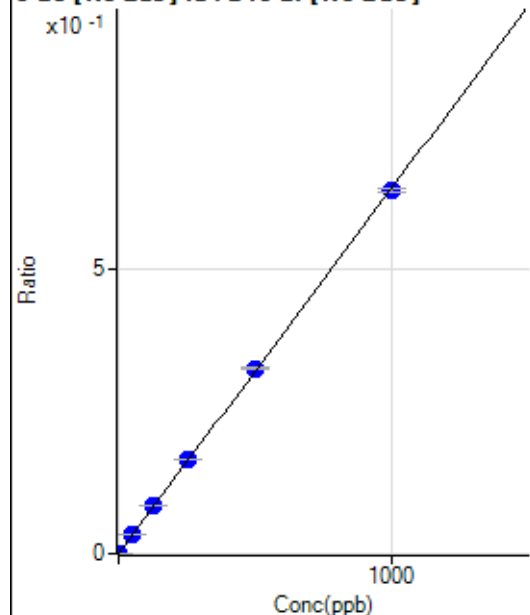


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7071520 MS.b\
 Analysis File: P7071520 MS.batch.bin
 DA Date-Time: 2020-07-15 14:15:38
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-07-15 11:58:24
2	004CALS.d	S01	2020-07-15 12:02:09
3	005CALS.d	S02	2020-07-15 12:07:07
4	006CALS.d	S03	2020-07-15 12:11:14
5	007CALS.d	S04	2020-07-15 12:15:45
6	008CALS.d	S05	2020-07-15 12:19:34
7	009CALS.d	S06	2020-07-15 12:23:15
8	010CALS.d	S07	2020-07-15 12:26:52
9	011CALS.d	S08	2020-07-15 12:30:25

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	103.71	0.0000	P	21.7
2	☐	0.100	0.099	403.72	0.0001	P	27.4
3	☐	1.000	1.032	3378.25	0.0007	P	2.4
4	☐	50.000	51.041	160622.99	0.0328	P	1.6
5	☐	125.000	131.219	398921.29	0.0844	P	0.8
6	☐	250.000	260.003	777469.15	0.1672	P	0.3
7	☐	500.000	506.656	1475336.75	0.3258	P	0.8
8	☐	1000.000	993.342	2928182.74	0.6387	P	0.9
9	☐			779.67	0.0002	P	7.5

$$y = 6.4292\text{E-}004 * x + 2.0448\text{E-}005$$

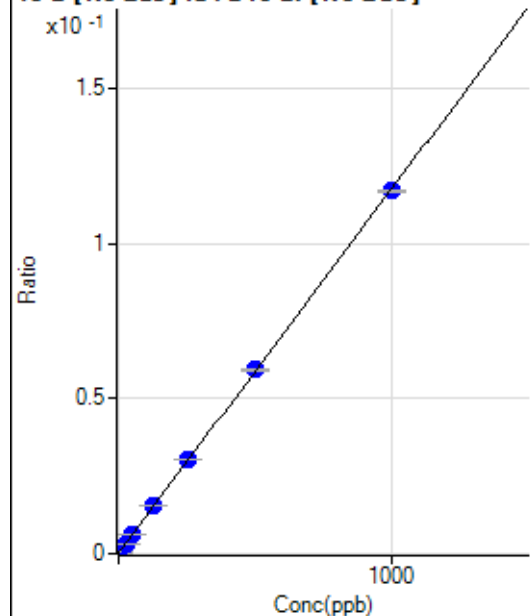
$$R = 0.9999$$

$$DL = 0.02066$$

$$BEC = 0.0318$$

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	891.73	0.0002	P	5.7
2	☐	2.500	2.321	2155.81	0.0004	P	6.4
3	☐	25.000	22.920	14162.71	0.0029	P	4.1
4	☐	50.000	51.102	30214.32	0.0062	P	1.4
5	☐	125.000	130.390	73214.01	0.0155	P	0.8
6	☐	250.000	258.051	141732.17	0.0305	P	1.5
7	☐	500.000	504.292	268994.06	0.0594	P	1.0
8	☐	1000.000	995.165	536587.10	0.1170	P	0.9
9	☐			17888.94	0.0045	P	6.1

$$y = 1.1743\text{E-}004 * x + 1.7582\text{E-}004$$

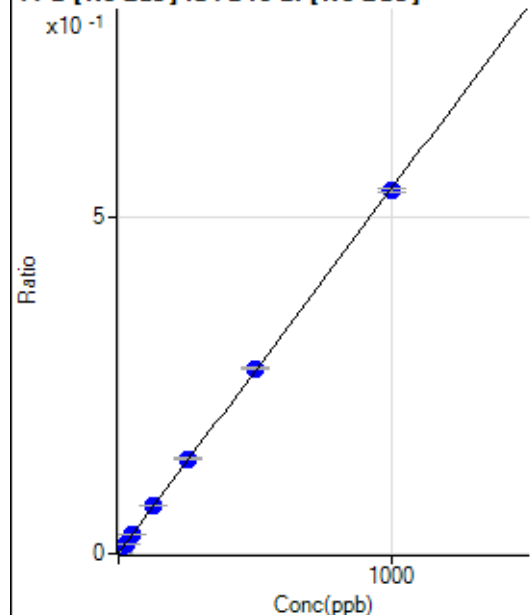
$$R = 0.9999$$

$$DL = 0.2539$$

$$BEC = 1.497$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4295.23	0.0008	P	0.9
2	☐	2.500	2.229	9889.72	0.0021	P	2.4
3	☐	25.000	23.061	66019.65	0.0134	P	0.8
4	☐	50.000	51.858	141854.42	0.0290	P	0.5
5	☐	125.000	131.168	340598.13	0.0720	P	0.4
6	☐	250.000	259.379	658683.27	0.1416	P	1.4
7	☐	500.000	506.692	1249471.06	0.2759	P	0.7
8	☐	1000.000	993.495	2476393.81	0.5401	P	1.2
9	☐			83157.00	0.0208	P	5.3

$$y = 5.4282\text{E-}004 * x + 8.4687\text{E-}004$$

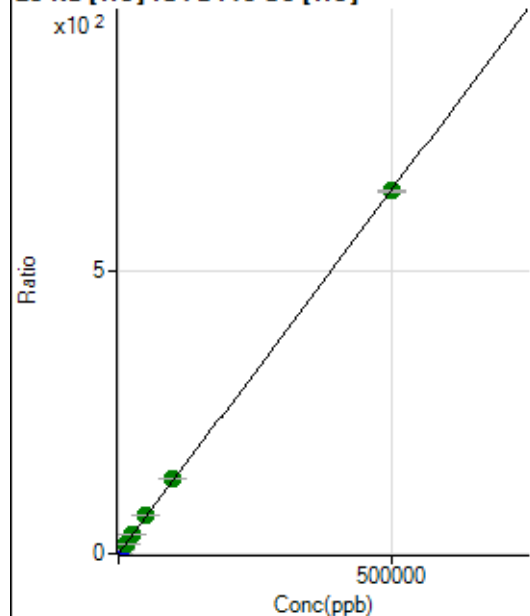
$$R = 0.9999$$

$$DL = 0.0415$$

$$BEC = 1.56$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31399.12	0.0679	P	2.1
2	☐	5.000	46.435	57754.52	0.1278	P	0.2
3	☐	500.000	504.104	323012.07	0.7179	P	2.0
4	☐	5000.000	5241.041	3075033.56	6.8253	P	0.2
5	☐	12500.000	13518.853	7482390.36	17.4982	A	1.8
6	☐	25000.000	26632.961	14346928.64	34.4066	A	0.9
7	☐	50000.000	52751.561	27624353.55	68.0820	A	0.9
8	☐	100000.00	103157.59	55111437.88	133.0720	A	0.4
9	☐	500000.00	498983.79	256206064.9	643.4223	A	0.5

$$y = 0.0013 * x + 0.0679$$

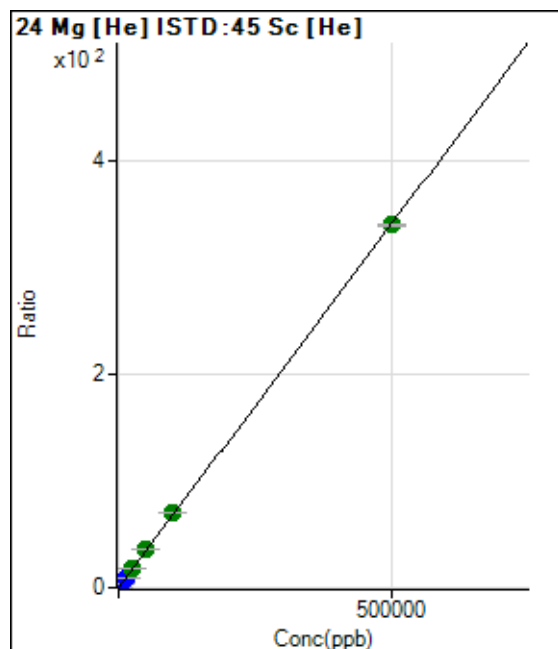
$$R = 1.0000$$

$$DL = 3.357$$

$$BEC = 52.67$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3009.06	0.0065	P	4.5
2	☐	5.000	47.088	17458.04	0.0386	P	2.4
3	☐	500.000	504.047	157616.31	0.3503	P	1.7
4	☐	5000.000	5353.856	1648006.14	3.6579	P	0.2
5	☐	12500.000	13761.367	4016272.61	9.3919	P	0.8
6	☐	25000.000	26880.750	7647299.95	18.3394	A	0.3
7	☐	50000.000	53111.220	14699499.78	36.2287	A	1.0
8	☐	100000.00	103569.29	29255779.54	70.6415	A	0.8
9	☐	500000.00	498845.90	135472940.9	340.2230	A	0.6

$$y = 6.8201\text{E-}004 * x + 0.0065$$

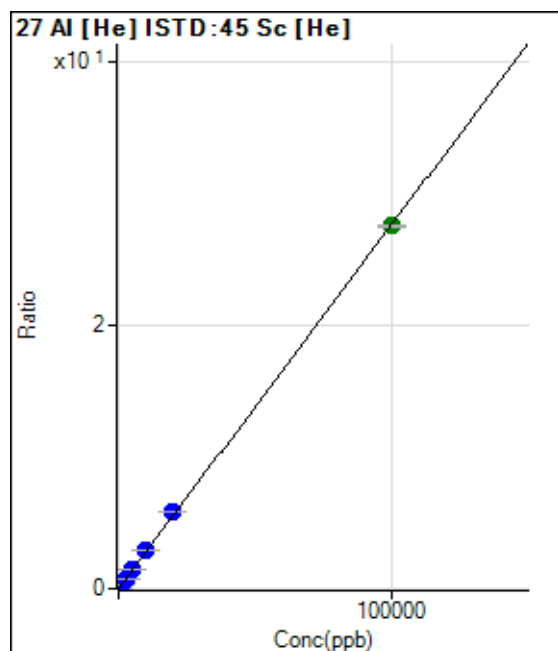
$$R = 1.0000$$

$$DL = 1.275$$

$$BEC = 9.546$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	117.31	0.0003	P	6.9
2	☐	2.000	1.721	329.27	0.0007	P	14.9
3	☐	20.000	19.660	2554.40	0.0057	P	1.6
4	☐	1000.000	1063.565	132277.67	0.2936	P	0.1
5	☐	2500.000	2771.102	326958.59	0.7646	P	0.4
6	☐	5000.000	5453.220	627283.97	1.5043	P	0.1
7	☐	10000.000	10745.650	1202652.43	2.9641	P	1.1
8	☐	20000.000	20933.964	2391350.44	5.7741	P	0.5
9	☐	100000.00	99708.568	10950542.28	27.5013	A	0.7

$$y = 2.7581\text{E-}004 * x + 2.5395\text{E-}004$$

$$R = 0.9999$$

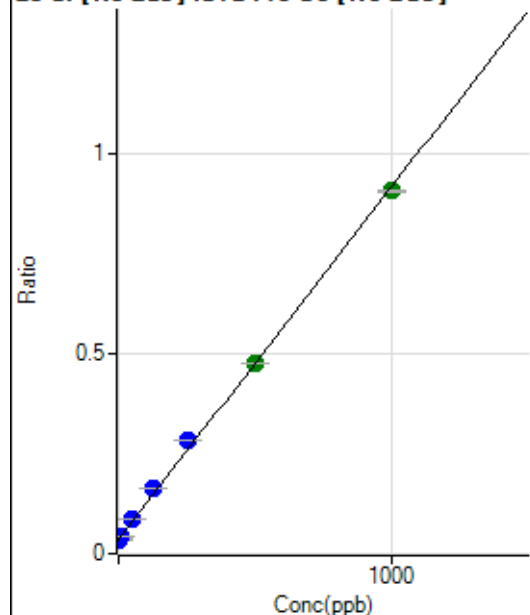
$$DL = 0.1901$$

$$BEC = 0.9207$$

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	421513.03	0.0360	P	0.6
2	☐	1.000	1.314	423190.18	0.0371	P	1.2
3	☐	10.000	9.483	516905.20	0.0444	P	1.5
4	☐	50.000	58.378	1011400.24	0.0875	P	1.5
5	☐	125.000	145.159	1833442.62	0.1641	P	0.8
6	☐	250.000	283.250	3095171.73	0.2859	P	0.3
7	☐	500.000	500.345	4978608.23	0.4775	A	0.1
8	☐	1000.000	988.581	9723097.62	0.9083	A	0.7
9	☐			583382.46	0.0597	P	1.1

$$y = 8.8236E-004 * x + 0.0360$$

$$R = 0.9993$$

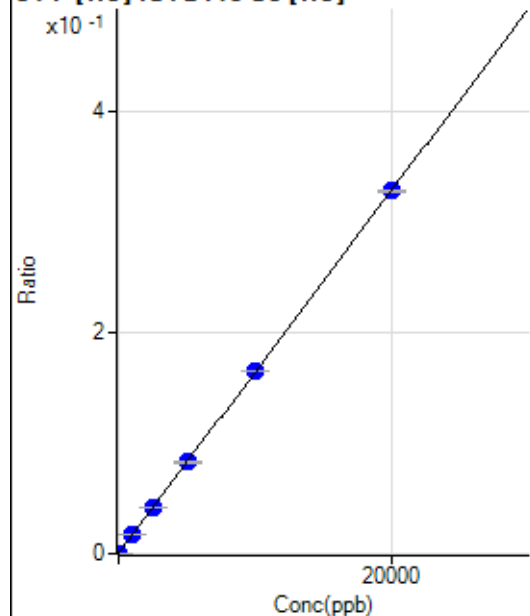
$$DL = 0.7081$$

$$BEC = 40.79$$

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	0.178	188.90	0.0004	P	6.2
2	☐	0.000	2.304	200.01	0.0004	P	9.1
3	☐	0.000	-2.482	163.90	0.0004	P	8.1
4	☐	1000.000	1004.395	7596.69	0.0169	P	3.6
5	☐	2500.000	2502.555	17711.20	0.0414	P	1.7
6	☐	5000.000	5030.524	34541.07	0.0828	P	1.6
7	☐	10000.000	10032.351	66878.07	0.1648	P	0.5
8	☐	20000.000	19975.654	135729.69	0.3277	P	0.7
9	☐			183.34	0.0005	P	42.4

$$y = 1.6386E-005 * x + 4.0494E-004$$

$$R = 1.0000$$

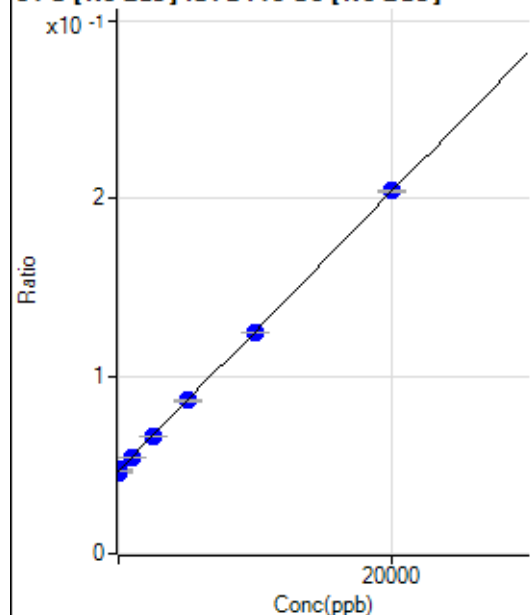
$$DL = 5.803$$

$$BEC = 24.71$$

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	-107.370	537794.49	0.0459	P	0.3
2	☐	0.000	134.232	544741.15	0.0478	P	0.7
3	☐	0.000	-26.862	542500.48	0.0465	P	0.6
4	☐	1000.000	940.466	626060.01	0.0542	P	1.0
5	☐	2500.000	2418.269	735187.88	0.0658	P	0.4
6	☐	5000.000	5023.372	934099.00	0.0863	P	0.4
7	☐	10000.000	9931.569	1302433.20	0.1249	P	0.4
8	☐	20000.000	20041.566	2188821.71	0.2045	P	0.7
9	☐			453159.02	0.0464	P	1.3

$$y = 7.8690E-006 * x + 0.0468$$

$$R = 0.9999$$

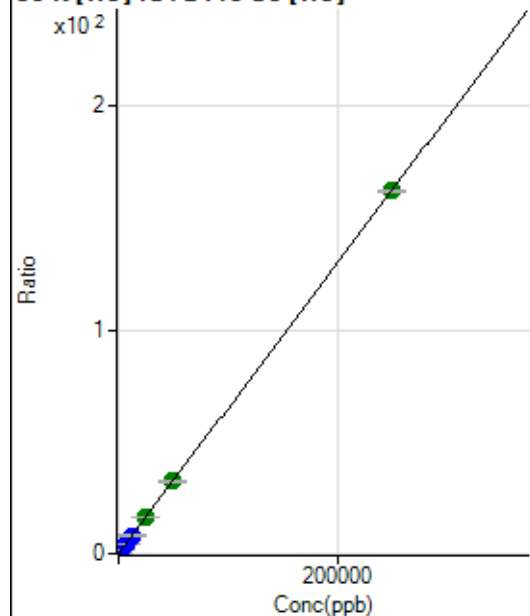
$$DL = 99.59$$

$$BEC = 5942$$

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	25700.45	0.0556	P	4.2
2	☐	5.000	45.079	38342.96	0.0848	P	0.8
3	☐	500.000	469.601	162005.56	0.3600	P	1.6
4	☐	2500.000	2473.465	747457.81	1.6590	P	0.2
5	☐	6250.000	6368.715	1789373.52	4.1842	P	0.1
6	☐	12500.000	12501.931	3402610.78	8.1601	P	0.4
7	☐	25000.000	24906.778	6573833.68	16.2016	A	1.1
8	☐	50000.000	49740.965	13377243.28	32.3006	A	0.6
9	☐	250000.00	250058.39	64569463.30	162.1579	A	0.4

$$y = 6.4826E-004 * x + 0.0556$$

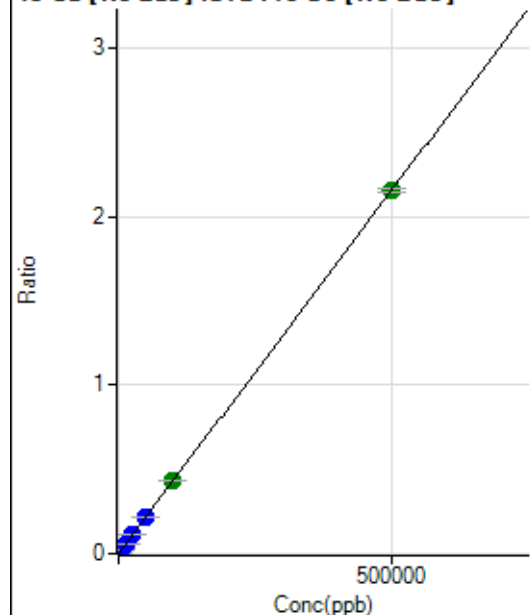
$$R = 1.0000$$

$$DL = 10.72$$

$$BEC = 85.77$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	546.57	0.0000	P	8.4
2	☐	5.000	44.619	2722.40	0.0002	P	2.1
3	☐	500.000	470.293	24163.56	0.0021	P	1.6
4	☐	5000.000	5096.542	254433.37	0.0220	P	0.8
5	☐	12500.000	13075.951	630256.98	0.0564	P	0.2
6	☐	25000.000	25966.470	1211898.08	0.1120	P	0.7
7	☐	50000.000	51038.334	2293935.87	0.2200	P	0.2
8	☐	100000.00	101533.87	4684803.13	0.4376	A	0.4
9	☐	500000.00	499525.73	21023602.75	2.1528	A	1.0

$$y = 4.3096\text{E-}006 * x + 4.6669\text{E-}005$$

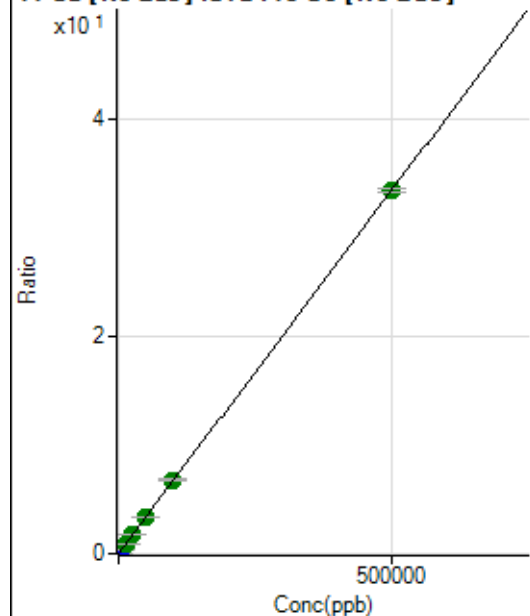
$$R = 1.0000$$

$$DL = 2.737$$

$$BEC = 10.83$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25912.83	0.0022	P	0.9
2	☐	5.000	47.618	61486.41	0.0054	P	1.2
3	☐	500.000	480.578	400361.12	0.0344	P	1.7
4	☐	5000.000	5135.062	3995683.81	0.3457	P	0.8
5	☐	12500.000	12860.686	9637076.60	0.8624	A	0.1
6	☐	25000.000	25637.760	18586195.48	1.7169	A	0.8
7	☐	50000.000	50513.558	35250501.06	3.3807	A	0.1
8	☐	100000.00	101657.80	72808796.49	6.8014	A	0.7
9	☐	500000.00	499574.84	326320986.3	33.4153	A	1.0

$$y = 6.6883\text{E-}005 * x + 0.0022$$

$$R = 1.0000$$

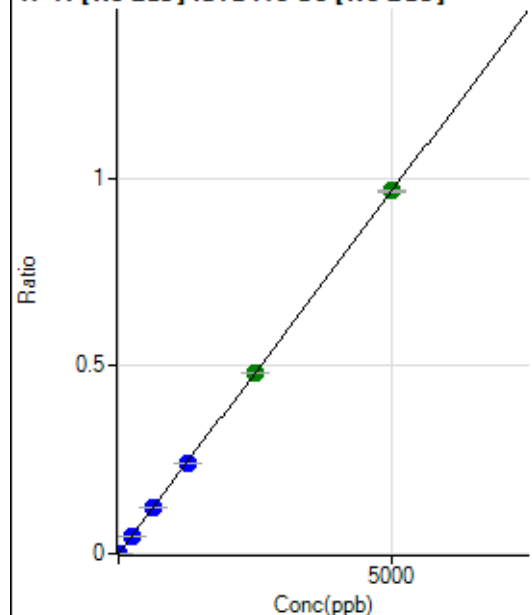
$$DL = 0.9085$$

$$BEC = 33.08$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0000	P	10.8
2	☐	0.500	0.475	1275.12	0.0001	P	9.0
3	☐	5.000	4.620	10618.18	0.0009	P	5.2
4	☐	250.000	245.062	546466.91	0.0473	P	1.1
5	☐	625.000	628.523	1354567.98	0.1212	P	0.6
6	☐	1250.000	1237.216	2582825.36	0.2386	P	0.3
7	☐	2500.000	2489.926	5006394.12	0.4801	A	0.4
8	☐	5000.000	5008.040	10337908.56	0.9657	A	0.5
9	☐			4239.66	0.0004	P	16.9

$$y = 1.9283\text{E-}004 * x + 2.0389\text{E-}005$$

$$R = 1.0000$$

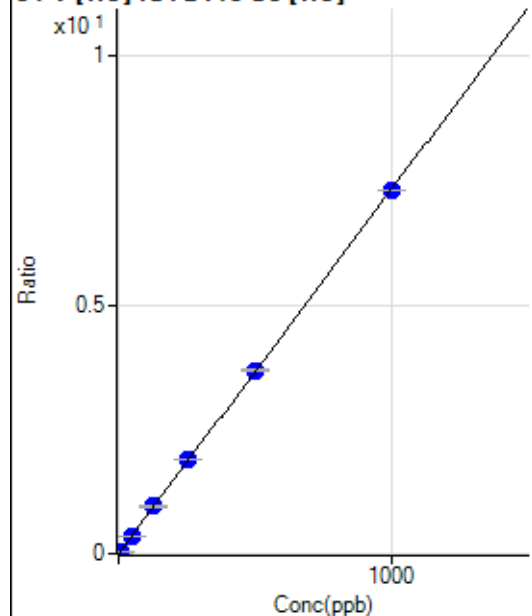
$$DL = 0.03415$$

$$BEC = 0.1057$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0001	P	9.8
2	☐	0.500	0.473	1587.89	0.0035	P	6.1
3	☐	5.000	4.763	15718.56	0.0349	P	2.6
4	☐	50.000	49.860	164540.64	0.3652	P	0.5
5	☐	125.000	129.437	405393.52	0.9480	P	0.5
6	☐	250.000	256.567	783522.07	1.8790	P	0.1
7	☐	500.000	503.975	1497694.21	3.6909	P	1.0
8	☐	1000.000	995.825	3020343.08	7.2930	P	0.2
9	☐			623.36	0.0016	P	14.1

$$y = 0.0073 * x + 5.2914\text{E-}005$$

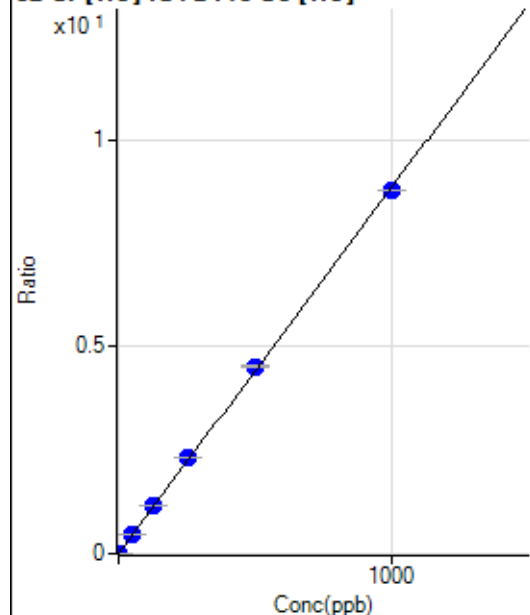
$$R = 1.0000$$

$$DL = 0.00212$$

$$BEC = 0.007225$$

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	590.02	0.0013	P	8.6
2	☐	0.200	0.177	1284.52	0.0028	P	2.9
3	☐	2.000	1.981	8444.77	0.0188	P	4.7
4	☐	50.000	51.386	205061.77	0.4552	P	1.2
5	☐	125.000	133.006	502932.50	1.1761	P	1.2
6	☐	250.000	260.643	960543.16	2.3035	P	0.2
7	☐	500.000	510.085	1828832.96	4.5069	P	1.1
8	☐	1000.000	991.227	3626579.15	8.7568	P	0.1
9	☐			5268.81	0.0132	P	2.8

$$y = 0.0088 * x + 0.0013$$

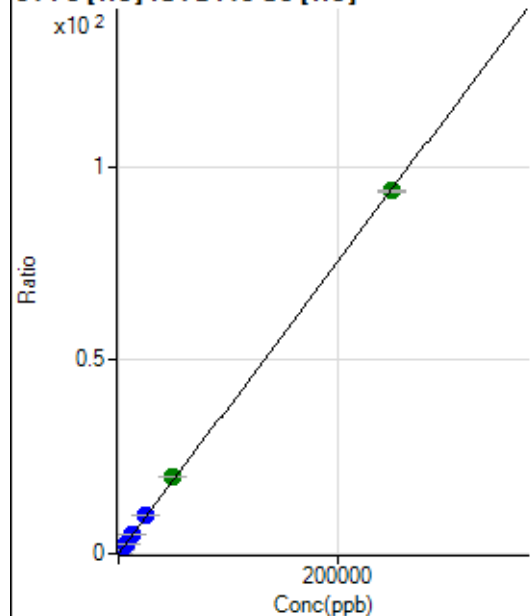
$$R = 0.9998$$

$$DL = 0.03725$$

$$BEC = 0.1446$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	935.85	0.0020	P	1.8
2	☐	5.000	4.110	1613.78	0.0036	P	4.4
3	☐	50.000	52.452	9789.37	0.0218	P	2.7
4	☐	2500.000	2700.451	458619.64	1.0180	P	0.4
5	☐	6250.000	7007.374	1128193.33	2.6383	P	1.0
6	☐	12500.000	13567.901	2129303.13	5.1064	P	0.2
7	☐	25000.000	26252.412	4008541.62	9.8784	P	0.8
8	☐	50000.000	53080.453	8271083.84	19.9714	A	0.3
9	☐	250000.00	249184.33	37329454.54	93.7475	A	0.2

$$y = 3.7621E-004 * x + 0.0020$$

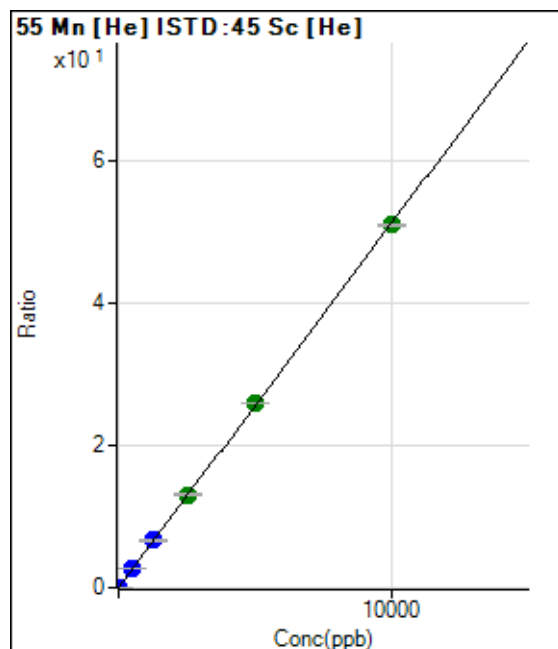
$$R = 0.9999$$

$$DL = 0.2858$$

$$BEC = 5.379$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1653.46	0.0036	P	11.5
2	☒	0.100					
3	☐	1.000	1.047	4016.17	0.0089	P	6.2
4	☐	500.000	504.619	1164735.55	2.5853	P	0.8
5	☐	1250.000	1298.150	2841658.99	6.6452	P	1.0
6	☐	2500.000	2546.816	5434996.34	13.0336	A	1.2
7	☐	5000.000	5052.961	10492136.51	25.8556	A	0.2
8	☐	10000.000	9955.566	21095738.02	50.9384	A	0.4
9	☐			13190.55	0.0331	P	3.9

$$y = 0.0051 * x + 0.0036$$

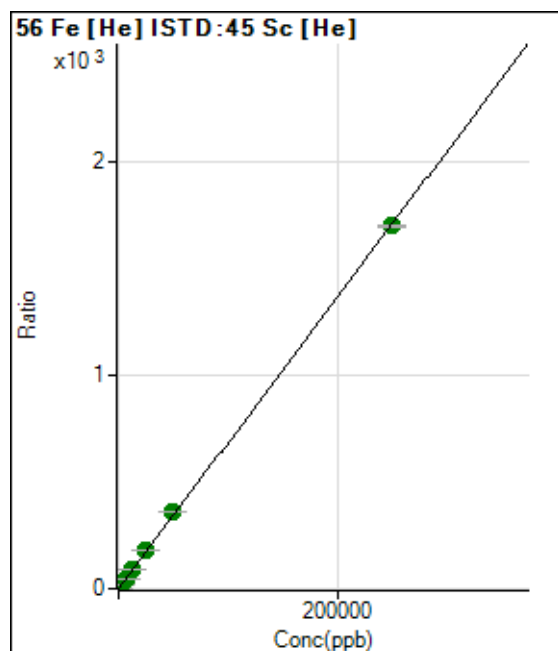
$$R = 1.0000$$

$$DL = 0.2414$$

$$BEC = 0.697$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11512.96	0.0249	P	1.7
2	☐	5.000	3.910	23315.86	0.0516	P	0.9
3	☐	50.000	50.921	167604.69	0.3725	P	2.0
4	☐	2500.000	2613.538	8048635.84	17.8647	A	0.4
5	☐	6250.000	6840.280	19977120.58	46.7161	A	1.0
6	☐	12500.000	13453.894	38304422.18	91.8601	A	0.3
7	☐	25000.000	26643.684	73807095.46	181.8926	A	0.5
8	☐	50000.000	52412.436	148176453.1	357.7881	A	0.3
9	☐	250000.00	249289.55	677581479.8	1701.656	A	0.3

$$y = 0.0068 * x + 0.0249$$

$$R = 0.9999$$

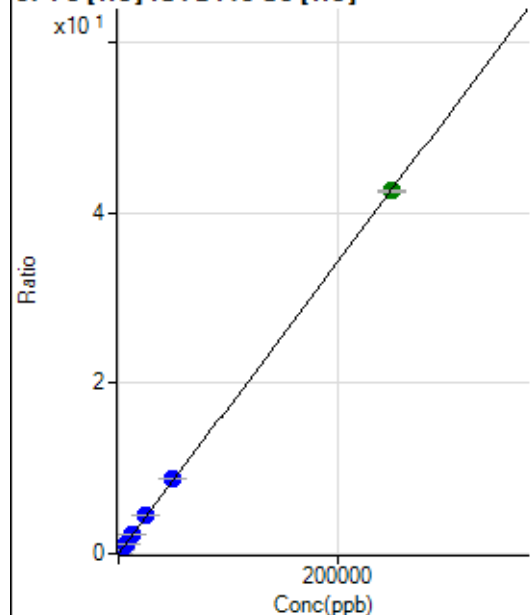
$$DL = 0.1844$$

$$BEC = 3.647$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	406.59	0.0009	P	8.7
2	☐	5.000	4.323	731.21	0.0016	P	1.3
3	☐	50.000	52.193	4402.48	0.0098	P	2.7
4	☐	2500.000	2673.565	205896.56	0.4570	P	0.2
5	☐	6250.000	7010.360	511817.26	1.1969	P	1.3
6	☐	12500.000	13573.898	966009.25	2.3167	P	0.1
7	☐	25000.000	26645.197	1844944.53	4.5467	P	0.8
8	☐	50000.000	51461.723	3636407.27	8.7805	P	0.2
9	☐	250000.00	249468.69	16947337.47	42.5615	A	0.8

$$y = 1.7061E-004 * x + 8.8033E-004$$

R = 1.0000

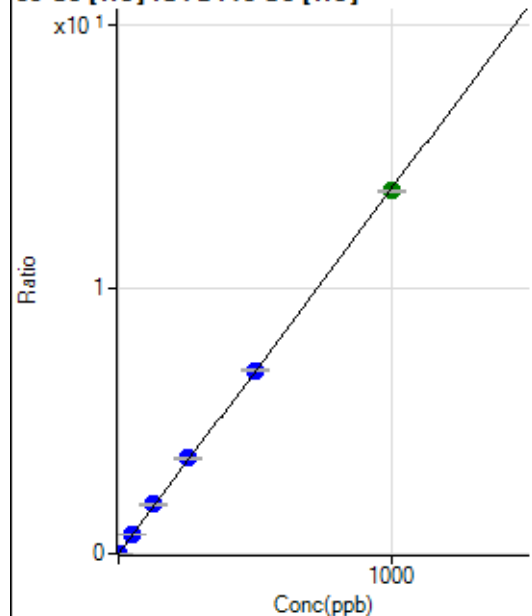
DL = 1.35

BEC = 5.16

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	148.89	0.0003	P	3.7
2	☐	0.100	0.094	728.92	0.0016	P	9.0
3	☐	1.000	0.992	6303.65	0.0140	P	1.2
4	☐	50.000	52.048	323619.83	0.7183	P	0.3
5	☐	125.000	135.272	798063.95	1.8663	P	1.3
6	☐	250.000	261.351	1503452.22	3.6055	P	0.5
7	☐	500.000	502.556	2813185.31	6.9327	P	1.1
8	☐	1000.000	994.498	5681528.67	13.7187	A	0.4
9	☐			8680.46	0.0218	P	3.1

$$y = 0.0138 * x + 3.2176E-004$$

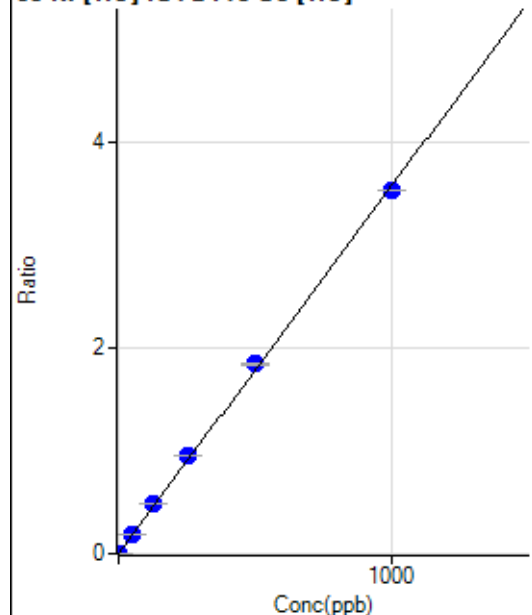
R = 0.9999

DL = 0.002596

BEC = 0.02333

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	481.13	0.0010	P	14.6
2	☐	0.100	0.074	592.24	0.0013	P	8.9
3	☐	1.000	1.039	2142.41	0.0048	P	4.3
4	☐	50.000	52.950	85874.10	0.1906	P	0.2
5	☐	125.000	137.424	210829.92	0.4930	P	1.1
6	☐	250.000	264.883	395861.97	0.9493	P	0.3
7	☐	500.000	515.338	749039.09	1.8460	P	0.9
8	☐	1000.000	986.910	1463683.69	3.5342	P	0.1
9	☐			2165.75	0.0054	P	1.7

$$y = 0.0036 * x + 0.0010$$

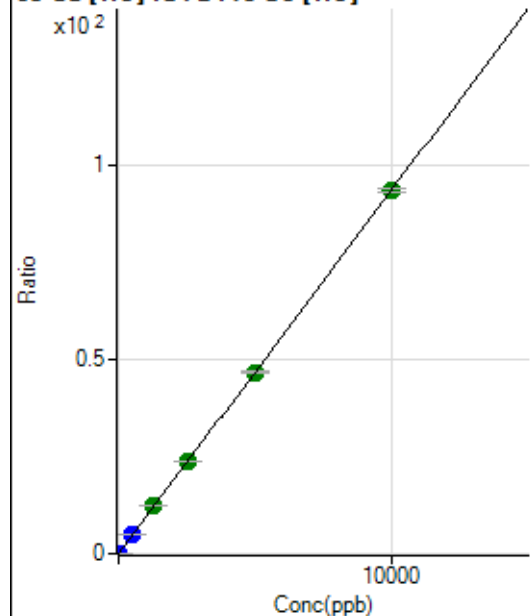
$$R = 0.9997$$

$$DL = 0.128$$

$$BEC = 0.2913$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	737.81	0.0016	P	6.3
2	☐	0.200	0.191	1531.22	0.0034	P	5.1
3	☐	2.000	2.212	10043.59	0.0223	P	2.2
4	☐	500.000	518.504	2188958.94	4.8587	P	0.5
5	☐	1250.000	1317.019	5276510.44	12.3387	A	0.8
6	☐	2500.000	2556.098	9985012.77	23.9457	A	0.3
7	☐	5000.000	4992.748	18976090.83	46.7708	A	1.5
8	☐	10000.000	9980.299	38719710.26	93.4914	A	1.1
9	☐			6274.78	0.0158	P	7.8

$$y = 0.0094 * x + 0.0016$$

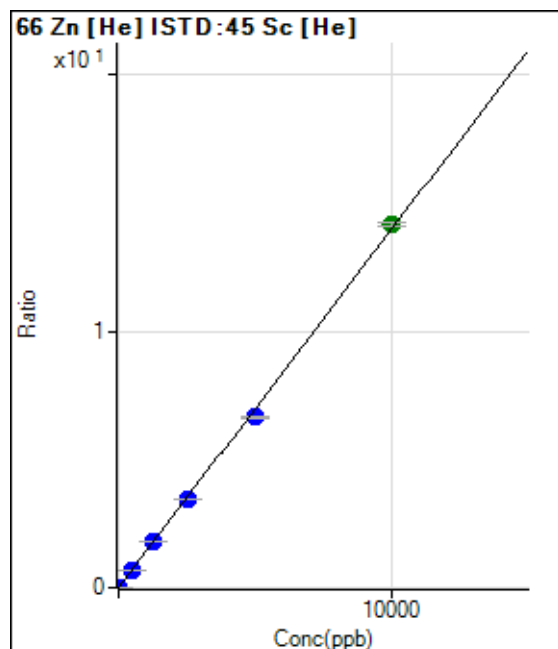
$$R = 1.0000$$

$$DL = 0.03235$$

$$BEC = 0.1705$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	562.24	0.0012	P	11.4
2	☐	0.200	0.144	641.13	0.0014	P	10.9
3	☐	2.000	1.935	1763.47	0.0039	P	7.3
4	☐	500.000	485.437	306146.69	0.6795	P	0.3
5	☐	1250.000	1268.281	758343.23	1.7734	P	1.0
6	☐	2500.000	2452.733	1429585.33	3.4284	P	0.3
7	☐	5000.000	4768.639	2703937.05	6.6643	P	1.3
8	☐	10000.000	10125.940	5860216.65	14.1499	A	0.9
9	☐			3885.03	0.0098	P	3.8

$$y = 0.0014 * x + 0.0012$$

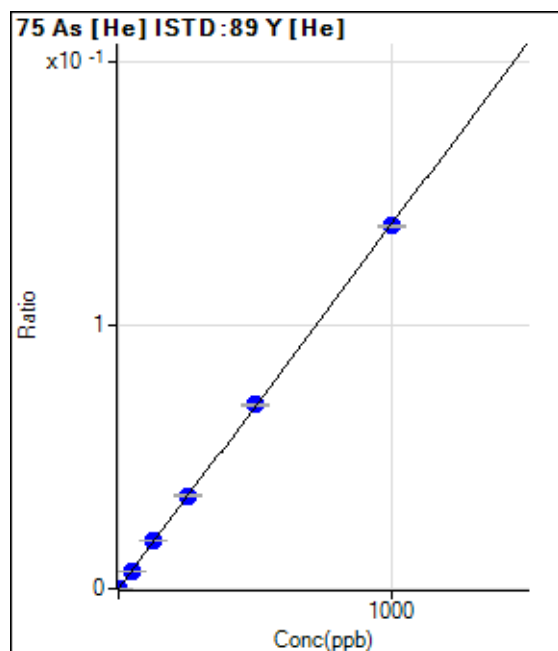
$$R = 0.9996$$

$$DL = 0.2991$$

$$BEC = 0.8716$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	8.0
2	☐	0.100	0.098	69.14	0.0000	P	9.4
3	☐	1.000	1.028	410.50	0.0002	P	4.9
4	☐	50.000	49.151	18374.04	0.0068	P	0.5
5	☐	125.000	130.722	46543.84	0.0181	P	1.4
6	☐	250.000	255.583	89457.39	0.0353	P	1.3
7	☐	500.000	504.604	172051.14	0.0697	P	1.1
8	☐	1000.000	995.630	346899.44	0.1376	P	0.4
9	☐			140.74	0.0001	P	8.0

$$y = 1.3815E-004 * x + 1.2253E-005$$

$$R = 1.0000$$

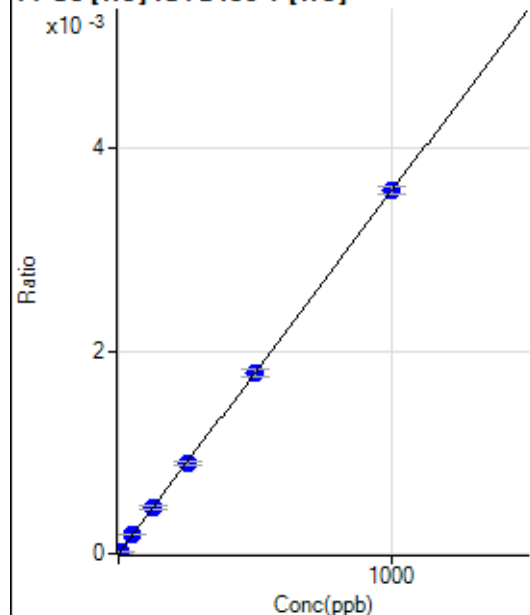
$$DL = 0.02131$$

$$BEC = 0.08869$$

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	0.694	6.67	0.0000	P	86.6
3	☐	5.000	4.201	40.00	0.0000	P	28.8
4	☐	50.000	51.603	498.90	0.0002	P	3.9
5	☐	125.000	128.538	1184.52	0.0005	P	9.1
6	☐	250.000	249.045	2257.99	0.0009	P	6.1
7	☐	500.000	498.475	4402.96	0.0018	P	4.4
8	☐	1000.000	1000.483	9030.72	0.0036	P	2.1
9	☐			4.45	0.0000	P	86.6

$$y = 3.5794\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 1.0000$$

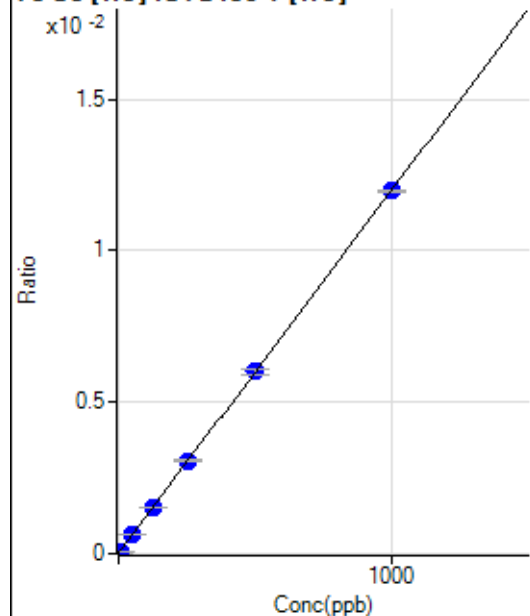
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	48.15	0.0000	P	21.2
2	☐	0.500	0.991	79.01	0.0000	P	4.6
3	☐	5.000	4.565	192.60	0.0001	P	20.3
4	☐	50.000	51.946	1727.90	0.0006	P	1.5
5	☐	125.000	124.867	3896.85	0.0015	P	0.5
6	☐	250.000	255.476	7792.89	0.0031	P	1.1
7	☐	500.000	499.751	14808.89	0.0060	P	2.3
8	☐	1000.000	998.677	30202.97	0.0120	P	0.3
9	☐			57.41	0.0000	P	29.5

$$y = 1.1975\text{E-}005 * x + 1.7666\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.9397$$

$$BEC = 1.475$$

Weight: <None>

Min Conc: 0

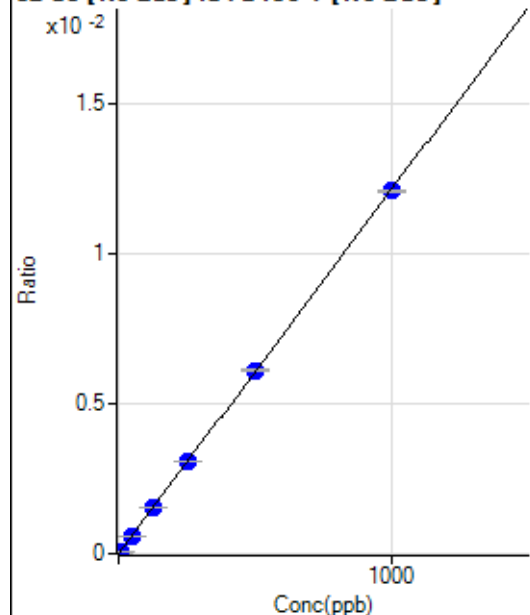
81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40445.27		P	3.7
2	☐			42158.06		P	1.4
3	☐			42469.61		P	1.9
4	☐			43825.31		P	1.4
5	☐			42372.49		P	1.6
6	☐			39079.76		P	1.2
7	☐			38554.73		P	3.3
8	☐			38698.85		P	1.6
9	☐			37550.92		P	2.2

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.74		P	56.8
2	☐			66.74		P	60.6
3	☐			46.71		P	12.4
4	☐			80.08		P	54.5
5	☐			23.36		P	24.7
6	☐			56.72		P	50.9
7	☐			86.76		P	13.3
8	☐			70.07		P	49.5
9	☐			76.75		P	27.2

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-6.22	0.0000	P	-730.
2	☐	0.500	0.369	90.25	0.0000	P	25.0
3	☐	5.000	4.951	1314.29	0.0001	P	4.5
4	☐	50.000	49.536	13273.41	0.0006	P	0.4
5	☐	125.000	129.008	33267.89	0.0016	P	0.1
6	☐	250.000	255.336	64685.27	0.0031	P	0.1
7	☐	500.000	504.086	124286.20	0.0061	P	0.5
8	☐	1000.000	996.146	253778.36	0.0121	P	0.5
9	☐			191.85	0.0000	P	16.0

$$y = 1.2117E-005 * x - 2.7286E-007$$

$$R = 1.0000$$

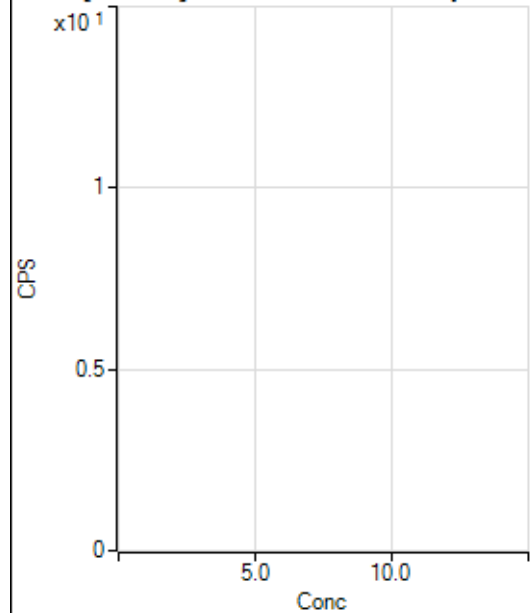
$$DL = 0.4935$$

$$BEC = -0.02252$$

Weight: <None>

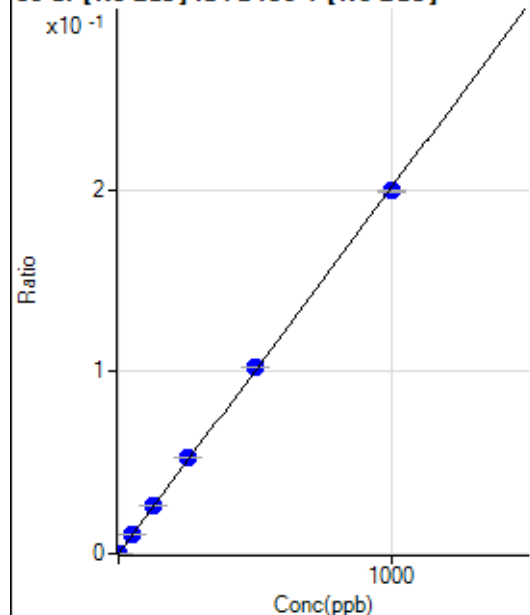
Min Conc: 0

83 Kr [No Gas] No available calibration points



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			347.79		P	11.7
2	☐			378.90		P	16.8
3	☐			338.90		P	15.9
4	☐			365.57		P	0.5
5	☐			361.12		P	12.9
6	☐			323.34		P	21.3
7	☐			365.57		P	5.0
8	☐			358.90		P	8.4
9	☐			437.79		P	5.1

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	508.36	0.0000	P	7.0
2	☐	0.100	0.121	1013.96	0.0000	P	12.0
3	☐	1.000	0.986	4873.23	0.0002	P	5.1
4	☐	50.000	50.707	226356.14	0.0102	P	0.5
5	☐	125.000	131.804	565276.11	0.0266	P	0.4
6	☐	250.000	260.715	1097911.73	0.0525	P	0.3
7	☐	500.000	510.826	2093082.25	0.1029	P	0.4
8	☐	1000.000	991.023	4195220.97	0.1995	P	0.8
9	☐			22320.90	0.0012	P	4.1

$$y = 2.0132E-004 * x + 2.2982E-005$$

$$R = 0.9998$$

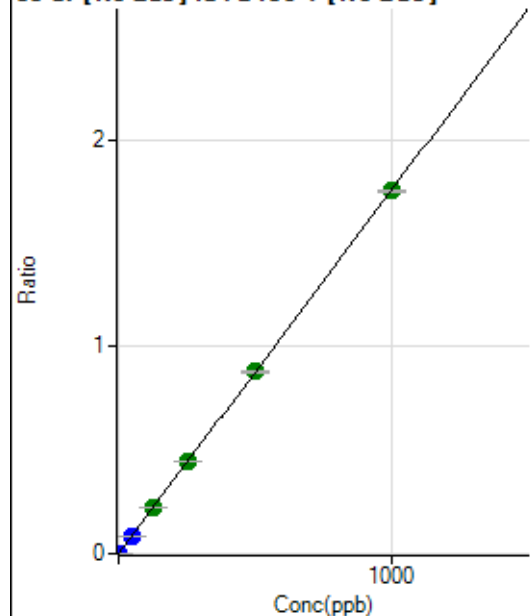
$$DL = 0.02412$$

$$BEC = 0.1142$$

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	541.70	0.0000	P	22.0
2	☐	0.100	0.093	4025.75	0.0002	P	6.6
3	☐	1.000	0.972	38118.09	0.0017	P	2.4
4	☐	50.000	49.940	1941833.90	0.0878	P	0.3
5	☐	125.000	128.364	4800903.97	0.2256	A	1.1
6	☐	250.000	252.812	9288191.79	0.4442	A	0.6
7	☐	500.000	501.429	17928059.26	0.8811	A	0.7
8	☐	1000.000	998.165	36874799.09	1.7539	A	0.7
9	☐			189148.13	0.0102	P	1.7

$$y = 0.0018 * x + 2.4512E-005$$

$$R = 1.0000$$

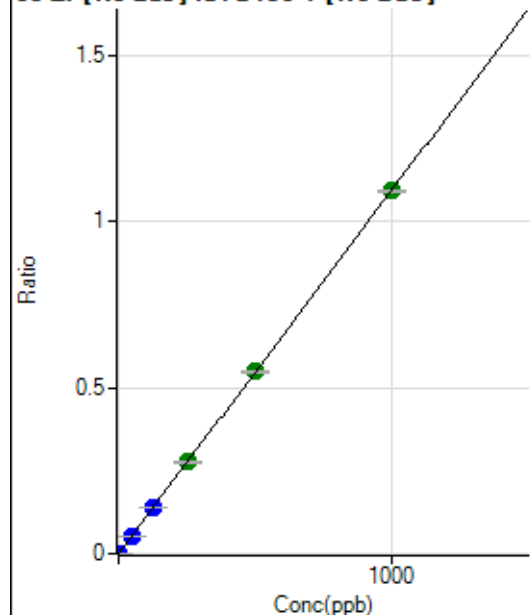
$$DL = 0.009224$$

$$BEC = 0.01395$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1030.64	0.0000	P	7.2
2	☐	0.100	0.083	2944.85	0.0001	P	3.4
3	☐	1.000	0.852	21541.90	0.0010	P	1.3
4	☐	50.000	48.520	1175546.07	0.0531	P	0.3
5	☐	125.000	125.634	2926974.46	0.1375	P	0.3
6	☐	250.000	252.300	5772858.90	0.2761	A	1.4
7	☐	500.000	500.527	11145089.83	0.5477	A	0.3
8	☐	1000.000	999.157	22986268.74	1.0933	A	0.3
9	☐			9653.66	0.0005	P	15.0

$$y = 0.0011 * x + 4.6579E-005$$

$$R = 1.0000$$

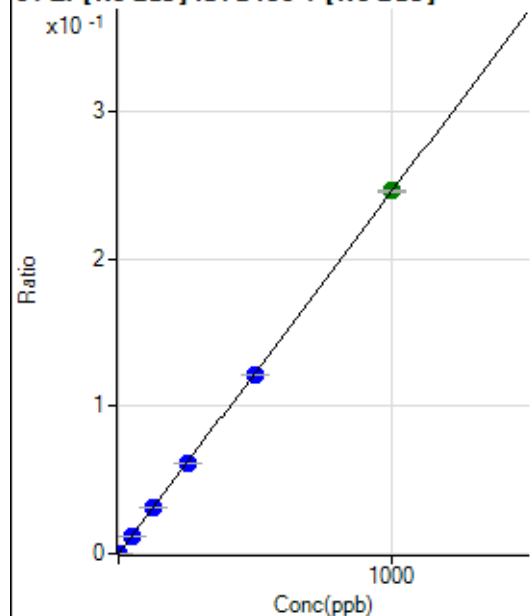
$$DL = 0.009217$$

$$BEC = 0.04257$$

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	275.02	0.0000	P	21.9
2	☐	0.100	0.065	608.37	0.0000	P	21.9
3	☐	1.000	0.805	4620.37	0.0002	P	2.0
4	☐	50.000	48.375	262784.85	0.0119	P	0.1
5	☐	125.000	128.049	668826.36	0.0314	P	0.8
6	☐	250.000	250.438	1284634.90	0.0614	P	0.9
7	☐	500.000	492.816	2460038.40	0.1209	P	0.2
8	☐	1000.000	1003.183	5173783.75	0.2461	A	0.9
9	☐			2136.36	0.0001	P	21.7

$$y = 2.4529E-004 * x + 1.2436E-005$$

$$R = 1.0000$$

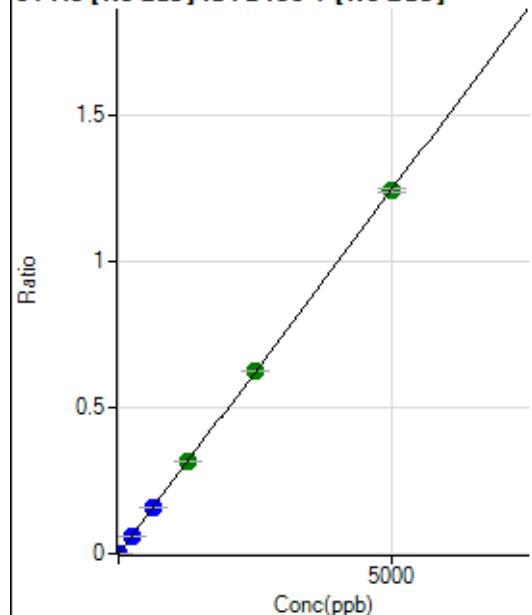
$$DL = 0.03335$$

$$BEC = 0.0507$$

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	530.59	0.0000	P	9.2
2	☐	0.500	0.438	2855.97	0.0001	P	3.5
3	☐	5.000	4.575	25609.86	0.0012	P	2.5
4	☐	250.000	245.694	1354488.78	0.0612	P	0.6
5	☐	625.000	630.922	3345534.36	0.1572	P	0.9
6	☐	1250.000	1262.492	6575851.06	0.3145	A	0.7
7	☐	2500.000	2516.905	12758191.08	0.6270	A	0.2
8	☐	5000.000	4987.900	26123179.58	1.2425	A	1.0
9	☐			12175.18	0.0007	P	15.7

$$y = 2.4910\text{E-}004 * x + 2.3983\text{E-}005$$

$$R = 1.0000$$

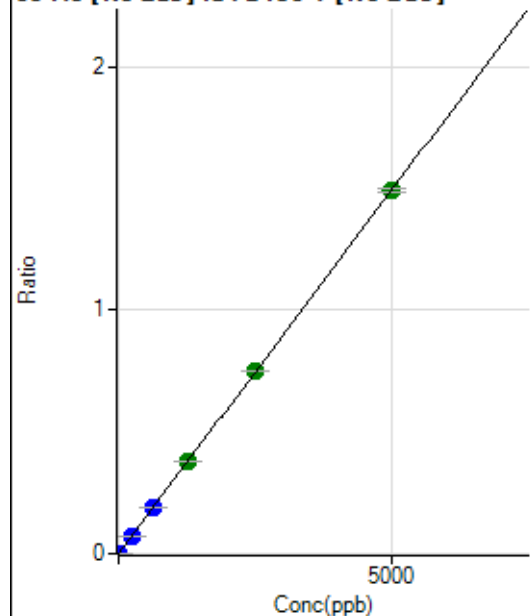
$$DL = 0.02652$$

$$BEC = 0.09628$$

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	225.01	0.0000	P	3.5
2	☐	0.500	0.444	3058.79	0.0001	P	2.3
3	☐	5.000	4.694	31020.78	0.0014	P	3.9
4	☐	250.000	247.649	1634667.62	0.0739	P	0.8
5	☐	625.000	631.809	4012153.48	0.1885	P	0.5
6	☐	1250.000	1262.939	7878063.89	0.3768	A	0.6
7	☐	2500.000	2507.705	15223461.45	0.7481	A	0.3
8	☐	5000.000	4992.180	31312795.49	1.4893	A	0.9
9	☐			13807.31	0.0007	P	11.5

$$y = 2.9833\text{E-}004 * x + 1.0172\text{E-}005$$

$$R = 1.0000$$

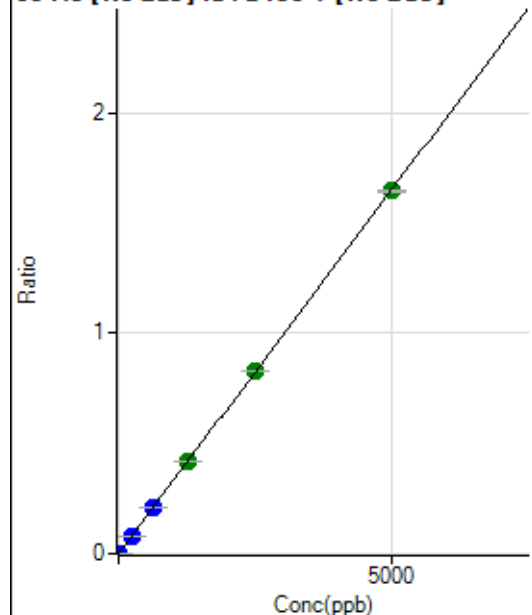
$$DL = 0.003548$$

$$BEC = 0.0341$$

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	319.46	0.0000	P	7.8
2	☐	0.500	0.428	3333.88	0.0002	P	5.9
3	☐	5.000	4.796	35110.72	0.0016	P	2.2
4	☐	250.000	248.135	1810793.83	0.0819	P	0.8
5	☐	625.000	627.411	4404808.26	0.2069	P	0.2
6	☐	1250.000	1268.550	8748061.31	0.4184	A	0.4
7	☐	2500.000	2513.601	16868999.51	0.8290	A	0.7
8	☐	5000.000	4988.354	34590576.82	1.6452	A	0.6
9	☐			30447.25	0.0016	P	5.8

$$y = 3.2981\text{E-}004 * x + 1.4442\text{E-}005$$

$$R = 1.0000$$

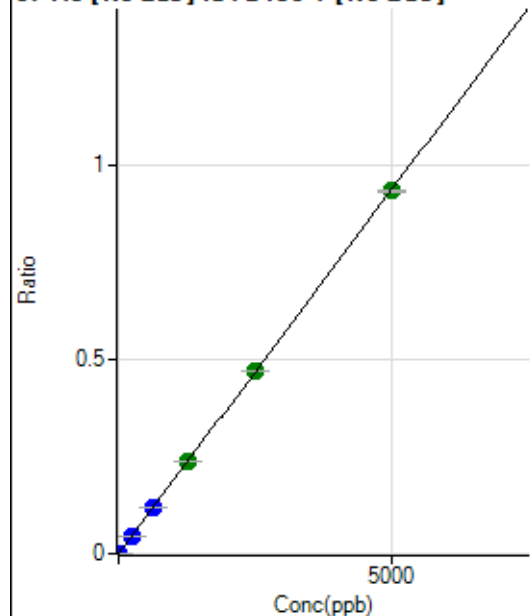
$$DL = 0.01027$$

$$BEC = 0.04379$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144.45	0.0000	P	9.3
2	☐	0.500	0.447	1939.11	0.0001	P	7.3
3	☐	5.000	4.792	19914.46	0.0009	P	3.0
4	☐	250.000	247.179	1025817.03	0.0464	P	1.1
5	☐	625.000	632.593	2525726.21	0.1187	P	0.4
6	☐	1250.000	1268.102	4973396.99	0.2379	A	0.8
7	☐	2500.000	2516.509	9605266.62	0.4720	A	0.4
8	☐	5000.000	4986.412	19664926.83	0.9353	A	0.5
9	☐			8803.07	0.0005	P	10.9

$$y = 1.8757\text{E-}004 * x + 6.5324\text{E-}006$$

$$R = 1.0000$$

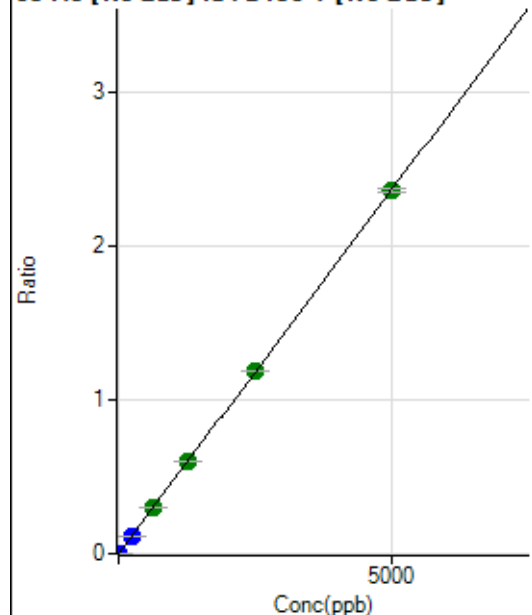
$$DL = 0.009748$$

$$BEC = 0.03483$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	361.13	0.0000	P	19.1
2	☐	0.500	0.457	4984.42	0.0002	P	4.9
3	☐	5.000	4.771	49991.69	0.0023	P	1.4
4	☐	250.000	248.096	2595139.47	0.1173	P	0.8
5	☐	625.000	637.388	6413654.09	0.3014	A	1.6
6	☐	1250.000	1260.911	12464162.26	0.5961	A	0.7
7	☐	2500.000	2512.689	24172785.79	1.1879	A	0.2
8	☐	5000.000	4989.475	49594775.07	2.3589	A	1.0
9	☐			20774.28	0.0011	P	11.8

$$y = 4.7277\text{E-}004 * x + 1.6317\text{E-}005$$

$$R = 1.0000$$

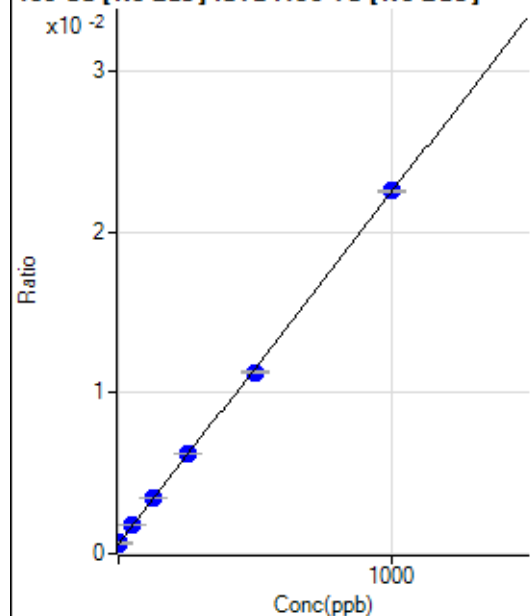
$$DL = 0.01979$$

$$BEC = 0.03451$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11163.15	0.0006	P	1.8
2	☐	0.100	-0.098	10721.14	0.0006	P	0.5
3	☐	1.000	1.880	11630.24	0.0007	P	3.7
4	☐	50.000	51.976	31371.64	0.0018	P	2.0
5	☐	125.000	130.614	60438.01	0.0035	P	2.0
6	☐	250.000	255.579	107696.22	0.0062	P	0.4
7	☐	500.000	488.479	195031.05	0.0113	P	0.8
8	☐	1000.000	1003.564	395123.58	0.0225	P	0.7
9	☐			9848.22	0.0006	P	3.9

$$y = 2.1833\text{E-}005 * x + 6.2029\text{E-}004$$

$$R = 0.9999$$

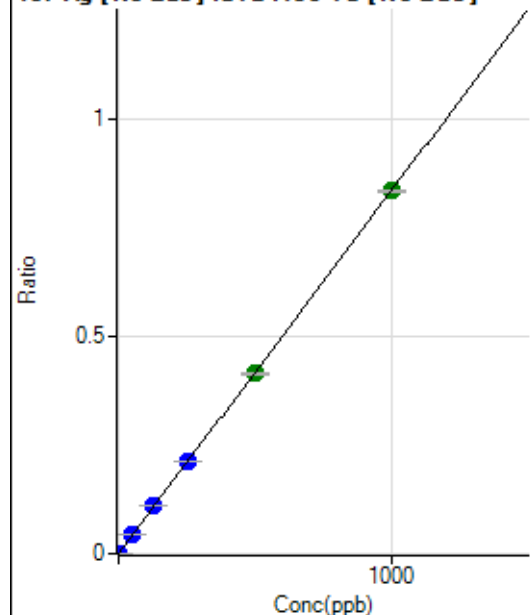
$$DL = 1.575$$

$$BEC = 28.41$$

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	219.46	0.0000	P	5.9
2	☐	0.100	0.095	1583.49	0.0001	P	3.2
3	☐	1.000	1.021	15222.60	0.0009	P	4.8
4	☐	50.000	53.197	795609.51	0.0445	P	1.1
5	☐	125.000	133.754	1947944.51	0.1119	P	0.8
6	☐	250.000	254.652	3700032.03	0.2130	P	1.2
7	☐	500.000	496.505	7178251.55	0.4154	A	0.5
8	☐	1000.000	999.330	14661265.09	0.8360	A	0.6
9	☐			4284.14	0.0003	P	9.7

$$y = 8.3655E-004 * x + 1.2195E-005$$

$$R = 0.9999$$

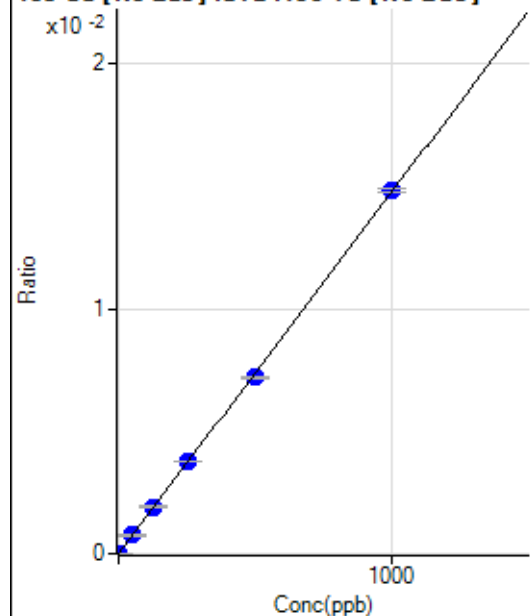
$$DL = 0.002573$$

$$BEC = 0.01458$$

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	27.78	0.0000	P	17.0
2	☐	0.100	0.086	48.61	0.0000	P	62.2
3	☐	1.000	0.876	254.17	0.0000	P	7.2
4	☐	50.000	50.664	13387.15	0.0007	P	1.4
5	☐	125.000	129.681	33325.47	0.0019	P	2.4
6	☐	250.000	256.832	65835.46	0.0038	P	0.2
7	☐	500.000	487.695	124364.67	0.0072	P	0.6
8	☐	1000.000	1003.826	259712.12	0.0148	P	1.1
9	☐			245.84	0.0000	P	17.2

$$y = 1.4752E-005 * x + 1.5430E-006$$

$$R = 0.9999$$

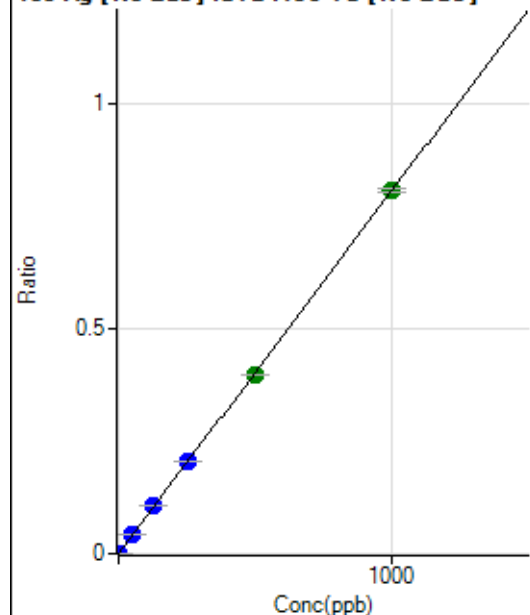
$$DL = 0.05349$$

$$BEC = 0.1046$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	52.3
2	☐	0.100	0.104	1533.49	0.0001	P	8.0
3	☐	1.000	1.009	14388.42	0.0008	P	1.2
4	☐	50.000	53.542	771809.46	0.0432	P	0.9
5	☐	125.000	133.329	1871737.91	0.1075	P	0.4
6	☐	250.000	254.426	3563602.81	0.2052	P	1.1
7	☐	500.000	494.125	6886699.98	0.3985	A	0.4
8	☐	1000.000	1000.613	14151229.83	0.8069	A	1.0
9	☐			4211.93	0.0003	P	16.5

$$y = 8.0643\text{E-}004 * x + 4.4793\text{E-}006$$

$$R = 0.9999$$

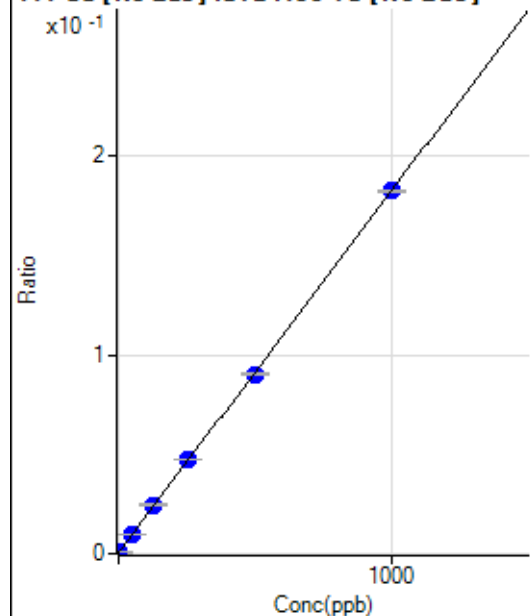
$$DL = 0.008717$$

$$BEC = 0.005554$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7819.76	0.0004	P	1.8
2	☐	0.100	0.077	7780.51	0.0004	P	0.6
3	☐	1.000	1.055	11021.97	0.0006	P	2.6
4	☐	50.000	52.487	178641.76	0.0100	P	0.9
5	☐	125.000	132.656	428174.88	0.0246	P	0.9
6	☐	250.000	258.580	825527.92	0.0475	P	1.5
7	☐	500.000	493.801	1561953.64	0.0904	P	0.7
8	☐	1000.000	999.873	3201492.20	0.1826	P	0.9
9	☐			8043.98	0.0005	P	4.1

$$y = 1.8214\text{E-}004 * x + 4.3452\text{E-}004$$

$$R = 0.9999$$

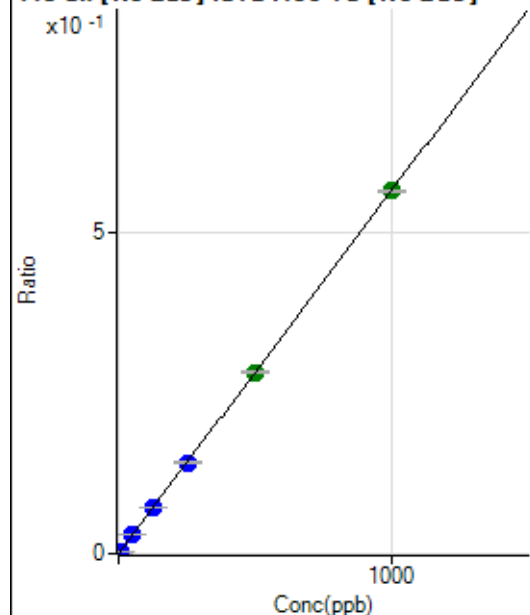
$$DL = 0.1281$$

$$BEC = 2.386$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850.06	0.0000	P	9.2
2	☐	0.500	0.448	5220.67	0.0003	P	3.0
3	☐	5.000	4.802	48657.38	0.0028	P	1.6
4	☐	50.000	50.785	514927.03	0.0288	P	1.2
5	☐	125.000	128.794	1270617.37	0.0730	P	0.9
6	☐	250.000	250.269	2462616.37	0.1418	P	1.4
7	☐	500.000	500.080	4895568.47	0.2833	A	0.5
8	☐	1000.000	999.380	9927503.35	0.5661	A	0.4
9	☐			4823.25	0.0003	P	13.3

$$y = 5.6637\text{E-}004 * x + 4.7227\text{E-}005$$

$$R = 1.0000$$

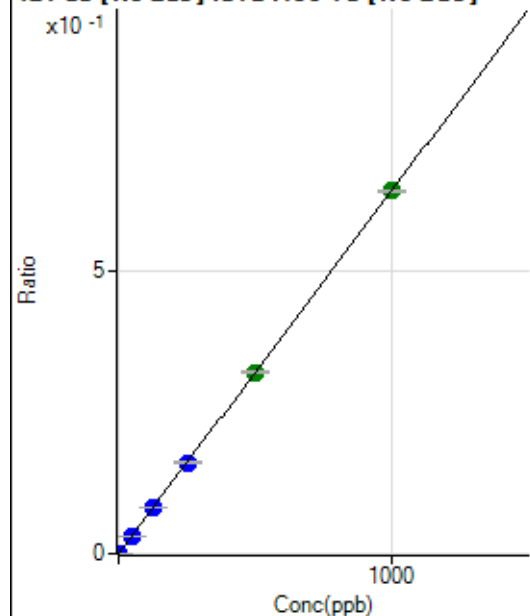
$$DL = 0.02307$$

$$BEC = 0.08339$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	12.8
2	☐	0.200	0.167	1989.12	0.0001	P	8.6
3	☐	2.000	1.859	21080.41	0.0012	P	2.5
4	☐	50.000	49.817	570853.32	0.0319	P	0.7
5	☐	125.000	128.112	1429567.14	0.0821	P	0.9
6	☐	250.000	250.518	2788886.56	0.1606	P	1.5
7	☐	500.000	498.506	5522358.28	0.3195	A	1.0
8	☐	1000.000	1000.238	11243938.36	0.6411	A	0.4
9	☐			12077.93	0.0008	P	11.8

$$y = 6.4097\text{E-}004 * x + 7.4109\text{E-}006$$

$$R = 1.0000$$

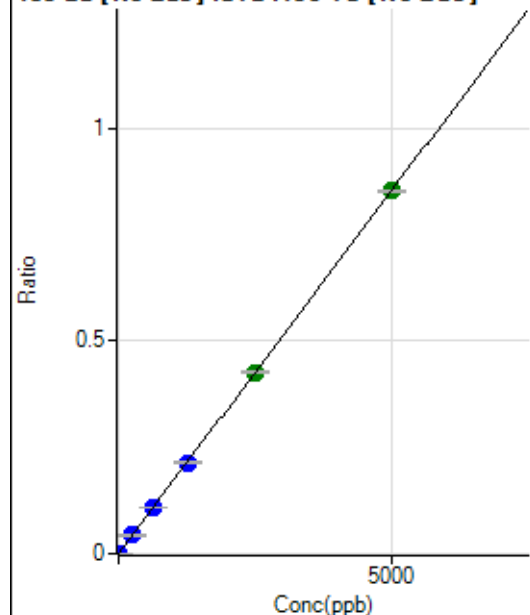
$$DL = 0.004439$$

$$BEC = 0.01156$$

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	130.56	0.0000	P	13.5
2	☐	1.000	0.960	2964.33	0.0002	P	2.9
3	☐	10.000	9.515	28644.23	0.0016	P	0.8
4	☐	250.000	251.875	767306.81	0.0429	P	1.0
5	☐	625.000	642.834	1907058.40	0.1096	P	1.0
6	☐	1250.000	1251.427	3703897.87	0.2133	P	1.6
7	☐	2500.000	2495.807	7350517.53	0.4253	A	1.4
8	☐	5000.000	4999.418	14941641.83	0.8520	A	0.5
9	☐			24834.11	0.0016	P	6.9

$$y = 1.7042\text{E-}004 * x + 7.2562\text{E-}006$$

$$R = 1.0000$$

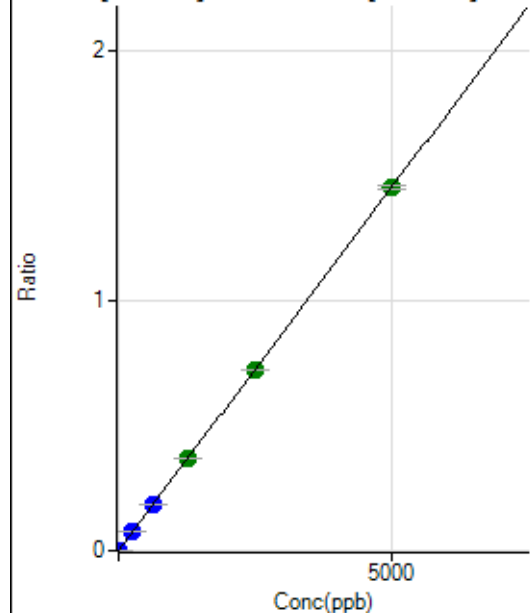
$$DL = 0.01729$$

$$BEC = 0.04258$$

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	200.01	0.0000	P	15.1
2	☐	1.000	0.934	4903.84	0.0003	P	2.5
3	☐	10.000	9.724	49921.52	0.0028	P	0.6
4	☐	250.000	255.891	1330053.02	0.0744	P	0.5
5	☐	625.000	648.157	3280771.12	0.1885	P	0.1
6	☐	1250.000	1273.046	6428668.24	0.3702	A	1.6
7	☐	2500.000	2488.938	12507021.29	0.7237	A	0.8
8	☐	5000.000	4996.581	25478307.34	1.4528	A	1.0
9	☐			42683.40	0.0028	P	3.2

$$y = 2.9076\text{E-}004 * x + 1.1115\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01735$$

$$BEC = 0.03823$$

Weight: <None>

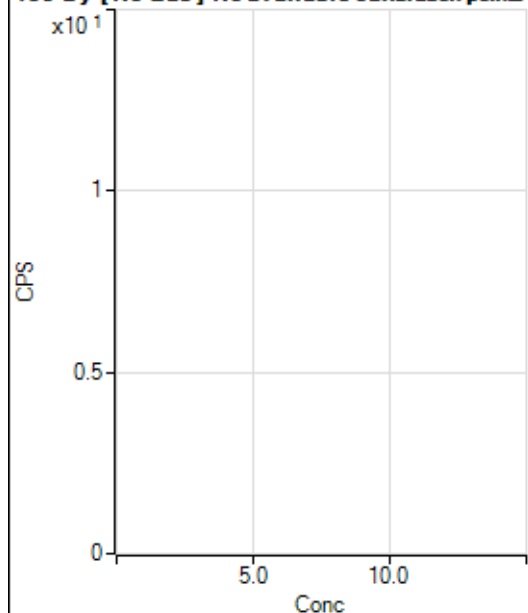
Min Conc: 0

150 Nd [No Gas] No available calibration points

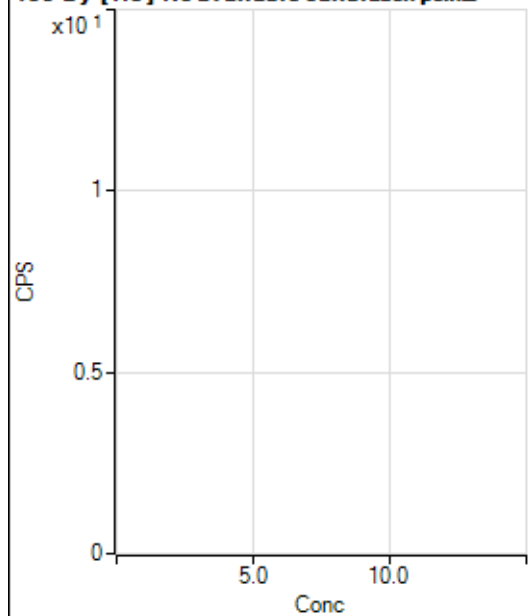
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	86.6
2	☐			4.45		P	86.6
3	☐			15.56		P	65.5
4	☐			106.67		P	33.1
5	☐			262.23		P	11.5
6	☐			486.69		P	2.7
7	☐			873.39		P	4.0
8	☐			1704.61		P	7.4
9	☐			62.23		P	22.3

150 Nd [He] No available calibration points

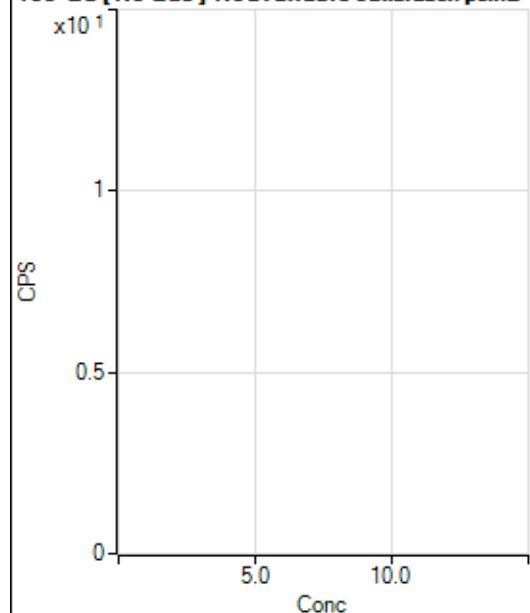
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			3.33		P	100.1
3	☐			1.11		P	173.2
4	☐			5.56		P	34.7
5	☐			32.22		P	72.7
6	☐			28.89		P	13.3
7	☐			82.22		P	12.4
8	☐			118.89		P	20.3
9	☐			15.56		P	75.3

156 Dy [No Gas] No available calibration points

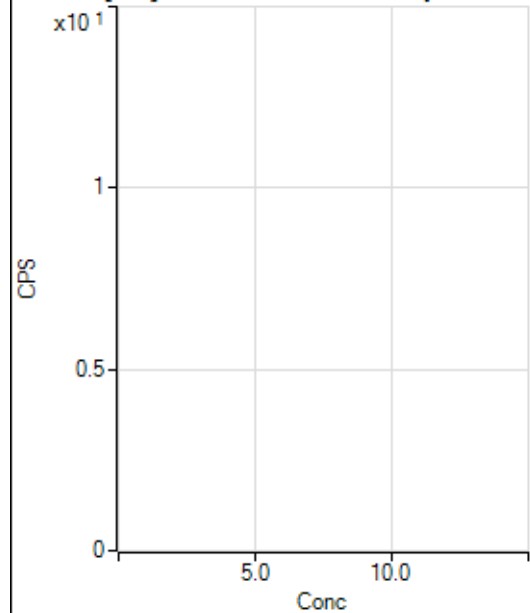
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.45		P	39.0
2	☐			38.89		P	12.4
3	☐			52.78		P	71.2
4	☐			55.56		P	22.9
5	☐			119.45		P	28.2
6	☐			186.12		P	6.8
7	☐			255.57		P	6.8
8	☐			447.25		P	11.2
9	☐			991.75		P	17.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	109.0
2	☐			20.00		P	44.1
3	☐			18.89		P	36.7
4	☐			33.33		P	10.0
5	☐			42.22		P	29.9
6	☐			108.89		P	30.2
7	☐			205.56		P	13.1
8	☐			351.12		P	5.6
9	☐			385.57		P	10.8

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

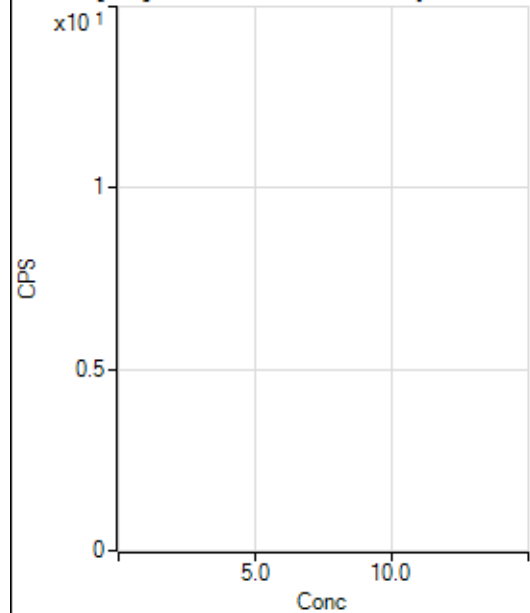
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			158.34		P	22.9
2	☐			144.45		P	18.5
3	☐			150.01		P	30.9
4	☐			150.01		P	29.4
5	☐			133.34		P	45.1
6	☐			169.45		P	41.8
7	☐			308.35		P	9.7
8	☐			363.91		P	7.0
9	☐			1016.75		P	3.0

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			225.56		P	16.8
2	☐			248.90		P	15.9
3	☐			264.45		P	14.2
4	☐			246.67		P	1.4
5	☐			270.01		P	7.5
6	☐			275.56		P	8.8
7	☐			292.23		P	8.6
8	☐			363.34		P	12.6
9	☐			706.70		P	8.6

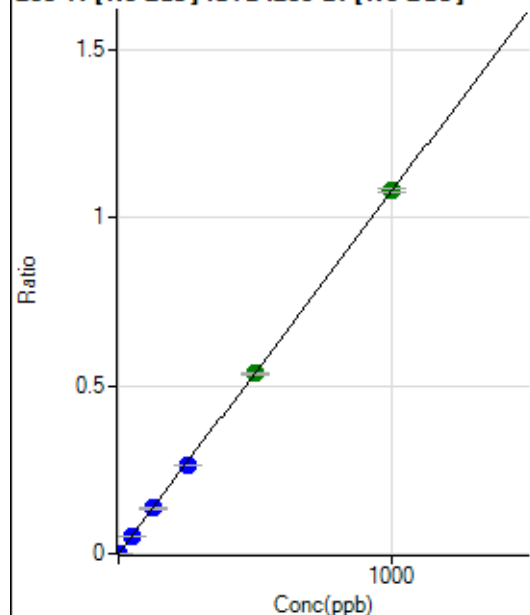
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			116.67		P	24.7
2	☐			111.12		P	18.9
3	☐			69.45		P	13.9
4	☐			83.34		P	26.5
5	☐			86.11		P	22.4
6	☐			102.78		P	33.8
7	☐			127.78		P	15.1
8	☐			136.12		P	33.7
9	☐			141.67		P	5.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.44		P	29.6
2	☐			33.33		P	10.0
3	☐			32.22		P	33.3
4	☐			44.44		P	11.5
5	☐			27.78		P	30.2
6	☐			47.78		P	14.5
7	☐			51.11		P	10.0
8	☐			63.33		P	15.8
9	☐			83.34		P	16.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	177.79	0.0000	P	20.7
2	☐	0.100	0.082	1075.09	0.0001	P	5.9
3	☐	1.000	0.893	10079.22	0.0010	P	5.7
4	☐	50.000	48.334	535883.75	0.0521	P	0.5
5	☐	125.000	124.989	1342444.42	0.1346	P	0.6
6	☐	250.000	246.083	2613383.55	0.2650	P	0.6
7	☐	500.000	498.591	5171475.29	0.5370	A	0.9
8	☐	1000.000	1001.768	10391982.70	1.0788	A	1.2
9	☐			1950.23	0.0003	P	25.1

$$y = 0.0011 * x + 1.6806E-005$$

$$R = 1.0000$$

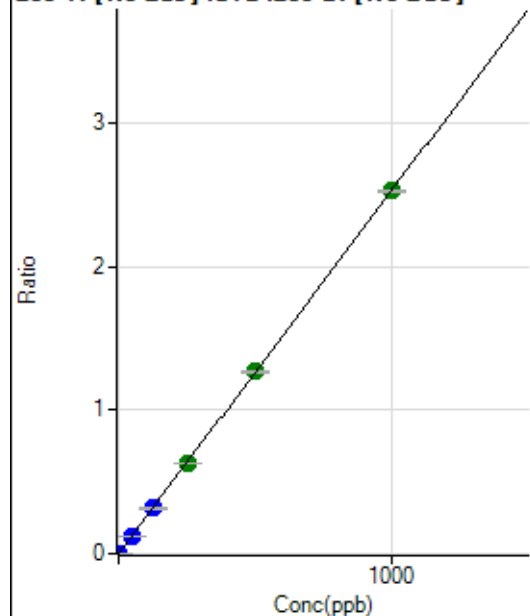
$$DL = 0.009674$$

$$BEC = 0.01561$$

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	402.80	0.0000	P	20.3
2	☐	0.100	0.087	2653.18	0.0003	P	5.1
3	☐	1.000	0.934	24754.40	0.0024	P	0.9
4	☐	50.000	48.890	1272821.47	0.1237	P	0.5
5	☐	125.000	124.663	3144185.57	0.3153	P	0.3
6	☐	250.000	249.226	6214950.70	0.6303	A	1.1
7	☐	500.000	501.430	12212791.59	1.2681	A	0.5
8	☐	1000.000	999.576	24349881.79	2.5278	A	0.7
9	☐			4576.00	0.0006	P	16.4

$$y = 0.0025 * x + 3.8077E-005$$

$$R = 1.0000$$

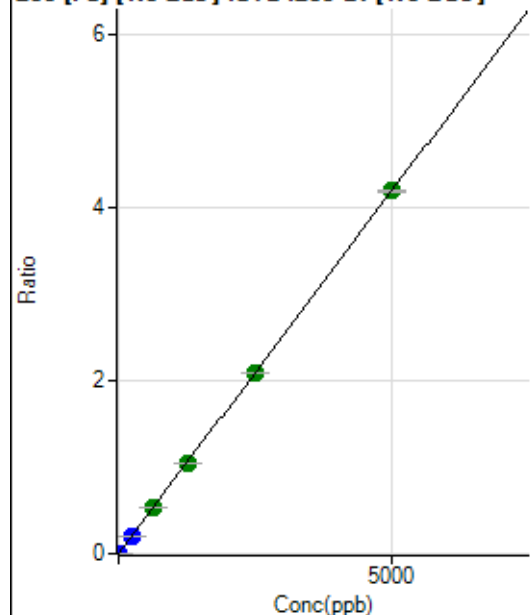
$$DL = 0.009168$$

$$BEC = 0.01506$$

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	444.47	0.0000	P	11.4
2	☐	0.100	0.081	1127.86	0.0001	P	5.6
3	☐	1.000	0.931	8488.12	0.0008	P	1.6
4	☐	250.000	247.625	2139305.95	0.2079	P	0.6
5	☐	625.000	627.140	5249232.47	0.5264	A	0.4
6	☐	1250.000	1249.022	10336767.36	1.0483	A	1.1
7	☐	2500.000	2491.447	20137859.71	2.0910	A	0.8
8	☐	5000.000	5004.372	40458204.61	4.2000	A	0.6
9	☐			11351.47	0.0015	P	14.1

$$y = 8.3926E-004 * x + 4.2060E-005$$

$$R = 1.0000$$

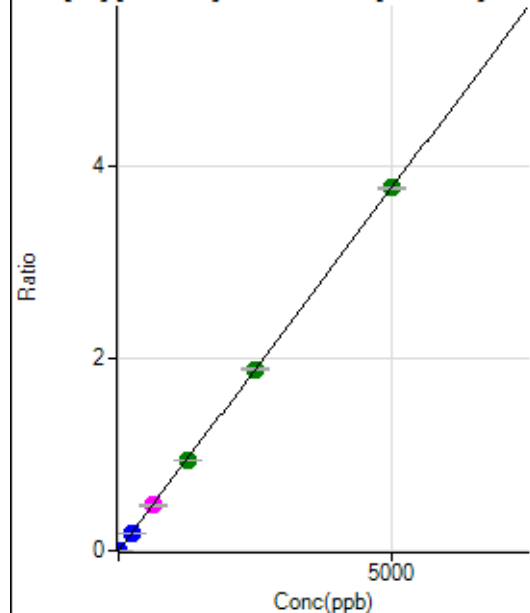
$$DL = 0.01718$$

$$BEC = 0.05011$$

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	411.13	0.0000	P	27.4
2	☐	0.100	0.081	1026.00	0.0001	P	5.0
3	☐	1.000	0.920	7550.50	0.0007	P	2.0
4	☐	250.000	245.602	1905428.52	0.1851	P	0.3
5	☐	625.000	623.191	4684145.47	0.4697	M	1.2
6	☐	1250.000	1248.346	9277875.32	0.9409	A	0.2
7	☐	2500.000	2500.096	18146321.94	1.8843	A	1.0
8	☐	5000.000	5000.812	36306693.40	3.7690	A	0.3
9	☐			10181.94	0.0013	P	11.5

$$y = 7.5366E-004 * x + 3.8927E-005$$

$$R = 1.0000$$

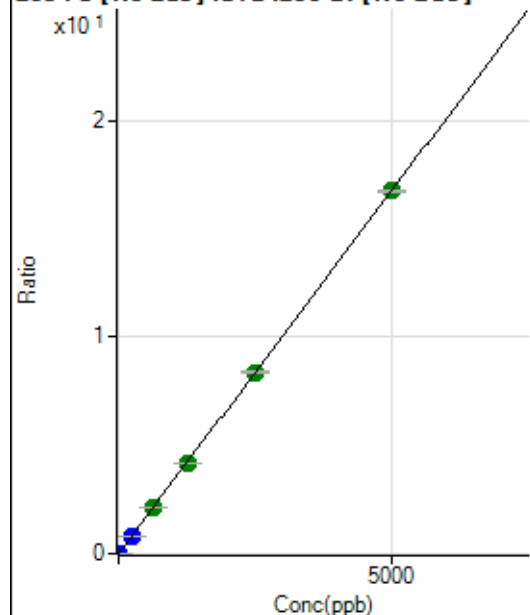
$$DL = 0.04249$$

$$BEC = 0.05165$$

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	1844.55	0.0002	P	10.5
2	☐	0.100	0.081	4568.96	0.0004	P	4.5
3	☐	1.000	0.944	34360.90	0.0033	P	2.1
4	☐	250.000	245.692	8465423.16	0.8225	P	0.4
5	☐	625.000	624.176	20835784.09	2.0894	A	0.4
6	☐	1250.000	1248.033	41193813.54	4.1775	A	0.3
7	☐	2500.000	2499.399	80569471.48	8.3660	A	0.8
8	☐	5000.000	5001.111	161253075.8	16.7396	A	0.4
9	☐			45832.33	0.0060	P	12.6

$$y = 0.0033 * x + 1.7454E-004$$

$$R = 1.0000$$

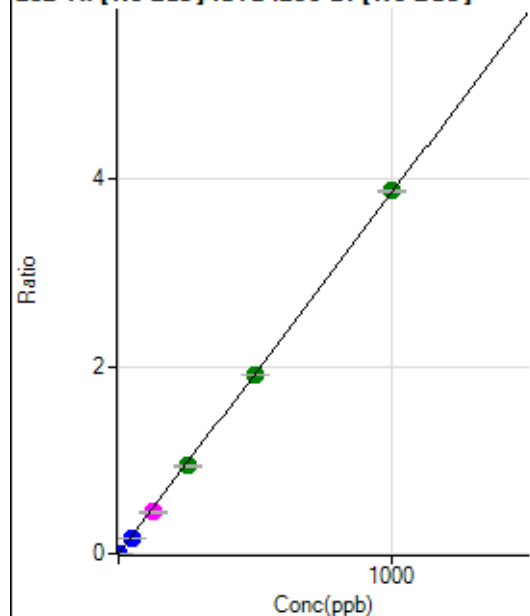
$$DL = 0.01646$$

$$BEC = 0.05215$$

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	1551.99	0.0001	P	5.7
2	☐	0.100	-0.005	1322.33	0.0001	P	8.3
3	☐	1.000	-0.009	1138.98	0.0001	P	4.1
4	☐	50.000	44.655	1773694.16	0.1723	P	0.8
5	☐	125.000	115.164	4429720.53	0.4442	M	2.3
6	☐	250.000	242.403	9218845.40	0.9349	A	0.5
7	☐	500.000	496.466	18438787.10	1.9145	A	0.6
8	☐	1000.000	1005.164	37337601.30	3.8761	A	0.9
9	☐			13036.59	0.0017	P	11.2

$$y = 0.0039 * x + 1.4682E-004$$

$$R = 0.9999$$

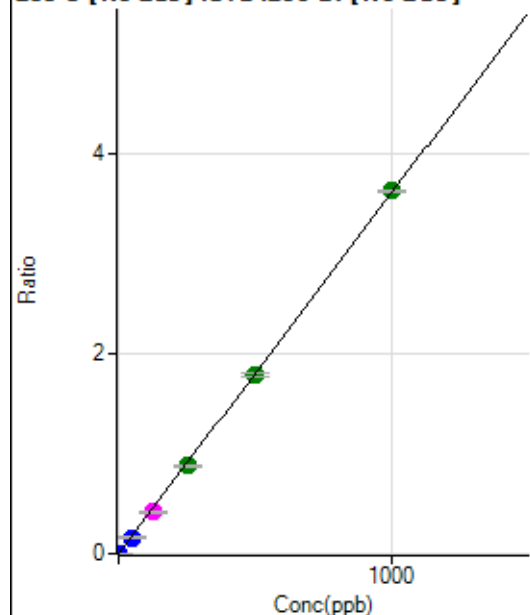
$$DL = 0.006477$$

$$BEC = 0.03807$$

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	211.12	0.0000	P	24.4
2	☐	0.100	0.076	3006.04	0.0003	P	0.9
3	☐	1.000	0.821	30810.41	0.0030	P	1.2
4	☐	50.000	45.164	1679897.49	0.1632	P	1.1
5	☐	125.000	115.664	4168576.44	0.4180	M	2.3
6	☐	250.000	242.527	8642641.17	0.8764	A	0.7
7	☐	500.000	495.551	17245011.32	1.7908	A	1.8
8	☐	1000.000	1005.502	35002459.81	3.6335	A	0.7
9	☐			6927.24	0.0009	P	19.5

$$y = 0.0036 * x + 1.9981E-005$$

$$R = 0.9999$$

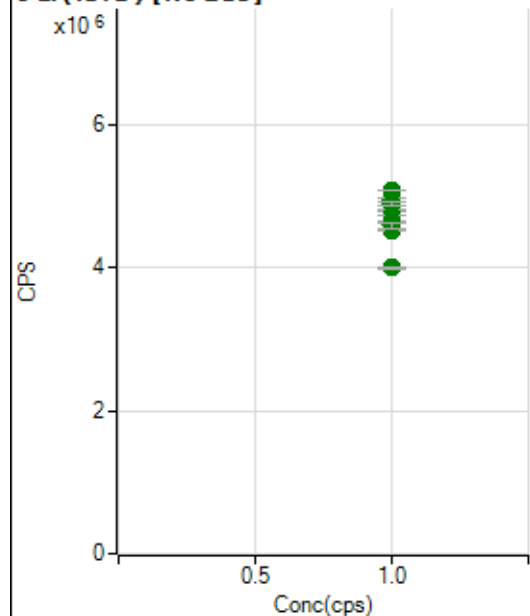
$$DL = 0.004049$$

$$BEC = 0.005529$$

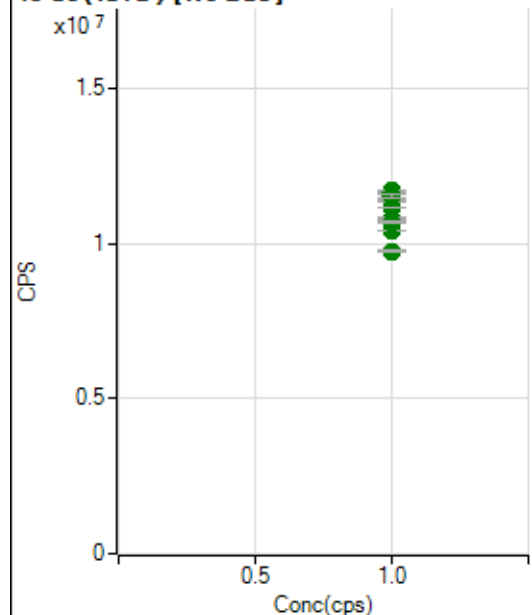
Weight: <None>

Min Conc: 0

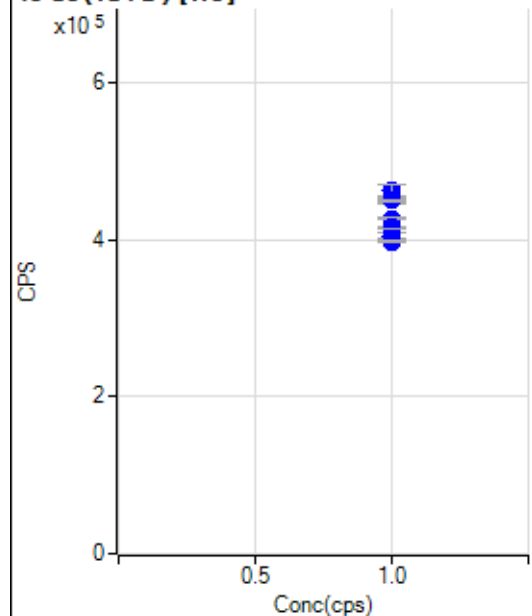
6 Li (ISTD) [No Gas]



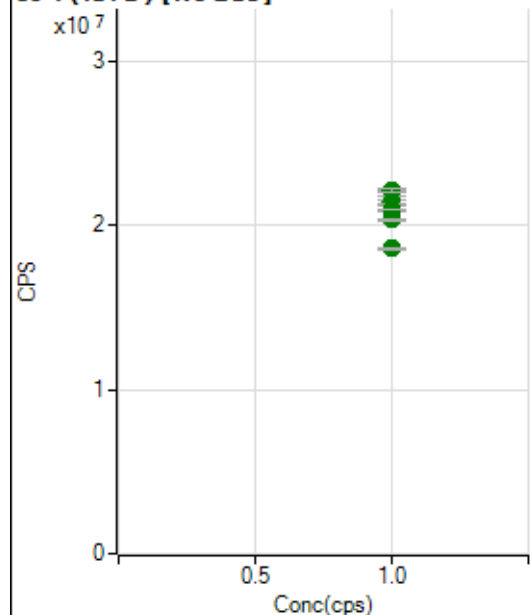
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5071869.09		A	0.1
2	☐	1.000		4807763.75		A	0.6
3	☐	1.000		4939701.28		A	1.0
4	☐	1.000		4892174.09		A	0.9
5	☐	1.000		4727428.12		A	0.3
6	☐	1.000		4650489.03		A	0.4
7	☐	1.000		4529005.52		A	0.7
8	☐	1.000		4585280.56		A	1.4
9	☐	1.000		3995593.80		A	0.7

45 Sc (ISTD) [No Gas]

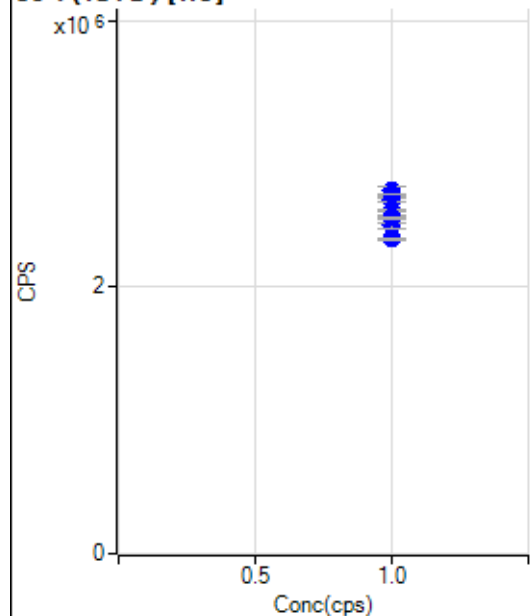
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11712971.35		A	0.6
2	☐	1.000		11392554.14		A	0.3
3	☐	1.000		11655169.55		A	1.1
4	☐	1.000		11560007.60		A	0.8
5	☐	1.000		11175009.00		A	0.5
6	☐	1.000		10825353.59		A	0.4
7	☐	1.000		10426954.22		A	0.5
8	☐	1.000		10705351.16		A	0.8
9	☐	1.000		9766000.76		A	0.9

45 Sc (ISTD) [He]

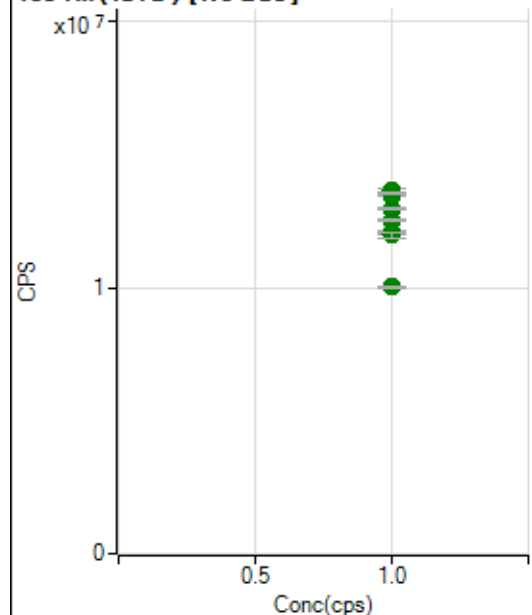
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		462600.98		P	3.1
2	☐	1.000		452010.15		P	1.0
3	☐	1.000		450046.15		P	1.3
4	☐	1.000		450537.12		P	0.6
5	☐	1.000		427649.90		P	0.8
6	☐	1.000		416984.70		P	0.5
7	☐	1.000		405793.13		P	2.1
8	☐	1.000		414145.02		P	0.2
9	☐	1.000		398196.87		P	0.9

89 Y (ISTD) [No Gas]

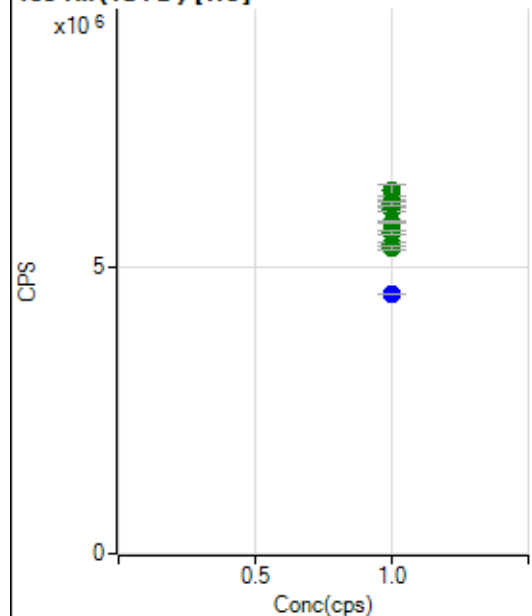
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22119596.89		A	0.7
2	☐	1.000		21445359.96		A	0.8
3	☐	1.000		22003290.09		A	1.8
4	☐	1.000		22123524.67		A	0.9
5	☐	1.000		21285197.88		A	1.0
6	☐	1.000		20908458.44		A	0.2
7	☐	1.000		20348826.22		A	0.9
8	☐	1.000		21024648.02		A	0.2
9	☐	1.000		18612737.92		A	0.9

89 Y (ISTD) [He]

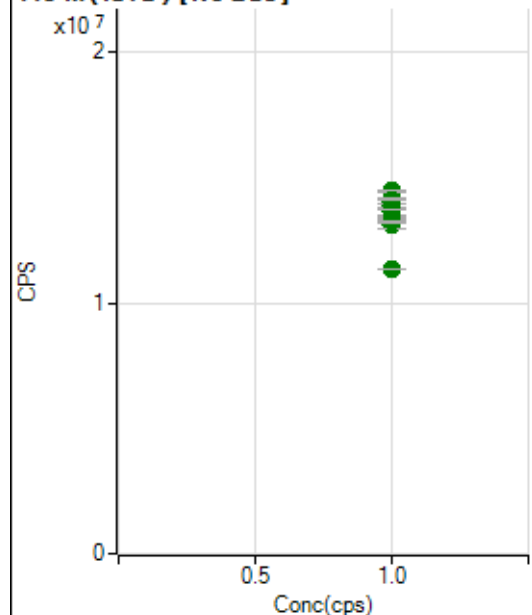
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2724202.67		P	2.7
2	☐	1.000		2675027.29		P	0.6
3	☐	1.000		2660012.62		P	0.8
4	☐	1.000		2701033.80		P	0.1
5	☐	1.000		2575616.21		P	0.8
6	☐	1.000		2532548.12		P	0.5
7	☐	1.000		2467647.72		P	1.8
8	☐	1.000		2521772.00		P	0.4
9	☐	1.000		2363455.87		P	0.8

103 Rh (ISTD) [No Gas]

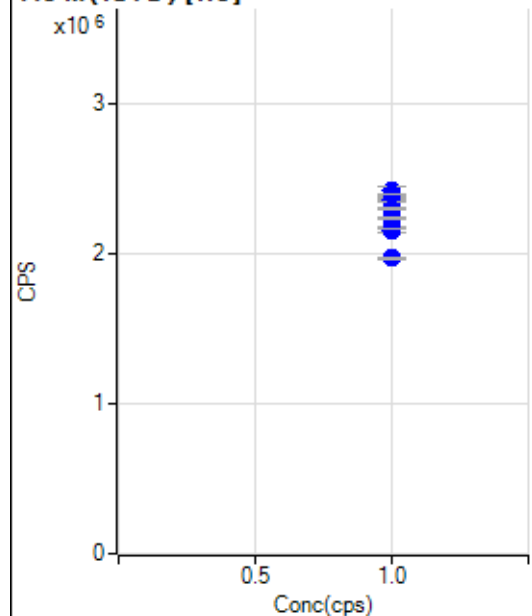
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13546040.35		A	0.1
2	☐	1.000		13432477.44		A	0.1
3	☐	1.000		13639262.85		A	1.4
4	☐	1.000		13559566.19		A	0.4
5	☐	1.000		12973836.89		A	0.5
6	☐	1.000		12527155.23		A	0.4
7	☐	1.000		12071650.93		A	0.8
8	☐	1.000		11967749.68		A	1.4
9	☐	1.000		10037415.06		A	0.6

103 Rh (ISTD) [He]

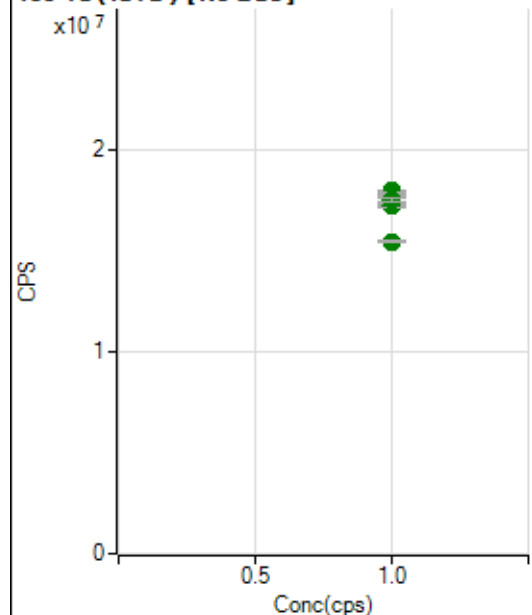
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6314020.25		A	3.1
2	☐	1.000		6138644.98		A	0.9
3	☐	1.000		5989486.09		A	1.0
4	☐	1.000		6089241.23		A	0.8
5	☐	1.000		5771820.75		A	0.6
6	☐	1.000		5579733.46		A	1.0
7	☐	1.000		5383676.45		A	1.1
8	☐	1.000		5324576.66		A	0.8
9	☐	1.000		4520518.75		P	0.5

115 In (ISTD) [No Gas]

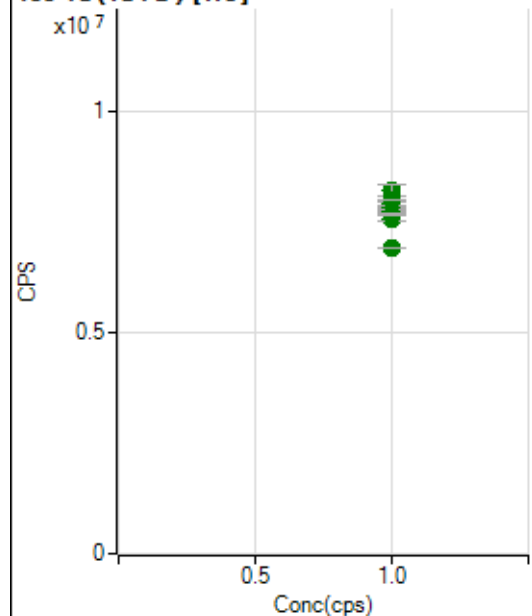
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14458777.42		A	0.2
2	☐	1.000		13860662.83		A	1.1
3	☐	1.000		14030932.75		A	1.0
4	☐	1.000		14121533.04		A	0.5
5	☐	1.000		13604083.75		A	1.3
6	☐	1.000		13362467.48		A	0.3
7	☐	1.000		13091954.12		A	1.7
8	☐	1.000		13221112.78		A	1.0
9	☐	1.000		11342460.28		A	0.5

115 In (ISTD) [He]

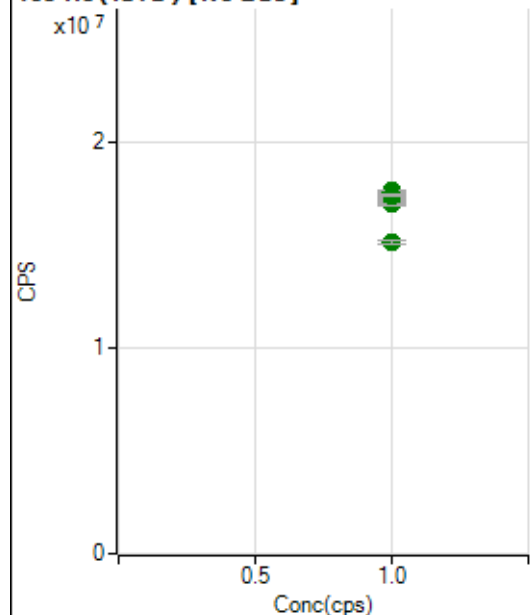
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2422710.18		P	2.8
2	☐	1.000		2381167.17		P	1.1
3	☐	1.000		2363051.17		P	1.1
4	☐	1.000		2400664.78		P	0.4
5	☐	1.000		2304279.96		P	0.5
6	☐	1.000		2240067.88		P	0.6
7	☐	1.000		2162984.86		P	1.6
8	☐	1.000		2169236.77		P	0.3
9	☐	1.000		1976750.89		P	0.6

159 Tb (ISTD) [No Gas]

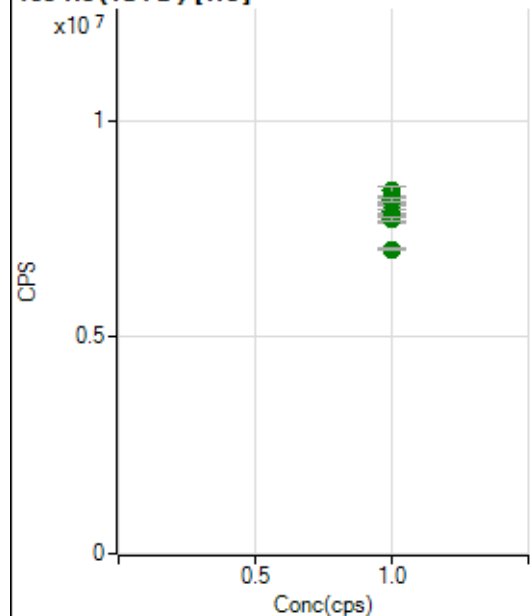
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17996998.48		A	0.3
2	☐	1.000		17343910.02		A	0.2
3	☐	1.000		17587577.10		A	1.3
4	☐	1.000		17874034.46		A	0.9
5	☐	1.000		17407404.88		A	0.4
6	☐	1.000		17369656.13		A	1.4
7	☐	1.000		17282210.16		A	0.9
8	☐	1.000		17538007.24		A	1.1
9	☐	1.000		15482048.52		A	1.0

159 Tb (ISTD) [He]

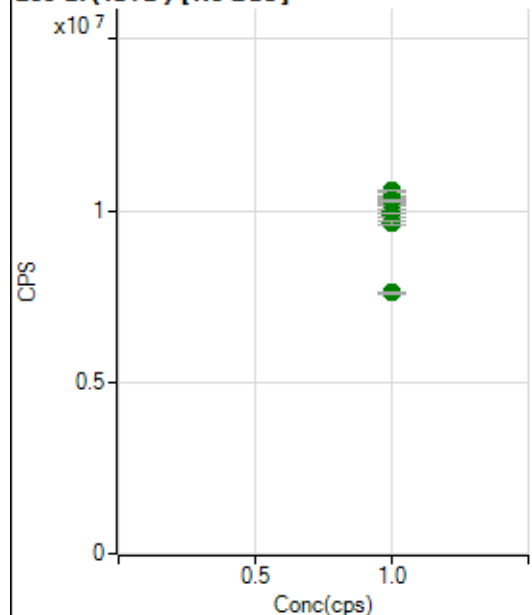
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8198672.52		A	3.1
2	☐	1.000		7893904.33		A	1.4
3	☐	1.000		7842089.26		A	1.1
4	☐	1.000		7996240.99		A	0.3
5	☐	1.000		7755969.33		A	1.0
6	☐	1.000		7734311.83		A	1.2
7	☐	1.000		7570233.57		A	1.6
8	☐	1.000		7663766.83		A	0.5
9	☐	1.000		6909394.97		A	0.2

165 Ho (ISTD) [No Gas]

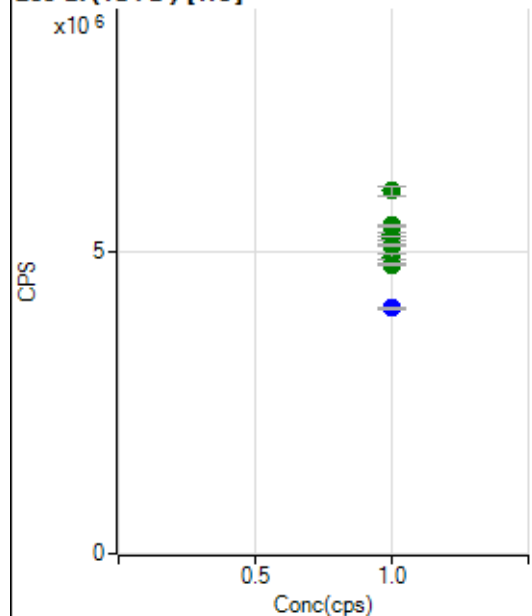
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17597323.21		A	0.4
2	☐	1.000		17100689.19		A	1.0
3	☐	1.000		17569740.29		A	0.7
4	☐	1.000		17527183.07		A	0.9
5	☐	1.000		17213945.99		A	0.3
6	☐	1.000		17115852.94		A	0.7
7	☐	1.000		16942871.41		A	0.9
8	☐	1.000		17378886.55		A	0.9
9	☐	1.000		15108036.03		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8377045.92		A	2.7
2	☐	1.000		8078413.91		A	0.6
3	☐	1.000		7891196.83		A	0.9
4	☐	1.000		8156994.67		A	1.0
5	☐	1.000		7916931.13		A	1.1
6	☐	1.000		7824550.85		A	0.1
7	☐	1.000		7711406.41		A	2.3
8	☐	1.000		7717793.15		A	1.3
9	☐	1.000		7028946.91		A	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10572153.45		A	0.6
2	☐	1.000		10266786.17		A	1.9
3	☐	1.000		10312869.50		A	1.7
4	☐	1.000		10291762.14		A	0.3
5	☐	1.000		9972298.74		A	0.6
6	☐	1.000		9860992.28		A	0.7
7	☐	1.000		9631363.05		A	1.4
8	☐	1.000		9633233.47		A	1.0
9	☐	1.000		7613542.87		A	0.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5994163.52		A	2.8
2	☐	1.000		5412529.23		A	1.0
3	☐	1.000		5277035.37		A	1.3
4	☐	1.000		5420465.47		A	0.8
5	☐	1.000		5201866.45		A	1.1
6	☐	1.000		5089693.26		A	0.4
7	☐	1.000		4908228.75		A	2.2
8	☐	1.000		4777526.35		A	0.8
9	☐	1.000		4053853.62		P	0.7

US EPA Tune Check Sample Report

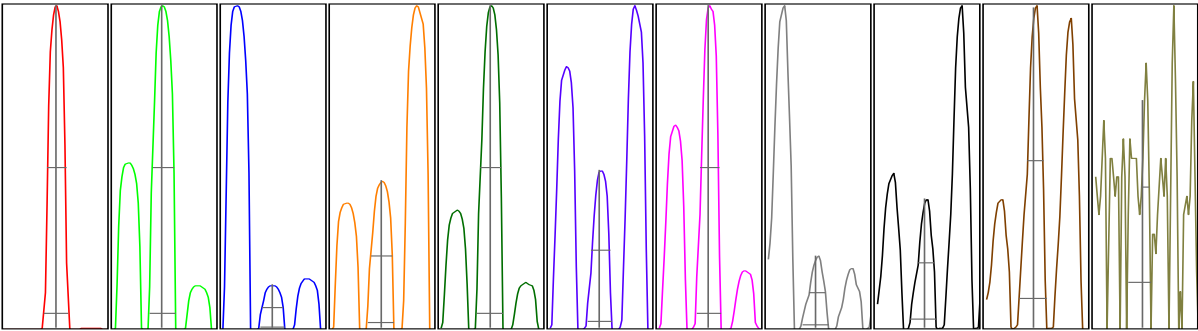
Batch Folder D:\ICP-MS Data\1\DATA\P7071520 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	11014	0.48	5.00	
24	160290	0.43	5.00	
25	21396	0.16	5.00	
26	25225	0.35	5.00	
59	78279	0.29	5.00	
113	12821	0.97	5.00	
115	41430	2.90	5.00	
206	14564	0.95	5.00	
207	12387	1.05	5.00	
208	30084	0.89	5.00	
220	0	36.44		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	11079	11055	11001	10948	10987
24	159907	161017	160790	160413	159324
25	21369	21416	21447	21382	21369
26	25141	25303	25240	25318	25125
59	78245	78543	78456	78176	77978
113	12958	12910	12853	12712	12672
115	42845	42384	41352	40626	39942
206	14747	14624	14595	14444	14408
207	12554	12469	12391	12239	12281
208	30336	30406	29968	29813	29897
220	0	0	0	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	21224	9.05	8.9 - 9.1		0.716	0.900	
24	265895	23.95	23.9 - 24.1		0.776	0.900	
25	35732	25.00	24.9 - 25.1		0.740	0.900	
26	41926	26.00	25.9 - 26.1		0.779	0.900	
59	135590	59.00	58.9 - 59.1		0.775	0.900	
113	25111	113.00	112.9 - 113.1		0.728	0.900	
115	80976	115.00	114.9 - 115.1		0.728	0.900	
206	29674	205.95	205.9 - 206.1		0.774	0.900	
207	25065	206.95	206.9 - 207.1		0.736	0.900	
208	62109	207.95	207.9 - 208.1		0.770	0.900	
220	1	219.95	-		0.661		

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	0.76	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	13.4	V
Extract 2	-155.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	18269	1.08	
89	52106	1.12	
205	35211	0.76	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	18113	18555	18375	18084	18217
89	52048	52800	52530	51312	51841
205	35323	35535	35321	34890	34984

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	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	7.9	V	Deflect	2.0	V
Extract 2	-155.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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			