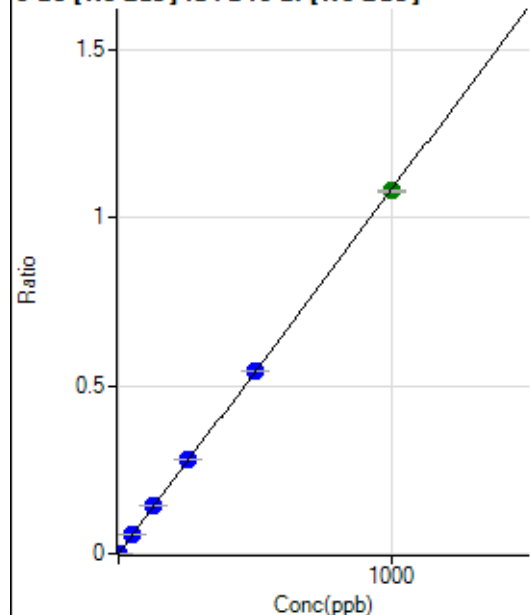


Batch Folder: D:\P8100917 MS.b\
Analysis File: P8100917 MS.batch.bin
DA Date-Time: 2017-10-10 09:28:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2017-10-09 13:42:06
2			
3	005CALS.d	S02	2017-10-09 13:49:05
4	006CALS.d	S03	2017-10-09 13:52:35
5	007CALS.d	S04	2017-10-09 13:56:04
6	008CALS.d	S05	2017-10-09 13:59:28
7	009CALS.d	S06	2017-10-09 14:02:46
8	010CALS.d	S07	2017-10-09 14:05:58
9	011CALS.d	S08	2017-10-09 14:09:08

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0001	P	23.9
2	☐	0.100					
3	☐	1.000	0.850	1098.22	0.0010	P	7.1
4	☐	50.000	52.720	62134.21	0.0572	P	2.2
5	☐	125.000	130.936	157262.69	0.1418	P	1.5
6	☐	250.000	257.850	320064.83	0.2791	P	0.3
7	☐	500.000	501.515	624727.25	0.5428	P	0.5
8	☐	1000.000	996.402	1232219.21	1.0783	A	0.5
9	☐			320.38	0.0003	P	24.2

$$y = 0.0011 * x + 1.0363E-004$$

$$R = 1.0000$$

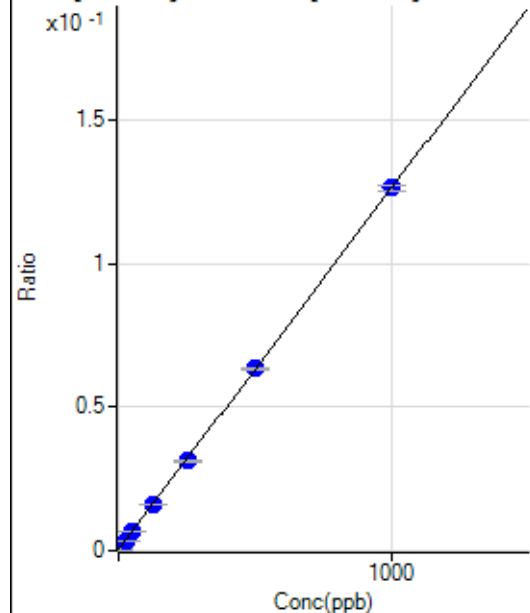
$$DL = 0.06853$$

$$BEC = 0.09576$$

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	436.14	0.0004	P	27.7
2	☐	2.500					
3	☐	25.000	22.916	3511.71	0.0033	P	2.7
4	☐	50.000	51.115	7427.23	0.0068	P	2.0
5	☐	125.000	125.417	17964.58	0.0162	P	2.0
6	☐	250.000	245.016	35856.92	0.0313	P	2.2
7	☐	500.000	500.349	73036.19	0.0635	P	1.6
8	☐	1000.000	1001.016	144631.53	0.1266	P	1.5
9	☐			5448.51	0.0048	P	6.6

$$y = 1.2605E-004 * x + 3.8859E-004$$

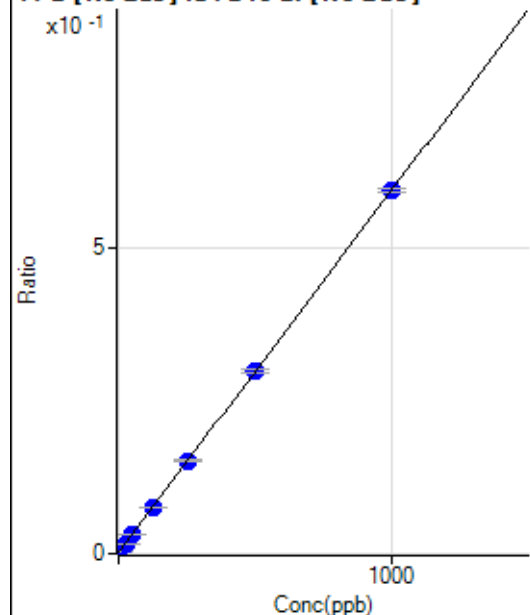
$$R = 1.0000$$

$$DL = 2.564$$

$$BEC = 3.083$$

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	2169.70	0.0019	P	8.6
2	☐	2.500					
3	☐	25.000	22.155	16079.11	0.0150	P	5.0
4	☐	50.000	51.466	35138.43	0.0323	P	1.6
5	☐	125.000	125.209	84137.85	0.0759	P	1.8
6	☐	250.000	253.710	173976.12	0.1517	P	2.3
7	☐	500.000	500.152	342106.27	0.2972	P	2.2
8	☐	1000.000	998.968	676243.69	0.5918	P	1.2
9	☐			25206.55	0.0223	P	10.2

$$y = 5.9045\text{E-}004 * x + 0.0019$$

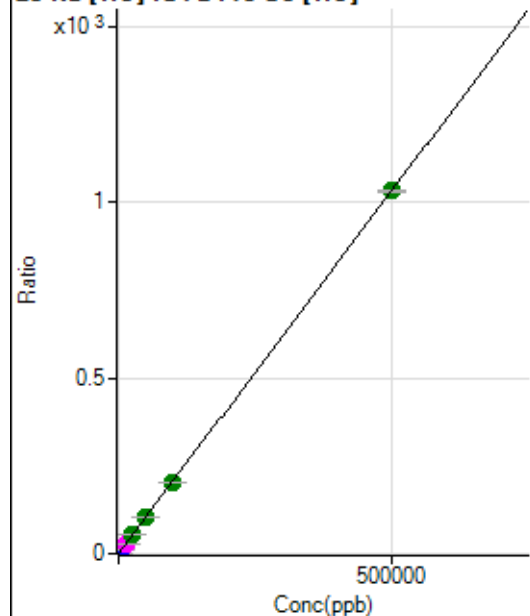
$$R = 1.0000$$

$$DL = 0.8392$$

$$BEC = 3.27$$

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	13723.80	0.3483	P	0.8
2	☐	50.000					
3	☐	500.000	460.398	48210.43	1.2976	P	0.7
4	☐	5000.000	5232.054	430251.08	11.1366	P	0.8
5	☐	12500.000	13178.492	1049115.51	27.5219	M	0.7
6	☐	25000.000	25870.707	2075815.39	53.6928	A	0.3
7	☐	50000.000	50625.344	3953228.91	104.7360	A	2.1
8	☐	100000.00	98465.248	7709280.64	203.3802	A	1.2
9	☐	500000.00	500181.63	39303492.54	1,031.705	A	0.7

$$y = 0.0021 * x + 0.3483$$

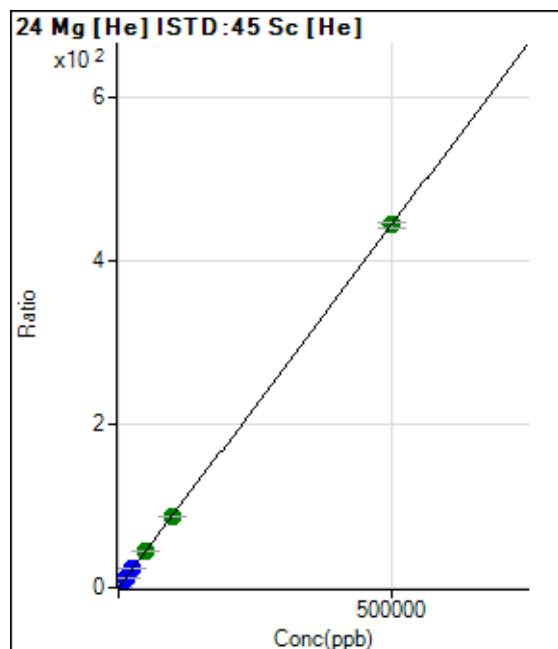
$$R = 1.0000$$

$$DL = 4.16$$

$$BEC = 168.9$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.67	0.0036	P	24.6
2	☐	50.000					
3	☐	500.000	464.733	15464.56	0.4162	P	1.8
4	☐	5000.000	5234.781	179685.56	4.6512	P	1.3
5	☐	12500.000	13082.221	442887.60	11.6185	P	0.7
6	☐	25000.000	25433.121	873109.57	22.5841	P	0.6
7	☐	50000.000	50761.099	1701346.59	45.0712	A	1.8
8	☐	100000.00	98878.690	3327853.37	87.7918	A	0.8
9	☐	500000.00	500109.62	16914459.75	444.0196	A	1.3

$$y = 8.8784\text{E-}004 * x + 0.0036$$

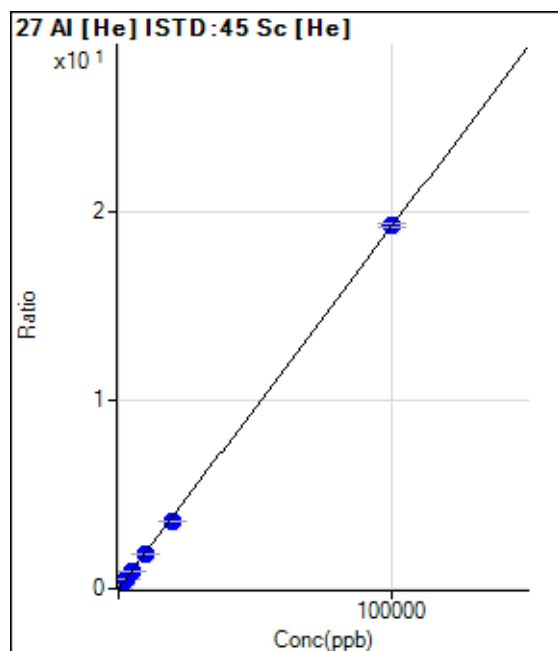
$$R = 1.0000$$

$$DL = 2.981$$

$$BEC = 4.043$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.66	0.0004	P	85.7
2	☐	2.000					
3	☐	20.000	21.978	172.23	0.0046	P	14.3
4	☐	1000.000	986.779	7316.10	0.1894	P	6.0
5	☐	2500.000	2516.013	18384.85	0.4823	P	0.6
6	☐	5000.000	4865.434	36044.27	0.9323	P	1.9
7	☐	10000.000	9575.102	69236.01	1.8343	P	1.7
8	☐	20000.000	18710.254	135842.06	3.5838	P	1.4
9	☐	100000.00	100306.89	731840.08	19.2113	P	1.2

$$y = 1.9152\text{E-}004 * x + 4.2064\text{E-}004$$

$$R = 0.9999$$

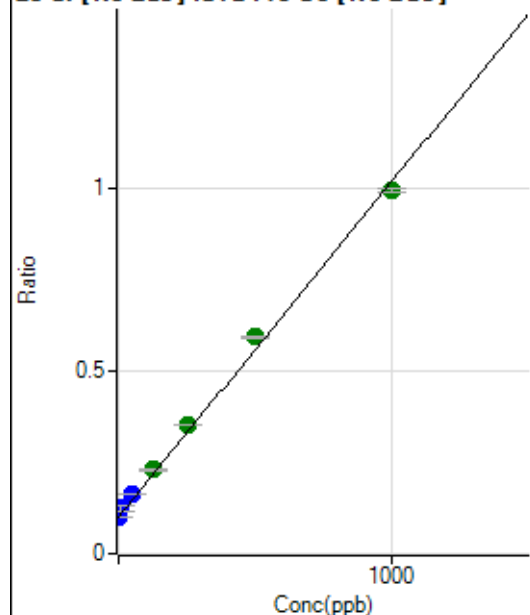
$$DL = 5.646$$

$$BEC = 2.196$$

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	427544.20	0.1002	P	4.6
2	☐	1.000					
3	☐	10.000	25.787	502156.05	0.1238	P	11.0
4	☐	50.000	68.700	674196.70	0.1631	P	0.5
5	☐	125.000	140.445	949309.44	0.2289	A	1.6
6	☐	250.000	274.495	1481551.30	0.3518	A	0.7
7	☐	500.000	536.034	2479037.42	0.5915	A	0.6
8	☐	1000.000	972.835	4174205.91	0.9919	A	0.9
9	☐			541848.05	0.1297	P	0.8

$$y = 9.1662\text{E-}004 * x + 0.1002$$

$$R = 0.9988$$

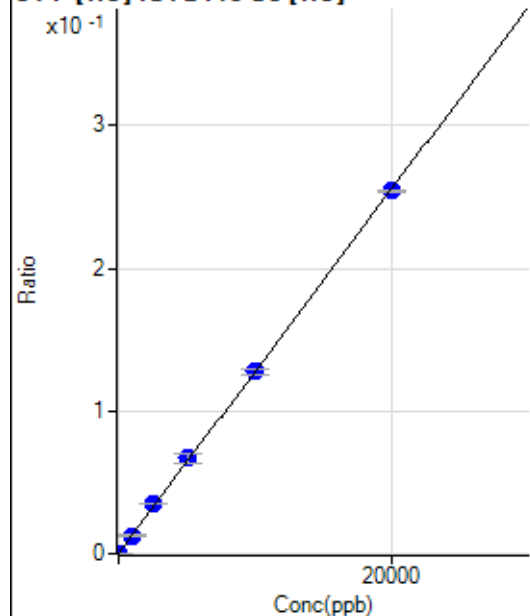
$$DL = 15.05$$

$$BEC = 109.3$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-0.289	5.56	0.0001	P	173.2
2	☐	0.000					
3	☐	0.000	0.289	5.55	0.0001	P	86.6
4	☐	1000.000	973.484	486.14	0.0126	P	14.3
5	☐	2500.000	2752.146	1344.58	0.0353	P	2.1
6	☐	5000.000	5224.987	2583.71	0.0668	P	9.1
7	☐	10000.000	10008.019	4828.84	0.1279	P	3.0
8	☐	20000.000	19909.551	9637.00	0.2542	P	0.9
9	☐			2.78	0.0001	P	173.2

$$y = 1.2762\text{E-}005 * x + 1.4470\text{E-}004$$

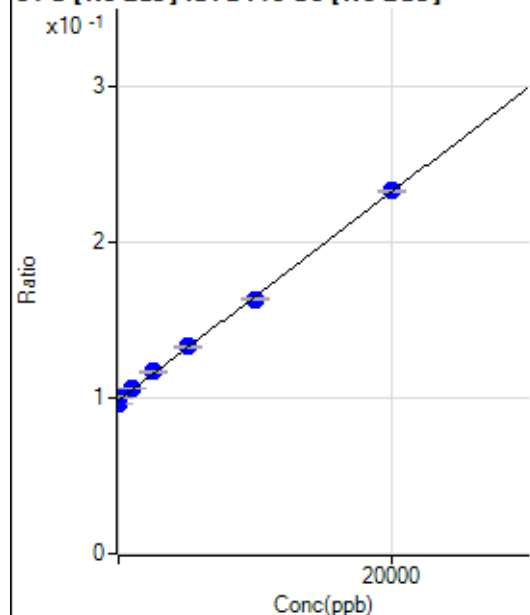
$$R = 0.9999$$

$$DL = 43.81$$

$$BEC = 11.34$$

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	-317.870	411947.03	0.0965	P	0.8
2	☐	0.000					
3	☐	0.000	317.870	409458.91	0.1008	P	2.2
4	☐	1000.000	1117.379	438622.44	0.1061	P	0.2
5	☐	2500.000	2767.707	486065.84	0.1172	P	0.8
6	☐	5000.000	5127.281	560313.14	0.1330	P	0.3
7	☐	10000.000	9696.092	686016.43	0.1637	P	0.6
8	☐	20000.000	20080.802	982079.01	0.2334	P	0.3
9	☐			394407.31	0.0944	P	0.9

$$y = 6.7094\text{E-}006 * x + 0.0986$$

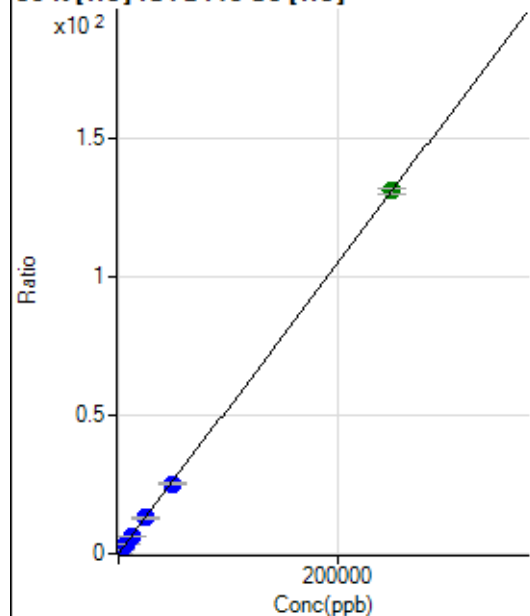
$$R = 0.9994$$

$$DL = 661.1$$

$$BEC = 1.47\text{E}+04$$

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	3608.98	0.0916	P	6.2
2	☐	50.000					
3	☐	500.000	450.986	12172.49	0.3276	P	1.4
4	☐	2500.000	2553.940	55172.64	1.4281	P	1.0
5	☐	6250.000	6385.166	130876.16	3.4331	P	0.8
6	☐	12500.000	12406.636	254552.16	6.5843	P	0.4
7	☐	25000.000	24498.471	487379.26	12.9122	P	1.9
8	☐	50000.000	48066.495	956955.57	25.2459	P	1.1
9	☐	250000.00	250437.70	4996081.23	131.1513	A	1.3

$$y = 5.2332\text{E-}004 * x + 0.0916$$

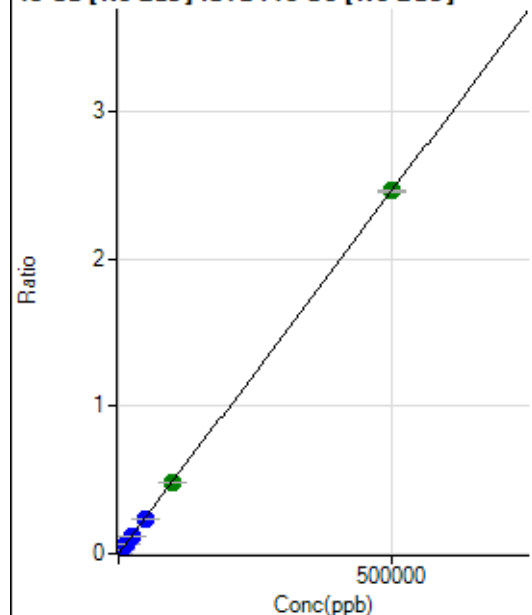
$$R = 1.0000$$

$$DL = 32.62$$

$$BEC = 175$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1853.00	0.0004	P	6.6
2	☐	50.000					
3	☐	500.000	429.773	10354.26	0.0025	P	2.3
4	☐	5000.000	4830.412	99937.57	0.0242	P	1.1
5	☐	12500.000	12160.272	249718.93	0.0602	P	0.9
6	☐	25000.000	24471.998	508492.29	0.1207	P	1.1
7	☐	50000.000	48726.796	1005730.19	0.2400	P	0.3
8	☐	100000.00	98225.164	2033825.67	0.4833	A	1.2
9	☐	500000.00	500518.94	10280148.93	2.4609	A	0.7

$$y = 4.9158\text{E-}006 * x + 4.3410\text{E-}004$$

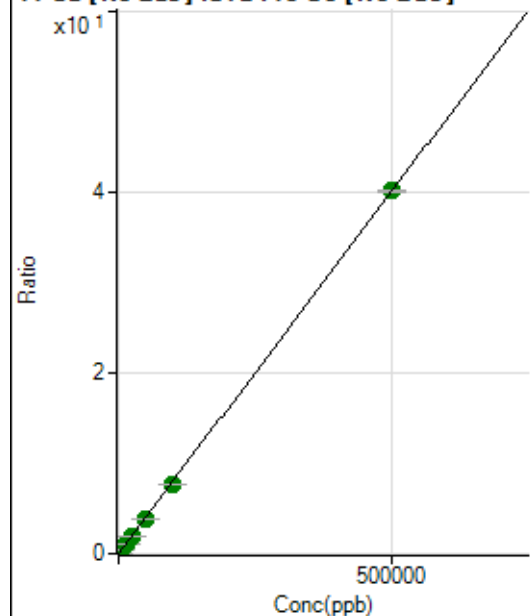
$$R = 1.0000$$

$$DL = 17.47$$

$$BEC = 88.31$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22174.01	0.0052	P	2.1
2	☐	50.000					
3	☐	500.000	435.022	162829.64	0.0401	P	1.0
4	☐	5000.000	5008.058	1680415.59	0.4066	A	0.5
5	☐	12500.000	12246.094	4092167.45	0.9867	A	0.7
6	☐	25000.000	24423.491	8266920.32	1.9627	A	0.1
7	☐	50000.000	48680.710	16374032.14	3.9068	A	0.6
8	☐	100000.00	96280.731	32497071.21	7.7218	A	0.4
9	☐	500000.00	500910.94	167724987.0	40.1519	A	0.7

$$y = 8.0147\text{E-}005 * x + 0.0052$$

$$R = 1.0000$$

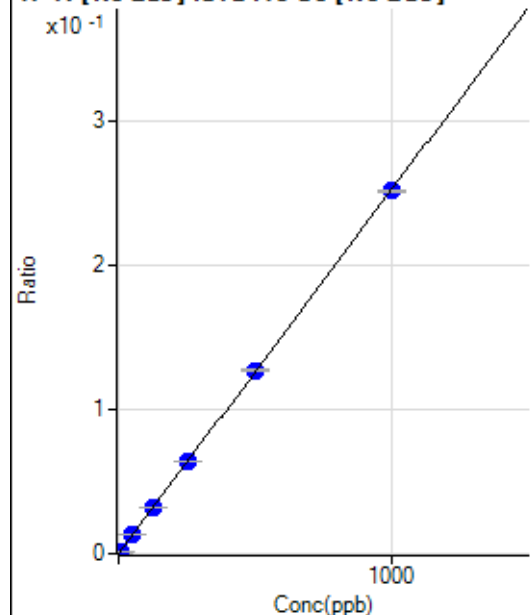
$$DL = 4.167$$

$$BEC = 64.81$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	136.12	0.0000	P	44.9
2	☐	0.500					
3	☐	5.000	4.724	4962.22	0.0012	P	2.2
4	☐	50.000	51.815	54044.31	0.0131	P	1.2
5	☐	125.000	126.832	132558.08	0.0320	P	0.5
6	☐	250.000	252.704	268103.99	0.0636	P	0.6
7	☐	500.000	504.164	532078.17	0.1270	P	0.5
8	☐	1000.000	996.924	1056317.24	0.2510	P	0.7
9	☐			719.50	0.0002	P	13.7

$$y = 2.5175\text{E-}004 * x + 3.1862\text{E-}005$$

$$R = 1.0000$$

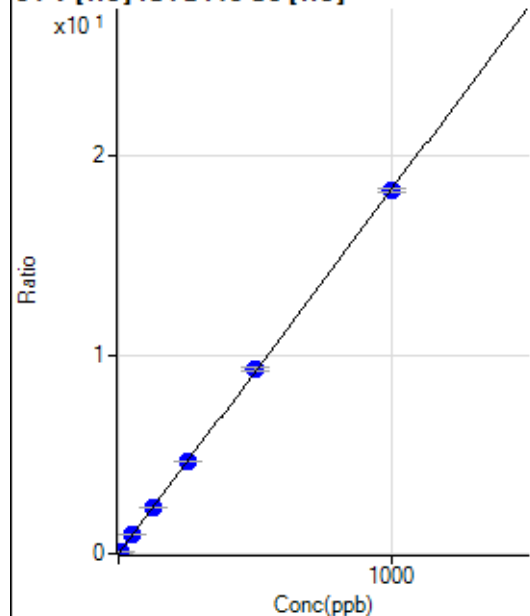
$$DL = 0.1706$$

$$BEC = 0.1266$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	13.33	0.0003	P	1.1
2	☐	0.500					
3	☐	5.000	4.539	3100.40	0.0835	P	2.1
4	☐	50.000	51.442	36405.14	0.9424	P	1.8
5	☐	125.000	127.832	89246.65	2.3413	P	1.4
6	☐	250.000	253.445	179454.24	4.6417	P	0.0
7	☐	500.000	505.063	349136.96	9.2496	P	1.8
8	☐	1000.000	996.183	691523.77	18.2436	P	1.1
9	☐			193.34	0.0051	P	7.1

$$y = 0.0183 * x + 3.3832\text{E-}004$$

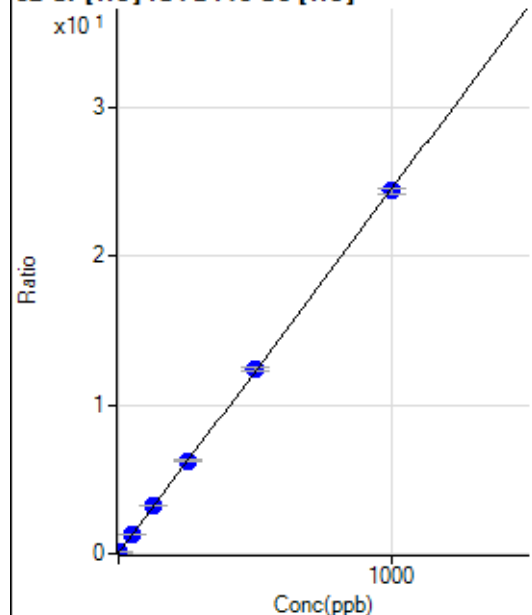
$$R = 1.0000$$

$$DL = 0.0005995$$

$$BEC = 0.01847$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	827.82	0.0210	P	2.5
2	☐	0.200					
3	☐	2.000	2.065	2656.97	0.0715	P	3.2
4	☐	50.000	51.828	49802.79	1.2891	P	2.0
5	☐	125.000	130.218	122256.76	3.2072	P	0.4
6	☐	250.000	254.842	241876.25	6.2564	P	0.6
7	☐	500.000	505.628	467789.31	12.3926	P	1.5
8	☐	1000.000	995.232	923811.57	24.3721	P	1.4
9	☐			14037.23	0.3685	P	3.2

$$y = 0.0245 * x + 0.0210$$

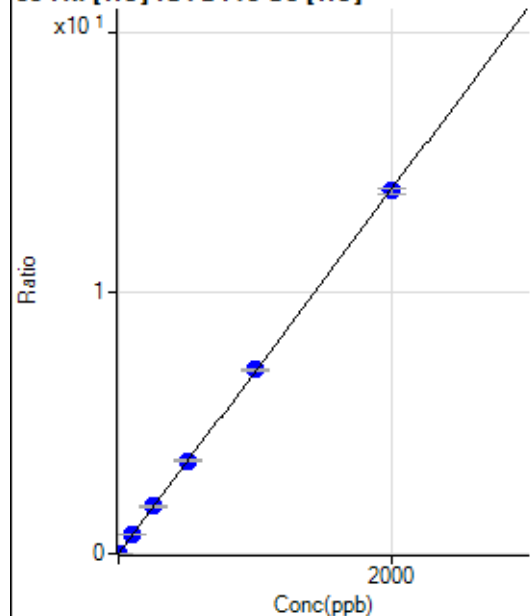
$$R = 1.0000$$

$$DL = 0.06368$$

$$BEC = 0.8585$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.78	0.0010	P	36.9
2	☐	0.100					
3	☐	1.000	0.928	276.67	0.0074	P	6.3
4	☐	100.000	102.698	27765.57	0.7186	P	0.8
5	☐	250.000	258.526	68905.67	1.8076	P	0.7
6	☐	500.000	509.614	137718.28	3.5623	P	1.0
7	☐	1000.000	1009.488	266335.61	7.0556	P	1.2
8	☐	2000.000	1991.652	527614.41	13.9193	P	1.6
9	☐			2083.52	0.0547	P	2.6

$$y = 0.0070 * x + 9.5936E-004$$

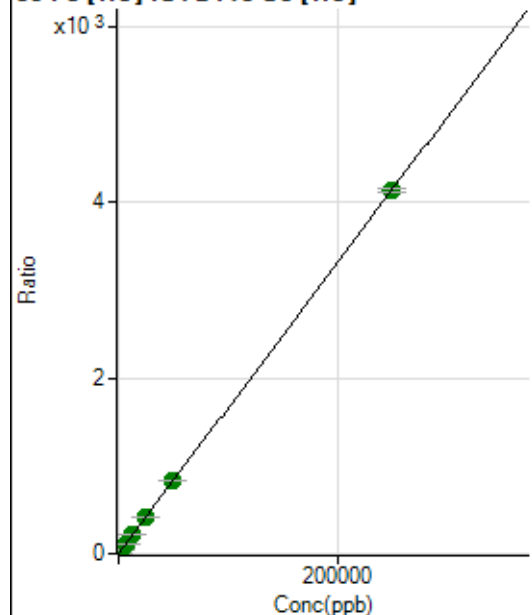
$$R = 1.0000$$

$$DL = 0.1518$$

$$BEC = 0.1373$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1729.79	0.0439	P	2.3
2	☐	5.000					
3	☐	50.000	47.286	30656.46	0.8252	P	1.2
4	☐	2500.000	2664.337	1702315.61	44.0654	A	1.4
5	☐	6250.000	6645.105	4187007.67	109.8377	A	0.5
6	☐	12500.000	12880.188	8229058.29	212.8569	A	1.0
7	☐	25000.000	25682.395	16019949.20	424.3815	A	1.0
8	☐	50000.000	50472.522	31611865.52	833.9766	A	1.3
9	☐	250000.00	249806.72	157235364.6	4,127.477	A	1.1

$$y = 0.0165 * x + 0.0439$$

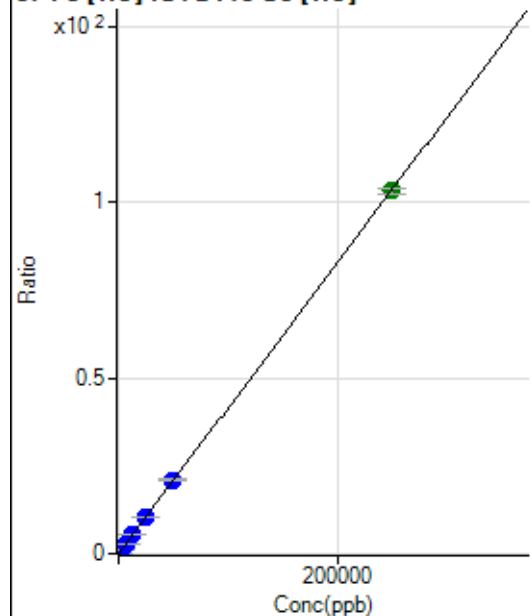
$$R = 1.0000$$

$$DL = 0.1795$$

$$BEC = 2.657$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0010	P	23.7
2	☐	5.000					
3	☐	50.000	46.402	750.04	0.0202	P	0.9
4	☐	2500.000	2613.795	41815.16	1.0826	P	3.5
5	☐	6250.000	6589.562	103987.11	2.7279	P	0.4
6	☐	12500.000	12941.489	207082.38	5.3564	P	0.4
7	☐	25000.000	25595.130	399856.21	10.5927	P	1.3
8	☐	50000.000	50717.161	795586.04	20.9887	P	1.1
9	☐	250000.00	249765.35	3937220.46	103.3587	A	1.8

$$y = 4.1382E-004 * x + 9.8543E-004$$

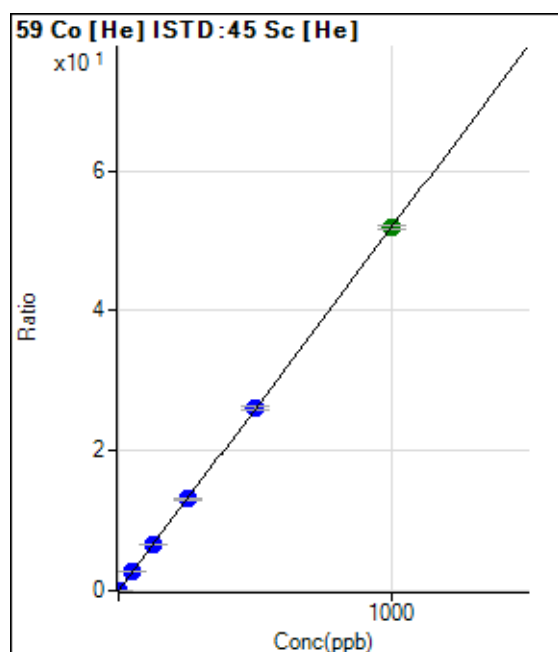
$$R = 1.0000$$

$$DL = 1.695$$

$$BEC = 2.381$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	104.45	0.0026	P	24.7
2	☐	0.100					
3	☐	1.000	0.841	1719.03	0.0463	P	4.1
4	☐	50.000	50.882	102115.34	2.6434	P	1.5
5	☐	125.000	128.224	253767.35	6.6573	P	1.0
6	☐	250.000	251.761	505233.37	13.0687	P	1.1
7	☐	500.000	500.926	981364.53	26.0001	P	2.1
8	☐	1000.000	998.650	1964710.94	51.8313	A	1.0
9	☐			2230.22	0.0586	P	6.6

$$y = 0.0519 * x + 0.0026$$

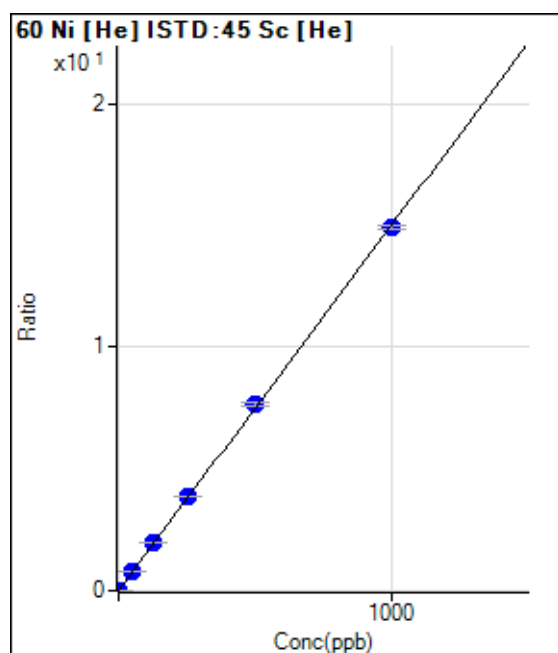
$$R = 1.0000$$

$$DL = 0.03783$$

$$BEC = 0.05098$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	104.44	0.0027	P	30.7
2	☐	0.100					
3	☐	1.000	0.947	626.69	0.0169	P	8.5
4	☐	50.000	52.880	30728.55	0.7955	P	1.8
5	☐	125.000	131.062	75002.94	1.9676	P	0.7
6	☐	250.000	256.499	148772.83	3.8482	P	0.7
7	☐	500.000	509.125	288210.95	7.6357	P	2.1
8	☐	1000.000	992.911	564363.73	14.8888	P	1.0
9	☐			5729.06	0.1504	P	4.0

$$y = 0.0150 * x + 0.0027$$

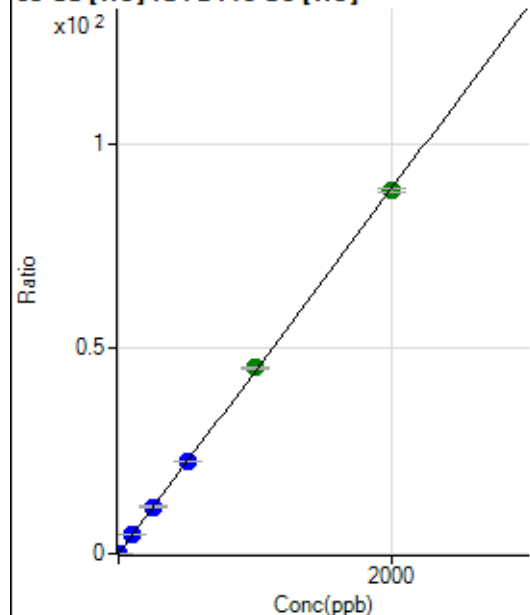
$$R = 0.9999$$

$$DL = 0.1629$$

$$BEC = 0.1771$$

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	212.23	0.0054	P	6.7
2	☐	0.200					
3	☐	2.000	1.814	3200.42	0.0862	P	1.6
4	☐	100.000	102.855	177137.56	4.5854	P	1.7
5	☐	250.000	257.892	437959.57	11.4892	P	0.6
6	☐	500.000	507.115	873222.67	22.5869	P	0.6
7	☐	1000.000	1018.678	1712466.26	45.3665	A	1.4
8	☐	2000.000	1987.753	3355345.44	88.5189	A	1.0
9	☐			3778.37	0.0992	P	6.2

$$y = 0.0445 * x + 0.0054$$

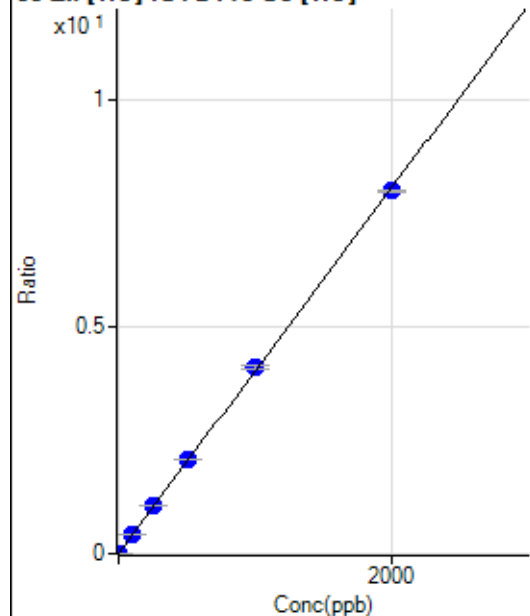
$$R = 0.9999$$

$$DL = 0.02414$$

$$BEC = 0.1209$$

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	126.67	0.0032	P	39.2
2	☐	0.200					
3	☐	2.000	2.002	418.90	0.0113	P	6.1
4	☐	100.000	103.537	16228.60	0.4201	P	2.5
5	☐	250.000	261.605	40278.54	1.0566	P	0.2
6	☐	500.000	516.156	80475.05	2.0816	P	0.8
7	☐	1000.000	1019.481	155075.76	4.1083	P	1.6
8	☐	2000.000	1984.593	303037.49	7.9945	P	0.8
9	☐			765.59	0.0201	P	1.5

$$y = 0.0040 * x + 0.0032$$

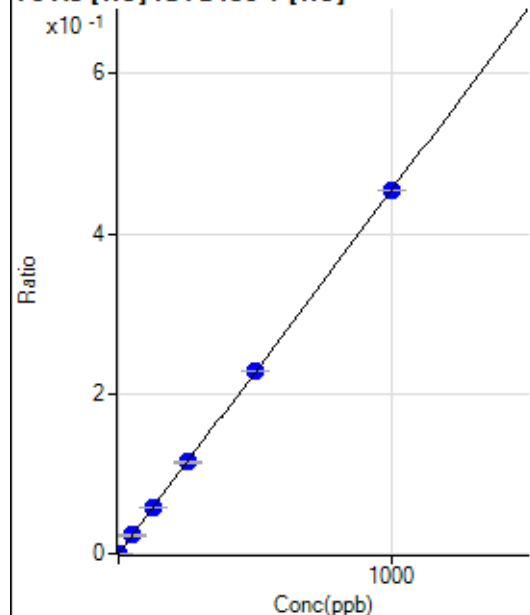
$$R = 0.9999$$

$$DL = 0.9388$$

$$BEC = 0.798$$

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	3.70	0.0000	P	49.5
2	☐	0.100					
3	☐	1.000	0.902	103.71	0.0004	P	6.6
4	☐	50.000	50.441	5892.66	0.0229	P	2.1
5	☐	125.000	126.303	14635.01	0.0574	P	0.7
6	☐	250.000	253.121	29571.17	0.1151	P	2.3
7	☐	500.000	502.037	57442.23	0.2282	P	0.6
8	☐	1000.000	998.016	114178.77	0.4537	P	0.1
9	☐			43.83	0.0002	P	10.7

$$y = 4.5456\text{E-}004 * x + 1.4083\text{E-}005$$

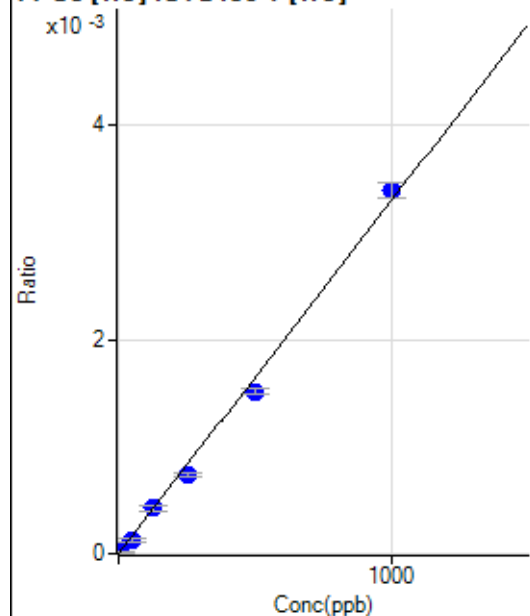
$$R = 1.0000$$

$$DL = 0.04605$$

$$BEC = 0.03098$$

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	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	2.771	2.22	0.0000	P	86.6
4	☐	50.000	38.063	32.22	0.0001	P	21.7
5	☐	125.000	128.294	107.78	0.0004	P	11.0
6	☐	250.000	225.516	191.12	0.0007	P	5.1
7	☐	500.000	458.028	380.01	0.0015	P	3.7
8	☐	1000.000	1027.303	852.26	0.0034	P	4.1
9	☐			2.22	0.0000	P	173.2

$$y = 3.2969\text{E-}006 * x + 0.0000\text{E+}000$$

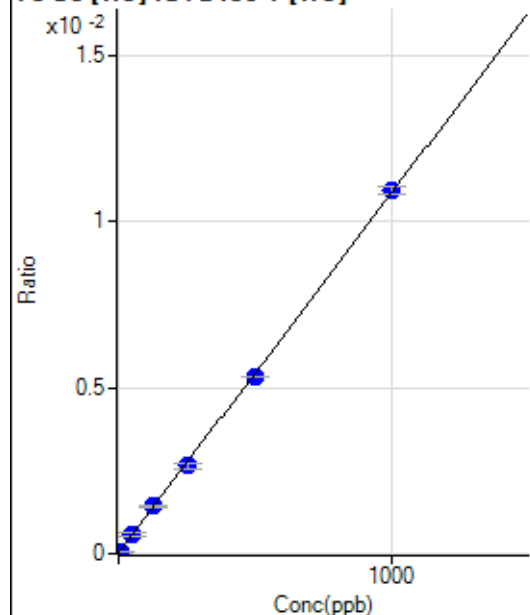
$$R = 0.9984$$

$$DL = 0$$

$$BEC = 0$$

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	3.09	0.0000	P	124.8
2	☐	0.500					
3	☐	5.000	3.328	11.73	0.0000	P	44.9
4	☐	50.000	52.067	148.15	0.0006	P	17.8
5	☐	125.000	129.979	362.36	0.0014	P	1.9
6	☐	250.000	243.278	681.51	0.0027	P	5.8
7	☐	500.000	491.519	1345.14	0.0053	P	0.2
8	☐	1000.000	1005.204	2747.83	0.0109	P	2.0
9	☐			3.09	0.0000	P	125.0

$$y = 1.0849\text{E-}005 * x + 1.1704\text{E-}005$$

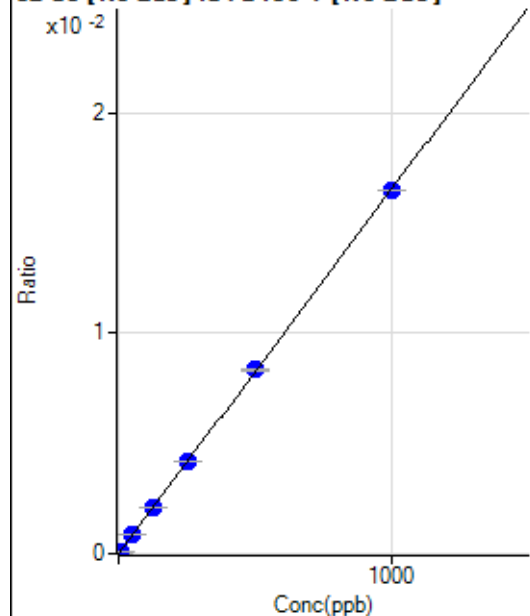
$$R = 0.9999$$

$$DL = 4.04$$

$$BEC = 1.079$$

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	-57.91	0.0000	P	-118.
2	☐	0.500					
3	☐	5.000	4.764	521.50	0.0001	P	4.3
4	☐	50.000	52.216	6352.92	0.0009	P	0.7
5	☐	125.000	128.840	15789.30	0.0021	P	0.3
6	☐	250.000	254.122	32055.58	0.0042	P	0.2
7	☐	500.000	504.607	64227.93	0.0083	P	0.5
8	☐	1000.000	996.076	127188.02	0.0165	P	0.2
9	☐			67.78	0.0000	P	29.7

$$y = 1.6542\text{E-}005 * x - 7.6364\text{E-}006$$

$$R = 1.0000$$

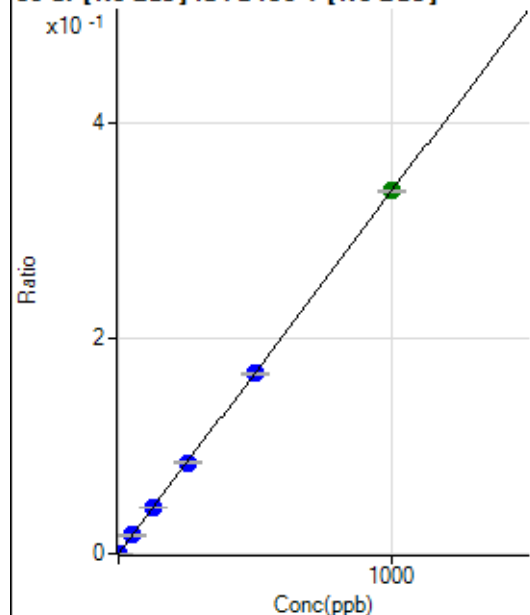
$$DL = 1.635$$

$$BEC = -0.4616$$

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	697.28	0.0001	P	9.8
2	☐	0.100					
3	☐	1.000	0.884	2858.77	0.0004	P	3.6
4	☐	50.000	50.394	126706.48	0.0171	P	1.8
5	☐	125.000	125.734	315759.77	0.0425	P	0.4
6	☐	250.000	251.881	649236.26	0.0850	P	0.3
7	☐	500.000	496.246	1288811.65	0.1673	P	0.5
8	☐	1000.000	1001.296	2606900.38	0.3376	A	0.4
9	☐			87421.38	0.0116	P	1.3

$$y = 3.3704\text{E-}004 * x + 9.1660\text{E-}005$$

$$R = 1.0000$$

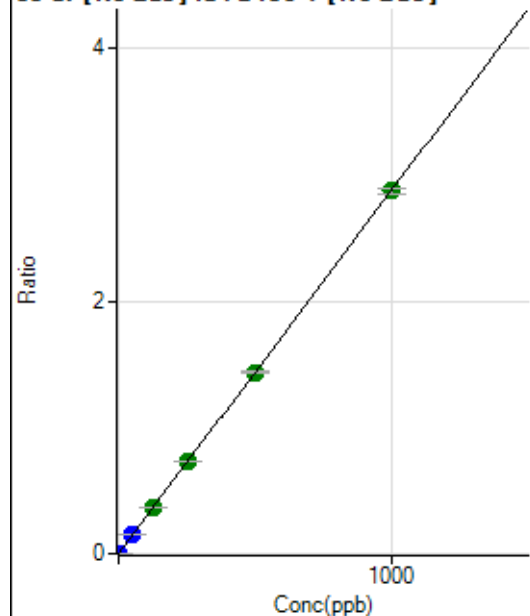
$$DL = 0.07982$$

$$BEC = 0.272$$

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	291.69	0.0000	P	24.5
2	☐	0.100					
3	☐	1.000	0.926	19804.05	0.0027	P	1.4
4	☐	50.000	51.038	1089955.54	0.1469	P	1.3
5	☐	125.000	129.006	2760076.65	0.3712	A	0.7
6	☐	250.000	253.213	5566235.80	0.7286	A	0.4
7	☐	500.000	499.704	11073523.42	1.4379	A	1.0
8	☐	1000.000	998.792	22194660.22	2.8739	A	1.3
9	☐			754765.42	0.1001	P	0.3

$$y = 0.0029 * x + 3.8332\text{E-}005$$

$$R = 1.0000$$

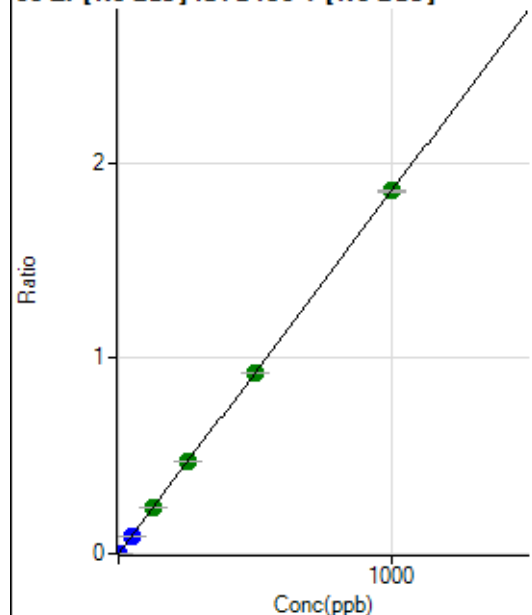
$$DL = 0.009809$$

$$BEC = 0.01332$$

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	513.92	0.0001	P	19.0
2	☐	0.100					
3	☐	1.000	0.878	12428.45	0.0017	P	1.4
4	☐	50.000	50.031	689041.72	0.0929	P	0.8
5	☐	125.000	127.422	1757539.08	0.2364	A	0.8
6	☐	250.000	253.388	3590696.74	0.4700	A	0.3
7	☐	500.000	496.564	7093512.05	0.9210	A	0.1
8	☐	1000.000	1000.567	14331640.60	1.8558	A	0.4
9	☐			2044.68	0.0003	P	9.3

$$y = 0.0019 * x + 6.7544E-005$$

$$R = 1.0000$$

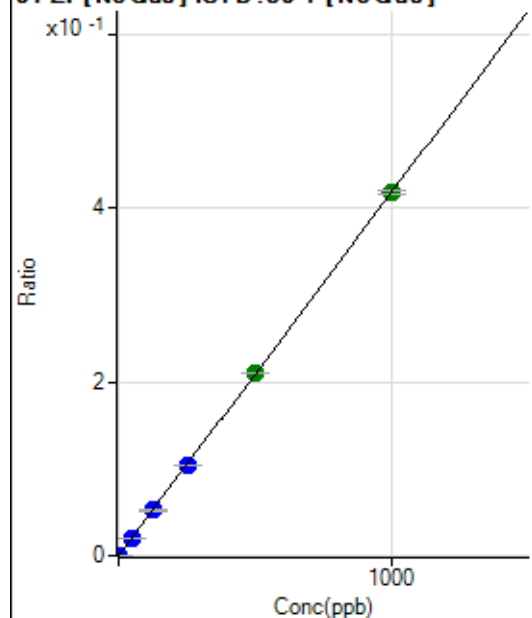
$$DL = 0.0208$$

$$BEC = 0.03642$$

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	105.56	0.0000	P	28.0
2	☐	0.100					
3	☐	1.000	0.927	2944.90	0.0004	P	6.6
4	☐	50.000	49.823	154720.68	0.0209	P	1.2
5	☐	125.000	124.492	387203.46	0.0521	P	0.9
6	☐	250.000	249.217	796359.27	0.1042	P	0.1
7	☐	500.000	503.043	1620463.00	0.2104	A	0.2
8	☐	1000.000	998.747	3225899.03	0.4177	A	1.1
9	☐			352.80	0.0000	P	10.2

$$y = 4.1823E-004 * x + 1.3886E-005$$

$$R = 1.0000$$

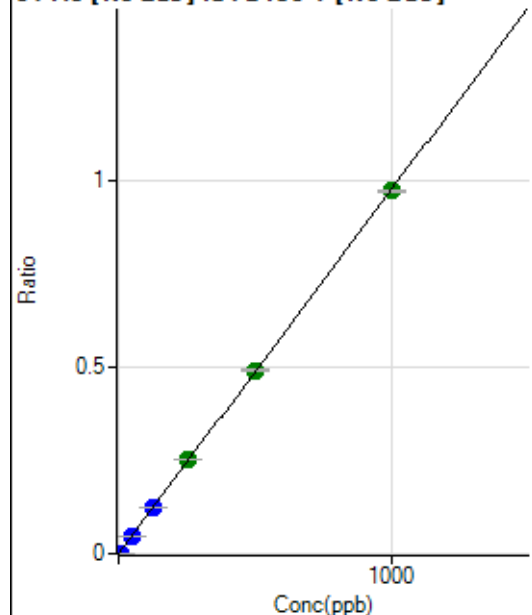
$$DL = 0.02789$$

$$BEC = 0.0332$$

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	186.12	0.0000	P	26.2
2	☐	0.500					
3	☐	5.000	1.976	14352.68	0.0020	P	1.2
4	☐	50.000	49.843	362027.35	0.0488	P	0.6
5	☐	125.000	125.546	913397.85	0.1229	P	0.4
6	☐	250.000	256.811	1919595.83	0.2513	A	0.0
7	☐	500.000	504.121	3798616.84	0.4932	A	0.6
8	☐	1000.000	996.191	7526873.00	0.9747	A	0.4
9	☐			6121.09	0.0008	P	4.0

$$y = 9.7836\text{E-}004 * x + 2.4473\text{E-}005$$

$$R = 0.9999$$

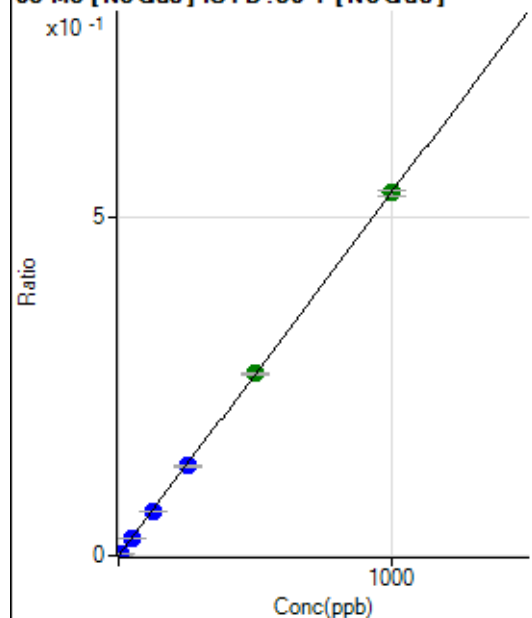
$$DL = 0.01967$$

$$BEC = 0.02501$$

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	152.79	0.0000	P	26.5
2	☐	0.500					
3	☐	5.000	4.453	17614.86	0.0024	P	1.4
4	☐	50.000	49.032	194906.07	0.0263	P	0.7
5	☐	125.000	123.033	489808.24	0.0659	P	0.4
6	☐	250.000	246.832	1009523.61	0.1321	P	0.8
7	☐	500.000	502.750	2072761.42	0.2691	A	0.9
8	☐	1000.000	999.714	4132967.15	0.5352	A	1.4
9	☐			9331.38	0.0012	P	3.3

$$y = 5.3530\text{E-}004 * x + 2.0078\text{E-}005$$

$$R = 1.0000$$

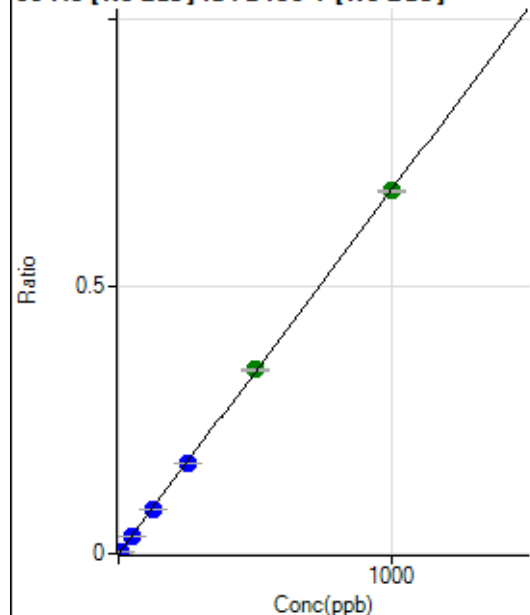
$$DL = 0.02987$$

$$BEC = 0.03751$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.12	0.0000	P	20.8
2	☐	0.500					
3	☐	5.000	3.739	18766.60	0.0026	P	2.2
4	☐	50.000	49.556	249930.83	0.0337	P	0.7
5	☐	125.000	124.167	627215.45	0.0844	P	0.1
6	☐	250.000	248.528	1289755.76	0.1688	P	0.5
7	☐	500.000	505.480	2644440.53	0.3434	A	0.2
8	☐	1000.000	997.760	5233853.63	0.6777	A	0.5
9	☐			12175.40	0.0016	P	3.0

$$y = 6.7924\text{E-}004 * x + 2.1183\text{E-}005$$

$$R = 1.0000$$

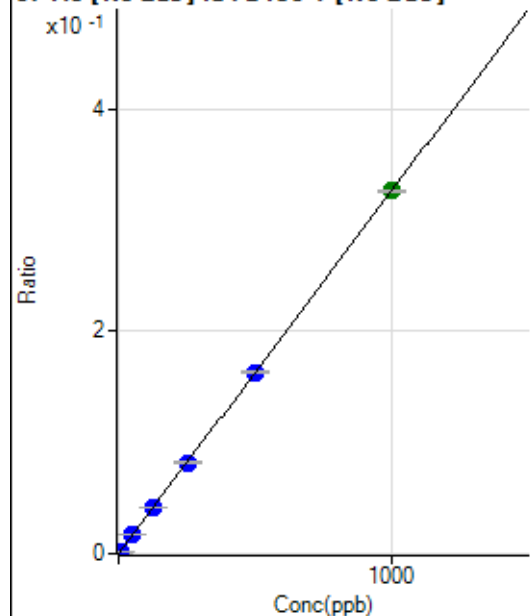
$$DL = 0.01945$$

$$BEC = 0.03119$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	30.4
2	☐	0.500					
3	☐	5.000	4.452	10724.12	0.0015	P	4.5
4	☐	50.000	50.515	122438.00	0.0165	P	0.2
5	☐	125.000	125.835	305500.69	0.0411	P	0.6
6	☐	250.000	250.794	625555.68	0.0819	P	0.9
7	☐	500.000	498.881	1254366.94	0.1629	P	1.3
8	☐	1000.000	1000.234	2521874.90	0.3266	A	0.6
9	☐			5754.21	0.0008	P	1.9

$$y = 3.2647\text{E-}004 * x + 8.4062\text{E-}006$$

$$R = 1.0000$$

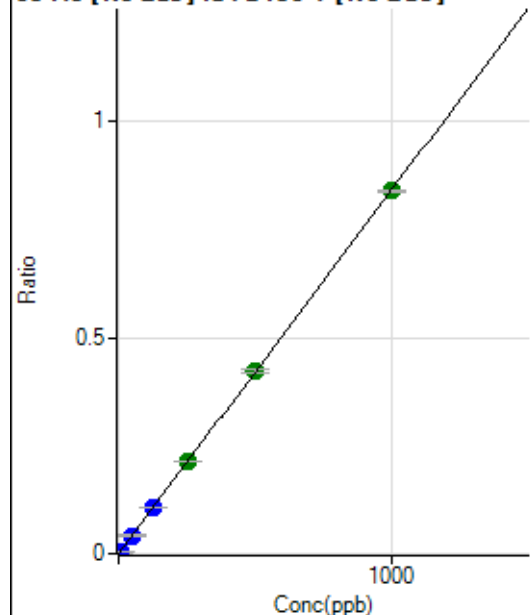
$$DL = 0.02345$$

$$BEC = 0.02575$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.01	0.0000	P	9.4
2	☐	0.500					
3	☐	5.000	4.385	27228.37	0.0037	P	4.3
4	☐	50.000	50.067	312693.31	0.0421	P	1.5
5	☐	125.000	125.749	786666.58	0.1058	P	0.7
6	☐	250.000	252.998	1626054.95	0.2129	A	0.9
7	☐	500.000	502.552	3256038.05	0.4228	A	1.1
8	☐	1000.000	997.880	6482921.41	0.8395	A	0.9
9	☐			14983.92	0.0020	P	4.1

$$y = 8.4124\text{E-}004 * x + 2.3010\text{E-}005$$

$$R = 1.0000$$

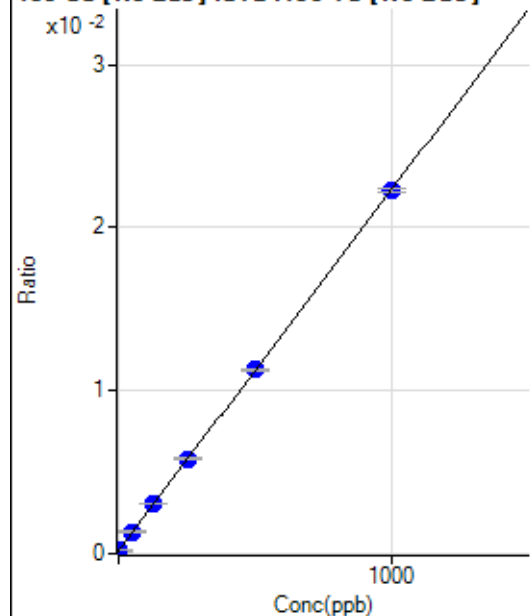
$$DL = 0.007689$$

$$BEC = 0.02735$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1616.85	0.0002	P	2.9
2	☐	0.100					
3	☐	1.000	0.929	1722.42	0.0002	P	2.2
4	☐	50.000	52.853	12017.02	0.0013	P	1.7
5	☐	125.000	131.719	27913.15	0.0031	P	2.1
6	☐	250.000	255.137	54689.67	0.0058	P	1.2
7	☐	500.000	501.059	108204.81	0.0113	P	0.2
8	☐	1000.000	997.204	214011.77	0.0223	P	1.2
9	☐			1661.31	0.0002	P	7.6

$$y = 2.2142\text{E-}005 * x + 1.7615\text{E-}004$$

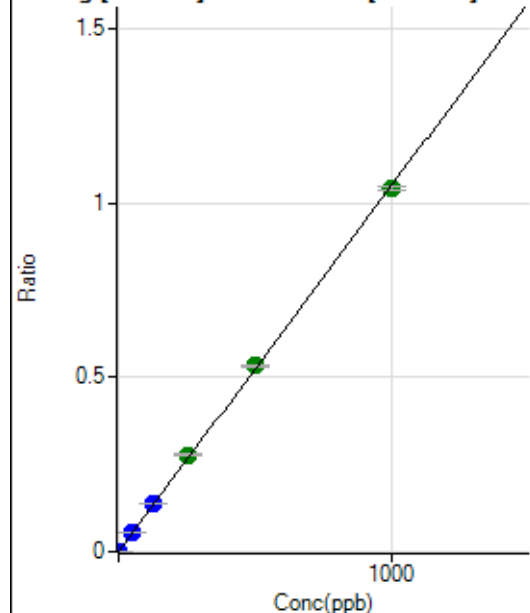
$$R = 1.0000$$

$$DL = 0.6861$$

$$BEC = 7.956$$

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	100.01	0.0000	P	16.7
2	☐	0.100					
3	☐	1.000	0.933	8678.21	0.0010	P	3.6
4	☐	50.000	53.278	499227.97	0.0559	P	0.5
5	☐	125.000	132.422	1254543.17	0.1390	P	0.5
6	☐	250.000	264.466	2606056.27	0.2776	A	1.0
7	☐	500.000	507.702	5116504.37	0.5329	A	0.3
8	☐	1000.000	991.441	10007150.48	1.0407	A	0.9
9	☐			1030.64	0.0001	P	9.0

$$y = 0.0010 * x + 1.0896E-005$$

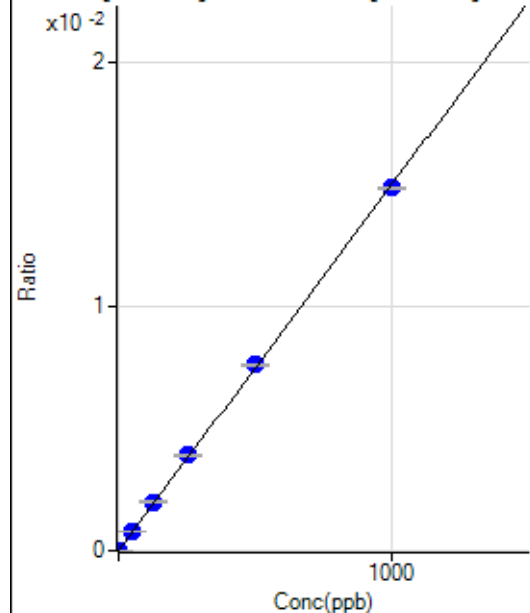
$$R = 0.9998$$

$$DL = 0.005215$$

$$BEC = 0.01038$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	50.1
2	☐	0.100					
3	☐	1.000	1.070	148.61	0.0000	P	18.6
4	☐	50.000	54.218	7260.46	0.0008	P	2.5
5	☐	125.000	134.052	18138.90	0.0020	P	1.4
6	☐	250.000	260.623	36676.47	0.0039	P	1.1
7	☐	500.000	507.541	73036.75	0.0076	P	0.8
8	☐	1000.000	992.231	143002.74	0.0149	P	0.7
9	☐			22.22	0.0000	P	42.4

$$y = 1.4987E-005 * x + 9.0827E-007$$

$$R = 0.9999$$

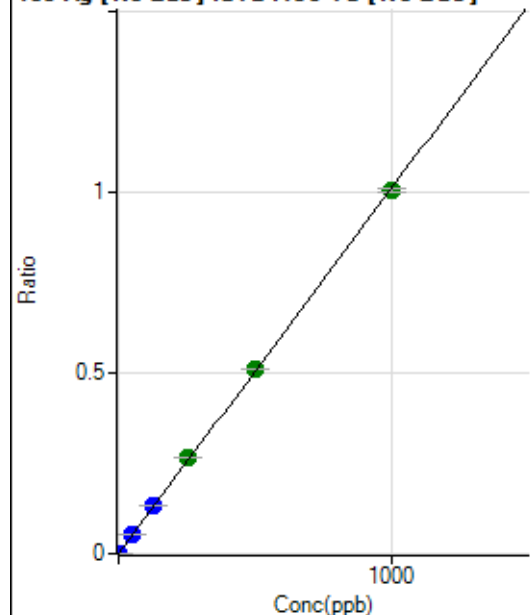
$$DL = 0.09117$$

$$BEC = 0.0606$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	19.5
2	☐	0.100					
3	☐	1.000	0.918	8200.12	0.0009	P	2.5
4	☐	50.000	52.741	475650.19	0.0533	P	0.1
5	☐	125.000	130.839	1193035.40	0.1322	P	0.4
6	☐	250.000	262.280	2487461.78	0.2650	A	1.1
7	☐	500.000	505.906	4907055.06	0.5111	A	0.6
8	☐	1000.000	993.110	9647729.03	1.0033	A	1.2
9	☐			1025.09	0.0001	P	11.6

$$y = 0.0010 * x + 9.6836E-006$$

$$R = 0.9999$$

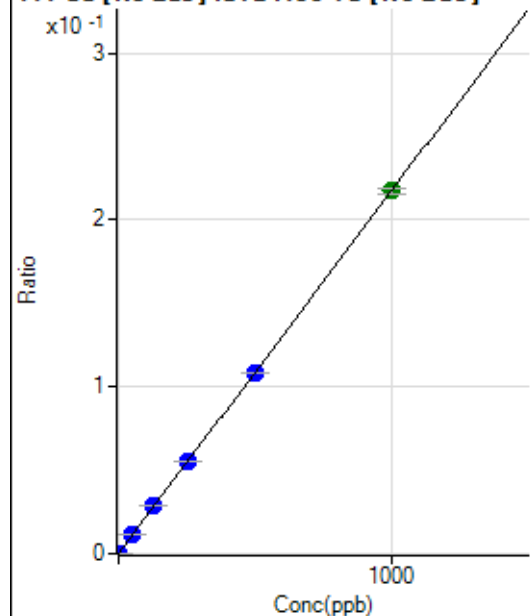
$$DL = 0.005596$$

$$BEC = 0.009585$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1188.47	0.0001	P	3.4
2	☐	0.100					
3	☐	1.000	0.911	2864.32	0.0003	P	1.1
4	☐	50.000	52.029	102035.27	0.0114	P	0.7
5	☐	125.000	130.058	256154.88	0.0284	P	0.5
6	☐	250.000	255.319	521889.58	0.0556	P	0.8
7	☐	500.000	496.064	1035859.81	0.1079	P	0.2
8	☐	1000.000	999.905	2089927.43	0.2174	A	1.5
9	☐			1322.36	0.0001	P	4.6

$$y = 2.1724E-004 * x + 1.2948E-004$$

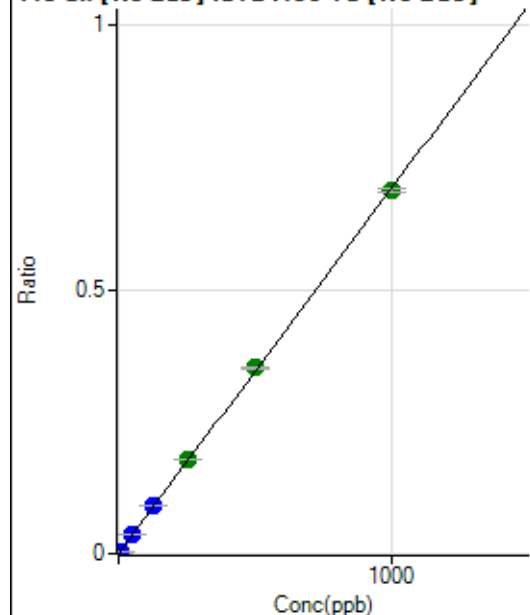
$$R = 1.0000$$

$$DL = 0.06047$$

$$BEC = 0.596$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1050.67	0.0001	P	36.5
2	☐	0.500					
3	☐	5.000	4.523	28364.38	0.0032	P	1.3
4	☐	50.000	51.500	318661.56	0.0357	P	0.2
5	☐	125.000	129.838	810790.87	0.0898	P	0.3
6	☐	250.000	258.334	1676905.98	0.1786	A	1.0
7	☐	500.000	507.973	3371271.17	0.3512	A	0.9
8	☐	1000.000	993.253	6601308.83	0.6865	A	1.2
9	☐			7296.79	0.0008	P	4.1

$$y = 6.9106\text{E-}004 * x + 1.1441\text{E-}004$$

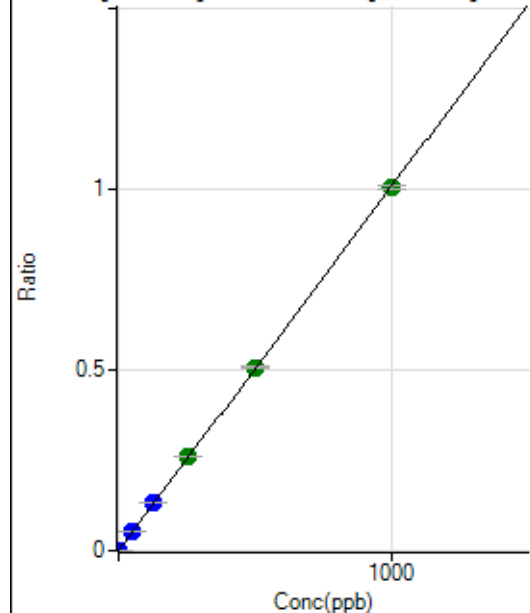
$$R = 0.9999$$

$$DL = 0.1811$$

$$BEC = 0.1656$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.02	0.0000	P	17.5
2	☐	0.200					
3	☐	2.000	1.806	16166.04	0.0018	P	2.4
4	☐	50.000	52.089	468789.82	0.0525	P	0.6
5	☐	125.000	129.538	1178486.76	0.1306	P	0.3
6	☐	250.000	257.731	2438595.97	0.2598	A	1.2
7	☐	500.000	502.903	4866343.25	0.5069	A	0.8
8	☐	1000.000	995.945	9652283.98	1.0038	A	1.1
9	☐			10818.76	0.0012	P	1.3

$$y = 0.0010 * x + 2.7244\text{E-}005$$

$$R = 1.0000$$

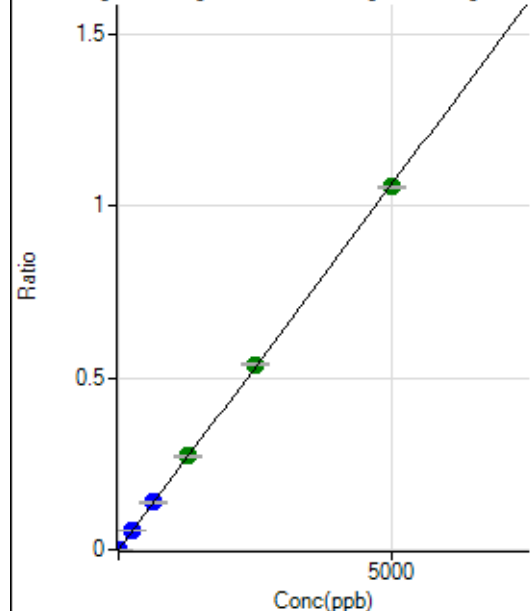
$$DL = 0.01419$$

$$BEC = 0.02703$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.78	0.0000	P	63.2
2	☐	1.000					
3	☐	10.000	9.193	17170.25	0.0020	P	0.5
4	☐	250.000	257.566	487743.02	0.0546	P	0.3
5	☐	625.000	646.113	1237028.54	0.1371	P	0.6
6	☐	1250.000	1280.442	2549881.76	0.2716	A	0.7
7	☐	2500.000	2540.442	5173899.86	0.5389	A	0.8
8	☐	5000.000	4969.153	10136296.75	1.0541	A	0.5
9	☐			2808.77	0.0003	P	2.6

$$y = 2.1213\text{E-}004 * x + 1.1209\text{E-}005$$

$$R = 0.9999$$

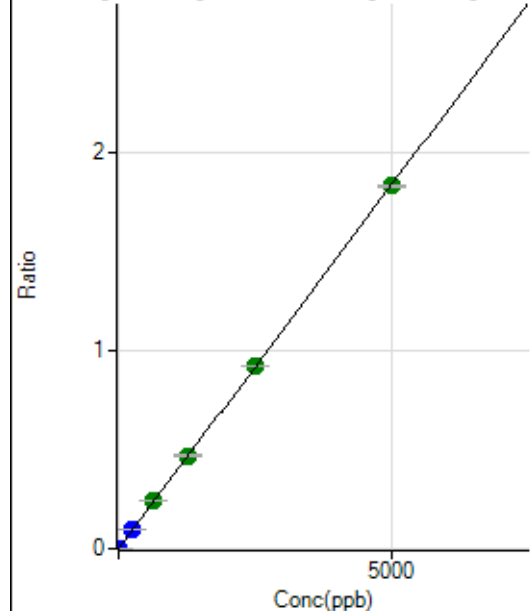
$$DL = 0.1002$$

$$BEC = 0.05284$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	172.23	0.0000	P	31.0
2	☐	1.000					
3	☐	10.000	9.224	29776.17	0.0034	P	1.9
4	☐	250.000	258.949	847405.68	0.0949	P	0.3
5	☐	625.000	649.609	2149372.51	0.2382	A	0.3
6	☐	1250.000	1277.609	4396698.19	0.4684	A	1.0
7	☐	2500.000	2505.285	8817426.76	0.9184	A	0.5
8	☐	5000.000	4986.933	17579410.12	1.8282	A	0.4
9	☐			4895.60	0.0005	P	4.4

$$y = 3.6659\text{E-}004 * x + 1.8772\text{E-}005$$

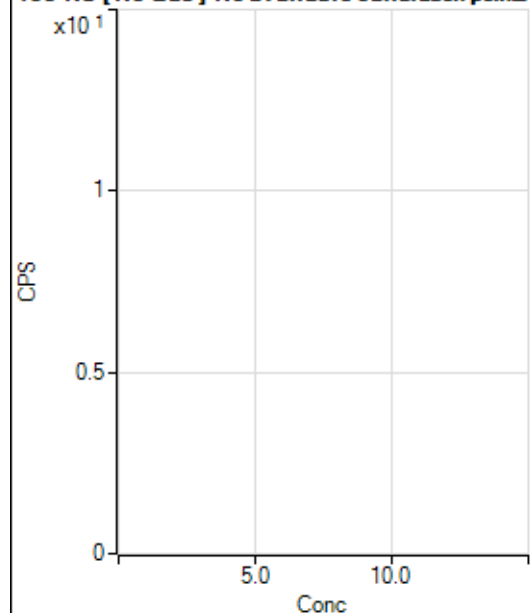
$$R = 1.0000$$

$$DL = 0.04757$$

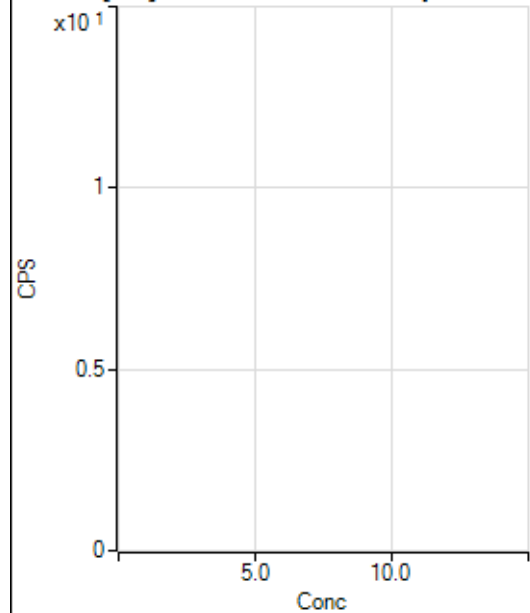
$$BEC = 0.05121$$

Weight: <None>

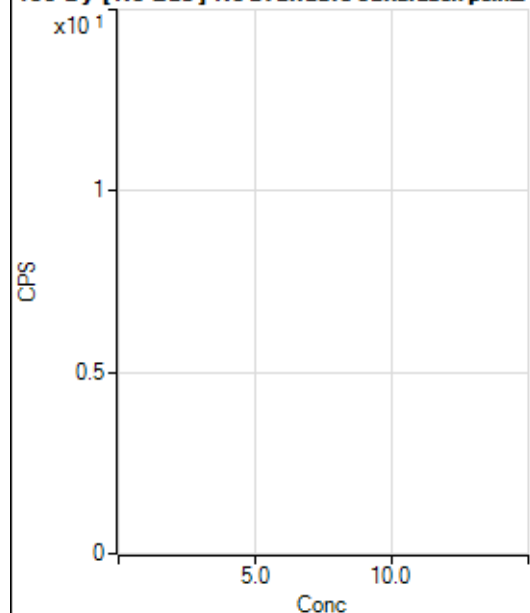
Min Conc: 0

150 Nd [No Gas] No available calibration points

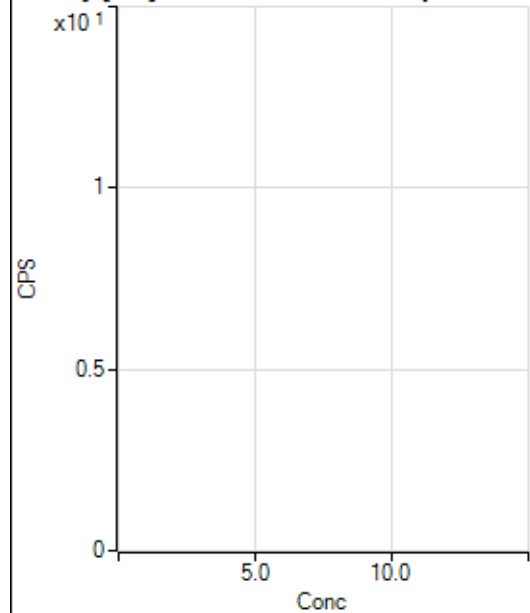
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	114.5
2	☐						
3	☐			15.56		P	107.9
4	☐			20.00		P	57.7
5	☐			35.56		P	21.6
6	☐			140.01		P	12.6
7	☐			206.68		P	6.5
8	☐			355.57		P	16.8
9	☐			88.89		P	15.6

150 Nd [He] No available calibration points

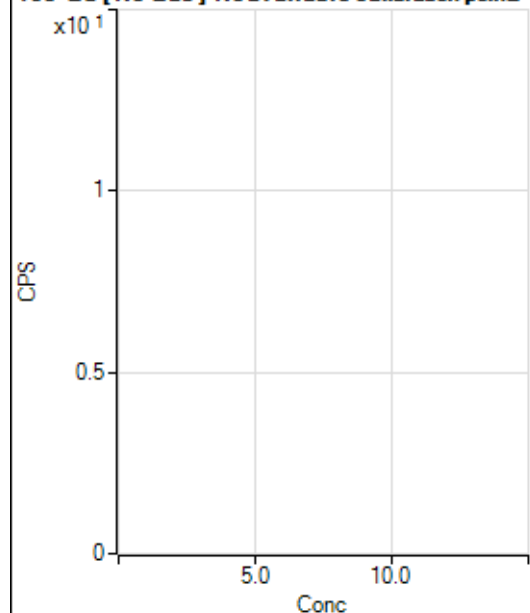
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			3.33		P	100.1
6	☐			0.00		P	
7	☐			1.11		P	173.2
8	☐			8.89		P	57.3
9	☐			13.33		P	50.0

156 Dy [No Gas] No available calibration points

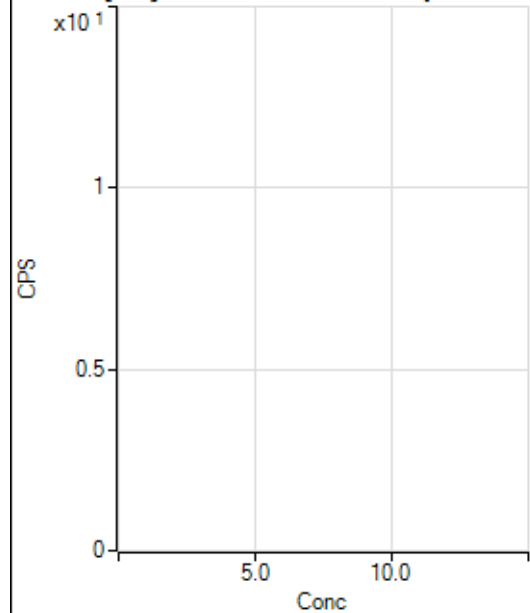
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	65.5
2	☐						
3	☐			8.33		P	173.2
4	☐			36.11		P	13.3
5	☐			30.56		P	41.7
6	☐			38.89		P	81.1
7	☐			66.67		P	45.1
8	☐			147.23		P	14.2
9	☐			63.89		P	37.7

156 Dy [He] No available calibration points

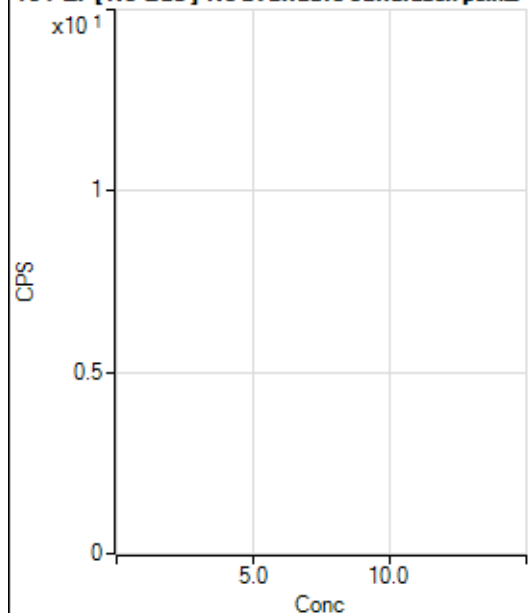
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐						
3	☐			2.22		P	86.6
4	☐			2.22		P	86.6
5	☐			2.22		P	173.2
6	☐			3.33		P	0.0
7	☐			7.78		P	24.7
8	☐			18.89		P	66.8
9	☐			10.00		P	33.3

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

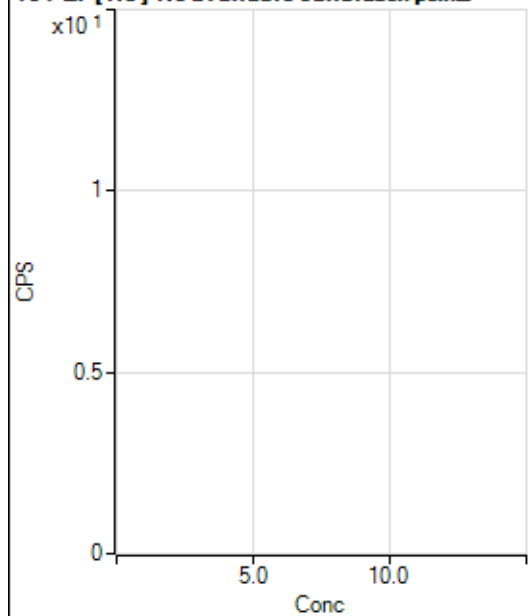
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	15.7
2	☐						
3	☐			50.00		P	72.6
4	☐			66.67		P	25.0
5	☐			75.01		P	29.4
6	☐			80.56		P	41.8
7	☐			111.11		P	24.1
8	☐			113.90		P	34.6
9	☐			108.34		P	27.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	88.2
2	☐						
3	☐			6.67		P	50.0
4	☐			21.11		P	18.2
5	☐			10.00		P	33.3
6	☐			16.66		P	34.6
7	☐			17.78		P	28.6
8	☐			23.33		P	49.5
9	☐			26.67		P	25.0

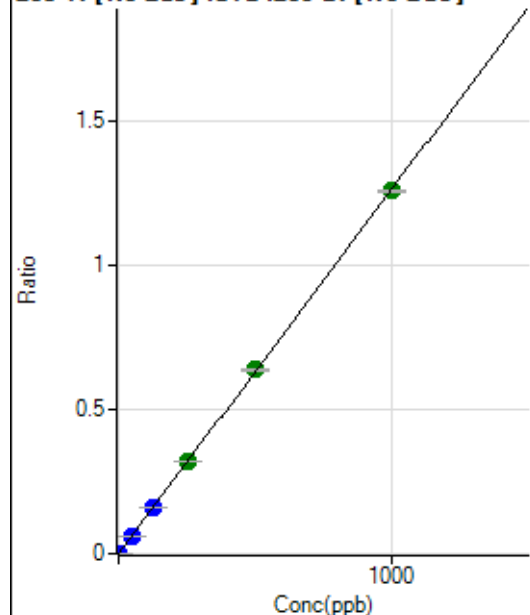
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	12.4
2	☐						
3	☐			47.22		P	36.7
4	☐			44.44		P	60.3
5	☐			44.44		P	43.3
6	☐			30.56		P	31.5
7	☐			19.44		P	89.2
8	☐			22.22		P	57.3
9	☐			50.00		P	60.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	69.3
2	☐						
3	☐			11.11		P	69.3
4	☐			10.00		P	33.3
5	☐			5.56		P	34.7
6	☐			11.11		P	17.3
7	☐			3.33		P	0.0
8	☐			8.89		P	86.6
9	☐			15.55		P	24.8

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.90	0.0000	P	23.2
2	☐	0.100					
3	☐	1.000	0.920	6329.70	0.0012	P	0.8
4	☐	50.000	49.473	339524.59	0.0625	P	0.2
5	☐	125.000	126.338	868977.12	0.1597	P	0.7
6	☐	250.000	254.400	1827875.93	0.3215	A	0.4
7	☐	500.000	504.537	3737440.01	0.6375	A	0.6
8	☐	1000.000	996.491	7338493.22	1.2591	A	0.5
9	☐			2567.04	0.0005	P	7.0

$$y = 0.0013 * x + 2.9352E-005$$

$$R = 1.0000$$

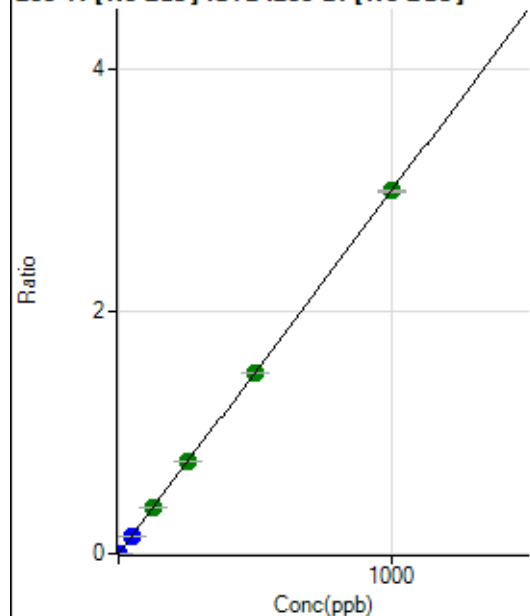
$$DL = 0.01614$$

$$BEC = 0.02323$$

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	366.69	0.0001	P	26.1
2	☐	0.100					
3	☐	1.000	0.915	14903.86	0.0028	P	1.5
4	☐	50.000	49.708	808454.26	0.1489	P	0.4
5	☐	125.000	127.682	2081281.82	0.3824	A	1.1
6	☐	250.000	253.969	4324648.10	0.7606	A	0.3
7	☐	500.000	497.663	8736707.75	1.4903	A	0.6
8	☐	1000.000	999.856	17450645.53	2.9942	A	0.8
9	☐			5976.67	0.0011	P	6.5

$$y = 0.0030 * x + 6.5699E-005$$

$$R = 1.0000$$

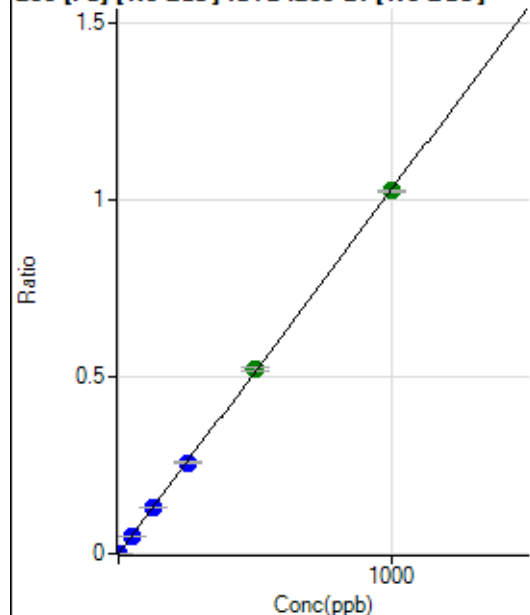
$$DL = 0.01716$$

$$BEC = 0.02194$$

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	690.78	0.0001	P	8.5
2	☐	0.100					
3	☐	1.000	0.907	5623.66	0.0011	P	0.7
4	☐	50.000	49.154	275547.86	0.0508	P	0.8
5	☐	125.000	125.526	704407.67	0.1294	P	0.4
6	☐	250.000	250.663	1468824.50	0.2583	P	0.3
7	☐	500.000	506.880	3061473.22	0.5222	A	1.2
8	☐	1000.000	996.371	5982469.69	1.0265	A	0.9
9	☐			6364.76	0.0012	P	0.6

$$y = 0.0010 * x + 1.2369E-004$$

$$R = 1.0000$$

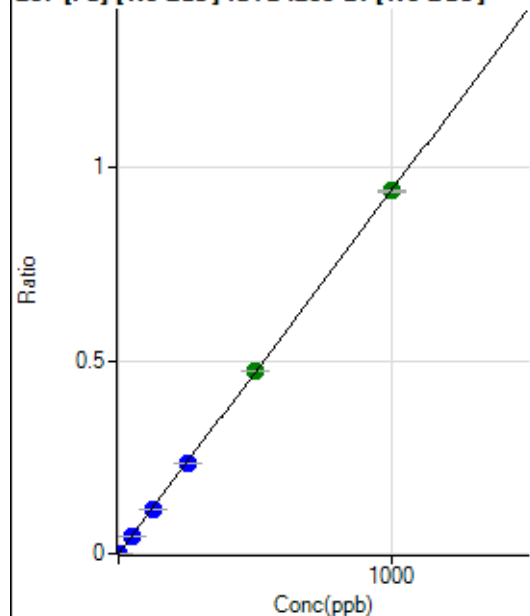
$$DL = 0.03057$$

$$BEC = 0.1201$$

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	713.01	0.0001	P	12.4
2	☐	0.100					
3	☐	1.000	0.827	4814.06	0.0009	P	3.9
4	☐	50.000	48.705	249391.02	0.0459	P	0.4
5	☐	125.000	123.900	634960.21	0.1167	P	0.6
6	☐	250.000	248.899	1331822.89	0.2342	P	0.4
7	☐	500.000	502.702	2772543.38	0.4729	A	0.4
8	☐	1000.000	999.127	5477730.68	0.9399	A	0.3
9	☐			5488.40	0.0010	P	2.2

$$y = 9.4055E-004 * x + 1.2769E-004$$

$$R = 1.0000$$

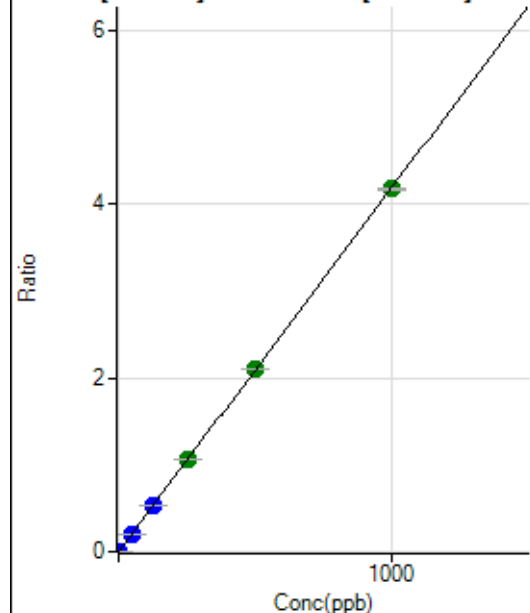
$$DL = 0.05041$$

$$BEC = 0.1358$$

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	3020.61	0.0005	P	1.5
2	☐	0.100					
3	☐	1.000	0.879	22386.27	0.0042	P	0.6
4	☐	50.000	49.276	1120920.36	0.2065	P	0.4
5	☐	125.000	125.323	2853536.65	0.5243	P	0.4
6	☐	250.000	253.412	6024808.46	1.0596	A	0.3
7	☐	500.000	503.038	12327371.48	2.1028	A	0.5
8	☐	1000.000	997.624	24302458.64	4.1698	A	0.7
9	☐			25505.35	0.0049	P	0.9

$$y = 0.0042 * x + 5.4069E-004$$

$$R = 1.0000$$

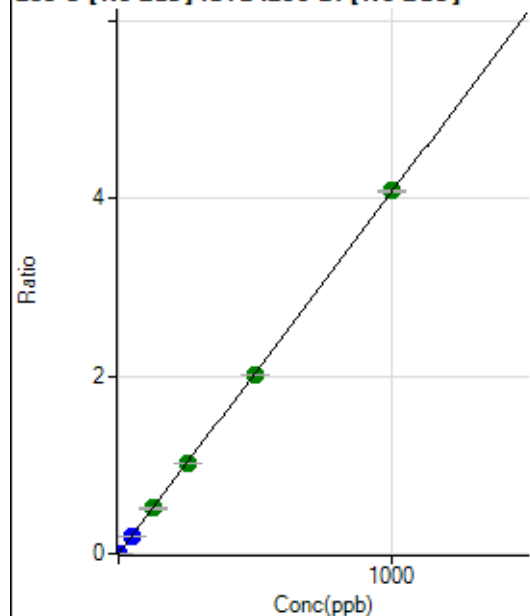
$$DL = 0.005858$$

$$BEC = 0.1294$$

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	602.82	0.0001	P	8.2
2	☐	0.100					
3	☐	1.000	0.861	19182.38	0.0036	P	3.0
4	☐	50.000	48.770	1076884.80	0.1984	P	0.7
5	☐	125.000	126.051	2789386.93	0.5125	A	1.9
6	☐	250.000	249.041	5756917.27	1.0125	A	0.4
7	☐	500.000	493.044	11750263.63	2.0044	A	0.4
8	☐	1000.000	1003.648	23779443.41	4.0800	A	0.8
9	☐			1697.42	0.0003	P	6.0

$$y = 0.0041 * x + 1.0787E-004$$

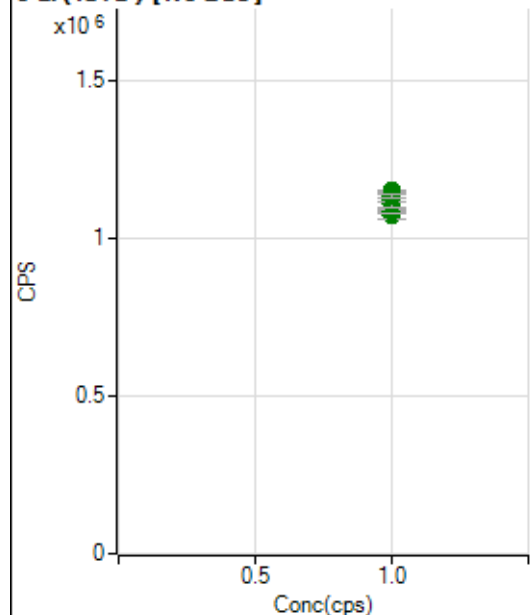
$$R = 1.0000$$

$$DL = 0.006551$$

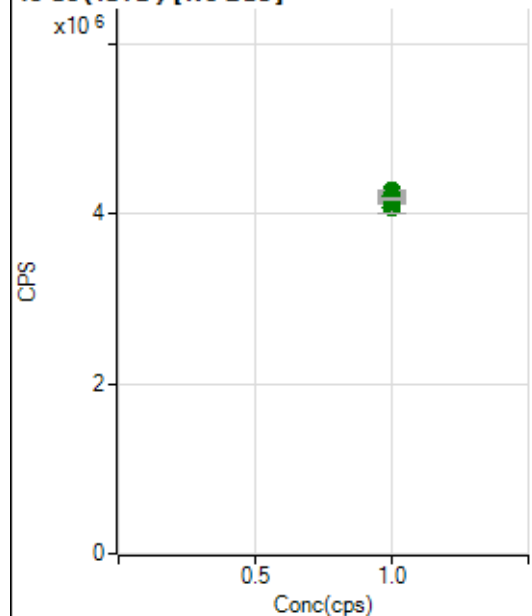
$$BEC = 0.02654$$

Weight: <None>

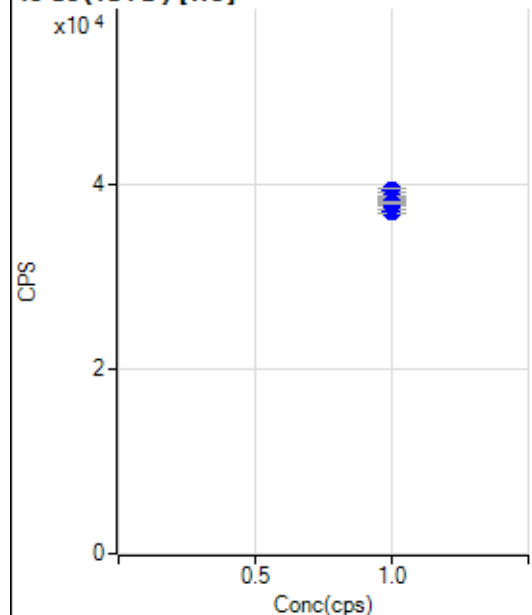
Min Conc: 0

6 Li (ISTD) [No Gas]

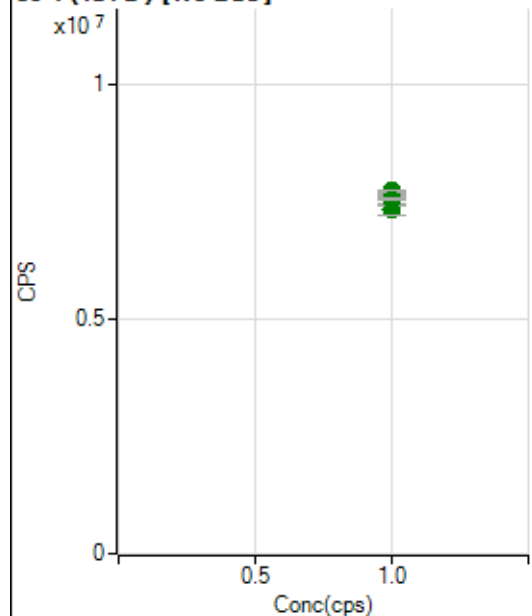
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1124445.42		A	1.0
2	☐	1.000					
3	☐	1.000		1071955.52		A	2.5
4	☐	1.000		1087320.30		A	1.0
5	☐	1.000		1109315.13		A	1.7
6	☐	1.000		1146696.42		A	0.8
7	☐	1.000		1150971.30		A	0.4
8	☐	1.000		1142737.40		A	0.1
9	☐	1.000		1132906.01		A	1.2

45 Sc (ISTD) [No Gas]

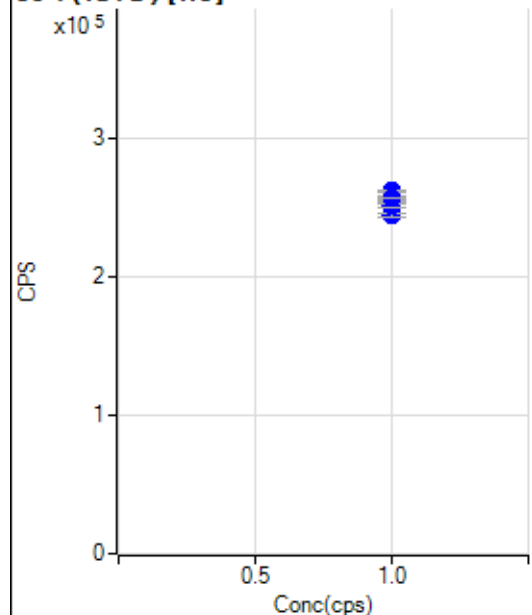
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4269154.22		A	0.3
2	☐	1.000					
3	☐	1.000		4065374.61		A	3.0
4	☐	1.000		4133065.81		A	0.4
5	☐	1.000		4147452.91		A	0.4
6	☐	1.000		4212031.30		A	1.1
7	☐	1.000		4191161.77		A	0.3
8	☐	1.000		4208500.75		A	0.6
9	☐	1.000		4177403.96		A	0.7

45 Sc (ISTD) [He]

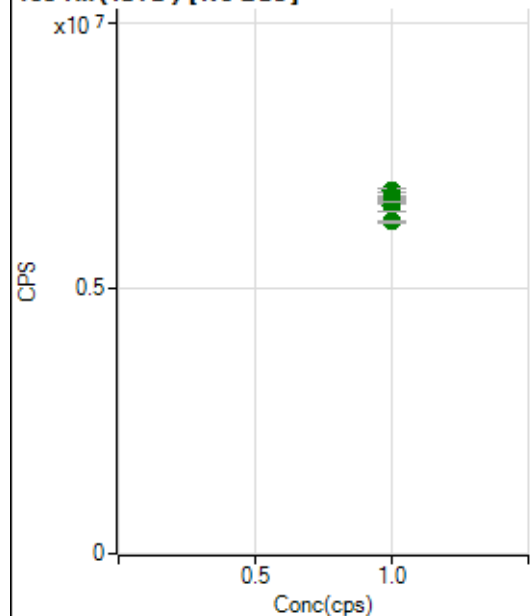
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		39404.11		P	1.1
2	☐	1.000					
3	☐	1.000		37152.41		P	1.4
4	☐	1.000		38636.45		P	1.4
5	☐	1.000		38120.61		P	0.8
6	☐	1.000		38661.18		P	0.5
7	☐	1.000		37753.01		P	1.6
8	☐	1.000		37907.87		P	1.0
9	☐	1.000		38097.25		P	1.0

89 Y (ISTD) [No Gas]

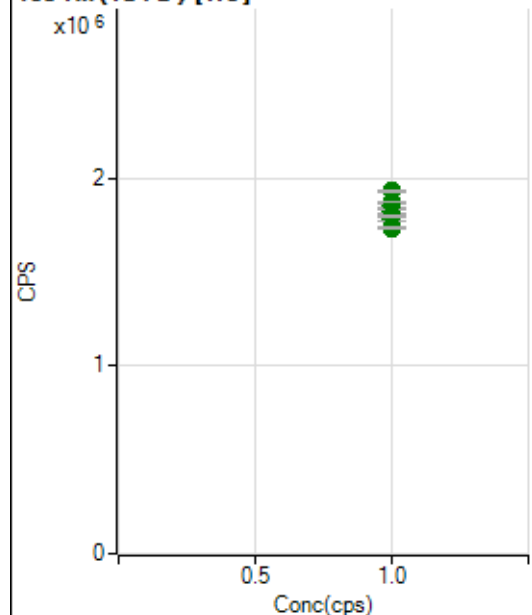
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7605234.61		A	0.4
2	☐	1.000					
3	☐	1.000		7330296.49		A	2.9
4	☐	1.000		7420441.69		A	0.7
5	☐	1.000		7434974.68		A	0.6
6	☐	1.000		7639371.34		A	0.3
7	☐	1.000		7701672.73		A	0.8
8	☐	1.000		7722567.11		A	0.2
9	☐	1.000		7543129.40		A	0.4

89 Y(ISTD) [He]

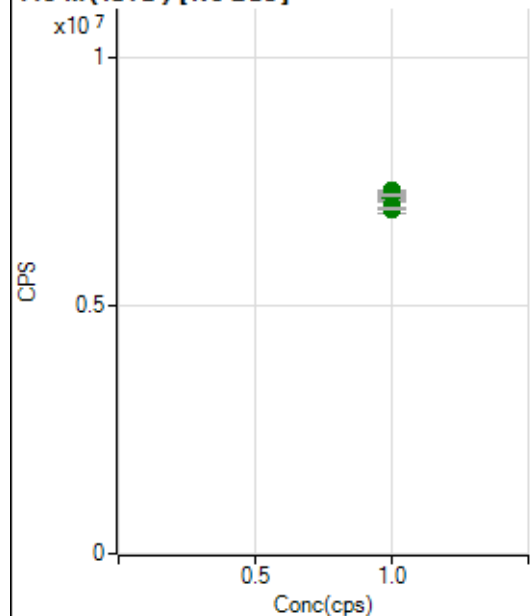
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		262333.64		P	0.8
2	☐	1.000					
3	☐	1.000		244553.43		P	1.2
4	☐	1.000		256858.68		P	0.5
5	☐	1.000		254846.85		P	0.2
6	☐	1.000		257008.68		P	0.8
7	☐	1.000		251703.11		P	0.9
8	☐	1.000		251676.93		P	0.6
9	☐	1.000		256966.03		P	0.1

103 Rh(ISTD) [No Gas]

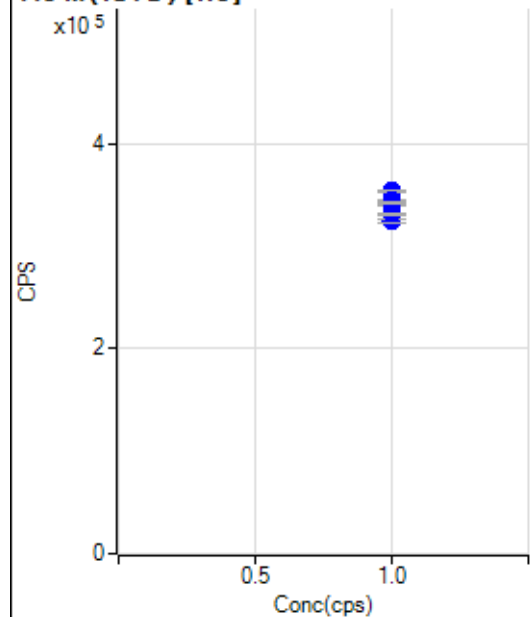
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6842724.03		A	1.0
2	☐	1.000					
3	☐	1.000		6567860.13		A	3.0
4	☐	1.000		6620875.15		A	0.9
5	☐	1.000		6637790.38		A	0.6
6	☐	1.000		6746840.43		A	0.3
7	☐	1.000		6692739.26		A	0.2
8	☐	1.000		6633615.17		A	0.2
9	☐	1.000		6262060.30		A	0.3

103 Rh (ISTD) [He]

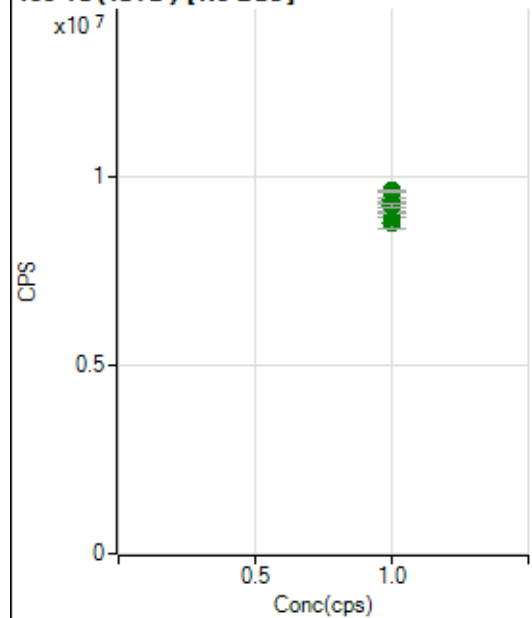
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1933234.07		A	0.5
2	☐	1.000					
3	☐	1.000		1786199.73		A	1.0
4	☐	1.000		1852872.70		A	1.0
5	☐	1.000		1836133.48		A	0.2
6	☐	1.000		1874925.39		A	0.2
7	☐	1.000		1822613.03		A	0.9
8	☐	1.000		1799597.26		A	0.2
9	☐	1.000		1736072.30		A	0.4

115 In (ISTD) [No Gas]

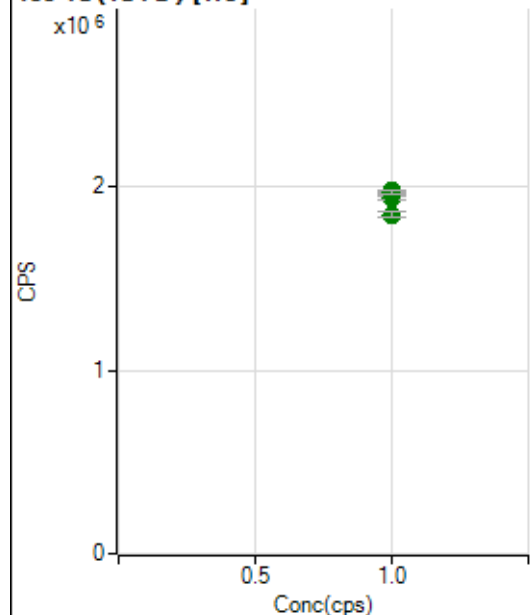
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7285562.57		A	0.2
2	☐	1.000					
3	☐	1.000		6965735.16		A	3.6
4	☐	1.000		7127311.44		A	0.5
5	☐	1.000		7159815.44		A	0.7
6	☐	1.000		7282065.85		A	0.6
7	☐	1.000		7303987.16		A	0.0
8	☐	1.000		7221318.86		A	0.8
9	☐	1.000		6946851.80		A	0.4

115 In (ISTD) [He]

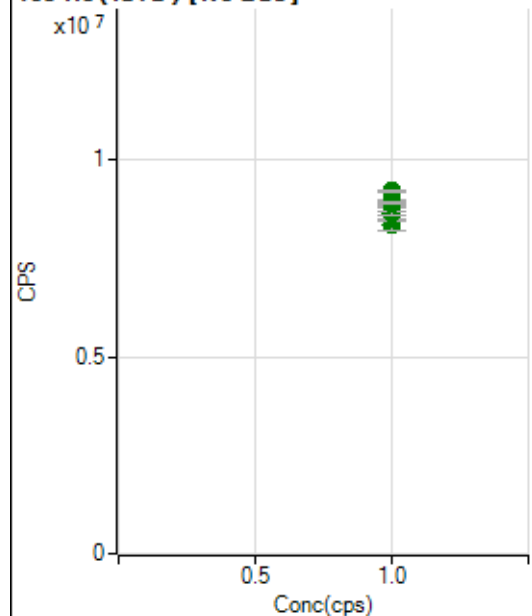
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		354007.51		P	0.3
2	☐	1.000					
3	☐	1.000		329333.21		P	1.3
4	☐	1.000		345441.53		P	0.3
5	☐	1.000		341170.57		P	1.0
6	☐	1.000		342287.74		P	0.4
7	☐	1.000		331548.48		P	0.5
8	☐	1.000		324956.17		P	1.0
9	☐	1.000		331457.78		P	0.4

159 Tb (ISTD) [No Gas]

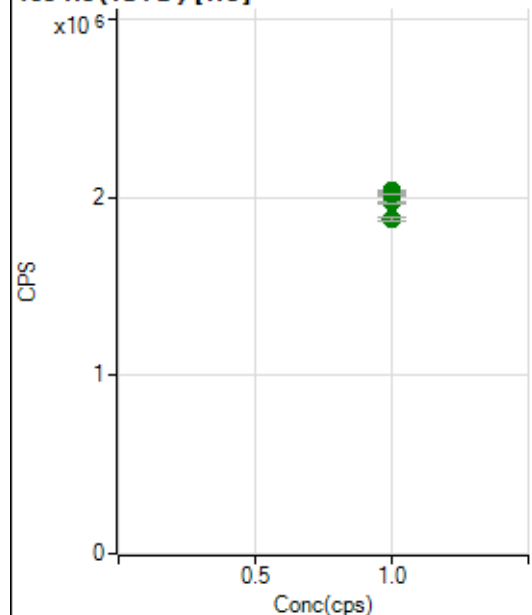
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9178982.02		A	0.2
2	☐	1.000					
3	☐	1.000		8753047.23		A	3.8
4	☐	1.000		8925017.64		A	0.1
5	☐	1.000		9024854.86		A	0.6
6	☐	1.000		9387603.54		A	0.8
7	☐	1.000		9600532.57		A	0.1
8	☐	1.000		9615942.77		A	0.6
9	☐	1.000		9224302.71		A	0.8

159 Tb (ISTD) [He]

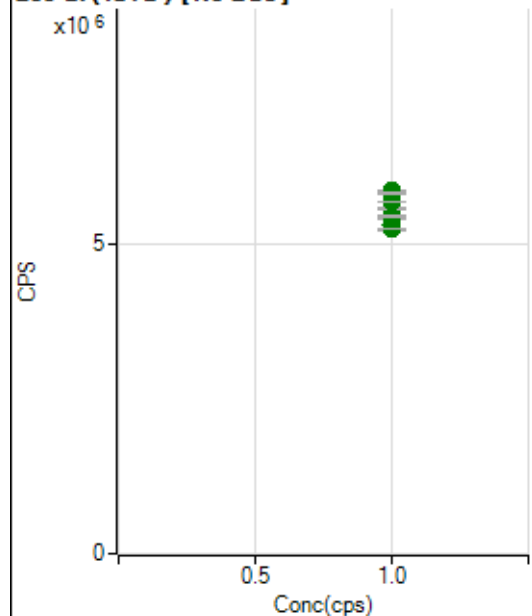
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1975715.15		A	0.9
2	☐	1.000					
3	☐	1.000		1847044.97		A	1.3
4	☐	1.000		1950657.17		A	0.4
5	☐	1.000		1934501.69		A	1.0
6	☐	1.000		1969194.40		A	1.4
7	☐	1.000		1972113.10		A	0.5
8	☐	1.000		1953514.92		A	0.5
9	☐	1.000		1968500.98		A	1.0

165 Ho (ISTD) [No Gas]

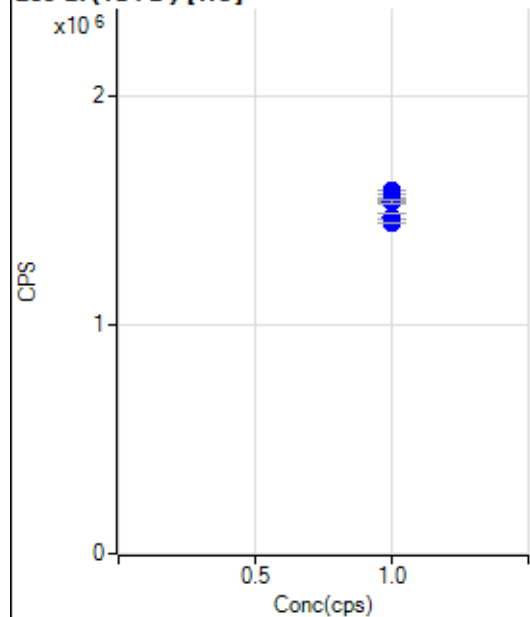
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8830432.40		A	0.5
2	☐	1.000					
3	☐	1.000		8353675.88		A	3.6
4	☐	1.000		8489467.99		A	0.5
5	☐	1.000		8638719.03		A	0.8
6	☐	1.000		8996665.48		A	0.2
7	☐	1.000		9211679.63		A	0.5
8	☐	1.000		9216847.78		A	0.5
9	☐	1.000		8904202.54		A	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2037110.86		A	0.6
2	☐	1.000					
3	☐	1.000		1880327.99		A	1.0
4	☐	1.000		1974327.71		A	0.6
5	☐	1.000		1971797.65		A	0.9
6	☐	1.000		2021215.49		A	1.0
7	☐	1.000		2013847.62		A	0.9
8	☐	1.000		2016651.93		A	0.6
9	☐	1.000		2017637.02		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5586732.35		A	0.6
2	☐	1.000					
3	☐	1.000		5314071.69		A	3.2
4	☐	1.000		5428908.95		A	0.3
5	☐	1.000		5442664.36		A	0.4
6	☐	1.000		5685987.70		A	0.3
7	☐	1.000		5862412.48		A	0.7
8	☐	1.000		5828312.34		A	0.3
9	☐	1.000		5252543.39		A	0.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1586303.76		P	0.1
2	☐	1.000					
3	☐	1.000		1474619.20		P	1.6
4	☐	1.000		1552739.80		P	0.0
5	☐	1.000		1542537.07		P	0.5
6	☐	1.000		1572695.97		P	0.1
7	☐	1.000		1558386.42		P	0.1
8	☐	1.000		1537671.71		P	0.8
9	☐	1.000		1447619.01		P	0.3

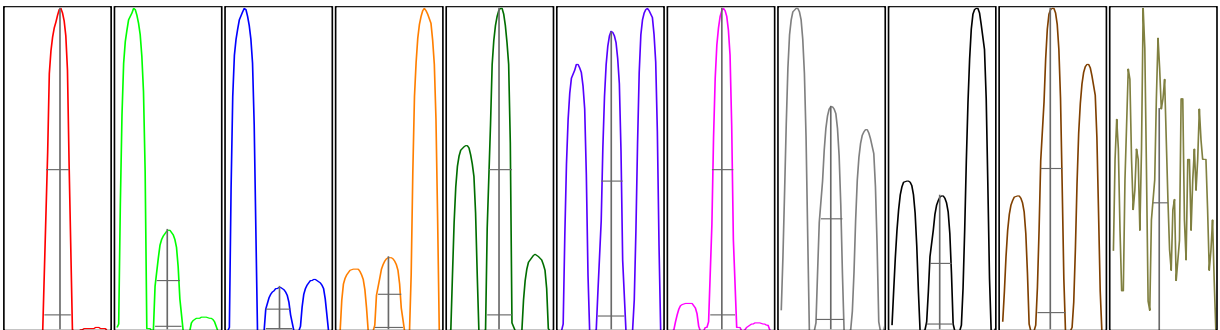
US EPA Tune Check Sample Report

Batch Folder D:\P8100917 MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6416	0.74	5.00	
24	32804	1.08	5.00	
25	4470	0.90	5.00	
26	5219	0.60	5.00	
59	70126	1.63	5.00	
113	9438	0.96	5.00	
115	119166	1.53	5.00	
206	26749	1.71	5.00	
207	23852	1.58	5.00	
208	57205	1.24	5.00	
220	2	8.60		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6476	6368	6441	6424	6369
24	33320	32530	33000	32460	32712
25	4492	4431	4526	4435	4464
26	5249	5178	5251	5201	5217
59	68462	69909	70840	69930	71488
113	9315	9501	9391	9438	9546
115	118410	121382	116593	119200	120244
206	26694	27150	26327	27282	26290
207	23629	24255	23545	24271	23561
208	56635	57631	56694	58254	56811
220	1	1	2	2	2

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	10240	9.10	8.9 - 9.1		0.782	0.900	
24	51944	24.00	23.9 - 24.1		0.787	0.900	
25	6922	25.05	24.9 - 25.1		0.789	0.900	
26	8224	26.00	25.9 - 26.1		0.812	0.900	
59	115793	59.00	58.9 - 59.1		0.741	0.900	
113	16670	113.05	112.9 - 113.1		0.771	0.900	
115	209444	115.05	114.9 - 115.1		0.739	0.900	
206	45782	206.00	205.9 - 206.1		0.787	0.900	
207	41115	206.95	206.9 - 207.1		0.759	0.900	
208	98304	207.95	207.9 - 208.1		0.814	0.900	
220	2	219.90	-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.3	V	Deflect	13.6	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	9594	0.95	
89	2076	0.87	
205	13193	0.73	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9738	9540	9623	9562	9507
89	2108	2069	2065	2069	2069
205	13342	13236	13137	13137	13111

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.3	V	Deflect	1.6	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	5.0	mL/min	OctP RF	200	V			