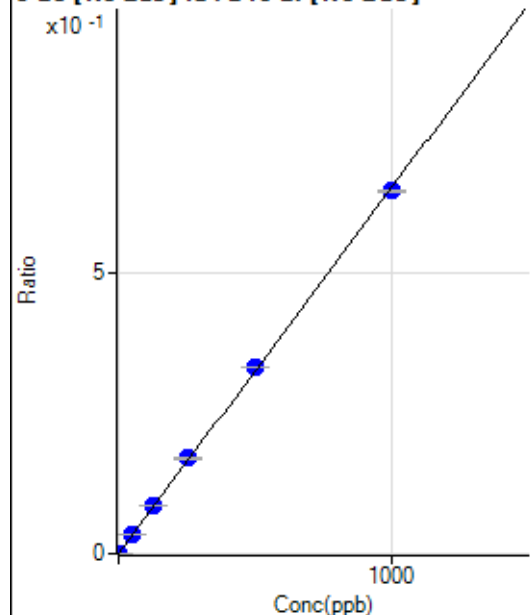


Batch Folder: D:\ICP-MS Data\P7120919-MS.b\
Analysis File: P7120919-MS.batch.bin
DA Date-Time: 2019-12-09 16:16:32
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-12-09 12:21:50
2	004CALS.d	S02	2019-12-09 12:25:27
3	005CALS.d	S03	2019-12-09 12:30:14
4	006CALS.d	S04	2019-12-09 12:34:25
5	007CALS.d	S05	2019-12-09 12:38:16
6	008CALS.d	S06	2019-12-09 12:42:04
7	009CALS.d	S07	2019-12-09 12:45:51
8	010CALS.d	S08	2019-12-09 12:49:39

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.37	0.0000	P	42.2
2	☐	1.000	1.047	2759.59	0.0007	P	6.5
3	☐	50.000	53.032	137744.90	0.0347	P	0.2
4	☐	125.000	130.472	339220.25	0.0853	P	0.7
5	☐	250.000	260.369	655617.67	0.1702	P	0.5
6	☐	500.000	509.671	1245511.87	0.3331	P	0.7
7	☐	1000.000	991.736	2382821.64	0.6482	P	0.6
8	☐			4467.44	0.0012	P	1.3

$$y = 6.5357\text{E-}004 * x + 5.0873\text{E-}006$$

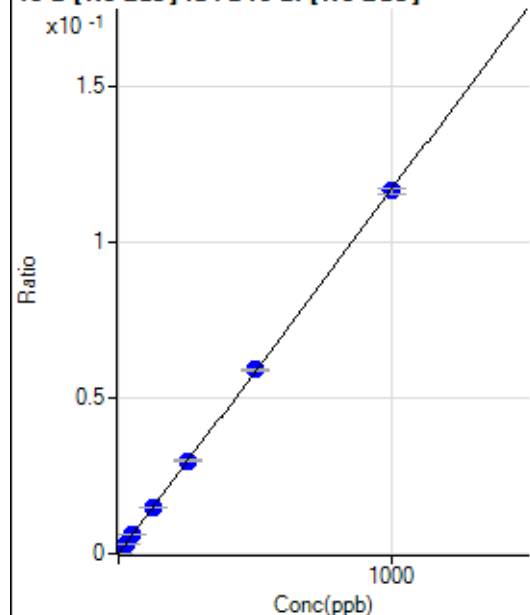
$$R = 0.9999$$

$$DL = 0.00985$$

$$BEC = 0.007784$$

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	219.45	0.0001	P	19.0
2	☐	25.000	25.301	12066.35	0.0030	P	2.0
3	☐	50.000	51.558	24170.08	0.0061	P	2.8
4	☐	125.000	126.119	58879.35	0.0148	P	0.8
5	☐	250.000	254.379	114775.13	0.0298	P	2.9
6	☐	500.000	505.083	221025.81	0.0591	P	0.9
7	☐	1000.000	996.139	428399.70	0.1165	P	1.6
8	☐			8808.46	0.0024	P	11.4

$$y = 1.1693\text{E-}004 * x + 5.4686\text{E-}005$$

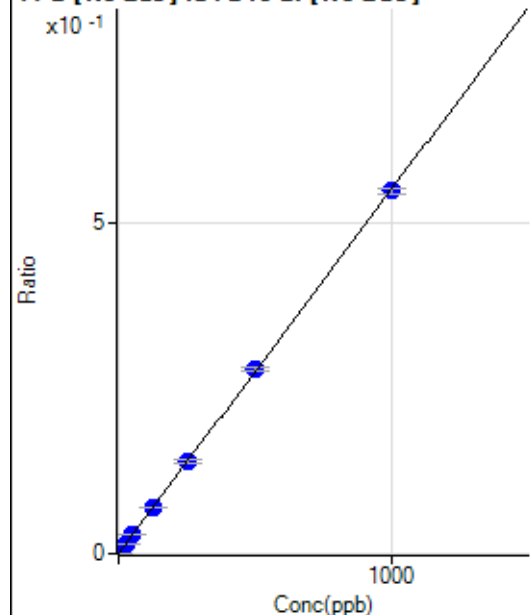
$$R = 1.0000$$

$$DL = 0.2666$$

$$BEC = 0.4677$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1094.53	0.0003	P	11.2
2	☐	25.000	25.195	56581.63	0.0141	P	1.5
3	☐	50.000	50.995	112517.37	0.0283	P	1.5
4	☐	125.000	126.416	277629.83	0.0698	P	0.4
5	☐	250.000	253.360	537710.97	0.1396	P	3.0
6	☐	500.000	506.339	1042141.66	0.2787	P	2.5
7	☐	1000.000	995.759	2014159.70	0.5479	P	1.7
8	☐			41507.96	0.0111	P	8.6

$$y = 5.4994\text{E-}004 * x + 2.7298\text{E-}004$$

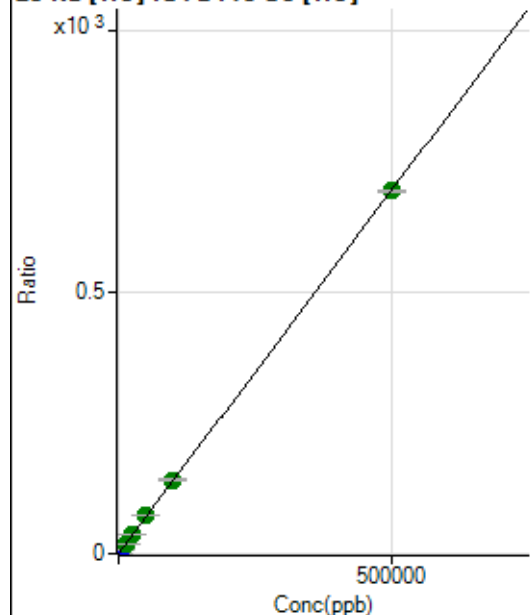
$$R = 1.0000$$

$$DL = 0.1666$$

$$BEC = 0.4964$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13070.11	0.0304	P	3.3
2	☐	500.000	510.542	322600.52	0.7393	P	0.6
3	☐	5000.000	5250.259	3181773.25	7.3200	P	0.2
4	☐	12500.000	13082.941	7793009.29	18.1950	A	0.5
5	☐	25000.000	26157.178	14914221.86	36.3476	A	0.4
6	☐	50000.000	51674.520	29490424.27	71.7764	A	0.1
7	☐	100000.00	101758.21	61454781.24	141.3136	A	1.0
8	☐	500000.00	499405.95	318292109.8	693.4160	A	0.3

$$y = 0.0014 * x + 0.0304$$

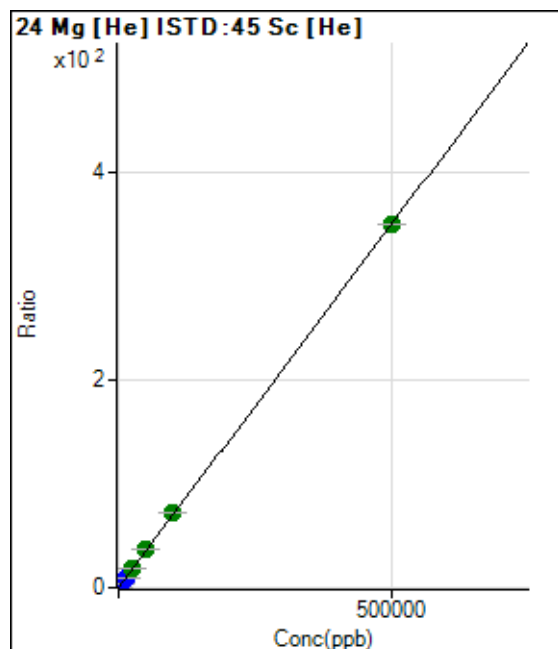
$$R = 1.0000$$

$$DL = 2.148$$

$$BEC = 21.91$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	252.79	0.0006	P	24.3
2	☐	500.000	544.199	166349.81	0.3812	P	0.7
3	☐	5000.000	5404.676	1643302.66	3.7807	P	0.5
4	☐	12500.000	13360.699	4002572.48	9.3452	P	0.3
5	☐	25000.000	26733.883	7672503.21	18.6985	A	0.3
6	☐	50000.000	52591.559	15113251.90	36.7836	A	0.2
7	☐	100000.00	102609.44	31209717.01	71.7665	A	1.1
8	☐	500000.00	499106.65	160233316.0	349.0800	A	0.2

$$y = 6.9941\text{E-}004 * x + 5.8790\text{E-}004$$

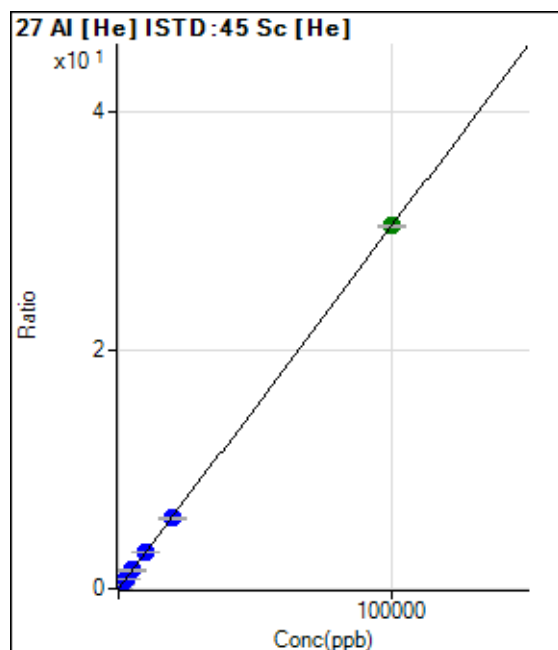
$$R = 1.0000$$

$$DL = 0.6137$$

$$BEC = 0.8406$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0003	P	28.1
2	☐	20.000	19.994	2769.81	0.0063	P	4.2
3	☐	1000.000	1033.245	136879.85	0.3149	P	0.9
4	☐	2500.000	2549.278	332621.04	0.7766	P	1.1
5	☐	5000.000	5045.042	630492.27	1.5366	P	0.9
6	☐	10000.000	10000.572	1251486.54	3.0458	P	0.9
7	☐	20000.000	19450.943	2576113.08	5.9237	P	1.1
8	☐	100000.00	100105.93	13993726.88	30.4859	A	0.4

$$y = 3.0453\text{E-}004 * x + 2.5835\text{E-}004$$

$$R = 1.0000$$

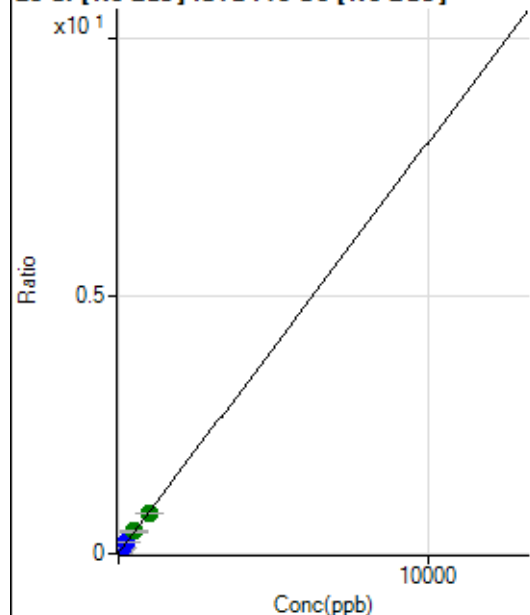
$$DL = 0.714$$

$$BEC = 0.8483$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	140997.36	0.0129	P	0.2
2	☐	10.000	10.149	225491.54	0.0210	P	0.7
3	☐	50.000	55.554	611924.83	0.0571	P	0.3
4	☐	125.000	137.196	1312236.99	0.1221	P	1.2
5	☐	250.000	264.290	2323256.58	0.2232	P	1.1
6	☐	500.000	524.573	4399468.11	0.4303	A	0.8
7	☐	1000.000	982.337	8166549.75	0.7945	A	1.2
8	☐			557868.34	0.0529	P	1.1

$$y = 7.9566E-004 * x + 0.0129$$

$$R = 0.9994$$

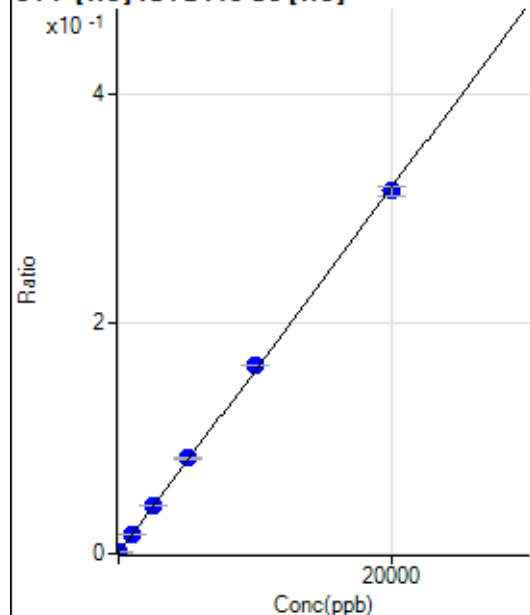
$$DL = 0.09941$$

$$BEC = 16.22$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-25.543	125.01	0.0003	P	17.2
2	☐	0.000	25.543	480.58	0.0011	P	15.6
3	☐	1000.000	1034.899	7441.05	0.0171	P	4.1
4	☐	2500.000	2573.780	17789.07	0.0415	P	1.3
5	☐	5000.000	5181.110	34017.53	0.0829	P	0.8
6	☐	10000.000	10248.875	67101.90	0.1633	P	0.5
7	☐	20000.000	19819.318	137050.16	0.3152	P	2.4
8	☐			175.01	0.0004	P	5.3

$$y = 1.5867E-005 * x + 6.9603E-004$$

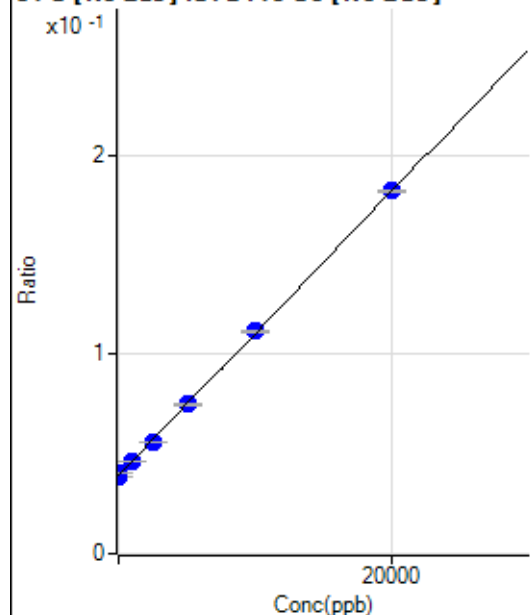
$$R = 0.9998$$

$$DL = 20.93$$

$$BEC = 43.87$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-111.519	426076.24	0.0390	P	0.6
2	☐	0.000	111.519	436239.89	0.0406	P	0.8
3	☐	1000.000	949.705	498930.45	0.0466	P	0.4
4	☐	2500.000	2308.295	604615.94	0.0562	P	0.8
5	☐	5000.000	4955.032	781711.56	0.0751	P	0.9
6	☐	10000.000	10086.462	1141551.55	0.1116	P	0.2
7	☐	20000.000	19994.489	1873116.71	0.1822	P	0.5
8	☐			375901.20	0.0357	P	1.0

$$y = 7.1235\text{E-}006 * x + 0.0398$$

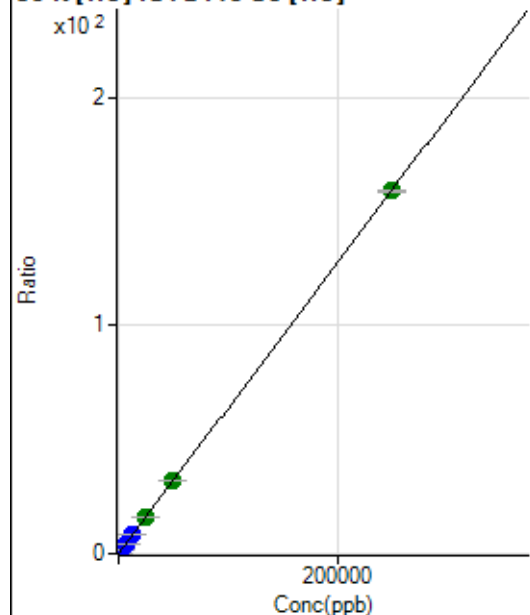
R = 0.9999

DL = 116.3

BEC = 5587

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17113.20	0.0398	P	1.6
2	☐	500.000	506.621	158056.14	0.3622	P	0.6
3	☐	2500.000	2596.758	735542.38	1.6922	P	0.1
4	☐	6250.000	6394.049	1759678.49	4.1085	P	0.4
5	☐	12500.000	12670.158	3324563.33	8.1021	P	0.1
6	☐	25000.000	25352.239	6644672.94	16.1720	A	0.3
7	☐	50000.000	49942.773	13838274.61	31.8195	A	0.6
8	☐	250000.00	249963.13	73030215.52	159.0968	A	0.8

$$y = 6.3632\text{E-}004 * x + 0.0398$$

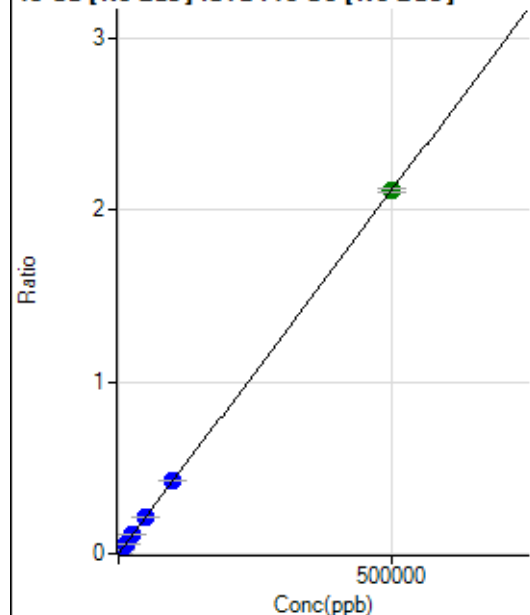
R = 1.0000

DL = 3.013

BEC = 62.58

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	258.35	0.0000	P	0.3
2	☐	500.000	491.371	22579.03	0.0021	P	0.6
3	☐	5000.000	5158.571	233936.74	0.0218	P	0.5
4	☐	12500.000	12940.164	588393.30	0.0547	P	0.5
5	☐	25000.000	25873.838	1138859.13	0.1094	P	1.3
6	☐	50000.000	51491.897	2226034.05	0.2177	P	0.2
7	☐	100000.00	101191.11	4397618.94	0.4278	P	0.8
8	☐	500000.00	499556.31	22264197.02	2.1120	A	1.0

$$y = 4.2277\text{E-}006 * x + 2.3650\text{E-}005$$

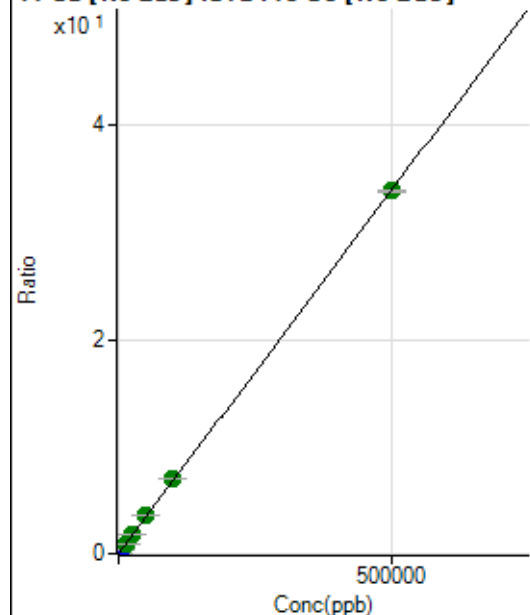
$$R = 1.0000$$

$$DL = 0.04298$$

$$BEC = 5.594$$

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	11405.81	0.0010	P	2.5
2	☐	500.000	495.224	372183.21	0.0346	P	0.3
3	☐	5000.000	5191.018	3783767.92	0.3531	P	0.2
4	☐	12500.000	12878.090	9401410.28	0.8745	A	0.3
5	☐	25000.000	26006.369	18371752.67	1.7649	A	0.8
6	☐	50000.000	51960.072	36043960.87	3.5253	A	0.2
7	☐	100000.00	102866.68	71725961.33	6.9781	A	1.1
8	☐	500000.00	499168.97	356923730.2	33.8576	A	0.6

$$y = 6.7826\text{E-}005 * x + 0.0010$$

$$R = 1.0000$$

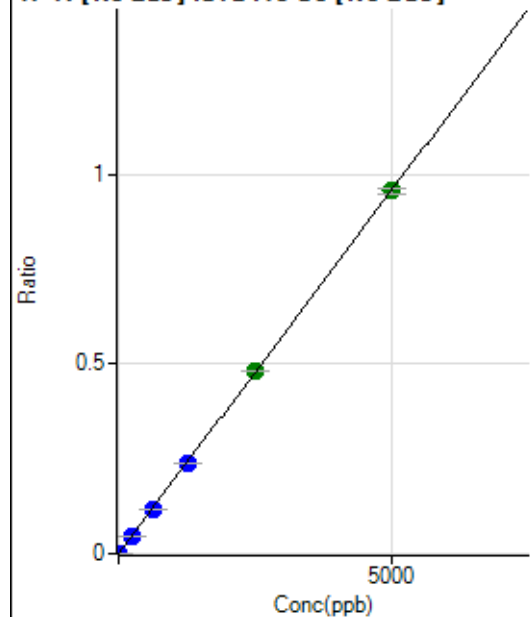
$$DL = 1.142$$

$$BEC = 15.39$$

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	91.67	0.0000	P	9.0
2	☐	5.000	5.042	10454.05	0.0010	P	5.5
3	☐	250.000	249.789	511936.48	0.0478	P	0.8
4	☐	625.000	620.739	1276291.40	0.1187	P	0.1
5	☐	1250.000	1239.172	2466872.28	0.2370	P	1.1
6	☐	2500.000	2516.287	4920269.34	0.4812	A	0.3
7	☐	5000.000	4995.107	9819037.89	0.9553	A	1.3
8	☐			19471.89	0.0018	P	0.9

$$y = 1.9124\text{E-}004 * x + 8.3917\text{E-}006$$

$$R = 1.0000$$

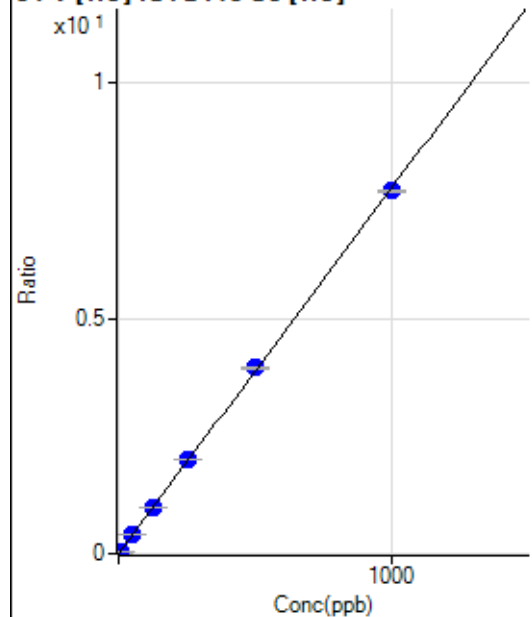
$$DL = 0.01186$$

$$BEC = 0.04388$$

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	7.78	0.0000	P	99.5
2	☐	5.000	5.237	17758.67	0.0407	P	1.3
3	☐	50.000	51.685	174509.23	0.4015	P	0.7
4	☐	125.000	128.537	427627.96	0.9984	P	0.6
5	☐	250.000	257.266	819940.50	1.9983	P	0.7
6	☐	500.000	509.417	1625833.78	3.9569	P	0.6
7	☐	1000.000	992.947	3354155.26	7.7127	P	0.8
8	☐			7314.13	0.0159	P	0.8

$$y = 0.0078 * x + 1.8153\text{E-}005$$

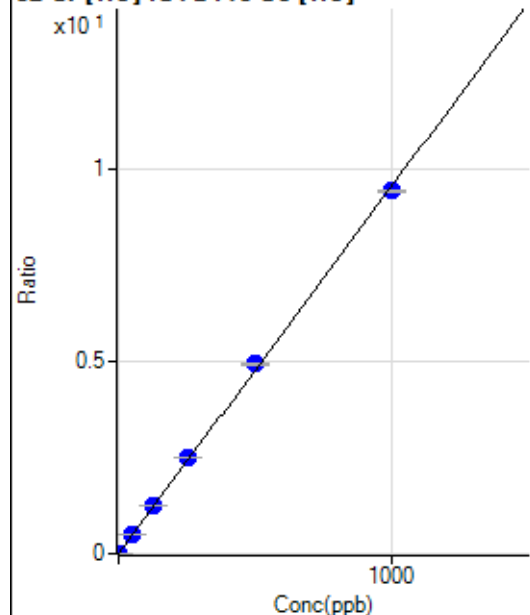
$$R = 0.9999$$

$$DL = 0.006974$$

$$BEC = 0.002337$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1430.10	0.0033	P	4.8
2	☐	2.000	2.040	9950.18	0.0228	P	0.8
3	☐	50.000	52.833	220621.26	0.5076	P	1.1
4	☐	125.000	130.871	536380.02	1.2523	P	0.3
5	☐	250.000	260.557	1021723.32	2.4900	P	0.4
6	☐	500.000	516.988	2028664.80	4.9374	P	0.5
7	☐	1000.000	987.991	4102162.79	9.4326	P	0.6
8	☐			125117.51	0.2726	P	0.2

$$y = 0.0095 * x + 0.0033$$

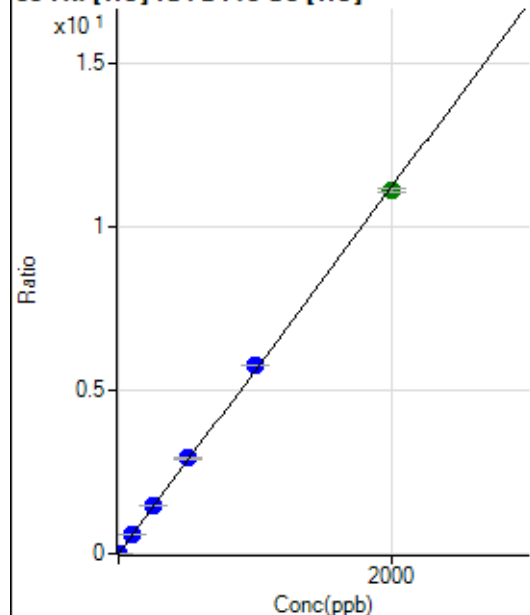
$$R = 0.9997$$

$$DL = 0.04982$$

$$BEC = 0.3486$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.67	0.0003	P	27.7
2	☐	1.000	1.032	2663.61	0.0061	P	0.7
3	☐	100.000	104.961	256045.20	0.5891	P	0.4
4	☐	250.000	260.536	626050.76	1.4617	P	0.8
5	☐	500.000	519.608	1196024.91	2.9149	P	0.5
6	☐	1000.000	1028.503	2370439.52	5.7693	P	0.0
7	☐	2000.000	1979.282	4828341.73	11.1024	A	1.0
8	☐			26214.67	0.0571	P	0.6

$$y = 0.0056 * x + 3.1775E-004$$

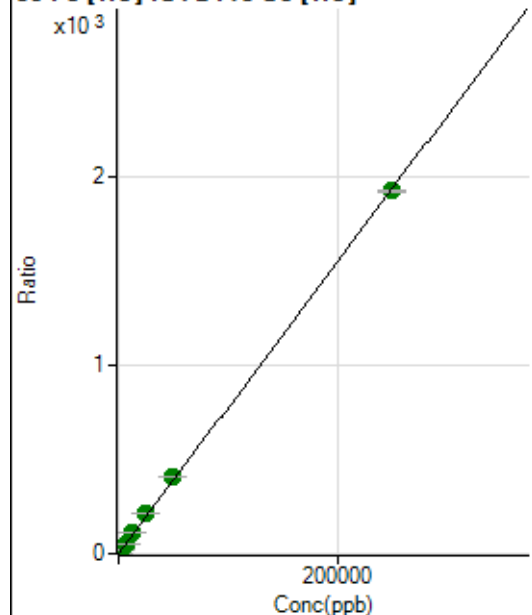
$$R = 0.9998$$

$$DL = 0.04704$$

$$BEC = 0.05665$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5982.85	0.0139	P	3.7
2	☐	50.000	56.635	196883.63	0.4512	P	1.0
3	☐	2500.000	2784.230	9349534.24	21.5096	A	0.2
4	☐	6250.000	6943.497	22966145.42	53.6213	A	0.3
5	☐	12500.000	13908.403	44066405.61	107.3941	A	0.3
6	☐	25000.000	27460.647	87111584.36	212.0245	A	0.5
7	☐	50000.000	52728.929	177042468.7	407.1088	A	1.2
8	☐	250000.00	249117.54	882857019.7	1,923.331	A	0.5

$$y = 0.0077 * x + 0.0139$$

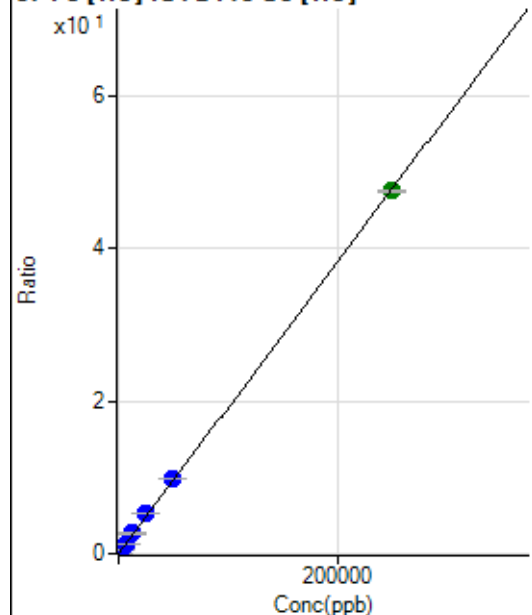
$$R = 0.9999$$

$$DL = 0.2018$$

$$BEC = 1.803$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	237.05	0.0006	P	9.0
2	☐	50.000	60.817	5299.26	0.0121	P	6.2
3	☐	2500.000	2785.403	231023.70	0.5315	P	0.9
4	☐	6250.000	6933.432	566289.64	1.3222	P	0.3
5	☐	12500.000	13909.006	1088066.48	2.6518	P	0.8
6	☐	25000.000	27329.106	2140581.05	5.2099	P	0.0
7	☐	50000.000	52064.586	4316481.72	9.9249	P	0.2
8	☐	250000.00	249263.78	21809901.41	47.5142	A	0.3

$$y = 1.9062E-004 * x + 5.5145E-004$$

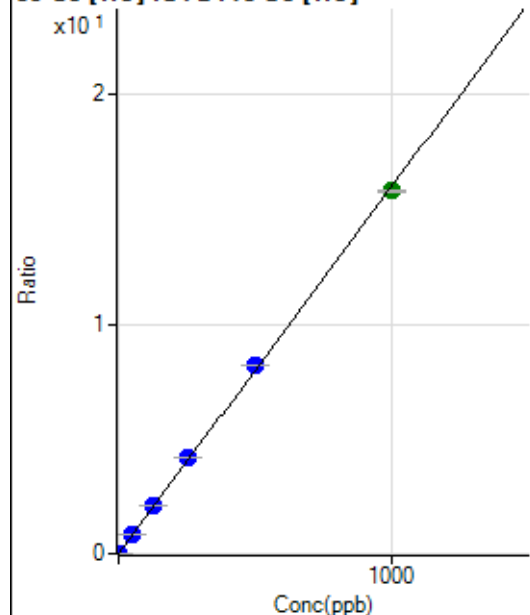
$$R = 0.9999$$

$$DL = 0.7835$$

$$BEC = 2.893$$

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	116.67	0.0003	P	14.8
2	☐	1.000	1.048	7427.54	0.0170	P	4.0
3	☐	50.000	53.360	370769.05	0.8530	P	1.0
4	☐	125.000	132.534	907279.30	2.1183	P	0.4
5	☐	250.000	263.002	1724674.70	4.2033	P	0.7
6	☐	500.000	513.754	3373506.89	8.2106	P	0.4
7	☐	1000.000	988.763	6872060.94	15.8018	A	0.7
8	☐			24725.46	0.0539	P	0.5

$$y = 0.0160 * x + 2.7162E-004$$

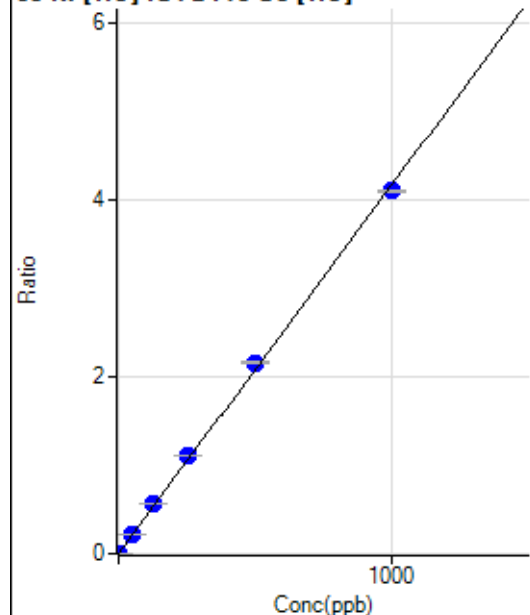
$$R = 0.9998$$

$$DL = 0.007535$$

$$BEC = 0.017$$

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	104.45	0.0002	P	4.6
2	☐	1.000	1.086	2080.18	0.0048	P	10.4
3	☐	50.000	54.142	98172.44	0.2259	P	1.2
4	☐	125.000	134.526	240208.11	0.5608	P	0.6
5	☐	250.000	266.960	456565.73	1.1127	P	0.7
6	☐	500.000	519.122	888903.66	2.1635	P	1.1
7	☐	1000.000	984.801	1784902.37	4.1041	P	0.4
8	☐			38937.33	0.0848	P	0.3

$$y = 0.0042 * x + 2.4303E-004$$

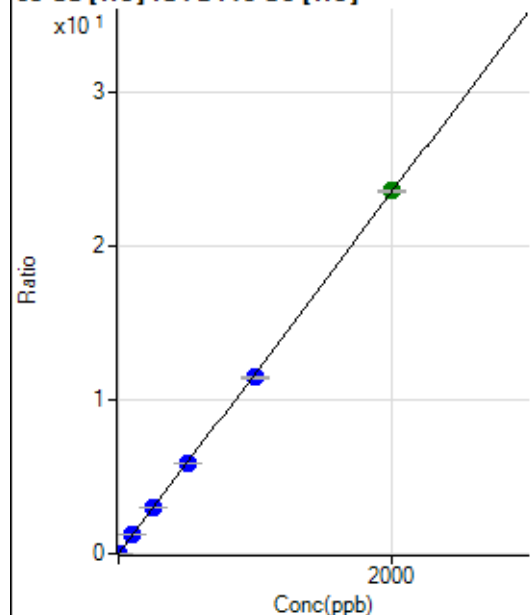
$$R = 0.9995$$

$$DL = 0.008122$$

$$BEC = 0.05832$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	625.58	0.0015	P	6.8
2	☐	2.000	2.028	11009.85	0.0252	P	2.3
3	☐	100.000	103.994	530511.37	1.2205	P	0.3
4	☐	250.000	260.149	1306729.44	3.0510	P	0.3
5	☐	500.000	505.304	2431074.69	5.9247	P	0.1
6	☐	1000.000	974.788	4695375.10	11.4280	P	0.7
7	☐	2000.000	2009.811	10246229.99	23.5607	A	0.8
8	☐			32114.25	0.0700	P	1.2

$$y = 0.0117 * x + 0.0015$$

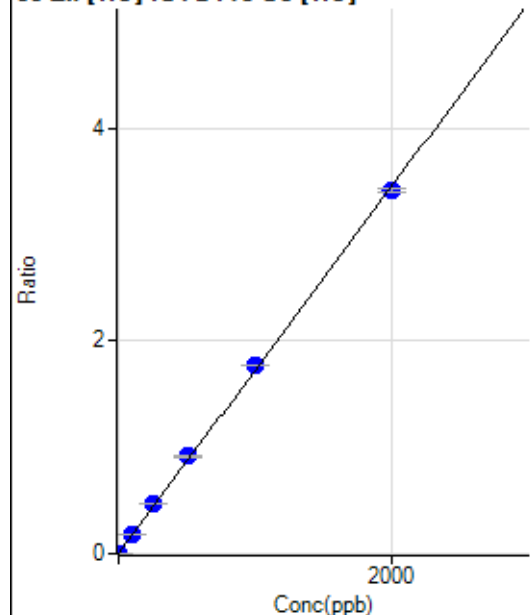
$$R = 0.9999$$

$$DL = 0.02516$$

$$BEC = 0.1242$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	853.37	0.0020	P	4.9
2	☐	2.000	2.325	2614.73	0.0060	P	5.6
3	☐	100.000	106.987	80986.27	0.1863	P	0.3
4	☐	250.000	271.349	201090.32	0.4695	P	0.1
5	☐	500.000	529.712	375286.84	0.9146	P	0.8
6	☐	1000.000	1024.848	726282.99	1.7677	P	0.5
7	☐	2000.000	1977.130	1482278.40	3.4085	P	1.0
8	☐			25967.64	0.0566	P	0.7

$$y = 0.0017 * x + 0.0020$$

$$R = 0.9997$$

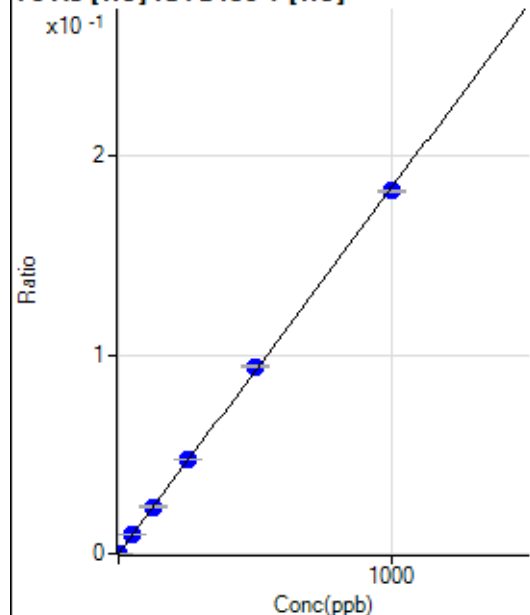
$$DL = 0.1682$$

$$BEC = 1.153$$

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	6.79	0.0000	P	68.8
2	☐	1.000	1.032	461.12	0.0002	P	10.7
3	☐	50.000	51.826	22918.74	0.0095	P	1.5
4	☐	125.000	128.607	56431.67	0.0237	P	1.2
5	☐	250.000	258.351	108562.12	0.0476	P	0.5
6	☐	500.000	510.993	214571.98	0.0941	P	0.9
7	☐	1000.000	991.874	436280.18	0.1826	P	0.4
8	☐			968.56	0.0004	P	6.5

$$y = 1.8414\text{E-}004 * x + 2.9068\text{E-}006$$

$$R = 0.9999$$

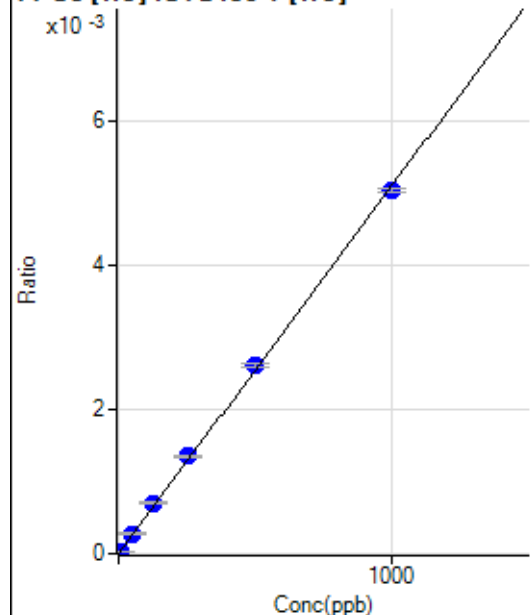
$$DL = 0.03259$$

$$BEC = 0.01579$$

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	6.125	74.44	0.0000	P	6.7
3	☐	50.000	53.626	654.47	0.0003	P	11.2
4	☐	125.000	138.413	1676.79	0.0007	P	4.6
5	☐	250.000	264.755	3071.49	0.0013	P	1.4
6	☐	500.000	513.908	5959.10	0.0026	P	2.6
7	☐	1000.000	987.493	11991.78	0.0050	P	0.9
8	☐			23.33	0.0000	P	14.2

$$y = 5.0840\text{E-}006 * x + 0.0000\text{E+}000$$

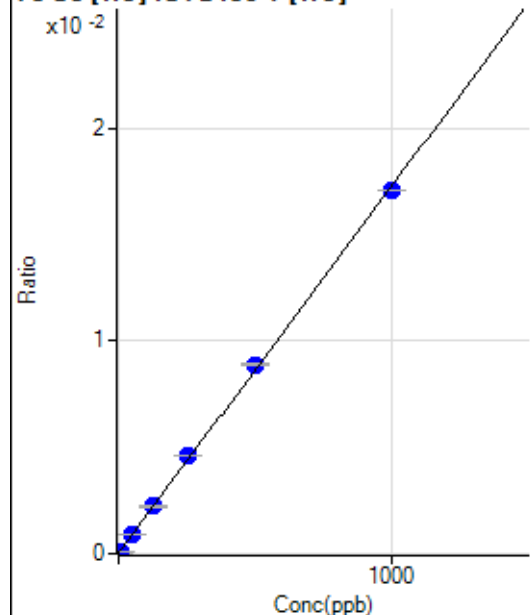
$$R = 0.9997$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	58.03	0.0000	P	29.2
2	☐	5.000	5.460	284.57	0.0001	P	9.6
3	☐	50.000	52.712	2242.78	0.0009	P	1.7
4	☐	125.000	128.264	5330.65	0.0022	P	1.9
5	☐	250.000	266.968	10565.02	0.0046	P	0.5
6	☐	500.000	514.423	20292.04	0.0089	P	0.9
7	☐	1000.000	988.001	40767.61	0.0171	P	0.1
8	☐			163.58	0.0001	P	16.8

$$y = 1.7249\text{E-}005 * x + 2.4850\text{E-}005$$

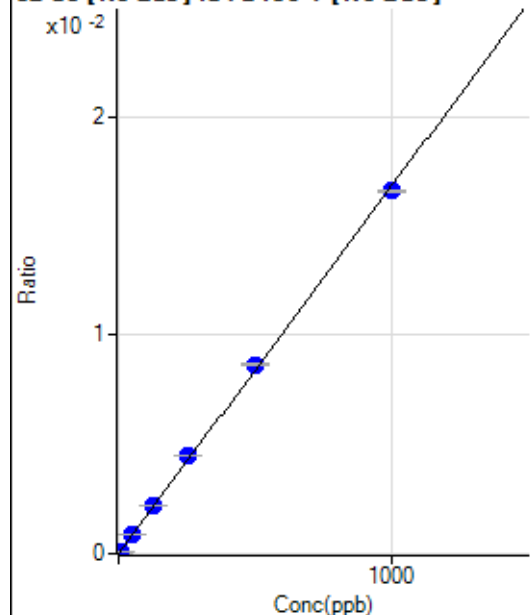
$$R = 0.9997$$

$$DL = 1.261$$

$$BEC = 1.441$$

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	60.78	0.0000	P	172.
2	☐	5.000	5.525	1822.43	0.0001	P	7.1
3	☐	50.000	53.172	16972.46	0.0009	P	1.0
4	☐	125.000	132.606	42666.63	0.0022	P	0.7
5	☐	250.000	266.112	83547.50	0.0045	P	0.7
6	☐	500.000	514.720	160664.47	0.0087	P	0.5
7	☐	1000.000	987.500	308872.43	0.0166	P	0.4
8	☐			818.64	0.0000	P	18.3

$$y = 1.6806\text{E-}005 * x + 3.1011\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.9571$$

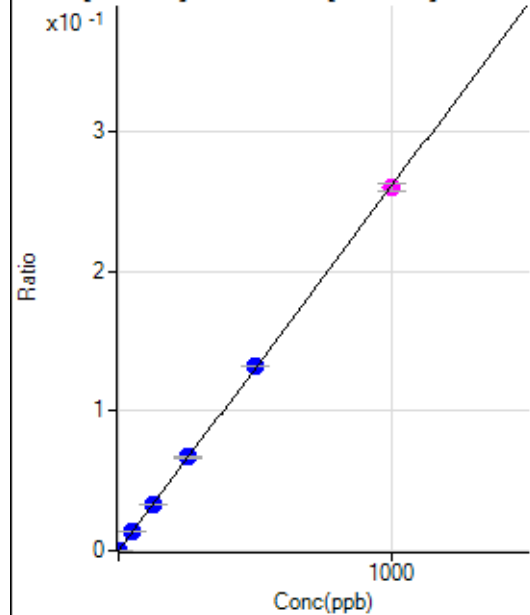
$$BEC = 0.1845$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1098.95		P	10.5
2	☐			1092.28		P	9.5
3	☐			1058.94		P	1.9
4	☐			1061.17		P	5.4
5	☐			1086.73		P	1.6
6	☐			1065.61		P	0.7
7	☐			1052.28		P	12.8
8	☐			1107.84		P	6.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1741.85	0.0001	P	8.9
2	☐	1.000	1.042	6854.69	0.0004	P	2.6
3	☐	50.000	51.253	254871.70	0.0135	P	0.8
4	☐	125.000	128.010	640452.49	0.0335	P	0.9
5	☐	250.000	256.183	1249794.40	0.0670	P	1.0
6	☐	500.000	506.293	2454964.62	0.1322	P	0.4
7	☐	1000.000	994.869	4833218.34	0.2597	M	2.1
8	☐			30561.16	0.0017	P	3.4

$$y = 2.6100\text{E-}004 * x + 8.9077\text{E-}005$$

$$R = 0.9999$$

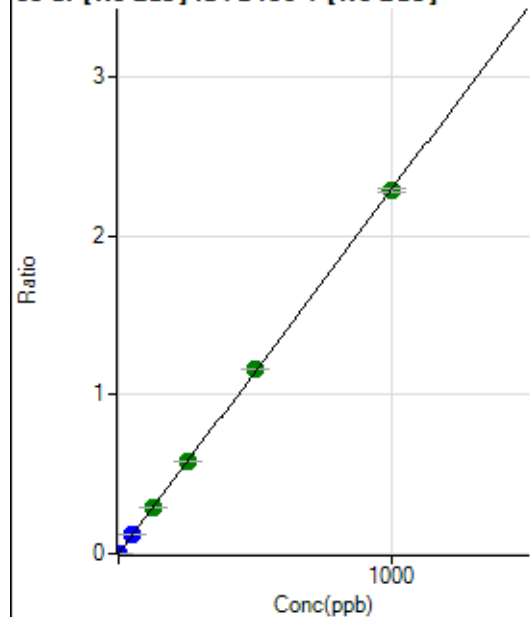
$$DL = 0.09142$$

$$BEC = 0.3413$$

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	591.70	0.0000	P	13.0
2	☐	1.000	0.993	43815.14	0.0023	P	3.1
3	☐	50.000	50.616	2196246.84	0.1160	P	0.4
4	☐	125.000	125.565	5502296.87	0.2878	A	0.4
5	☐	250.000	252.765	10814972.72	0.5793	A	0.2
6	☐	500.000	505.606	21513863.85	1.1588	A	0.4
7	☐	1000.000	996.405	42492420.39	2.2836	A	1.2
8	☐			251896.62	0.0136	P	1.0

$$y = 0.0023 * x + 3.0265E-005$$

$$R = 1.0000$$

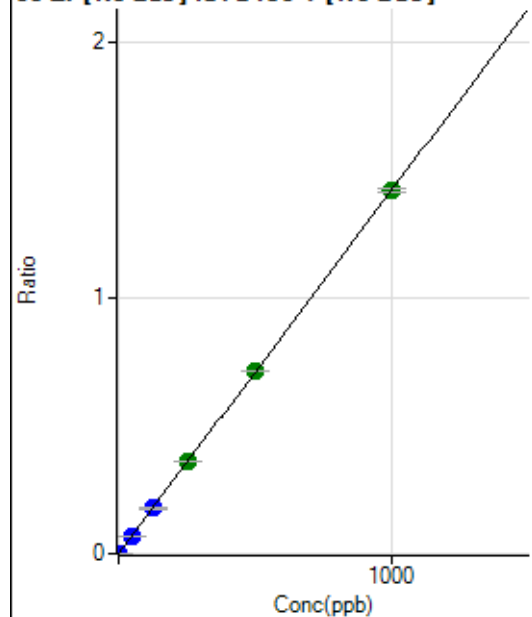
$$DL = 0.005168$$

$$BEC = 0.01321$$

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	1144.55	0.0001	P	6.7
2	☐	1.000	0.851	24054.28	0.0013	P	1.5
3	☐	50.000	49.849	1340563.01	0.0708	P	0.5
4	☐	125.000	124.516	3380632.63	0.1768	P	0.8
5	☐	250.000	252.188	6684310.22	0.3581	A	0.6
6	☐	500.000	501.878	13228875.64	0.7125	A	0.3
7	☐	1000.000	998.582	26379526.46	1.4177	A	0.9
8	☐			49121.17	0.0027	P	0.9

$$y = 0.0014 * x + 5.8542E-005$$

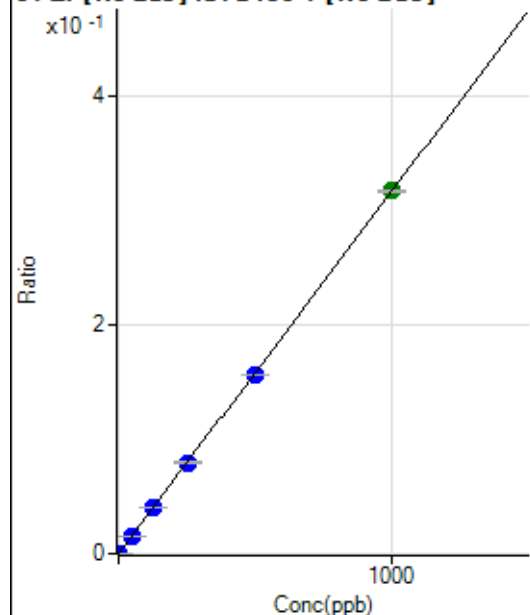
$$R = 1.0000$$

$$DL = 0.008291$$

$$BEC = 0.04124$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	213.90	0.0000	P	19.4
2	☐	1.000	0.827	5178.91	0.0003	P	2.0
3	☐	50.000	49.822	298745.84	0.0158	P	0.5
4	☐	125.000	125.581	760279.99	0.0398	P	0.8
5	☐	250.000	251.270	1485048.53	0.0796	P	1.7
6	☐	500.000	495.271	2911150.63	0.1568	P	0.5
7	☐	1000.000	1001.983	5902589.50	0.3172	A	0.8
8	☐			11024.13	0.0006	P	2.0

$$y = 3.1658\text{E-}004 * x + 1.0937\text{E-}005$$

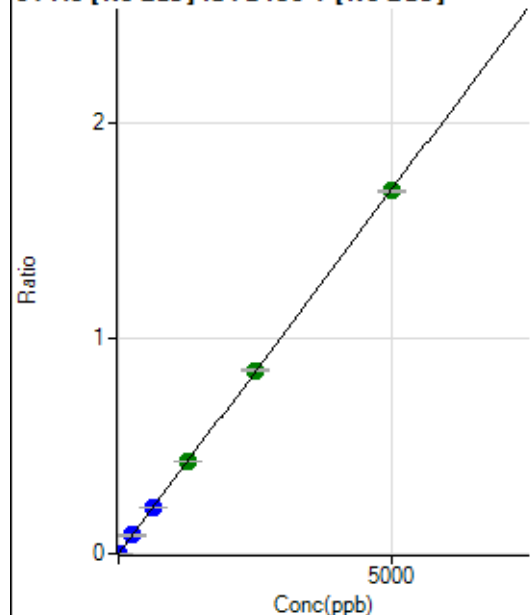
$$R = 1.0000$$

$$DL = 0.02011$$

$$BEC = 0.03455$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	433.36	0.0000	P	18.5
2	☐	5.000	4.897	31800.16	0.0017	P	1.7
3	☐	250.000	251.265	1604993.76	0.0848	P	0.4
4	☐	625.000	626.702	4042792.02	0.2115	P	0.7
5	☐	1250.000	1267.861	7985635.68	0.4278	A	0.7
6	☐	2500.000	2521.487	15794589.94	0.8507	A	0.4
7	☐	5000.000	4984.515	31292778.48	1.6817	A	0.7
8	☐			76390.40	0.0041	P	2.1

$$y = 3.3739\text{E-}004 * x + 2.2166\text{E-}005$$

$$R = 1.0000$$

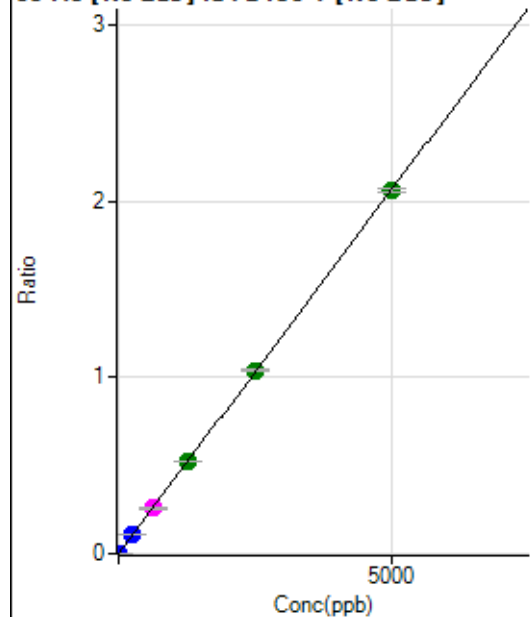
$$DL = 0.0364$$

$$BEC = 0.0657$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.12	0.0000	P	34.3
2	☐	5.000	5.178	40686.75	0.0021	P	0.4
3	☐	250.000	251.668	1967980.08	0.1040	P	0.5
4	☐	625.000	623.023	4920880.53	0.2574	M	0.8
5	☐	1250.000	1263.604	9745573.05	0.5220	A	0.1
6	☐	2500.000	2522.232	19345982.38	1.0420	A	0.2
7	☐	5000.000	4985.647	38326548.08	2.0597	A	1.1
8	☐			104578.04	0.0056	P	1.8

$$y = 4.1313E-004 * x + 3.1253E-006$$

$$R = 1.0000$$

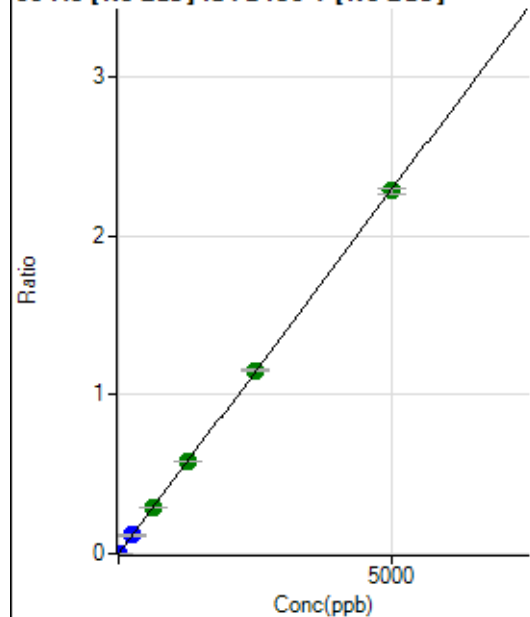
$$DL = 0.007782$$

$$BEC = 0.007565$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	155.56	0.0000	P	13.3
2	☐	5.000	5.155	45033.16	0.0024	P	0.6
3	☐	250.000	251.034	2178849.07	0.1151	P	0.6
4	☐	625.000	625.342	5482089.05	0.2867	A	0.7
5	☐	1250.000	1265.884	10836375.68	0.5805	A	0.6
6	☐	2500.000	2521.788	21468140.41	1.1563	A	0.6
7	☐	5000.000	4985.040	42533382.20	2.2858	A	1.3
8	☐			122653.85	0.0066	P	2.1

$$y = 4.5853E-004 * x + 7.9547E-006$$

$$R = 1.0000$$

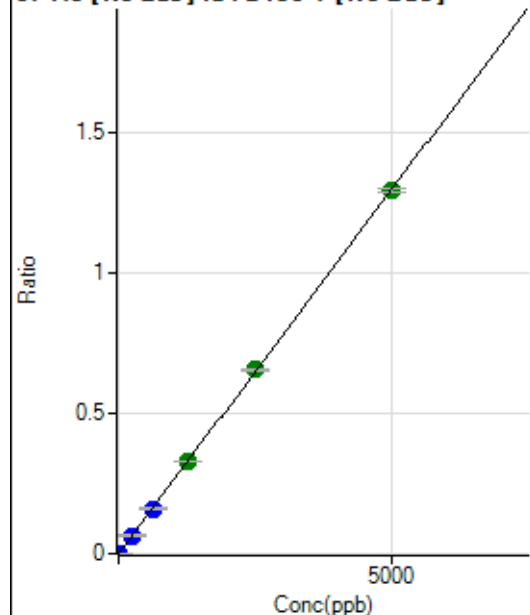
$$DL = 0.006914$$

$$BEC = 0.01735$$

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	52.78	0.0000	P	71.2
2	☐	5.000	5.154	25426.22	0.0013	P	0.5
3	☐	250.000	250.772	1230661.67	0.0650	P	0.1
4	☐	625.000	618.505	3065734.27	0.1604	P	0.8
5	☐	1250.000	1269.202	6142800.18	0.3291	A	0.4
6	☐	2500.000	2524.391	12150971.80	0.6545	A	0.2
7	☐	5000.000	4983.777	24042764.78	1.2921	A	1.2
8	☐			64711.28	0.0035	P	1.1

$$y = 2.5926\text{E-}004 * x + 2.6984\text{E-}006$$

$$R = 1.0000$$

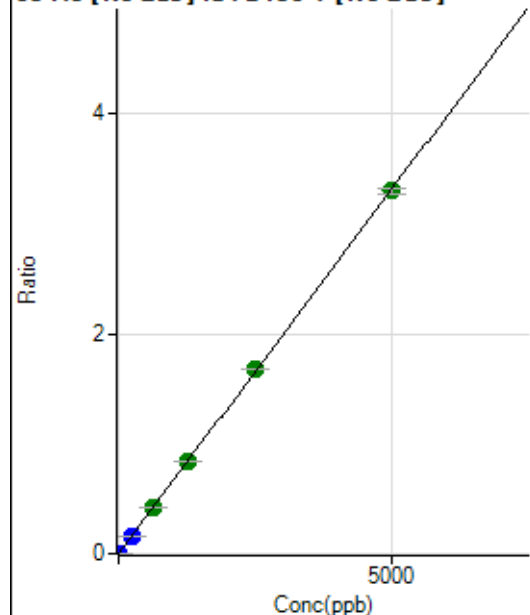
$$DL = 0.02224$$

$$BEC = 0.01041$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	8.9
2	☐	5.000	5.135	64646.90	0.0034	P	2.0
3	☐	250.000	250.368	3137754.78	0.1658	P	0.3
4	☐	625.000	623.639	7894307.47	0.4129	A	0.6
5	☐	1250.000	1267.623	15667764.24	0.8393	A	0.9
6	☐	2500.000	2528.236	31078764.24	1.6740	A	0.3
7	☐	5000.000	4981.628	61374578.46	3.2984	A	1.5
8	☐			164402.07	0.0089	P	0.6

$$y = 6.6210\text{E-}004 * x + 4.6878\text{E-}006$$

$$R = 1.0000$$

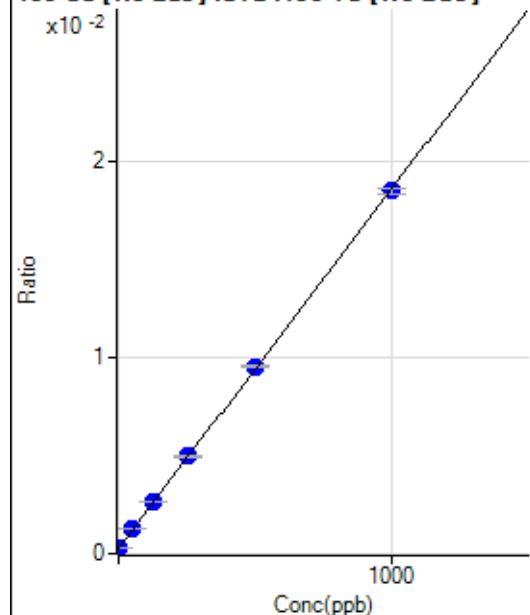
$$DL = 0.001886$$

$$BEC = 0.00708$$

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	8013.72	0.0003	P	4.7
2	☐	1.000	2.071	8741.90	0.0003	P	1.6
3	☐	50.000	55.006	34364.61	0.0013	P	2.3
4	☐	125.000	129.794	71919.26	0.0027	P	0.8
5	☐	250.000	256.855	133624.86	0.0050	P	1.8
6	☐	500.000	504.895	254567.63	0.0095	P	0.7
7	☐	1000.000	994.988	489744.65	0.0185	P	1.7
8	☐			8641.89	0.0003	P	5.5

$$y = 1.8318\text{E-}005 * x + 2.9134\text{E-}004$$

$$R = 1.0000$$

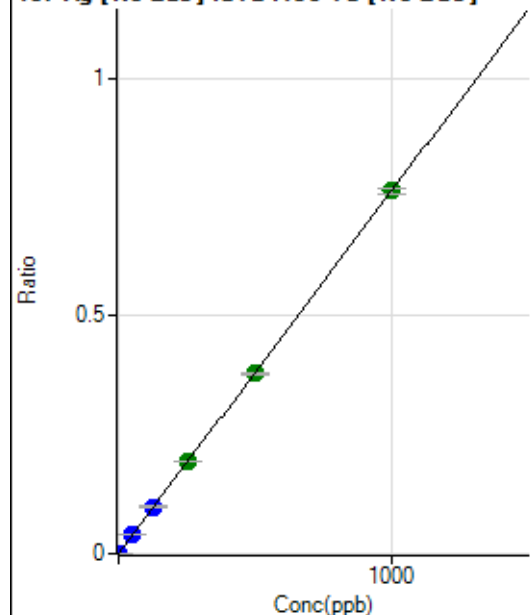
$$DL = 2.239$$

$$BEC = 15.9$$

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	188.90	0.0000	P	32.5
2	☐	1.000	1.020	20854.96	0.0008	P	1.9
3	☐	50.000	52.852	1067430.59	0.0403	P	1.6
4	☐	125.000	129.169	2656735.00	0.0986	P	1.2
5	☐	250.000	254.363	5192754.41	0.1942	A	0.6
6	☐	500.000	496.148	10105263.42	0.3787	A	0.2
7	☐	1000.000	1000.171	20189992.64	0.7634	A	1.7
8	☐			30066.13	0.0012	P	1.9

$$y = 7.6327\text{E-}004 * x + 6.8665\text{E-}006$$

$$R = 1.0000$$

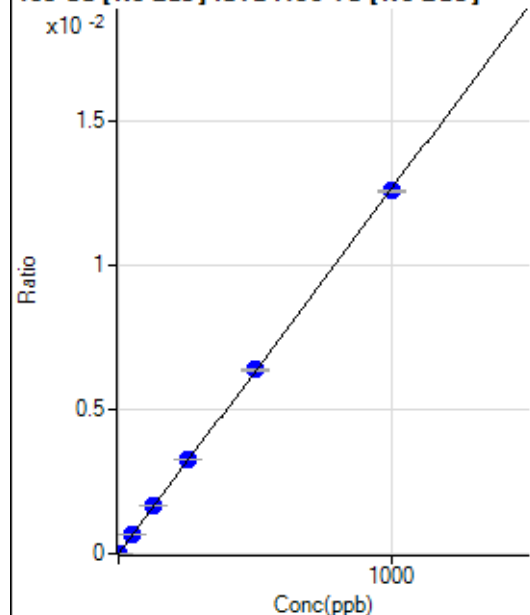
$$DL = 0.008759$$

$$BEC = 0.008996$$

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	18.06	0.0000	P	35.3
2	☐	1.000	1.030	363.90	0.0000	P	13.2
3	☐	50.000	53.236	17858.70	0.0007	P	0.6
4	☐	125.000	132.948	45400.62	0.0017	P	0.1
5	☐	250.000	258.403	87560.19	0.0033	P	1.3
6	☐	500.000	504.128	170426.02	0.0064	P	0.4
7	☐	1000.000	994.680	333276.10	0.0126	P	0.5
8	☐			594.47	0.0000	P	11.9

$$y = 1.2668\text{E-}005 * x + 6.5653\text{E-}007$$

$$R = 0.9999$$

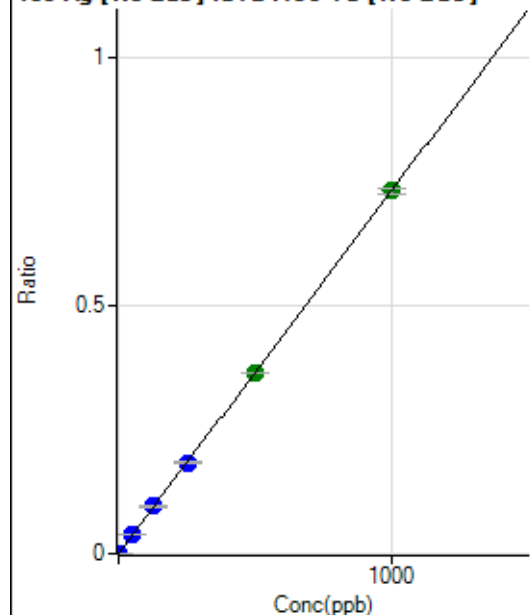
$$DL = 0.05487$$

$$BEC = 0.05183$$

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	66.67	0.0000	P	21.6
2	☐	1.000	1.045	20345.99	0.0008	P	4.0
3	☐	50.000	53.239	1029094.25	0.0389	P	1.0
4	☐	125.000	130.190	2562969.20	0.0951	P	1.2
5	☐	250.000	250.878	4901830.79	0.1833	P	1.5
6	☐	500.000	498.042	9709497.00	0.3639	A	0.4
7	☐	1000.000	999.949	19321227.52	0.7306	A	1.5
8	☐			28340.32	0.0011	P	2.2

$$y = 7.3059\text{E-}004 * x + 2.4237\text{E-}006$$

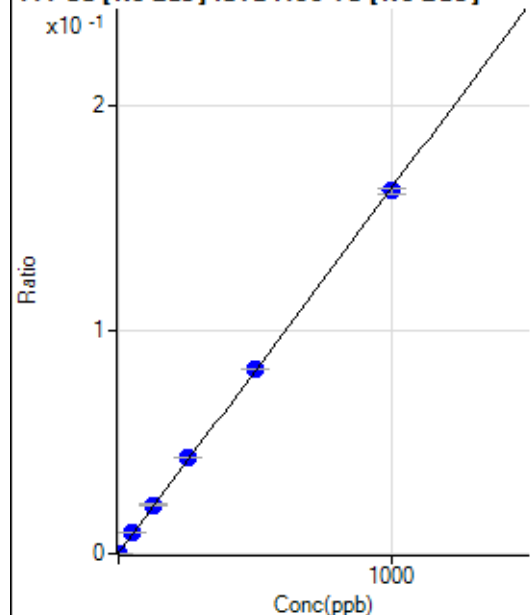
$$R = 1.0000$$

$$DL = 0.002148$$

$$BEC = 0.003317$$

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	5615.03	0.0002	P	4.7
2	☐	1.000	1.111	10230.64	0.0004	P	1.4
3	☐	50.000	54.321	239819.24	0.0091	P	0.6
4	☐	125.000	132.792	589168.61	0.0219	P	0.6
5	☐	250.000	261.613	1146717.50	0.0429	P	1.2
6	☐	500.000	506.132	2208444.83	0.0828	P	0.2
7	☐	1000.000	992.840	4288498.78	0.1622	P	1.4
8	☐			12925.49	0.0005	P	3.1

$$y = 1.6312\text{E-}004 * x + 2.0413\text{E-}004$$

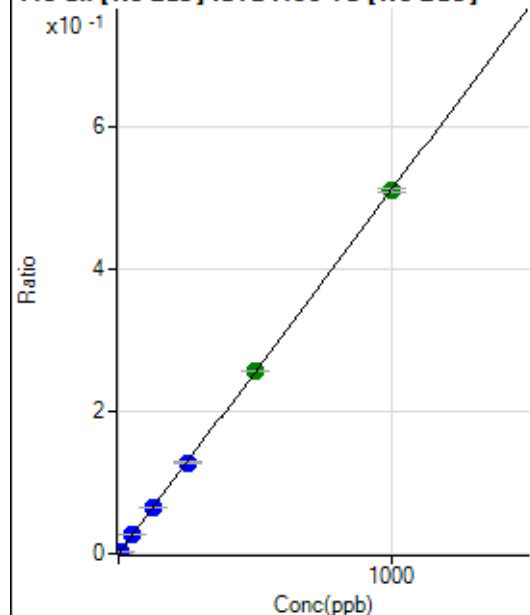
$$R = 0.9999$$

$$DL = 0.1748$$

$$BEC = 1.251$$

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	1027.86	0.0000	P	11.0
2	☐	5.000	5.117	70354.37	0.0026	P	0.2
3	☐	50.000	51.182	692335.57	0.0262	P	0.9
4	☐	125.000	126.585	1742526.60	0.0647	P	1.0
5	☐	250.000	250.432	3420568.00	0.1279	P	1.4
6	☐	500.000	504.208	6870400.15	0.2575	A	0.3
7	☐	1000.000	997.530	13471344.92	0.5094	A	1.1
8	☐			30790.29	0.0012	P	2.0

$$y = 5.1057\text{E-}004 * x + 3.7366\text{E-}005$$

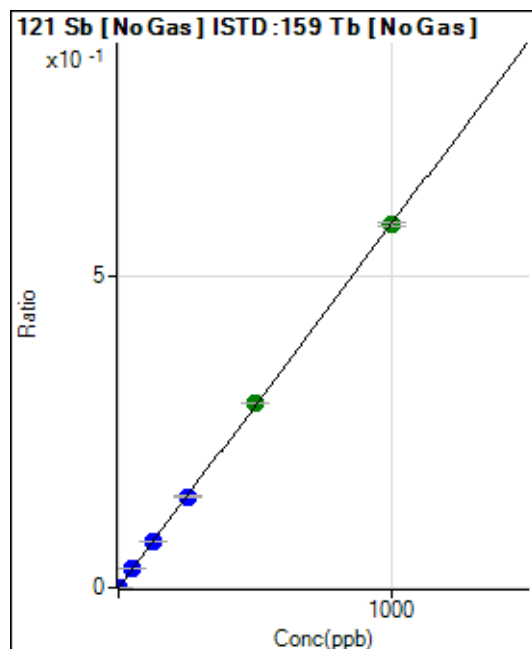
$$R = 1.0000$$

$$DL = 0.02418$$

$$BEC = 0.07318$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.56	0.0000	P	30.7
2	☐	2.000	1.934	30222.30	0.0011	P	0.8
3	☐	50.000	50.919	788572.73	0.0298	P	0.5
4	☐	125.000	126.440	1994149.28	0.0740	P	0.8
5	☐	250.000	250.683	3923819.84	0.1467	P	1.3
6	☐	500.000	505.420	7893232.38	0.2958	A	0.2
7	☐	1000.000	996.894	15430727.95	0.5834	A	0.9
8	☐			39439.57	0.0016	P	1.8

$$y = 5.8525\text{E-}004 * x + 6.5636\text{E-}006$$

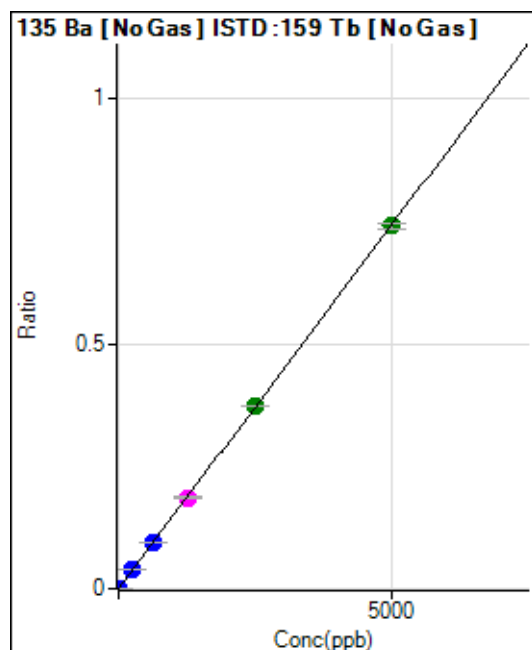
$$R = 1.0000$$

$$DL = 0.01032$$

$$BEC = 0.01122$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	24.2
2	☐	10.000	10.026	39588.02	0.0015	P	1.8
3	☐	250.000	258.872	1017347.32	0.0385	P	0.8
4	☐	625.000	634.721	2540531.41	0.0943	P	0.8
5	☐	1250.000	1248.924	4961169.12	0.1855	M	1.8
6	☐	2500.000	2516.713	9975345.97	0.3738	A	0.5
7	☐	5000.000	4990.254	19604148.36	0.7412	A	1.3
8	☐			35875.04	0.0014	P	0.9

$$y = 1.4854\text{E-}004 * x + 1.9189\text{E-}006$$

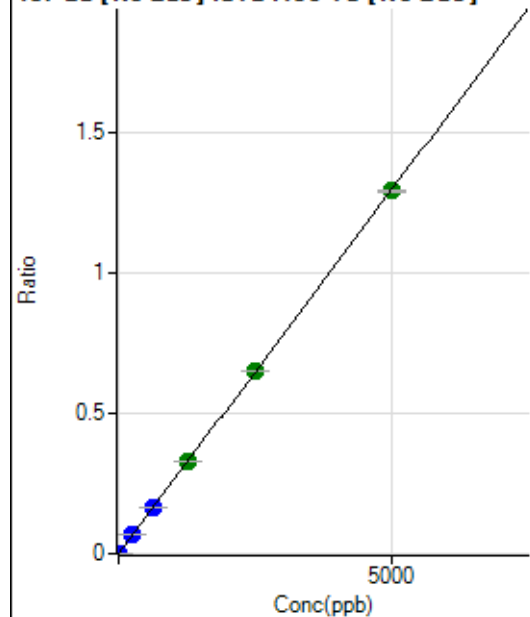
$$R = 1.0000$$

$$DL = 0.009362$$

$$BEC = 0.01292$$

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	108.34	0.0000	P	13.4
2	☐	10.000	10.214	70415.09	0.0027	P	1.7
3	☐	250.000	257.857	1768952.73	0.0669	P	1.4
4	☐	625.000	630.184	4403048.88	0.1634	P	1.2
5	☐	1250.000	1263.644	8763269.99	0.3277	A	0.7
6	☐	2500.000	2515.483	17404655.08	0.6523	A	0.5
7	☐	5000.000	4987.806	34205613.61	1.2933	A	0.8
8	☐			63269.56	0.0025	P	2.2

$$y = 2.5929E-004 * x + 3.9388E-006$$

$$R = 1.0000$$

$$DL = 0.006085$$

$$BEC = 0.01519$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			20.00		P	33.4
3	☐			91.11		P	15.2
4	☐			217.79		P	20.4
5	☐			484.47		P	11.9
6	☐			875.61		P	5.0
7	☐			1571.26		P	1.1
8	☐			211.12		P	1.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			8.89		P	43.3
3	☐			21.11		P	45.6
4	☐			24.44		P	34.3
5	☐			52.22		P	31.5
6	☐			64.44		P	25.5
7	☐			101.11		P	16.9
8	☐			80.00		P	12.5

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			102.78		P	40.0
2	☐			80.56		P	33.3
3	☐			80.56		P	15.8
4	☐			163.90		P	21.2
5	☐			125.01		P	6.7
6	☐			211.12		P	18.2
7	☐			438.91		P	12.2
8	☐			211.12		P	19.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	44.4
2	☐			22.22		P	43.3
3	☐			62.22		P	34.0
4	☐			62.22		P	11.1
5	☐			110.00		P	16.9
6	☐			193.34		P	7.5
7	☐			327.79		P	5.6
8	☐			72.22		P	16.2

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136.12		P	9.4
2	☐			233.35		P	25.8
3	☐			197.23		P	38.1
4	☐			188.90		P	12.7
5	☐			219.46		P	19.5
6	☐			205.57		P	12.4
7	☐			238.90		P	23.7
8	☐			238.90		P	14.1

160 Gd [He] No available calibration points

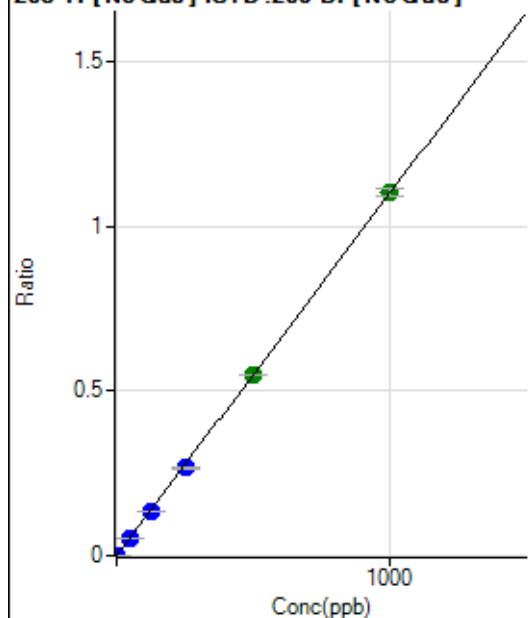
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			375.57		P	15.0
2	☐			360.01		P	4.9
3	☐			362.24		P	1.4
4	☐			367.79		P	13.1
5	☐			343.34		P	8.3
6	☐			357.79		P	3.5
7	☐			370.01		P	7.2
8	☐			402.24		P	5.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			119.45		P	33.0
2	☐			177.79		P	11.8
3	☐			147.23		P	18.2
4	☐			161.12		P	30.3
5	☐			144.45		P	20.3
6	☐			127.78		P	15.1
7	☐			175.01		P	21.8
8	☐			188.90		P	14.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			81.11		P	2.4
2	☐			77.78		P	16.2
3	☐			100.00		P	10.0
4	☐			83.34		P	16.0
5	☐			92.23		P	5.5
6	☐			90.00		P	23.1
7	☐			91.11		P	11.2
8	☐			118.89		P	15.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	583.38	0.0000	P	8.6
2	☐	1.000	0.939	17954.51	0.0011	P	1.5
3	☐	50.000	49.252	900460.40	0.0542	P	0.3
4	☐	125.000	121.738	2256778.85	0.1338	P	1.2
5	☐	250.000	242.912	4441156.44	0.2670	P	1.5
6	☐	500.000	499.681	8917099.94	0.5492	A	0.1
7	☐	1000.000	1002.377	17400482.68	1.1016	A	2.1
8	☐			32409.88	0.0024	P	2.6

$$y = 0.0011 * x + 3.2877E-005$$

$$R = 1.0000$$

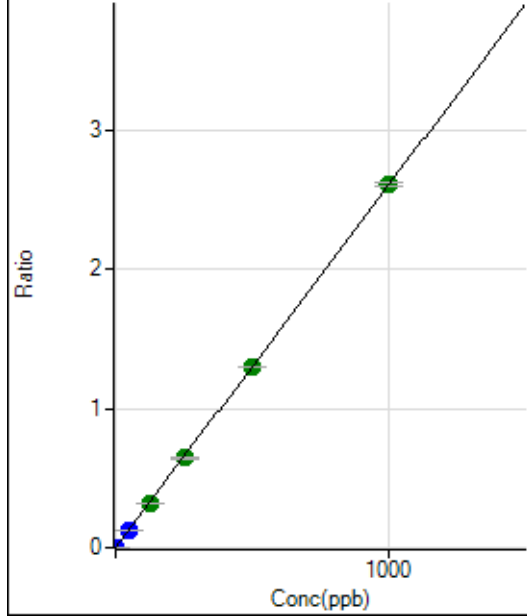
$$DL = 0.007761$$

$$BEC = 0.02992$$

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	883.40	0.0000	P	1.8
2	☐	1.000	0.946	42298.92	0.0025	P	2.5
3	☐	50.000	49.640	2146220.23	0.1291	P	0.2
4	☐	125.000	121.246	5316413.31	0.3152	A	0.3
5	☐	250.000	247.256	10692531.84	0.6428	A	1.3
6	☐	500.000	499.628	21089527.21	1.2988	A	0.2
7	☐	1000.000	1001.359	41119410.64	2.6031	A	1.1
8	☐			76207.53	0.0056	P	0.5

$$y = 0.0026 * x + 4.9802E-005$$

$$R = 1.0000$$

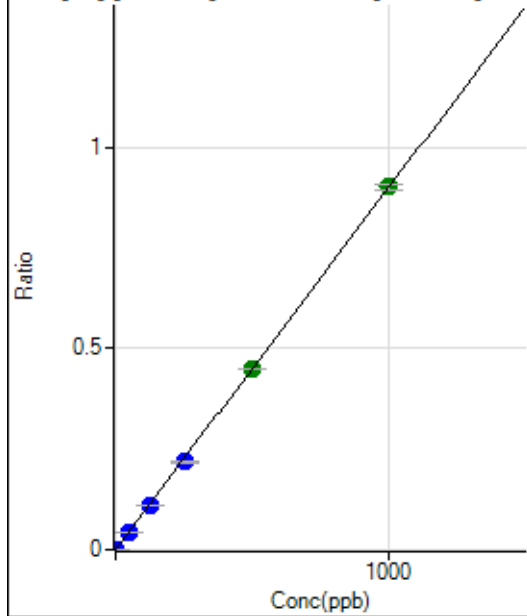
$$DL = 0.001022$$

$$BEC = 0.01916$$

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	1779.80	0.0001	P	8.6
2	☐	1.000	0.942	15972.95	0.0009	P	1.6
3	☐	50.000	49.386	740305.31	0.0445	P	0.4
4	☐	125.000	121.648	1847248.15	0.1095	P	0.5
5	☐	250.000	242.604	3631798.69	0.2183	P	1.9
6	☐	500.000	499.572	7298718.80	0.4495	A	0.6
7	☐	1000.000	1002.513	14246559.23	0.9019	A	1.6
8	☐			72424.60	0.0053	P	1.6

$$y = 8.9959E-004 * x + 1.0032E-004$$

$$R = 1.0000$$

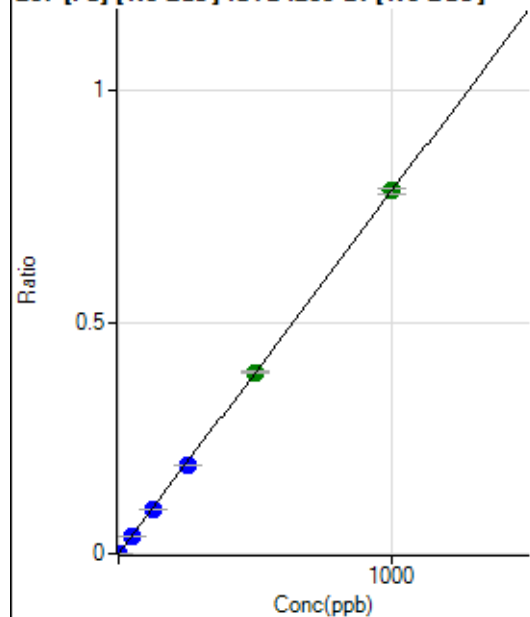
$$DL = 0.02877$$

$$BEC = 0.1115$$

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	1631.63	0.0001	P	1.6
2	☐	1.000	0.924	13742.65	0.0008	P	1.1
3	☐	50.000	49.074	640479.41	0.0385	P	0.4
4	☐	125.000	122.465	1619022.17	0.0960	P	0.4
5	☐	250.000	243.986	3179748.71	0.1912	P	1.8
6	☐	500.000	501.204	6374621.09	0.3926	A	0.4
7	☐	1000.000	1001.265	12386821.00	0.7842	A	1.8
8	☐			63577.88	0.0047	P	0.9

$$y = 7.8313E-004 * x + 9.2000E-005$$

$$R = 1.0000$$

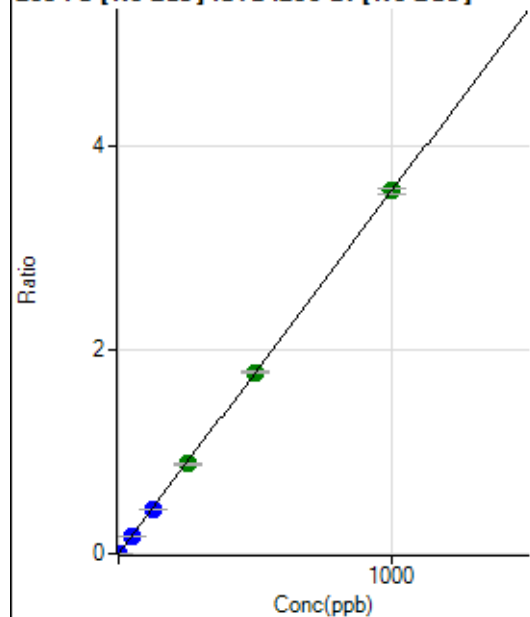
$$DL = 0.005763$$

$$BEC = 0.1175$$

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	6789.74	0.0004	P	2.6
2	☐	1.000	0.940	62848.34	0.0037	P	2.0
3	☐	50.000	49.407	2929898.11	0.1762	P	0.4
4	☐	125.000	122.551	7362294.39	0.4366	P	0.6
5	☐	250.000	246.581	14604757.01	0.8780	A	1.1
6	☐	500.000	500.814	28947512.22	1.7828	A	0.3
7	☐	1000.000	1000.784	56266058.67	3.5622	A	1.8
8	☐			288648.27	0.0212	P	0.2

$$y = 0.0036 * x + 3.8282E-004$$

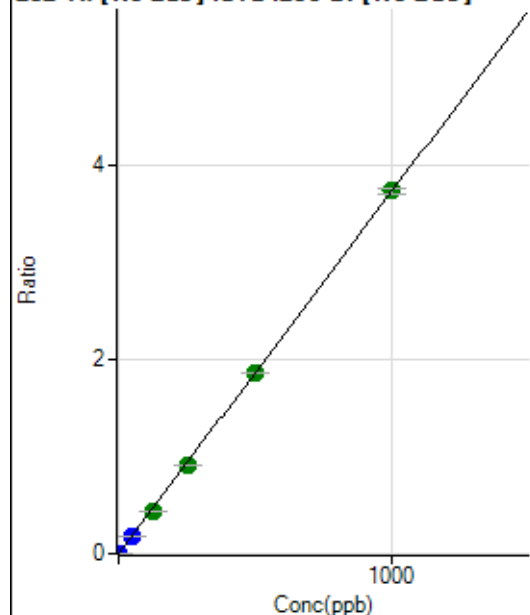
$$R = 1.0000$$

$$DL = 0.008439$$

$$BEC = 0.1076$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2194.69	0.0001	P	4.7
2	☐	1.000	0.787	51453.56	0.0031	P	2.3
3	☐	50.000	47.093	2913884.41	0.1753	P	0.4
4	☐	125.000	118.671	7445437.20	0.4415	A	0.3
5	☐	250.000	245.515	15191385.29	0.9132	A	0.6
6	☐	500.000	498.295	30092443.96	1.8533	A	0.4
7	☐	1000.000	1002.911	58915853.17	3.7300	A	1.7
8	☐			17842.26	0.0013	P	1.3

$$y = 0.0037 * x + 1.2371E-004$$

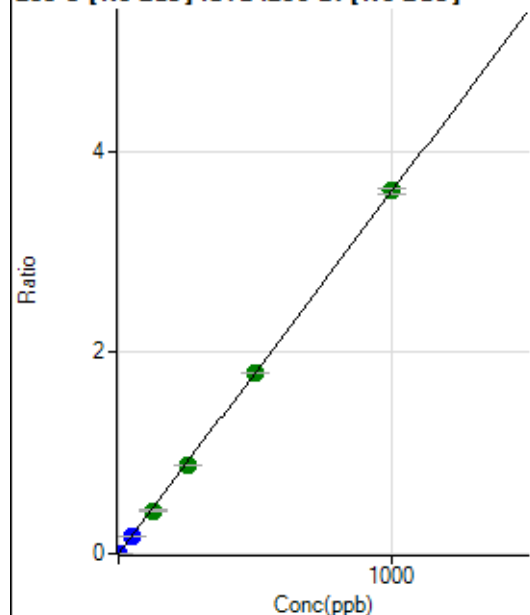
$$R = 1.0000$$

$$DL = 0.004728$$

$$BEC = 0.03326$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2216.96	0.0001	P	9.1
2	☐	1.000	0.917	57691.32	0.0034	P	3.0
3	☐	50.000	47.646	2849754.14	0.1714	P	0.1
4	☐	125.000	119.075	7221289.00	0.4282	A	0.9
5	☐	250.000	245.236	14667264.31	0.8817	A	0.8
6	☐	500.000	499.253	29143592.67	1.7949	A	0.6
7	☐	1000.000	1002.423	56922630.09	3.6037	A	1.5
8	☐			96156.98	0.0071	P	1.0

$$y = 0.0036 * x + 1.2497E-004$$

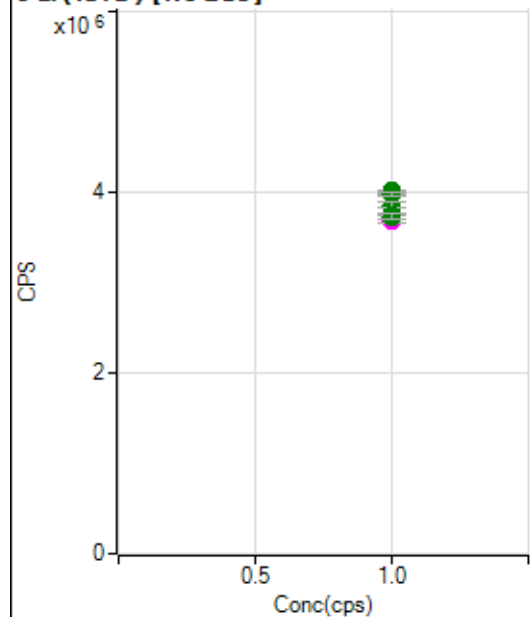
$$R = 1.0000$$

$$DL = 0.009519$$

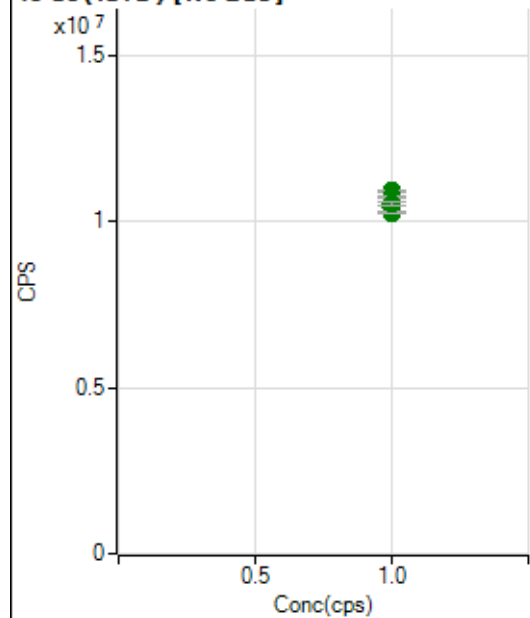
$$BEC = 0.03476$$

Weight: <None>

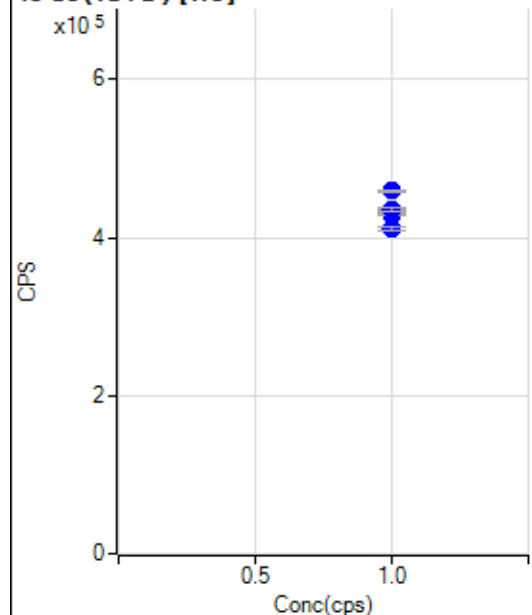
Min Conc: 0

6 Li (ISTD) [No Gas]

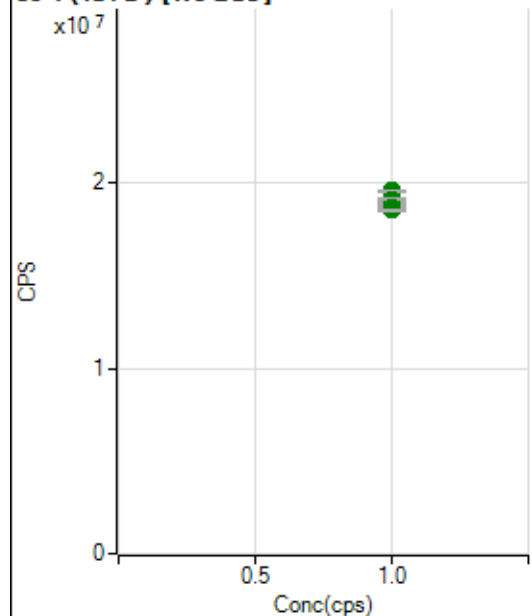
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4010420.46		A	0.7
2	☐	1.000		4004666.60		A	0.3
3	☐	1.000		3973573.31		A	0.5
4	☐	1.000		3977762.86		A	0.8
5	☐	1.000		3852839.53		A	1.6
6	☐	1.000		3739112.41		A	0.5
7	☐	1.000		3676315.74		M	0.7
8	☐	1.000		3728758.17		A	1.5

45 Sc (ISTD) [No Gas]

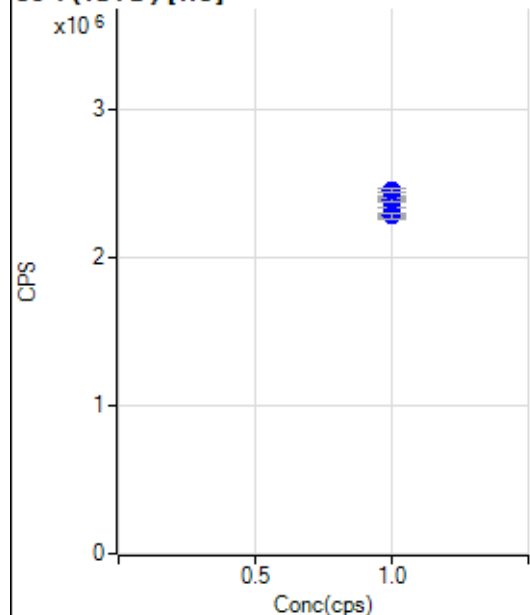
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10923792.52		A	0.3
2	☐	1.000		10746501.20		A	0.6
3	☐	1.000		10714961.61		A	0.4
4	☐	1.000		10750446.51		A	0.5
5	☐	1.000		10410137.21		A	1.6
6	☐	1.000		10224411.16		A	0.1
7	☐	1.000		10279045.28		A	0.4
8	☐	1.000		10542328.62		A	1.1

45 Sc (ISTD) [He]

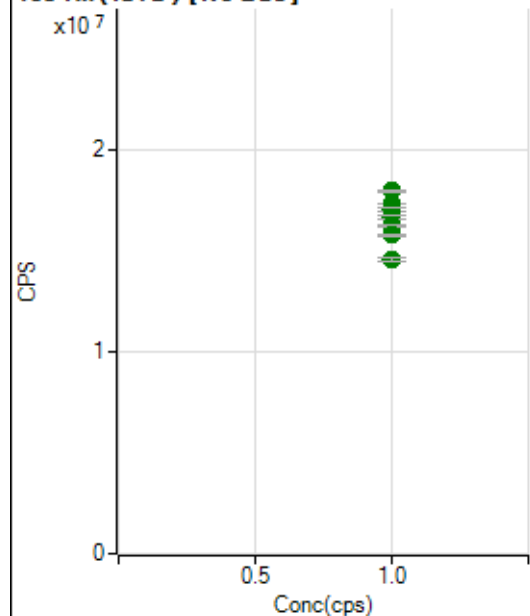
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		429742.28		P	0.5
2	☐	1.000		436382.93		P	0.2
3	☐	1.000		434668.11		P	0.6
4	☐	1.000		428302.98		P	0.1
5	☐	1.000		410334.25		P	1.2
6	☐	1.000		410867.04		P	1.1
7	☐	1.000		434910.80		P	1.1
8	☐	1.000		459015.59		P	0.6

89 Y (ISTD) [No Gas]

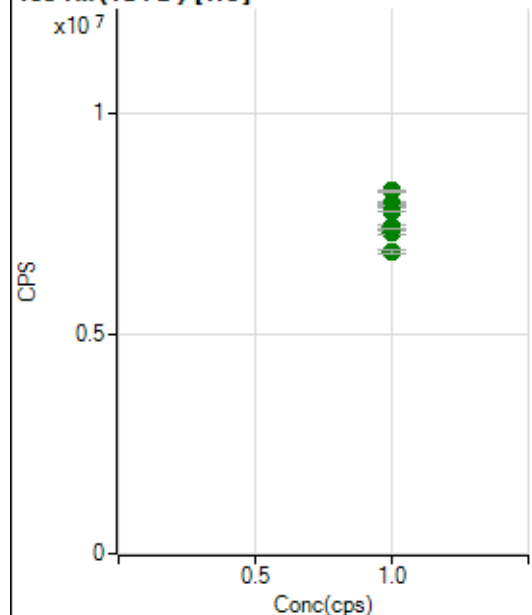
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19552683.18		A	0.2
2	☐	1.000		18989959.72		A	0.7
3	☐	1.000		18927969.44		A	0.8
4	☐	1.000		19118328.61		A	0.3
5	☐	1.000		18668337.64		A	1.1
6	☐	1.000		18565933.47		A	0.4
7	☐	1.000		18607512.64		A	0.4
8	☐	1.000		18519035.28		A	0.6

89 Y (ISTD) [He]

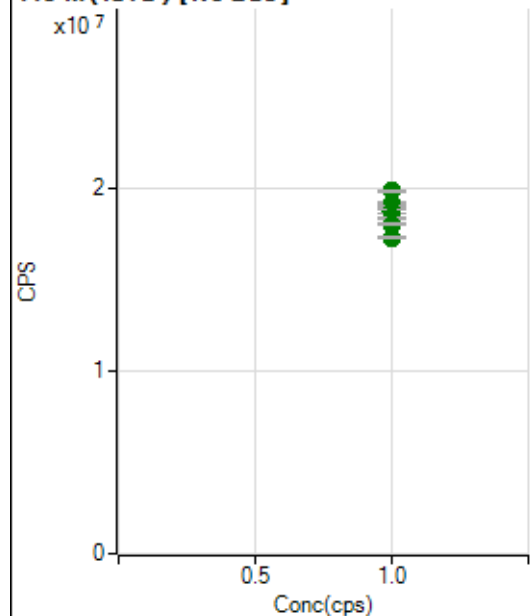
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2336217.76		P	0.4
2	☐	1.000		2390445.45		P	0.3
3	☐	1.000		2400973.89		P	0.6
4	☐	1.000		2382657.55		P	0.3
5	☐	1.000		2281907.47		P	0.7
6	☐	1.000		2280279.15		P	1.4
7	☐	1.000		2388681.62		P	0.8
8	☐	1.000		2448392.17		P	1.0

103 Rh (ISTD) [No Gas]

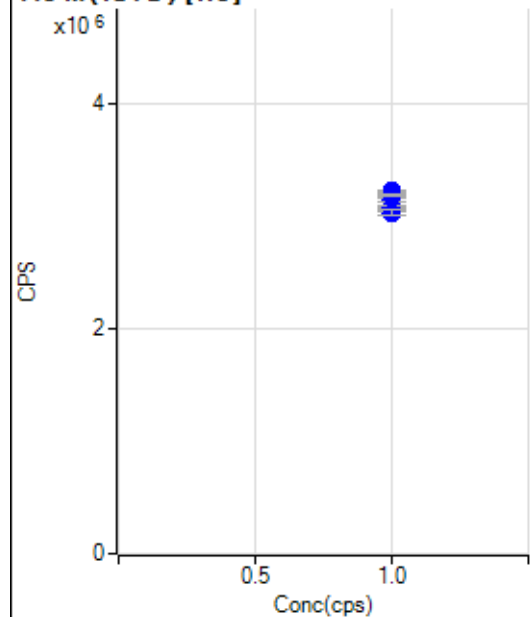
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17949559.43		A	0.2
2	☐	1.000		17309593.62		A	0.3
3	☐	1.000		17029408.37		A	0.9
4	☐	1.000		17092911.67		A	0.1
5	☐	1.000		16638041.17		A	1.1
6	☐	1.000		16231108.17		A	0.4
7	☐	1.000		15755845.31		A	0.9
8	☐	1.000		14550423.59		A	0.8

103 Rh (ISTD) [He]

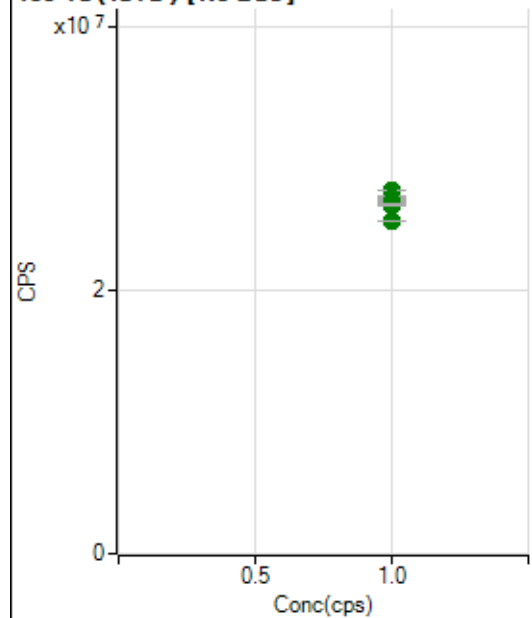
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8247823.14		A	0.7
2	☐	1.000		7966722.31		A	0.3
3	☐	1.000		7910233.63		A	0.5
4	☐	1.000		7781543.08		A	0.4
5	☐	1.000		7418577.32		A	1.0
6	☐	1.000		7301245.93		A	1.3
7	☐	1.000		7401408.92		A	0.1
8	☐	1.000		6868794.21		A	0.9

115 In (ISTD) [No Gas]

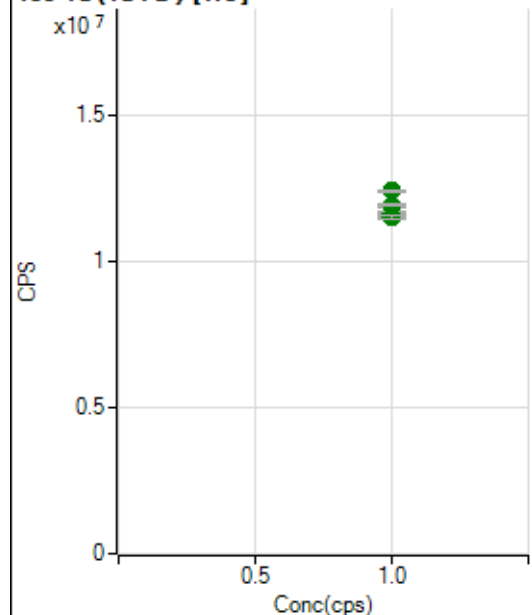
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19828148.23		A	0.6
2	☐	1.000		19162792.67		A	0.7
3	☐	1.000		18989680.72		A	0.9
4	☐	1.000		18988043.67		A	0.4
5	☐	1.000		18733066.10		A	1.2
6	☐	1.000		18359697.37		A	0.3
7	☐	1.000		18002444.28		A	0.6
8	☐	1.000		17259542.32		A	0.5

115 In (ISTD) [He]

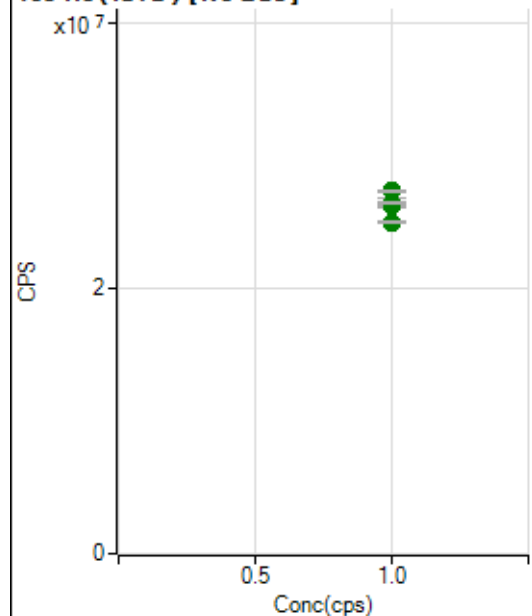
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3141860.53		P	0.7
2	☐	1.000		3214065.53		P	0.3
3	☐	1.000		3220239.39		P	0.4
4	☐	1.000		3184241.06		P	0.4
5	☐	1.000		3054761.48		P	0.7
6	☐	1.000		3022165.62		P	1.6
7	☐	1.000		3074474.57		P	0.9
8	☐	1.000		3027993.44		P	1.5

159 Tb (ISTD) [No Gas]

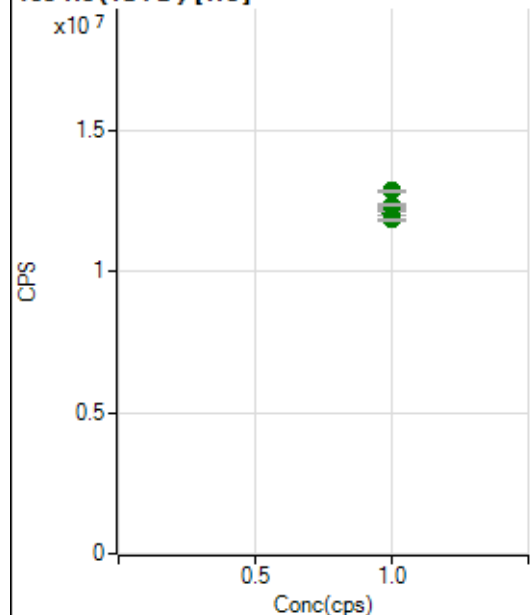
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27506604.59		A	0.1
2	☐	1.000		26549264.05		A	0.7
3	☐	1.000		26456061.00		A	0.2
4	☐	1.000		26947040.99		A	0.9
5	☐	1.000		26746867.38		A	1.4
6	☐	1.000		26683991.27		A	0.2
7	☐	1.000		26448948.50		A	0.8
8	☐	1.000		25230932.40		A	0.4

159 Tb (ISTD) [He]

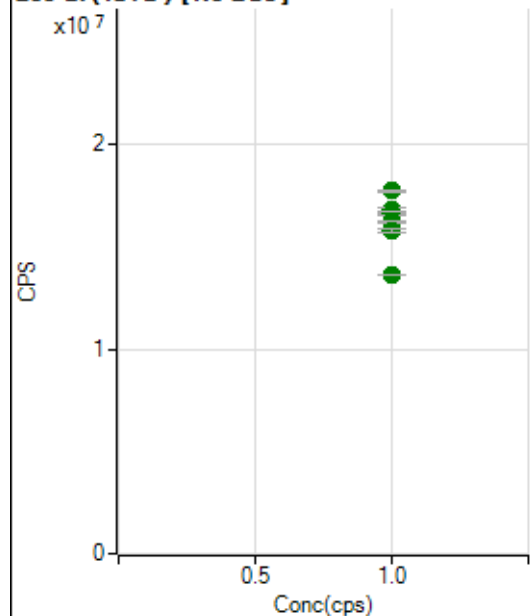
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12388264.40		A	0.4
2	☐	1.000		11864043.30		A	0.5
3	☐	1.000		11889623.16		A	0.1
4	☐	1.000		11909571.63		A	0.4
5	☐	1.000		11571863.85		A	0.5
6	☐	1.000		11601113.02		A	1.5
7	☐	1.000		11885048.16		A	0.6
8	☐	1.000		11481298.16		A	0.9

165 Ho (ISTD) [No Gas]

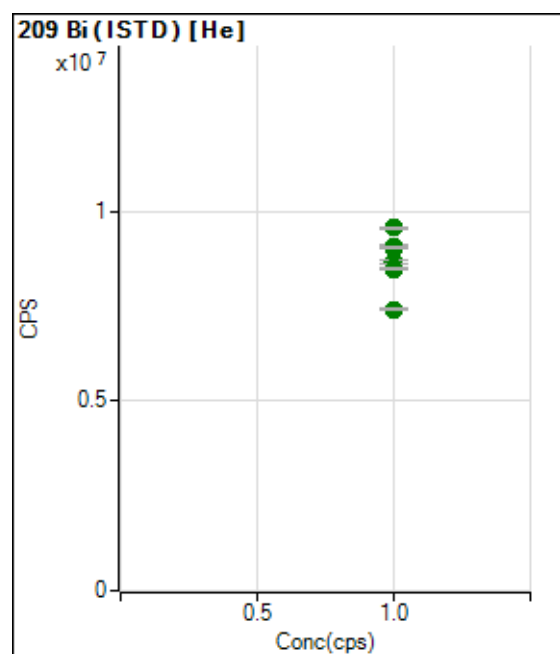
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27333076.65		A	0.3
2	☐	1.000		26270078.02		A	0.7
3	☐	1.000		26185129.06		A	0.3
4	☐	1.000		26528966.91		A	0.4
5	☐	1.000		26578953.89		A	1.2
6	☐	1.000		26347230.62		A	0.3
7	☐	1.000		26423662.40		A	0.6
8	☐	1.000		24960604.90		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12847853.00		A	0.2
2	☐	1.000		12230913.29		A	0.5
3	☐	1.000		12331164.68		A	0.4
4	☐	1.000		12333813.42		A	0.8
5	☐	1.000		12057122.18		A	0.9
6	☐	1.000		12055169.40		A	1.6
7	☐	1.000		12357285.79		A	0.1
8	☐	1.000		11823218.85		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17736688.07		A	0.8
2	☐	1.000		16856264.05		A	0.9
3	☐	1.000		16625754.06		A	0.1
4	☐	1.000		16865398.64		A	1.0
5	☐	1.000		16636211.56		A	1.4
6	☐	1.000		16237119.76		A	0.4
7	☐	1.000		15797567.27		A	1.4
8	☐	1.000		13617894.10		A	0.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9554795.13		A	0.6
2	☐	1.000		9086520.00		A	0.2
3	☐	1.000		9051801.39		A	0.9
4	☐	1.000		9035311.46		A	0.3
5	☐	1.000		8669280.91		A	1.1
6	☐	1.000		8532732.23		A	1.3
7	☐	1.000		8465265.29		A	0.5
8	☐	1.000		7404435.79		A	0.6

US EPA Tune Check Sample Report

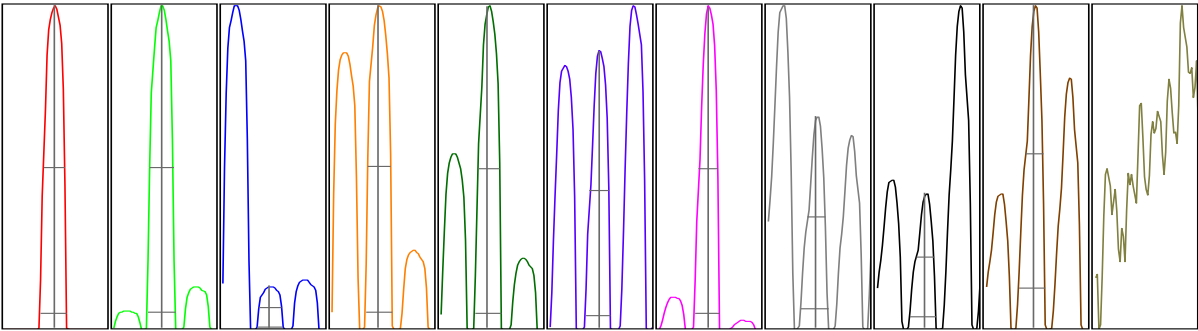
Batch Folder D:\ICP-MS Data\P7120919-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	14250	1.09	5.00	
24	1479219	1.61	5.00	
25	193153	1.45	5.00	
26	225746	1.43	5.00	
59	140299	1.51	5.00	
113	20914	1.69	5.00	
115	241412	1.55	5.00	
206	62817	1.61	5.00	
207	59083	1.36	5.00	
208	135292	1.64	5.00	
220	122	2.05		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	14309	14469	14044	14204	14226
24	1487186	1515210	1452246	1466035	1475418
25	193929	197452	190203	191337	192845
26	226326	230959	222722	223604	225118
59	140908	143612	138032	139219	139722
113	20956	21396	20418	20803	20997
115	241567	247304	237054	239999	241139
206	63235	64169	61513	62221	62949
207	59317	60170	57962	58795	59174
208	136161	138308	132262	134428	135300
220	118	123	122	121	124

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	23628	9.00	8.9 - 9.1		0.778	0.900	
24	2345674	23.95	23.9 - 24.1		0.826	0.900	
25	309305	24.90	24.9 - 25.1		0.758	0.900	
26	361674	25.90	25.9 - 26.1		0.784	0.900	
59	236345	58.90	58.9 - 59.1		0.780	0.900	
113	39209	113.00	112.9 - 113.1		0.730	0.900	
115	453222	115.00	114.9 - 115.1		0.730	0.900	
206	120856	205.95	205.9 - 206.1		0.784	0.900	
207	110013	206.95	206.9 - 207.1		0.753	0.900	
208	261855	207.95	207.9 - 208.1		0.758	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	7.6	V	Deflect	13.6	V
Extract 2	-135.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	35212	0.57	
89	519082	0.59	
205	52168	0.94	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	34894	35417	35324	35263	35162
89	520960	523005	516785	519269	515390
205	51359	52473	52044	52514	52452

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	7.6	V	Deflect	2.2	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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			