2	☐	1.000		204410.24		P	0.8
3	☐	1.000		199764.72		P	0.6
4	☐	1.000		188832.17		P	0.2
5	☐	1.000		181234.03		P	1.4
6	☐	1.000		182804.89		P	0.4
7	☐	1.000		188319.08		P	0.5
8	☐	1.000		180428.65		P	1.6

89 Y (ISTD) [No Gas]

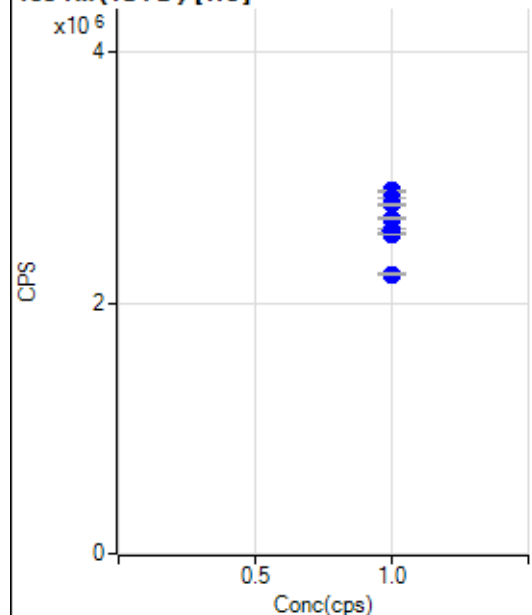
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8500256.96		A	0.4
2	☐	1.000		8180413.97		A	0.3
3	☐	1.000		8153115.92		A	0.4
4	☐	1.000		8030016.20		A	0.1
5	☐	1.000		7657208.91		A	0.6
6	☐	1.000		7642478.98		A	0.7
7	☐	1.000		7865467.38		A	0.8
8	☐	1.000		7521338.57		A	0.5

89 Y(ISTD) [He]

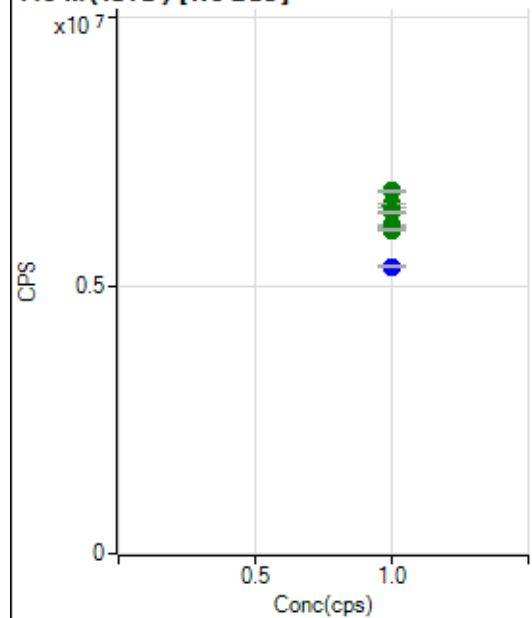
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1200203.16		P	1.1
2	☐	1.000		1170507.01		P	0.3
3	☐	1.000		1151459.21		P	0.5
4	☐	1.000		1106601.76		P	0.4
5	☐	1.000		1067199.64		P	0.3
6	☐	1.000		1076890.65		P	0.5
7	☐	1.000		1093374.88		P	0.9
8	☐	1.000		1062448.59		P	1.7

103 Rh(ISTD) [No Gas]

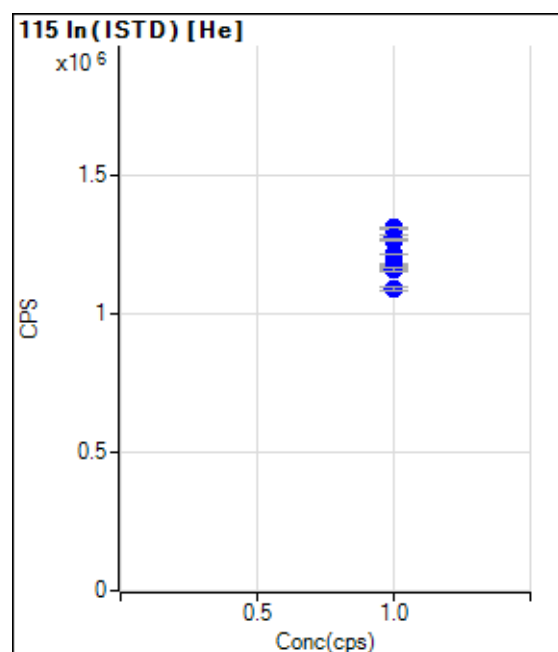
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6386122.76		A	0.4
2	☐	1.000		6182015.37		A	0.3
3	☐	1.000		6036675.96		A	1.2
4	☐	1.000		5757534.16		M	2.6
5	☐	1.000		5398010.27		P	0.3
6	☐	1.000		5278843.91		P	0.6
7	☐	1.000		5260981.41		P	0.4
8	☐	1.000		4687111.22		P	0.6

103 Rh (ISTD) [He]

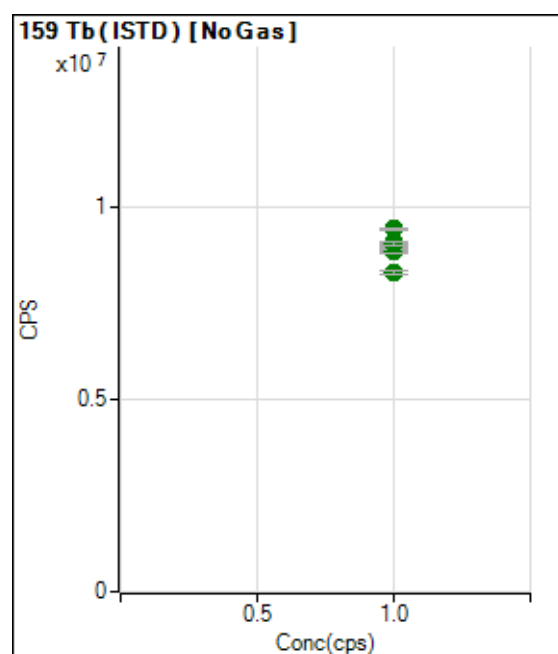
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2896855.86		P	0.7
2	☐	1.000		2840157.84		P	0.5
3	☐	1.000		2789754.89		P	0.6
4	☐	1.000		2676610.06		P	0.8
5	☐	1.000		2584767.17		P	1.2
6	☐	1.000		2563513.78		P	0.6
7	☐	1.000		2545477.17		P	0.3
8	☐	1.000		2233805.71		P	1.3

115 In (ISTD) [No Gas]

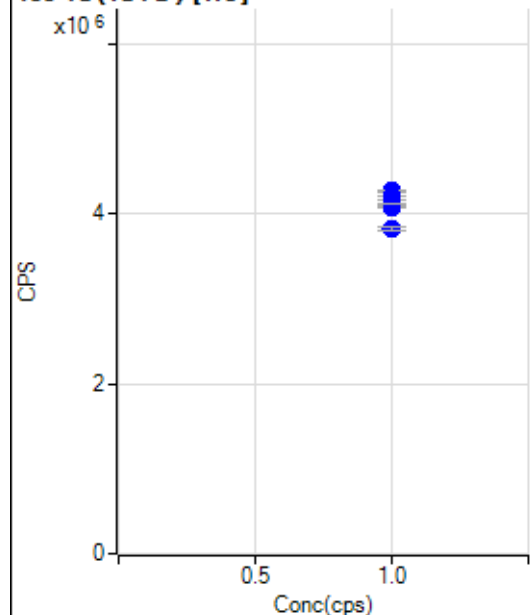
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6772148.18		A	0.7
2	☐	1.000		6527622.39		A	0.4
3	☐	1.000		6497362.26		A	0.7
4	☐	1.000		6378487.04		A	0.8
5	☐	1.000		6120645.48		A	0.4
6	☐	1.000		6048046.01		A	1.1
7	☐	1.000		6051907.00		A	0.3
8	☐	1.000		5360252.45		P	0.6



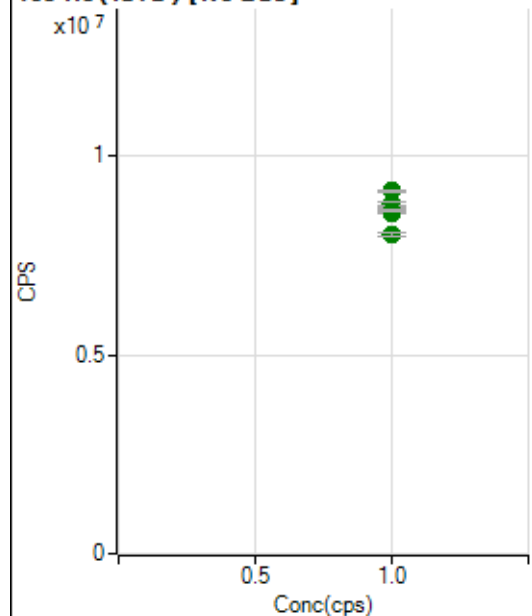
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1307970.82		P	0.8
2	☐	1.000		1274995.49		P	0.7
3	☐	1.000		1265134.21		P	0.6
4	☐	1.000		1213635.12		P	0.1
5	☐	1.000		1175307.74		P	0.6
6	☐	1.000		1164970.55		P	1.0
7	☐	1.000		1158372.35		P	0.9
8	☐	1.000		1087765.69		P	1.2



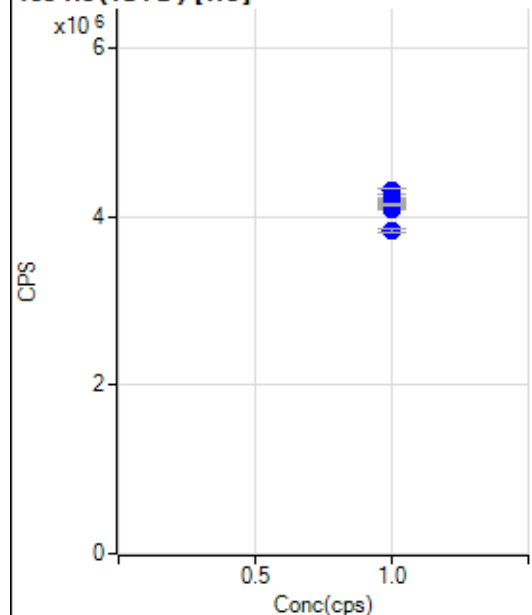
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9413489.65		A	0.3
2	☐	1.000		8924573.48		A	0.6
3	☐	1.000		8998084.52		A	0.4
4	☐	1.000		9059503.27		A	0.6
5	☐	1.000		8815233.97		A	0.8
6	☐	1.000		8847071.95		A	0.9
7	☐	1.000		9029640.35		A	0.8
8	☐	1.000		8268997.79		A	1.2

159 Tb (ISTD) [He]

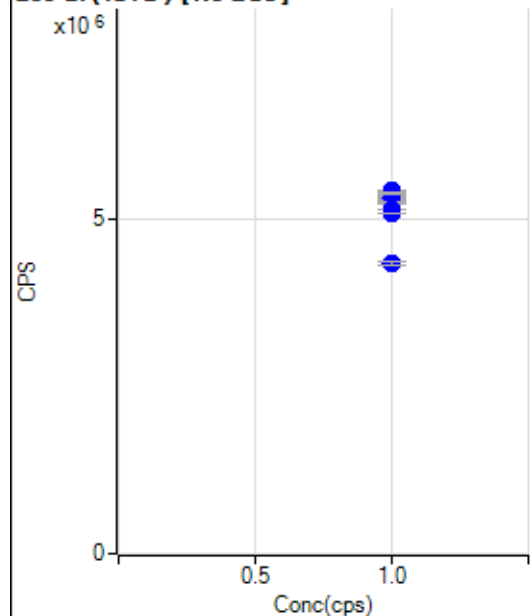
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4267559.62		P	0.7
2	☐	1.000		4208046.53		P	0.3
3	☐	1.000		4200565.60		P	0.1
4	☐	1.000		4158918.20		P	0.4
5	☐	1.000		4080085.04		P	0.8
6	☐	1.000		4080342.06		P	0.2
7	☐	1.000		4118174.66		P	0.5
8	☐	1.000		3813477.90		P	1.3

165 Ho (ISTD) [No Gas]

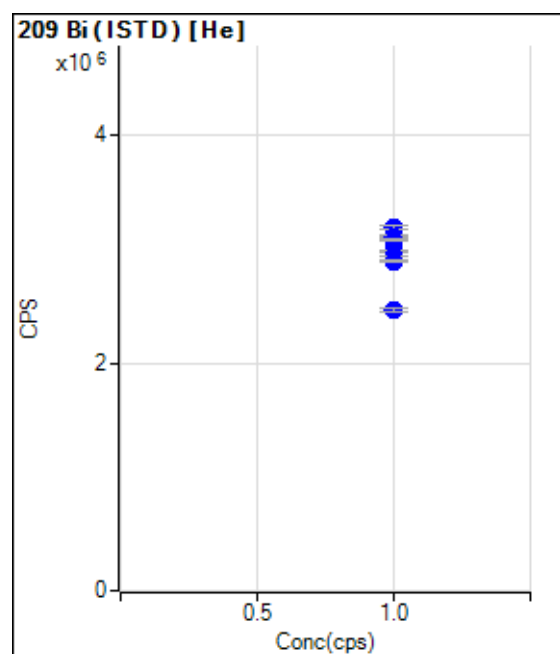
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9134787.18		A	0.3
2	☐	1.000		8682208.87		A	0.3
3	☐	1.000		8680067.99		A	0.5
4	☐	1.000		8788558.36		A	1.1
5	☐	1.000		8589871.38		A	0.4
6	☐	1.000		8596074.15		A	0.5
7	☐	1.000		8625784.83		A	0.4
8	☐	1.000		8045826.48		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4301983.27		P	1.5
2	☐	1.000		4182316.47		P	0.2
3	☐	1.000		4210805.35		P	0.3
4	☐	1.000		4170531.88		P	0.5
5	☐	1.000		4090644.49		P	0.9
6	☐	1.000		4101979.73		P	0.4
7	☐	1.000		4135740.15		P	0.4
8	☐	1.000		3830855.57		P	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5436545.27		P	0.6
2	☐	1.000		5329557.00		P	0.4
3	☐	1.000		5324662.63		P	0.9
4	☐	1.000		5399092.21		P	0.5
5	☐	1.000		5257766.73		P	0.3
6	☐	1.000		5146338.26		P	0.0
7	☐	1.000		5101471.56		P	0.4
8	☐	1.000		4357124.80		P	1.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3187199.47		P	1.0
2	☐	1.000		3103966.83		P	0.4
3	☐	1.000		3108757.59		P	0.8
4	☐	1.000		3075101.52		P	0.6
5	☐	1.000		2984832.52		P	0.6
6	☐	1.000		2939958.43		P	0.4
7	☐	1.000		2891719.79		P	0.5
8	☐	1.000		2467908.47		P	1.3

US EPA Tune Check Sample Report

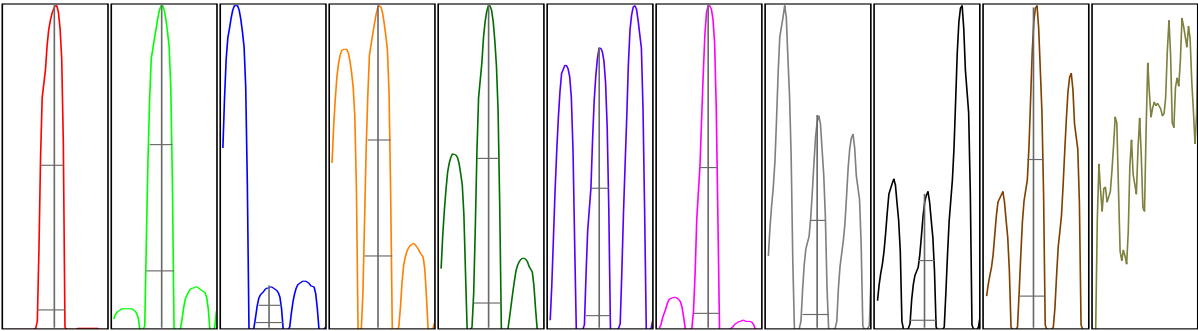
Batch Folder D:\ICP-MS Data\P7112219 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	9735	0.43	5.00	
24	743004	0.50	5.00	
25	101002	0.33	5.00	
26	111492	0.47	5.00	
59	66171	0.69	5.00	
113	8637	0.61	5.00	
115	99616	0.90	5.00	
206	23145	1.26	5.00	
207	21509	0.83	5.00	
208	50045	0.56	5.00	
220	53	3.79		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	9677	9706	9765	9752	9774
24	737078	742435	743235	745686	746589
25	100449	101015	101212	101330	101005
26	110642	111349	111992	111706	111771
59	65616	66033	65970	66786	66449
113	8571	8653	8593	8690	8679
115	98314	99042	100335	100289	100101
206	22671	23187	23244	23467	23155
207	21254	21497	21487	21755	21551
208	49708	50005	49878	50415	50218
220	52	53	52	56	51

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	15504	9.00	8.9 - 9.1		0.787	0.900	
24	1142305	23.95	23.9 - 24.1		0.798	0.900	
25	148325	24.90	24.9 - 25.1		0.806	0.900	
26	171311	25.90	25.9 - 26.1		0.798	0.900	
59	109142	58.95	58.9 - 59.1		0.804	0.900	
113	16383	113.00	112.9 - 113.1		0.734	0.900	
115	192443	115.00	114.9 - 115.1		0.747	0.900	
206	48876	206.00	205.9 - 206.1		0.772	0.900	
207	43845	206.95	206.9 - 207.1		0.736	0.900	
208	104282	207.95	207.9 - 208.1		0.745	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
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	8.7	V	Deflect	15.4	V
Extract 2	-145.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	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	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	17409	0.64	
89	246671	0.63	
205	19476	0.83	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	17460	17425	17447	17495	17216
89	246250	246189	248446	247903	244565
205	19454	19498	19505	19689	19235

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	8.9	V	Deflect	2.6	V
Extract 2	-150.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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	190	V			