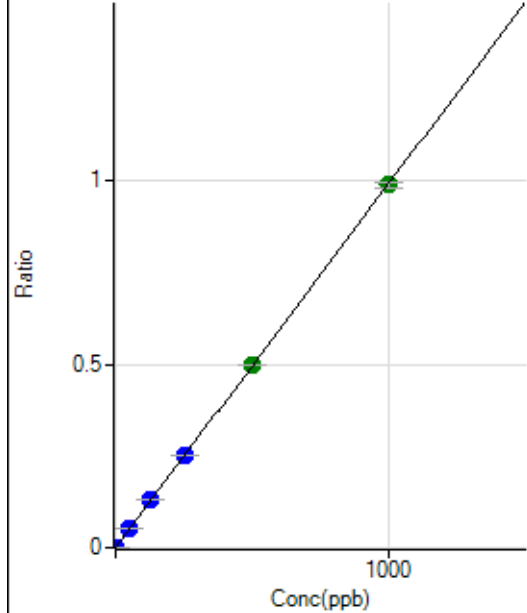


Batch Folder: D:\Agilent\ICPMH\1\DATA\P7031122-MS.b\
Analysis File: P7031122-MS.batch.bin
DA Date-Time: 2022-03-11 13:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2022-03-11 11:54:49
2	005CALS.d	S02	2022-03-11 12:00:37
3	006CALS.d	S03	2022-03-11 12:03:32
4	007CALS.d	S04	2022-03-11 12:06:17
5	008CALS.d	S05	2022-03-11 12:09:04
6	009CALS.d	S06	2022-03-11 12:11:48
7	010CALS.d	S07	2022-03-11 12:14:36
8	011CALS.d	S08	2022-03-11 12:17:20

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	28.89	0.0000	P	6.3
2	☐	1.000	1.030	3495.98	0.0010	P	4.0
3	☐	50.000	53.480	176213.85	0.0530	P	1.4
4	☐	125.000	131.076	418817.24	0.1299	P	0.8
5	☐	250.000	253.612	796979.82	0.2513	P	0.2
6	☐	500.000	501.520	1506855.13	0.4969	A	0.2
7	☐	1000.000	997.404	2891553.43	0.9883	A	1.8
8	☐			482.23	0.0002	P	7.5

$$y = 9.9084\text{E-}004 * x + 8.4541\text{E-}006$$

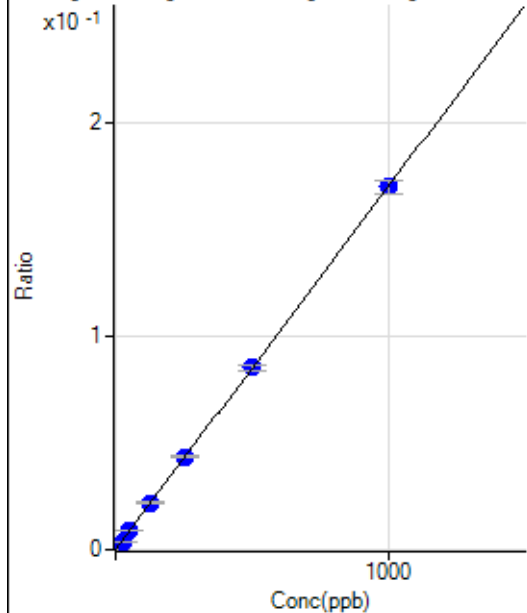
$$R = 1.0000$$

$$DL = 0.0016$$

$$BEC = 0.008532$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	186.12	0.0001	P	28.4
2	☐	25.000	22.522	13214.26	0.0039	P	6.0
3	☐	50.000	52.092	29693.04	0.0089	P	3.3
4	☐	125.000	127.461	70175.58	0.0218	P	3.8
5	☐	250.000	255.693	138315.48	0.0436	P	3.4
6	☐	500.000	499.880	258342.56	0.0852	P	3.7
7	☐	1000.000	998.286	497651.24	0.1701	P	3.7
8	☐			11398.92	0.0040	P	10.1

$$y = 1.7034\text{E-}004 * x + 5.4421\text{E-}005$$

$$R = 1.0000$$

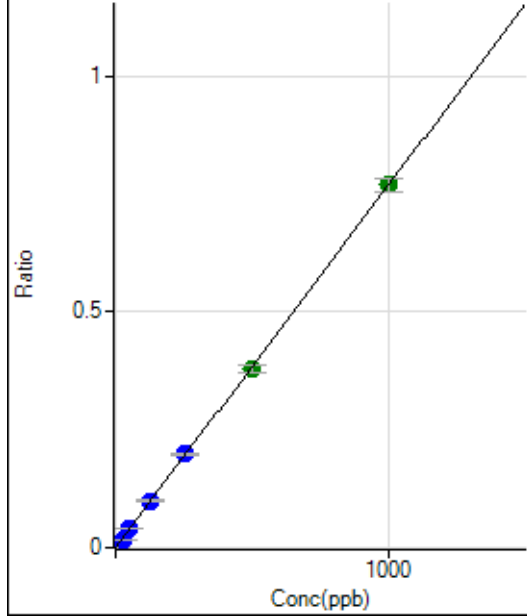
$$DL = 0.2718$$

$$BEC = 0.3195$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	738.93	0.0002	P	19.6
2	☐	25.000	22.557	59545.87	0.0175	P	8.0
3	☐	50.000	52.008	133527.56	0.0402	P	0.9
4	☐	125.000	128.198	318094.07	0.0987	P	3.4
5	☐	250.000	258.113	629306.94	0.1984	P	3.2
6	☐	500.000	493.785	1150352.46	0.3794	A	3.6
7	☐	1000.000	1000.640	2248719.52	0.7686	A	3.7
8	☐			50391.48	0.0178	P	11.2

$$y = 7.6789\text{E-}004 * x + 2.1643\text{E-}004$$

$$R = 0.9999$$

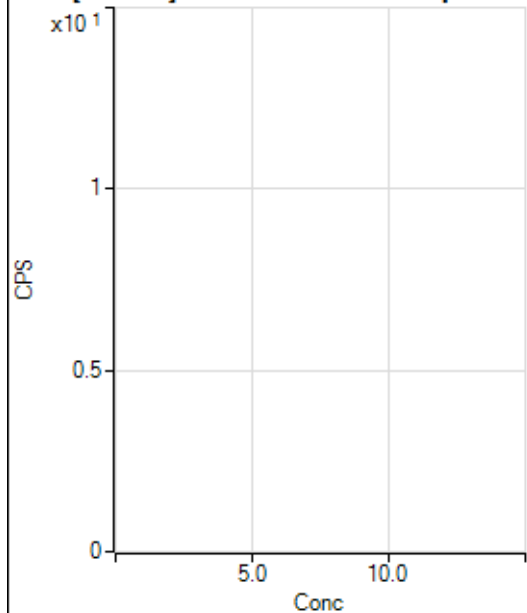
$$DL = 0.1654$$

$$BEC = 0.2818$$

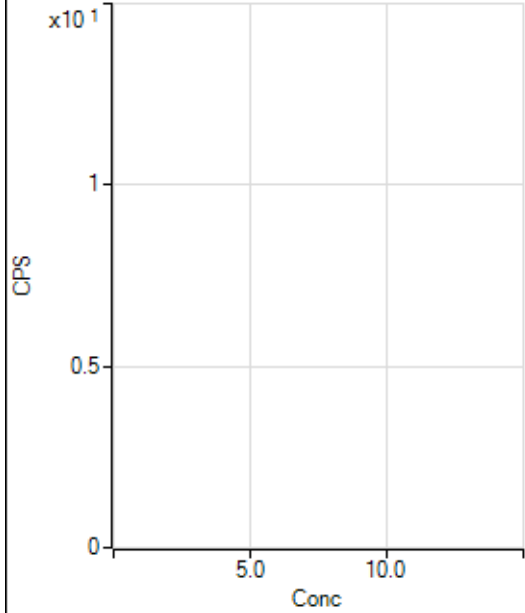
Weight: <None>

Min Conc: 0

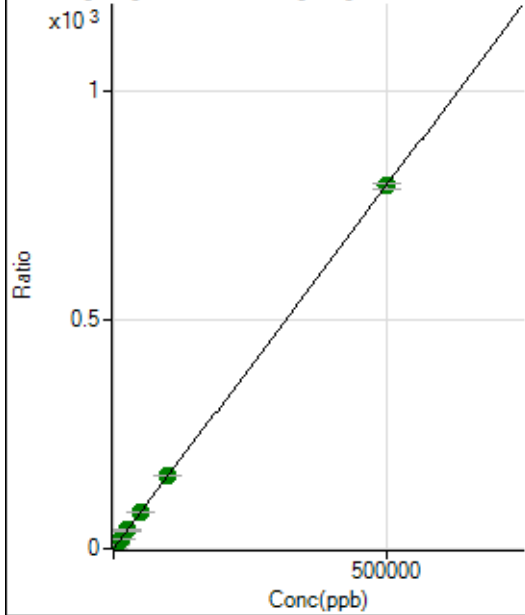
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	17371.08	0.0274	P	1.8
2	☐	500.000	479.995	508965.08	0.7892	P	1.1
3	☐	5000.000	5070.302	4950127.31	8.0744	A	0.1
4	☐	12500.000	12729.456	11842647.72	20.2302	A	0.1
5	☐	25000.000	25229.417	22372062.77	40.0688	A	0.7
6	☐	50000.000	50498.489	43592039.87	80.1731	A	0.7
7	☐	100000.00	101634.69	85911597.29	161.3310	A	0.6
8	☐	500000.00	499605.32	458640113.96	792.9473	A	1.6

$$y = 0.0016 * x + 0.0274$$

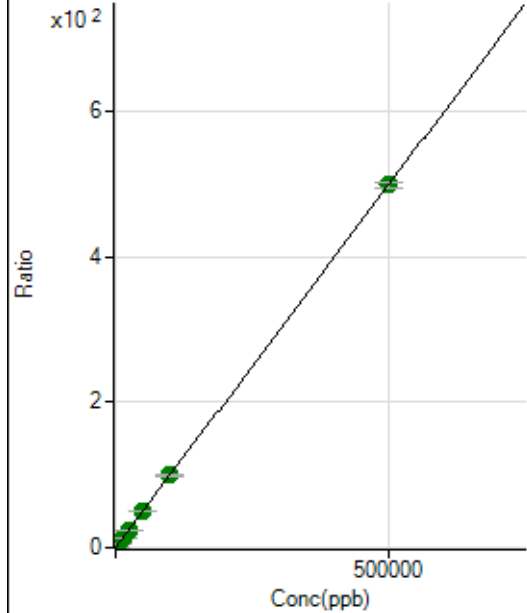
$$R = 1.0000$$

$$DL = 0.9496$$

$$BEC = 17.24$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	261.12	0.0004	P	15.1
2	☐	500.000	485.091	312104.27	0.4839	P	1.6
3	☐	5000.000	5051.977	3087581.84	5.0362	A	0.7
4	☐	12500.000	12557.582	7327607.28	12.5178	A	0.8
5	☐	25000.000	25039.165	13935543.14	24.9594	A	0.1
6	☐	50000.000	49787.470	26984191.11	49.6284	A	0.4
7	☐	100000.00	99651.489	52896373.41	99.3328	A	0.7
8	☐	500000.00	500087.05	288321613.85	498.4859	A	1.6

$$y = 9.9680\text{E-}004 * x + 4.1138\text{E-}004$$

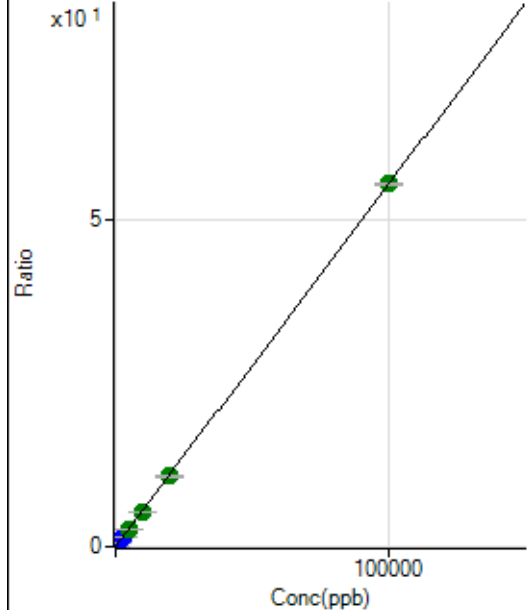
$$R = 1.0000$$

$$DL = 0.1871$$

$$BEC = 0.4127$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	164.82	0.0003	P	12.8
2	☐	20.000	18.959	6964.66	0.0108	P	3.8
3	☐	1000.000	1005.443	342641.47	0.5589	P	0.1
4	☐	2500.000	2503.065	814266.58	1.3910	P	1.0
5	☐	5000.000	4842.032	1502186.48	2.6906	A	1.2
6	☐	10000.000	9628.223	2908745.26	5.3499	A	1.7
7	☐	20000.000	19417.400	5745338.09	10.7890	A	1.2
8	☐	100000.00	100161.46	32193090.30	55.6520	A	0.8

$$y = 5.5562\text{E-}004 * x + 2.5956\text{E-}004$$

$$R = 1.0000$$

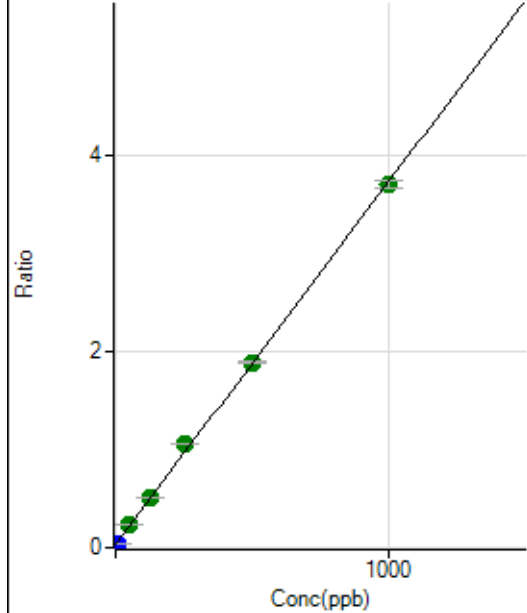
$$DL = 0.1791$$

$$BEC = 0.4672$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	231124.32	0.0312	P	0.7
2	☐	10.000	3.190	320750.35	0.0430	P	2.0
3	☐	50.000	53.606	1650555.83	0.2295	A	2.2
4	☐	125.000	127.818	3536810.67	0.5040	A	0.7
5	☐	250.000	277.165	7082282.89	1.0564	A	1.2
6	☐	500.000	502.092	12040577.96	1.8884	A	1.6
7	☐	1000.000	991.698	22871659.54	3.6995	A	2.2
8	☐			1155649.06	0.1870	M	6.6

$$y = 0.0037 * x + 0.0312$$

$$R = 0.9995$$

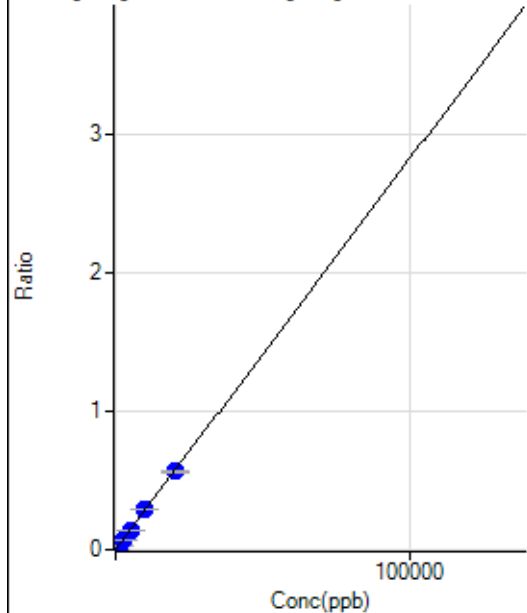
$$DL = 0.1821$$

$$BEC = 8.441$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-11.041	622.25	0.0010	P	9.9
2	☐	0.000	11.041	1033.40	0.0016	P	3.9
3	☐	1000.000	1020.120	18428.18	0.0301	P	2.2
4	☐	2500.000	2603.924	43735.36	0.0747	P	2.1
5	☐	5000.000	5103.926	81073.51	0.1452	P	0.6
6	☐	10000.000	10099.234	155537.55	0.2861	P	0.2
7	☐	20000.000	19910.405	299656.99	0.5627	P	0.7
8	☐			766.71	0.0013	P	15.1

$$y = 2.8198E-005 * x + 0.0013$$

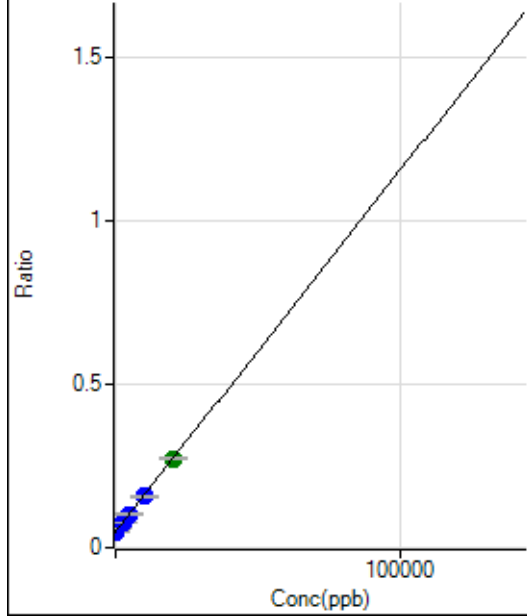
$$R = 1.0000$$

$$DL = 8.501$$

$$BEC = 45.79$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-33.078	362136.86	0.0489	P	0.3
2	☐	0.000	33.078	370120.50	0.0497	P	2.7
3	☐	1000.000	1173.069	447810.12	0.0623	P	2.8
4	☐	2500.000	2457.709	536793.70	0.0765	P	0.3
5	☐	5000.000	4810.840	687405.64	0.1025	P	1.6
6	☐	10000.000	9669.169	996603.39	0.1563	P	1.9
7	☐	20000.000	20209.339	1687851.41	0.2730	A	1.3
8	☐			281320.12	0.0455	P	1.4

$$y = 1.1070\text{E-}005 * x + 0.0493$$

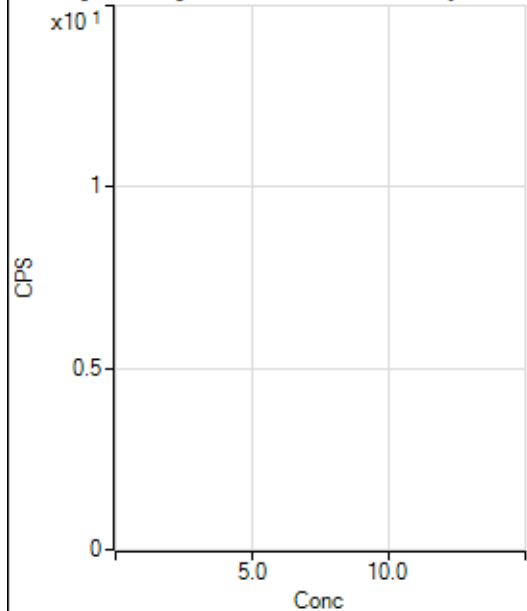
$$R = 0.9997$$

$$DL = 196$$

$$BEC = 4452$$

Weight: <None>

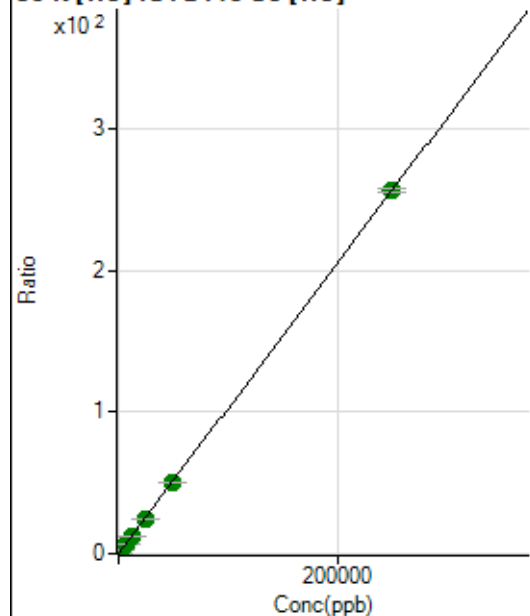
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33351.03	0.0525	P	1.1
2	☐	500.000	508.355	369271.67	0.5726	P	2.2
3	☐	2500.000	2504.189	1602957.29	2.6147	A	0.0
4	☐	6250.000	6191.026	3738883.46	6.3869	A	0.6
5	☐	12500.000	12204.452	7000995.99	12.5395	A	1.0
6	☐	25000.000	24375.225	13588484.33	24.9920	A	0.8
7	☐	50000.000	49390.238	26937921.09	50.5861	A	0.3
8	☐	250000.00	250200.62	148107232.48	256.0448	A	1.1

$$y = 0.0010 * x + 0.0525$$

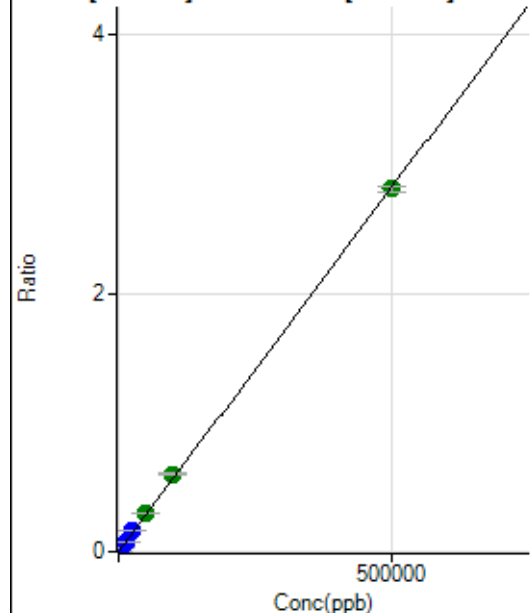
$$R = 1.0000$$

$$DL = 1.762$$

$$BEC = 51.33$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	147.23	0.0000	P	23.2
2	☐	500.000	524.454	22197.25	0.0030	P	4.2
3	☐	5000.000	5918.367	240190.03	0.0334	P	3.4
4	☐	12500.000	14235.030	563628.41	0.0803	P	0.4
5	☐	25000.000	28202.178	1066623.34	0.1591	P	1.2
6	☐	50000.000	53018.346	1906740.17	0.2991	A	2.1
7	☐	100000.00	106715.22	3721612.02	0.6020	A	2.2
8	☐	500000.00	498142.42	17366145.18	2.8100	A	1.3

$$y = 5.6408\text{E-}006 * x + 1.9874\text{E-}005$$

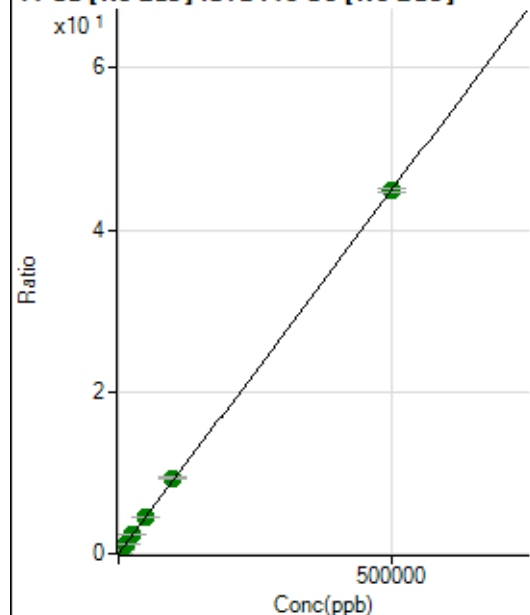
$$R = 0.9999$$

$$DL = 2.447$$

$$BEC = 3.523$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	14521.90	0.0020	P	1.3
2	☐	500.000	520.670	362963.32	0.0487	P	2.7
3	☐	5000.000	5300.754	3435546.00	0.4777	A	2.3
4	☐	12500.000	12876.256	8123662.94	1.1576	A	0.5
5	☐	25000.000	25455.569	15329701.73	2.2867	A	1.3
6	☐	50000.000	51303.969	29371291.28	4.6066	A	0.9
7	☐	100000.00	103468.44	57426213.09	9.2886	A	2.1
8	☐	500000.00	499140.70	276887242.30	44.8014	A	0.9

$$y = 8.9753\text{E-}005 * x + 0.0020$$

$$R = 1.0000$$

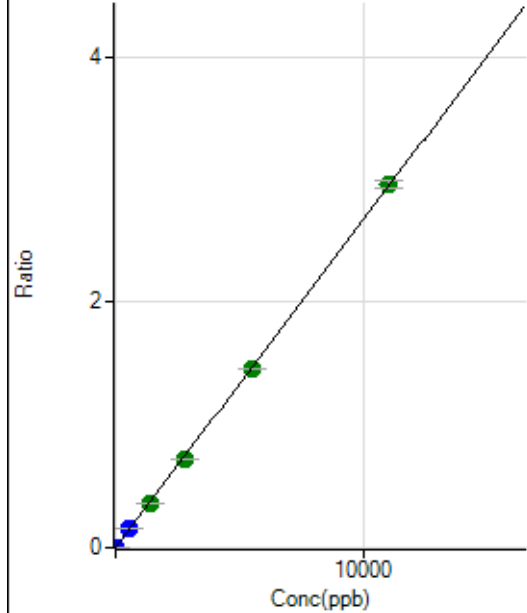
$$DL = 0.8468$$

$$BEC = 21.86$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	155.56	0.0000	P	13.5
2	☐	5.000	5.198	10542.80	0.0014	P	4.0
3	☐	550.000	583.120	1123884.62	0.1563	P	1.9
4	☐	1375.000	1373.053	2581971.37	0.3679	A	0.2
5	☐	2750.000	2698.301	4847290.43	0.7230	A	0.9
6	☐	5500.000	5442.505	9298971.30	1.4584	A	0.9
7	☐	11000.000	11040.259	18289415.86	2.9583	A	2.1
8	☐			4800.89	0.0008	P	4.2

$$y = 2.6795E-004 * x + 2.1017E-005$$

$$R = 1.0000$$

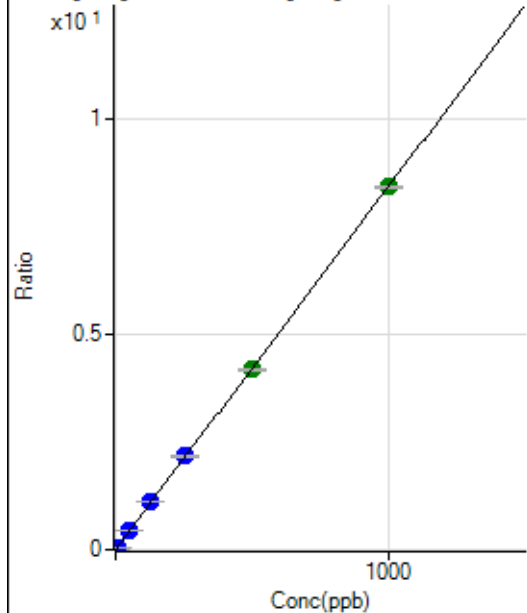
$$DL = 0.03187$$

$$BEC = 0.07843$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	14.44	0.0000	P	35.7
2	☐	5.000	4.938	26906.26	0.0417	P	2.8
3	☐	50.000	52.290	270681.47	0.4415	P	0.5
4	☐	125.000	130.502	645063.82	1.1019	P	0.7
5	☐	250.000	256.962	1211383.25	2.1697	P	0.9
6	☐	500.000	496.552	2279665.57	4.1927	A	0.8
7	☐	1000.000	999.182	4492625.49	8.4366	A	0.8
8	☐			1026.71	0.0018	P	6.5

$$y = 0.0084 * x + 2.2768E-005$$

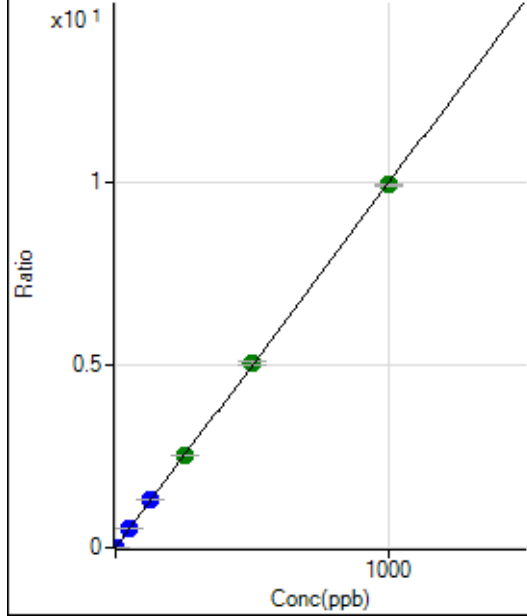
$$R = 1.0000$$

$$DL = 0.002885$$

$$BEC = 0.002697$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2282.42	0.0036	P	4.4
2	☐	2.000	1.967	14960.85	0.0232	P	1.7
3	☐	50.000	53.403	328403.41	0.5357	P	0.8
4	☐	125.000	131.461	768935.13	1.3135	P	1.3
5	☐	250.000	254.657	1418695.28	2.5410	A	0.5
6	☐	500.000	505.767	2741871.24	5.0430	A	1.5
7	☐	1000.000	994.974	5281217.73	9.9175	A	0.7
8	☐			21701.25	0.0375	P	2.7

$$y = 0.0100 * x + 0.0036$$

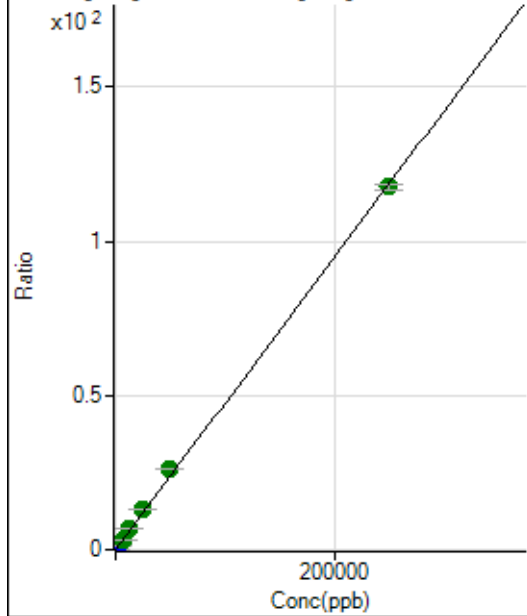
$$R = 1.0000$$

$$DL = 0.04797$$

$$BEC = 0.3608$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1384.82	0.0022	P	8.1
2	☐	50.000	57.206	18871.19	0.0293	P	0.6
3	☐	2500.000	3057.673	888507.12	1.4494	P	1.1
4	☐	6250.000	7195.987	1995131.31	3.4081	A	0.7
5	☐	12500.000	13995.366	3699763.93	6.6263	A	1.0
6	☐	25000.000	27722.184	7135419.49	13.1233	A	0.2
7	☐	50000.000	55765.292	14056390.17	26.3963	A	0.4
8	☐	250000.00	248470.72	68021768.54	117.6050	A	1.6

$$y = 4.7331E-004 * x + 0.0022$$

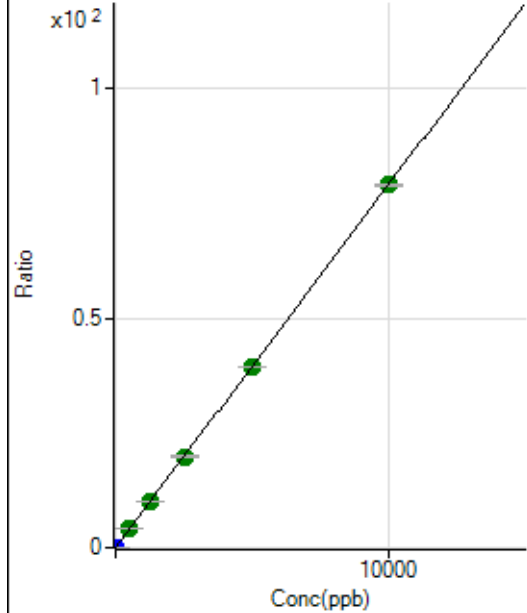
$$R = 0.9997$$

$$DL = 1.114$$

$$BEC = 4.608$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	255.56	0.0004	P	10.4
2	☐	1.000	1.008	5397.69	0.0084	P	4.8
3	☐	500.000	515.628	2500293.84	4.0785	A	0.5
4	☐	1250.000	1282.210	5936538.59	10.1413	A	0.7
5	☐	2500.000	2514.760	11104886.64	19.8895	A	0.4
6	☐	5000.000	4995.096	21480249.54	39.5064	A	0.2
7	☐	10000.000	9993.955	42091139.93	79.0422	A	0.5
8	☐			27091.10	0.0468	P	2.5

$$y = 0.0079 * x + 4.0243E-004$$

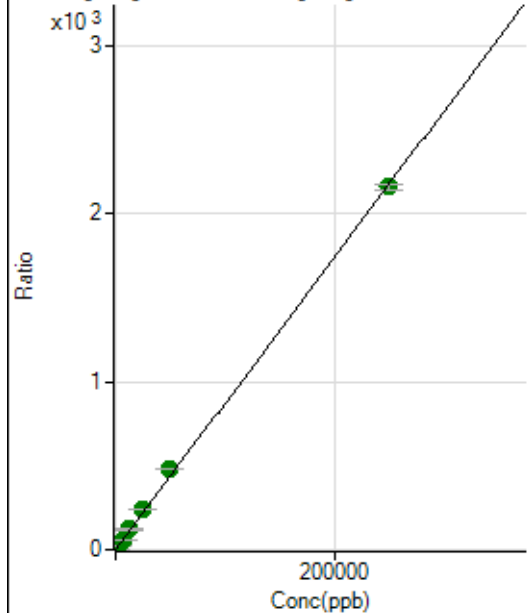
$$R = 1.0000$$

$$DL = 0.01581$$

$$BEC = 0.05088$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	11789.94	0.0186	P	1.2
2	☐	50.000	56.140	326098.56	0.5056	P	1.6
3	☐	2500.000	2847.047	15154282.75	24.7195	A	0.3
4	☐	6250.000	7107.080	36106424.42	61.6795	A	0.4
5	☐	12500.000	13901.953	67351214.93	120.6317	A	1.2
6	☐	25000.000	27625.094	130325410.32	239.6935	A	0.1
7	☐	50000.000	55089.830	254530322.36	477.9771	A	0.1
8	☐	250000.00	248624.52	1247704057.5	2,157.081	A	1.3

$$y = 0.0087 * x + 0.0186$$

$$R = 0.9998$$

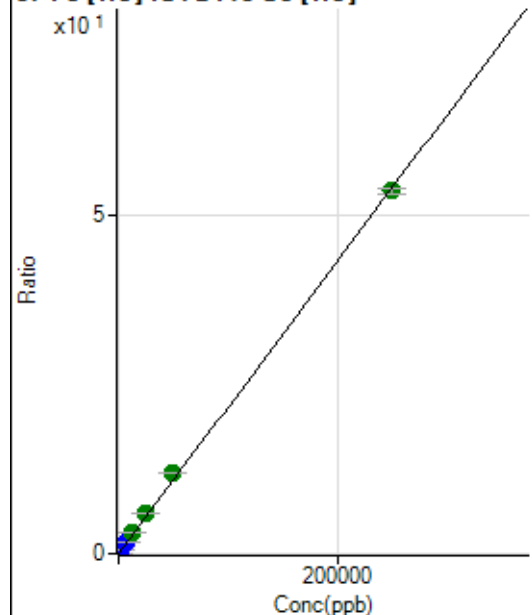
$$DL = 0.07849$$

$$BEC = 2.14$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	266.67	0.0004	P	9.4
2	☐	50.000	57.930	8309.83	0.0129	P	4.2
3	☐	2500.000	3013.600	397929.37	0.6491	P	0.8
4	☐	6250.000	7460.467	940333.53	1.6063	P	0.4
5	☐	12500.000	13981.324	1680554.03	3.0100	A	0.4
6	☐	25000.000	27763.159	3249558.64	5.9766	A	0.6
7	☐	50000.000	55575.593	6370719.53	11.9634	A	0.5
8	☐	250000.00	248499.10	30940744.21	53.4915	A	1.3

$$y = 2.1526E-004 * x + 4.2005E-004$$

$$R = 0.9997$$

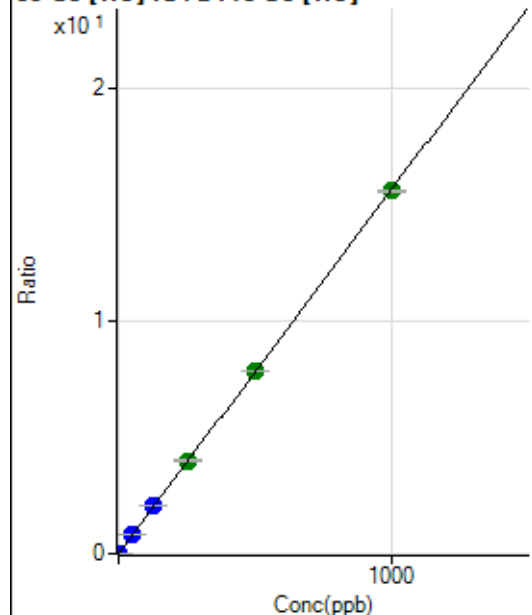
$$DL = 0.5516$$

$$BEC = 1.951$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	126.67	0.0002	P	7.3
2	☐	1.000	1.037	10574.92	0.0164	P	3.6
3	☐	50.000	53.884	516121.62	0.8419	P	0.6
4	☐	125.000	133.263	1218671.19	2.0819	P	0.9
5	☐	250.000	255.768	2230742.43	3.9955	A	1.2
6	☐	500.000	501.716	4261330.53	7.8373	A	0.4
7	☐	1000.000	996.473	8288985.85	15.5657	A	0.3
8	☐			22607.10	0.0391	P	0.7

$$y = 0.0156 * x + 1.9951E-004$$

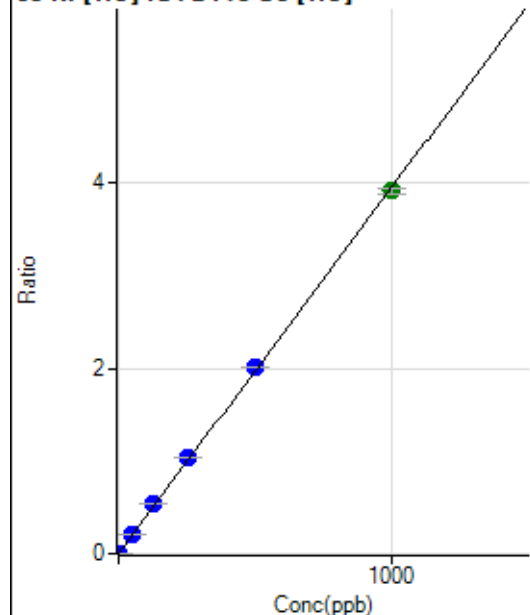
$$R = 1.0000$$

$$DL = 0.00279$$

$$BEC = 0.01277$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	63.33	0.0001	P	31.8
2	☐	1.000	1.017	2652.48	0.0041	P	3.4
3	☐	50.000	54.986	133051.86	0.2170	P	0.1
4	☐	125.000	135.087	312040.47	0.5330	P	0.4
5	☐	250.000	262.303	577820.02	1.0349	P	0.7
6	☐	500.000	508.196	1090133.26	2.0050	P	0.4
7	☐	1000.000	991.316	2082659.59	3.9110	A	1.6
8	☐			8243.45	0.0142	P	0.4

$$y = 0.0039 * x + 9.9770E-005$$

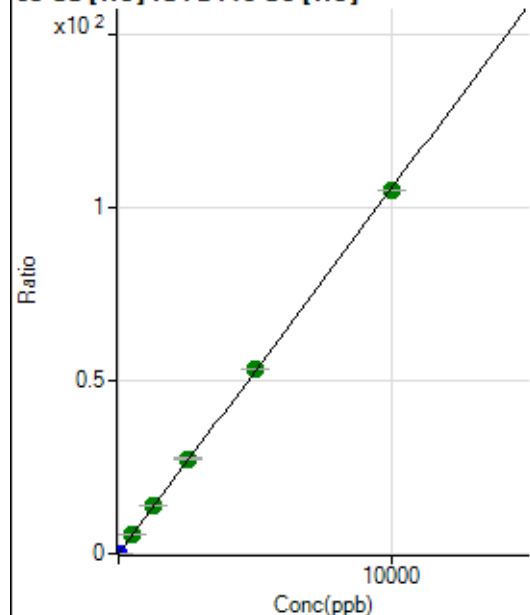
$$R = 0.9998$$

$$DL = 0.02414$$

$$BEC = 0.02529$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	966.71	0.0015	P	1.3
2	☐	2.000	2.096	15244.53	0.0236	P	2.2
3	☐	500.000	538.558	3485433.04	5.6850	A	0.8
4	☐	1250.000	1334.477	8244845.02	14.0845	A	0.5
5	☐	2500.000	2597.582	15306525.05	27.4142	A	0.8
6	☐	5000.000	5063.375	29054677.90	53.4361	A	0.3
7	☐	10000.000	9931.429	55812731.39	104.8095	A	0.1
8	☐			27253.78	0.0471	P	4.5

$$y = 0.0106 * x + 0.0015$$

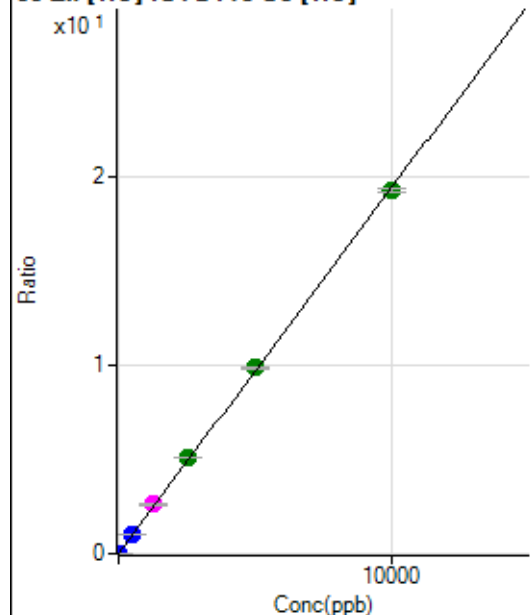
$$R = 0.9999$$

$$DL = 0.005835$$

$$BEC = 0.1443$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	522.24	0.0008	P	8.3
2	☐	2.000	1.986	3014.78	0.0047	P	1.2
3	☐	500.000	548.140	652036.58	1.0636	P	0.4
4	☐	1250.000	1349.140	1531726.85	2.6166	M	2.0
5	☐	2500.000	2615.818	2832156.83	5.0726	A	0.2
6	☐	5000.000	5077.106	5352990.06	9.8447	A	1.1
7	☐	10000.000	9917.693	10240250.68	19.2300	A	1.0
8	☐			12762.22	0.0221	P	1.2

$$y = 0.0019 * x + 8.2254E-004$$

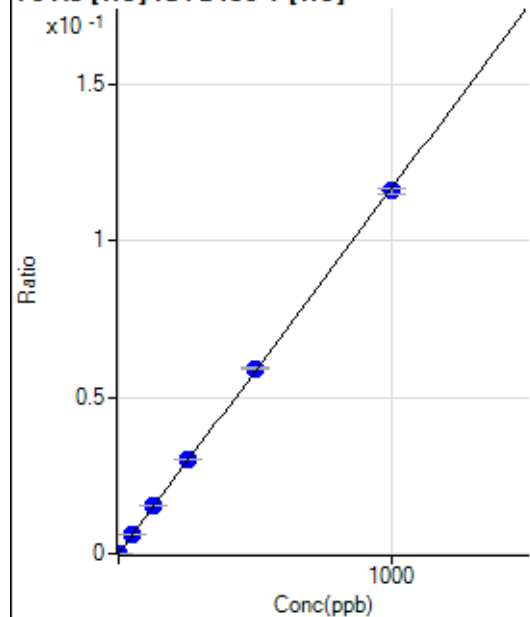
$$R = 0.9999$$

$$DL = 0.105$$

$$BEC = 0.4242$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	23.46	0.0000	P	17.8
2	☐	1.000	1.063	834.59	0.0001	P	7.5
3	☐	50.000	52.998	39028.14	0.0062	P	0.9
4	☐	125.000	132.331	93307.52	0.0155	P	1.6
5	☐	250.000	258.487	174918.29	0.0302	P	1.1
6	☐	500.000	506.663	335621.21	0.0592	P	0.7
7	☐	1000.000	993.480	651895.97	0.1160	P	1.2
8	☐			311.12	0.0001	P	11.9

$$y = 1.1678E-004 * x + 3.5880E-006$$

$$R = 0.9999$$

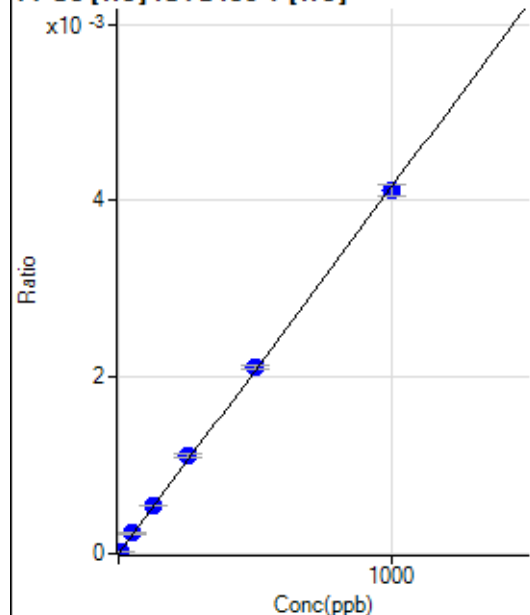
$$DL = 0.01642$$

$$BEC = 0.03072$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.502	122.23	0.0000	P	12.8
3	☐	50.000	55.847	1462.31	0.0002	P	5.0
4	☐	125.000	131.381	3295.95	0.0005	P	2.1
5	☐	250.000	268.638	6467.02	0.0011	P	3.4
6	☐	500.000	509.703	12012.75	0.0021	P	2.2
7	☐	1000.000	989.402	23100.32	0.0041	P	3.1
8	☐			5.55	0.0000	P	124.5

$$y = 4.1554\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

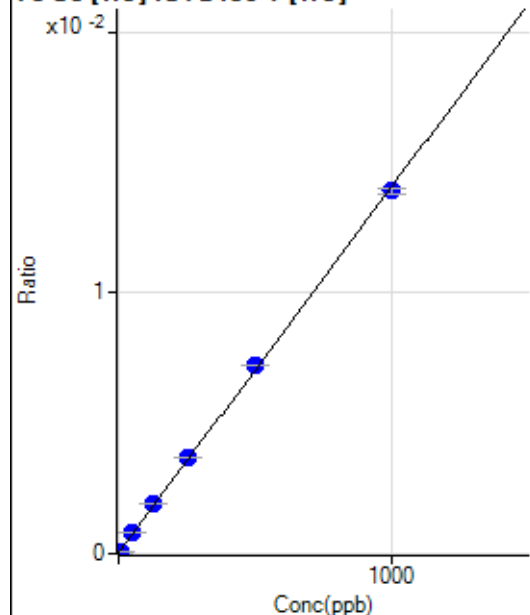
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	223.46	0.0000	P	4.7
2	☐	5.000	5.037	686.44	0.0001	P	4.1
3	☐	50.000	54.516	5036.68	0.0008	P	1.7
4	☐	125.000	135.832	11712.68	0.0019	P	1.5
5	☐	250.000	260.896	21407.44	0.0037	P	1.4
6	☐	500.000	512.342	40970.56	0.0072	P	0.7
7	☐	1000.000	989.525	78203.33	0.0139	P	1.6
8	☐			217.29	0.0000	P	14.4

$$y = 1.4031\text{E-}005 * x + 3.4206\text{E-}005$$

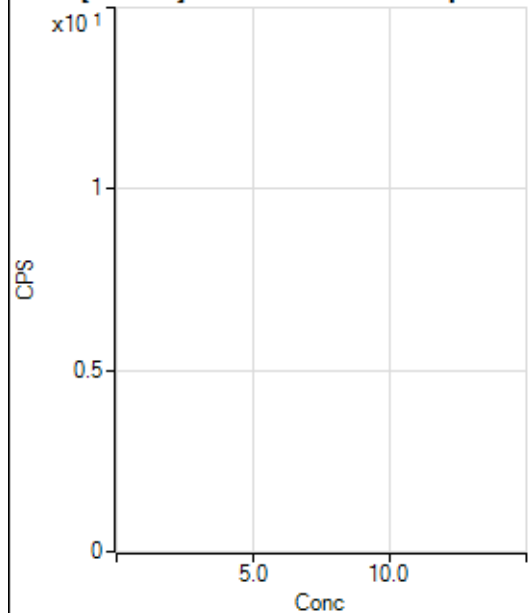
$$R = 0.9998$$

$$DL = 0.3429$$

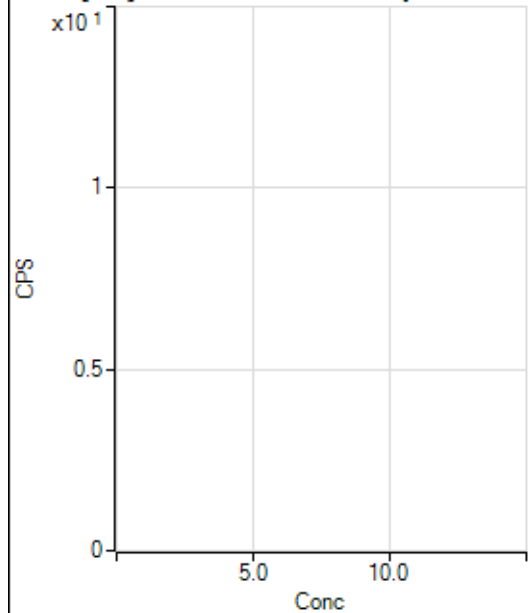
$$BEC = 2.438$$

Weight: <None>

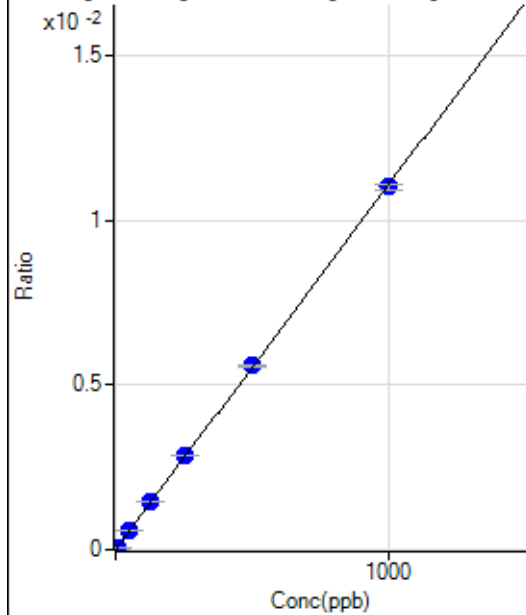
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			7004.67		P	3.0
2	☐			7207.51		P	4.6
3	☐			7471.54		P	2.4
4	☐			6618.33		P	4.4
5	☐			6257.02		P	4.5
6	☐			5692.91		P	6.3
7	☐			5595.65		P	6.2
8	☐			6140.31		P	4.6

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			90.09		P	11.1
2	☐			46.71		P	44.6
3	☐			76.74		P	7.5
4	☐			56.72		P	20.4
5	☐			66.73		P	48.2
6	☐			90.10		P	33.3
7	☐			93.43		P	30.9
8	☐			80.08		P	21.7

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-158.82	0.0000	P	-205.
2	☐	5.000	5.203	1267.22	0.0001	P	0.8
3	☐	50.000	52.997	13948.60	0.0006	P	4.6
4	☐	125.000	131.581	34035.26	0.0015	P	1.9
5	☐	250.000	258.253	65086.06	0.0029	P	0.6
6	☐	500.000	504.525	122882.41	0.0056	P	0.6
7	☐	1000.000	994.701	234965.80	0.0110	P	1.4
8	☐			-188.99	0.0000	P	-87.4

$$y = 1.1073E-005 * x - 6.3081E-006$$

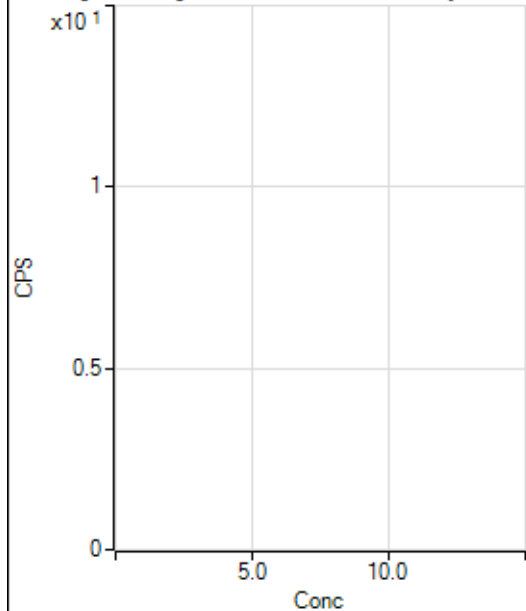
$$R = 0.9999$$

$$DL = 3.51$$

$$BEC = -0.5697$$

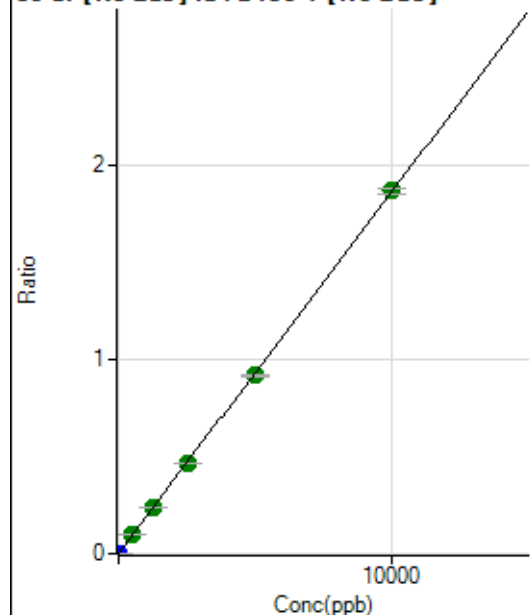
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			15826.36		P	0.5
2	☐			15709.57		P	0.9
3	☐			15788.52		P	2.3
4	☐			15335.83		P	1.3
5	☐			14387.12		P	2.6
6	☐			13772.09		P	3.2
7	☐			13570.80		P	1.4
8	☐			13415.08		P	3.9

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	25372.38	0.0010	P	2.9
2	☐	1.000	1.001	29805.67	0.0012	P	2.5
3	☐	500.000	514.686	2319519.58	0.0965	A	2.5
4	☐	1250.000	1253.850	5483716.23	0.2337	A	1.3
5	☐	2500.000	2482.557	10533722.11	0.4618	A	0.2
6	☐	5000.000	4936.739	20198916.43	0.9173	A	0.9
7	☐	10000.000	10034.776	39776219.99	1.8635	A	1.5
8	☐			51994.94	0.0026	P	1.4

$$y = 1.8560E-004 * x + 0.0010$$

$$R = 1.0000$$

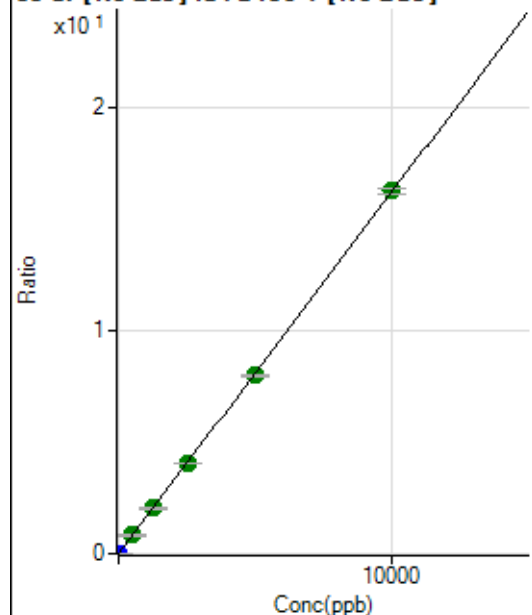
$$DL = 0.4762$$

$$BEC = 5.502$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	516.69	0.0000	P	9.1
2	☐	1.000	1.011	40904.76	0.0017	P	2.5
3	☐	500.000	510.903	19855729.26	0.8265	A	2.8
4	☐	1250.000	1254.511	47613719.81	2.0295	A	0.7
5	☐	2500.000	2480.021	91516109.68	4.0120	A	0.5
6	☐	5000.000	4929.948	175618615.04	7.9753	A	0.8
7	☐	10000.000	10038.912	346642057.75	16.2401	A	1.6
8	☐			271590.04	0.0134	P	1.1

$$y = 0.0016 * x + 2.0780E-005$$

$$R = 1.0000$$

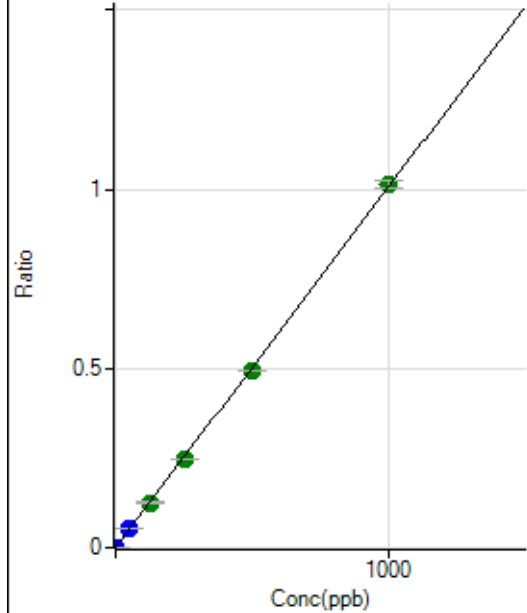
$$DL = 0.003514$$

$$BEC = 0.01285$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1200.08	0.0000	P	8.5
2	☐	1.000	0.972	25358.51	0.0010	P	2.6
3	☐	50.000	52.715	1276575.21	0.0531	P	1.7
4	☐	125.000	124.935	2952593.80	0.1259	A	1.7
5	☐	250.000	247.019	5674976.60	0.2488	A	0.2
6	☐	500.000	490.364	10874315.78	0.4938	A	0.7
7	☐	1000.000	1005.436	21610568.02	1.0125	A	2.1
8	☐			13122.84	0.0006	P	3.0

$$y = 0.0010 * x + 4.8293E-005$$

$$R = 0.9999$$

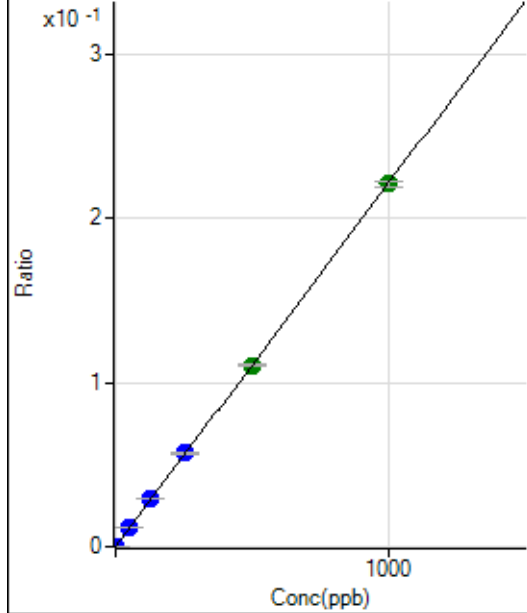
$$DL = 0.0123$$

$$BEC = 0.04796$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	183.34	0.0000	P	13.0
2	☐	1.000	0.948	5362.23	0.0002	P	4.0
3	☐	50.000	52.678	280269.46	0.0117	P	1.0
4	☐	125.000	130.347	676813.26	0.0288	P	0.4
5	☐	250.000	256.950	1297007.56	0.0569	P	0.5
6	☐	500.000	499.190	2432280.57	0.1105	A	1.1
7	☐	1000.000	997.865	4712817.60	0.2208	A	1.8
8	☐			2655.87	0.0001	P	4.6

$$y = 2.2126E-004 * x + 7.3840E-006$$

$$R = 1.0000$$

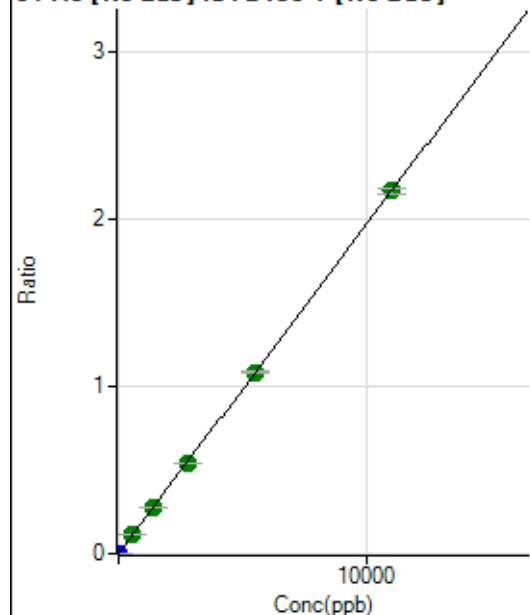
$$DL = 0.01302$$

$$BEC = 0.03337$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	380.57	0.0000	P	19.3
2	☐	5.000	5.991	29546.97	0.0012	P	2.1
3	☐	550.000	566.283	2682874.21	0.1117	A	1.5
4	☐	1375.000	1375.784	6364061.12	0.2712	A	0.7
5	☐	2750.000	2738.415	12315252.19	0.5399	A	0.2
6	☐	5500.000	5490.024	23834988.03	1.0824	A	0.9
7	☐	11000.000	11006.972	46319278.81	2.1700	A	1.8
8	☐			16367.95	0.0008	P	4.4

$$y = 1.9715E-004 * x + 1.5335E-005$$

$$R = 1.0000$$

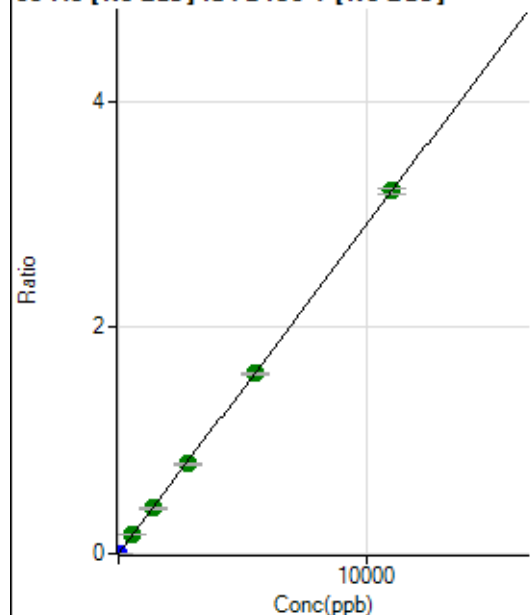
$$DL = 0.04502$$

$$BEC = 0.07778$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	83.34	0.0000	P	30.1
2	☐	5.000	5.172	37245.17	0.0015	P	3.5
3	☐	550.000	568.809	3977177.69	0.1655	A	2.0
4	☐	1375.000	1373.152	9375397.61	0.3996	A	0.9
5	☐	2750.000	2725.743	18093920.89	0.7932	A	1.3
6	☐	5500.000	5470.806	35060529.26	1.5921	A	1.1
7	☐	11000.000	11019.952	68451623.75	3.2070	A	1.9
8	☐			20726.26	0.0010	P	2.8

$$y = 2.9102E-004 * x + 3.3555E-006$$

$$R = 1.0000$$

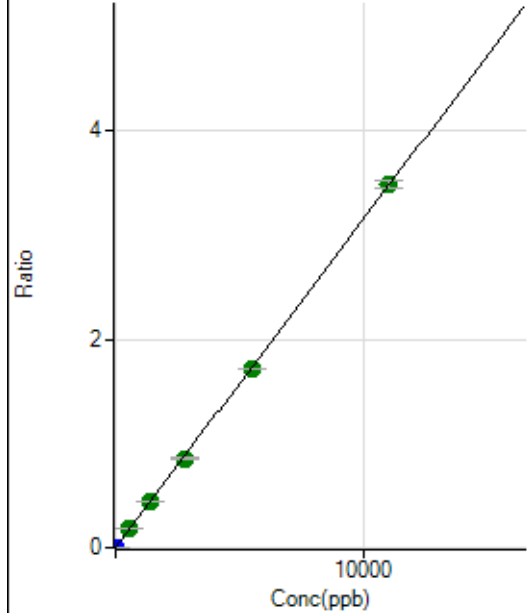
$$DL = 0.0104$$

$$BEC = 0.01153$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	613.92	0.0000	P	13.3
2	☐	5.000	5.276	41710.15	0.0017	P	2.9
3	☐	550.000	568.850	4311666.24	0.1795	A	2.5
4	☐	1375.000	1383.699	10241228.27	0.4365	A	0.6
5	☐	2750.000	2713.175	19523938.46	0.8559	A	0.8
6	☐	5500.000	5452.265	37875000.85	1.7200	A	0.4
7	☐	11000.000	11031.043	74273634.30	3.4798	A	2.1
8	☐			26786.32	0.0013	P	4.1

$$y = 3.1545\text{E-}004 * x + 2.4687\text{E-}005$$

$$R = 1.0000$$

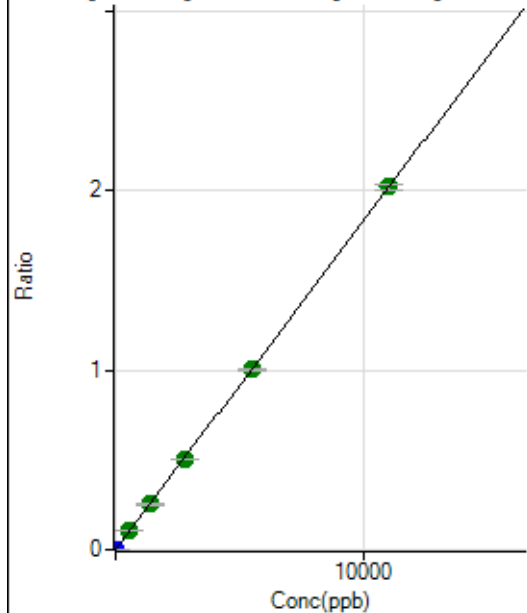
$$DL = 0.03131$$

$$BEC = 0.07826$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	58.33	0.0000	P	56.6
2	☐	5.000	5.151	23380.30	0.0009	P	1.3
3	☐	550.000	570.784	2514583.71	0.1047	A	1.9
4	☐	1375.000	1375.851	5918414.80	0.2523	A	0.9
5	☐	2750.000	2735.317	11440105.81	0.5015	A	0.3
6	☐	5500.000	5464.257	22062859.00	1.0019	A	0.5
7	☐	11000.000	11020.396	43129366.59	2.0206	A	1.4
8	☐			12886.54	0.0006	P	2.8

$$y = 1.8335\text{E-}004 * x + 2.3455\text{E-}006$$

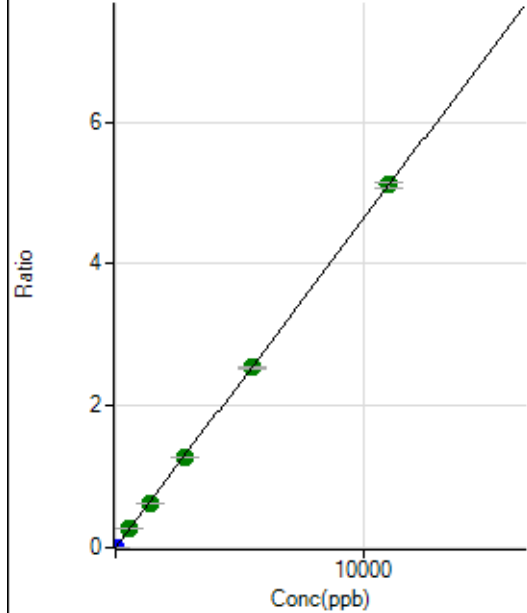
$$R = 1.0000$$

$$DL = 0.02174$$

$$BEC = 0.01279$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	258.34	0.0000	P	8.7
2	☐	5.000	5.131	59092.21	0.0024	P	1.1
3	☐	550.000	563.167	6283146.63	0.2615	A	1.0
4	☐	1375.000	1367.954	14900812.48	0.6351	A	0.6
5	☐	2750.000	2724.441	28853464.53	1.2649	A	0.2
6	☐	5500.000	5473.550	55962369.31	2.5413	A	0.8
7	☐	11000.000	11019.837	109205109.38	5.1163	A	1.5
8	☐			32199.93	0.0016	P	5.4

$$y = 4.6428\text{E-}004 * x + 1.0398\text{E-}005$$

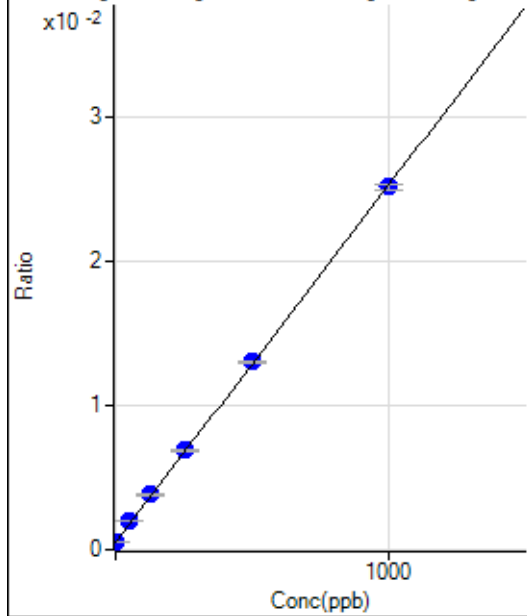
$$R = 1.0000$$

$$DL = 0.00582$$

$$BEC = 0.0224$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	9700.56	0.0006	P	1.6
2	☐	1.000	1.103	10217.60	0.0006	P	3.0
3	☐	50.000	56.436	33210.32	0.0020	P	1.5
4	☐	125.000	132.111	65650.23	0.0038	P	1.3
5	☐	250.000	257.073	116995.47	0.0069	P	1.7
6	☐	500.000	504.269	214442.38	0.0130	P	0.6
7	☐	1000.000	994.887	403297.41	0.0252	P	1.9
8	☐			8434.49	0.0006	P	4.6

$$y = 2.4775\text{E-}005 * x + 5.5640\text{E-}004$$

$$R = 0.9999$$

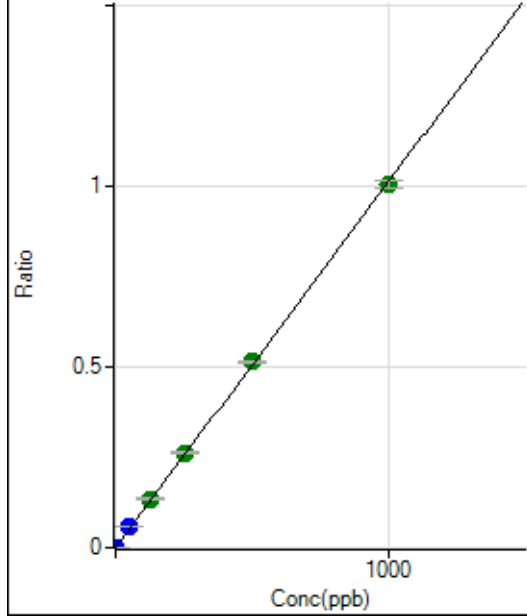
$$DL = 1.074$$

$$BEC = 22.46$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	109.73	0.0000	P	14.7
2	☐	1.000	1.116	19853.96	0.0011	P	4.4
3	☐	50.000	58.867	1011336.55	0.0595	P	1.2
4	☐	125.000	133.584	2315919.04	0.1351	A	2.2
5	☐	250.000	260.066	4443273.49	0.2630	A	1.4
6	☐	500.000	508.486	8449976.41	0.5142	A	0.5
7	☐	1000.000	991.724	16047116.68	1.0029	A	2.0
8	☐			5945.73	0.0004	P	2.8

$$y = 0.0010 * x + 6.2966E-006$$

$$R = 0.9999$$

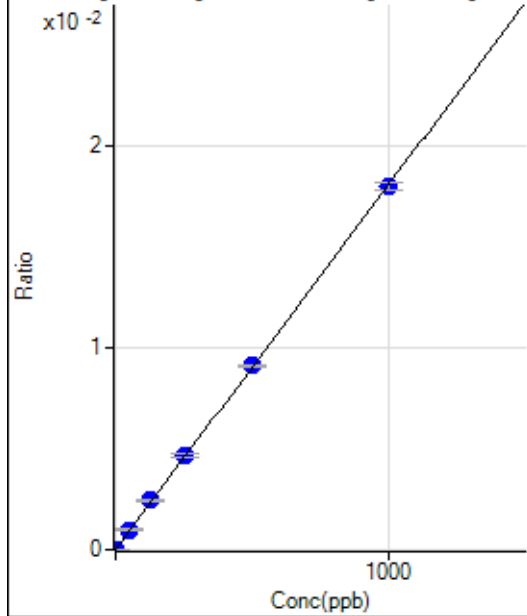
$$DL = 0.002753$$

$$BEC = 0.006226$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	159.73	0.0000	P	4.6
2	☐	1.000	0.964	465.29	0.0000	P	6.9
3	☐	50.000	54.650	16922.46	0.0010	P	1.2
4	☐	125.000	134.414	41774.00	0.0024	P	1.8
5	☐	250.000	257.556	78735.77	0.0047	P	2.3
6	☐	500.000	504.608	149910.99	0.0091	P	1.1
7	☐	1000.000	994.398	287511.90	0.0180	P	2.1
8	☐			201.39	0.0000	P	22.2

$$y = 1.8061E-005 * x + 9.1637E-006$$

$$R = 0.9999$$

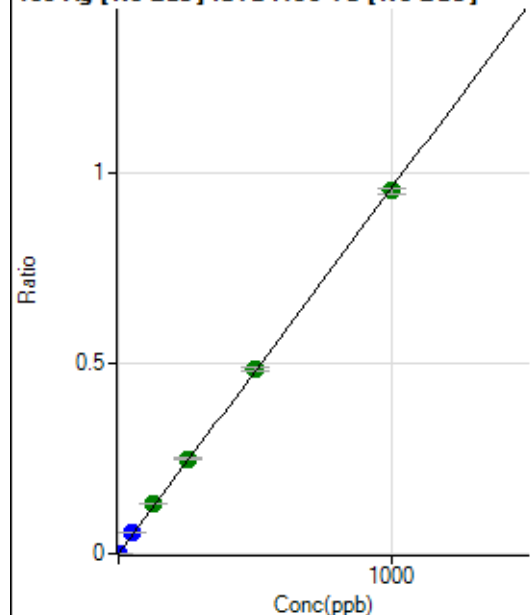
$$DL = 0.06964$$

$$BEC = 0.5074$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	18.06	0.0000	P	35.3
2	☐	1.000	1.098	18436.91	0.0011	P	6.7
3	☐	50.000	59.222	965681.42	0.0569	P	1.5
4	☐	125.000	135.564	2231089.03	0.1301	A	0.8
5	☐	250.000	259.835	4214100.87	0.2494	A	1.1
6	☐	500.000	505.987	7981367.54	0.4857	A	1.8
7	☐	1000.000	992.766	15249107.11	0.9530	A	1.8
8	☐			5481.66	0.0004	P	2.4

$$y = 9.5996\text{E-}004 * x + 1.0360\text{E-}006$$

$$R = 0.9999$$

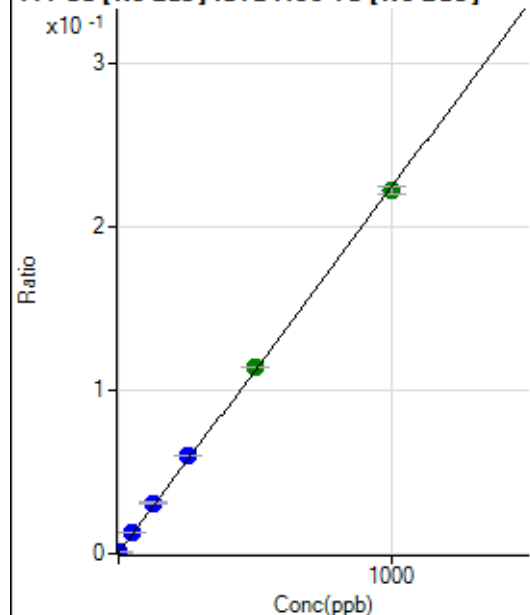
$$DL = 0.001142$$

$$BEC = 0.001079$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	6729.02	0.0004	P	1.8
2	☐	1.000	1.108	11088.76	0.0006	P	2.0
3	☐	50.000	57.855	226203.46	0.0133	P	0.9
4	☐	125.000	136.753	530575.99	0.0309	P	1.6
5	☐	250.000	268.006	1018499.24	0.0603	P	0.5
6	☐	500.000	507.527	1870263.47	0.1138	A	0.4
7	☐	1000.000	989.873	3545959.64	0.2216	A	2.1
8	☐			6719.10	0.0004	P	3.9

$$y = 2.2349\text{E-}004 * x + 3.8595\text{E-}004$$

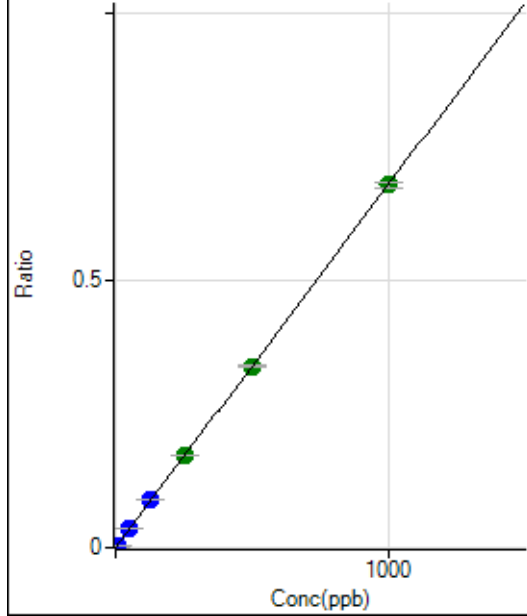
$$R = 0.9998$$

$$DL = 0.09359$$

$$BEC = 1.727$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2080.78	0.0001	P	4.6
2	☐	5.000	5.262	64614.70	0.0037	P	2.9
3	☐	50.000	55.008	636753.53	0.0375	P	1.1
4	☐	125.000	131.674	1535376.57	0.0896	P	2.0
5	☐	250.000	252.232	2896827.32	0.1715	A	0.6
6	☐	500.000	499.908	5582176.64	0.3397	A	0.5
7	☐	1000.000	998.402	10853685.31	0.6783	A	1.9
8	☐			7440.98	0.0005	P	2.2

$$y = 6.7929\text{E-}004 * x + 1.1937\text{E-}004$$

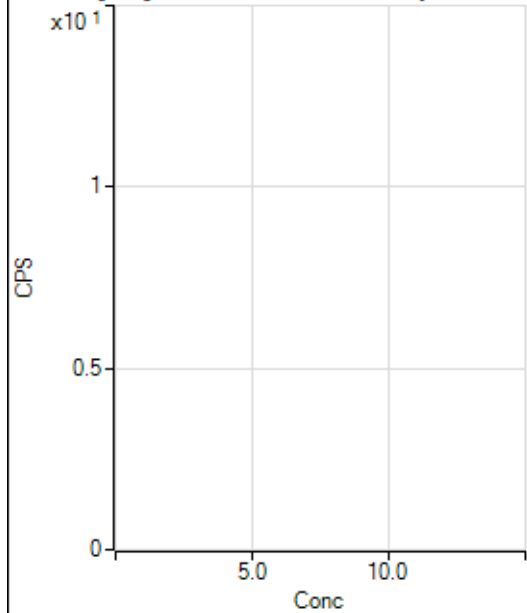
$$R = 1.0000$$

$$DL = 0.02423$$

$$BEC = 0.1757$$

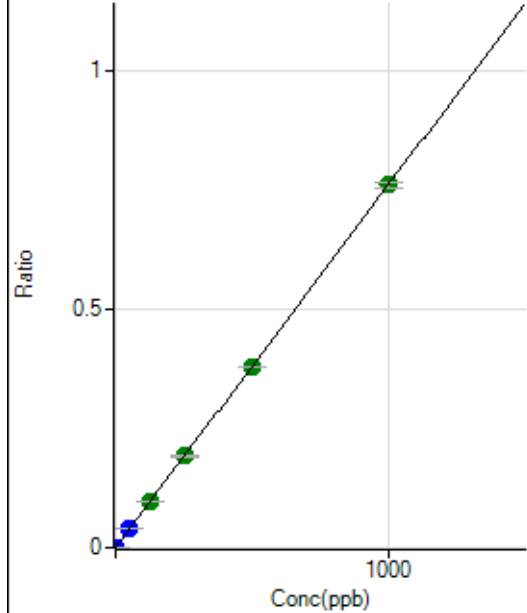
Weight: <None>

Min Conc: 0

118 Sn [He] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			941.01		P	6.4
2	☐			28985.37		P	1.0
3	☐			281913.55		P	0.8
4	☐			687272.15		P	0.1
5	☐			1308038.62		P	0.4
6	☐			2475597.75		A	0.8
7	☐			4859554.28		A	0.7
8	☐			3527.42		P	5.3

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	59.72	0.0000	P	8.5
2	☐	2.000	2.020	26957.29	0.0015	P	2.6
3	☐	50.000	54.615	706176.04	0.0416	P	1.4
4	☐	125.000	128.258	1673573.40	0.0976	A	2.1
5	☐	250.000	251.799	3237906.95	0.1917	A	1.5
6	☐	500.000	499.030	6241780.56	0.3798	A	0.2
7	☐	1000.000	999.397	12172098.88	0.7607	A	1.8
8	☐			8092.64	0.0005	P	5.4

$$y = 7.6115\text{E-}004 * x + 3.4267\text{E-}006$$

$$R = 1.0000$$

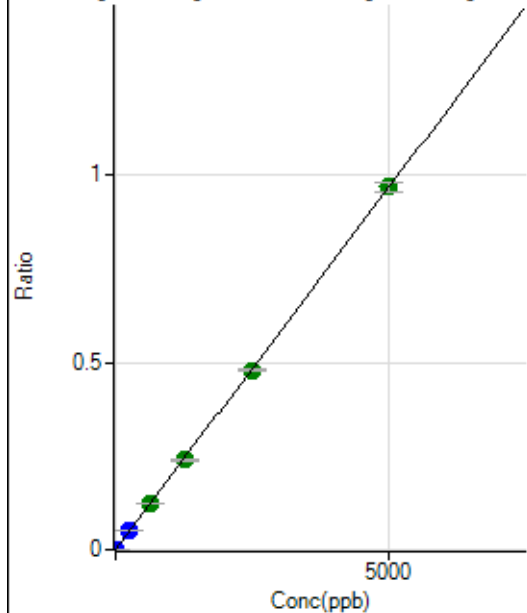
$$DL = 0.001148$$

$$BEC = 0.004502$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	52.78	0.0000	P	55.1
2	☐	10.000	9.989	33799.23	0.0019	P	2.5
3	☐	250.000	269.240	883161.79	0.0520	P	1.6
4	☐	625.000	632.363	2093494.12	0.1221	A	1.3
5	☐	1250.000	1241.915	4051728.78	0.2398	A	1.3
6	☐	2500.000	2476.915	7859668.32	0.4783	A	0.8
7	☐	5000.000	5011.682	15484051.56	0.9678	A	2.7
8	☐			7552.17	0.0005	P	5.1

$$y = 1.9310\text{E-}004 * x + 3.0247\text{E-}006$$

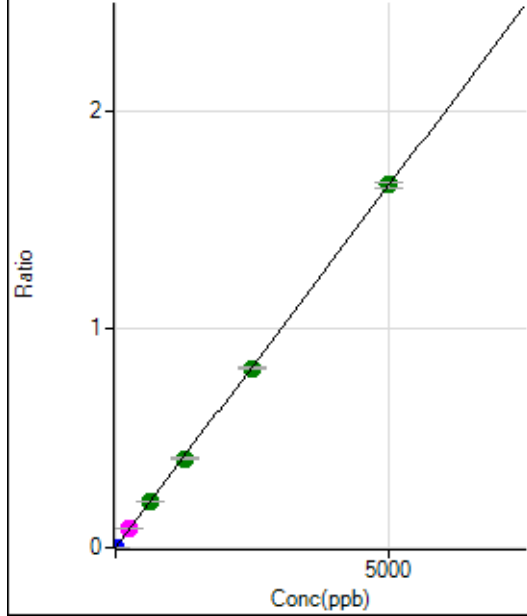
$$R = 1.0000$$

$$DL = 0.02588$$

$$BEC = 0.01566$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	50.00	0.0000	P	33.1
2	☐	10.000	10.041	58295.67	0.0033	P	2.5
3	☐	250.000	269.103	1515751.79	0.0892	M	1.4
4	☐	625.000	636.231	3616464.70	0.2109	A	0.8
5	☐	1250.000	1234.481	6914965.95	0.4093	A	0.5
6	☐	2500.000	2478.209	13502127.21	0.8216	A	0.9
7	☐	5000.000	5012.416	26591467.78	1.6619	A	1.8
8	☐			13167.57	0.0009	P	1.4

$$y = 3.3155E-004 * x + 2.8658E-006$$

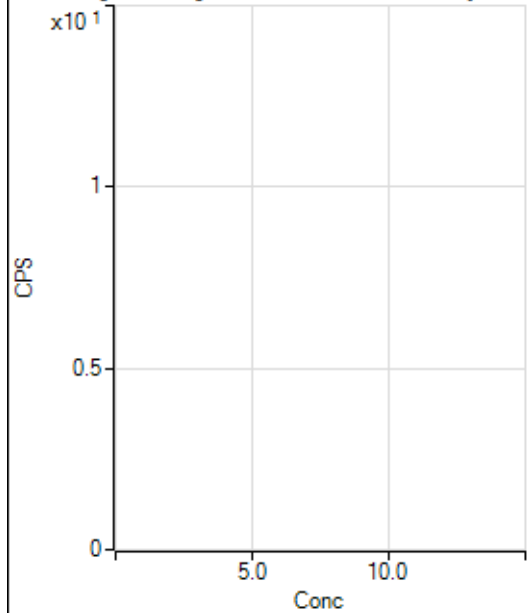
$$R = 1.0000$$

$$DL = 0.008582$$

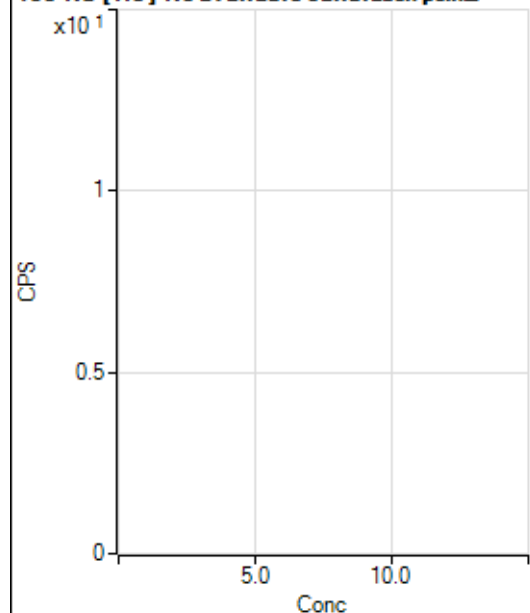
$$BEC = 0.008644$$

Weight: <None>

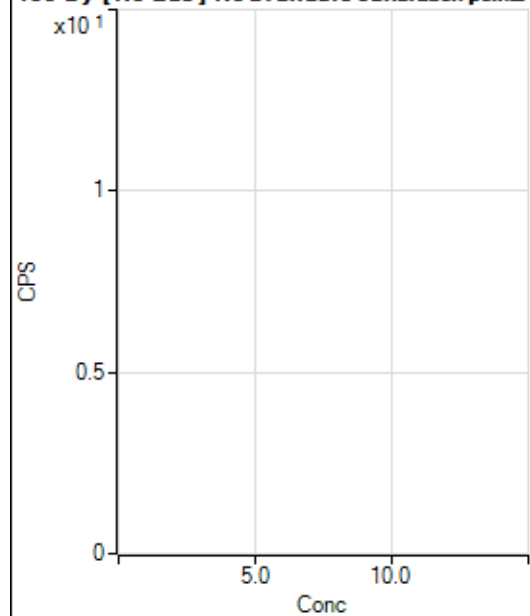
Min Conc: 0

150 Nd [No Gas] No available calibration points

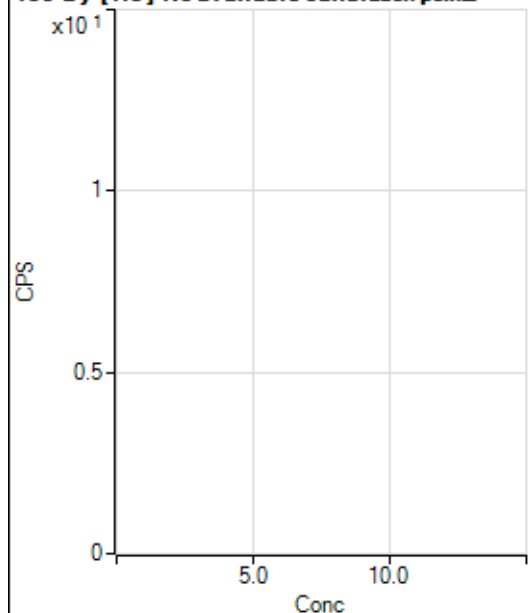
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			6.67		P	100.0
2	☐			6.67		P	100.0
3	☐			80.00		P	14.4
4	☐			151.12		P	6.7
5	☐			271.12		P	16.4
6	☐			555.58		P	8.0
7	☐			995.61		P	10.1
8	☐			133.34		P	42.7

150 Nd [He] No available calibration points

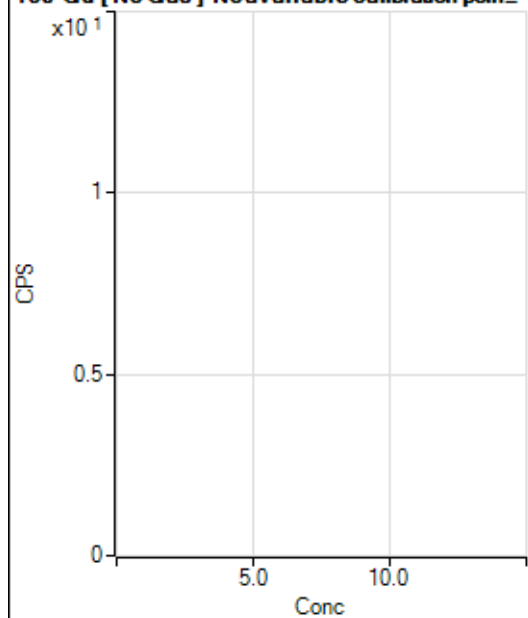
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1.11		P	173.2
2	☐			0.00		P	
3	☐			20.00		P	16.7
4	☐			37.78		P	5.1
5	☐			65.56		P	12.8
6	☐			87.78		P	19.5
7	☐			208.89		P	10.1
8	☐			70.00		P	8.2

156 Dy [No Gas] No available calibration points

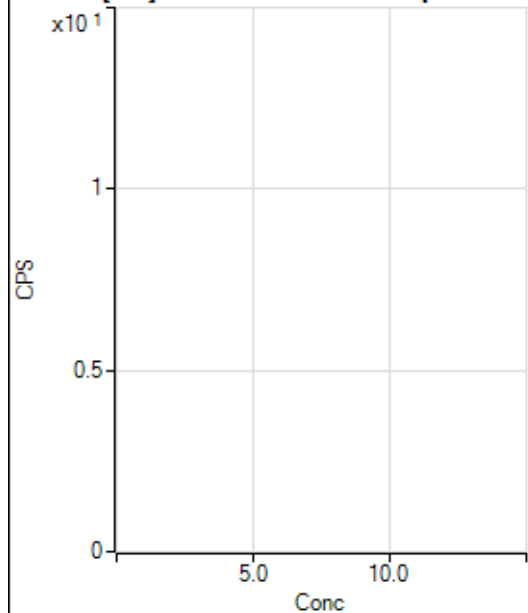
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			11.11		P	114.6
2	☐			8.33		P	100.0
3	☐			80.56		P	36.3
4	☐			105.56		P	36.5
5	☐			202.79		P	12.6
6	☐			508.35		P	4.3
7	☐			858.38		P	12.6
8	☐			3044.86		P	1.3

156 Dy [He] No available calibration points

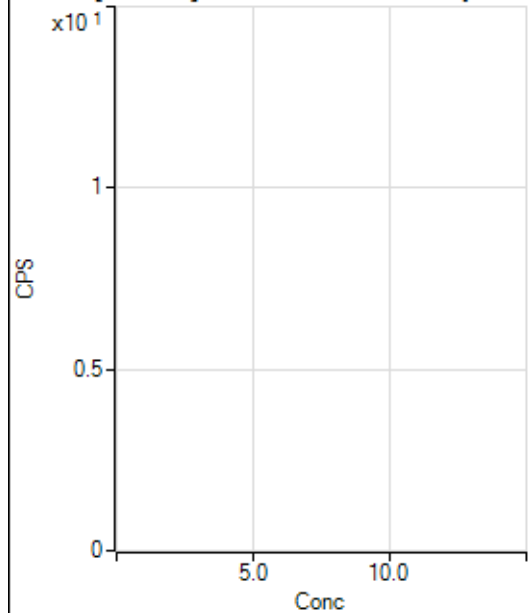
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			12.22		P	15.7
2	☐			10.00		P	88.2
3	☐			55.56		P	29.6
4	☐			118.89		P	15.4
5	☐			206.67		P	9.8
6	☐			418.90		P	9.2
7	☐			836.70		P	2.4
8	☐			1977.94		P	3.4

160 Gd [No Gas] Noavailable calibration poin_

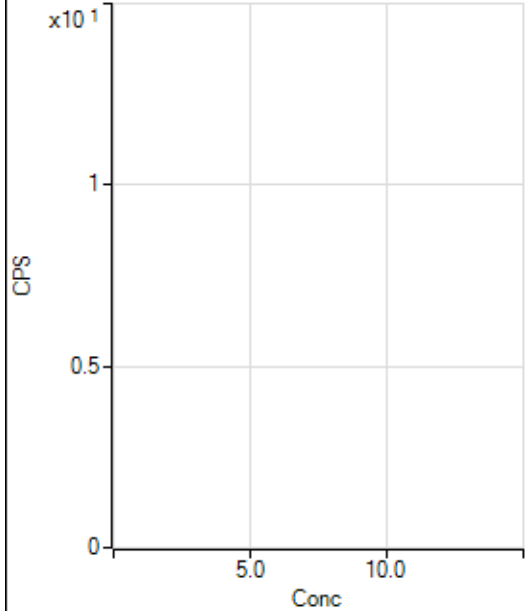
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			136.12		P	3.5
2	☐			108.34		P	40.7
3	☐			144.45		P	12.0
4	☐			191.67		P	11.5
5	☐			236.12		P	10.8
6	☐			380.57		P	21.0
7	☐			713.93		P	14.8
8	☐			2530.85		P	11.8

160 Gd [He] No available calibration points

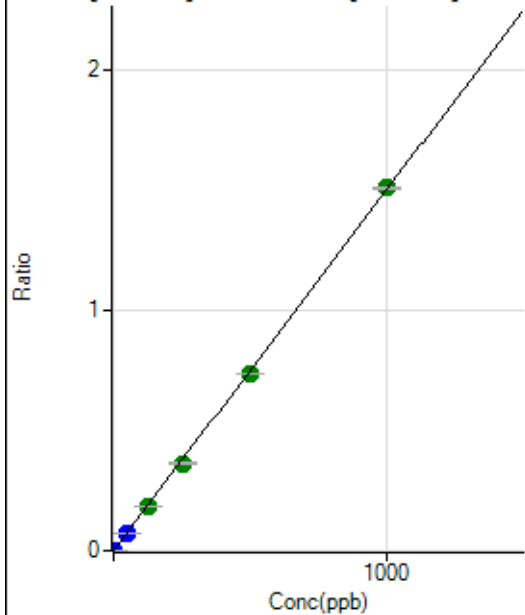
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			372.23		P	9.1
2	☐			415.57		P	14.0
3	☐			418.90		P	18.4
4	☐			450.01		P	7.1
5	☐			493.35		P	9.1
6	☐			614.46		P	11.0
7	☐			855.59		P	12.3
8	☐			2334.66		P	1.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			113.89		P	34.6
2	☐			116.67		P	14.3
3	☐			147.23		P	21.4
4	☐			155.56		P	3.1
5	☐			180.56		P	26.6
6	☐			227.79		P	5.6
7	☐			261.12		P	12.1
8	☐			555.58		P	8.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			86.67		P	13.3
2	☐			75.55		P	30.0
3	☐			103.33		P	14.8
4	☐			93.33		P	15.6
5	☐			113.33		P	29.9
6	☐			142.23		P	10.6
7	☐			214.45		P	5.0
8	☐			322.23		P	21.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	908.39	0.0001	P	7.5
2	☐	1.000	0.928	19492.10	0.0015	P	3.8
3	☐	50.000	49.562	966314.87	0.0743	P	1.0
4	☐	125.000	121.395	2364442.28	0.1818	A	0.7
5	☐	250.000	241.460	4626457.87	0.3616	A	1.3
6	☐	500.000	491.994	9121619.91	0.7368	A	0.2
7	☐	1000.000	1006.610	17829952.31	1.5074	A	0.7
8	☐			4687.05	0.0005	P	9.3

$$y = 0.0015 * x + 6.8216E-005$$

$$R = 0.9999$$

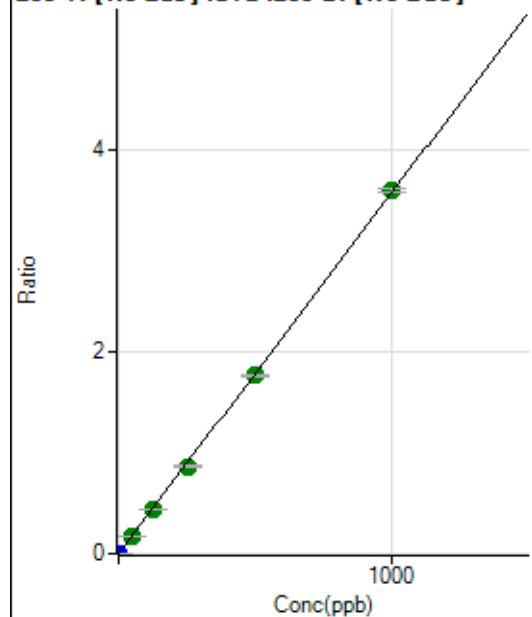
$$DL = 0.01026$$

$$BEC = 0.04556$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2069.66	0.0002	P	3.4
2	☐	1.000	0.920	46179.06	0.0035	P	1.7
3	☐	50.000	49.495	2307473.10	0.1774	A	1.5
4	☐	125.000	121.858	5675519.01	0.4365	A	0.7
5	☐	250.000	242.419	11106841.48	0.8682	A	0.9
6	☐	500.000	493.207	21865541.98	1.7661	A	0.4
7	☐	1000.000	1005.710	42595629.43	3.6012	A	1.1
8	☐			10618.39	0.0011	P	9.3

$$y = 0.0036 * x + 1.5535E-004$$

$$R = 0.9999$$

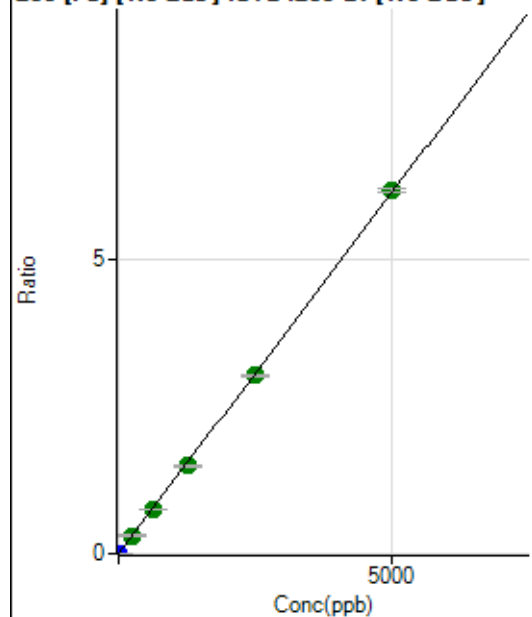
$$DL = 0.004428$$

$$BEC = 0.04339$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	305.57	0.0000	P	25.3
2	☐	1.000	0.920	15416.39	0.0012	P	3.7
3	☐	250.000	251.279	4012622.25	0.3085	A	2.1
4	☐	625.000	604.864	9654924.17	0.7425	A	0.2
5	☐	1250.000	1216.575	19107034.92	1.4934	A	0.9
6	☐	2500.000	2465.250	37467756.16	3.0263	A	1.1
7	☐	5000.000	5028.184	73008076.63	6.1724	A	1.1
8	☐			37785.96	0.0038	P	3.0

$$y = 0.0012 * x + 2.2920E-005$$

$$R = 0.9999$$

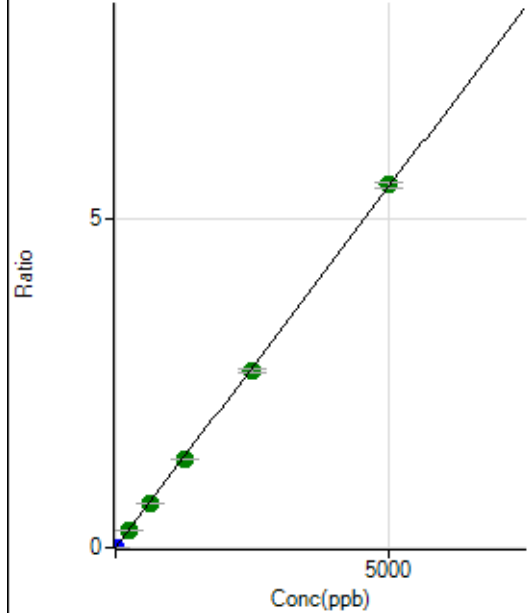
$$DL = 0.01415$$

$$BEC = 0.01867$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	264.82	0.0000	P	16.5
2	☐	1.000	0.910	13651.50	0.0010	P	1.8
3	☐	250.000	248.969	3558109.14	0.2736	A	2.5
4	☐	625.000	605.780	8654143.95	0.6656	A	0.3
5	☐	1250.000	1220.145	17150588.35	1.3406	A	0.6
6	☐	2500.000	2452.727	33363430.14	2.6948	A	1.4
7	☐	5000.000	5033.554	65410149.15	5.5302	A	1.4
8	☐			33350.32	0.0033	P	1.8

$$y = 0.0011 * x + 1.9897E-005$$

$$R = 0.9999$$

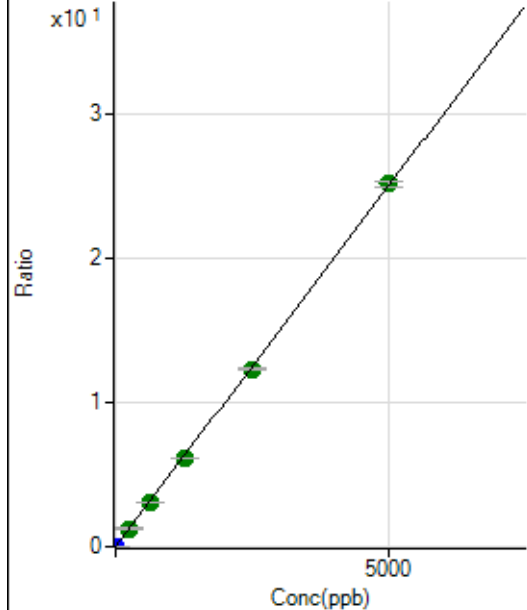
$$DL = 0.008989$$

$$BEC = 0.01811$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1250.05	0.0001	P	14.5
2	☐	1.000	0.918	62598.49	0.0047	P	2.5
3	☐	250.000	250.546	16280952.24	1.2517	A	2.1
4	☐	625.000	609.057	39560939.43	3.0426	A	0.6
5	☐	1250.000	1218.979	77905493.64	6.0894	A	0.8
6	☐	2500.000	2463.535	152362993.68	12.3064	A	1.0
7	☐	5000.000	5027.953	297076231.18	25.1167	A	1.4
8	☐			153147.15	0.0153	P	1.6

$$y = 0.0050 * x + 9.3778E-005$$

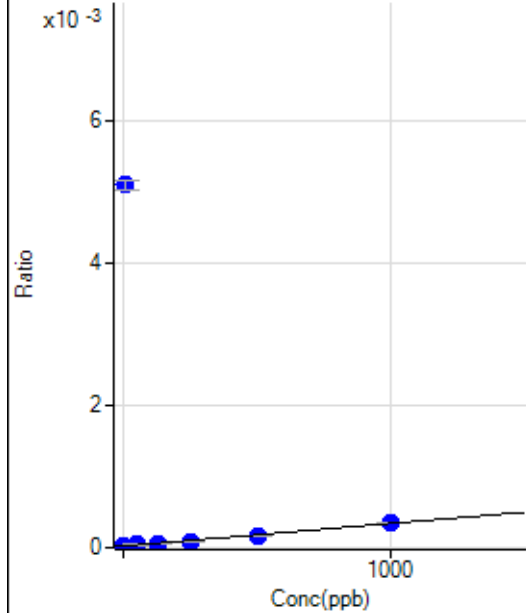
$$R = 0.9999$$

$$DL = 0.008138$$

$$BEC = 0.01877$$

Weight: <None>

Min Conc: 0

²³²Th [No Gas] ISTD :²⁰⁹Bi [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	318.53	0.0000	P	1.9
2	☐	1.000	15963.968	68258.53	0.0051	P	2.7
3	☐	50.000	56.609	544.47	0.0000	P	19.9
4	☐	125.000	120.033	807.44	0.0001	P	7.8
5	☐	250.000	146.459	901.90	0.0001	P	6.1
6	☐	500.000	455.703	2090.94	0.0002	P	2.3
7	☐	1000.000	1032.361	4167.38	0.0004	P	2.7
8	☐			711.14	0.0001	P	4.4

$$y = 3.1815\text{E-}007 * x + 2.3911\text{E-}005$$

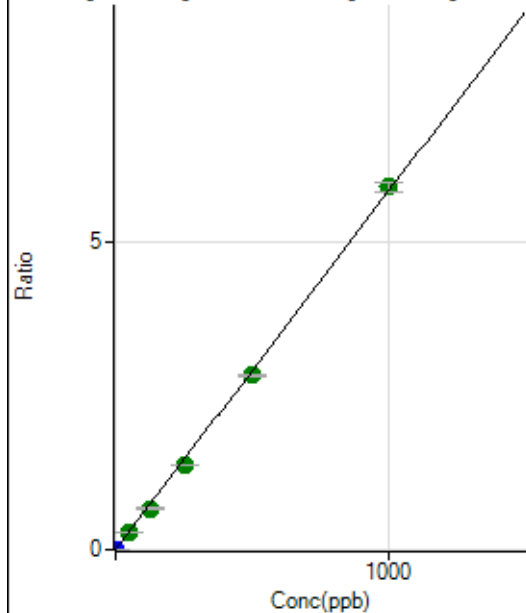
$$R = -0.2739$$

$$DL = 4.282$$

$$BEC = 75.16$$

Weight: <None>

Min Conc: 0

²³⁸U [No Gas] ISTD :²⁰⁹Bi [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	102.78	0.0000	P	28.2
2	☐	1.000	0.874	68104.80	0.0051	P	2.4
3	☐	50.000	47.380	3584320.52	0.2755	A	0.4
4	☐	125.000	115.172	8706452.37	0.6697	A	2.9
5	☐	250.000	235.870	17546591.71	1.3715	A	0.9
6	☐	500.000	485.661	34959523.35	2.8239	A	0.7
7	☐	1000.000	1012.061	69596719.61	5.8846	A	2.4
8	☐			10829.66	0.0011	P	3.6

$$y = 0.0058 * x + 7.7106\text{E-}006$$

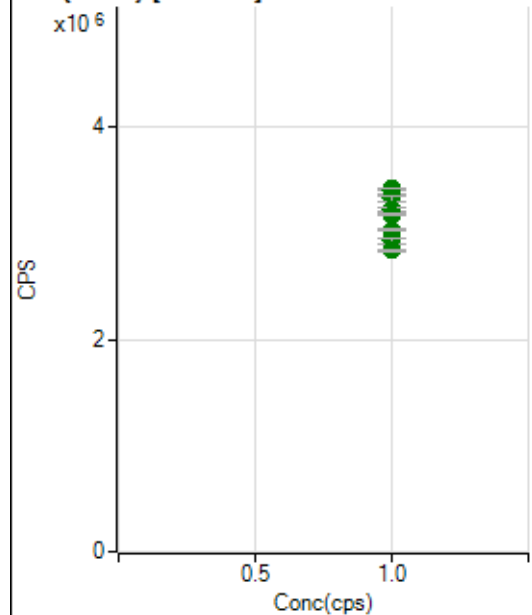
$$R = 0.9997$$

$$DL = 0.001122$$

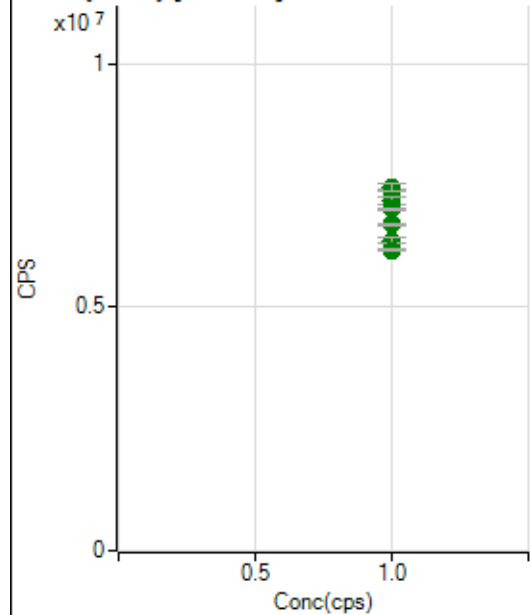
$$BEC = 0.001326$$

Weight: <None>

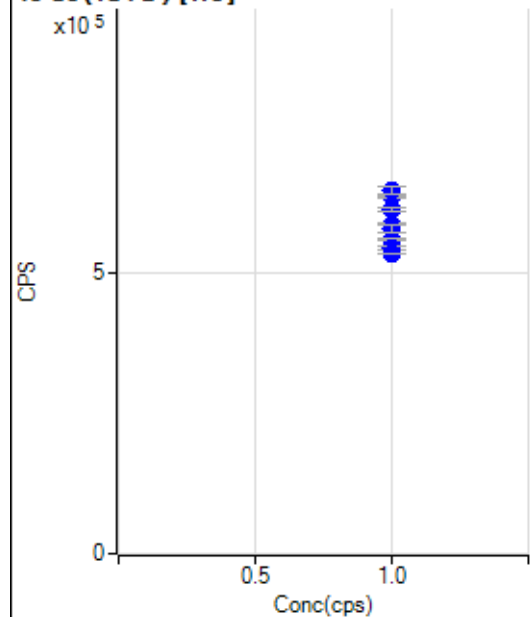
Min Conc: 0

6 Li (ISTD) [No Gas]

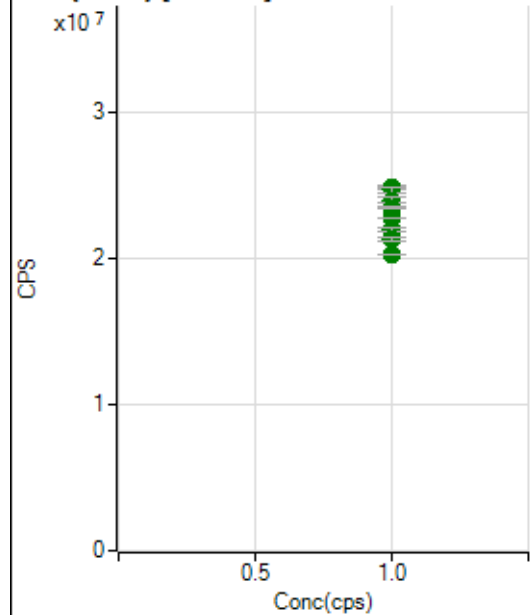
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3416716.03		A	0.6
2	☐	1.000		3398466.48		A	1.8
3	☐	1.000		3325275.57		A	1.2
4	☐	1.000		3224663.91		A	0.7
5	☐	1.000		3171451.10		A	0.6
6	☐	1.000		3032290.54		A	0.3
7	☐	1.000		2926382.63		A	1.5
8	☐	1.000		2835749.30		A	0.7

45 Sc (ISTD) [No Gas]

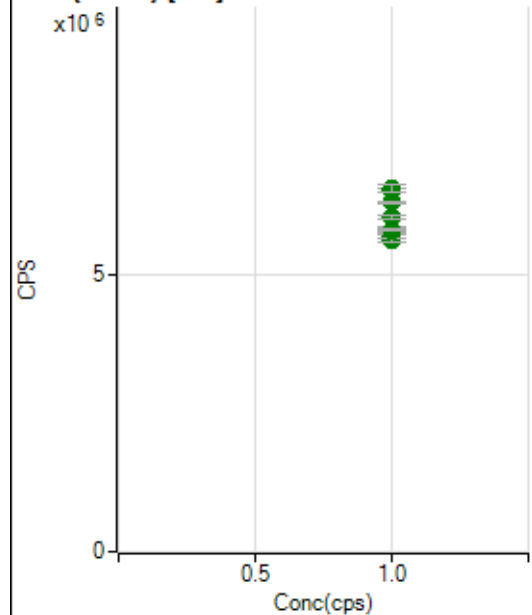
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		7402493.71		A	0.5
2	☐	1.000		7456998.85		A	2.2
3	☐	1.000		7193867.25		A	2.2
4	☐	1.000		7017431.00		A	0.6
5	☐	1.000		6704325.53		A	0.9
6	☐	1.000		6376435.25		A	1.5
7	☐	1.000		6183289.77		A	1.2
8	☐	1.000		6180454.21		A	0.5

45 Sc (ISTD) [He]

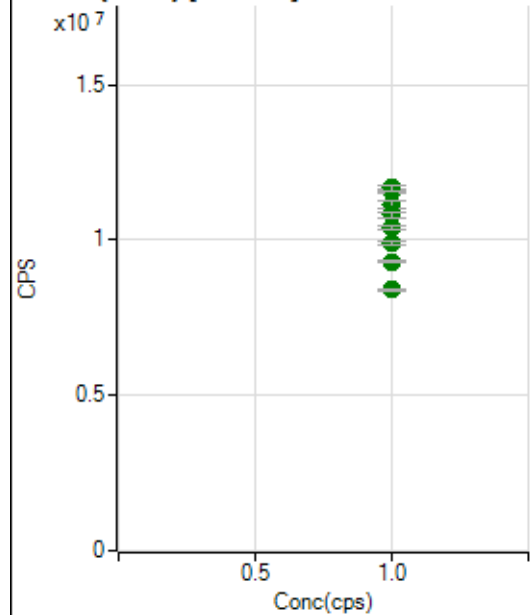
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		634995.37		P	0.4
2	☐	1.000		645045.67		P	2.0
3	☐	1.000		613060.89		P	1.0
4	☐	1.000		585395.50		P	0.6
5	☐	1.000		558330.28		P	0.5
6	☐	1.000		543718.65		P	0.7
7	☐	1.000		532515.82		P	0.1
8	☐	1.000		578539.90		P	2.4

89 Y (ISTD) [No Gas]

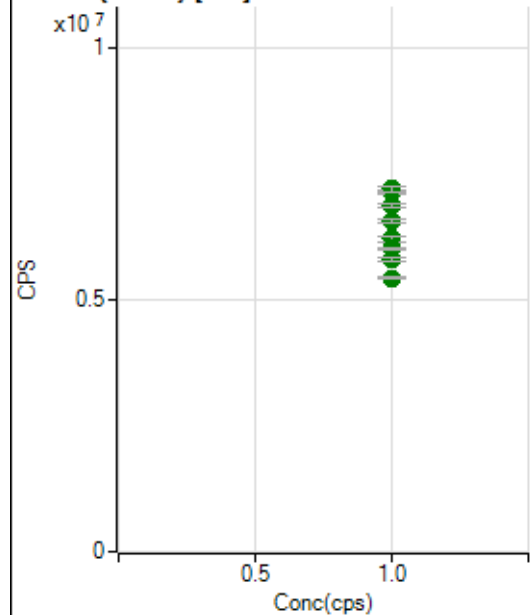
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		24849252.13		A	1.0
2	☐	1.000		24699502.13		A	1.9
3	☐	1.000		24032560.20		A	2.0
4	☐	1.000		23461870.76		A	0.6
5	☐	1.000		22810687.71		A	0.3
6	☐	1.000		22021426.06		A	0.9
7	☐	1.000		21346365.65		A	0.8
8	☐	1.000		20267401.36		A	0.4

89 Y(ISTD) [He]

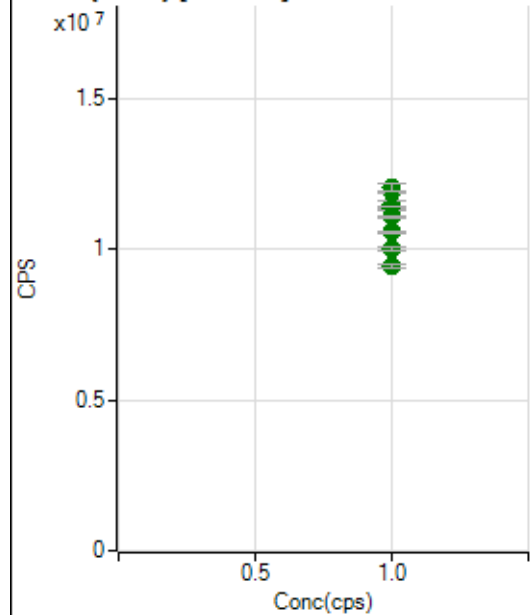
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6534830.46		A	1.1
2	☐	1.000		6541280.73		A	2.0
3	☐	1.000		6302358.52		A	0.6
4	☐	1.000		6037146.79		A	1.1
5	☐	1.000		5794763.11		A	1.7
6	☐	1.000		5672346.03		A	1.2
7	☐	1.000		5619119.92		A	0.7
8	☐	1.000		5806663.66		A	1.2

103 Rh(ISTD) [No Gas]

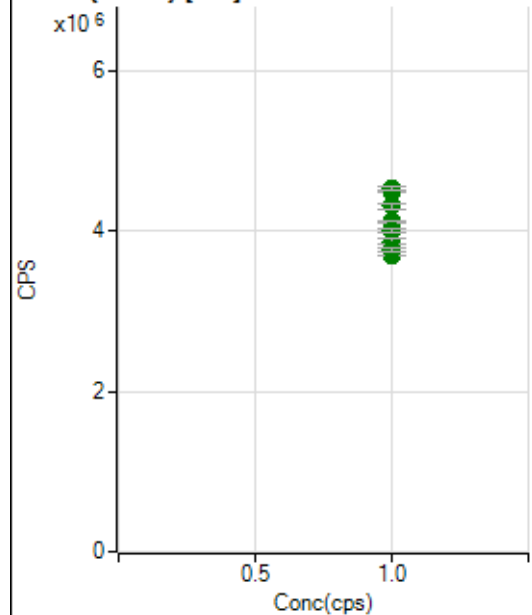
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11574641.22		A	1.1
2	☐	1.000		11677618.58		A	1.4
3	☐	1.000		11154420.88		A	2.0
4	☐	1.000		10808661.30		A	1.5
5	☐	1.000		10408805.05		A	0.9
6	☐	1.000		9899263.12		A	0.9
7	☐	1.000		9310979.37		A	1.0
8	☐	1.000		8398066.12		A	0.8

103 Rh (ISTD) [He]

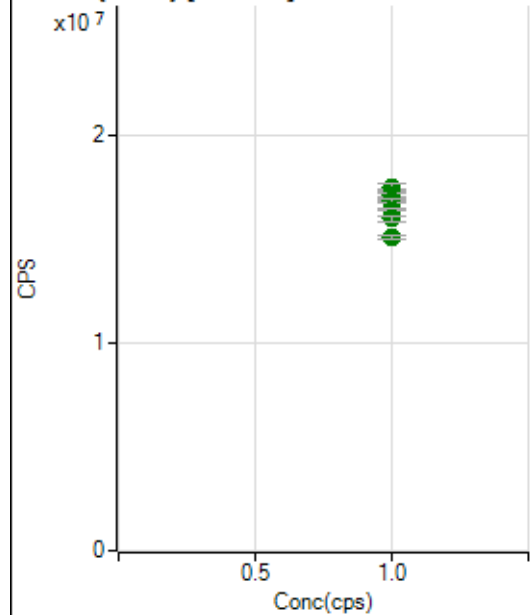
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		7151148.99		A	1.0
2	☐	1.000		7207901.28		A	1.8
3	☐	1.000		6870937.61		A	0.8
4	☐	1.000		6583486.29		A	1.2
5	☐	1.000		6209672.54		A	1.7
6	☐	1.000		6027380.05		A	0.8
7	☐	1.000		5806394.91		A	1.4
8	☐	1.000		5436721.72		A	1.0

115 In (ISTD) [No Gas]

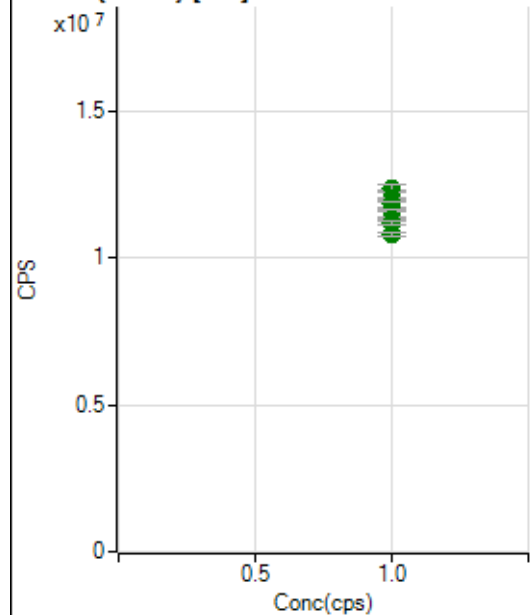
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11908803.25		A	0.2
2	☐	1.000		12036498.88		A	2.2
3	☐	1.000		11482226.22		A	2.5
4	☐	1.000		11354559.13		A	0.7
5	☐	1.000		11090912.79		A	0.7
6	☐	1.000		10569403.80		A	0.5
7	☐	1.000		10027831.98		A	1.0
8	☐	1.000		9445468.21		A	1.0

115 In (ISTD) [He]

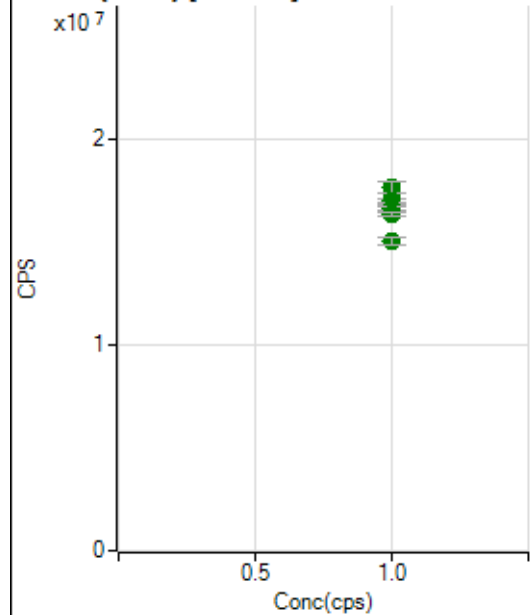
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4489530.67		A	0.6
2	☐	1.000		4526852.74		A	1.0
3	☐	1.000		4313500.60		A	1.4
4	☐	1.000		4119526.04		A	0.6
5	☐	1.000		4001213.61		A	1.1
6	☐	1.000		3868318.47		A	1.8
7	☐	1.000		3693737.27		A	0.3
8	☐	1.000		3768326.33		A	1.8

159 Tb (ISTD) [No Gas]

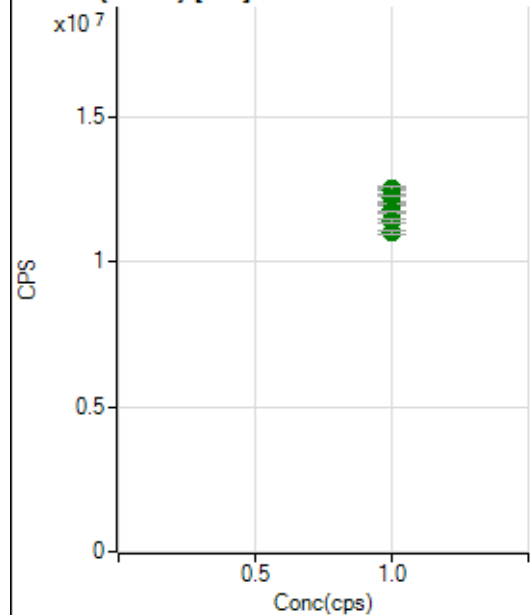
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		17433524.32		A	0.6
2	☐	1.000		17502742.38		A	2.6
3	☐	1.000		16988434.33		A	1.4
4	☐	1.000		17145165.58		A	1.1
5	☐	1.000		16895632.11		A	1.2
6	☐	1.000		16432691.42		A	0.5
7	☐	1.000		16004337.82		A	1.8
8	☐	1.000		15123903.11		A	1.7

159 Tb (ISTD) [He]

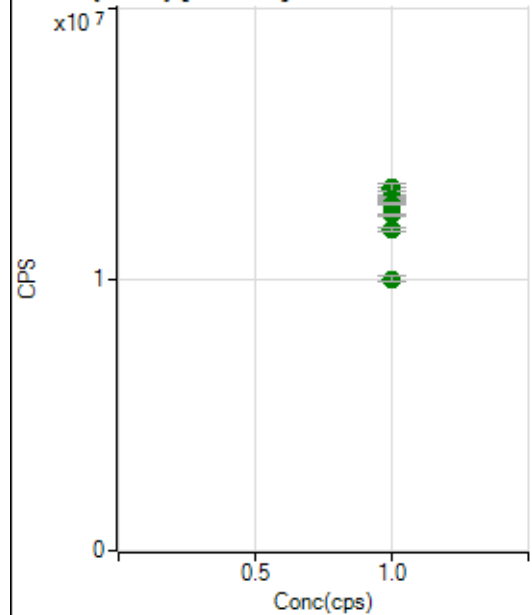
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		12318575.65		A	0.2
2	☐	1.000		12352323.98		A	2.0
3	☐	1.000		12035556.21		A	0.6
4	☐	1.000		11841533.43		A	1.5
5	☐	1.000		11609775.24		A	0.7
6	☐	1.000		11354551.78		A	0.5
7	☐	1.000		11196136.64		A	1.7
8	☐	1.000		10813886.99		A	1.4

165 Ho (ISTD) [No Gas]

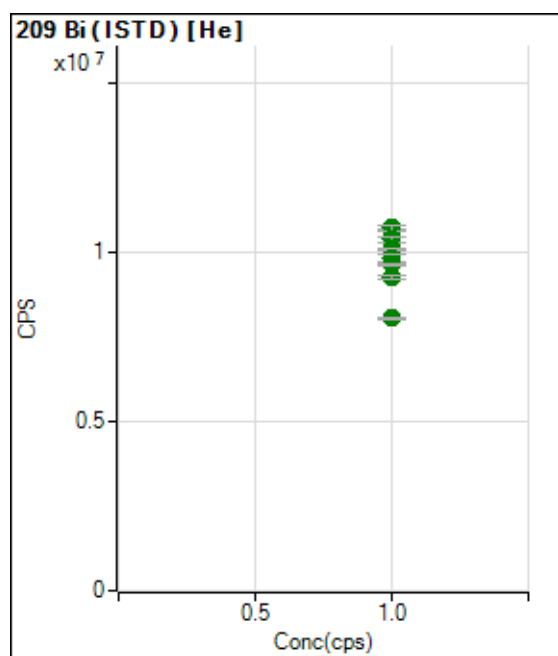
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		17336292.10		A	0.4
2	☐	1.000		17599158.07		A	3.0
3	☐	1.000		16996094.05		A	1.4
4	☐	1.000		16984078.08		A	1.4
5	☐	1.000		16839853.50		A	0.8
6	☐	1.000		16577540.59		A	1.1
7	☐	1.000		16284764.48		A	1.2
8	☐	1.000		15044996.03		A	2.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		12517572.73		A	0.4
2	☐	1.000		12473410.23		A	1.9
3	☐	1.000		12190083.15		A	1.6
4	☐	1.000		11959553.99		A	0.4
5	☐	1.000		11842704.13		A	2.6
6	☐	1.000		11739064.96		A	0.5
7	☐	1.000		11424671.78		A	1.0
8	☐	1.000		11007789.49		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		13320228.00		A	0.8
2	☐	1.000		13381803.55		A	2.1
3	☐	1.000		13009740.64		A	1.3
4	☐	1.000		13002782.58		A	0.7
5	☐	1.000		12794024.11		A	0.7
6	☐	1.000		12380233.15		A	0.7
7	☐	1.000		11829124.41		A	1.2
8	☐	1.000		10023433.60		A	2.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		10637436.23		A	0.4
2	☐	1.000		10704319.07		A	1.5
3	☐	1.000		10364389.84		A	1.8
4	☐	1.000		10078072.07		A	0.9
5	☐	1.000		9838963.05		A	2.3
6	☐	1.000		9618397.43		A	0.7
7	☐	1.000		9244496.04		A	0.7
8	☐	1.000		8040299.74		A	0.4

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7031122-MS.b
Acq. Date-Time 2022-03-11 11:22:48
Report Comment ---
Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		20013	200133.55			0.398	5.000
24		127598	1275979.95			0.712	5.000
25		18239	182388.16			0.133	5.000
26		21490	214899.99			0.389	5.000
59		39905	399051.12			0.593	5.000
113		23346	233456.82			0.501	5.000
115		62157	621568.61			0.670	5.000
206		42818	428180.67			0.490	5.000
207		35892	358920.30			0.603	5.000
208		85818	858183.01			0.350	5.000
220		0	0.80			71.261	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

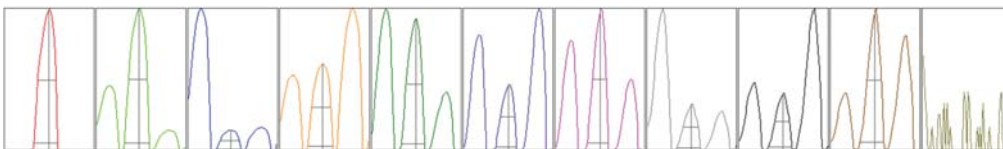
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	20141	20006	19970	20021	19929
24	126893	126702	128716	128403	127277
25	18263	18238	18203	18260	18230
26	21628	21502	21469	21432	21420
59	39828	40133	39636	39755	40173
113	23289	23419	23191	23335	23495
115	62252	62003	61779	61916	62835
206	43004	42619	42803	42607	43058
207	35847	35906	35596	35906	36205
208	85510	85856	85577	85881	86268

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	35100.11	9.00	8.90 - 9.10	
24	215897.18	23.95	23.90 - 24.10	
25	29815.42	24.95	24.90 - 25.10	
26	34150.37	25.95	25.90 - 26.10	
59	77314.61	59.00	58.90 - 59.10	
113	50000.48	113.05	112.90 - 113.10	
115	137695.91	115.05	114.90 - 115.10	
206	86592.08	206.00	205.90 - 206.10	
207	73636.65	207.00	206.90 - 207.10	
208	180720.13	208.00	207.90 - 208.10	
220	0.00	220.00	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.786	0.900	
24	0.63	0.832	0.900	
25	0.63	0.828	0.900	
26	0.65	0.834	0.900	
59	0.54	0.776	0.900	
113	0.48	0.691	0.900	
115	0.45	0.713	0.900	
206	0.50	0.782	0.900	
207	0.49	0.791	0.900	
208	0.48	0.802	0.900	
220	0.30	0.300		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode ---

Nebulizer Gas 0.79 L/min

Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.2 V	Deflect	14.6 V
Extract 2	-150.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	124	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.9 mm
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EM

Discriminator	3.1 mV	Analog HV	2161 V	Pulse HV	1454 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		13703	137028.72			1.290	
89		97436	974363.07			1.129	
205		93185	931854.79			1.912	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	13473	13620	13660	13873	13889
89	96546	96444	97010	98921	98260
205	90997	92161	92815	95361	94593

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.79 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	11.1 V	Deflect	2.6 V
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US EPA Tune Check Report

Extract 2	-140.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	1.0004	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.9 mm
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EM

Discriminator	3.1 mV	Analog HV	2161 V	Pulse HV	1454 V
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