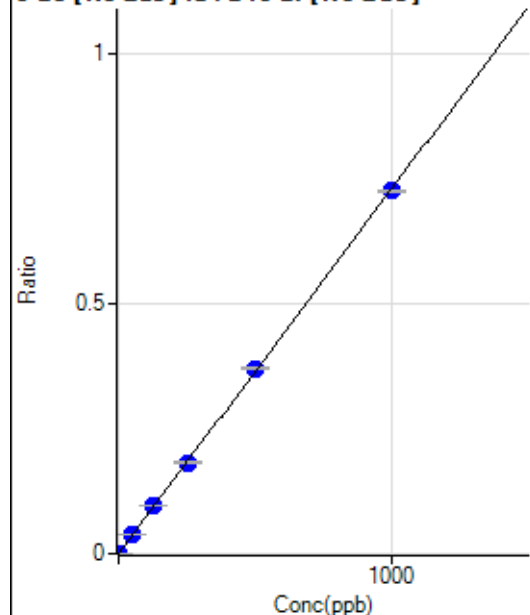


Batch Folder: D:\ICP-MS Data\P7062818 MS.b\
Analysis File: P7062818 MS.batch.bin
DA Date-Time: 2018-06-29 00:45:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-06-28 12:44:16
2			
3	005CALS.d	S02	2018-06-28 12:52:01
4	006CALS.d	S03	2018-06-28 12:55:54
5	007CALS.d	S04	2018-06-28 12:59:47
6	008CALS.d	S05	2018-06-28 13:03:38
7	009CALS.d	S06	2018-06-28 13:07:25
8	010CALS.d	S07	2018-06-28 13:11:12
9	011CALS.d	S08	2018-06-28 13:14:55

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	29.0
2	☐	0.100					
3	☐	1.000	1.010	933.39	0.0008	P	4.4
4	☐	50.000	52.791	48479.53	0.0385	P	1.1
5	☐	125.000	130.219	122174.56	0.0950	P	1.4
6	☐	250.000	248.431	242494.21	0.1812	P	1.9
7	☐	500.000	508.864	472151.80	0.3712	P	0.9
8	☐	1000.000	995.168	902715.43	0.7259	P	0.8
9	☐			594.47	0.0005	P	10.2

$$y = 7.2936E-004 * x + 3.3157E-005$$

$$R = 0.9999$$

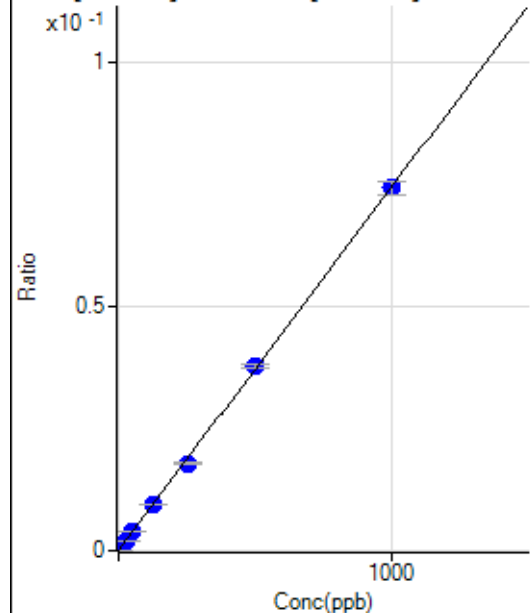
$$DL = 0.03962$$

$$BEC = 0.04546$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0001	P	43.1
2	☐	2.500					
3	☐	25.000	25.154	2328.05	0.0019	P	5.4
4	☐	50.000	51.279	4853.75	0.0039	P	4.8
5	☐	125.000	128.135	12299.89	0.0096	P	0.4
6	☐	250.000	239.124	23819.55	0.0178	P	1.4
7	☐	500.000	508.122	48049.56	0.0378	P	1.6
8	☐	1000.000	998.199	92208.86	0.0742	P	3.5
9	☐			5692.95	0.0047	P	8.5

$$y = 7.4234E-005 * x + 5.1943E-005$$

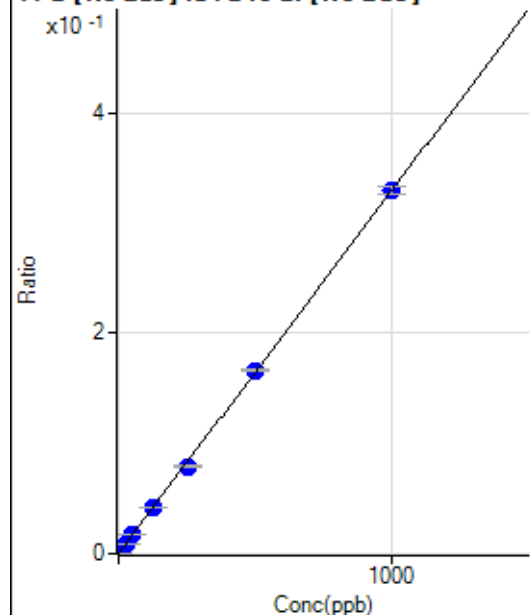
$$R = 0.9999$$

$$DL = 0.904$$

$$BEC = 0.6997$$

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	252.79	0.0002	P	25.8
2	☐	2.500					
3	☐	25.000	27.151	11098.99	0.0091	P	1.5
4	☐	50.000	52.476	21994.51	0.0175	P	1.2
5	☐	125.000	128.370	54602.04	0.0425	P	0.3
6	☐	250.000	239.583	105771.84	0.0791	P	1.5
7	☐	500.000	503.739	211137.31	0.1660	P	1.1
8	☐	1000.000	1000.136	409531.49	0.3293	P	2.3
9	☐			25636.46	0.0211	P	6.0

$$y = 3.2906E-004 * x + 2.1505E-004$$

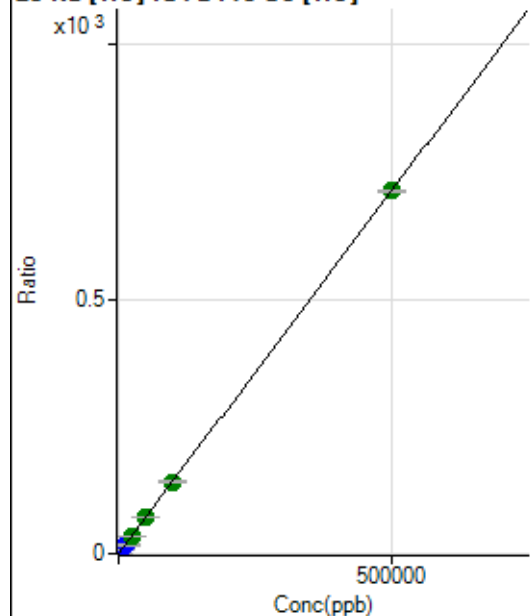
$$R = 0.9999$$

$$DL = 0.5064$$

$$BEC = 0.6535$$

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	5117.74	0.0408	P	2.8
2	☐	50.000					
3	☐	500.000	463.786	88913.24	0.7019	P	0.5
4	☐	5000.000	4965.483	926820.79	7.1187	P	0.4
5	☐	12500.000	11944.861	2324650.12	17.0673	P	4.6
6	☐	25000.000	24156.708	4460656.52	34.4744	A	0.8
7	☐	50000.000	51276.197	8816936.48	73.1313	A	1.2
8	☐	100000.00	99199.060	17710277.48	141.4419	A	1.4
9	☐	500000.00	500088.99	88999588.10	712.8813	A	0.6

$$y = 0.0014 * x + 0.0408$$

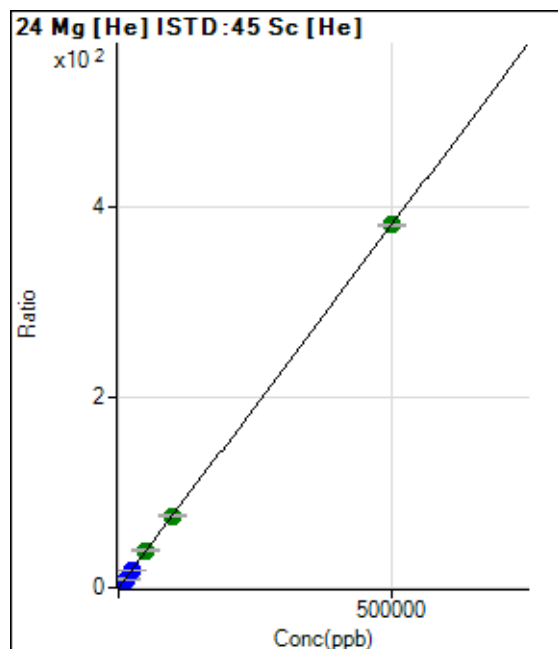
$$R = 1.0000$$

$$DL = 2.418$$

$$BEC = 28.63$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1711.28	0.0136	P	4.0
2	☐	50.000					
3	☐	500.000	450.038	45135.30	0.3563	P	2.2
4	☐	5000.000	4926.379	490158.73	3.7648	P	0.3
5	☐	12500.000	11740.823	1219629.49	8.9537	P	4.6
6	☐	25000.000	24129.929	2379165.14	18.3874	P	0.9
7	☐	50000.000	51424.118	4722429.79	39.1706	A	1.6
8	☐	100000.00	98956.645	9436430.77	75.3644	A	1.4
9	☐	500000.00	500129.52	47546319.47	380.8383	A	0.5

$$y = 7.6145\text{E-}004 * x + 0.0136$$

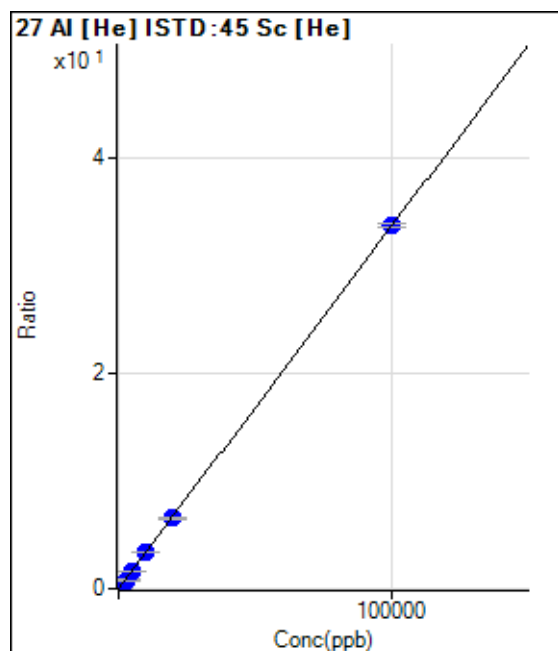
$$R = 1.0000$$

$$DL = 2.141$$

$$BEC = 17.92$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0002	P	94.9
2	☐	2.000					
3	☐	20.000	19.355	847.28	0.0067	P	2.5
4	☐	1000.000	999.235	43784.52	0.3363	P	0.7
5	☐	2500.000	2342.707	107390.91	0.7882	P	4.4
6	☐	5000.000	4782.169	208169.85	1.6088	P	1.2
7	☐	10000.000	10104.857	409839.61	3.3993	P	0.9
8	☐	20000.000	19417.163	817923.62	6.5319	P	0.9
9	☐	100000.00	100120.91	4204716.85	33.6795	P	0.9

$$y = 3.3639\text{E-}004 * x + 1.7768\text{E-}004$$

$$R = 1.0000$$

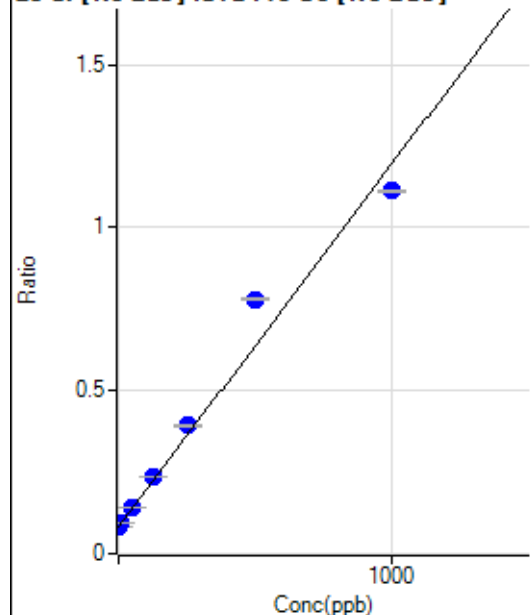
$$DL = 1.504$$

$$BEC = 0.5282$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	215663.52	0.0823	P	0.2
2	☐	1.000					
3	☐	10.000	11.828	256375.70	0.0955	P	1.4
4	☐	50.000	51.921	386534.47	0.1400	P	0.3
5	☐	125.000	138.909	661020.11	0.2367	P	1.0
6	☐	250.000	279.261	1109321.74	0.3926	P	0.8
7	☐	500.000	627.680	2026400.11	0.7798	P	0.6
8	☐	1000.000	926.992	2866983.42	1.1124	P	0.9
9	☐			278567.29	0.1065	P	1.0

$$y = 0.0011 * x + 0.0823$$

$$R = 0.9866$$

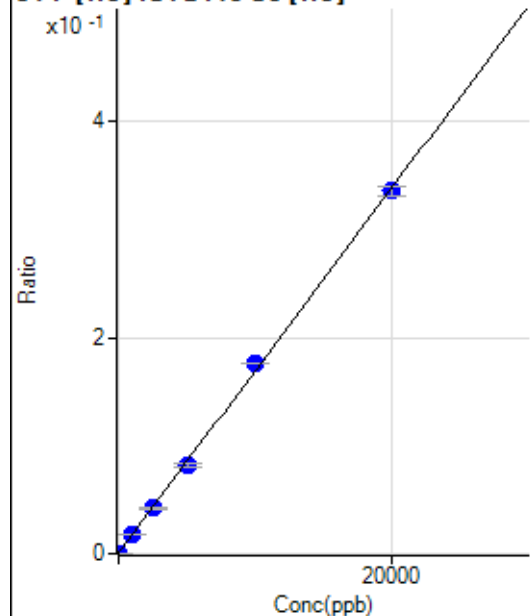
$$DL = 0.4559$$

$$BEC = 74.08$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-3.740	69.45	0.0006	P	6.9
2	☐	0.000					
3	☐	0.000	3.740	86.11	0.0007	P	20.6
4	☐	1000.000	1034.683	2355.84	0.0181	P	1.7
5	☐	2500.000	2456.782	5740.21	0.0421	P	7.2
6	☐	5000.000	4781.548	10531.95	0.0814	P	4.6
7	☐	10000.000	10392.689	21240.76	0.1762	P	0.2
8	☐	20000.000	19861.937	42090.91	0.3361	P	2.6
9	☐			102.78	0.0008	P	5.3

$$y = 1.6892E-005 * x + 6.1707E-004$$

$$R = 0.9997$$

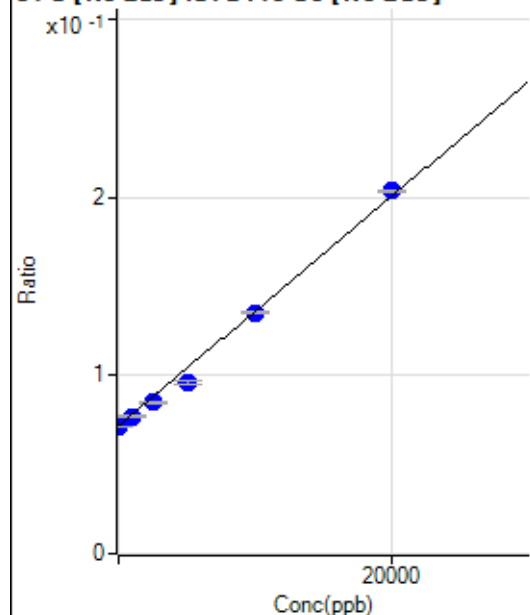
$$DL = 15.85$$

$$BEC = 36.53$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	98.980	190088.99	0.0726	P	0.7
2	☐	0.000					
3	☐	0.000	-98.980	191437.74	0.0713	P	1.5
4	☐	1000.000	800.279	212787.65	0.0771	P	1.0
5	☐	2500.000	2029.614	237389.56	0.0850	P	0.9
6	☐	5000.000	3769.503	271769.95	0.0962	P	2.5
7	☐	10000.000	9813.048	351175.25	0.1351	P	0.9
8	☐	20000.000	20469.885	525248.15	0.2038	P	0.9
9	☐			162749.08	0.0622	P	1.2

$$y = 6.4424\text{E-}006 * x + 0.0719$$

$$R = 0.9979$$

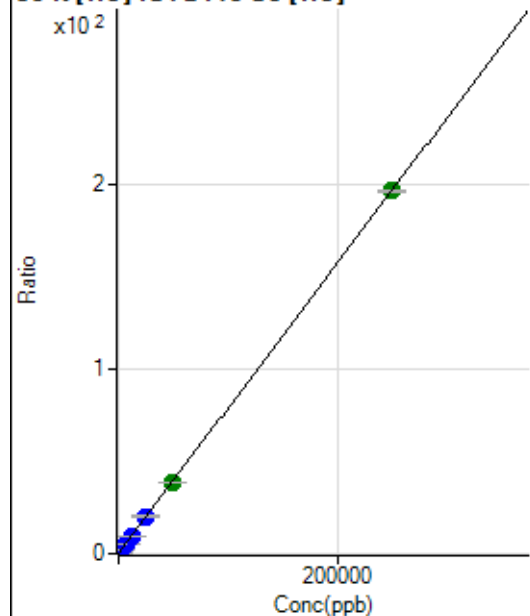
$$DL = 365.2$$

$$BEC = 1.116\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19802.82	0.1580	P	2.4
2	☐	50.000					
3	☐	500.000	486.393	68419.70	0.5402	P	1.5
4	☐	2500.000	2501.782	276500.57	2.1238	P	0.6
5	☐	6250.000	5962.486	659653.57	4.8432	P	4.2
6	☐	12500.000	12044.796	1245058.57	9.6226	P	0.8
7	☐	25000.000	25466.994	2431680.44	20.1696	P	1.6
8	☐	50000.000	49337.761	4874487.52	38.9270	A	0.8
9	☐	250000.00	250115.70	24556509.58	196.6959	A	0.7

$$y = 7.8579\text{E-}004 * x + 0.1580$$

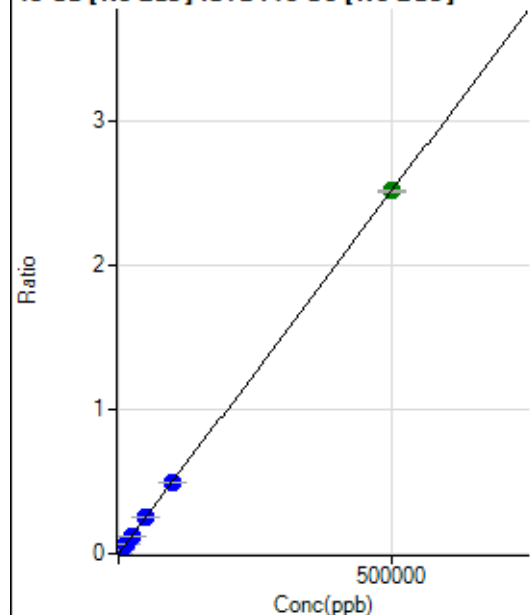
$$R = 1.0000$$

$$DL = 14.21$$

$$BEC = 201$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50.00	0.0000	P	16.7
2	☐	50.000					
3	☐	500.000	465.257	6346.05	0.0024	P	2.1
4	☐	5000.000	4944.476	68815.71	0.0249	P	0.9
5	☐	12500.000	12286.816	172915.97	0.0619	P	2.2
6	☐	25000.000	23735.359	337828.38	0.1196	P	2.5
7	☐	50000.000	49535.329	648503.05	0.2496	P	0.8
8	☐	100000.00	98639.329	1280704.28	0.4969	P	1.1
9	☐	500000.00	500387.75	6590551.36	2.5207	A	0.8

$$y = 5.0376\text{E-}006 * x + 1.9089\text{E-}005$$

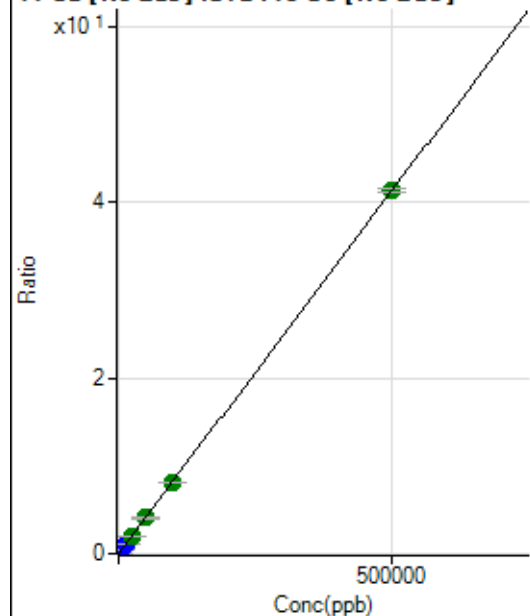
$$R = 1.0000$$

$$DL = 1.9$$

$$BEC = 3.789$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3108.81	0.0012	P	11.1
2	☐	50.000					
3	☐	500.000	451.873	103385.08	0.0385	P	1.4
4	☐	5000.000	4907.678	1121943.20	0.4064	P	0.2
5	☐	12500.000	12280.913	2835287.34	1.0152	P	1.6
6	☐	25000.000	23508.396	5487594.52	1.9422	A	2.0
7	☐	50000.000	49350.986	10591651.71	4.0760	A	1.2
8	☐	100000.00	97949.050	20846413.66	8.0886	A	1.2
9	☐	500000.00	500556.12	108058011.4	41.3307	A	1.1

$$y = 8.2567\text{E-}005 * x + 0.0012$$

$$R = 1.0000$$

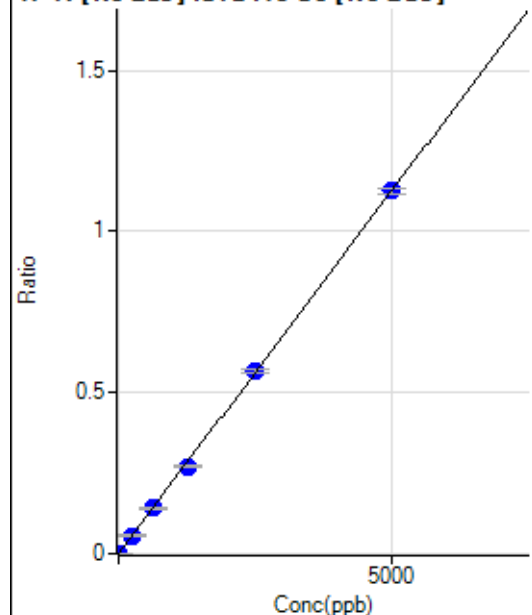
$$DL = 4.771$$

$$BEC = 14.37$$

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	75.00	0.0000	P	48.2
2	☐	0.500					
3	☐	5.000	4.707	2922.63	0.0011	P	2.3
4	☐	250.000	250.838	155941.07	0.0565	P	1.1
5	☐	625.000	625.380	393188.20	0.1408	P	1.9
6	☐	1250.000	1198.341	762214.28	0.2697	P	2.4
7	☐	2500.000	2519.716	1473767.07	0.5671	P	1.3
8	☐	5000.000	5002.968	2902107.70	1.1261	P	1.6
9	☐			1672.40	0.0006	P	3.4

$$y = 2.2507\text{E-}004 * x + 2.8583\text{E-}005$$

$$R = 0.9999$$

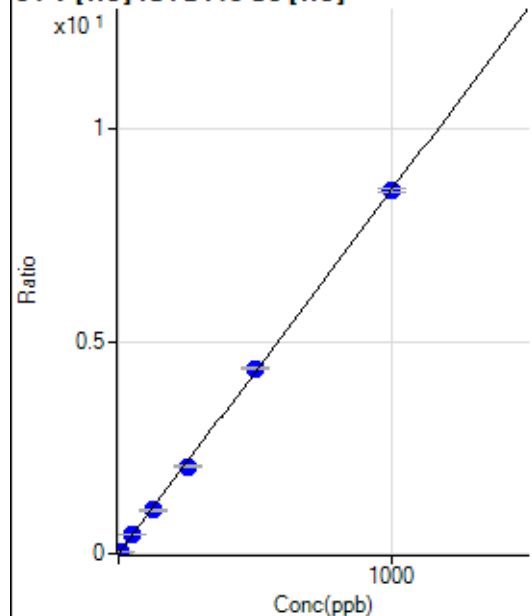
$$DL = 0.1835$$

$$BEC = 0.127$$

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	6.67	0.0001	P	50.1
2	☐	0.500					
3	☐	5.000	4.699	5099.86	0.0403	P	3.6
4	☐	50.000	50.765	56556.86	0.4344	P	0.7
5	☐	125.000	120.003	139862.93	1.0268	P	4.4
6	☐	250.000	240.502	266268.88	2.0578	P	0.9
7	☐	500.000	510.197	526309.97	4.3654	P	1.1
8	☐	1000.000	997.864	1069090.09	8.5380	P	1.1
9	☐			366.68	0.0029	P	2.3

$$y = 0.0086 * x + 5.3247\text{E-}005$$

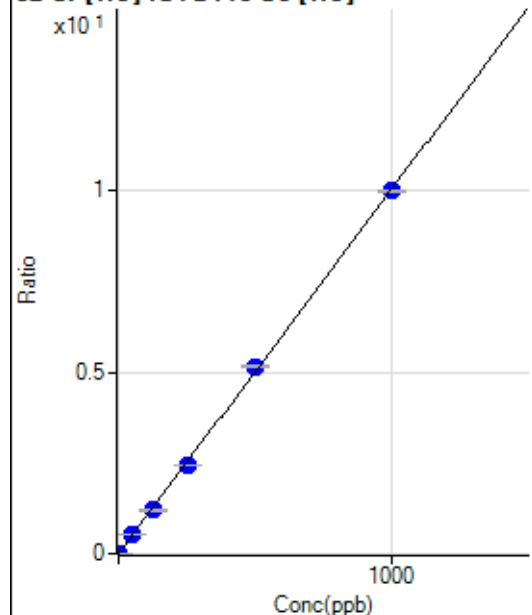
$$R = 0.9999$$

$$DL = 0.009363$$

$$BEC = 0.006223$$

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	144.45	0.0012	P	4.6
2	☐	0.200					
3	☐	2.000	2.099	2811.42	0.0222	P	5.4
4	☐	50.000	51.594	67479.08	0.5183	P	1.5
5	☐	125.000	120.573	164785.93	1.2097	P	4.0
6	☐	250.000	243.593	316079.97	2.4428	P	0.6
7	☐	500.000	512.217	619148.25	5.1354	P	1.0
8	☐	1000.000	995.967	1250263.21	9.9843	P	0.7
9	☐			41860.52	0.3353	P	0.8

$$y = 0.0100 * x + 0.0012$$

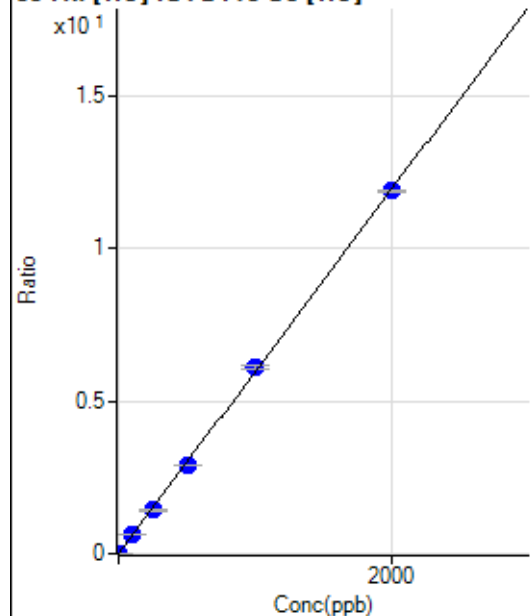
$$R = 0.9999$$

$$DL = 0.01576$$

$$BEC = 0.1149$$

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	37.78	0.0003	P	41.1
2	☐	0.100					
3	☐	1.000	1.008	798.92	0.0063	P	2.2
4	☐	100.000	102.403	79466.35	0.6104	P	0.1
5	☐	250.000	241.763	196246.99	1.4406	P	4.2
6	☐	500.000	486.705	375221.16	2.8999	P	0.7
7	☐	1000.000	1024.035	735556.09	6.1011	P	1.5
8	☐	2000.000	1992.216	1486261.92	11.8691	P	0.8
9	☐			7124.05	0.0571	P	2.8

$$y = 0.0060 * x + 3.0057E-004$$

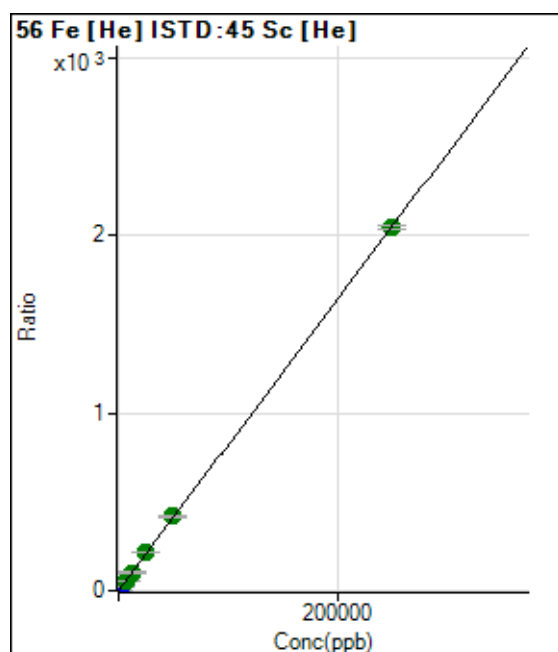
$$R = 0.9999$$

$$DL = 0.06215$$

$$BEC = 0.05045$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2046.50	0.0163	P	2.2
2	☐	5.000					
3	☐	50.000	50.530	54482.93	0.4301	P	0.2
4	☐	2500.000	2642.697	2819643.03	21.6574	P	0.6
5	☐	6250.000	6209.758	6928953.86	50.8680	A	4.4
6	☐	12500.000	12558.575	13308990.11	102.8584	A	0.7
7	☐	25000.000	26430.563	26096718.64	216.4561	A	1.1
8	☐	50000.000	51234.817	52537422.93	419.5780	A	1.4
9	☐	250000.00	249606.63	255183813.1	2,044.043	A	1.1

$$y = 0.0082 * x + 0.0163$$

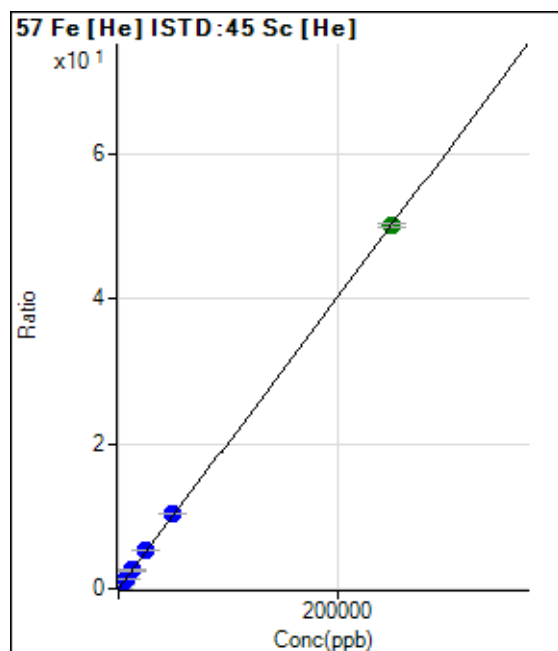
$$R = 1.0000$$

$$DL = 0.131$$

$$BEC = 1.993$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.31	0.0024	P	29.2
2	☐	5.000					
3	☐	50.000	50.617	1587.16	0.0125	P	9.8
4	☐	2500.000	2665.702	69979.65	0.5375	P	0.7
5	☐	6250.000	6281.799	172116.01	1.2635	P	4.2
6	☐	12500.000	12582.705	327155.07	2.5284	P	0.7
7	☐	25000.000	26811.872	649229.99	5.3850	P	1.2
8	☐	50000.000	51713.988	1300309.79	10.3842	P	0.9
9	☐	250000.00	249469.42	6252658.41	50.0844	A	1.0

$$y = 2.0075E-004 * x + 0.0024$$

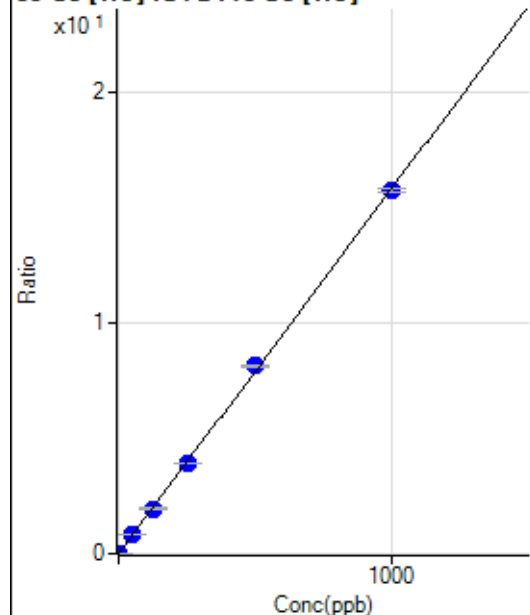
$$R = 1.0000$$

$$DL = 10.32$$

$$BEC = 11.79$$

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	58.89	0.0005	P	16.7
2	☐	0.100					
3	☐	1.000	1.014	2094.63	0.0165	P	1.4
4	☐	50.000	52.292	107893.74	0.8287	P	0.9
5	☐	125.000	122.973	265355.46	1.9482	P	4.4
6	☐	250.000	245.854	503908.12	3.8945	P	0.2
7	☐	500.000	513.820	981239.05	8.1388	P	1.1
8	☐	1000.000	994.266	1971998.60	15.7485	P	1.1
9	☐			24166.80	0.1936	P	1.8

$$y = 0.0158 * x + 4.6939E-004$$

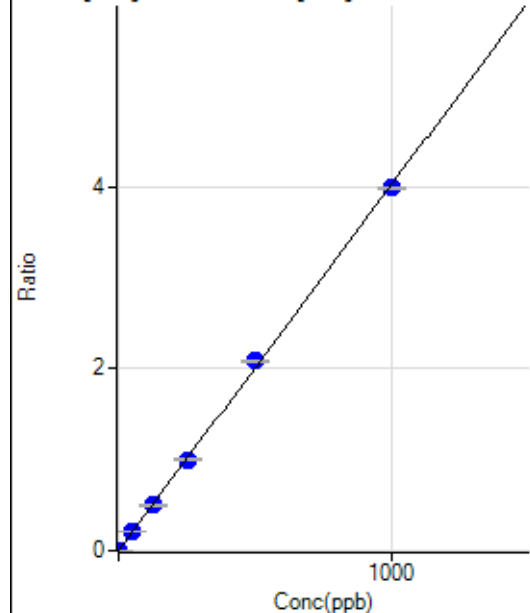
$$R = 0.9998$$

$$DL = 0.01482$$

$$BEC = 0.02964$$

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	137.78	0.0011	P	22.0
2	☐	0.100					
3	☐	1.000	1.042	670.03	0.0053	P	5.3
4	☐	50.000	52.776	27767.61	0.2133	P	1.5
5	☐	125.000	124.323	68233.74	0.5009	P	4.1
6	☐	250.000	248.624	129474.43	1.0007	P	1.3
7	☐	500.000	518.044	251233.84	2.0838	P	1.1
8	☐	1000.000	991.268	499205.96	3.9864	P	0.6
9	☐			14411.68	0.1154	P	1.4

$$y = 0.0040 * x + 0.0011$$

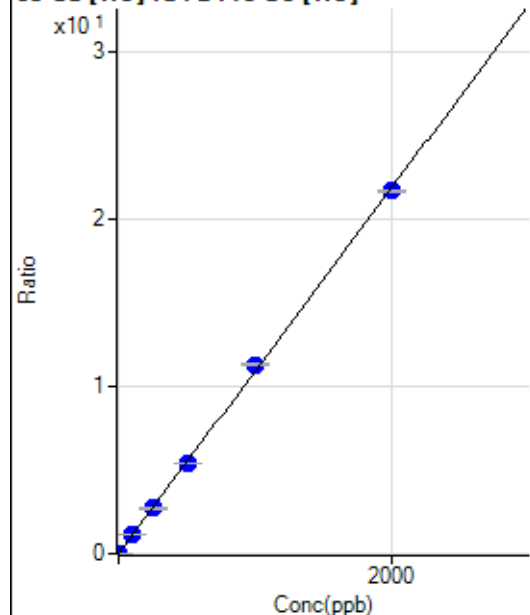
$$R = 0.9998$$

$$DL = 0.181$$

$$BEC = 0.2737$$

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	313.34	0.0025	P	4.0
2	☐	0.200					
3	☐	2.000	2.092	3217.08	0.0254	P	2.5
4	☐	100.000	106.552	152162.13	1.1687	P	0.2
5	☐	250.000	247.184	368839.99	2.7080	P	4.3
6	☐	500.000	495.307	701787.88	5.4238	P	0.7
7	☐	1000.000	1033.434	1364021.63	11.3138	P	1.2
8	☐	2000.000	1984.481	2720331.56	21.7233	P	0.5
9	☐			5657.85	0.0453	P	1.6

$$y = 0.0109 * x + 0.0025$$

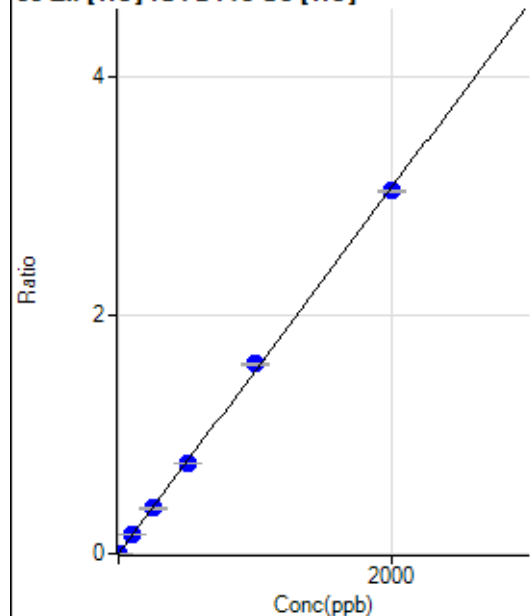
$$R = 0.9998$$

$$DL = 0.02735$$

$$BEC = 0.2283$$

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	70.00	0.0006	P	0.9
2	☐	0.200					
3	☐	2.000	2.354	528.91	0.0042	P	6.2
4	☐	100.000	103.620	20795.02	0.1597	P	1.0
5	☐	250.000	247.134	51783.90	0.3802	P	4.5
6	☐	500.000	495.650	98585.43	0.7619	P	0.7
7	☐	1000.000	1035.510	191840.36	1.5912	P	1.2
8	☐	2000.000	1983.510	381613.22	3.0474	P	0.6
9	☐			2335.78	0.0187	P	1.3

$$y = 0.0015 * x + 5.5831E-004$$

$$R = 0.9998$$

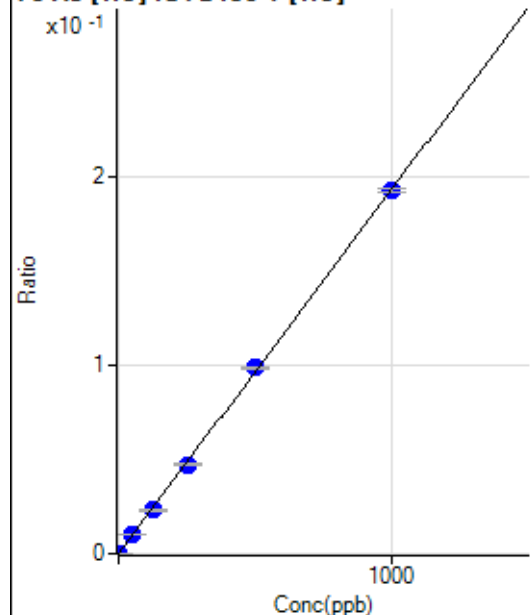
$$DL = 0.00982$$

$$BEC = 0.3635$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.32	0.0000	P	66.2
2	☐	0.100					
3	☐	1.000	0.998	151.85	0.0002	P	21.4
4	☐	50.000	51.679	7826.22	0.0100	P	0.8
5	☐	125.000	120.672	19207.86	0.0233	P	5.5
6	☐	250.000	245.520	36970.93	0.0474	P	1.5
7	☐	500.000	509.983	72041.87	0.0985	P	1.3
8	☐	1000.000	996.585	145446.23	0.1924	P	1.2
9	☐			234.57	0.0003	P	6.3

$$y = 1.9306\text{E-}004 * x + 5.7858\text{E-}006$$

$$R = 0.9999$$

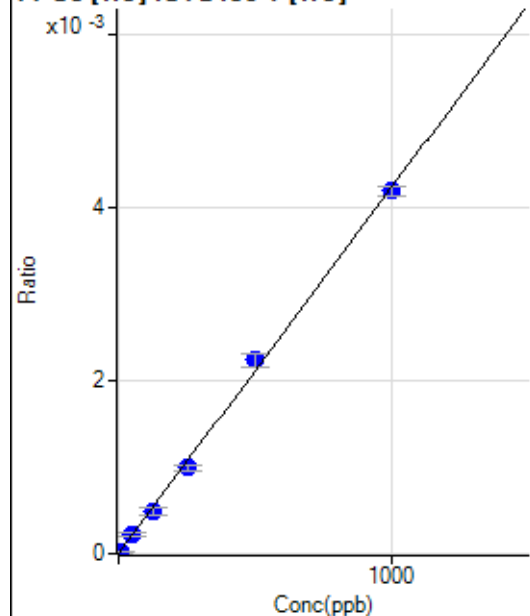
$$DL = 0.05954$$

$$BEC = 0.02997$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	0.500					
3	☐	5.000	4.460	16.67	0.0000	P	87.3
4	☐	50.000	53.322	178.90	0.0002	P	15.3
5	☐	125.000	114.824	401.12	0.0005	P	20.8
6	☐	250.000	235.332	777.81	0.0010	P	6.4
7	☐	500.000	528.152	1634.56	0.0022	P	6.9
8	☐	1000.000	990.700	3165.95	0.0042	P	2.7
9	☐			4.45	0.0000	P	86.6

$$y = 4.2255\text{E-}006 * x + 2.9468\text{E-}006$$

$$R = 0.9992$$

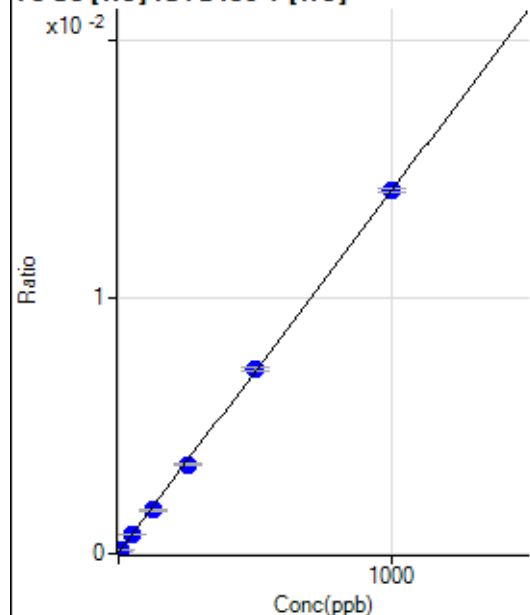
$$DL = 1.812$$

$$BEC = 0.6974$$

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	41.98	0.0001	P	17.3
2	☐	0.500					
3	☐	5.000	5.420	101.24	0.0001	P	16.0
4	☐	50.000	49.863	594.46	0.0008	P	3.0
5	☐	125.000	118.279	1418.60	0.0017	P	4.3
6	☐	250.000	242.454	2707.07	0.0035	P	1.2
7	☐	500.000	505.816	5254.70	0.0072	P	1.9
8	☐	1000.000	999.823	10690.43	0.0141	P	1.0
9	☐			46.91	0.0001	P	14.5

$$y = 1.4087\text{E-}005 * x + 5.5871\text{E-}005$$

$$R = 0.9999$$

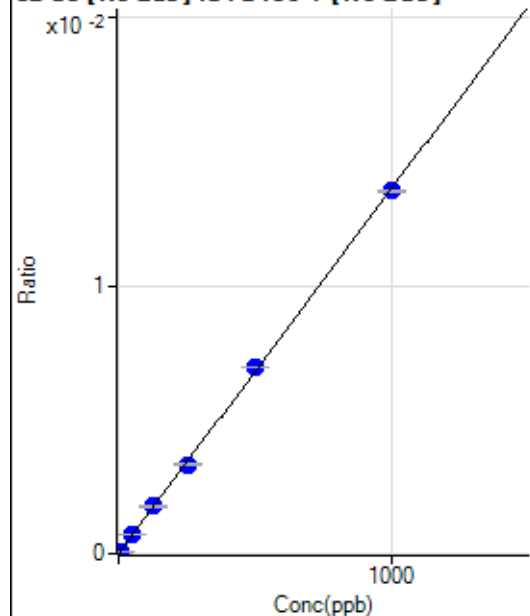
$$DL = 2.063$$

$$BEC = 3.966$$

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	-30.25	0.0000	P	-50.
2	☐	0.500					
3	☐	5.000	4.962	281.94	0.0001	P	9.5
4	☐	50.000	53.238	3414.83	0.0007	P	0.4
5	☐	125.000	129.402	8430.07	0.0018	P	1.0
6	☐	250.000	244.908	16286.96	0.0033	P	3.7
7	☐	500.000	512.126	31165.33	0.0070	P	0.3
8	☐	1000.000	994.498	60372.84	0.0135	P	0.8
9	☐			85.14	0.0000	P	41.4

$$y = 1.3621\text{E-}005 * x - 6.7136\text{E-}006$$

$$R = 0.9999$$

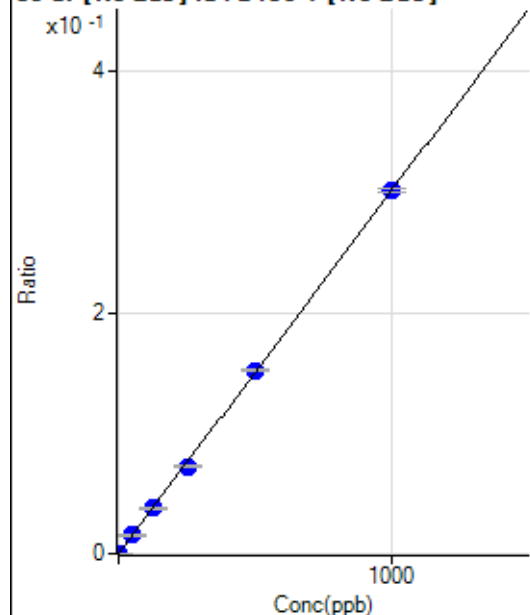
$$DL = 0.7411$$

$$BEC = -0.4929$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	313.90	0.0001	P	7.7
2	☐	0.100					
3	☐	1.000	0.948	1641.83	0.0004	P	6.3
4	☐	50.000	50.471	72463.54	0.0152	P	1.7
5	☐	125.000	125.853	182016.22	0.0379	P	2.7
6	☐	250.000	240.456	354020.56	0.0724	P	1.9
7	☐	500.000	505.022	679414.67	0.1519	P	1.4
8	☐	1000.000	999.745	1340814.46	0.3007	P	0.9
9	☐			7104.87	0.0016	P	5.4

$$y = 3.0071\text{E-}004 * x + 6.9564\text{E-}005$$

$$R = 0.9999$$

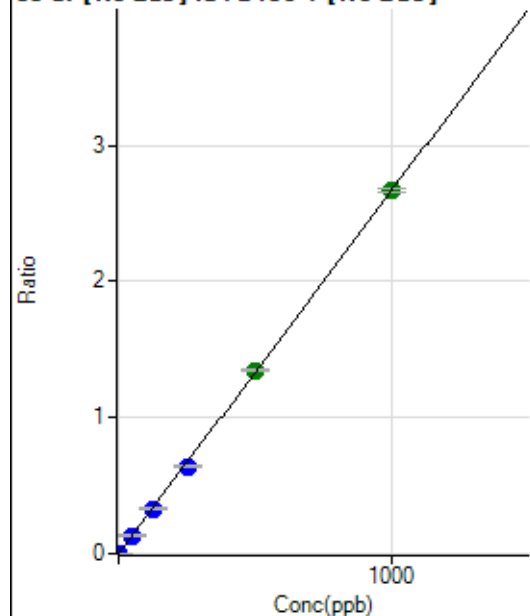
$$DL = 0.05363$$

$$BEC = 0.2313$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	12.4
2	☐	0.100					
3	☐	1.000	0.992	12328.05	0.0027	P	0.4
4	☐	50.000	50.139	635638.30	0.1337	P	1.3
5	☐	125.000	124.509	1594269.81	0.3321	P	1.9
6	☐	250.000	239.911	3129900.59	0.6399	P	2.1
7	☐	500.000	505.703	6031302.48	1.3488	A	0.9
8	☐	1000.000	999.725	11888813.46	2.6663	A	1.1
9	☐			60171.09	0.0134	P	1.8

$$y = 0.0027 * x + 1.7242\text{E-}005$$

$$R = 0.9999$$

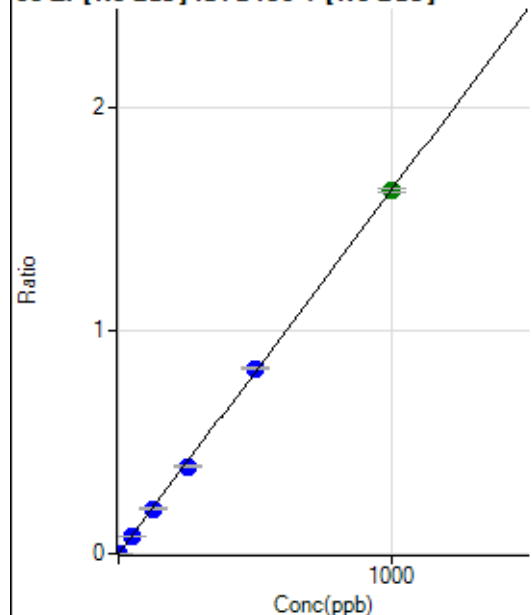
$$DL = 0.002412$$

$$BEC = 0.006465$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	363.91	0.0001	P	17.1
2	☐	0.100					
3	☐	1.000	0.982	7763.50	0.0017	P	2.8
4	☐	50.000	49.757	384945.94	0.0810	P	1.2
5	☐	125.000	124.049	968832.72	0.2018	P	2.0
6	☐	250.000	240.211	1911075.82	0.3907	P	2.1
7	☐	500.000	508.946	3701302.34	0.8277	P	1.2
8	☐	1000.000	998.105	7237450.42	1.6232	A	1.1
9	☐			1869.64	0.0004	P	2.9

$$y = 0.0016 * x + 8.0627E-005$$

$$R = 0.9999$$

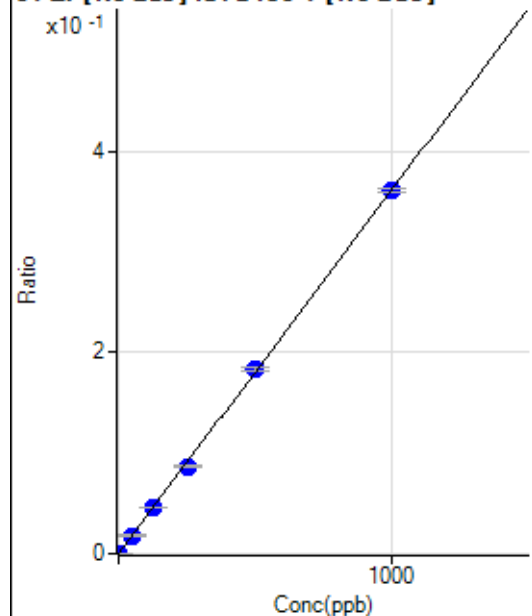
$$DL = 0.02545$$

$$BEC = 0.04958$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.90	0.0000	P	11.4
2	☐	0.100					
3	☐	1.000	0.946	1697.40	0.0004	P	5.6
4	☐	50.000	49.704	85381.61	0.0180	P	3.1
5	☐	125.000	125.583	217731.14	0.0454	P	1.8
6	☐	250.000	239.625	423193.17	0.0865	P	1.9
7	☐	500.000	507.980	819990.50	0.1834	P	1.5
8	☐	1000.000	998.546	1607132.35	0.3604	P	1.2
9	☐			347.24	0.0001	P	15.8

$$y = 3.6094E-004 * x + 2.5249E-005$$

$$R = 0.9999$$

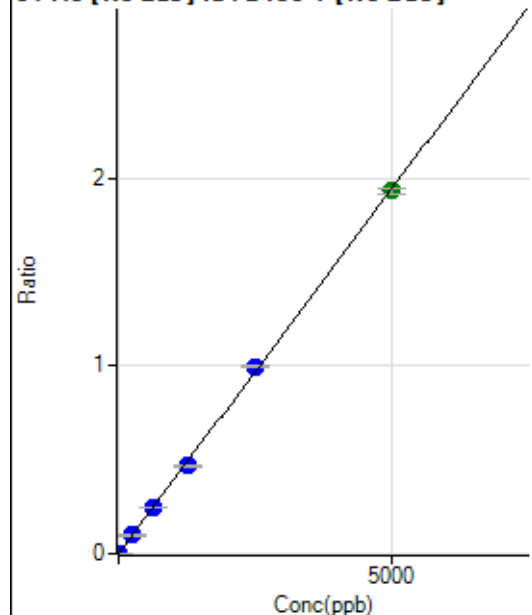
$$DL = 0.02388$$

$$BEC = 0.06995$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	32.6
2	☐	0.500					
3	☐	5.000	4.863	8839.20	0.0019	P	5.3
4	☐	250.000	252.253	465125.37	0.0979	P	1.3
5	☐	625.000	627.470	1168494.50	0.2434	P	2.0
6	☐	1250.000	1202.396	2281352.16	0.4664	P	1.8
7	☐	2500.000	2567.031	4452441.98	0.9957	P	1.2
8	☐	5000.000	4977.964	8609111.30	1.9308	A	1.3
9	☐			9712.08	0.0022	P	4.1

$$y = 3.8787\text{E-}004 * x + 2.3381\text{E-}005$$

$$R = 0.9998$$

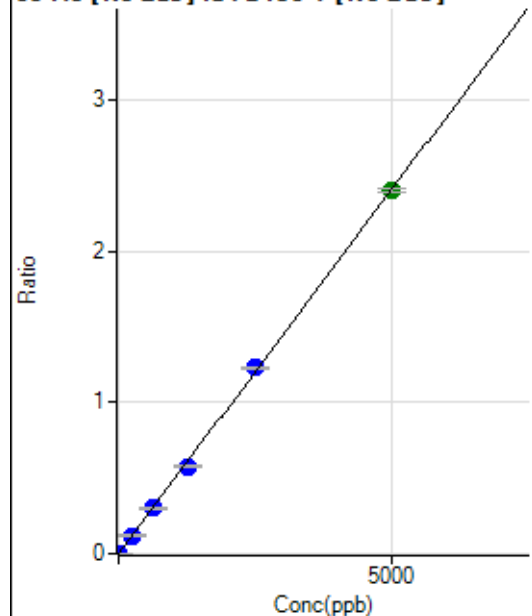
$$DL = 0.05903$$

$$BEC = 0.06028$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	43.8
2	☐	0.500					
3	☐	5.000	4.631	10326.32	0.0022	P	4.5
4	☐	250.000	250.736	573421.89	0.1206	P	1.2
5	☐	625.000	622.842	1438750.24	0.2997	P	2.2
6	☐	1250.000	1200.359	2825241.30	0.5776	P	2.0
7	☐	2500.000	2557.003	5501843.79	1.2304	P	1.0
8	☐	5000.000	4984.142	10693264.30	2.3982	A	1.2
9	☐			15492.34	0.0035	P	2.7

$$y = 4.8117\text{E-}004 * x + 2.4653\text{E-}006$$

$$R = 0.9999$$

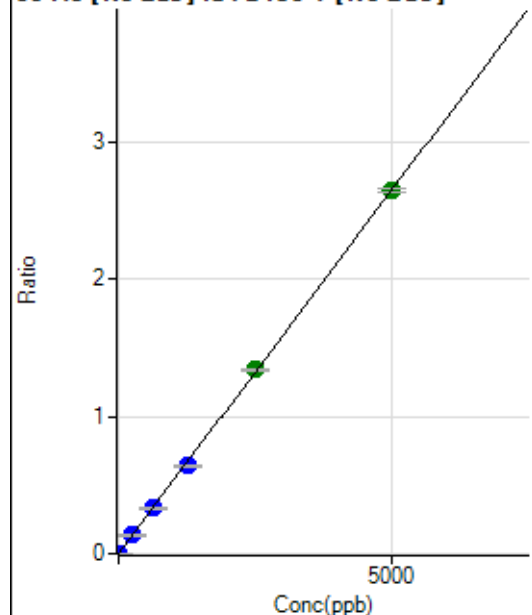
$$DL = 0.006726$$

$$BEC = 0.005123$$

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	47.23	0.0000	P	20.3
2	☐	0.500					
3	☐	5.000	4.874	11972.15	0.0026	P	1.1
4	☐	250.000	251.759	632346.50	0.1330	P	1.7
5	☐	625.000	625.278	1586338.25	0.3304	P	1.5
6	☐	1250.000	1208.938	3125155.67	0.6389	P	2.1
7	☐	2500.000	2531.972	5983227.04	1.3380	A	0.9
8	☐	5000.000	4994.157	11767368.84	2.6391	A	1.2
9	☐			19319.30	0.0043	P	1.5

$$y = 5.2844\text{E-}004 * x + 1.0467\text{E-}005$$

$$R = 0.9999$$

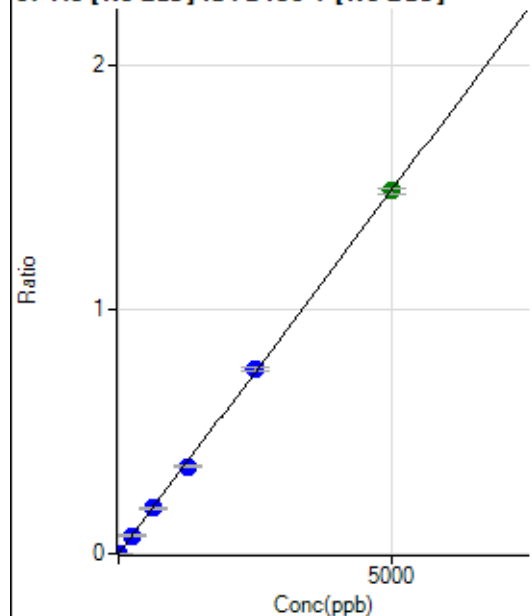
$$DL = 0.01207$$

$$BEC = 0.01981$$

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	22.22	0.0000	P	57.1
2	☐	0.500					
3	☐	5.000	4.718	6532.34	0.0014	P	5.4
4	☐	250.000	250.745	355289.72	0.0748	P	1.3
5	☐	625.000	627.236	897693.06	0.1870	P	2.1
6	☐	1250.000	1199.606	1749354.01	0.3576	P	2.3
7	☐	2500.000	2539.575	3385422.04	0.7571	P	1.1
8	☐	5000.000	4992.494	6635979.23	1.4883	A	1.5
9	☐			9776.01	0.0022	P	5.3

$$y = 2.9811\text{E-}004 * x + 4.9238\text{E-}006$$

$$R = 0.9999$$

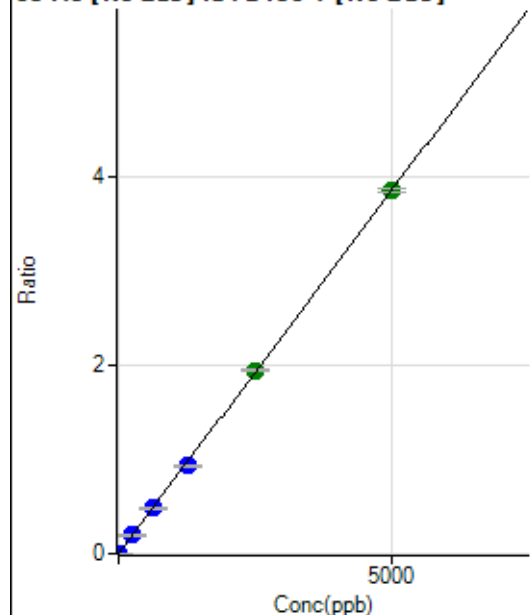
$$DL = 0.02831$$

$$BEC = 0.01652$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	52.8
2	☐	0.500					
3	☐	5.000	4.786	17141.49	0.0037	P	2.2
4	☐	250.000	251.747	923280.31	0.1943	P	1.5
5	☐	625.000	626.338	2320256.65	0.4833	P	1.6
6	☐	1250.000	1214.012	4582208.53	0.9368	P	2.1
7	☐	2500.000	2521.911	8701840.39	1.9460	A	1.2
8	☐	5000.000	4997.787	17195207.33	3.8564	A	1.1
9	☐			24747.33	0.0055	P	0.7

$$y = 7.7162\text{E-}004 * x + 9.2358\text{E-}006$$

$$R = 1.0000$$

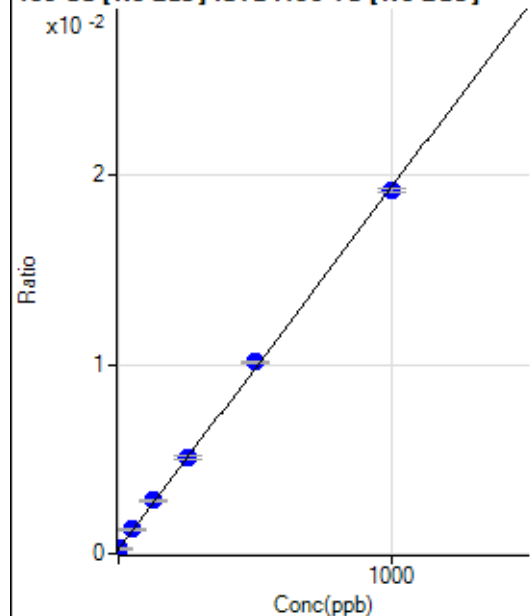
$$DL = 0.01897$$

$$BEC = 0.01197$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1261.22	0.0002	P	3.2
2	☐	0.100					
3	☐	1.000	1.648	1472.37	0.0003	P	6.4
4	☐	50.000	54.444	7413.35	0.0013	P	4.0
5	☐	125.000	134.017	16329.51	0.0028	P	1.6
6	☐	250.000	253.212	30180.26	0.0051	P	4.2
7	☐	500.000	516.581	56940.40	0.0101	P	0.9
8	☐	1000.000	989.556	107362.22	0.0192	P	0.9
9	☐			1336.24	0.0002	P	9.9

$$y = 1.9135\text{E-}005 * x + 2.2923\text{E-}004$$

$$R = 0.9998$$

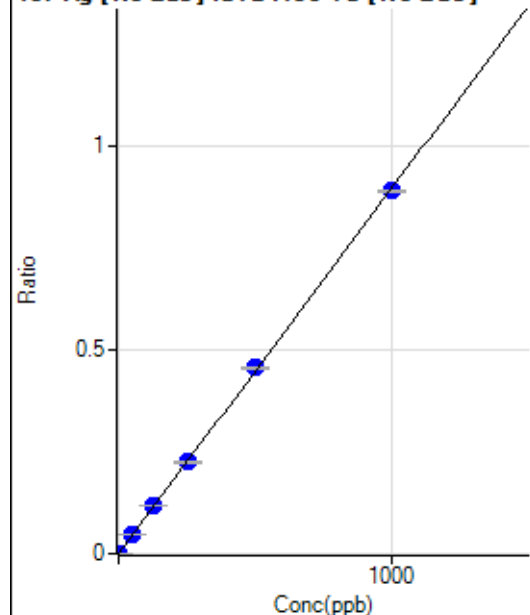
$$DL = 1.154$$

$$BEC = 11.98$$

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	47.23	0.0000	P	19.8
2	☐	0.100					
3	☐	1.000	1.100	5606.91	0.0010	P	5.6
4	☐	50.000	53.383	278728.22	0.0478	P	1.1
5	☐	125.000	132.467	693080.44	0.1186	P	0.7
6	☐	250.000	251.256	1337339.20	0.2249	P	2.5
7	☐	500.000	509.374	2566475.90	0.4559	P	1.3
8	☐	1000.000	993.897	4983164.31	0.8895	P	0.6
9	☐			788.95	0.0001	P	9.3

$$y = 8.9494\text{E-}004 * x + 8.5767\text{E-}006$$

$$R = 0.9999$$

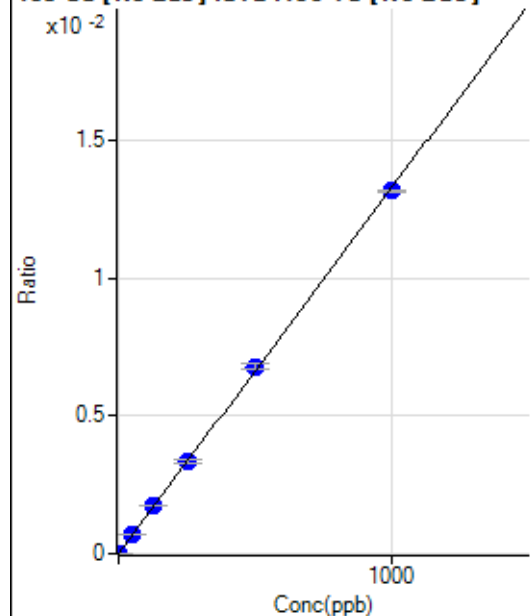
$$DL = 0.005699$$

$$BEC = 0.009584$$

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	0.00	0.0000	P	
2	☐	0.100					
3	☐	1.000	1.148	86.11	0.0000	P	8.0
4	☐	50.000	53.257	4127.08	0.0007	P	4.2
5	☐	125.000	131.502	10213.57	0.0017	P	1.0
6	☐	250.000	252.401	19943.45	0.0034	P	2.3
7	☐	500.000	512.504	38333.87	0.0068	P	2.2
8	☐	1000.000	992.172	73848.10	0.0132	P	0.8
9	☐			33.33	0.0000	P	0.9

$$y = 1.3286\text{E-}005 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

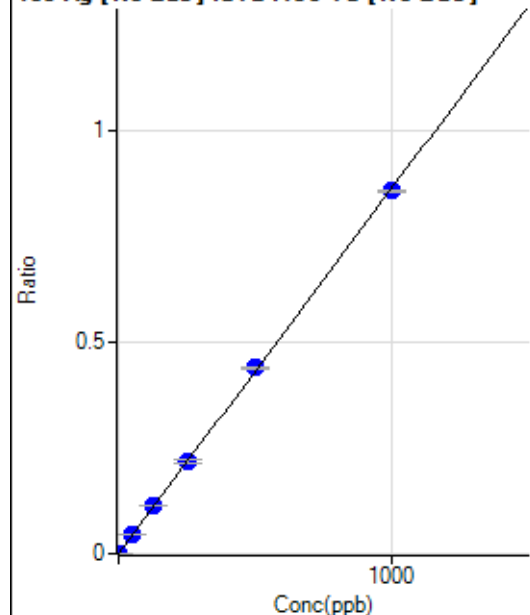
$$DL = 0$$

$$BEC = 0$$

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	19.44	0.0000	P	89.1
2	☐	0.100					
3	☐	1.000	1.034	5059.45	0.0009	P	4.6
4	☐	50.000	53.279	268128.01	0.0460	P	0.8
5	☐	125.000	132.069	666045.25	0.1139	P	0.5
6	☐	250.000	252.252	1294198.29	0.2176	P	2.8
7	☐	500.000	508.788	2471075.58	0.4389	P	1.1
8	☐	1000.000	993.995	4803902.88	0.8575	P	0.7
9	☐			755.61	0.0001	P	5.6

$$y = 8.6267\text{E-}004 * x + 3.5425\text{E-}006$$

$$R = 0.9999$$

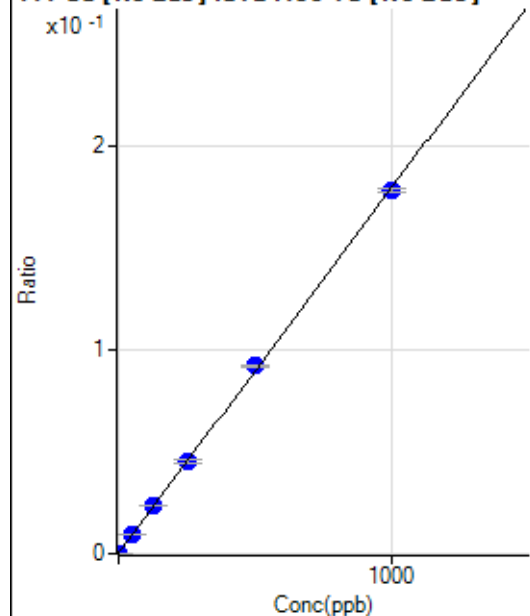
$$DL = 0.01098$$

$$BEC = 0.004106$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	889.80	0.0002	P	3.4
2	☐	0.100					
3	☐	1.000	1.031	1955.16	0.0003	P	6.0
4	☐	50.000	53.330	56644.68	0.0097	P	0.6
5	☐	125.000	131.292	138368.82	0.0237	P	0.7
6	☐	250.000	252.243	269565.44	0.0453	P	2.5
7	☐	500.000	512.821	517866.84	0.0920	P	0.8
8	☐	1000.000	992.076	996062.20	0.1778	P	0.9
9	☐			1175.94	0.0002	P	13.2

$$y = 1.7906\text{E-}004 * x + 1.6172\text{E-}004$$

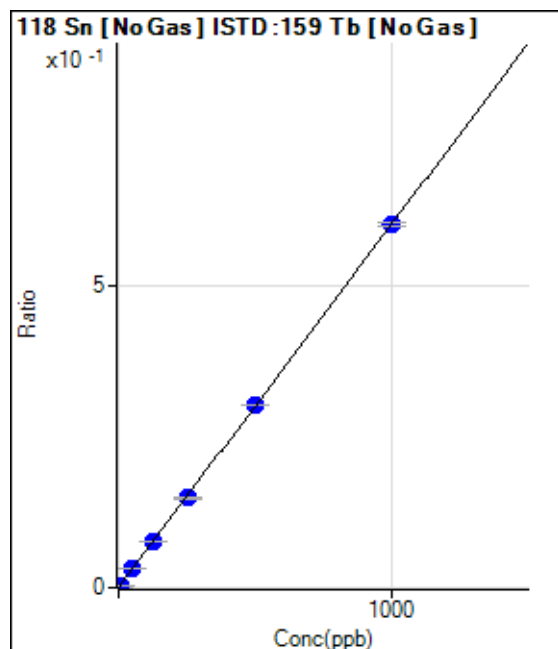
$$R = 0.9999$$

$$DL = 0.09096$$

$$BEC = 0.9032$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2383.64	0.0004	P	4.1
2	☐	0.500					
3	☐	5.000	5.024	19452.95	0.0034	P	1.6
4	☐	50.000	51.221	181619.89	0.0311	P	1.0
5	☐	125.000	128.123	451508.82	0.0772	P	1.1
6	☐	250.000	246.956	882964.20	0.1485	P	3.1
7	☐	500.000	502.908	1699619.70	0.3019	P	0.7
8	☐	1000.000	998.855	3356688.12	0.5992	P	1.1
9	☐			7958.14	0.0014	P	3.3

$$y = 5.9943\text{E-}004 * x + 4.3311\text{E-}004$$

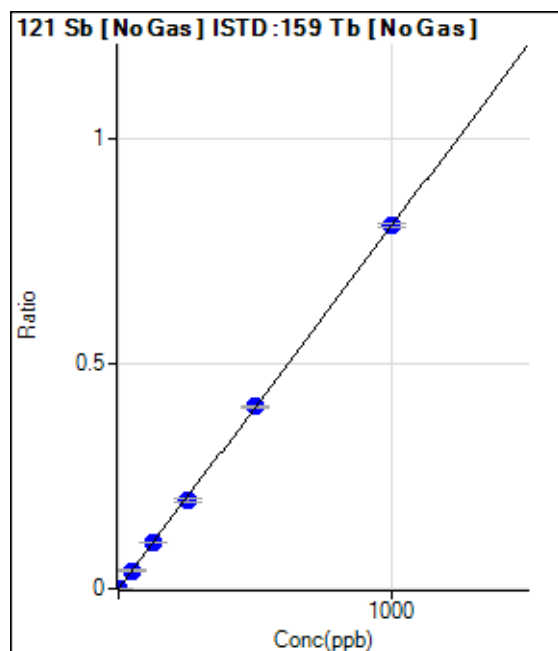
$$R = 1.0000$$

$$DL = 0.08984$$

$$BEC = 0.7225$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	16.67	0.0000	P	49.5
2	☐	0.200					
3	☐	2.000	1.925	8761.39	0.0016	P	3.9
4	☐	50.000	50.280	235986.12	0.0405	P	1.1
5	☐	125.000	127.114	597858.76	0.1023	P	0.5
6	☐	250.000	244.111	1168000.18	0.1964	P	3.0
7	☐	500.000	502.229	2274851.16	0.4041	P	0.8
8	☐	1000.000	1000.079	4507548.58	0.8046	P	1.1
9	☐			6368.40	0.0011	P	4.4

$$y = 8.0454\text{E-}004 * x + 3.0230\text{E-}006$$

$$R = 1.0000$$

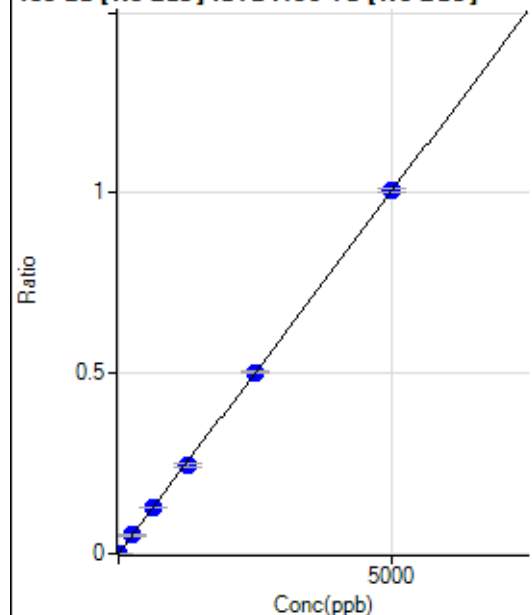
$$DL = 0.005582$$

$$BEC = 0.003757$$

Weight: <None>

Min Conc: 0

135 Ba [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	78.1
2	☐	1.000					
3	☐	10.000	9.541	10846.35	0.0019	P	2.6
4	☐	250.000	252.540	295959.43	0.0507	P	1.4
5	☐	625.000	635.038	745811.85	0.1276	P	0.9
6	☐	1250.000	1216.698	1453615.39	0.2444	P	3.1
7	☐	2500.000	2499.289	2826719.18	0.5021	P	0.8
8	☐	5000.000	5007.300	5635423.56	1.0059	P	1.0
9	☐			1041.76	0.0002	P	5.4

$$y = 2.0089\text{E-}004 * x + 4.0358\text{E-}006$$

$$R = 1.0000$$

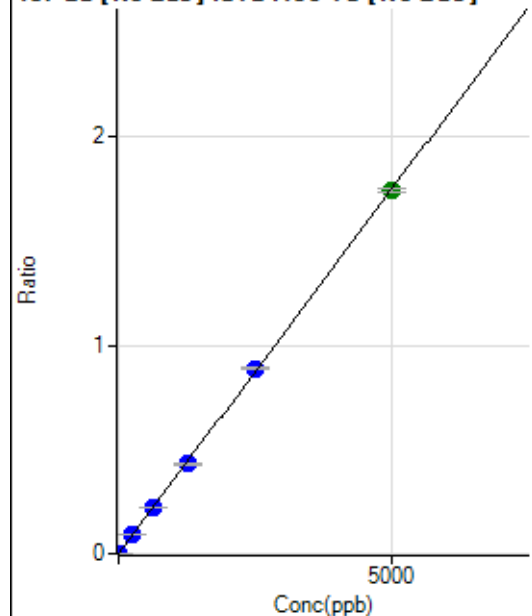
$$DL = 0.04708$$

$$BEC = 0.02009$$

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	38.89	0.0000	P	54.0
2	☐	1.000					
3	☐	10.000	9.569	18910.82	0.0033	P	0.4
4	☐	250.000	254.177	517764.12	0.0888	P	1.6
5	☐	625.000	639.267	1304969.37	0.2232	P	0.7
6	☐	1250.000	1231.128	2556704.61	0.4299	P	2.8
7	☐	2500.000	2544.939	5003101.76	0.8887	P	0.8
8	☐	5000.000	4980.257	9742520.45	1.7390	A	1.1
9	☐			2039.13	0.0004	P	10.2

$$y = 3.4919\text{E-}004 * x + 7.0772\text{E-}006$$

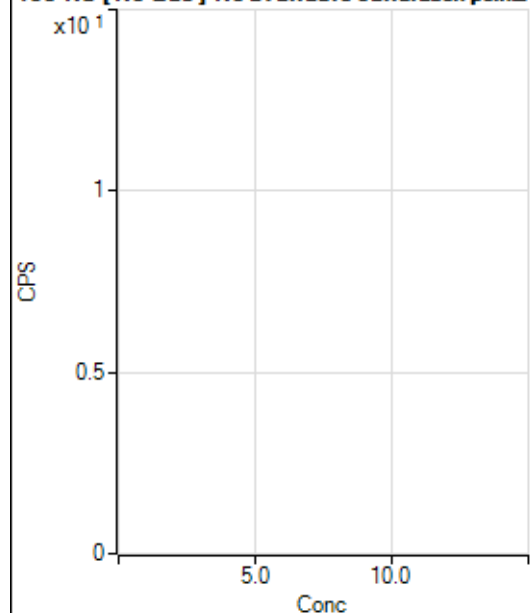
$$R = 0.9999$$

$$DL = 0.03286$$

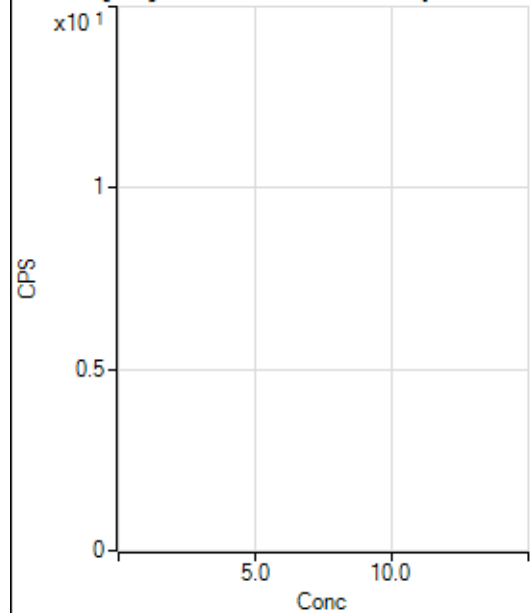
$$BEC = 0.02027$$

Weight: <None>

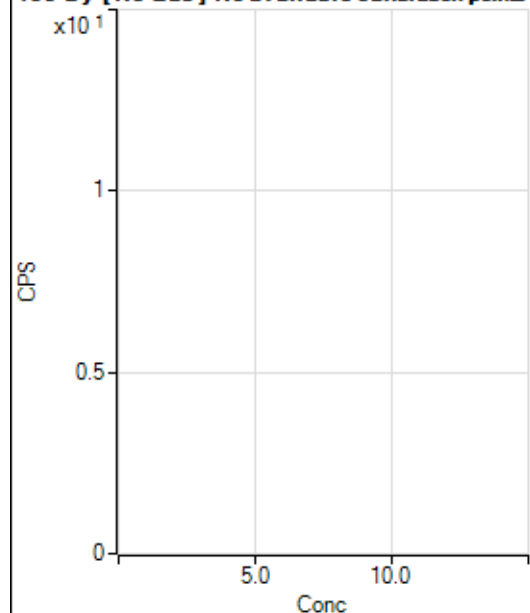
Min Conc: 0

150 Nd [No Gas] No available calibration points

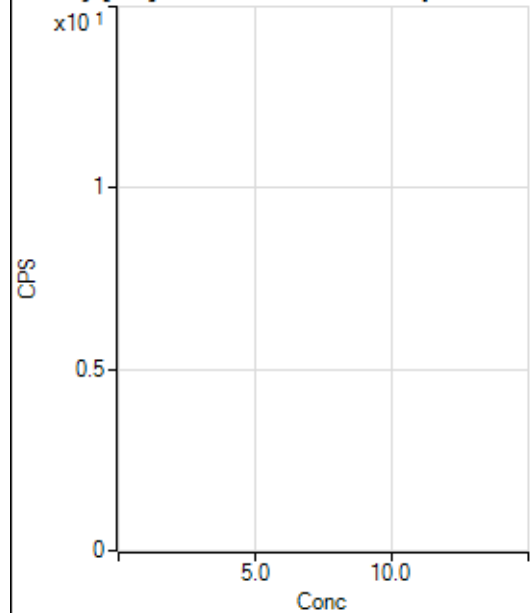
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			22.22		P	62.4
5	☐			62.23		P	16.4
6	☐			133.34		P	20.0
7	☐			182.23		P	8.4
8	☐			417.80		P	7.5
9	☐			77.78		P	26.2

150 Nd [He] No available calibration points

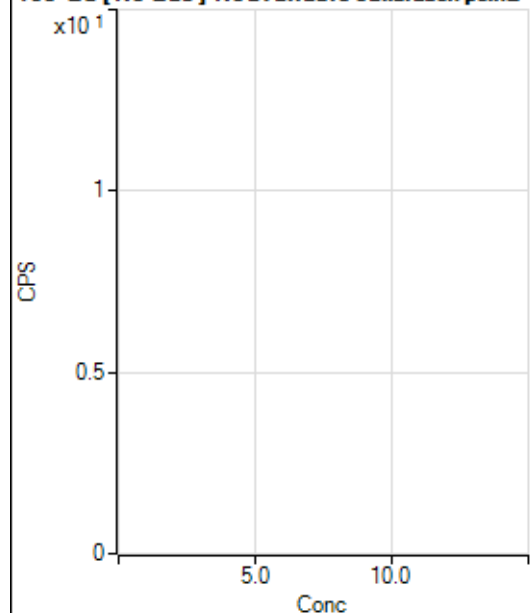
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			12.22		P	41.7
6	☐			11.11		P	62.5
7	☐			20.00		P	44.1
8	☐			67.78		P	27.1
9	☐			42.22		P	12.1

156 Dy [No Gas] No available calibration points

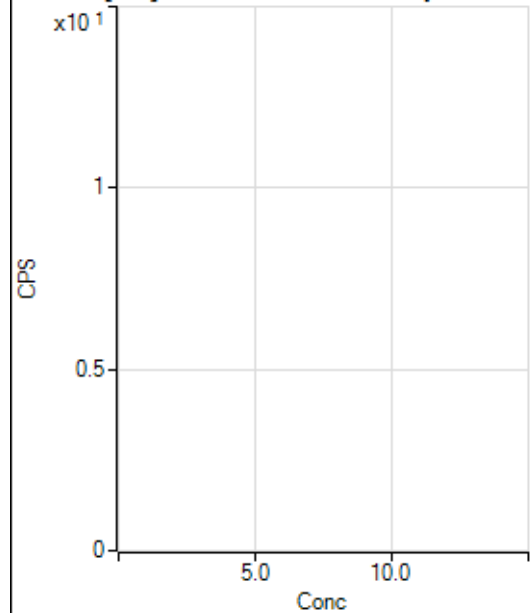
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.78		P	173.
2	☐						
3	☐			2.78		P	173.
4	☐			11.11		P	43.3
5	☐			16.67		P	NaN
6	☐			8.33		P	0.0
7	☐			63.89		P	37.7
8	☐			94.45		P	18.4
9	☐			55.56		P	31.2

156 Dy [He] No available calibration points

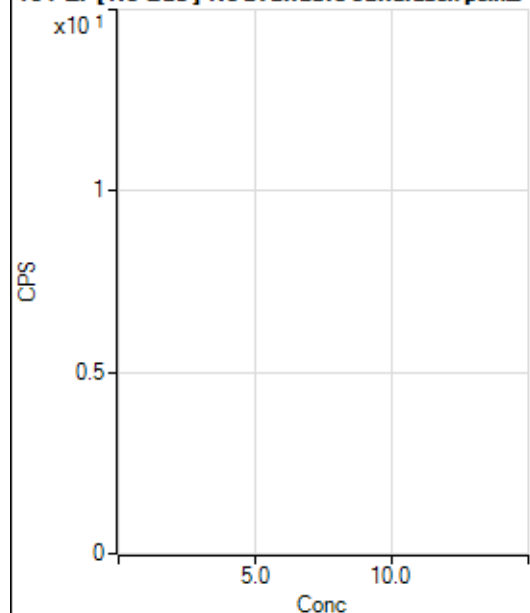
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐						
3	☐			2.22		P	173.
4	☐			3.33		P	0.0
5	☐			21.11		P	50.8
6	☐			24.44		P	39.4
7	☐			55.56		P	9.2
8	☐			101.11		P	15.6
9	☐			27.78		P	18.3

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

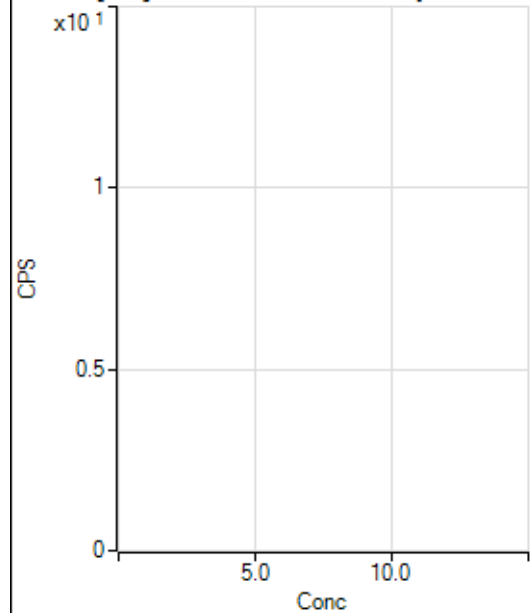
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	41.7
2	☐						
3	☐			19.45		P	24.7
4	☐			13.89		P	69.3
5	☐			36.11		P	35.3
6	☐			38.89		P	65.5
7	☐			25.00		P	33.3
8	☐			69.45		P	34.6
9	☐			52.78		P	24.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			87.78		P	20.9
2	☐						
3	☐			71.11		P	11.8
4	☐			83.34		P	10.6
5	☐			78.89		P	17.1
6	☐			76.67		P	4.4
7	☐			81.11		P	12.6
8	☐			102.23		P	21.2
9	☐			95.56		P	8.8

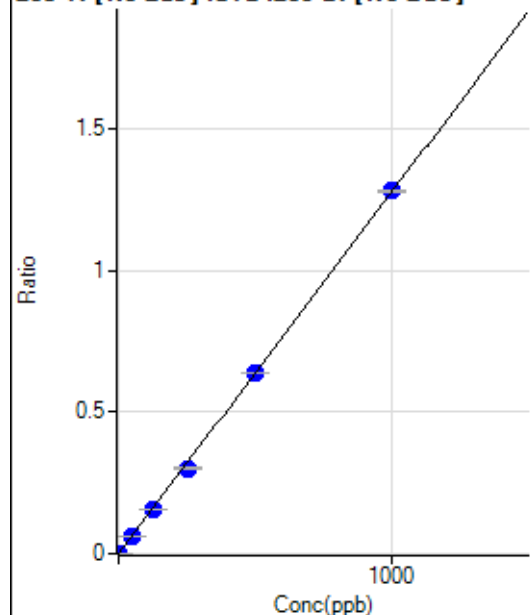
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	173.
2	☐						
3	☐			13.89		P	69.3
4	☐			8.33		P	100.
5	☐			22.22		P	114.
6	☐			13.89		P	124.
7	☐			25.00		P	88.2
8	☐			41.67		P	100.
9	☐			36.11		P	81.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			13.34		P	43.3
4	☐			5.56		P	34.7
5	☐			3.33		P	100.
6	☐			11.11		P	91.7
7	☐			6.66		P	86.6
8	☐			27.78		P	42.1
9	☐			18.89		P	36.7

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.67	0.0000	P	16.0
2	☐	0.100					
3	☐	1.000	0.954	4314.77	0.0013	P	9.3
4	☐	50.000	48.767	218714.19	0.0622	P	1.1
5	☐	125.000	121.781	550874.75	0.1554	P	2.0
6	☐	250.000	235.481	1090993.68	0.3004	P	1.8
7	☐	500.000	500.426	2185938.46	0.6384	P	0.7
8	☐	1000.000	1003.881	4298735.34	1.2806	P	0.8
9	☐			2378.10	0.0008	P	4.7

$$y = 0.0013 * x + 4.2564E-005$$

$$R = 0.9999$$

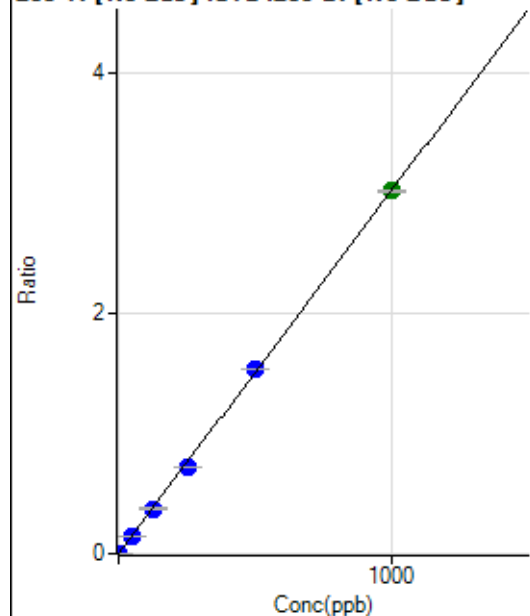
$$DL = 0.01606$$

$$BEC = 0.03337$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	386.13	0.0001	P	28.7
2	☐	0.100					
3	☐	1.000	0.961	10354.45	0.0030	P	2.6
4	☐	50.000	49.027	521238.44	0.1484	P	0.8
5	☐	125.000	123.266	1321753.36	0.3728	P	2.0
6	☐	250.000	238.157	2615479.14	0.7202	P	2.0
7	☐	500.000	507.564	5255502.59	1.5348	P	0.5
8	☐	1000.000	999.444	10144603.96	3.0221	A	0.7
9	☐			5131.77	0.0017	P	8.7

$$y = 0.0030 * x + 1.1605E-004$$

$$R = 0.9999$$

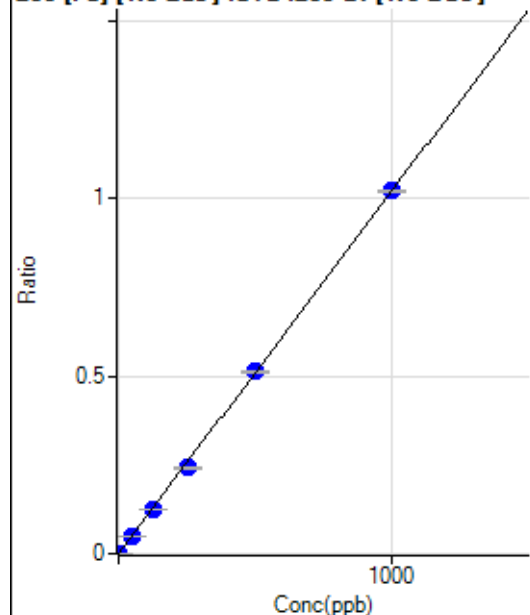
$$DL = 0.033$$

$$BEC = 0.03838$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	135.19	0.0000	P	16.8
2	☐	0.100					
3	☐	1.000	0.932	3396.83	0.0010	P	7.2
4	☐	50.000	49.407	177239.05	0.0504	P	1.2
5	☐	125.000	123.462	446716.47	0.1260	P	1.7
6	☐	250.000	238.348	883225.90	0.2432	P	2.0
7	☐	500.000	503.125	1757758.43	0.5133	P	1.0
8	☐	1000.000	1001.573	3430308.67	1.0219	P	0.8
9	☐			21093.13	0.0068	P	2.7

$$y = 0.0010 * x + 4.0583E-005$$

$$R = 0.9999$$

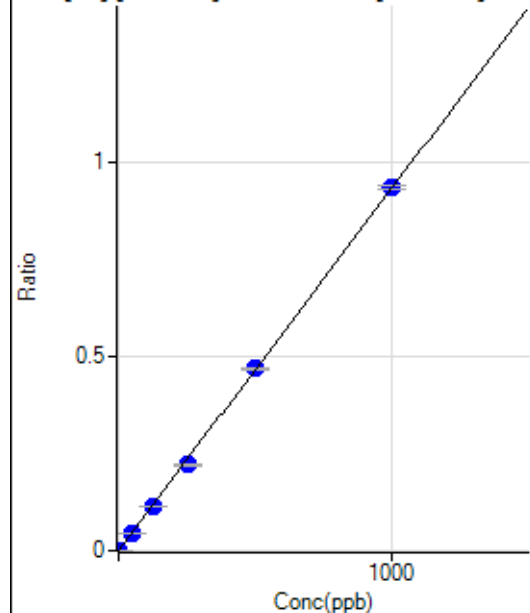
$$DL = 0.02007$$

$$BEC = 0.03978$$

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	122.23	0.0000	P	41.7
2	☐	0.100					
3	☐	1.000	0.959	3189.37	0.0009	P	3.0
4	☐	50.000	49.267	161348.34	0.0459	P	0.6
5	☐	125.000	122.154	403483.91	0.1138	P	2.5
6	☐	250.000	237.511	803481.27	0.2213	P	2.2
7	☐	500.000	502.510	1602701.55	0.4681	P	1.4
8	☐	1000.000	1002.260	3133792.31	0.9336	P	0.9
9	☐			17474.84	0.0056	P	2.4

$$y = 9.3141E-004 * x + 3.6716E-005$$

$$R = 0.9999$$

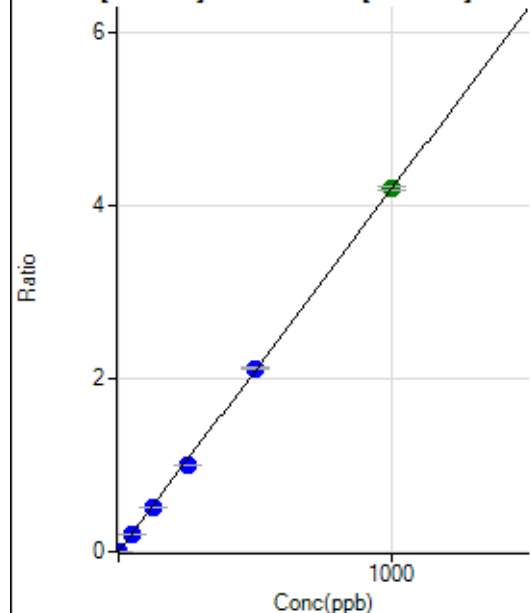
$$DL = 0.04926$$

$$BEC = 0.03942$$

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	598.17	0.0002	P	5.7
2	☐	0.100					
3	☐	1.000	0.964	14464.69	0.0042	P	2.6
4	☐	50.000	49.263	726090.08	0.2067	P	0.9
5	☐	125.000	122.927	1827305.86	0.5154	P	2.1
6	☐	250.000	238.549	3631762.22	1.0001	P	1.8
7	☐	500.000	504.693	7243841.99	2.1156	P	1.3
8	☐	1000.000	1000.812	14082190.50	4.1951	A	0.9
9	☐			82940.62	0.0267	P	1.6

$$y = 0.0042 * x + 1.7961E-004$$

$$R = 0.9999$$

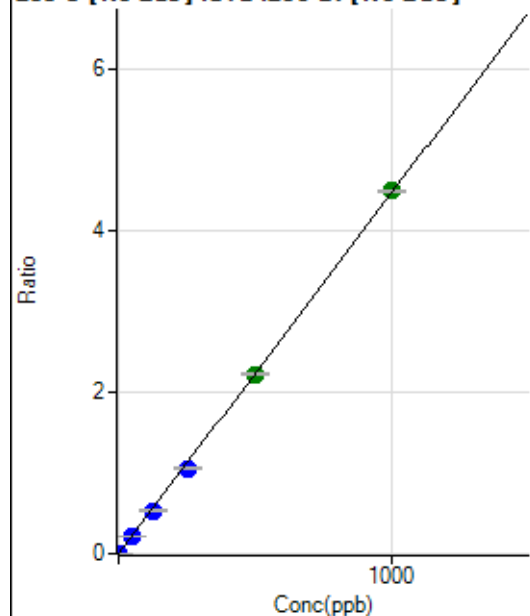
$$DL = 0.00734$$

$$BEC = 0.04285$$

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	61.12	0.0000	P	8.3
2	☐	0.100					
3	☐	1.000	0.915	14097.08	0.0041	P	3.8
4	☐	50.000	47.107	740384.88	0.2107	P	0.4
5	☐	125.000	118.904	1885660.76	0.5319	P	2.1
6	☐	250.000	235.644	3827714.28	1.0541	P	2.2
7	☐	500.000	497.690	7622713.19	2.2262	A	1.3
8	☐	1000.000	1005.650	15100461.45	4.4984	A	0.7
9	☐			1811.32	0.0006	P	6.2

$$y = 0.0045 * x + 1.8358E-005$$

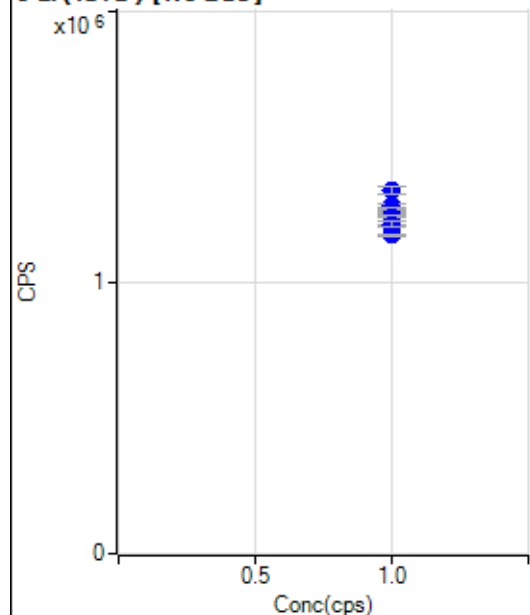
$$R = 0.9999$$

$$DL = 0.001028$$

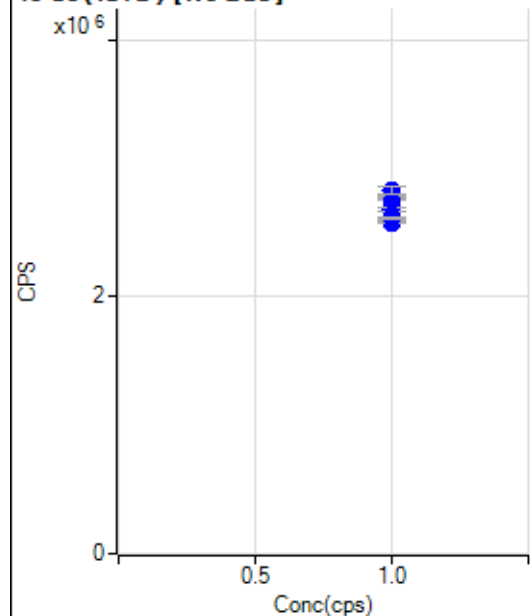
$$BEC = 0.004104$$

Weight: <None>

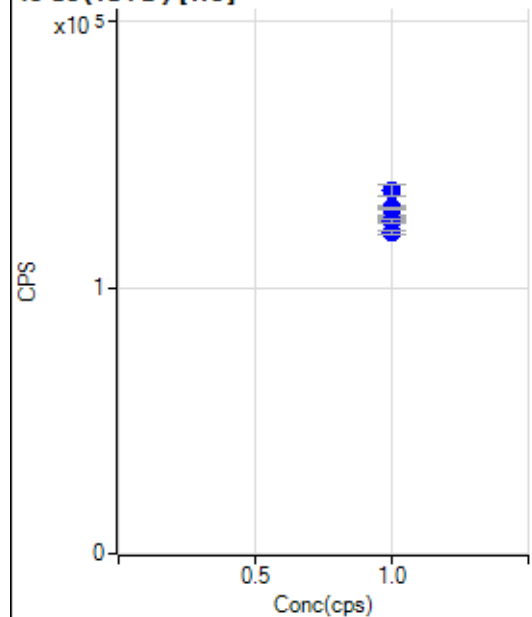
Min Conc: 0

6 Li (ISTD) [No Gas]

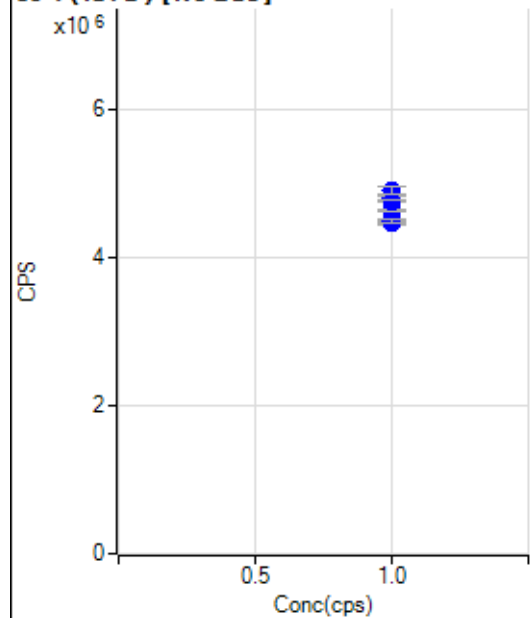
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1174247.76		P	0.7
2	☐	1.000					
3	☐	1.000		1213048.29		P	0.5
4	☐	1.000		1258034.62		P	0.3
5	☐	1.000		1286049.66		P	1.1
6	☐	1.000		1338199.44		P	2.2
7	☐	1.000		1272063.18		P	0.3
8	☐	1.000		1243631.73		P	0.4
9	☐	1.000		1216241.20		P	1.2

45 Sc (ISTD) [No Gas]

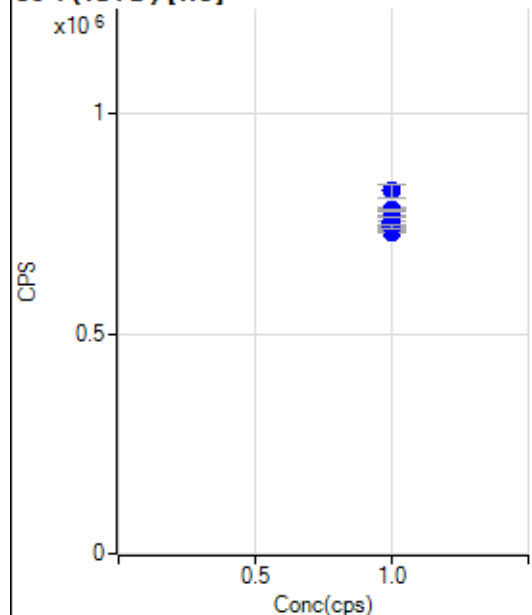
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2619823.61		P	0.5
2	☐	1.000					
3	☐	1.000		2685835.43		P	1.0
4	☐	1.000		2760674.11		P	0.4
5	☐	1.000		2792987.13		P	0.4
6	☐	1.000		2825550.82		P	2.1
7	☐	1.000		2598650.01		P	0.4
8	☐	1.000		2577393.16		P	0.6
9	☐	1.000		2614662.34		P	1.0

45 Sc (ISTD) [He]

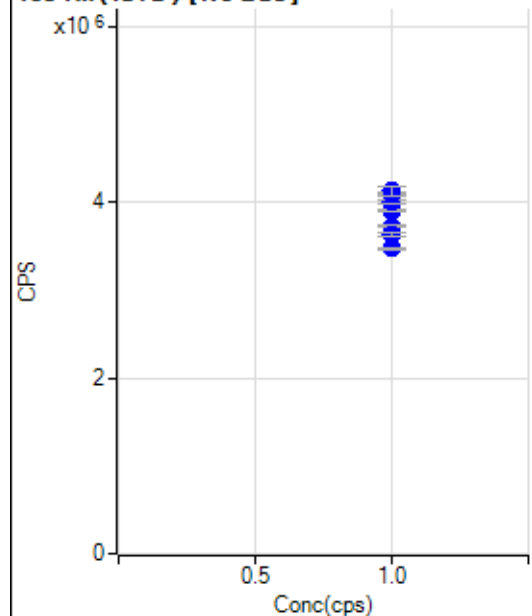
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		125385.04		P	0.9
2	☐	1.000					
3	☐	1.000		126673.18		P	0.6
4	☐	1.000		130192.34		P	0.6
5	☐	1.000		136237.75		P	3.3
6	☐	1.000		129388.69		P	0.6
7	☐	1.000		120570.98		P	0.8
8	☐	1.000		125233.87		P	1.9
9	☐	1.000		124849.13		P	0.8

89 Y (ISTD) [No Gas]

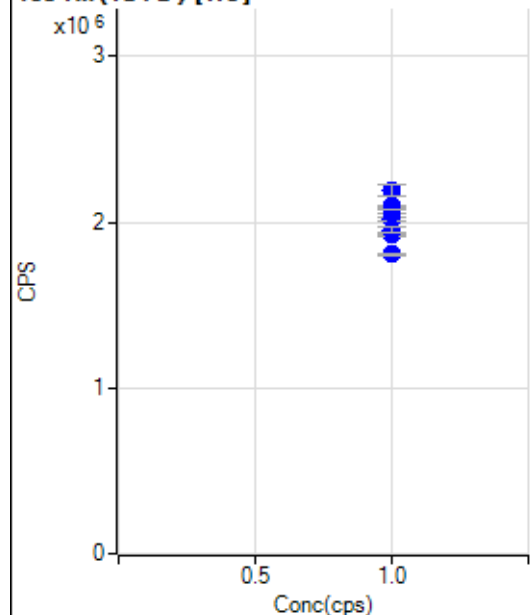
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4511548.48		P	0.4
2	☐	1.000					
3	☐	1.000		4629779.97		P	0.6
4	☐	1.000		4753000.00		P	0.5
5	☐	1.000		4801139.51		P	0.7
6	☐	1.000		4891740.76		P	2.2
7	☐	1.000		4471886.63		P	0.5
8	☐	1.000		4459098.93		P	0.8
9	☐	1.000		4482175.59		P	1.0

89 Y (ISTD) [He]

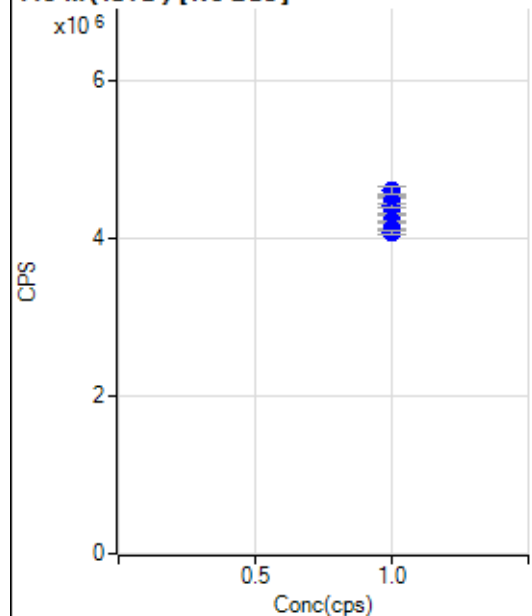
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		750407.74		P	1.6
2	☐	1.000					
3	☐	1.000		765658.80		P	0.4
4	☐	1.000		783945.48		P	0.3
5	☐	1.000		824577.81		P	3.6
6	☐	1.000		779863.93		P	0.1
7	☐	1.000		731689.78		P	0.7
8	☐	1.000		756038.63		P	2.1
9	☐	1.000		743198.91		P	0.8

103 Rh (ISTD) [No Gas]

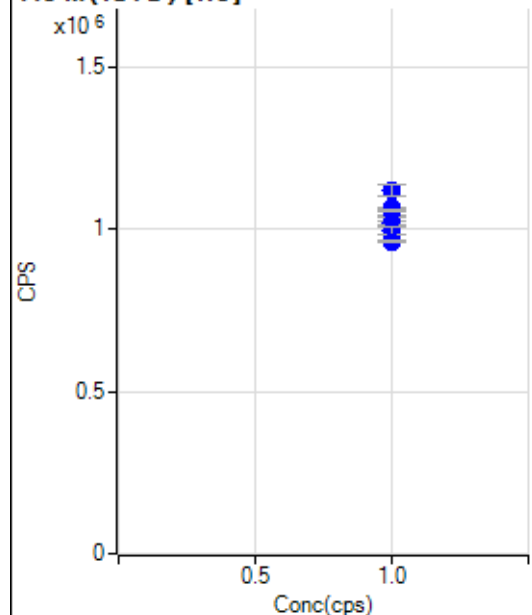
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3903618.32		P	0.7
2	☐	1.000					
3	☐	1.000		4015280.51		P	1.1
4	☐	1.000		4098907.17		P	0.3
5	☐	1.000		4098983.73		P	0.5
6	☐	1.000		4131706.82		P	2.4
7	☐	1.000		3728408.20		P	0.5
8	☐	1.000		3636498.56		P	0.8
9	☐	1.000		3480570.35		P	0.6

103 Rh (ISTD) [He]

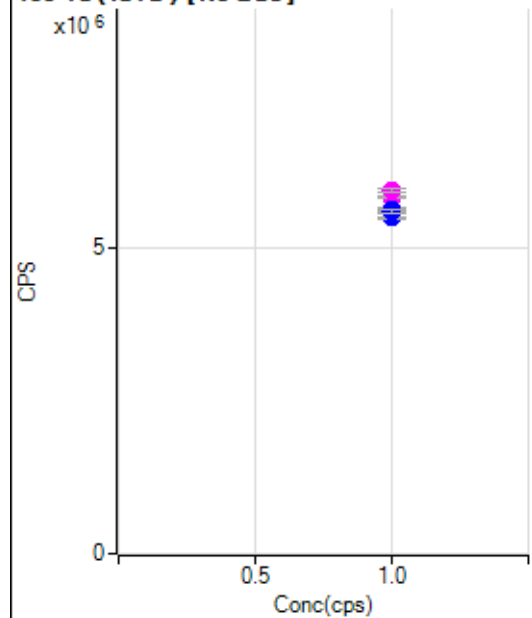
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2015456.72		P	1.0
2	☐	1.000					
3	☐	1.000		2054313.11		P	0.3
4	☐	1.000		2095155.21		P	0.3
5	☐	1.000		2189519.99		P	3.2
6	☐	1.000		2076027.47		P	0.1
7	☐	1.000		1922562.33		P	0.3
8	☐	1.000		1952028.01		P	2.0
9	☐	1.000		1805731.62		P	0.9

115 In (ISTD) [No Gas]

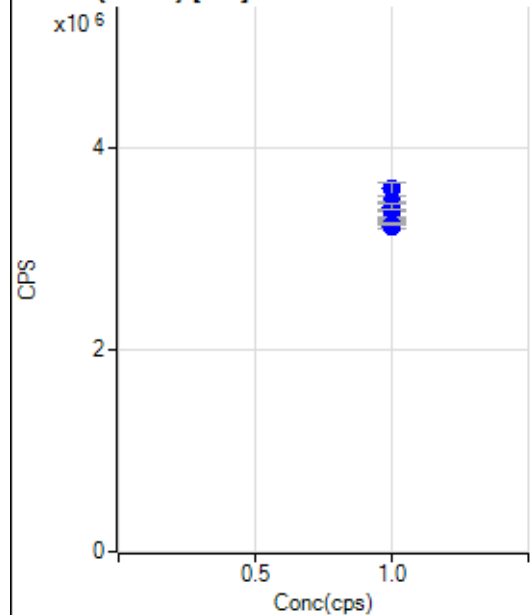
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4301034.65		P	0.4
2	☐	1.000					
3	☐	1.000		4418600.02		P	0.8
4	☐	1.000		4529313.92		P	0.3
5	☐	1.000		4550165.33		P	0.7
6	☐	1.000		4606557.59		P	2.1
7	☐	1.000		4212736.65		P	0.4
8	☐	1.000		4126071.19		P	0.6
9	☐	1.000		4068638.53		P	1.1

115 In (ISTD) [He]

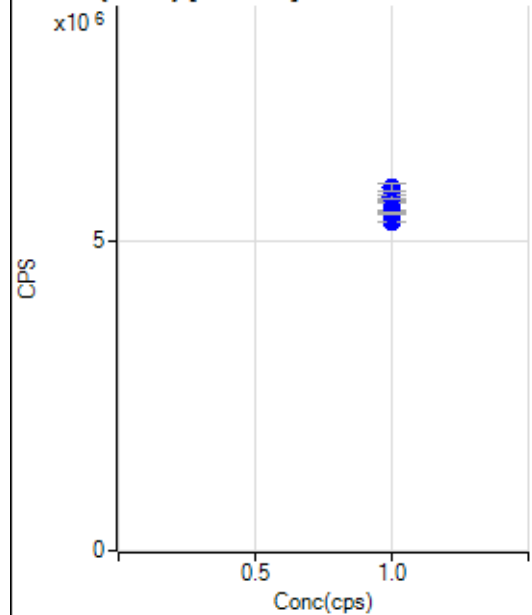
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1020600.66		P	1.0
2	☐	1.000					
3	☐	1.000		1038612.75		P	0.6
4	☐	1.000		1065806.10		P	0.6
5	☐	1.000		1117391.73		P	3.1
6	☐	1.000		1057121.49		P	0.1
7	☐	1.000		982804.34		P	0.3
8	☐	1.000		995035.78		P	2.2
9	☐	1.000		961048.96		P	0.8

159 Tb (ISTD) [No Gas]

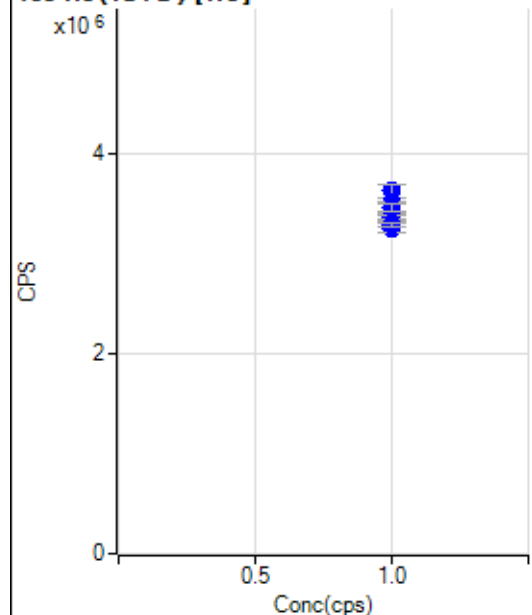
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5502659.71		P	0.6
2	☐	1.000					
3	☐	1.000		5647436.72		P	0.8
4	☐	1.000		5833212.07		P	0.3
5	☐	1.000		5845664.01		M	0.8
6	☐	1.000		5947585.68		M	1.2
7	☐	1.000		5629999.71		P	0.3
8	☐	1.000		5602357.07		P	0.5
9	☐	1.000		5607029.43		P	0.9

159 Tb (ISTD) [He]

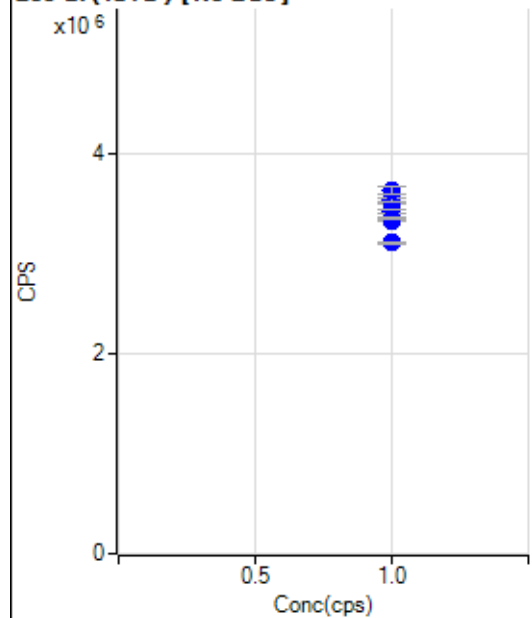
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3232013.46		P	1.2
2	☐	1.000					
3	☐	1.000		3276775.51		P	0.5
4	☐	1.000		3380985.12		P	0.5
5	☐	1.000		3600548.25		P	3.5
6	☐	1.000		3479063.80		P	0.1
7	☐	1.000		3316488.63		P	0.6
8	☐	1.000		3420565.47		P	1.9
9	☐	1.000		3250262.55		P	0.7

165 Ho (ISTD) [No Gas]

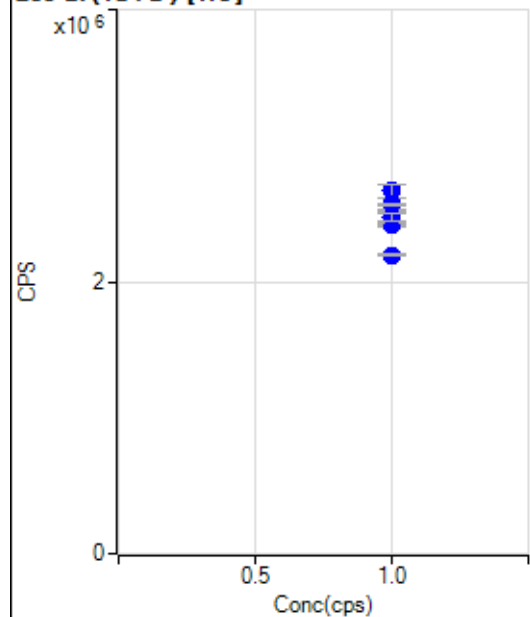
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5313256.63		P	0.2
2	☐	1.000					
3	☐	1.000		5477456.63		P	0.7
4	☐	1.000		5629054.68		P	0.3
5	☐	1.000		5701311.63		P	0.9
6	☐	1.000		5852828.95		P	2.0
7	☐	1.000		5474821.52		P	1.1
8	☐	1.000		5470748.00		P	0.5
9	☐	1.000		5438424.99		P	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3238678.81		P	1.4
2	☐	1.000					
3	☐	1.000		3309401.30		P	0.6
4	☐	1.000		3403332.76		P	0.6
5	☐	1.000		3625466.02		P	3.5
6	☐	1.000		3517953.21		P	0.1
7	☐	1.000		3362492.24		P	0.7
8	☐	1.000		3465184.43		P	2.3
9	☐	1.000		3287647.34		P	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3330084.19		P	0.5
2	☐	1.000					
3	☐	1.000		3428448.77		P	0.9
4	☐	1.000		3513370.29		P	0.4
5	☐	1.000		3545604.39		P	0.9
6	☐	1.000		3631862.13		P	2.1
7	☐	1.000		3424354.22		P	1.1
8	☐	1.000		3356871.20		P	0.2
9	☐	1.000		3109165.72		P	1.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2413071.56		P	0.6
2	☐	1.000					
3	☐	1.000		2442343.54		P	0.4
4	☐	1.000		2521416.28		P	0.7
5	☐	1.000		2669433.53		P	3.4
6	☐	1.000		2570844.30		P	0.2
7	☐	1.000		2440236.20		P	0.5
8	☐	1.000		2472554.56		P	2.0
9	☐	1.000		2197576.83		P	0.8

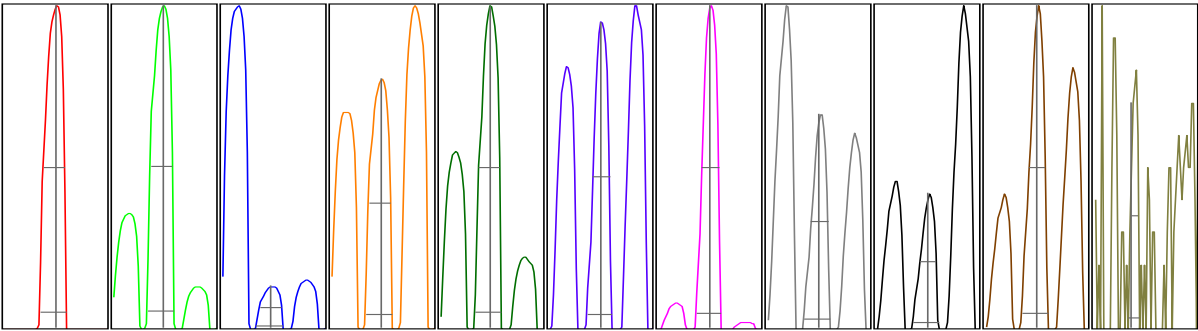
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7062818 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]					
Mass	Count	RSD%	RSD%	RSD%	
	(Mean)	(Actual)	(Required)	(Flag)	
9	3824	1.95	5.00		
24	62980	1.46	5.00		
25	8341	1.63	5.00		
26	9468	1.52	5.00		
59	30614	1.60	5.00		
113	3947	1.83	5.00		
115	51711	1.63	5.00		
206	11764	1.26	5.00		
207	10666	1.09	5.00		
208	25312	1.48	5.00		
220	0	51.35			

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
9	3752	3800	3872	3928	3767
24	61940	63096	63344	64261	62259
25	8204	8333	8436	8516	8218
26	9323	9470	9491	9693	9363
59	30275	30644	30945	31211	29995
113	3906	3929	3987	4048	3864
115	51186	52033	52169	52634	50532
206	11639	11838	11857	11911	11573
207	10570	10682	10714	10827	10537
208	25034	25448	25433	25799	24847
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6412	9.05	8.9 - 9.1		0.784	0.900	
24	102414	24.00	23.9 - 24.1		0.786	0.900	
25	13486	24.95	24.9 - 25.1		0.788	0.900	
26	15479	26.00	25.9 - 26.1		0.785	0.900	
59	53353	59.00	58.9 - 59.1		0.772	0.900	
113	8086	113.05	112.9 - 113.1		0.725	0.900	
115	104454	115.05	114.9 - 115.1		0.720	0.900	
206	24148	206.05	205.9 - 206.1		0.762	0.900	
207	22038	207.05	206.9 - 207.1		0.742	0.900	
208	52847	208.05	207.9 - 208.1		0.769	0.900	
220	0	219.65	-		0.291		

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	8.0	V	Deflect	16.0	V
Extract 2	-100.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	190	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	8371	0.41	
89	22009	0.52	
205	12005	0.46	

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
59	8322	8354	8397	8375	8408
89	21927	21918	21954	22187	22058
205	11987	11979	11977	12104	11979

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	9.2	V	Deflect	2.4	V
Extract 2	-105.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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			