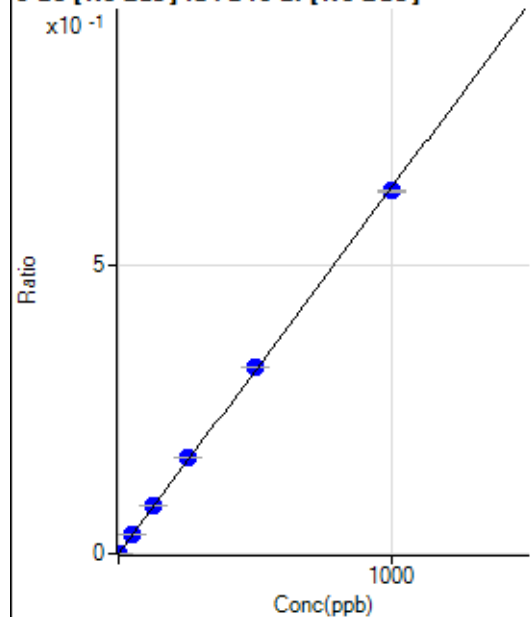


Batch Folder: D:\ICP-MS Data\P7080619IMS.b\
Analysis File: P7080619IMS.batch.bin
DA Date-Time: 2019-08-07 00:39:41
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-08-06 14:03:17
2	003CALS.d	S02	2019-08-06 14:06:54
3	004CALS.d	S03	2019-08-06 14:11:12
4	005CALS.d	S04	2019-08-06 14:15:09
5	006CALS.d	S05	2019-08-06 14:19:02
6	007CALS.d	S06	2019-08-06 14:22:51
7	008CALS.d	S07	2019-08-06 14:26:40
8	009CALS.d	S08	2019-08-06 14:30:27

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	51.11	0.0000	P	29.5
2	☐	1.000	1.006	1332.30	0.0007	P	1.0
3	☐	50.000	54.100	71167.08	0.0343	P	1.2
4	☐	125.000	132.763	160062.40	0.0842	P	1.0
5	☐	250.000	261.109	293853.55	0.1655	P	0.7
6	☐	500.000	509.283	566864.05	0.3228	P	0.0
7	☐	1000.000	991.406	1130925.28	0.6284	P	0.2
8	☐			256.68	0.0001	P	23.8

$$y = 6.3383\text{E-}004 * x + 2.5692\text{E-}005$$

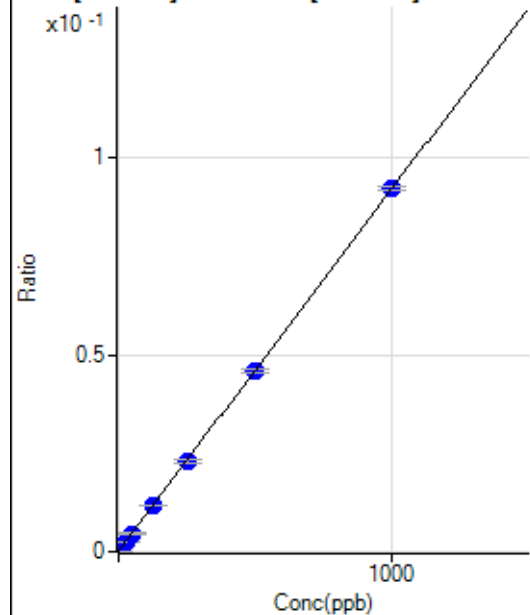
$$R = 0.9999$$

$$DL = 0.0359$$

$$BEC = 0.04053$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	325.02	0.0002	P	9.1
2	☐	25.000	22.654	4509.17	0.0022	P	2.9
3	☐	50.000	48.713	9620.10	0.0046	P	4.4
4	☐	125.000	124.143	22002.88	0.0116	P	1.3
5	☐	250.000	250.198	41095.88	0.0232	P	4.2
6	☐	500.000	497.642	80582.05	0.0459	P	1.8
7	☐	1000.000	1001.360	165891.08	0.0922	P	1.2
8	☐			9211.51	0.0051	P	7.1

$$y = 9.1890\text{E-}005 * x + 1.6332\text{E-}004$$

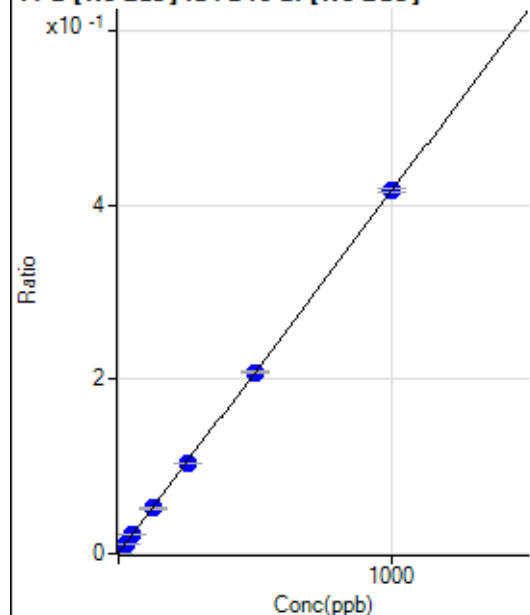
$$R = 1.0000$$

$$DL = 0.4866$$

$$BEC = 1.777$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1475.14	0.0007	P	13.4
2	☐	25.000	23.197	20859.50	0.0104	P	0.9
3	☐	50.000	49.428	44148.66	0.0213	P	1.9
4	☐	125.000	123.397	98950.98	0.0520	P	1.9
5	☐	250.000	249.202	185240.03	0.1043	P	0.7
6	☐	500.000	500.091	366388.50	0.2087	P	1.1
7	☐	1000.000	1000.428	749860.92	0.4167	P	1.1
8	☐			39458.39	0.0218	P	7.1

$$y = 4.1575\text{E-}004 * x + 7.4140\text{E-}004$$

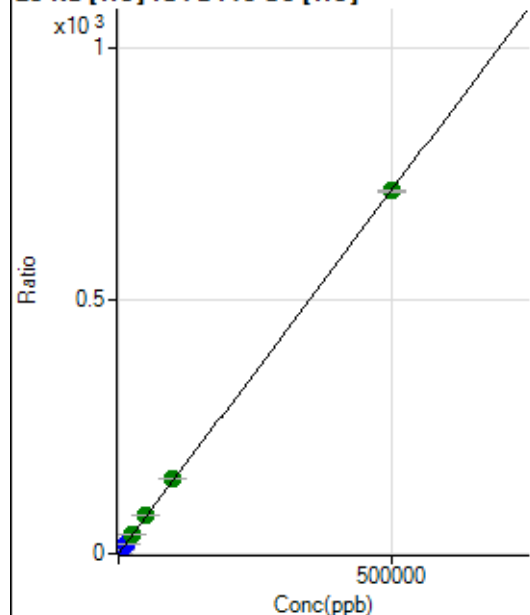
$$R = 1.0000$$

$$DL = 0.7155$$

$$BEC = 1.783$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3497.79	0.0244	P	6.8
2	☐	500.000	517.126	104574.41	0.7662	P	9.5
3	☐	5000.000	5139.120	1063615.61	7.3964	P	0.8
4	☐	12500.000	12824.262	2407839.40	18.4206	P	0.6
5	☐	25000.000	26010.291	4517020.85	37.3358	A	0.4
6	☐	50000.000	52189.647	9192454.72	74.8897	A	0.7
7	☐	100000.00	102144.88	18926261.88	146.5498	A	0.2
8	☐	500000.00	499292.02	96724563.27	716.2521	A	0.3

$$y = 0.0014 * x + 0.0244$$

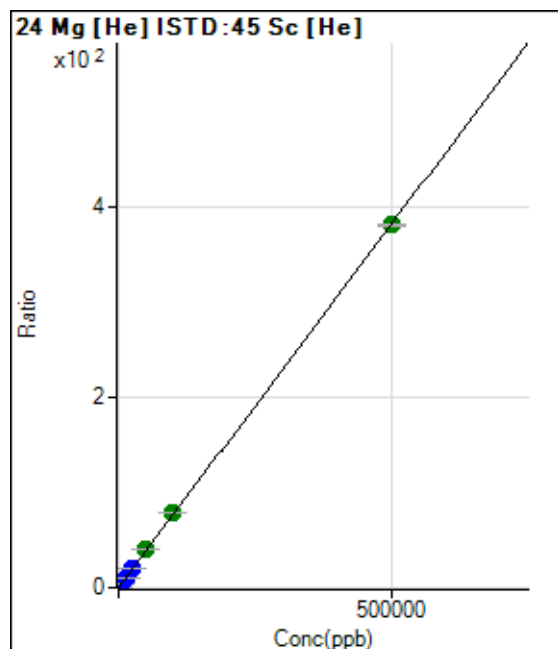
$$R = 1.0000$$

$$DL = 3.483$$

$$BEC = 17.01$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0005	P	24.9
2	☐	500.000	533.862	55727.01	0.4079	P	7.6
3	☐	5000.000	5200.672	570769.42	3.9693	P	1.1
4	☐	12500.000	12965.275	1293373.38	9.8947	P	0.4
5	☐	25000.000	26013.865	2401848.28	19.8525	P	0.3
6	☐	50000.000	52968.398	4961728.89	40.4225	A	0.6
7	☐	100000.00	102959.43	10147120.11	78.5723	A	0.4
8	☐	500000.00	499046.90	51428716.43	380.8401	A	0.7

$$y = 7.6313\text{E-}004 * x + 4.8406\text{E-}004$$

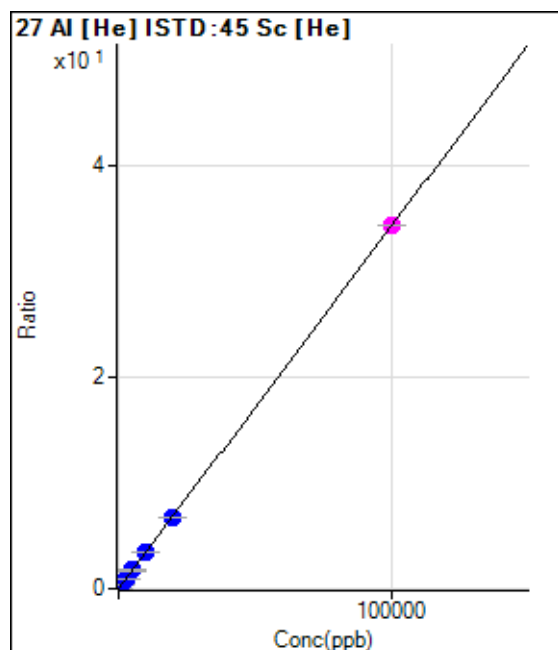
$$R = 1.0000$$

$$DL = 0.4745$$

$$BEC = 0.6343$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0004	P	32.4
2	☐	20.000	20.428	1011.19	0.0074	P	8.8
3	☐	1000.000	1017.315	50238.27	0.3493	P	1.2
4	☐	2500.000	2503.839	112315.22	0.8593	P	0.6
5	☐	5000.000	5037.460	209101.30	1.7283	P	0.7
6	☐	10000.000	10182.244	428769.56	3.4931	P	0.4
7	☐	20000.000	19732.381	874187.07	6.7690	P	0.4
8	☐	100000.00	100033.15	4633860.30	34.3137	M	0.1

$$y = 3.4302\text{E-}004 * x + 3.8846\text{E-}004$$

$$R = 1.0000$$

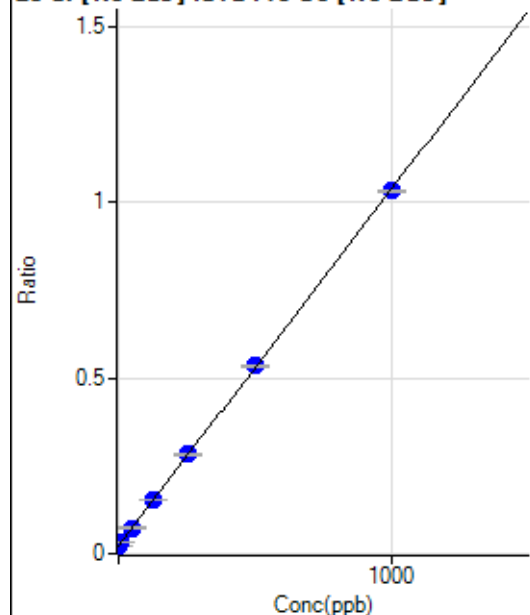
$$DL = 1.102$$

$$BEC = 1.132$$

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	84136.77	0.0229	P	0.6
2	☐	10.000	9.217	119454.24	0.0322	P	1.3
3	☐	50.000	50.013	277762.84	0.0735	P	0.8
4	☐	125.000	129.138	534802.02	0.1537	P	1.6
5	☐	250.000	256.133	908540.86	0.2824	P	1.4
6	☐	500.000	505.539	1683750.28	0.5350	P	0.8
7	☐	1000.000	995.187	3354959.00	1.0311	P	0.5
8	☐			153165.17	0.0464	P	1.1

$$y = 0.0010 * x + 0.0229$$

$$R = 0.9999$$

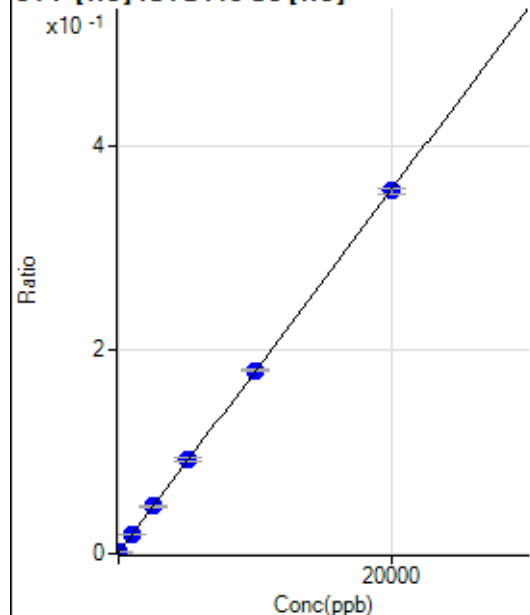
$$DL = 0.3798$$

$$BEC = 22.56$$

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	-29.648	44.44	0.0003	P	20.9
2	☐	0.000	29.648	186.12	0.0014	P	16.5
3	☐	1000.000	1033.035	2772.61	0.0193	P	4.9
4	☐	2500.000	2583.539	6137.63	0.0470	P	3.1
5	☐	5000.000	5141.022	11201.88	0.0926	P	2.8
6	☐	10000.000	10038.555	22097.84	0.1800	P	1.5
7	☐	20000.000	19933.373	46055.46	0.3566	P	1.8
8	☐			91.67	0.0007	P	17.5

$$y = 1.7849E-005 * x + 8.3870E-004$$

$$R = 1.0000$$

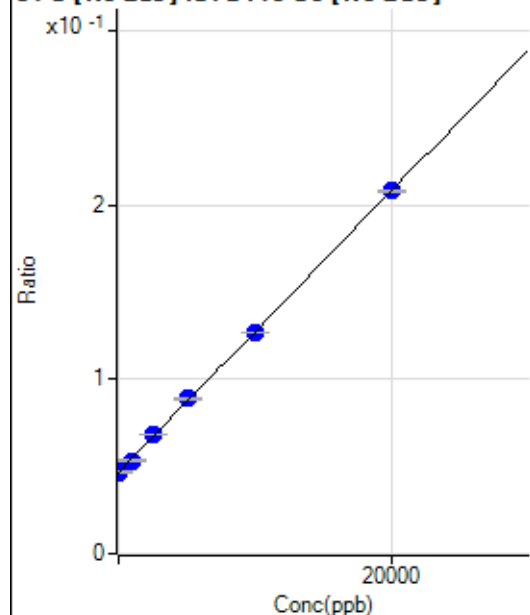
$$DL = 24.35$$

$$BEC = 46.99$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-21.841	171574.53	0.0466	P	1.3
2	☐	0.000	21.841	174242.17	0.0470	P	1.9
3	☐	1000.000	799.245	201165.77	0.0532	P	1.3
4	☐	2500.000	2677.894	238208.20	0.0684	P	1.2
5	☐	5000.000	5211.056	286216.94	0.0889	P	1.0
6	☐	10000.000	9935.910	400197.68	0.1272	P	0.4
7	☐	20000.000	19967.082	677817.97	0.2083	P	0.6
8	☐			128627.43	0.0390	P	3.7

$$y = 8.0899\text{E-}006 * x + 0.0468$$

R = 0.9998

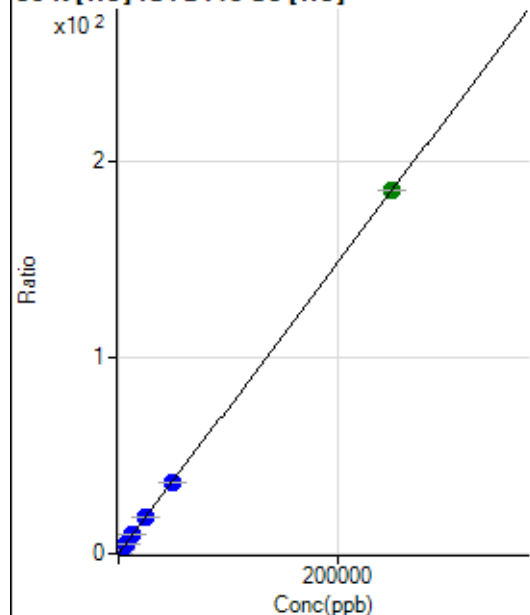
DL = 281.7

BEC = 5783

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8491.68	0.0592	P	3.0
2	☐	500.000	530.794	61606.27	0.4513	P	9.2
3	☐	2500.000	2566.453	281129.98	1.9551	P	1.0
4	☐	6250.000	6357.877	621659.16	4.7558	P	1.1
5	☐	12500.000	12644.832	1137223.87	9.4000	P	0.8
6	☐	25000.000	25242.283	2296090.68	18.7057	P	0.3
7	☐	50000.000	49313.227	4712121.98	36.4869	P	0.6
8	☐	250000.00	250102.46	24957586.67	184.8101	A	0.1

$$y = 7.3870\text{E-}004 * x + 0.0592$$

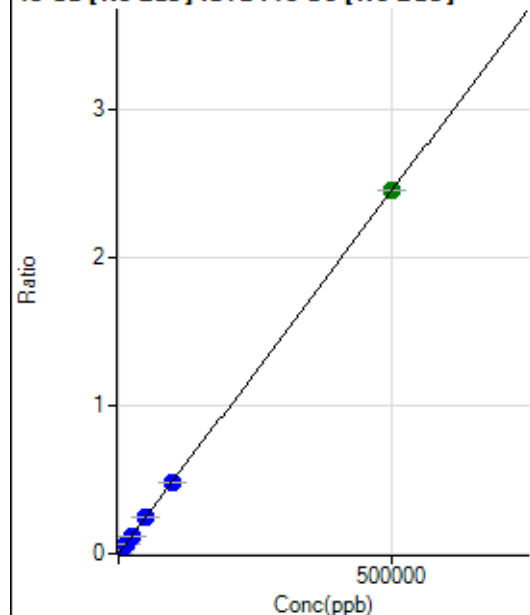
R = 1.0000

DL = 7.178

BEC = 80.17

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	155.56	0.0000	P	21.9
2	☐	500.000	476.056	8811.31	0.0024	P	3.0
3	☐	5000.000	4996.056	92634.45	0.0245	P	1.8
4	☐	12500.000	12405.054	211673.29	0.0608	P	0.8
5	☐	25000.000	24970.843	393828.58	0.1224	P	1.2
6	☐	50000.000	49783.089	767773.12	0.2440	P	0.7
7	☐	100000.00	98889.242	1576690.80	0.4846	P	0.3
8	☐	500000.00	500247.73	8082714.94	2.4511	A	0.1

$$y = 4.8997\text{E-}006 * x + 4.2273\text{E-}005$$

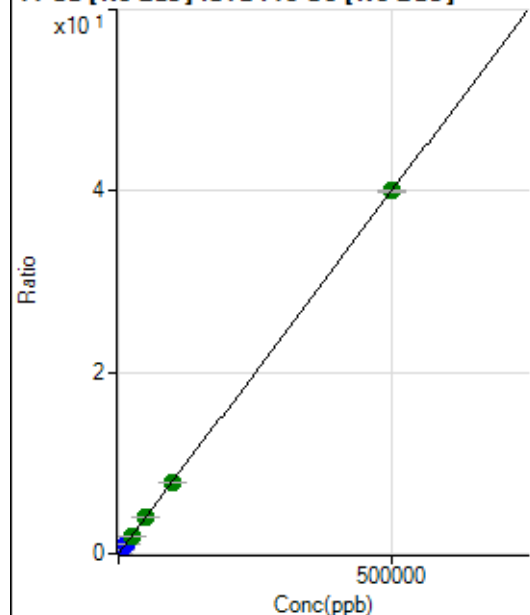
$$R = 1.0000$$

$$DL = 5.656$$

$$BEC = 8.628$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3903.62	0.0011	P	4.3
2	☐	500.000	473.382	144491.98	0.0389	P	0.7
3	☐	5000.000	4985.974	1511273.05	0.4000	P	0.5
4	☐	12500.000	12318.943	3434109.89	0.9868	P	1.2
5	☐	25000.000	24767.569	6380827.75	1.9830	A	0.9
6	☐	50000.000	49896.949	12568663.47	3.9938	A	0.6
7	☐	100000.00	98835.134	25736579.39	7.9098	A	0.5
8	☐	500000.00	500259.59	132006450.1	40.0317	A	0.6

$$y = 8.0020\text{E-}005 * x + 0.0011$$

$$R = 1.0000$$

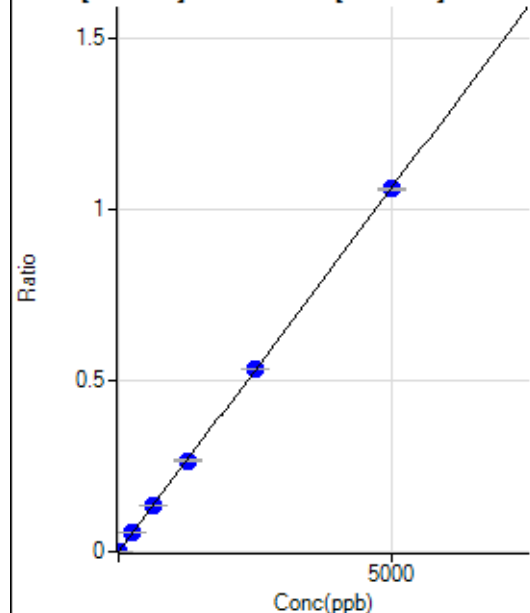
$$DL = 1.712$$

$$BEC = 13.25$$

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	55.56	0.0000	P	8.7
2	☐	5.000	5.040	4028.52	0.0011	P	3.5
3	☐	250.000	258.483	207510.33	0.0549	P	0.8
4	☐	625.000	635.500	469867.91	0.1350	P	1.1
5	☐	1250.000	1253.238	856739.69	0.2662	P	0.9
6	☐	2500.000	2514.102	1680850.83	0.5341	P	0.2
7	☐	5000.000	4990.403	3449471.43	1.0601	P	0.3
8	☐			1347.35	0.0004	P	1.5

$$y = 2.1243\text{E-}004 * x + 1.5093\text{E-}005$$

$$R = 1.0000$$

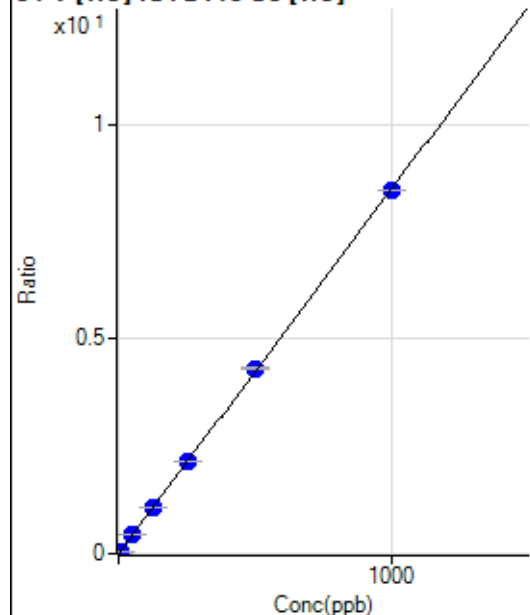
$$DL = 0.01852$$

$$BEC = 0.07105$$

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	3.33	0.0000	P	1.7
2	☐	5.000	5.488	6350.35	0.0466	P	12.0
3	☐	50.000	51.413	62732.08	0.4363	P	1.6
4	☐	125.000	127.788	141734.36	1.0843	P	0.6
5	☐	250.000	253.511	260254.26	2.1511	P	0.2
6	☐	500.000	507.451	528517.07	4.3059	P	1.1
7	☐	1000.000	994.975	1090333.26	8.4426	P	0.2
8	☐			220.01	0.0016	P	21.9

$$y = 0.0085 * x + 2.3223\text{E-}005$$

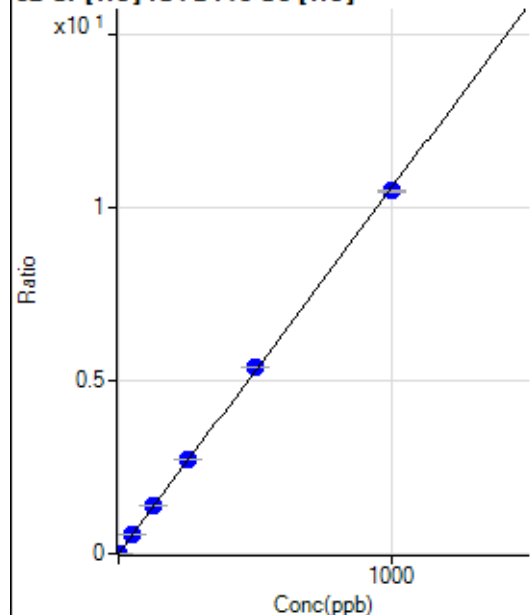
$$R = 1.0000$$

$$DL = 0.0001365$$

$$BEC = 0.002737$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	211.12	0.0015	P	3.4
2	☐	2.000	2.098	3228.18	0.0237	P	10.5
3	☐	50.000	51.677	78856.44	0.5483	P	1.4
4	☐	125.000	129.435	179211.00	1.3710	P	0.8
5	☐	250.000	257.042	329219.48	2.7212	P	0.5
6	☐	500.000	510.670	663426.32	5.4048	P	0.5
7	☐	1000.000	992.266	1356087.53	10.5005	P	0.3
8	☐			23774.96	0.1761	P	0.4

$$y = 0.0106 * x + 0.0015$$

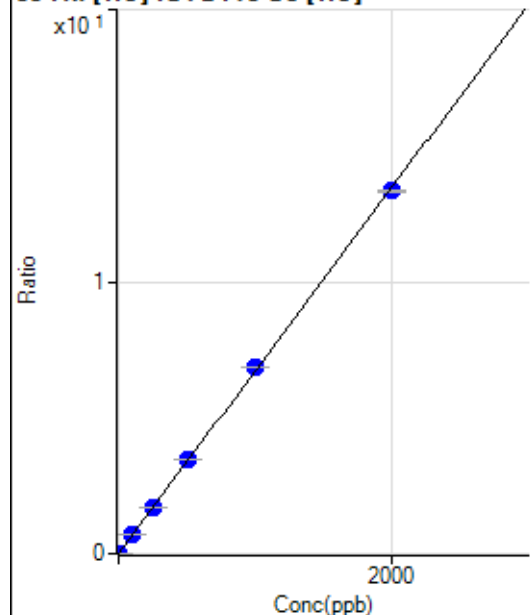
$$R = 0.9999$$

$$DL = 0.01408$$

$$BEC = 0.1391$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18.89	0.0001	P	83.9
2	☐	1.000	1.110	1036.72	0.0076	P	8.9
3	☐	100.000	103.297	99861.63	0.6945	P	1.5
4	☐	250.000	256.233	225161.58	1.7226	P	0.5
5	☐	500.000	516.239	419864.95	3.4704	P	0.4
6	☐	1000.000	1022.295	843532.63	6.8721	P	0.6
7	☐	2000.000	1983.849	1722235.04	13.3358	P	0.4
8	☐			6419.27	0.0475	P	1.4

$$y = 0.0067 * x + 1.3247E-004$$

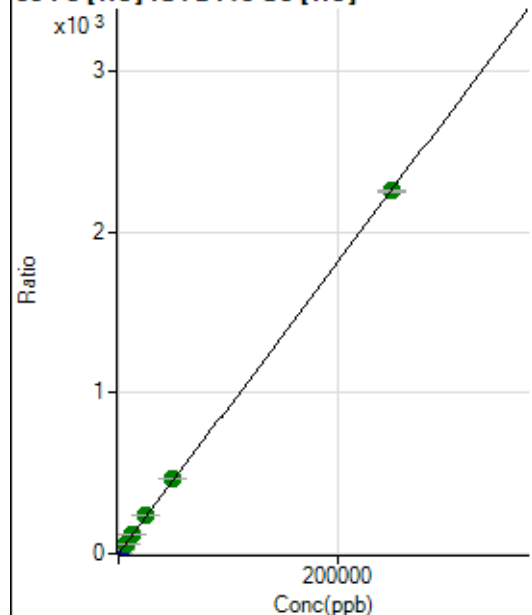
$$R = 0.9999$$

$$DL = 0.04962$$

$$BEC = 0.01971$$

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	1814.97	0.0127	P	5.9
2	☐	50.000	57.698	72947.43	0.5342	P	8.7
3	☐	2500.000	2675.603	3479918.62	24.1996	P	0.8
4	☐	6250.000	6644.705	7853348.78	60.0796	A	0.9
5	☐	12500.000	13311.698	14560192.69	120.3480	A	0.3
6	☐	25000.000	26508.248	29415151.12	239.6424	A	0.7
7	☐	50000.000	51319.792	59914118.00	463.9342	A	0.5
8	☐	250000.00	249533.00	304614199.4	2,255.745	A	0.8

$$y = 0.0090 * x + 0.0127$$

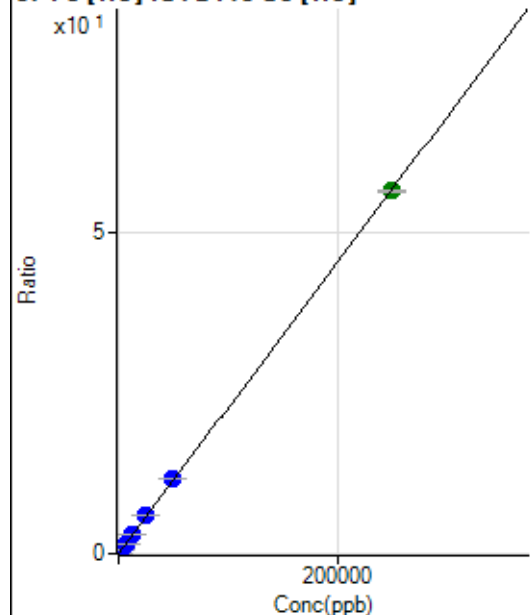
$$R = 1.0000$$

$$DL = 0.2463$$

$$BEC = 1.4$$

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	111.11	0.0008	P	46.7
2	☐	50.000	58.123	1902.03	0.0139	P	8.2
3	☐	2500.000	2691.689	87642.30	0.6095	P	1.0
4	☐	6250.000	6653.998	196793.48	1.5055	P	0.6
5	☐	12500.000	13378.460	366123.57	3.0262	P	0.5
6	☐	25000.000	26595.934	738346.47	6.0153	P	0.8
7	☐	50000.000	51440.156	1502409.05	11.6336	P	0.5
8	☐	250000.00	249496.43	7619355.49	56.4228	A	0.6

$$y = 2.2614E-004 * x + 7.7762E-004$$

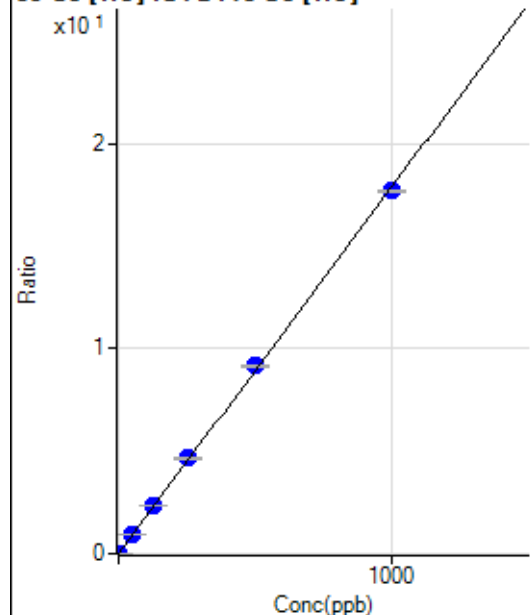
$$R = 1.0000$$

$$DL = 4.819$$

$$BEC = 3.439$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	70.00	0.0005	P	39.0
2	☐	1.000	1.086	2722.52	0.0199	P	7.8
3	☐	50.000	52.957	136281.45	0.9478	P	1.4
4	☐	125.000	131.916	308503.12	2.3602	P	0.8
5	☐	250.000	260.238	563232.92	4.6555	P	0.9
6	☐	500.000	512.350	1125002.16	9.1652	P	0.7
7	☐	1000.000	990.253	2287636.72	17.7138	P	0.4
8	☐			27571.65	0.2042	P	2.4

$$y = 0.0179 * x + 4.8965E-004$$

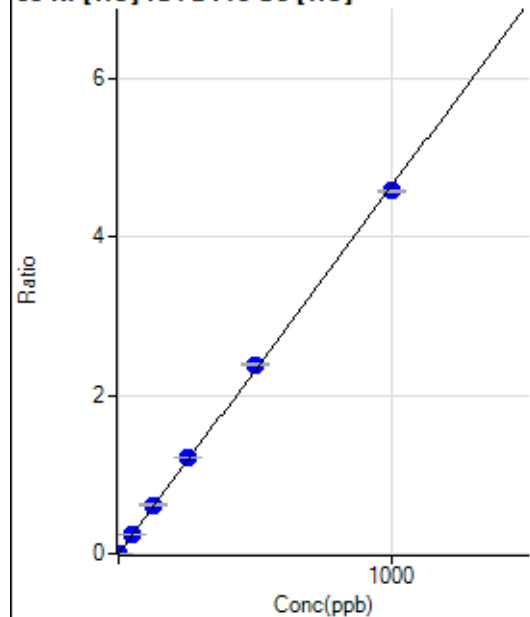
$$R = 0.9998$$

$$DL = 0.032$$

$$BEC = 0.02737$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23.33	0.0002	P	12.8
2	☐	1.000	1.169	764.48	0.0056	P	9.3
3	☐	50.000	54.141	36182.52	0.2516	P	0.9
4	☐	125.000	133.407	81006.74	0.6197	P	0.5
5	☐	250.000	263.481	148067.74	1.2238	P	0.4
6	☐	500.000	515.355	293802.82	2.3936	P	0.9
7	☐	1000.000	987.694	592420.75	4.5873	P	0.4
8	☐			11462.41	0.0849	P	1.6

$$y = 0.0046 * x + 1.6249E-004$$

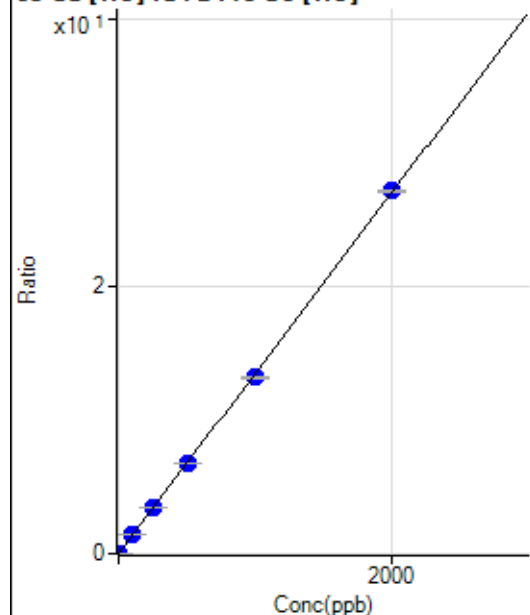
$$R = 0.9997$$

$$DL = 0.0134$$

$$BEC = 0.03499$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	334.45	0.0023	P	9.0
2	☐	2.000	2.031	4063.97	0.0297	P	7.6
3	☐	100.000	103.340	200866.00	1.3969	P	1.3
4	☐	250.000	252.175	445122.34	3.4053	P	0.3
5	☐	500.000	499.187	815274.64	6.7387	P	0.4
6	☐	1000.000	976.756	1618220.79	13.1833	P	0.6
7	☐	2000.000	2011.386	3505684.94	27.1453	P	0.4
8	☐			4980.93	0.0369	P	1.8

$$y = 0.0135 * x + 0.0023$$

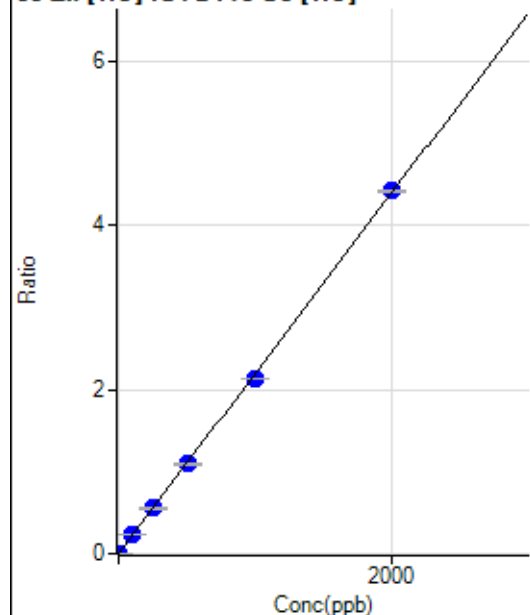
$$R = 0.9999$$

$$DL = 0.04651$$

$$BEC = 0.1728$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	216.67	0.0015	P	18.5
2	☐	2.000	2.110	838.93	0.0061	P	9.0
3	☐	100.000	104.297	33079.82	0.2301	P	1.9
4	☐	250.000	251.063	72114.87	0.5517	P	1.5
5	☐	500.000	498.051	132223.36	1.0929	P	1.0
6	☐	1000.000	973.743	262110.97	2.1354	P	0.3
7	☐	2000.000	2013.268	569953.18	4.4133	P	0.6
8	☐			5776.79	0.0428	P	3.2

$$y = 0.0022 * x + 0.0015$$

$$R = 0.9999$$

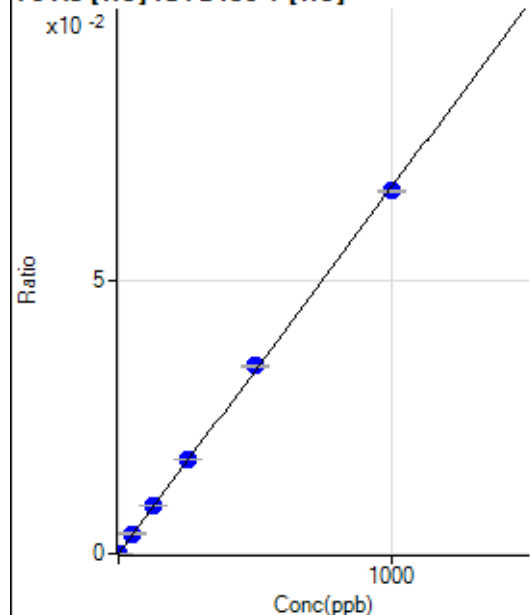
$$DL = 0.3822$$

$$BEC = 0.6904$$

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	9.26	0.0000	P	34.2
2	☐	1.000	0.991	172.84	0.0001	P	8.0
3	☐	50.000	54.722	9567.41	0.0037	P	3.0
4	☐	125.000	132.261	21260.04	0.0088	P	1.5
5	☐	250.000	257.315	38939.58	0.0172	P	0.8
6	☐	500.000	513.238	78548.17	0.0343	P	0.7
7	☐	1000.000	990.408	157513.25	0.0662	P	0.5
8	☐			230.25	0.0001	P	12.3

$$y = 6.6854\text{E-}005 * x + 3.5587\text{E-}006$$

$$R = 0.9998$$

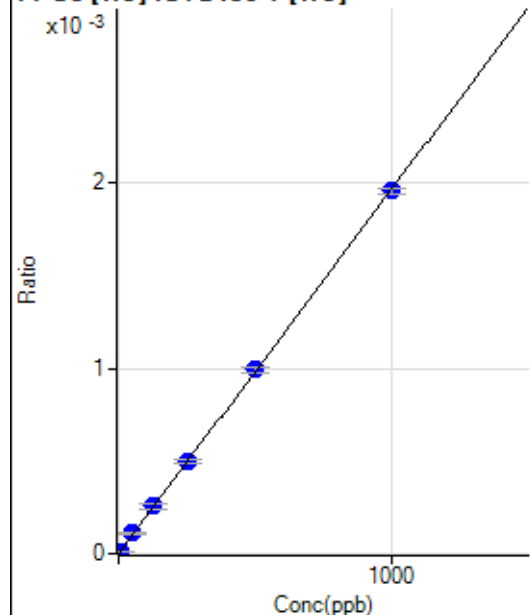
$$DL = 0.05466$$

$$BEC = 0.05323$$

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	☐	5.000	5.975	28.89	0.0000	P	24.6
3	☐	50.000	56.914	292.23	0.0001	P	10.1
4	☐	125.000	129.949	614.47	0.0003	P	13.8
5	☐	250.000	253.435	1127.84	0.0005	P	2.6
6	☐	500.000	504.600	2271.33	0.0010	P	2.5
7	☐	1000.000	995.872	4658.61	0.0020	P	1.9
8	☐			2.22	0.0000	P	173.

$$y = 1.9665\text{E-}006 * x + 0.0000\text{E+}000$$

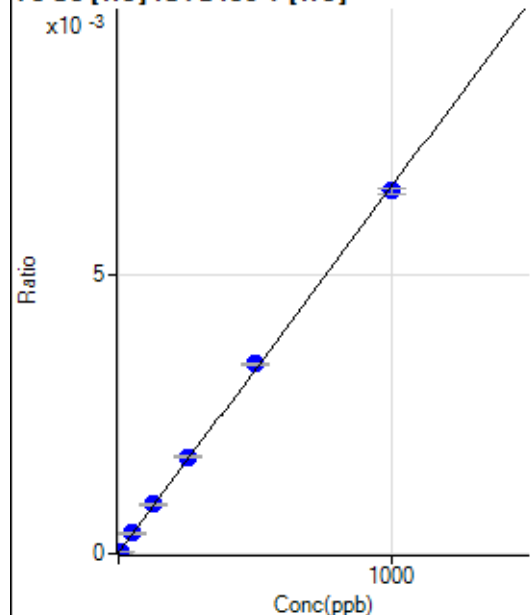
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	42.59	0.0000	P	22.7
2	☐	5.000	4.476	113.58	0.0000	P	5.2
3	☐	50.000	54.020	969.18	0.0004	P	5.0
4	☐	125.000	132.355	2127.34	0.0009	P	5.4
5	☐	250.000	261.903	3925.88	0.0017	P	2.1
6	☐	500.000	515.403	7778.07	0.0034	P	0.3
7	☐	1000.000	988.205	15462.02	0.0065	P	1.6
8	☐			28.40	0.0000	P	10.2

$$y = 6.5611\text{E-}006 * x + 1.6413\text{E-}005$$

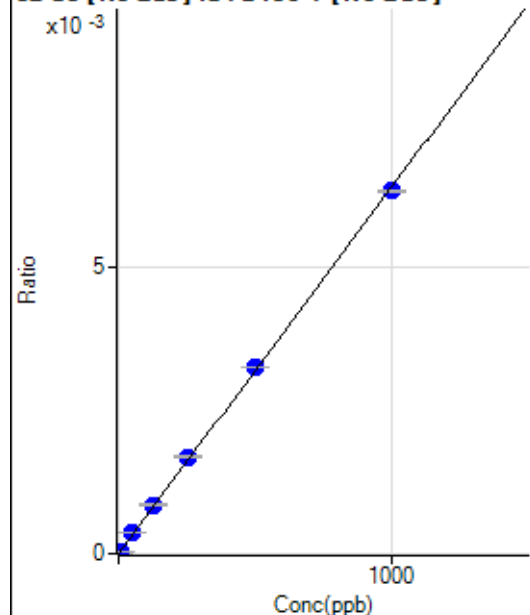
$$R = 0.9997$$

$$DL = 1.701$$

$$BEC = 2.502$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.65	0.0000	P	421.
2	☐	5.000	5.038	623.48	0.0000	P	4.8
3	☐	50.000	56.872	7225.60	0.0004	P	1.3
4	☐	125.000	133.139	15739.71	0.0009	P	1.7
5	☐	250.000	264.565	29616.95	0.0017	P	1.4
6	☐	500.000	509.175	56349.32	0.0033	P	0.3
7	☐	1000.000	990.410	112961.15	0.0063	P	0.5
8	☐			47.08	0.0000	P	75.3

$$y = 6.4047\text{E-}006 * x + 8.5242\text{E-}008$$

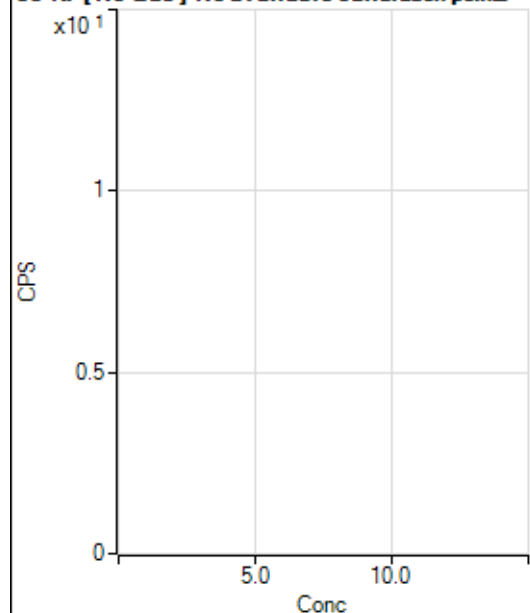
$$R = 0.9998$$

$$DL = 0.1684$$

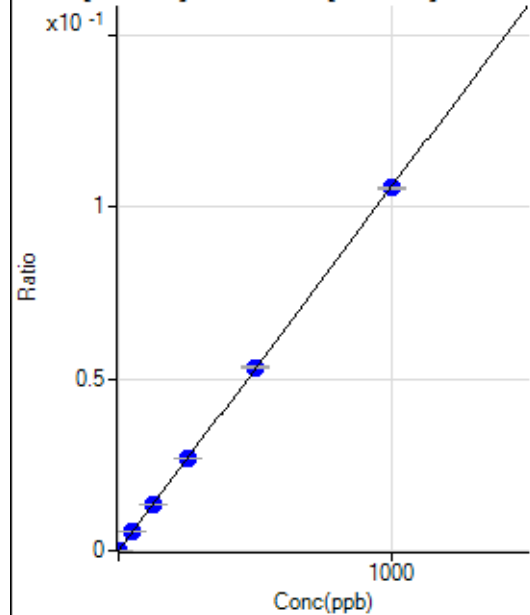
$$BEC = 0.01331$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			200.00		P	6.0
2	☐			188.89		P	10.8
3	☐			205.56		P	7.3
4	☐			207.79		P	10.2
5	☐			184.45		P	15.0
6	☐			197.79		P	1.9
7	☐			180.00		P	8.5
8	☐			208.89		P	11.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	380.58	0.0000	P	2.6
2	☐	1.000	0.937	2286.41	0.0001	P	13.3
3	☐	50.000	51.018	107327.50	0.0054	P	0.2
4	☐	125.000	127.229	248511.11	0.0135	P	1.6
5	☐	250.000	252.390	466526.85	0.0267	P	0.6
6	☐	500.000	503.817	920319.50	0.0533	P	0.8
7	☐	1000.000	997.164	1876955.75	0.1054	P	0.6
8	☐			8216.53	0.0005	P	3.4

$$y = 1.0568E-004 * x + 1.9759E-005$$

$$R = 1.0000$$

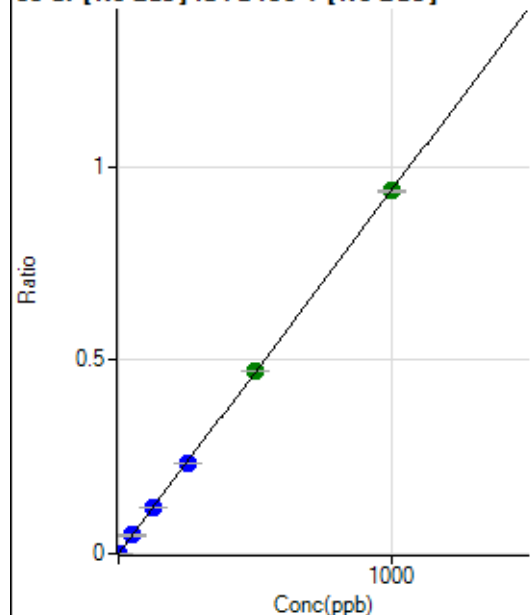
$$DL = 0.0146$$

$$BEC = 0.187$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	297.24	0.0000	P	17.0
2	☐	1.000	0.961	17661.57	0.0009	P	4.1
3	☐	50.000	50.408	937591.11	0.0473	P	0.5
4	☐	125.000	125.417	2170387.01	0.1176	P	1.1
5	☐	250.000	248.816	4077241.37	0.2333	P	0.4
6	☐	500.000	502.484	8139859.73	0.4711	A	0.2
7	☐	1000.000	998.982	16677967.73	0.9366	A	0.4
8	☐			69374.04	0.0040	P	0.5

$$y = 9.3750\text{E-}004 * x + 1.5433\text{E-}005$$

$$R = 1.0000$$

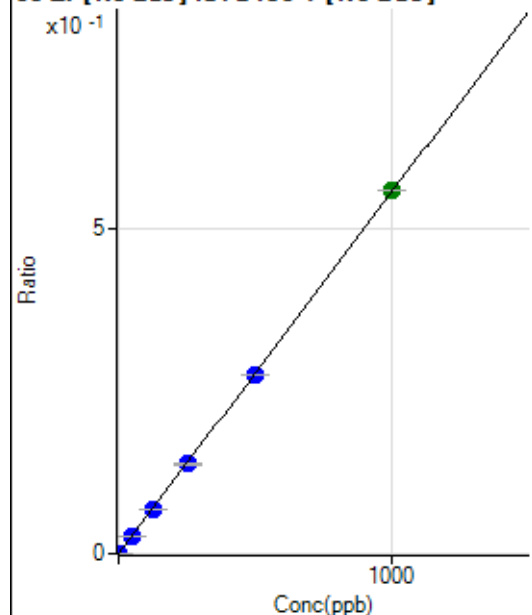
$$DL = 0.008394$$

$$BEC = 0.01646$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	686.16	0.0000	P	8.4
2	☐	1.000	0.869	9970.57	0.0005	P	2.1
3	☐	50.000	49.860	549030.58	0.0277	P	0.9
4	☐	125.000	124.057	1270206.68	0.0688	P	0.9
5	☐	250.000	247.584	2399909.49	0.1373	P	0.1
6	☐	500.000	493.113	4724783.70	0.2734	P	0.2
7	☐	1000.000	1004.173	9915480.17	0.5568	A	0.1
8	☐			3553.36	0.0002	P	14.8

$$y = 5.5446\text{E-}004 * x + 3.5621\text{E-}005$$

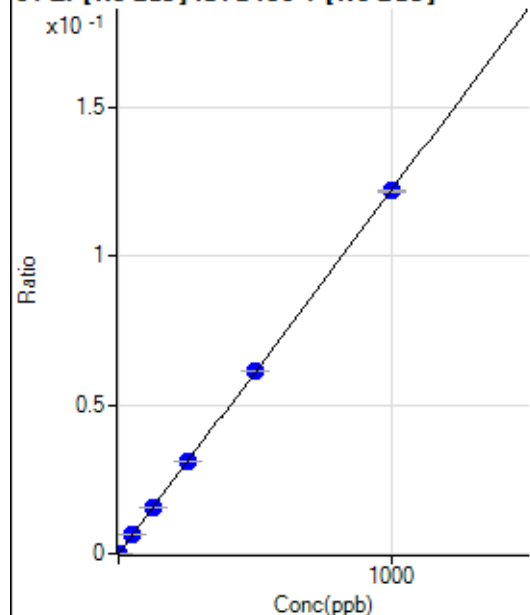
$$R = 1.0000$$

$$DL = 0.01625$$

$$BEC = 0.06425$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	130.56	0.0000	P	7.3
2	☐	1.000	0.824	2069.68	0.0001	P	6.1
3	☐	50.000	50.848	123353.05	0.0062	P	1.2
4	☐	125.000	126.164	284644.58	0.0154	P	1.5
5	☐	250.000	252.497	539357.40	0.0309	P	0.4
6	☐	500.000	502.103	1060193.58	0.0614	P	0.3
7	☐	1000.000	998.137	2171993.26	0.1220	P	0.3
8	☐			786.17	0.0000	P	20.3

$$y = 1.2219E-004 * x + 6.7782E-006$$

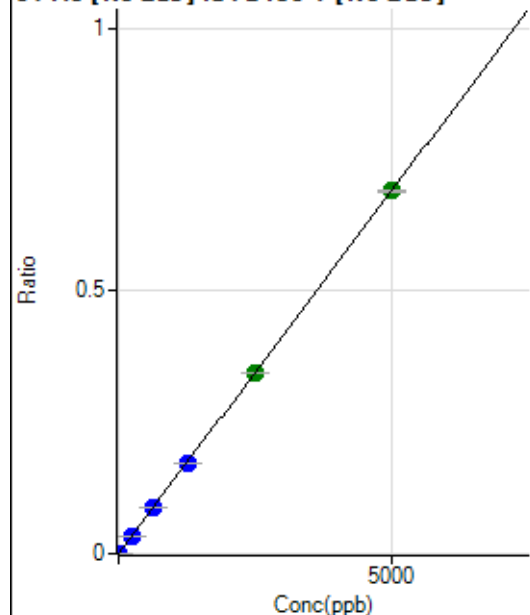
$$R = 1.0000$$

$$DL = 0.01209$$

$$BEC = 0.05547$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	191.68	0.0000	P	30.3
2	☐	5.000	4.604	12428.19	0.0006	P	1.4
3	☐	250.000	250.516	685649.78	0.0346	P	0.6
4	☐	625.000	625.488	1592824.95	0.0863	P	0.6
5	☐	1250.000	1241.617	2993845.40	0.1713	P	0.3
6	☐	2500.000	2501.723	5963348.22	0.3451	A	0.0
7	☐	5000.000	5001.148	12286038.38	0.6899	A	0.4
8	☐			7463.39	0.0004	P	4.7

$$y = 1.3795E-004 * x + 9.9493E-006$$

$$R = 1.0000$$

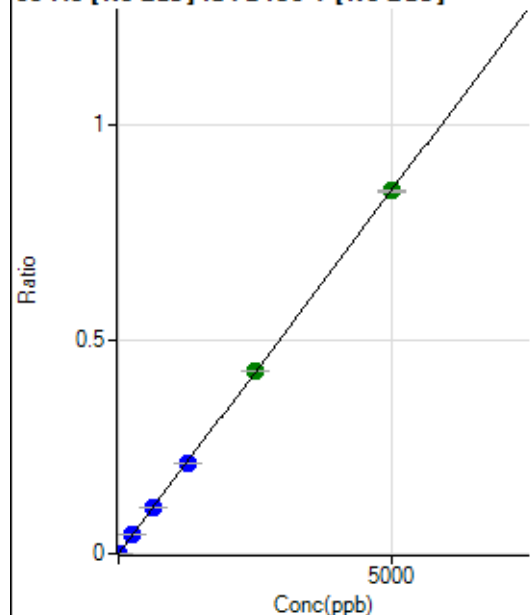
$$DL = 0.06561$$

$$BEC = 0.07212$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.11	0.0000	P	26.7
2	☐	5.000	4.682	15319.98	0.0008	P	1.2
3	☐	250.000	252.496	848492.68	0.0428	P	0.6
4	☐	625.000	627.677	1962744.62	0.1063	P	1.2
5	☐	1250.000	1247.795	3694934.72	0.2114	P	0.2
6	☐	2500.000	2510.547	7349332.46	0.4253	A	0.2
7	☐	5000.000	4994.819	15069429.50	0.8462	A	0.3
8	☐			10184.57	0.0006	P	8.5

$$y = 1.6942\text{E-}004 * x + 1.8752\text{E-}006$$

$$R = 1.0000$$

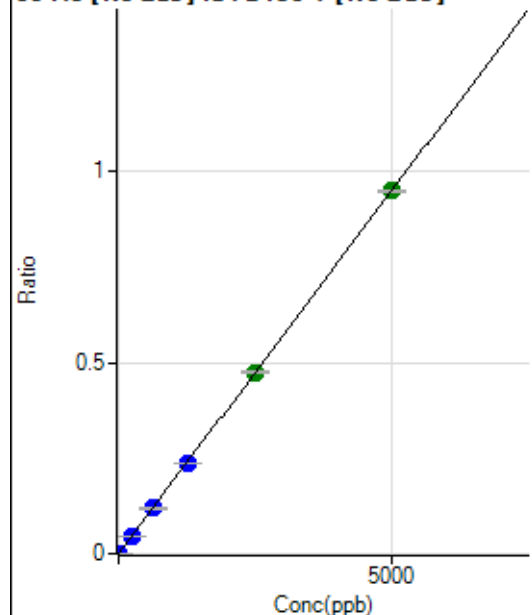
$$DL = 0.008876$$

$$BEC = 0.01107$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.01	0.0000	P	28.9
2	☐	5.000	4.546	16713.15	0.0009	P	1.5
3	☐	250.000	250.846	943595.54	0.0476	P	0.7
4	☐	625.000	624.242	2185105.54	0.1184	P	1.0
5	☐	1250.000	1240.375	4111433.95	0.2352	P	0.2
6	☐	2500.000	2501.474	8196957.30	0.4744	A	0.5
7	☐	5000.000	5001.722	16891591.70	0.9486	A	0.5
8	☐			15909.43	0.0009	P	2.7

$$y = 1.8965\text{E-}004 * x + 5.1928\text{E-}006$$

$$R = 1.0000$$

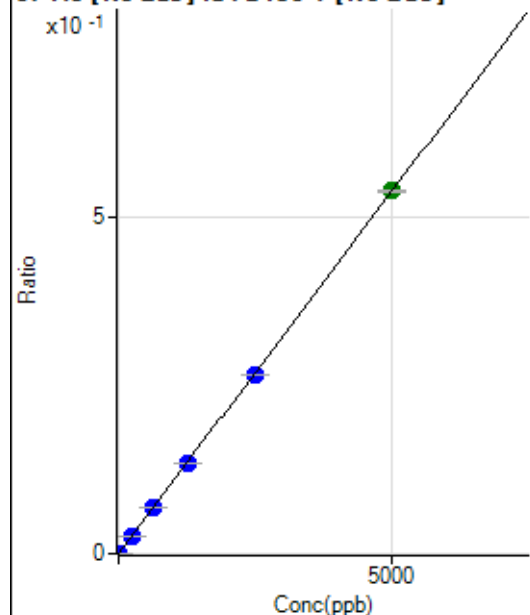
$$DL = 0.02378$$

$$BEC = 0.02738$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	69.2
2	☐	5.000	4.579	9492.47	0.0005	P	3.8
3	☐	250.000	250.924	533913.11	0.0269	P	0.3
4	☐	625.000	627.162	1241765.90	0.0673	P	0.6
5	☐	1250.000	1243.272	2331009.67	0.1334	P	0.4
6	☐	2500.000	2474.782	4587074.49	0.2655	P	0.6
7	☐	5000.000	5013.975	9578004.38	0.5379	A	0.8
8	☐			6440.63	0.0004	P	6.9

$$y = 1.0727\text{E-}004 * x + 1.4416\text{E-}006$$

$$R = 1.0000$$

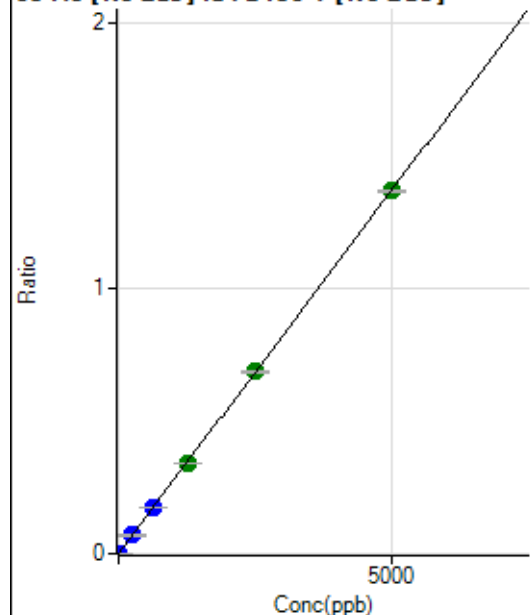
$$DL = 0.02788$$

$$BEC = 0.01344$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	31.6
2	☐	5.000	4.729	25025.66	0.0013	P	3.8
3	☐	250.000	251.613	1367509.82	0.0690	P	0.5
4	☐	625.000	626.554	3169039.46	0.1717	P	0.7
5	☐	1250.000	1251.889	5995853.52	0.3431	A	0.3
6	☐	2500.000	2505.491	11862954.69	0.6866	A	0.8
7	☐	5000.000	4996.508	24381597.25	1.3692	A	0.4
8	☐			16229.29	0.0009	P	6.7

$$y = 2.7402\text{E-}004 * x + 3.1733\text{E-}006$$

$$R = 1.0000$$

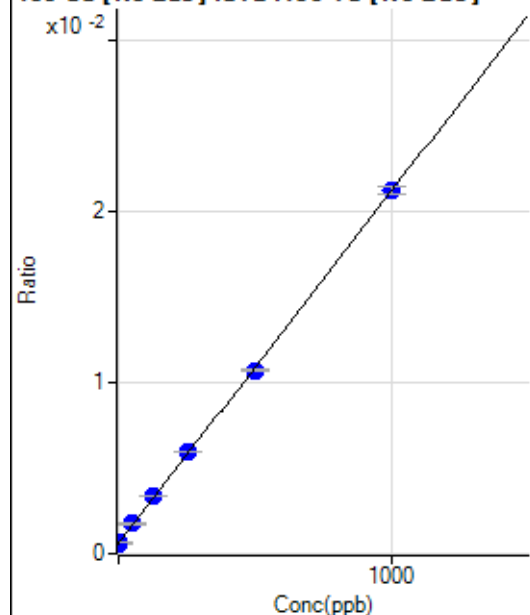
$$DL = 0.01097$$

$$BEC = 0.01158$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5423.48	0.0006	P	5.2
2	☐	1.000	2.151	5815.33	0.0007	P	4.2
3	☐	50.000	56.107	16301.67	0.0018	P	3.5
4	☐	125.000	134.661	29748.93	0.0034	P	0.3
5	☐	250.000	260.428	51734.40	0.0060	P	0.9
6	☐	500.000	491.537	94145.46	0.0107	P	1.6
7	☐	1000.000	1000.110	191342.17	0.0212	P	2.1
8	☐			5529.11	0.0006	P	3.1

$$y = 2.0593\text{E-}005 * x + 6.0908\text{E-}004$$

$$R = 0.9999$$

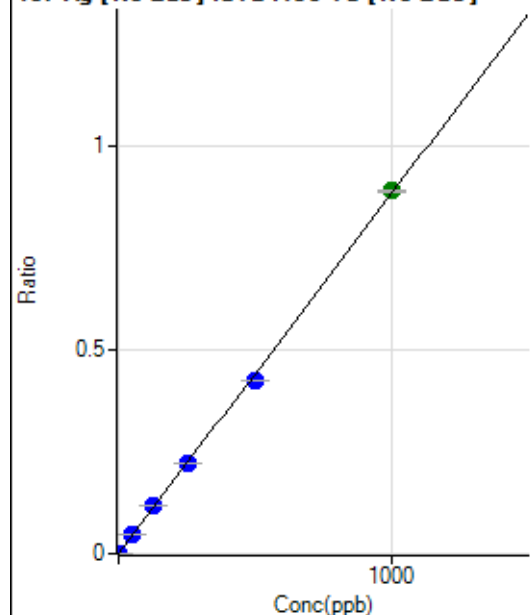
$$DL = 4.593$$

$$BEC = 29.58$$

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	102.78	0.0000	P	4.5
2	☐	1.000	1.045	8308.31	0.0009	P	4.1
3	☐	50.000	54.541	445047.84	0.0482	P	0.3
4	☐	125.000	132.388	1028038.14	0.1169	P	0.5
5	☐	250.000	250.959	1919166.54	0.2215	P	0.5
6	☐	500.000	481.465	3728722.04	0.4250	P	0.7
7	☐	1000.000	1007.877	8028414.94	0.8897	A	0.6
8	☐			1183.45	0.0001	P	26.8

$$y = 8.8275\text{E-}004 * x + 1.1543\text{E-}005$$

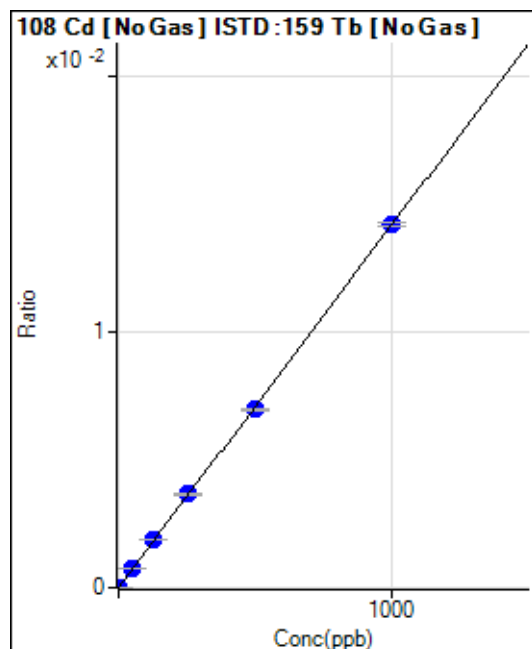
$$R = 0.9997$$

$$DL = 0.001754$$

$$BEC = 0.01308$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0000	P	17.6
2	☐	1.000	1.079	163.89	0.0000	P	16.2
3	☐	50.000	54.064	7113.04	0.0008	P	1.5
4	☐	125.000	132.507	16555.74	0.0019	P	2.1
5	☐	250.000	257.950	31715.01	0.0037	P	0.9
6	☐	500.000	492.138	61252.81	0.0070	P	0.7
7	☐	1000.000	1000.802	128089.05	0.0142	P	1.1
8	☐			50.00	0.0000	P	35.3

$$y = 1.4181\text{E-}005 * x + 3.1206\text{E-}006$$

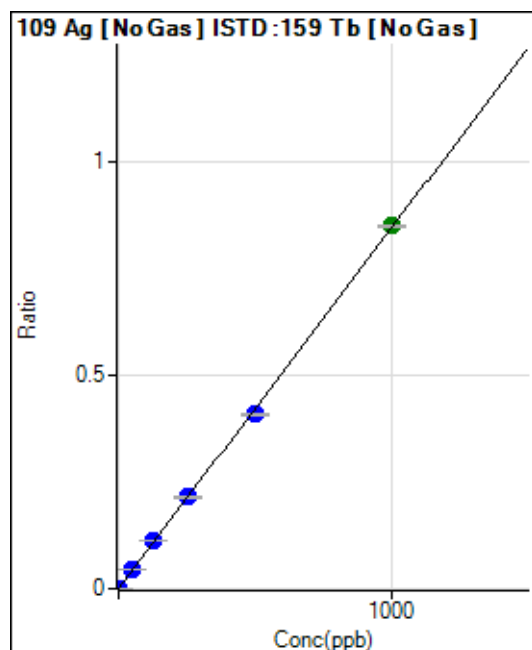
$$R = 0.9999$$

$$DL = 0.1162$$

$$BEC = 0.2201$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0000	P	75.2
2	☐	1.000	1.115	8425.15	0.0009	P	3.0
3	☐	50.000	54.736	427934.52	0.0463	P	0.6
4	☐	125.000	132.841	988424.08	0.1124	P	0.3
5	☐	250.000	253.447	1857305.62	0.2144	P	0.5
6	☐	500.000	482.810	3583318.83	0.4084	P	0.4
7	☐	1000.000	1006.516	7683156.33	0.8514	A	0.6
8	☐			1044.53	0.0001	P	27.1

$$y = 8.4593\text{E-}004 * x + 3.7489\text{E-}006$$

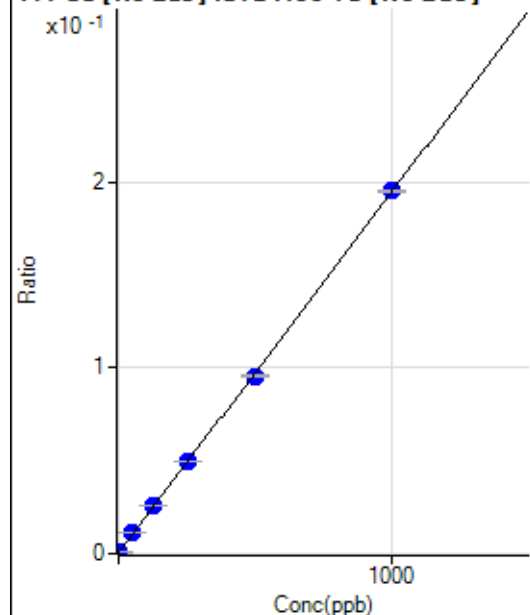
$$R = 0.9997$$

$$DL = 0.01$$

$$BEC = 0.004432$$

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	3797.83	0.0004	P	4.9
2	☐	1.000	1.034	5583.92	0.0006	P	3.6
3	☐	50.000	54.566	101943.63	0.0110	P	1.4
4	☐	125.000	131.247	228119.44	0.0259	P	0.4
5	☐	250.000	253.881	431151.34	0.0498	P	0.3
6	☐	500.000	489.403	838258.22	0.0955	P	0.9
7	☐	1000.000	1003.319	1763543.26	0.1954	P	0.3
8	☐			4150.66	0.0005	P	3.7

$$y = 1.9436\text{E-}004 * x + 4.2651\text{E-}004$$

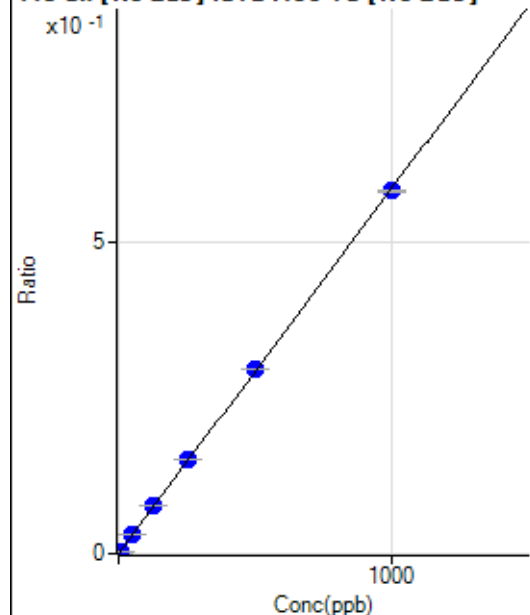
R = 0.9999

DL = 0.324

BEC = 2.194

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	552.82	0.0001	P	25.4
2	☐	5.000	5.268	28067.81	0.0032	P	1.8
3	☐	50.000	54.423	295869.39	0.0320	P	0.5
4	☐	125.000	133.477	689839.23	0.0784	P	0.1
5	☐	250.000	258.264	1314093.10	0.1517	P	0.5
6	☐	500.000	504.603	2599726.69	0.2963	P	0.4
7	☐	1000.000	994.351	5268645.26	0.5839	P	0.8
8	☐			3189.40	0.0004	P	7.6

$$y = 5.8713\text{E-}004 * x + 6.2060\text{E-}005$$

R = 0.9999

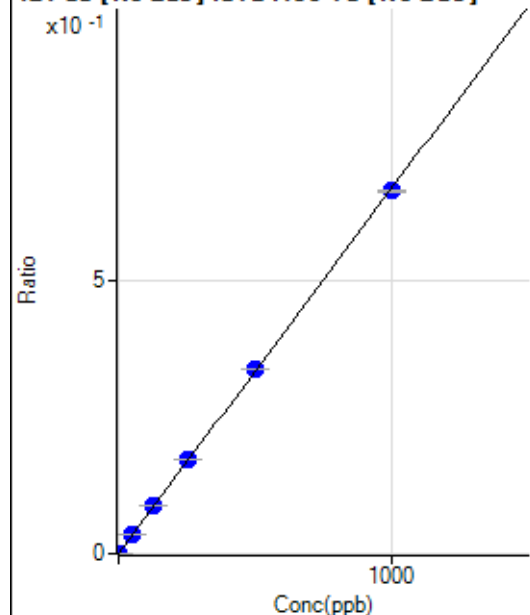
DL = 0.08069

BEC = 0.1057

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	125.01	0.0000	P	17.9
2	☐	2.000	2.005	12050.09	0.0014	P	4.4
3	☐	50.000	53.959	333490.03	0.0361	P	1.2
4	☐	125.000	133.005	782259.79	0.0889	P	0.4
5	☐	250.000	259.312	1501926.70	0.1734	P	0.5
6	☐	500.000	505.907	2967417.56	0.3382	P	0.8
7	☐	1000.000	993.520	5993917.89	0.6642	P	0.2
8	☐			10045.71	0.0012	P	2.5

$$y = 6.6856E-004 * x + 1.4044E-005$$

$$R = 0.9999$$

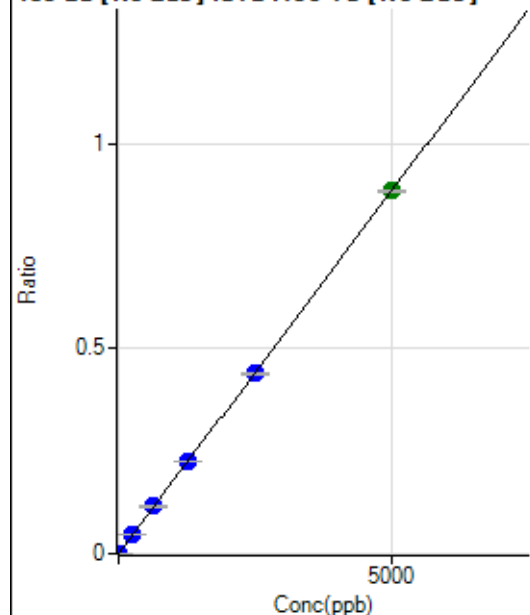
$$DL = 0.01125$$

$$BEC = 0.02101$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25.00	0.0000	P	88.4
2	☐	10.000	10.144	15987.60	0.0018	P	2.3
3	☐	250.000	262.800	429536.64	0.0465	P	0.8
4	☐	625.000	649.595	1010488.14	0.1149	P	0.8
5	☐	1250.000	1263.580	1935854.97	0.2235	P	0.1
6	☐	2500.000	2481.500	3850146.66	0.4389	P	0.9
7	☐	5000.000	5002.141	7982741.76	0.8846	A	0.5
8	☐			1502.93	0.0002	P	17.7

$$y = 1.7685E-004 * x + 2.8124E-006$$

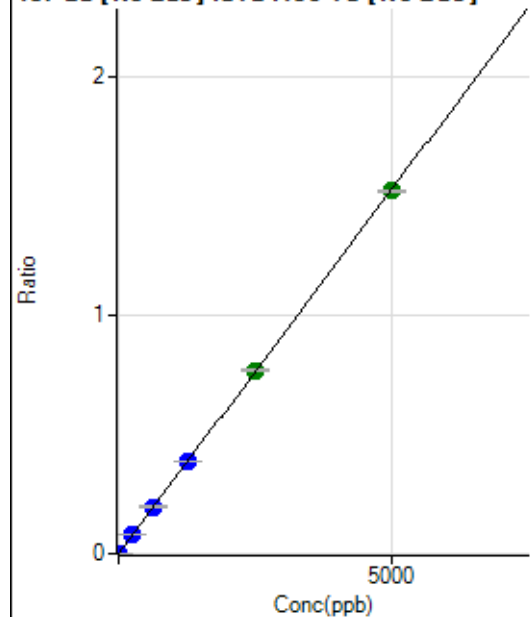
$$R = 1.0000$$

$$DL = 0.04219$$

$$BEC = 0.0159$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	52.78	0.0000	P	24.4
2	☐	10.000	10.227	27837.20	0.0031	P	2.3
3	☐	250.000	262.200	740097.56	0.0801	P	0.6
4	☐	625.000	646.728	1737359.35	0.1975	P	0.7
5	☐	1250.000	1263.599	3343118.54	0.3859	P	0.6
6	☐	2500.000	2519.678	6751427.76	0.7696	A	0.4
7	☐	5000.000	4983.435	13734288.67	1.5220	A	0.2
8	☐			2639.26	0.0003	P	13.6

$$y = 3.0542\text{E-}004 * x + 5.9305\text{E-}006$$

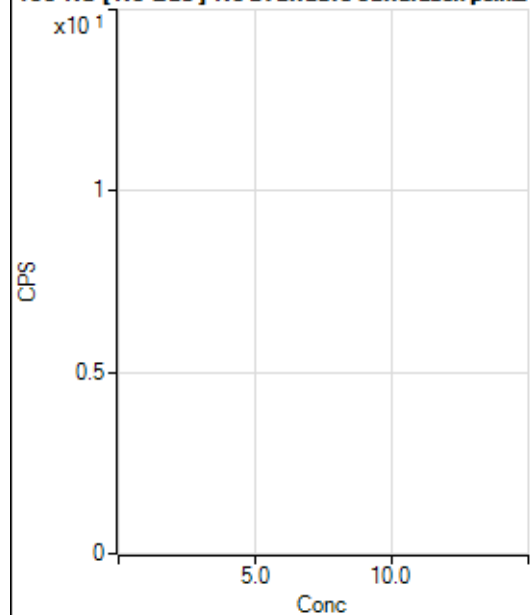
$$R = 1.0000$$

$$DL = 0.01422$$

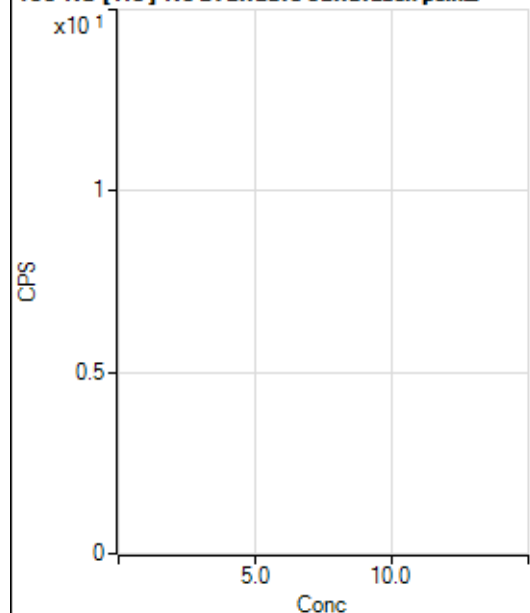
$$BEC = 0.01942$$

Weight: <None>

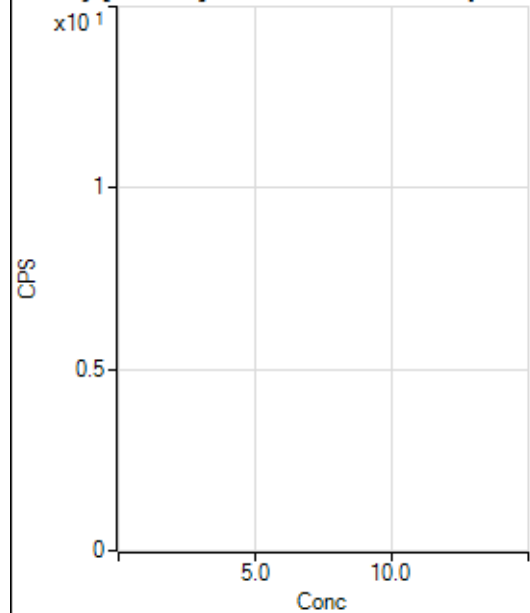
Min Conc: 0

150 Nd [No Gas] No available calibration points

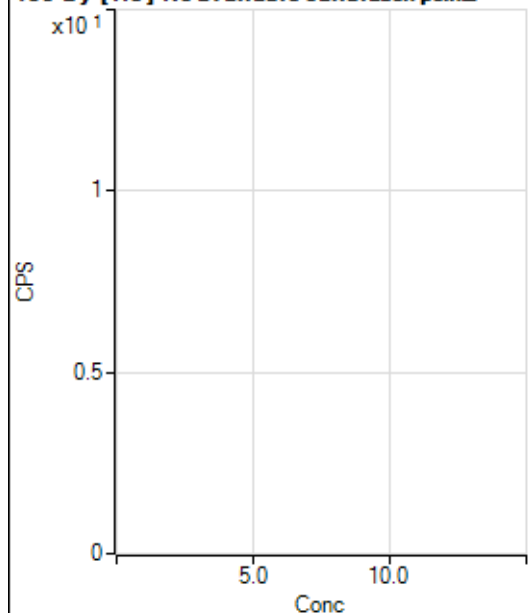
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	173.
2	☐			4.45		P	86.6
3	☐			46.67		P	37.8
4	☐			80.00		P	30.0
5	☐			137.78		P	15.6
6	☐			297.79		P	19.6
7	☐			566.70		P	6.2
8	☐			124.45		P	27.5

150 Nd [He] No available calibration points

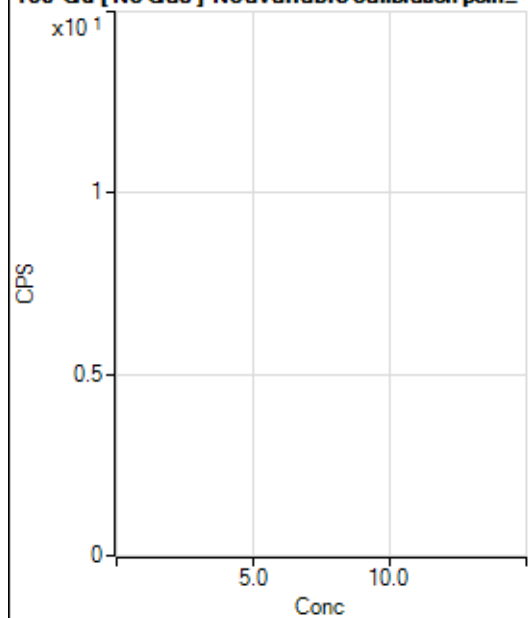
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	0.0
2	☐			2.22		P	86.6
3	☐			15.56		P	12.4
4	☐			12.22		P	68.7
5	☐			20.00		P	28.9
6	☐			24.45		P	28.4
7	☐			43.33		P	7.7
8	☐			68.89		P	2.8

156 Dy [No Gas] No available calibration points

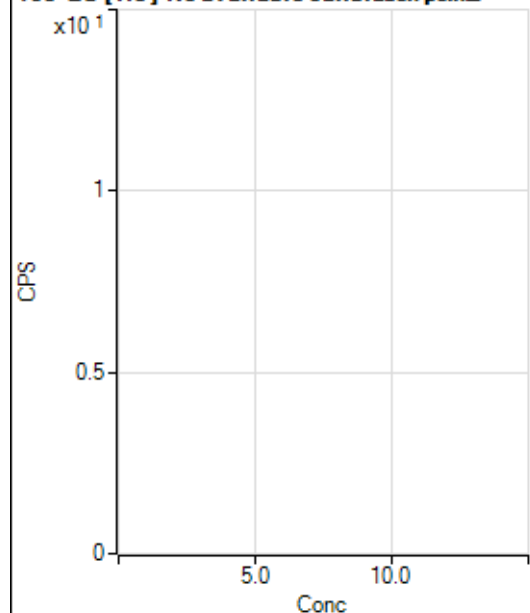
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			8.33		P	100.
3	☐			16.67		P	NaN
4	☐			19.45		P	24.7
5	☐			19.45		P	24.7
6	☐			47.22		P	36.7
7	☐			108.34		P	15.4
8	☐			69.45		P	42.1

156 Dy [He] No available calibration points

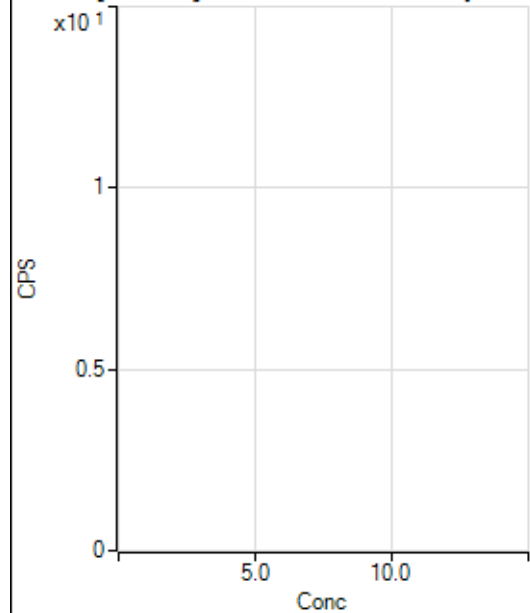
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	57.7
2	☐			12.22		P	103.
3	☐			16.67		P	20.0
4	☐			35.55		P	37.9
5	☐			27.78		P	48.5
6	☐			77.78		P	10.8
7	☐			148.89		P	18.1
8	☐			41.11		P	18.7

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

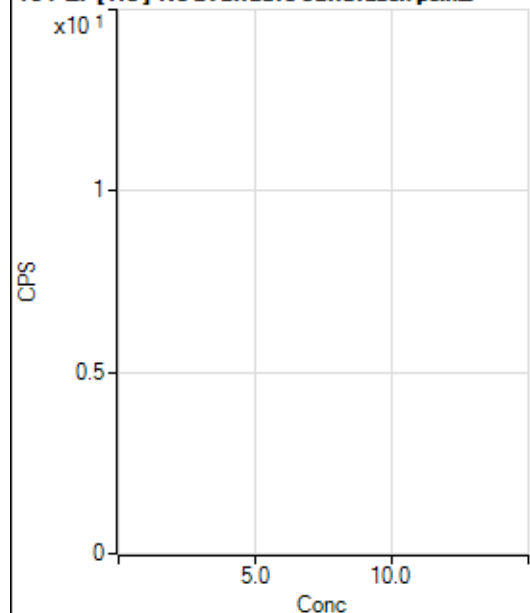
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	50.0
2	☐			52.78		P	45.6
3	☐			41.67		P	72.1
4	☐			27.78		P	34.6
5	☐			83.34		P	20.0
6	☐			38.89		P	53.9
7	☐			69.45		P	56.7
8	☐			102.78		P	16.9

160 Gd [He] No available calibration points

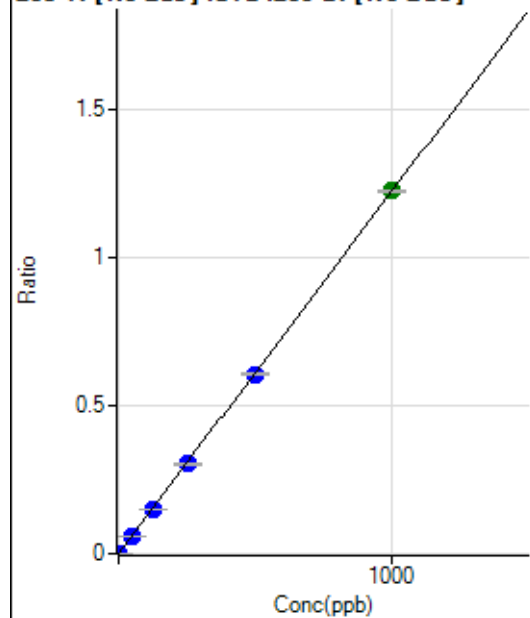
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			162.23		P	9.5
2	☐			157.78		P	6.5
3	☐			164.45		P	6.5
4	☐			154.45		P	5.4
5	☐			135.56		P	28.8
6	☐			135.56		P	3.8
7	☐			150.00		P	9.7
8	☐			171.11		P	13.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	50.0
2	☐			44.45		P	65.8
3	☐			27.78		P	62.5
4	☐			33.33		P	43.3
5	☐			50.00		P	44.1
6	☐			38.89		P	24.7
7	☐			55.56		P	37.8
8	☐			44.45		P	28.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			26.67		P	12.5
2	☐			24.44		P	7.9
3	☐			37.78		P	18.4
4	☐			26.67		P	33.1
5	☐			32.22		P	29.8
6	☐			34.45		P	20.1
7	☐			40.00		P	22.0
8	☐			43.33		P	7.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	461.14	0.0001	P	18.8
2	☐	1.000	0.942	7057.74	0.0012	P	3.7
3	☐	50.000	49.379	359501.92	0.0604	P	0.2
4	☐	125.000	123.553	862153.29	0.1510	P	1.2
5	☐	250.000	247.265	1717050.95	0.3020	P	0.4
6	☐	500.000	496.204	3438958.17	0.6060	P	1.2
7	☐	1000.000	1002.794	6980849.98	1.2247	A	0.5
8	☐			2044.70	0.0004	P	7.0

$$y = 0.0012 * x + 8.0138E-005$$

$$R = 1.0000$$

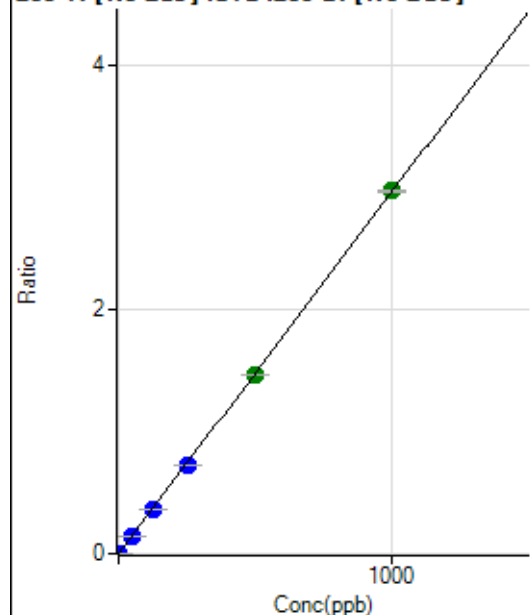
$$DL = 0.037$$

$$BEC = 0.06562$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	663.94	0.0001	P	6.3
2	☐	1.000	0.911	16099.28	0.0028	P	1.9
3	☐	50.000	48.814	859618.67	0.1444	P	0.4
4	☐	125.000	121.900	2058154.61	0.3604	P	0.9
5	☐	250.000	243.631	4093764.28	0.7201	P	1.2
6	☐	500.000	495.637	8312432.13	1.4649	A	0.8
7	☐	1000.000	1004.220	16917562.70	2.9679	A	0.4
8	☐			4798.31	0.0010	P	19.2

$$y = 0.0030 * x + 1.1533E-004$$

$$R = 1.0000$$

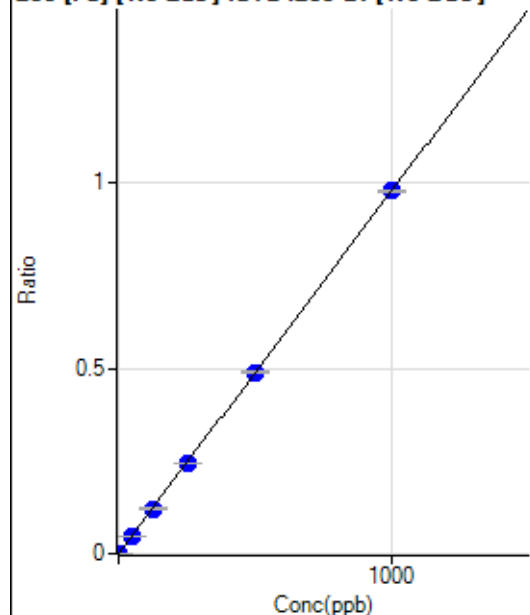
$$DL = 0.007405$$

$$BEC = 0.03902$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	507.43	0.0001	P	2.7
2	☐	1.000	0.913	5616.20	0.0010	P	6.7
3	☐	50.000	49.909	290854.78	0.0489	P	0.2
4	☐	125.000	124.505	695224.03	0.1217	P	1.5
5	☐	250.000	248.574	1381181.89	0.2430	P	0.3
6	☐	500.000	499.870	2771843.23	0.4885	P	0.7
7	☐	1000.000	1000.488	5572487.51	0.9776	P	0.6
8	☐			4636.14	0.0009	P	4.9

$$y = 9.7704E-004 * x + 8.8134E-005$$

$$R = 1.0000$$

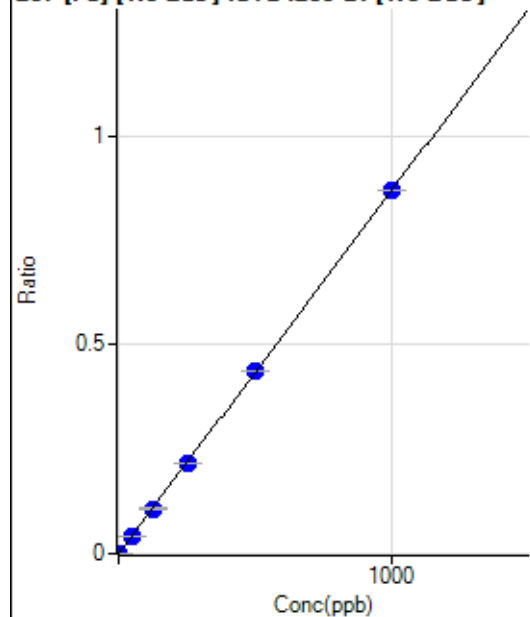
$$DL = 0.007436$$

$$BEC = 0.0902$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	524.10	0.0001	P	8.6
2	☐	1.000	0.863	4821.39	0.0008	P	2.0
3	☐	50.000	49.924	258913.94	0.0435	P	0.4
4	☐	125.000	124.186	617055.61	0.1080	P	1.5
5	☐	250.000	247.334	1222748.54	0.2151	P	0.3
6	☐	500.000	502.505	2479123.64	0.4369	P	0.6
7	☐	1000.000	999.520	4953021.69	0.8689	P	0.2
8	☐			3943.29	0.0008	P	0.8

$$y = 8.6926\text{E-}004 * x + 9.1057\text{E-}005$$

$$R = 1.0000$$

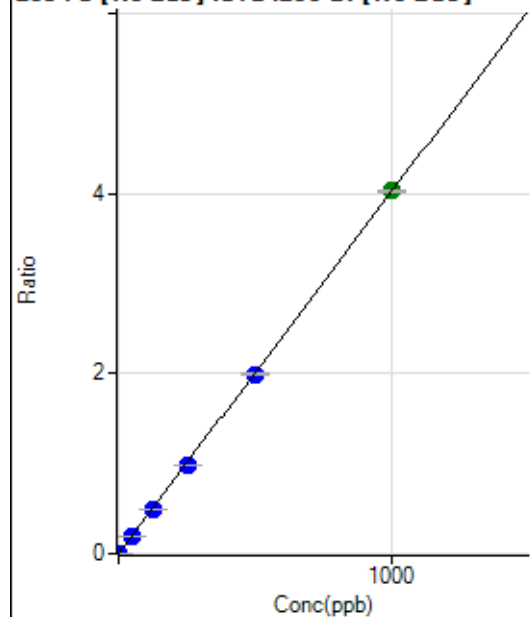
$$DL = 0.02689$$

$$BEC = 0.1048$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1783.43	0.0003	P	5.0
2	☐	1.000	0.908	22686.13	0.0040	P	3.0
3	☐	50.000	49.491	1184937.61	0.1990	P	0.5
4	☐	125.000	123.402	2831538.57	0.4958	P	1.1
5	☐	250.000	246.092	5619055.76	0.9884	P	0.2
6	☐	500.000	496.853	11321729.28	1.9952	P	0.2
7	☐	1000.000	1002.776	22952109.94	4.0266	A	0.2
8	☐			18127.60	0.0037	P	2.7

$$y = 0.0040 * x + 3.0981\text{E-}004$$

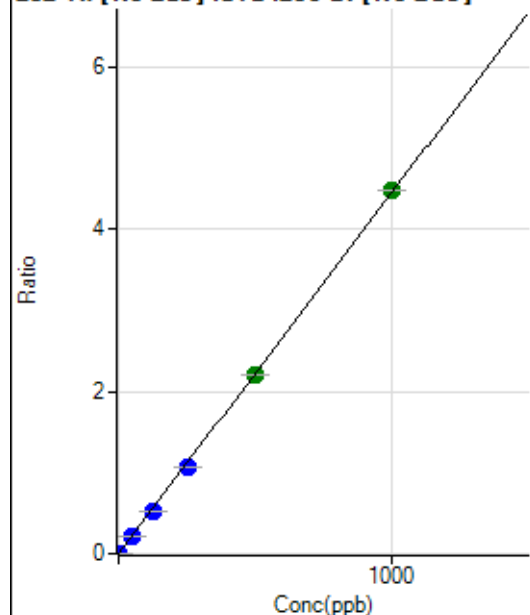
$$R = 1.0000$$

$$DL = 0.01165$$

$$BEC = 0.07716$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1344.56	0.0002	P	1.4
2	☐	1.000	0.772	21039.69	0.0037	P	3.3
3	☐	50.000	46.057	1222041.58	0.2052	P	0.9
4	☐	125.000	117.898	2998449.11	0.5250	P	1.2
5	☐	250.000	241.180	6104245.80	1.0738	P	0.5
6	☐	500.000	495.559	12518141.60	2.2061	A	0.6
7	☐	1000.000	1005.511	25513700.80	4.4760	A	0.1
8	☐			7257.85	0.0015	P	15.8

$$y = 0.0045 * x + 2.3353E-004$$

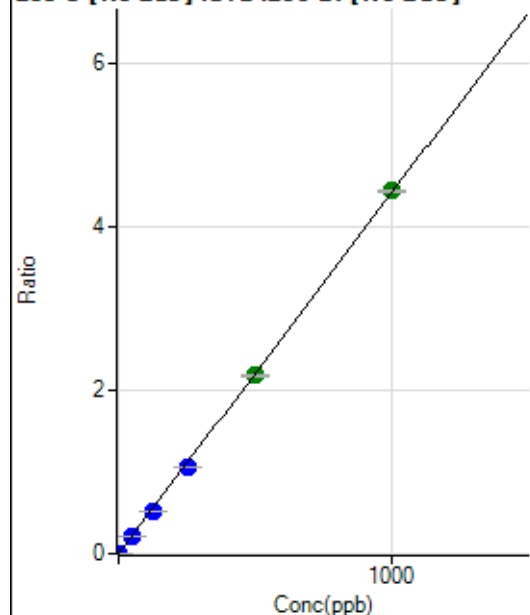
$$R = 0.9999$$

$$DL = 0.002273$$

$$BEC = 0.05247$$

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	1472.38	0.0003	P	5.3
2	☐	1.000	0.876	23569.61	0.0041	P	1.9
3	☐	50.000	46.187	1212388.10	0.2036	P	0.7
4	☐	125.000	117.086	2945845.53	0.5158	P	1.1
5	☐	250.000	239.617	5999527.87	1.0553	P	0.2
6	☐	500.000	494.502	12356837.08	2.1777	A	0.5
7	☐	1000.000	1006.525	25264171.40	4.4322	A	0.8
8	☐			4995.66	0.0010	P	16.5

$$y = 0.0044 * x + 2.5567E-004$$

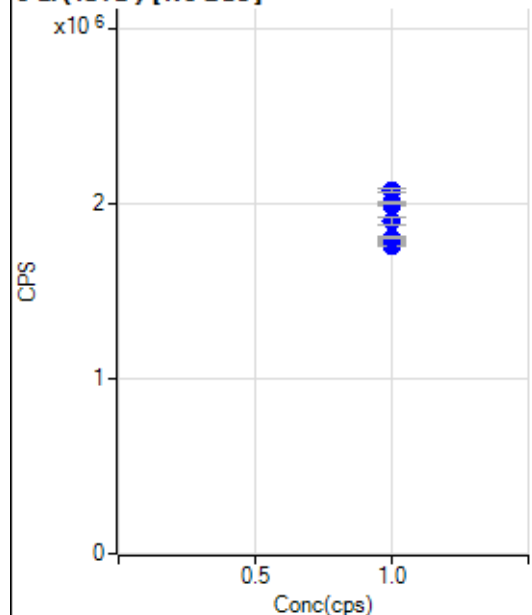
$$R = 0.9999$$

$$DL = 0.009191$$

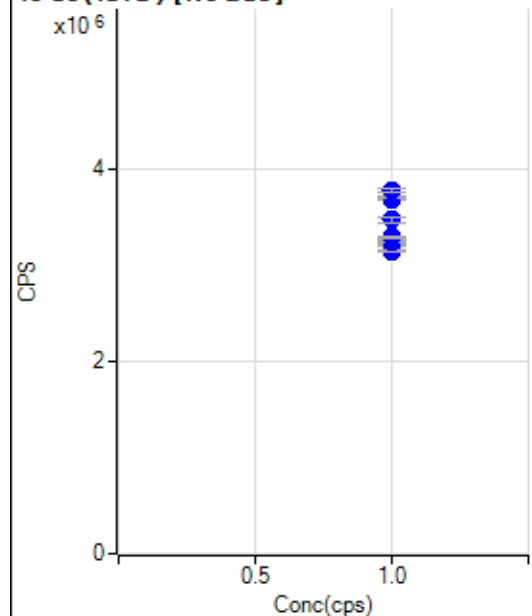
$$BEC = 0.05807$$

Weight: <None>

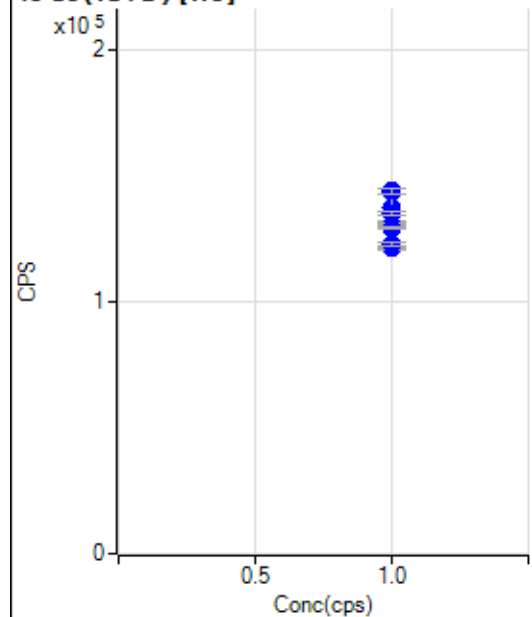
Min Conc: 0

6 Li (ISTD) [No Gas]

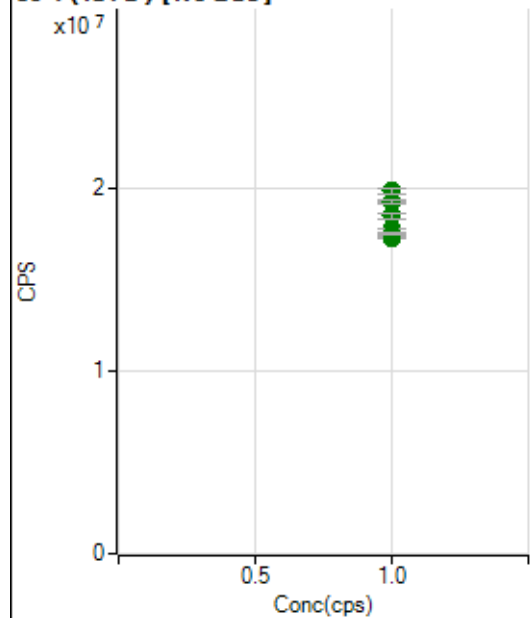
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1989886.57		P	0.1
2	☐	1.000		2008386.67		P	0.7
3	☐	1.000		2073686.83		P	1.2
4	☐	1.000		1901729.67		P	1.9
5	☐	1.000		1775287.65		P	0.9
6	☐	1.000		1755944.72		P	0.1
7	☐	1.000		1799651.35		P	0.4
8	☐	1.000		1806694.26		P	0.9

45 Sc (ISTD) [No Gas]

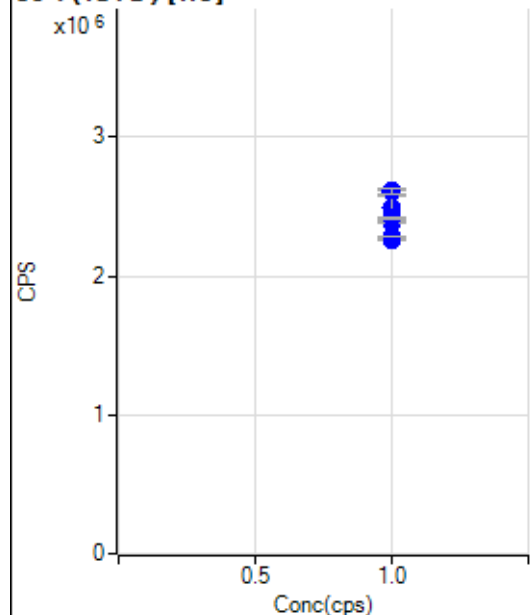
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3681203.99		P	0.3
2	☐	1.000		3710673.04		P	0.6
3	☐	1.000		3778000.52		P	1.2
4	☐	1.000		3480429.25		P	1.9
5	☐	1.000		3217986.31		P	1.0
6	☐	1.000		3147122.47		P	0.6
7	☐	1.000		3253794.71		P	0.4
8	☐	1.000		3297555.28		P	0.6

45 Sc (ISTD) [He]

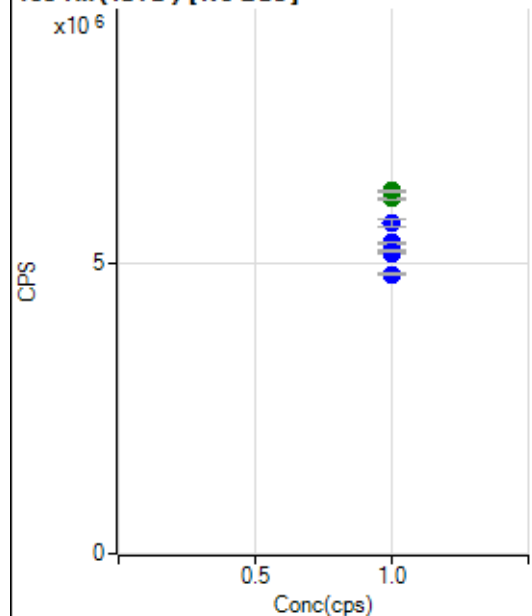
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		143418.67		P	1.7
2	☐	1.000		137184.58		P	8.1
3	☐	1.000		143811.80		P	1.9
4	☐	1.000		130712.23		P	0.5
5	☐	1.000		120985.93		P	0.7
6	☐	1.000		122750.02		P	0.8
7	☐	1.000		129145.70		P	0.6
8	☐	1.000		135045.14		P	0.8

89 Y (ISTD) [No Gas]

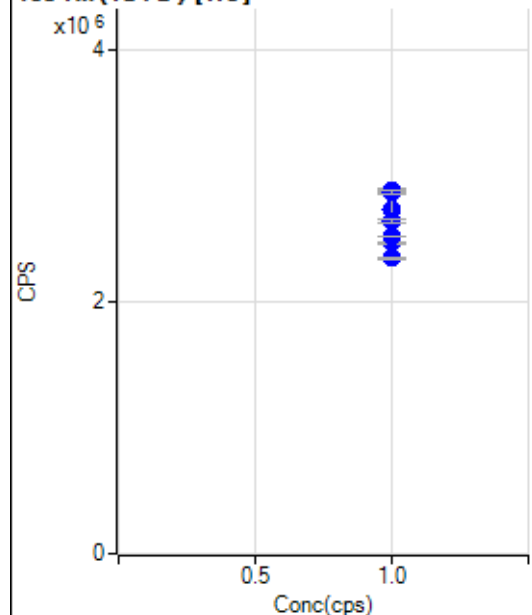
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19261378.60		A	0.1
2	☐	1.000		19269690.96		A	1.1
3	☐	1.000		19833916.37		A	1.3
4	☐	1.000		18458133.34		A	1.6
5	☐	1.000		17477953.49		A	0.4
6	☐	1.000		17278629.46		A	0.2
7	☐	1.000		17807672.09		A	0.0
8	☐	1.000		17481240.43		A	0.7

89 Y(ISTD) [He]

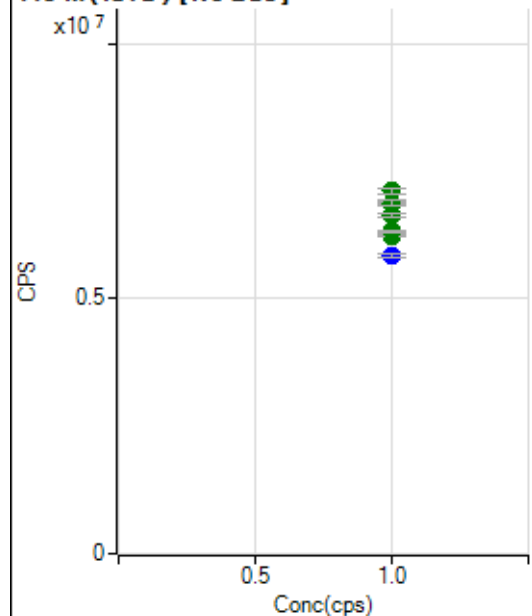
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2599063.56		P	1.3
2	☐	1.000		2487171.46		P	7.8
3	☐	1.000		2612887.93		P	1.4
4	☐	1.000		2403517.38		P	1.1
5	☐	1.000		2263100.95		P	0.3
6	☐	1.000		2288995.61		P	0.1
7	☐	1.000		2378776.61		P	0.2
8	☐	1.000		2420338.84		P	0.3

103 Rh(ISTD) [No Gas]

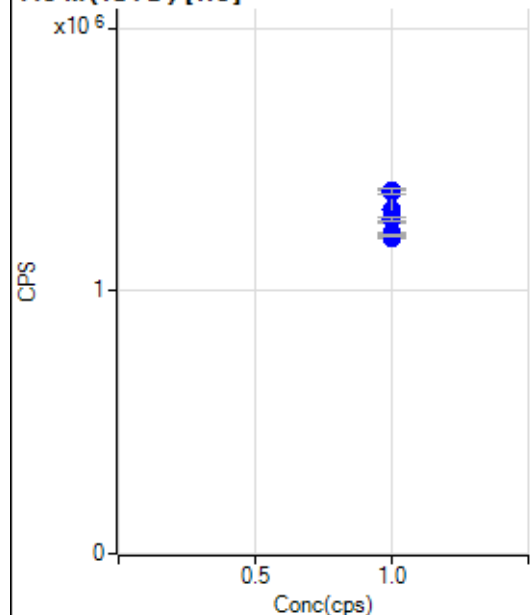
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6111687.85		A	0.3
2	☐	1.000		6115856.00		A	0.5
3	☐	1.000		6248838.25		A	0.7
4	☐	1.000		5699980.94		P	2.1
5	☐	1.000		5350385.19		P	0.7
6	☐	1.000		5173853.46		P	0.4
7	☐	1.000		5210066.83		P	0.5
8	☐	1.000		4808385.70		P	0.7

103 Rh (ISTD) [He]

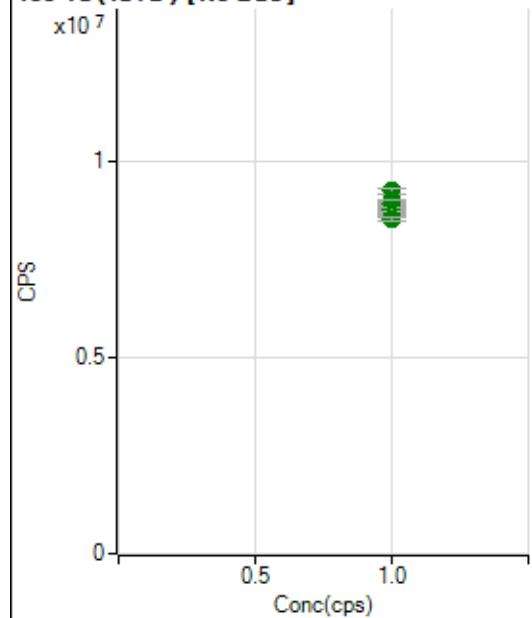
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2877948.08		P	1.1
2	☐	1.000		2736377.36		P	8.3
3	☐	1.000		2868079.37		P	1.2
4	☐	1.000		2643536.20		P	1.0
5	☐	1.000		2473831.07		P	0.2
6	☐	1.000		2464392.41		P	0.8
7	☐	1.000		2512269.89		P	0.1
8	☐	1.000		2343233.20		P	0.7

115 In (ISTD) [No Gas]

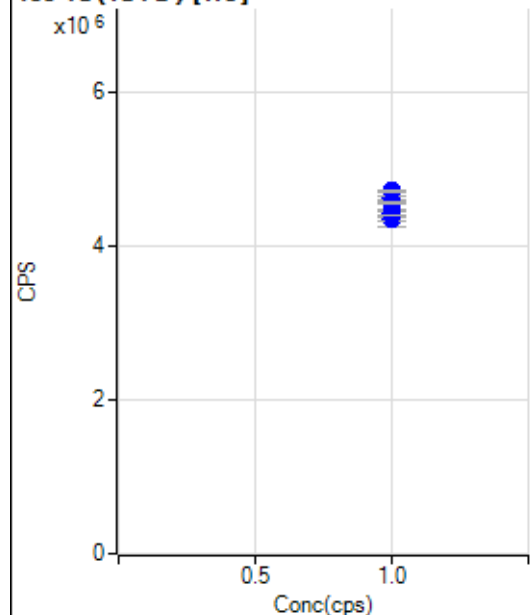
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6883811.38		A	0.4
2	☐	1.000		6876861.15		A	1.4
3	☐	1.000		7116905.54		A	1.3
4	☐	1.000		6626756.69		A	1.3
5	☐	1.000		6338355.81		A	0.5
6	☐	1.000		6229204.62		A	0.6
7	☐	1.000		6325603.25		A	0.3
8	☐	1.000		5840279.46		P	1.2

115 In (ISTD) [He]

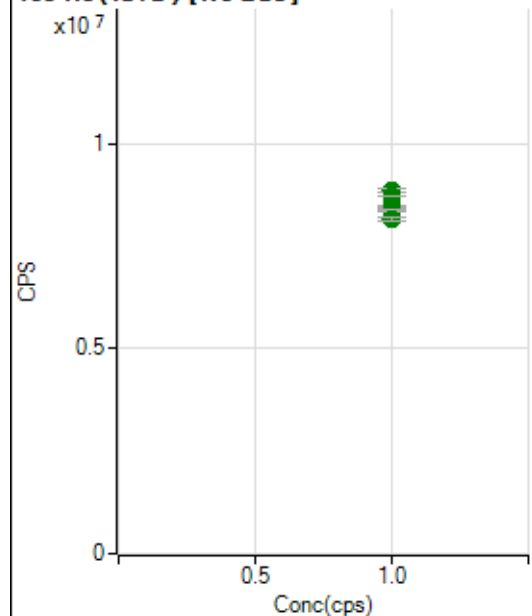
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1376679.64		P	0.9
2	☐	1.000		1313841.36		P	8.2
3	☐	1.000		1381905.75		P	1.6
4	☐	1.000		1276979.59		P	1.0
5	☐	1.000		1202492.48		P	0.4
6	☐	1.000		1206507.17		P	0.9
7	☐	1.000		1219556.37		P	0.1
8	☐	1.000		1212036.15		P	0.5

159 Tb (ISTD) [No Gas]

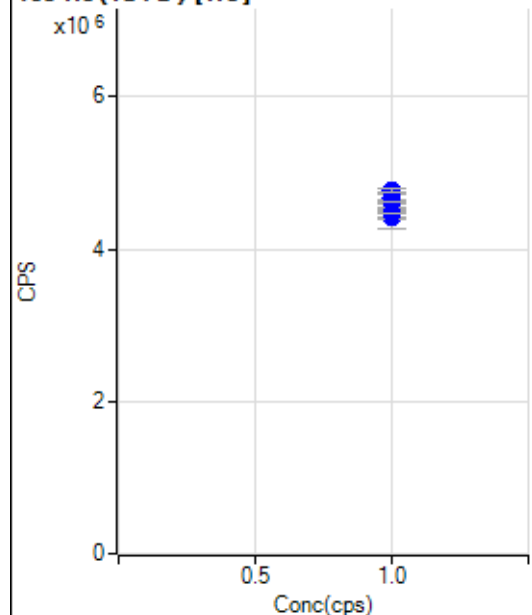
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8903930.28		A	0.3
2	☐	1.000		8897200.42		A	1.6
3	☐	1.000		9241817.08		A	1.5
4	☐	1.000		8795609.59		A	1.1
5	☐	1.000		8662689.53		A	0.5
6	☐	1.000		8773347.58		A	0.9
7	☐	1.000		9023706.81		A	0.3
8	☐	1.000		8512426.40		A	1.1

159 Tb (ISTD) [He]

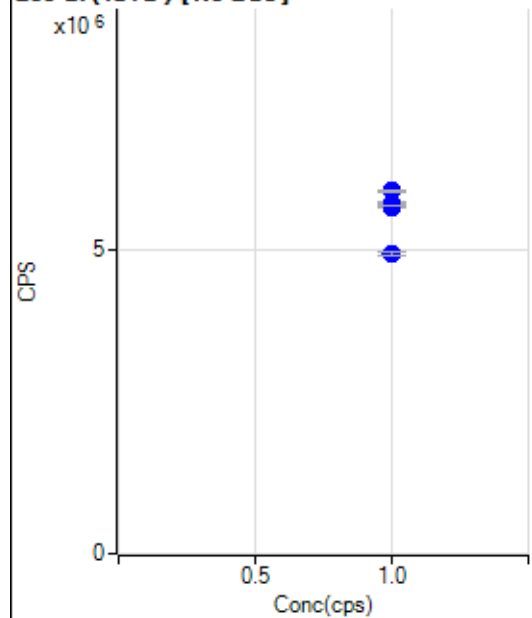
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4629924.37		P	1.3
2	☐	1.000		4421854.38		P	7.8
3	☐	1.000		4722533.78		P	0.5
4	☐	1.000		4481179.00		P	0.4
5	☐	1.000		4352218.79		P	0.8
6	☐	1.000		4431126.08		P	0.6
7	☐	1.000		4559803.79		P	0.4
8	☐	1.000		4404366.81		P	0.1

165 Ho (ISTD) [No Gas]

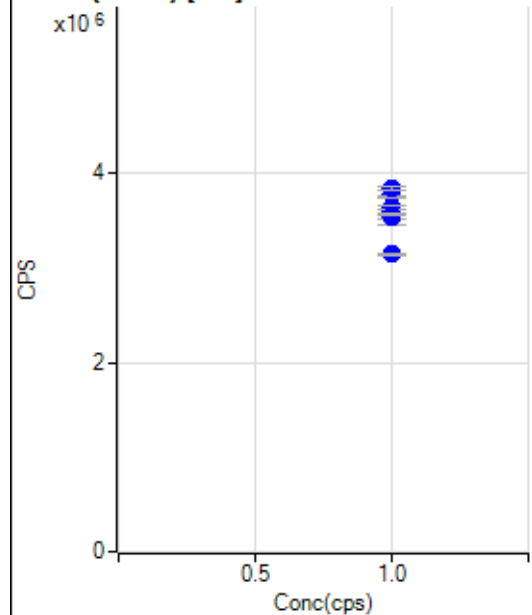
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8478498.63		A	0.1
2	☐	1.000		8432494.72		A	0.8
3	☐	1.000		8844335.18		A	0.9
4	☐	1.000		8410376.32		A	0.8
5	☐	1.000		8381331.18		A	1.2
6	☐	1.000		8388372.84		A	0.5
7	☐	1.000		8707485.70		A	0.2
8	☐	1.000		8162640.55		A	1.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4677174.44		P	1.5
2	☐	1.000		4430243.72		P	7.6
3	☐	1.000		4766285.07		P	1.0
4	☐	1.000		4534137.40		P	0.7
5	☐	1.000		4409656.77		P	0.4
6	☐	1.000		4481126.22		P	0.8
7	☐	1.000		4620725.21		P	0.3
8	☐	1.000		4467509.90		P	0.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5757782.69		P	0.6
2	☐	1.000		5733796.30		P	1.2
3	☐	1.000		5953827.97		P	0.9
4	☐	1.000		5711589.98		P	1.2
5	☐	1.000		5684933.04		P	0.6
6	☐	1.000		5674331.86		P	0.3
7	☐	1.000		5700137.76		P	0.1
8	☐	1.000		4927436.70		P	1.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3786601.92		P	1.6
2	☐	1.000		3594141.89		P	7.8
3	☐	1.000		3840056.12		P	1.1
4	☐	1.000		3643278.97		P	0.8
5	☐	1.000		3543648.49		P	1.2
6	☐	1.000		3544260.85		P	1.0
7	☐	1.000		3568449.11		P	0.2
8	☐	1.000		3148274.36		P	0.3

US EPA Tune Check Sample Report

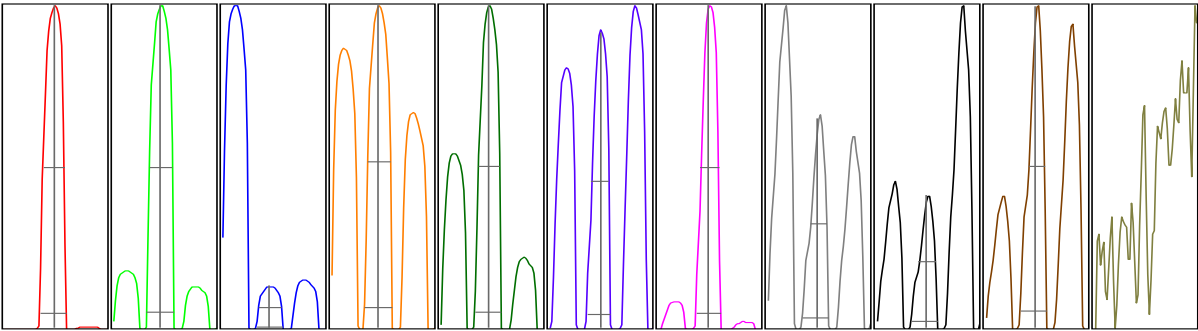
Batch Folder D:\ICP-MS Data\P7080619IMS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5655	1.61	5.00	
24	170818	1.53	5.00	
25	22521	1.48	5.00	
26	25736	1.55	5.00	
59	46036	1.59	5.00	
113	7367	1.54	5.00	
115	92636	2.66	5.00	
206	21030	1.61	5.00	
207	19239	1.53	5.00	
208	45927	1.53	5.00	
220	63	3.96		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5611	5655	5635	5565	5806
24	169846	170183	170289	168467	175307
25	22355	22520	22488	22178	23065
26	25529	25777	25725	25287	26363
59	46080	46017	45890	45067	47125
113	7432	7491	7366	7188	7358
115	95137	94486	92953	88971	91631
206	20857	20980	21046	20685	21583
207	19025	19280	19238	18949	19702
208	45572	45961	45871	45171	47060
220	63	65	65	60	60

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	9529	9.00	8.9 - 9.1		0.779	0.900	
24	267558	23.90	23.9 - 24.1		0.787	0.900	
25	35517	24.90	24.9 - 25.1		0.784	0.900	
26	40940	25.90	25.9 - 26.1		0.802	0.900	
59	77992	58.95	58.9 - 59.1		0.774	0.900	
113	14369	113.05	112.9 - 113.1		0.690	0.900	
115	181406	115.00	114.9 - 115.1		0.726	0.900	
206	42678	206.00	205.9 - 206.1		0.761	0.900	
207	39286	207.00	206.9 - 207.1		0.772	0.900	
208	94956	208.00	207.9 - 208.1		0.771	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.3	V	Deflect	14.0	V
Extract 2	-90.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-50	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	10922	0.53	
89	23523	0.91	
205	20659	0.33	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	10918	10899	10857	11015	10924
89	23791	23695	23419	23439	23271
205	20730	20628	20590	20735	20612

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.0	V	Deflect	2.0	V
Extract 2	-95.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			