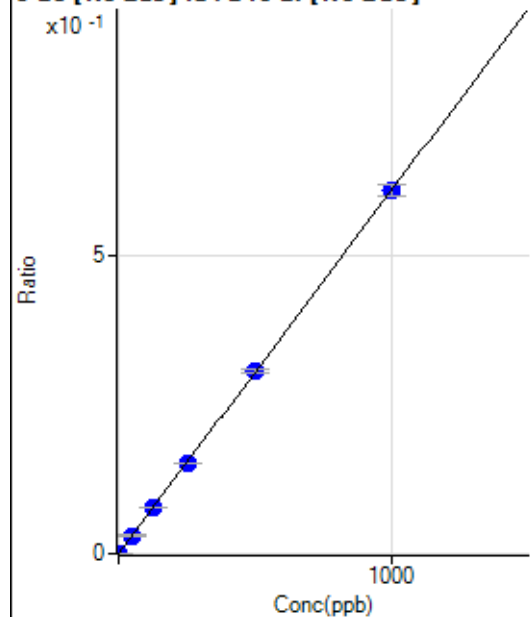


Batch Folder: D:\ICP-MS Data\P7122619MS3.b\
Analysis File: P7122619MS3.batch.bin
DA Date-Time: 2019-12-27 00:17:25
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2019-12-26 16:17:29
2	005CALS.d	S02	2019-12-26 16:21:07
3	006CALS.d	S03	2019-12-26 16:26:00
4	009CALS.d	S04	2019-12-26 16:40:12
5	010CALS.d	S05	2019-12-26 16:44:02
6	011CALS.d	S06	2019-12-26 16:47:51
7	012CALS.d	S07	2019-12-26 16:51:41
8	013CALS.d	S08	2019-12-26 16:55:32

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.52	0.0000	P	15.7
2	☐	1.000	1.033	2722.55	0.0006	P	4.9
3	☐	50.000	50.038	125475.31	0.0306	P	0.9
4	☐	125.000	126.790	320888.66	0.0775	P	0.9
5	☐	250.000	249.310	633054.88	0.1523	P	1.0
6	☐	500.000	502.870	1251786.57	0.3072	P	2.4
7	☐	1000.000	998.512	2419771.21	0.6100	P	3.1
8	☐			433.35	0.0001	P	12.6

$$y = 6.1094\text{E-}004 * x + 1.6114\text{E-}005$$

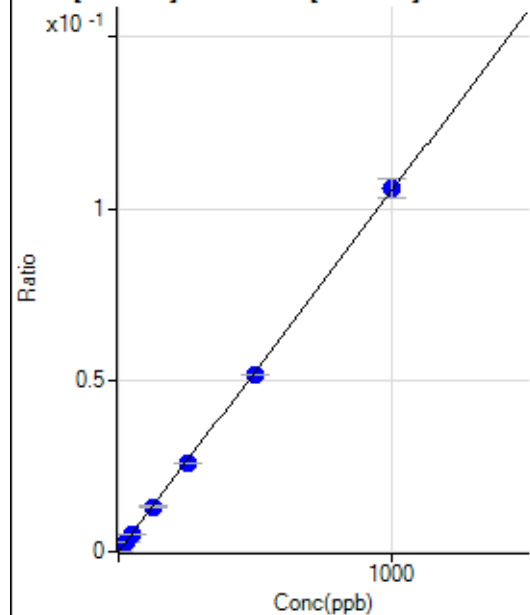
$$R = 1.0000$$

$$DL = 0.01243$$

$$BEC = 0.02638$$

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	236.12	0.0001	P	8.3
2	☐	25.000	26.183	11805.02	0.0028	P	1.7
3	☐	50.000	49.471	21552.15	0.0053	P	2.2
4	☐	125.000	123.758	54075.60	0.0131	P	2.2
5	☐	250.000	245.162	107293.41	0.0258	P	0.8
6	☐	500.000	491.305	210602.09	0.0517	P	0.3
7	☐	1000.000	1005.709	419135.25	0.1057	P	5.1
8	☐			11921.77	0.0030	P	9.2

$$y = 1.0507\text{E-}004 * x + 5.5634\text{E-}005$$

$$R = 0.9999$$

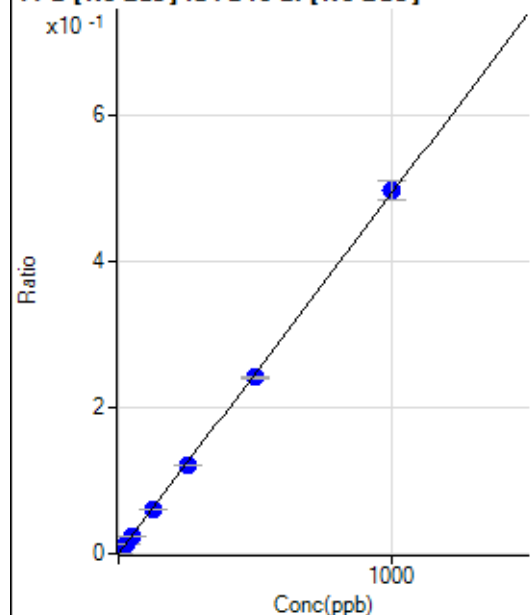
$$DL = 0.1313$$

$$BEC = 0.5295$$

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	1155.65	0.0003	P	7.6
2	☐	25.000	25.465	53877.57	0.0128	P	2.1
3	☐	50.000	48.852	99775.83	0.0243	P	0.6
4	☐	125.000	123.418	252748.10	0.0610	P	1.2
5	☐	250.000	244.080	500571.81	0.1204	P	1.1
6	☐	500.000	489.202	982502.86	0.2411	P	0.8
7	☐	1000.000	1007.123	1966691.73	0.4961	P	5.2
8	☐			55932.97	0.0141	P	10.2

$$y = 4.9230\text{E-}004 * x + 2.7225\text{E-}004$$

$$R = 0.9999$$

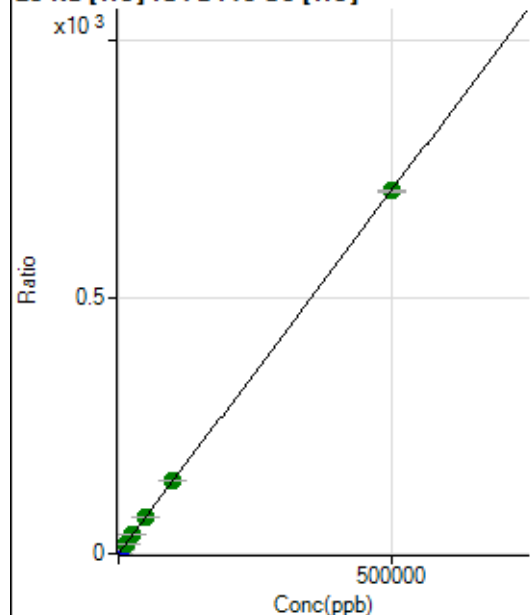
$$DL = 0.1261$$

$$BEC = 0.553$$

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	9158.70	0.0293	P	3.4
2	☐	500.000	481.106	219073.86	0.7107	P	3.8
3	☐	5000.000	5077.143	2278785.60	7.2205	P	0.2
4	☐	12500.000	12889.532	5683975.21	18.2859	A	1.7
5	☐	25000.000	25344.568	11497242.79	35.9271	A	0.7
6	☐	50000.000	50761.119	22796456.24	71.9268	A	0.1
7	☐	100000.00	101516.90	44533305.51	143.8167	A	0.3
8	☐	500000.00	499592.78	233194880.2	707.6471	A	0.6

$$y = 0.0014 * x + 0.0293$$

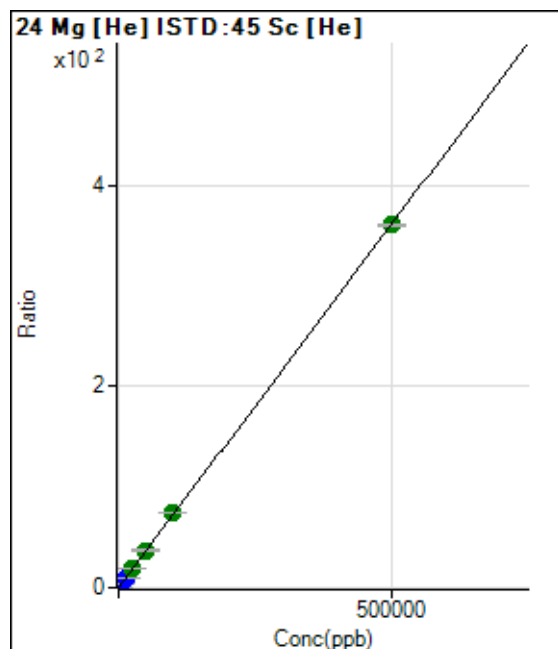
$$R = 1.0000$$

$$DL = 2.11$$

$$BEC = 20.69$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200.01	0.0006	P	19.0
2	☐	500.000	477.087	106368.03	0.3451	P	6.1
3	☐	5000.000	5197.662	1184691.90	3.7538	P	0.5
4	☐	12500.000	13102.367	2941197.92	9.4616	P	1.1
5	☐	25000.000	25829.886	5969000.56	18.6519	A	0.4
6	☐	50000.000	51483.551	11782199.39	37.1760	A	0.6
7	☐	100000.00	102619.96	22945282.98	74.1006	A	0.2
8	☐	500000.00	499269.14	118791308.2	360.5137	A	0.6

$$y = 7.2208\text{E-}004 * x + 6.4001\text{E-}004$$

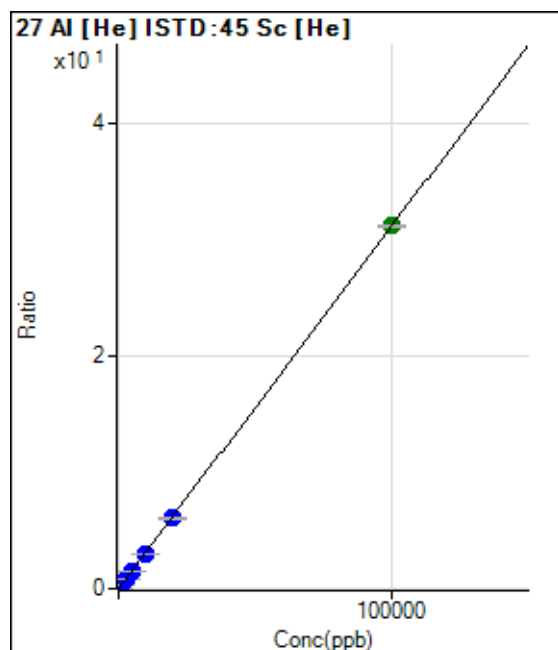
$$R = 1.0000$$

$$DL = 0.5054$$

$$BEC = 0.8863$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0001	P	17.0
2	☐	20.000	18.143	1766.85	0.0057	P	9.1
3	☐	1000.000	976.333	95895.41	0.3039	P	1.3
4	☐	2500.000	2486.081	240501.70	0.7736	P	0.8
5	☐	5000.000	4889.152	486844.85	1.5213	P	0.9
6	☐	10000.000	9669.503	953557.13	3.0087	P	0.3
7	☐	20000.000	19425.370	1871485.48	6.0441	P	0.9
8	☐	100000.00	100154.10	10268896.41	31.1623	A	0.9

$$y = 3.1114\text{E-}004 * x + 8.8874\text{E-}005$$

$$R = 1.0000$$

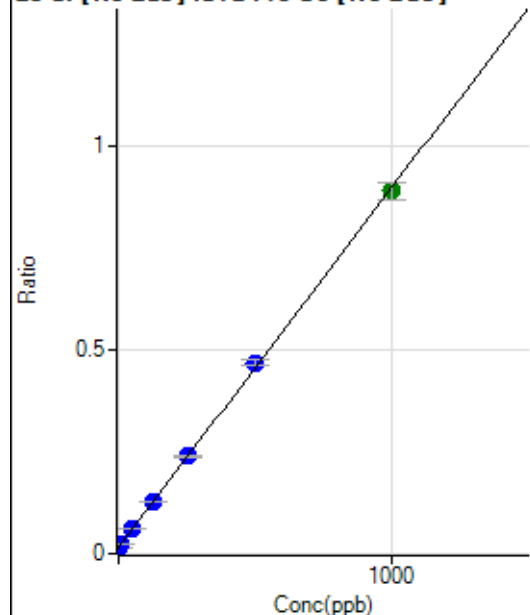
$$DL = 0.146$$

$$BEC = 0.2856$$

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	133679.41	0.0152	P	1.9
2	☐	10.000	10.987	220565.61	0.0249	P	1.9
3	☐	50.000	52.371	530128.54	0.0613	P	0.5
4	☐	125.000	127.108	1142031.41	0.1270	P	0.2
5	☐	250.000	253.594	2162903.54	0.2383	P	0.6
6	☐	500.000	513.858	4163428.69	0.4674	P	2.7
7	☐	1000.000	991.780	7778685.07	0.8880	A	4.5
8	☐			761750.91	0.0862	P	0.1

$$y = 8.8000\text{E-}004 * x + 0.0152$$

$$R = 0.9999$$

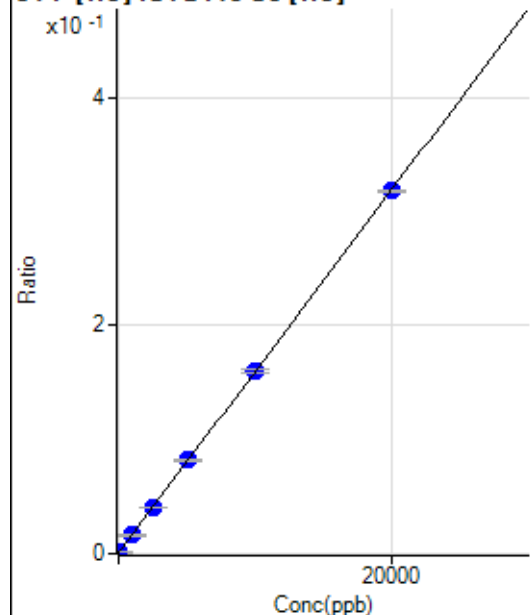
$$DL = 1.001$$

$$BEC = 17.26$$

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	-23.367	105.56	0.0003	P	19.5
2	☐	0.000	23.367	333.35	0.0011	P	14.0
3	☐	1000.000	1004.916	5267.80	0.0167	P	12.1
4	☐	2500.000	2538.254	12775.39	0.0411	P	0.4
5	☐	5000.000	5100.490	26193.28	0.0819	P	3.2
6	☐	10000.000	10030.658	50801.47	0.1603	P	1.2
7	☐	20000.000	19954.521	98525.13	0.3182	P	0.6
8	☐			183.34	0.0006	P	19.1

$$y = 1.5910\text{E-}005 * x + 7.0944\text{E-}004$$

$$R = 1.0000$$

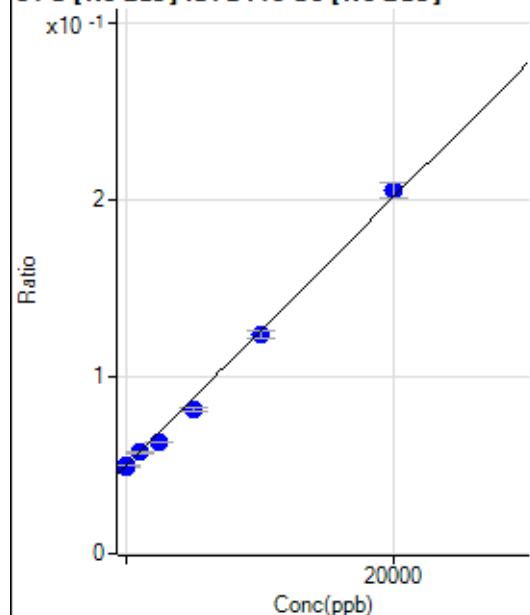
$$DL = 20.47$$

$$BEC = 44.59$$

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	-51.606	434997.93	0.0494	P	1.3
2	☐	0.000	51.606	445528.07	0.0502	P	1.0
3	☐	1000.000	991.232	496205.85	0.0574	P	1.4
4	☐	2500.000	1742.748	566987.82	0.0631	P	1.0
5	☐	5000.000	4202.962	742251.66	0.0818	P	1.9
6	☐	10000.000	9712.628	1102231.48	0.1237	P	3.3
7	☐	20000.000	20438.040	1799535.11	0.2054	P	4.2
8	☐			397666.05	0.0450	P	1.9

$$y = 7.6131\text{E-}006 * x + 0.0498$$

R = 0.9985

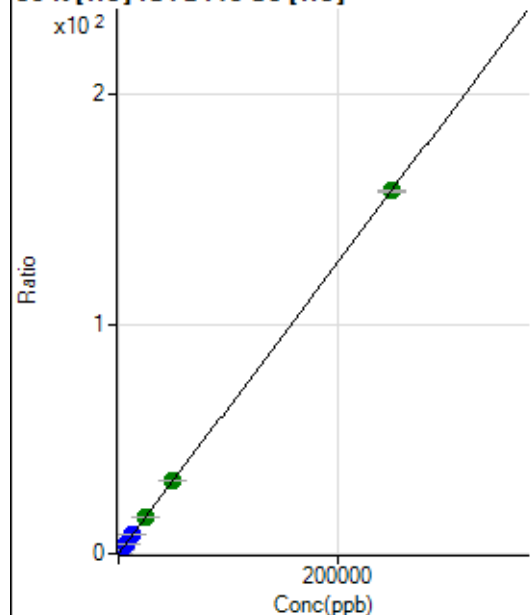
DL = 230.8

BEC = 6542

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	14198.97	0.0454	P	2.0
2	☐	500.000	495.301	110543.03	0.3586	P	3.4
3	☐	2500.000	2527.377	518675.28	1.6435	P	0.8
4	☐	6250.000	6412.179	1274482.23	4.0999	P	1.0
5	☐	12500.000	12666.041	2577500.17	8.0542	P	0.5
6	☐	25000.000	25184.083	5061298.29	15.9694	A	0.4
7	☐	50000.000	50133.503	9829836.94	31.7450	A	0.5
8	☐	250000.00	249942.27	52095585.19	158.0847	A	0.7

$$y = 6.3230\text{E-}004 * x + 0.0454$$

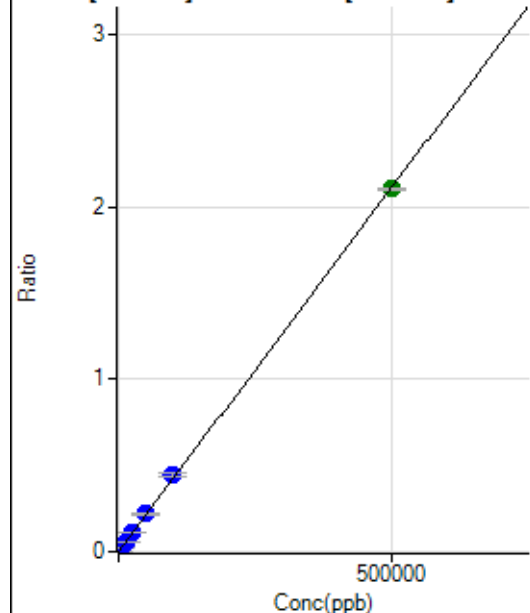
R = 1.0000

DL = 4.397

BEC = 71.86

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	172.23	0.0000	P	14.4
2	☐	500.000	522.567	19744.41	0.0022	P	6.0
3	☐	5000.000	5168.192	188945.11	0.0218	P	0.4
4	☐	12500.000	13010.305	493939.57	0.0549	P	0.4
5	☐	25000.000	25664.666	983350.00	0.1084	P	1.5
6	☐	50000.000	52344.850	1968563.19	0.2210	P	3.2
7	☐	100000.00	105561.02	3904590.10	0.4457	P	4.2
8	☐	500000.00	498605.61	18606392.08	2.1050	A	0.6

$$y = 4.2218\text{E-}006 * x + 1.9538\text{E-}005$$

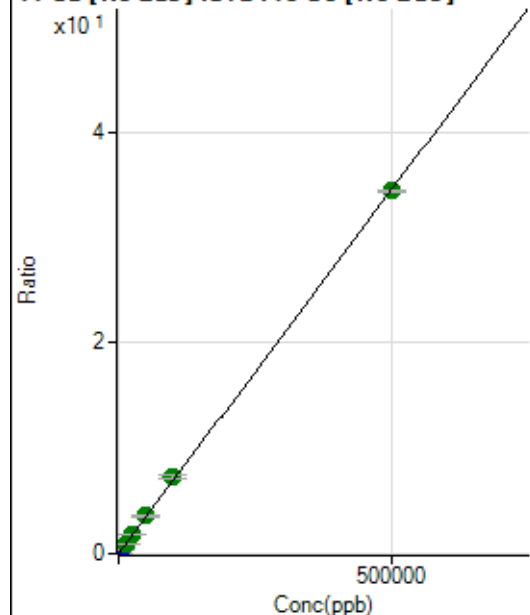
$$R = 0.9999$$

$$DL = 1.997$$

$$BEC = 4.628$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6660.22	0.0008	P	2.9
2	☐	500.000	523.558	327786.96	0.0369	P	1.3
3	☐	5000.000	5135.632	3076820.31	0.3556	P	0.5
4	☐	12500.000	12882.670	8008841.84	0.8909	A	0.8
5	☐	25000.000	25544.636	16023228.31	1.7659	A	1.6
6	☐	50000.000	52286.087	32186393.78	3.6137	A	3.4
7	☐	100000.00	105474.40	63854036.15	7.2889	A	4.5
8	☐	500000.00	498638.33	304560673.4	34.4562	A	0.4

$$y = 6.9099\text{E-}005 * x + 7.5669\text{E-}004$$

$$R = 0.9999$$

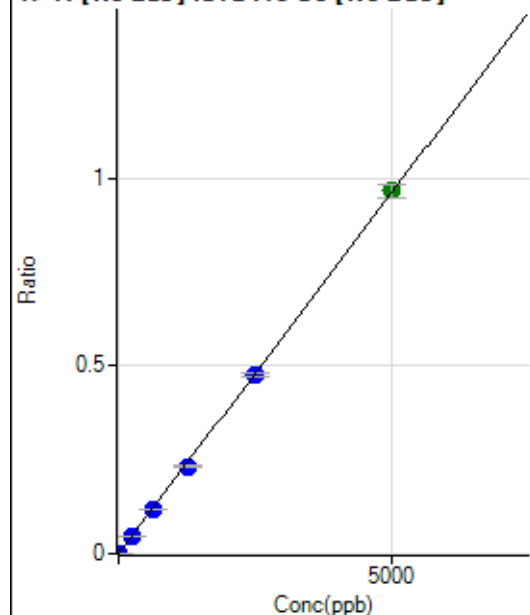
$$DL = 0.9643$$

$$BEC = 10.95$$

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	94.45	0.0000	P	17.3
2	☐	5.000	5.113	8822.50	0.0010	P	3.1
3	☐	250.000	243.785	405751.66	0.0469	P	0.5
4	☐	625.000	609.321	1053547.66	0.1172	P	0.7
5	☐	1250.000	1210.855	2113278.89	0.2329	P	1.3
6	☐	2500.000	2469.583	4231393.32	0.4750	P	2.3
7	☐	5000.000	5027.265	8471737.08	0.9669	A	3.9
8	☐			2836.49	0.0003	P	5.1

$$y = 1.9233\text{E-}004 * x + 1.0712\text{E-}005$$

R = 0.9999

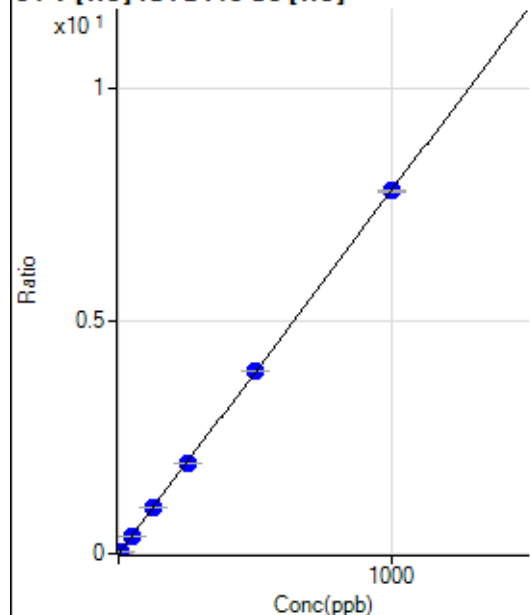
DL = 0.02885

BEC = 0.0557

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	4.44	0.0000	P	43.3
2	☐	5.000	4.722	11344.52	0.0368	P	5.3
3	☐	50.000	49.734	122303.89	0.3875	P	1.0
4	☐	125.000	127.014	307658.89	0.9897	P	0.9
5	☐	250.000	249.933	623230.36	1.9475	P	0.5
6	☐	500.000	501.754	1239113.08	3.9096	P	0.3
7	☐	1000.000	998.903	2410169.41	7.7834	P	0.3
8	☐			736.70	0.0022	P	6.5

$$y = 0.0078 * x + 1.4218\text{E-}005$$

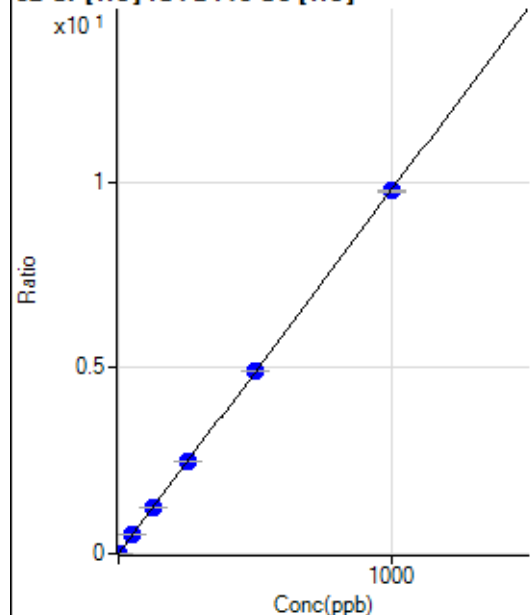
R = 1.0000

DL = 0.002372

BEC = 0.001825

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	977.83	0.0031	P	8.0
2	☐	2.000	1.806	6404.82	0.0208	P	5.2
3	☐	50.000	50.219	155886.21	0.4939	P	1.1
4	☐	125.000	128.082	390082.03	1.2549	P	1.4
5	☐	250.000	252.779	791597.96	2.4736	P	0.4
6	☐	500.000	502.643	1557927.15	4.9156	P	0.5
7	☐	1000.000	997.588	3019891.00	9.7527	P	0.3
8	☐			84483.73	0.2564	P	0.7

$$y = 0.0098 * x + 0.0031$$

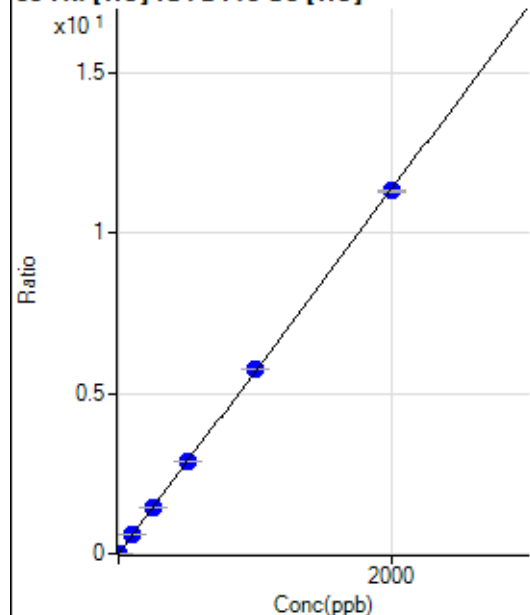
$$R = 1.0000$$

$$DL = 0.07671$$

$$BEC = 0.3202$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.78	0.0003	P	31.1
2	☐	1.000	0.927	1719.02	0.0056	P	3.8
3	☐	100.000	101.620	182179.38	0.5773	P	1.0
4	☐	250.000	256.869	453449.15	1.4587	P	1.0
5	☐	500.000	507.784	922705.51	2.8833	P	0.6
6	☐	1000.000	1012.581	1822171.62	5.7493	P	0.4
7	☐	2000.000	1990.824	3500002.69	11.3033	P	0.4
8	☐			15283.69	0.0464	P	0.6

$$y = 0.0057 * x + 3.1298E-004$$

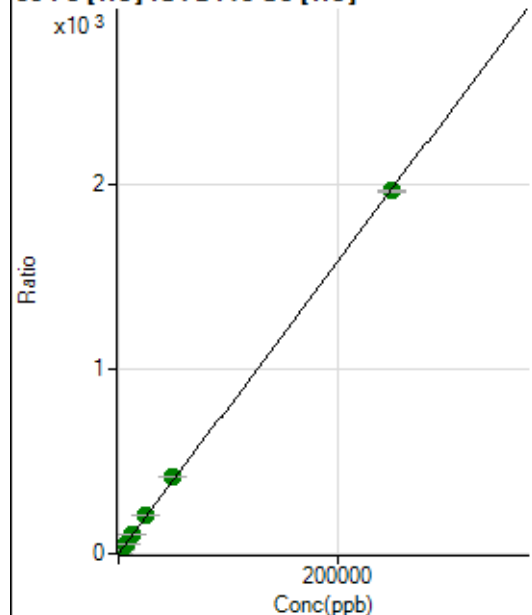
$$R = 1.0000$$

$$DL = 0.05135$$

$$BEC = 0.05513$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3426.41	0.0110	P	2.5
2	☐	50.000	77.510	191992.65	0.6230	P	7.8
3	☐	2500.000	2676.212	6673001.19	21.1439	A	0.8
4	☐	6250.000	6846.731	16810226.30	54.0768	A	1.0
5	☐	12500.000	13455.265	34006045.67	106.2617	A	0.3
6	☐	25000.000	26887.856	67296402.43	212.3334	A	0.6
7	☐	50000.000	53105.570	129854085.3	419.3641	A	0.7
8	☐	250000.00	249125.65	648222903.3	1,967.255	A	0.8

$$y = 0.0079 * x + 0.0110$$

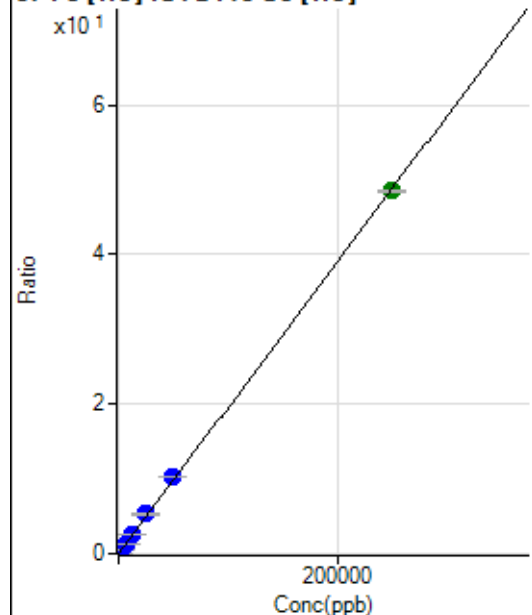
$$R = 0.9999$$

$$DL = 0.1041$$

$$BEC = 1.389$$

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	148.15	0.0005	P	15.5
2	☐	50.000	80.003	4947.26	0.0161	P	5.7
3	☐	2500.000	2727.253	167734.03	0.5315	P	0.3
4	☐	6250.000	6887.718	417016.94	1.3415	P	1.3
5	☐	12500.000	13559.294	845003.35	2.6405	P	0.8
6	☐	25000.000	27083.713	1671435.64	5.2737	P	0.4
7	☐	50000.000	53245.388	3210285.84	10.3675	P	0.4
8	☐	250000.00	249071.36	15979612.51	48.4953	A	0.6

$$y = 1.9470E-004 * x + 4.7429E-004$$

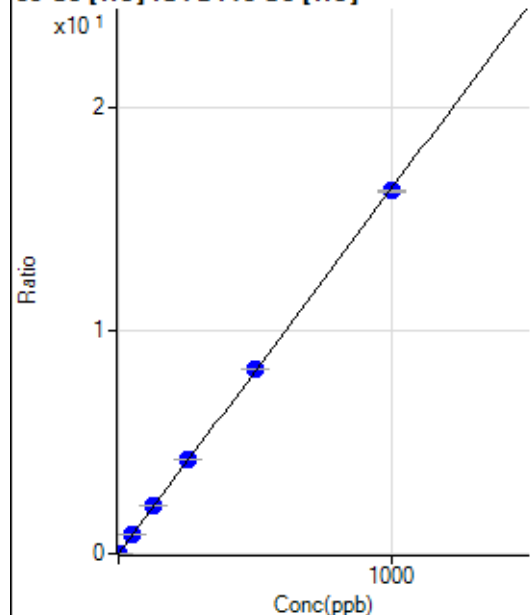
$$R = 0.9999$$

$$DL = 1.134$$

$$BEC = 2.436$$

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	130.00	0.0004	P	7.1
2	☐	1.000	0.936	4855.33	0.0158	P	8.2
3	☐	50.000	51.518	266630.74	0.8448	P	0.9
4	☐	125.000	131.263	668923.65	2.1519	P	1.4
5	☐	250.000	256.968	1348026.66	4.2124	P	0.8
6	☐	500.000	507.772	2637977.08	8.3233	P	0.1
7	☐	1000.000	993.513	5042526.77	16.2850	P	0.5
8	☐			9806.74	0.0298	P	1.3

$$y = 0.0164 * x + 4.1611E-004$$

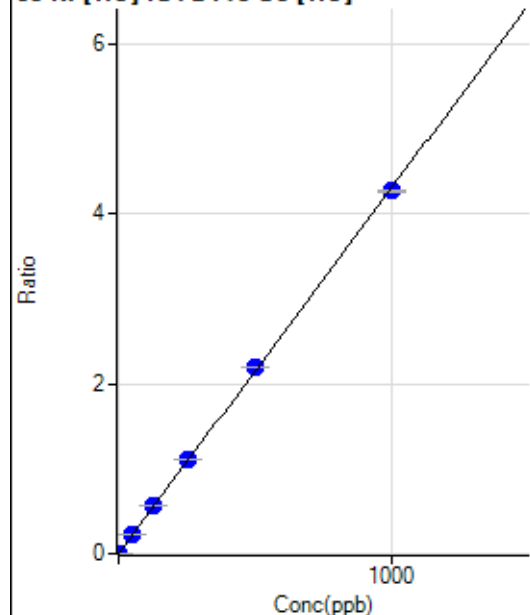
$$R = 0.9999$$

$$DL = 0.005438$$

$$BEC = 0.02539$$

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	54.45	0.0002	P	6.8
2	☐	1.000	0.937	1296.75	0.0042	P	4.7
3	☐	50.000	52.155	70886.10	0.2246	P	0.9
4	☐	125.000	132.472	177248.16	0.5702	P	1.5
5	☐	250.000	257.374	354470.32	1.1077	P	1.0
6	☐	500.000	509.900	695469.51	2.1943	P	0.4
7	☐	1000.000	992.165	1322016.60	4.2695	P	0.6
8	☐			26251.49	0.0797	P	0.5

$$y = 0.0043 * x + 1.7421E-004$$

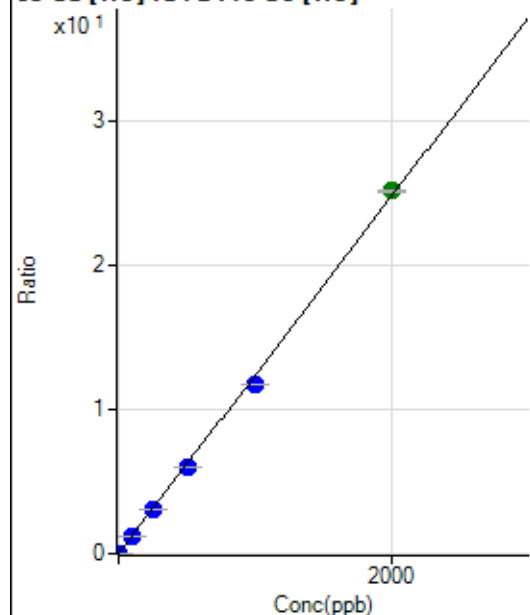
$$R = 0.9999$$

$$DL = 0.008208$$

$$BEC = 0.04049$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	612.25	0.0020	P	0.5
2	☐	2.000	1.777	7378.66	0.0239	P	4.7
3	☐	100.000	98.186	383972.29	1.2166	P	0.6
4	☐	250.000	248.431	956006.36	3.0753	P	0.8
5	☐	500.000	482.731	1911737.07	5.9739	P	0.8
6	☐	1000.000	947.152	3714224.63	11.7192	P	0.3
7	☐	2000.000	2031.028	7780671.06	25.1279	A	0.4
8	☐			13049.32	0.0396	P	2.2

$$y = 0.0124 * x + 0.0020$$

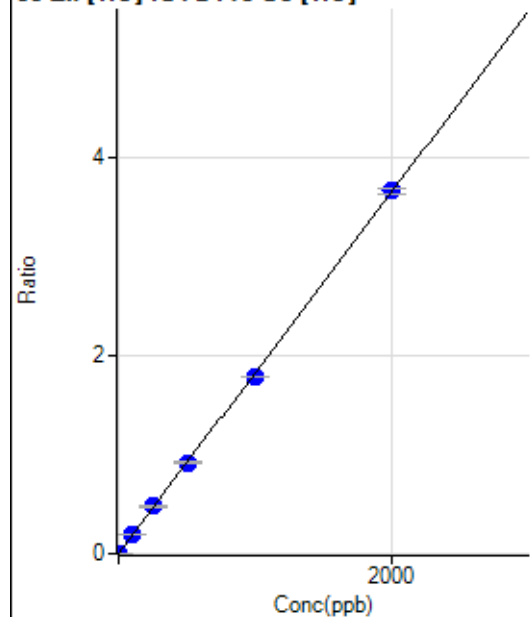
$$R = 0.9994$$

$$DL = 0.002418$$

$$BEC = 0.1584$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	661.14	0.0021	P	12.6
2	☐	2.000	2.310	1951.28	0.0063	P	1.1
3	☐	100.000	102.418	59617.96	0.1889	P	1.1
4	☐	250.000	260.769	148496.94	0.4777	P	1.0
5	☐	500.000	504.083	294880.97	0.9215	P	0.6
6	☐	1000.000	981.103	567779.28	1.7914	P	0.2
7	☐	2000.000	2006.961	1133979.18	3.6624	P	1.3
8	☐			15649.71	0.0475	P	1.4

$$y = 0.0018 * x + 0.0021$$

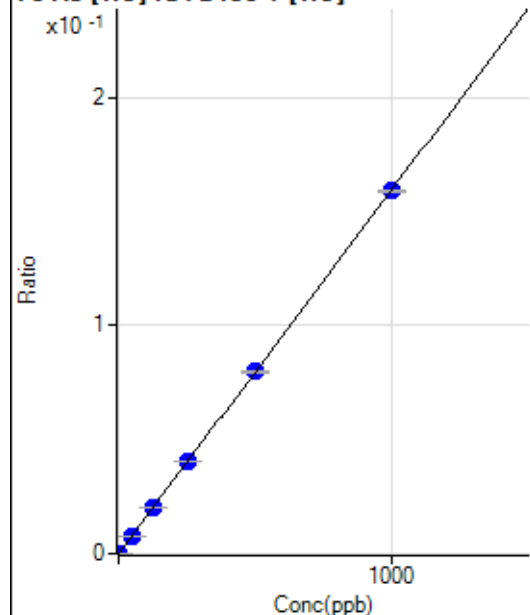
$$R = 0.9999$$

$$DL = 0.4395$$

$$BEC = 1.16$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.17	0.0000	P	45.7
2	☐	1.000	0.939	307.41	0.0002	P	17.6
3	☐	50.000	49.816	16270.90	0.0079	P	1.2
4	☐	125.000	128.077	41400.72	0.0204	P	1.0
5	☐	250.000	254.234	84073.83	0.0405	P	0.9
6	☐	500.000	501.098	164799.78	0.0799	P	1.1
7	☐	1000.000	998.017	317233.05	0.1590	P	0.3
8	☐			198.77	0.0001	P	6.5

$$y = 1.5935\text{E-}004 * x + 3.0565\text{E-}006$$

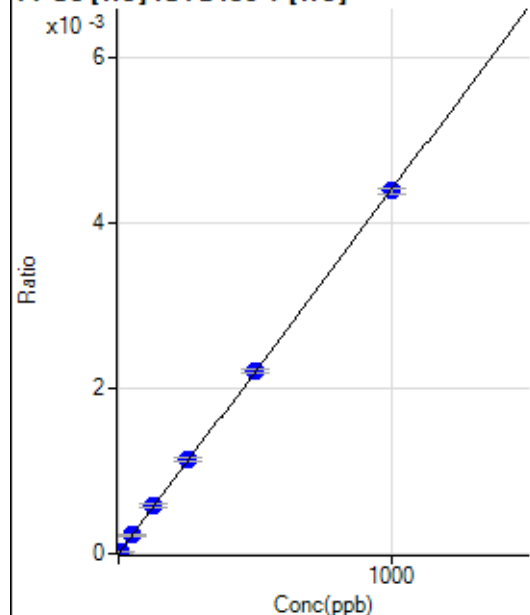
$$R = 1.0000$$

$$DL = 0.0263$$

$$BEC = 0.01918$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	4.257	38.89	0.0000	P	34.8
3	☐	50.000	50.212	454.46	0.0002	P	9.0
4	☐	125.000	130.197	1164.51	0.0006	P	9.3
5	☐	250.000	258.460	2364.67	0.0011	P	5.8
6	☐	500.000	501.068	4558.56	0.0022	P	2.5
7	☐	1000.000	996.695	8762.77	0.0044	P	1.5
8	☐			12.22	0.0000	P	42.3

$$y = 4.4071\text{E-}006 * x + 5.5140\text{E-}007$$

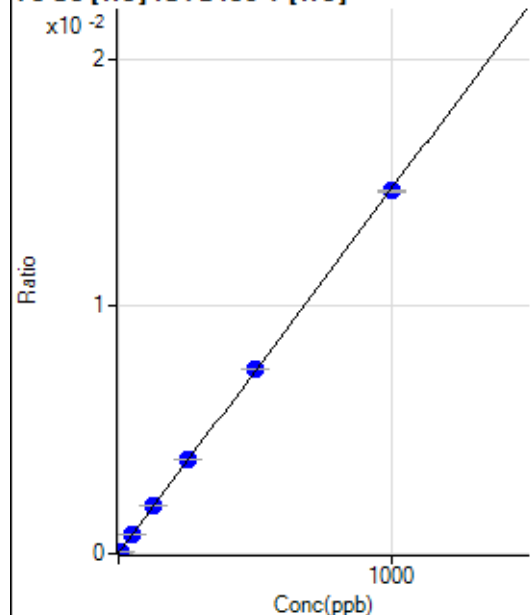
$$R = 0.9999$$

$$DL = 0.6501$$

$$BEC = 0.1251$$

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	43.83	0.0000	P	37.1
2	☐	5.000	4.621	180.87	0.0001	P	15.8
3	☐	50.000	51.771	1606.28	0.0008	P	0.6
4	☐	125.000	131.595	3974.04	0.0020	P	0.9
5	☐	250.000	258.025	7928.77	0.0038	P	1.0
6	☐	500.000	505.574	15408.89	0.0075	P	0.9
7	☐	1000.000	994.296	29246.81	0.0147	P	0.5
8	☐			61.11	0.0000	P	17.3

$$y = 1.4724\text{E-}005 * x + 2.1719\text{E-}005$$

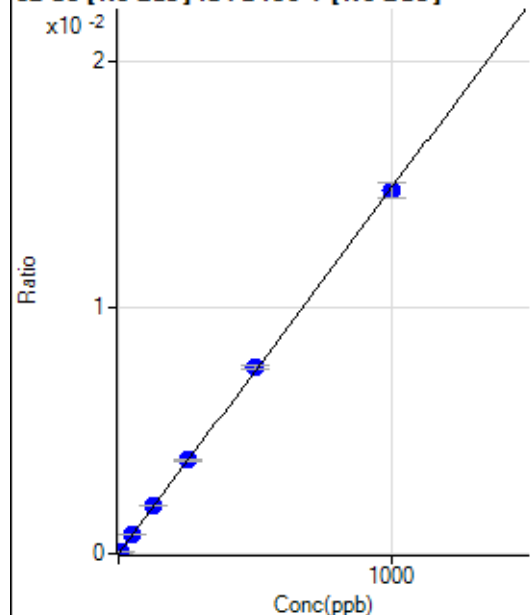
$$R = 0.9999$$

$$DL = 1.642$$

$$BEC = 1.475$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.25	0.0000	P	194.
2	☐	5.000	5.580	1536.53	0.0001	P	2.7
3	☐	50.000	52.079	13817.21	0.0008	P	0.8
4	☐	125.000	130.685	36068.49	0.0019	P	0.6
5	☐	250.000	256.936	71468.49	0.0038	P	1.8
6	☐	500.000	510.110	139391.08	0.0076	P	2.6
7	☐	1000.000	992.393	266375.16	0.0148	P	4.3
8	☐			227.38	0.0000	P	16.1

$$y = 1.4867\text{E-}005 * x + 1.2826\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.503$$

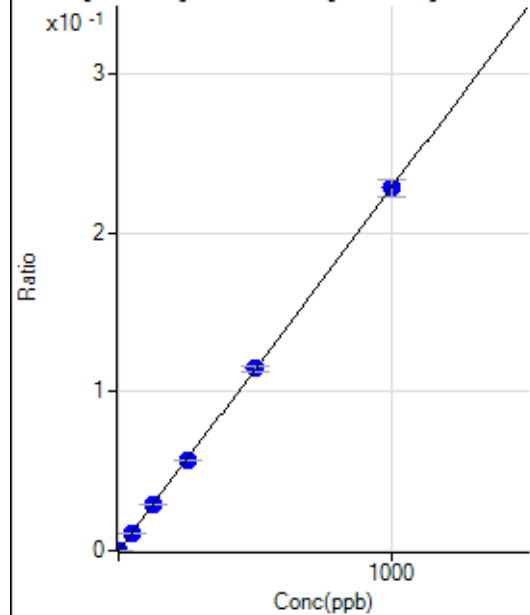
$$BEC = 0.08628$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			638.91		P	8.5
2	☐			608.91		P	3.8
3	☐			660.03		P	3.6
4	☐			614.47		P	8.2
5	☐			590.02		P	5.2
6	☐			696.70		P	5.9
7	☐			625.58		P	12.0
8	☐			705.58		P	7.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1050.08	0.0001	P	15.5
2	☐	1.000	1.032	5354.01	0.0003	P	4.7
3	☐	50.000	49.322	201474.42	0.0113	P	0.3
4	☐	125.000	125.359	531564.12	0.0287	P	0.3
5	☐	250.000	248.217	1060200.79	0.0567	P	0.5
6	☐	500.000	501.652	2103938.83	0.1145	P	2.7
7	☐	1000.000	999.609	4116920.75	0.2281	P	4.6
8	☐			9689.77	0.0005	P	1.4

$$y = 2.2810E-004 * x + 5.8084E-005$$

$$R = 1.0000$$

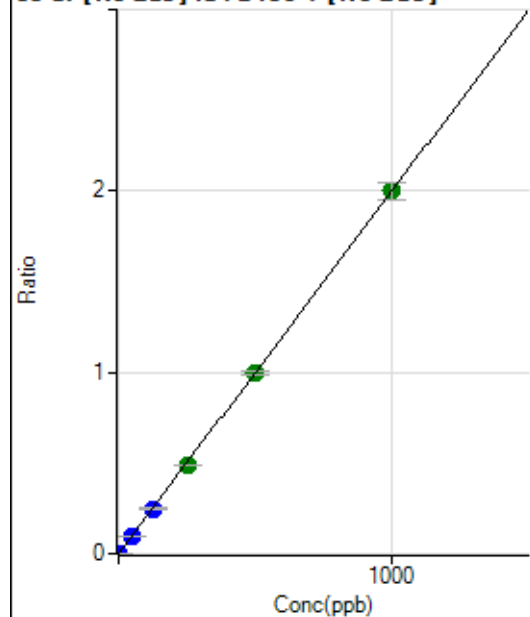
$$DL = 0.1184$$

$$BEC = 0.2546$$

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	130.56	0.0000	P	8.4
2	☐	1.000	1.056	38577.96	0.0021	P	1.7
3	☐	50.000	49.272	1753018.85	0.0984	P	0.6
4	☐	125.000	124.651	4618047.93	0.2489	P	0.4
5	☐	250.000	245.400	9166224.16	0.4900	A	0.9
6	☐	500.000	498.937	18307795.20	0.9963	A	3.1
7	☐	1000.000	1001.761	36110787.61	2.0004	A	4.4
8	☐			74896.06	0.0042	P	3.4

$$y = 0.0020 * x + 7.2116E-006$$

$$R = 1.0000$$

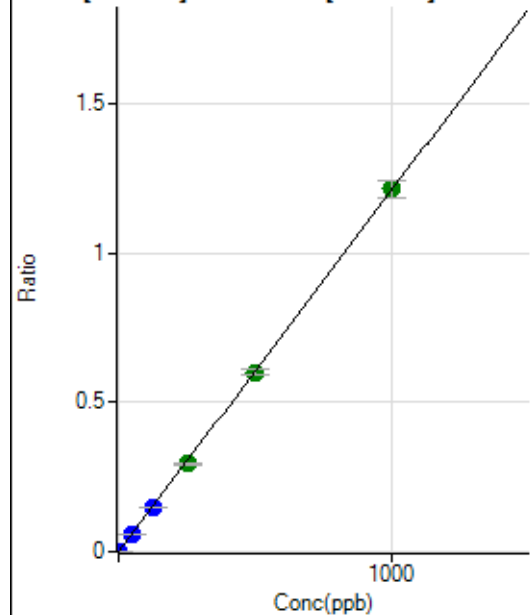
$$DL = 0.000911$$

$$BEC = 0.003611$$

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	927.85	0.0001	P	13.0
2	☐	1.000	0.757	17636.59	0.0010	P	4.3
3	☐	50.000	48.011	1035842.76	0.0581	P	0.4
4	☐	125.000	122.424	2748939.51	0.1482	P	0.3
5	☐	250.000	242.537	5489681.76	0.2935	A	1.8
6	☐	500.000	496.659	11043870.04	0.6010	A	2.8
7	☐	1000.000	1003.958	21926979.14	1.2148	A	4.9
8	☐			6712.97	0.0004	P	3.7

$$y = 0.0012 * x + 5.1354E-005$$

$$R = 1.0000$$

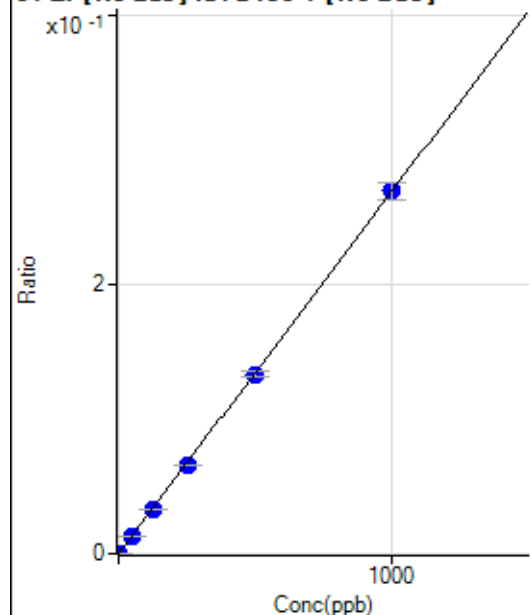
$$DL = 0.0165$$

$$BEC = 0.04244$$

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	219.45	0.0000	P	32.1
2	☐	1.000	0.731	3803.44	0.0002	P	1.2
3	☐	50.000	48.045	230280.86	0.0129	P	0.2
4	☐	125.000	123.388	615498.04	0.0332	P	0.8
5	☐	250.000	244.617	1229973.28	0.0658	P	1.5
6	☐	500.000	497.062	2455297.28	0.1336	P	2.8
7	☐	1000.000	1003.114	4867125.11	0.2696	P	4.6
8	☐			1452.91	0.0001	P	4.7

$$y = 2.6877E-004 * x + 1.2165E-005$$

$$R = 1.0000$$

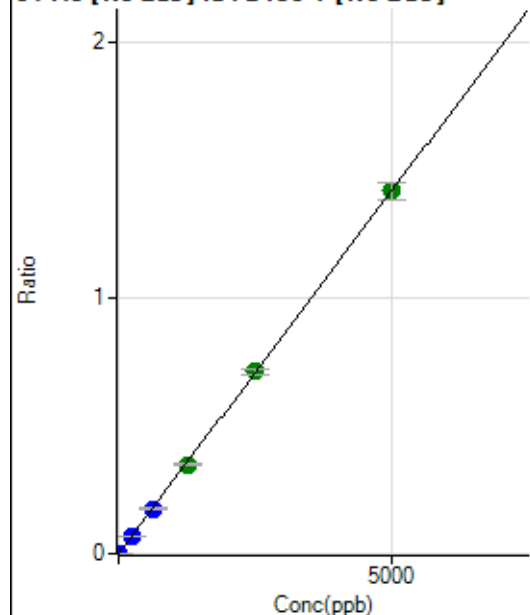
$$DL = 0.0436$$

$$BEC = 0.04526$$

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	338.91	0.0000	P	30.4
2	☐	5.000	4.853	25454.03	0.0014	P	1.0
3	☐	250.000	244.980	1238426.54	0.0695	P	0.6
4	☐	625.000	621.215	3269332.19	0.1762	P	0.9
5	☐	1250.000	1229.426	6523067.16	0.3488	A	1.9
6	☐	2500.000	2506.774	13068007.85	0.7111	A	2.7
7	☐	5000.000	5002.481	25614035.29	1.4190	A	4.8
8	☐			17745.04	0.0010	P	1.7

$$y = 2.8366E-004 * x + 1.8787E-005$$

$$R = 1.0000$$

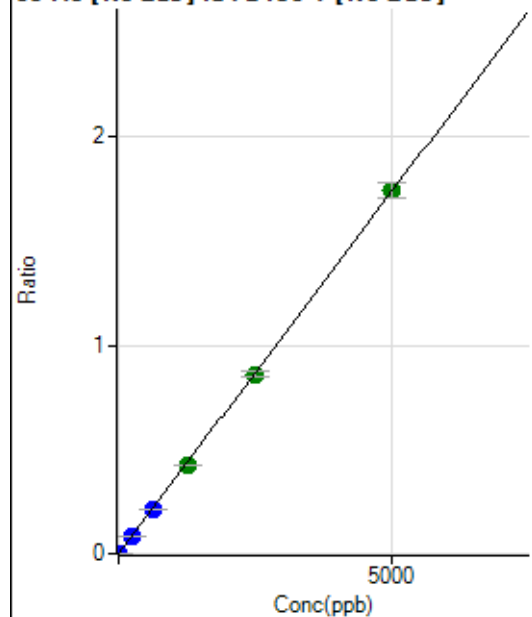
$$DL = 0.06034$$

$$BEC = 0.06623$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	20.9
2	☐	5.000	5.355	33957.95	0.0019	P	1.5
3	☐	250.000	243.302	1503456.90	0.0844	P	0.9
4	☐	625.000	617.492	3973260.98	0.2142	P	0.2
5	☐	1250.000	1223.289	7935655.12	0.4243	A	1.6
6	☐	2500.000	2485.301	15840035.77	0.8620	A	2.9
7	☐	5000.000	5015.300	31402107.30	1.7395	A	4.4
8	☐			27001.34	0.0015	P	0.5

$$y = 3.4683\text{E-}004 * x + 4.4502\text{E-}006$$

$$R = 1.0000$$

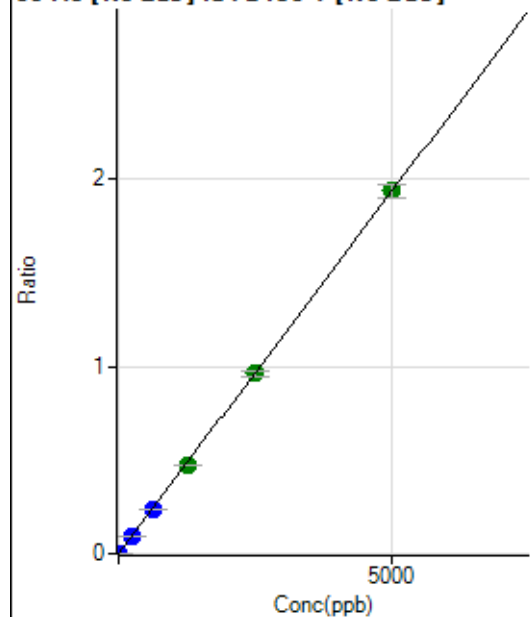
$$DL = 0.008037$$

$$BEC = 0.01283$$

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	138.90	0.0000	P	10.2
2	☐	5.000	5.308	37536.49	0.0021	P	2.4
3	☐	250.000	243.962	1678966.92	0.0942	P	0.7
4	☐	625.000	617.131	4422425.92	0.2384	P	0.4
5	☐	1250.000	1221.926	8828066.26	0.4720	A	1.6
6	☐	2500.000	2487.966	17660410.64	0.9610	A	2.7
7	☐	5000.000	5014.320	34969109.11	1.9368	A	4.0
8	☐			36583.97	0.0021	P	1.4

$$y = 3.8626\text{E-}004 * x + 7.6838\text{E-}006$$

$$R = 1.0000$$

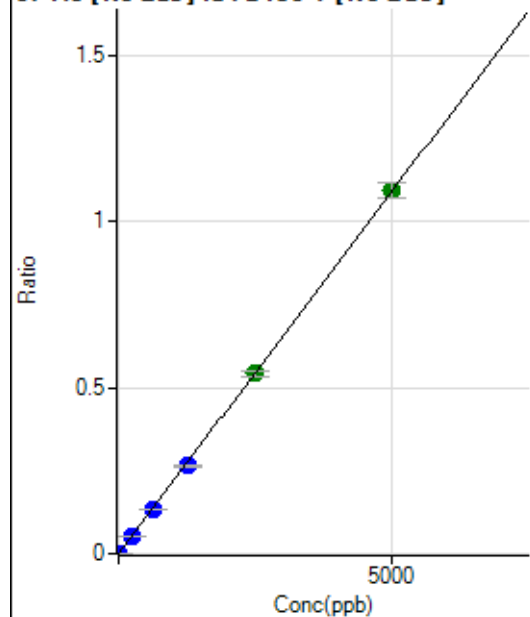
$$DL = 0.006105$$

$$BEC = 0.01989$$

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	55.56	0.0000	P	9.6
2	☐	5.000	5.314	21171.97	0.0012	P	1.6
3	☐	250.000	243.552	945273.76	0.0531	P	0.0
4	☐	625.000	615.065	2485774.91	0.1340	P	0.5
5	☐	1250.000	1210.970	4934061.09	0.2638	P	1.7
6	☐	2500.000	2489.874	9967803.35	0.5424	A	2.5
7	☐	5000.000	5016.384	19726768.67	1.0927	A	4.4
8	☐			16371.06	0.0009	P	0.4

$$y = 2.1784\text{E-}004 * x + 3.0732\text{E-}006$$

$$R = 1.0000$$

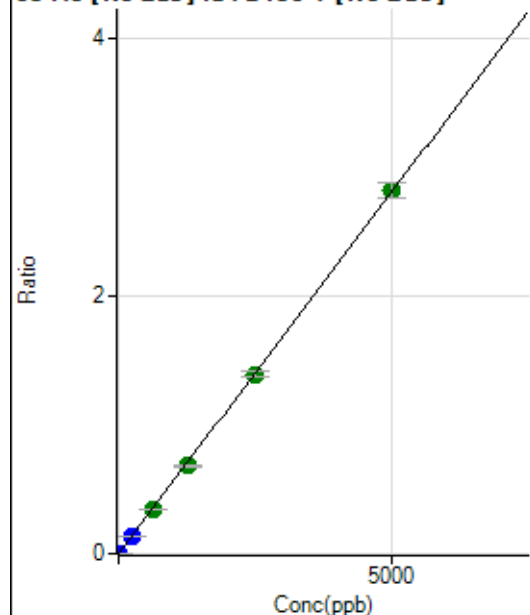
$$DL = 0.004043$$

$$BEC = 0.01411$$

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	94.45	0.0000	P	79.7
2	☐	5.000	5.300	54415.98	0.0030	P	1.2
3	☐	250.000	244.009	2442753.81	0.1371	P	0.9
4	☐	625.000	614.325	6404106.04	0.3452	A	0.3
5	☐	1250.000	1214.515	12764321.38	0.6824	A	1.7
6	☐	2500.000	2484.267	25650665.16	1.3959	A	3.1
7	☐	5000.000	5018.371	50905266.41	2.8198	A	4.4
8	☐			42104.85	0.0024	P	1.2

$$y = 5.6189\text{E-}004 * x + 5.1924\text{E-}006$$

$$R = 1.0000$$

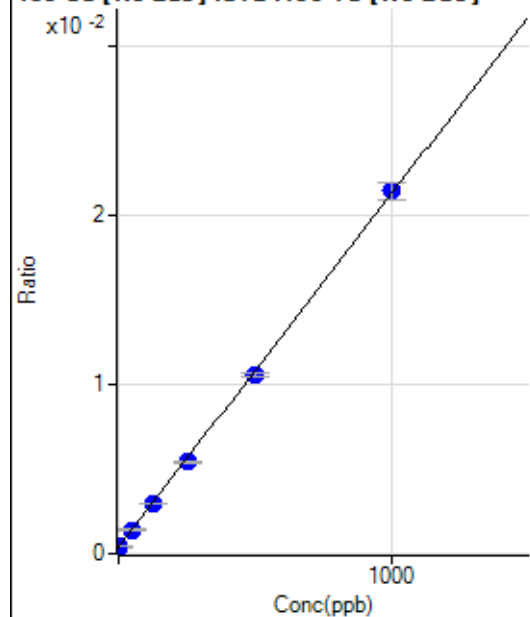
$$DL = 0.0221$$

$$BEC = 0.009241$$

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	7785.78	0.0004	P	1.1
2	☐	1.000	1.639	8744.70	0.0004	P	4.9
3	☐	50.000	48.722	28496.32	0.0014	P	2.6
4	☐	125.000	121.045	61509.75	0.0029	P	0.4
5	☐	250.000	240.864	115131.81	0.0054	P	2.0
6	☐	500.000	489.381	221152.80	0.0106	P	2.1
7	☐	1000.000	1008.151	435622.33	0.0215	P	5.0
8	☐			7719.12	0.0004	P	4.4

$$y = 2.0902\text{E-}005 * x + 3.9072\text{E-}004$$

$$R = 0.9999$$

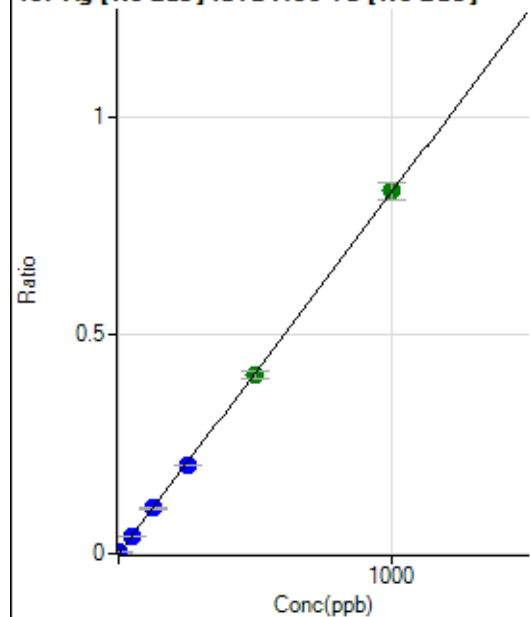
$$DL = 0.6097$$

$$BEC = 18.69$$

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	200.01	0.0000	P	16.9
2	☐	1.000	7.685	131163.85	0.0064	P	0.5
3	☐	50.000	50.028	837832.20	0.0414	P	0.6
4	☐	125.000	125.042	2180359.53	0.1035	P	0.7
5	☐	250.000	244.836	4301857.69	0.2027	P	1.6
6	☐	500.000	495.147	8534442.90	0.4099	A	3.5
7	☐	1000.000	1003.704	16867597.60	0.8309	A	4.5
8	☐			2922.66	0.0002	P	8.8

$$y = 8.2787\text{E-}004 * x + 1.0025\text{E-}005$$

$$R = 0.9999$$

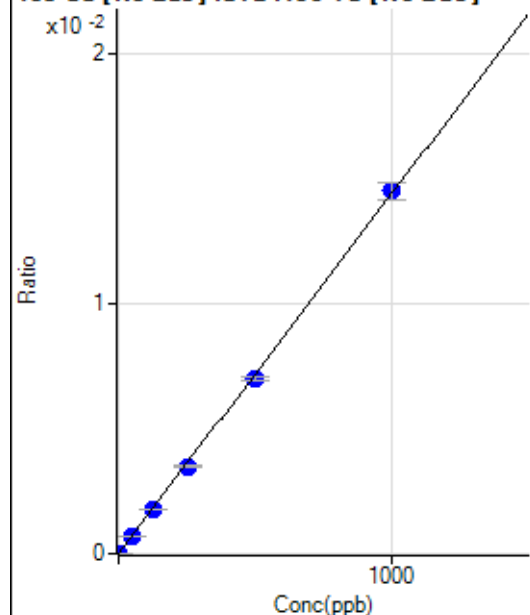
$$DL = 0.006142$$

$$BEC = 0.01211$$

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	21.3
2	☐	1.000	0.936	305.57	0.0000	P	3.8
3	☐	50.000	49.752	14489.59	0.0007	P	3.4
4	☐	125.000	121.202	36715.86	0.0017	P	1.4
5	☐	250.000	242.389	73961.34	0.0035	P	1.9
6	☐	500.000	487.667	145985.58	0.0070	P	2.3
7	☐	1000.000	1008.557	294281.86	0.0145	P	4.5
8	☐			102.78	0.0000	P	15.5

$$y = 1.4373\text{E-}005 * x + 1.3904\text{E-}006$$

$$R = 0.9999$$

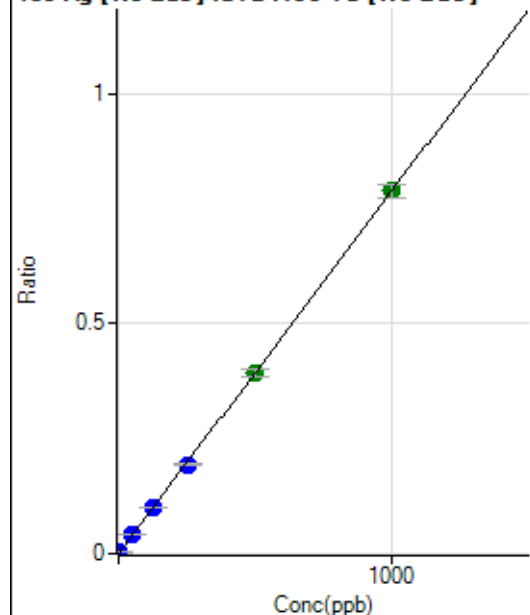
$$DL = 0.06174$$

$$BEC = 0.09674$$

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	61.11	0.0000	P	28.6
2	☐	1.000	7.696	124862.03	0.0061	P	1.4
3	☐	50.000	50.747	808700.19	0.0400	P	0.3
4	☐	125.000	125.645	2084937.98	0.0990	P	0.8
5	☐	250.000	246.684	4124787.42	0.1944	P	1.8
6	☐	500.000	498.573	8178394.97	0.3928	A	3.4
7	☐	1000.000	1001.418	16020488.90	0.7890	A	3.7
8	☐			2636.47	0.0001	P	3.2

$$y = 7.8789\text{E-}004 * x + 3.0706\text{E-}006$$

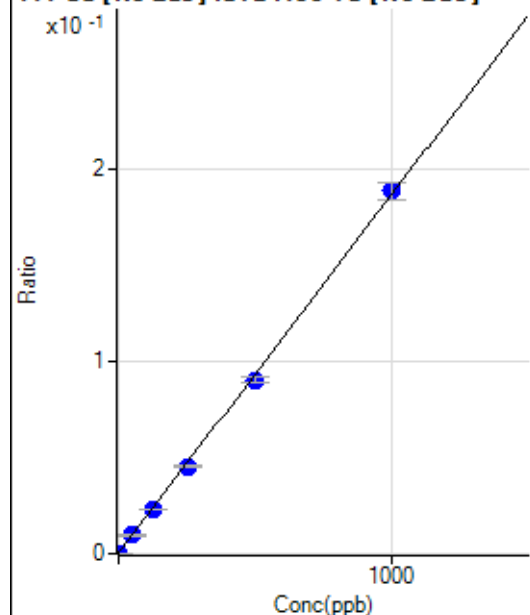
$$R = 1.0000$$

$$DL = 0.003346$$

$$BEC = 0.003897$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5469.49	0.0003	P	1.2
2	☐	1.000	1.080	9785.79	0.0005	P	3.5
3	☐	50.000	49.503	191953.69	0.0095	P	1.1
4	☐	125.000	123.246	489075.12	0.0232	P	1.1
5	☐	250.000	241.909	961751.72	0.0453	P	0.8
6	☐	500.000	483.121	1878579.14	0.0902	P	3.0
7	☐	1000.000	1010.707	3825528.04	0.1885	P	4.5
8	☐			6103.70	0.0003	P	4.5

$$y = 1.8619E-004 * x + 2.7448E-004$$

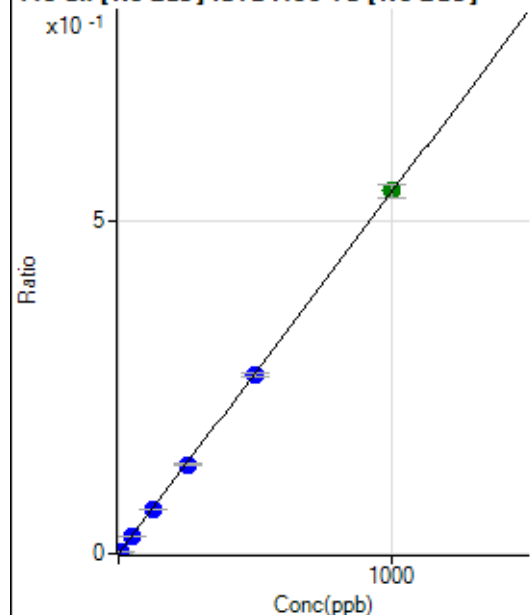
$$R = 0.9998$$

$$DL = 0.05403$$

$$BEC = 1.474$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	780.61	0.0000	P	5.2
2	☐	5.000	5.260	59454.43	0.0029	P	1.7
3	☐	50.000	49.383	541832.05	0.0268	P	0.9
4	☐	125.000	123.659	1411547.65	0.0670	P	0.5
5	☐	250.000	245.566	2823866.06	0.1331	P	1.9
6	☐	500.000	494.713	5580659.54	0.2680	P	3.1
7	☐	1000.000	1003.949	11042871.95	0.5439	A	3.9
8	☐			8258.34	0.0004	P	4.7

$$y = 5.4171E-004 * x + 3.9188E-005$$

$$R = 1.0000$$

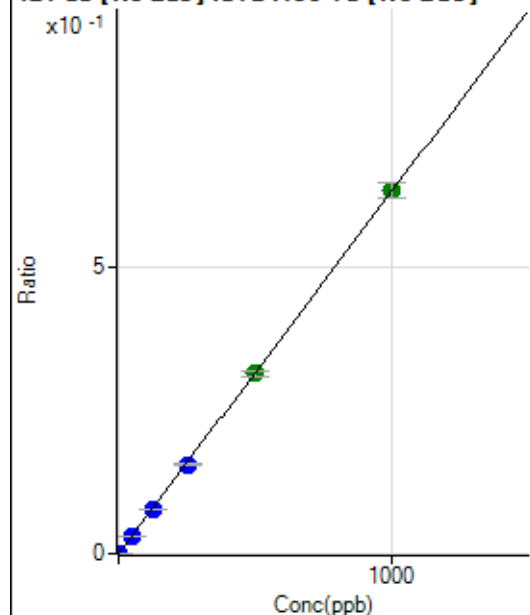
$$DL = 0.01124$$

$$BEC = 0.07234$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	51.6
2	☐	2.000	1.993	25988.80	0.0013	P	1.7
3	☐	50.000	49.008	626067.95	0.0310	P	0.5
4	☐	125.000	123.977	1649046.63	0.0783	P	0.9
5	☐	250.000	246.958	3310105.24	0.1560	P	1.7
6	☐	500.000	497.248	6538815.38	0.3140	A	3.0
7	☐	1000.000	1002.314	12851220.51	0.6330	A	4.3
8	☐			13793.44	0.0007	P	6.4

$$y = 6.3156\text{E-}004 * x + 3.8877\text{E-}006$$

$$R = 1.0000$$

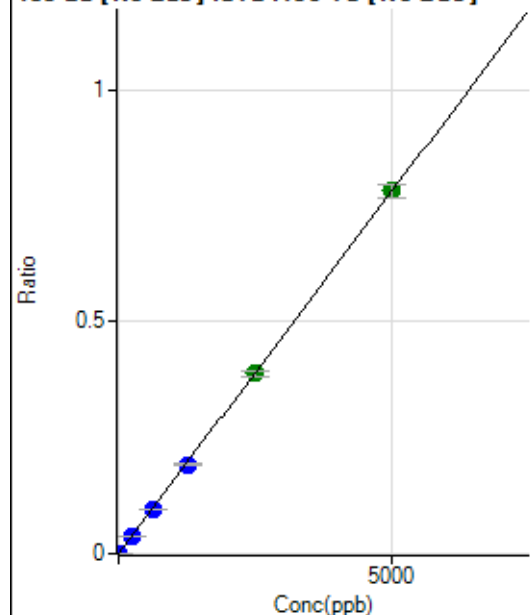
$$DL = 0.009534$$

$$BEC = 0.006156$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	78.8
2	☐	10.000	10.255	32973.40	0.0016	P	2.7
3	☐	250.000	247.848	781908.32	0.0387	P	1.1
4	☐	625.000	620.735	2039119.01	0.0968	P	0.0
5	☐	1250.000	1231.830	4077688.29	0.1921	P	1.8
6	☐	2500.000	2486.069	8074281.95	0.3878	A	2.8
7	☐	5000.000	5012.148	15872569.80	0.7818	A	4.0
8	☐			3375.56	0.0002	P	8.9

$$y = 1.5598\text{E-}004 * x + 2.6543\text{E-}006$$

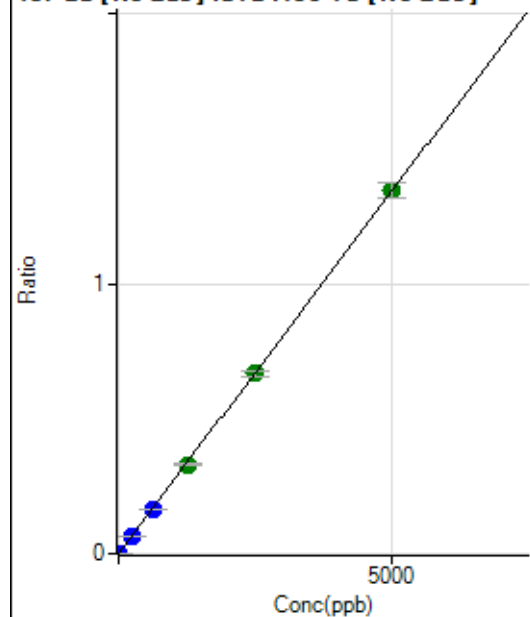
$$R = 1.0000$$

$$DL = 0.04023$$

$$BEC = 0.01702$$

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	66.67	0.0000	P	20.5
2	☐	10.000	10.328	57143.40	0.0028	P	0.4
3	☐	250.000	246.721	1339799.02	0.0662	P	0.4
4	☐	625.000	620.013	3505943.74	0.1665	P	0.3
5	☐	1250.000	1225.093	6980873.07	0.3289	A	1.7
6	☐	2500.000	2494.935	13946900.31	0.6699	A	3.3
7	☐	5000.000	5009.546	27305998.70	1.3450	A	4.2
8	☐			5654.18	0.0003	P	7.8

$$y = 2.6849E-004 * x + 3.3419E-006$$

$$R = 1.0000$$

$$DL = 0.007661$$

$$BEC = 0.01245$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			13.34		P	86.6
2	☐			11.11		P	69.3
3	☐			77.78		P	13.1
4	☐			153.34		P	11.5
5	☐			337.79		P	8.2
6	☐			702.27		P	4.3
7	☐			1435.68		P	9.7
8	☐			146.67		P	19.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	57.3
2	☐			4.44		P	43.4
3	☐			5.56		P	91.6
4	☐			24.44		P	41.7
5	☐			32.22		P	12.0
6	☐			52.22		P	9.7
7	☐			93.34		P	7.1
8	☐			62.22		P	3.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	31.5
2	☐			41.67		P	40.0
3	☐			50.00		P	28.9
4	☐			52.78		P	24.1
5	☐			100.00		P	14.4
6	☐			188.90		P	24.3
7	☐			372.25		P	18.1
8	☐			697.28		P	18.4

156 Dy [He] No available calibration points

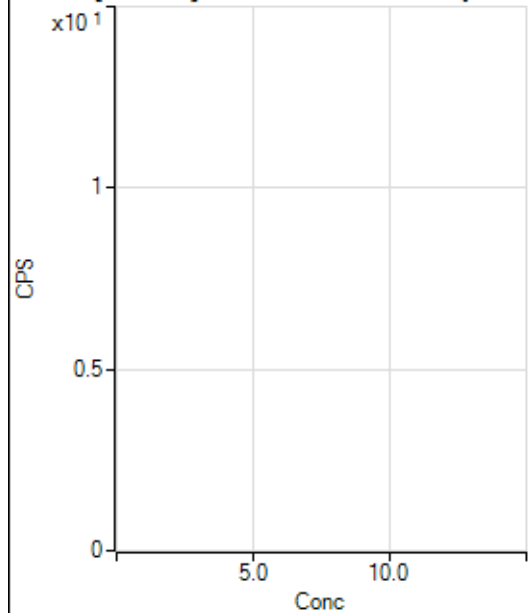
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	28.4
2	☐			15.55		P	24.8
3	☐			32.22		P	57.0
4	☐			51.11		P	21.0
5	☐			96.67		P	6.9
6	☐			138.89		P	11.8
7	☐			316.68		P	9.4
8	☐			286.67		P	13.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			122.23		P	25.8
2	☐			136.12		P	12.7
3	☐			102.78		P	28.5
4	☐			125.00		P	52.9
5	☐			138.90		P	24.2
6	☐			136.12		P	19.7
7	☐			155.56		P	20.3
8	☐			641.71		P	5.7

160 Gd [He] No available calibration points

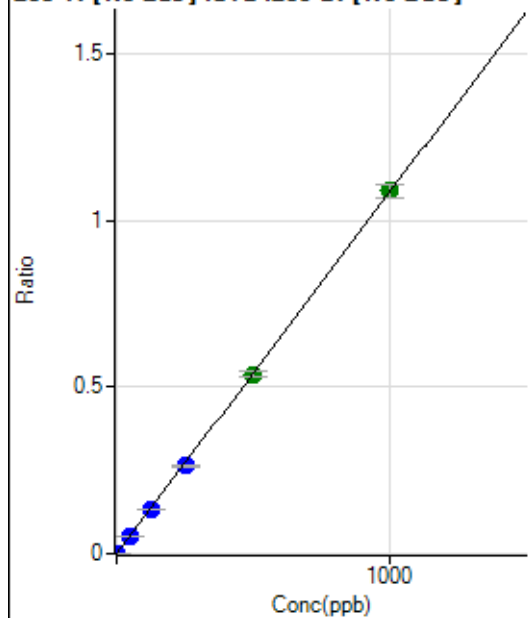
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			255.56		P	11.1
2	☐			260.01		P	16.0
3	☐			307.79		P	5.6
4	☐			302.23		P	6.1
5	☐			280.01		P	14.9
6	☐			313.34		P	16.9
7	☐			257.79		P	15.2
8	☐			481.12		P	6.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			97.23		P	17.8
2	☐			100.00		P	33.3
3	☐			88.89		P	14.3
4	☐			88.89		P	37.9
5	☐			102.78		P	18.7
6	☐			113.90		P	15.2
7	☐			100.01		P	22.0
8	☐			166.68		P	18.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			65.56		P	15.5
2	☐			71.11		P	25.8
3	☐			73.33		P	19.8
4	☐			60.00		P	0.0
5	☐			71.11		P	14.3
6	☐			70.00		P	25.2
7	☐			72.22		P	25.4
8	☐			101.11		P	23.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	722.28	0.0001	P	6.0
2	☐	1.000	0.945	14074.63	0.0011	P	2.6
3	☐	50.000	47.163	648761.47	0.0512	P	0.6
4	☐	125.000	120.663	1694264.65	0.1309	P	0.6
5	☐	250.000	242.602	3387660.23	0.2631	P	0.7
6	☐	500.000	496.700	6677411.30	0.5385	A	2.5
7	☐	1000.000	1004.184	12822385.27	1.0886	A	4.0
8	☐			5848.79	0.0006	P	3.9

$$y = 0.0011 * x + 5.7045E-005$$

$$R = 1.0000$$

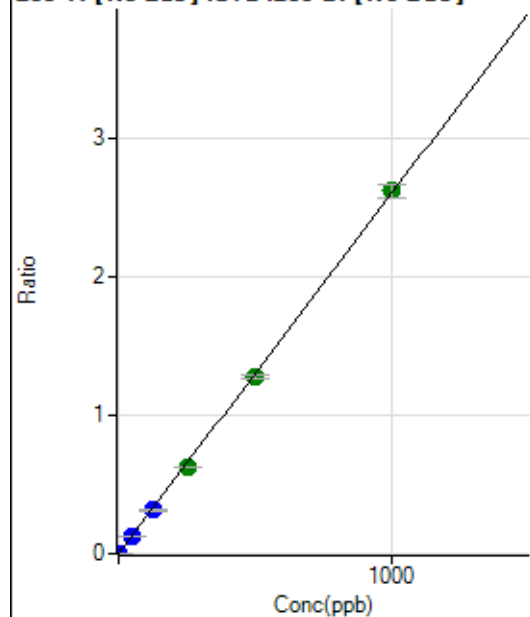
$$DL = 0.009529$$

$$BEC = 0.05262$$

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	1133.44	0.0001	P	5.2
2	☐	1.000	0.973	34139.33	0.0026	P	0.9
3	☐	50.000	47.119	1554769.73	0.1227	P	0.7
4	☐	125.000	120.574	4062132.51	0.3137	P	1.1
5	☐	250.000	240.716	8065465.55	0.6263	A	0.8
6	☐	500.000	491.899	15867358.51	1.2797	A	2.9
7	☐	1000.000	1007.069	30859255.90	2.6198	A	3.8
8	☐			13843.94	0.0013	P	3.6

$$y = 0.0026 * x + 8.9514E-005$$

$$R = 0.9999$$

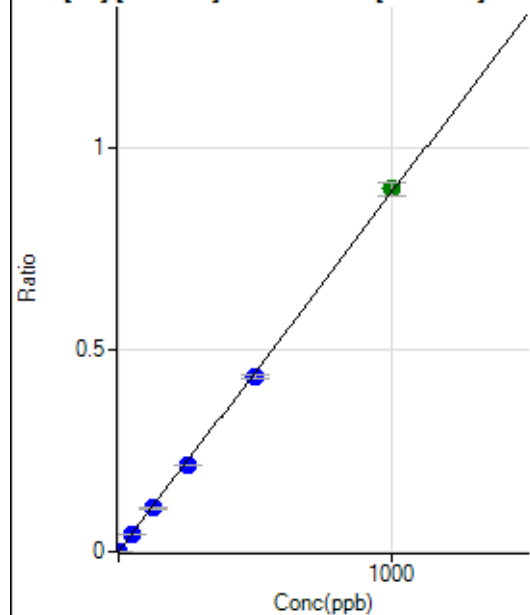
$$DL = 0.005374$$

$$BEC = 0.03441$$

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	1070.45	0.0001	P	12.5
2	☐	1.000	0.951	12102.17	0.0009	P	1.9
3	☐	50.000	47.397	534637.07	0.0422	P	0.3
4	☐	125.000	120.684	1388783.15	0.1073	P	0.5
5	☐	250.000	239.643	2741963.37	0.2129	P	1.1
6	☐	500.000	485.871	5351889.01	0.4316	P	2.5
7	☐	1000.000	1010.323	10570899.89	0.8974	A	3.5
8	☐			33633.98	0.0033	P	0.9

$$y = 8.8813E-004 * x + 8.4501E-005$$

$$R = 0.9998$$

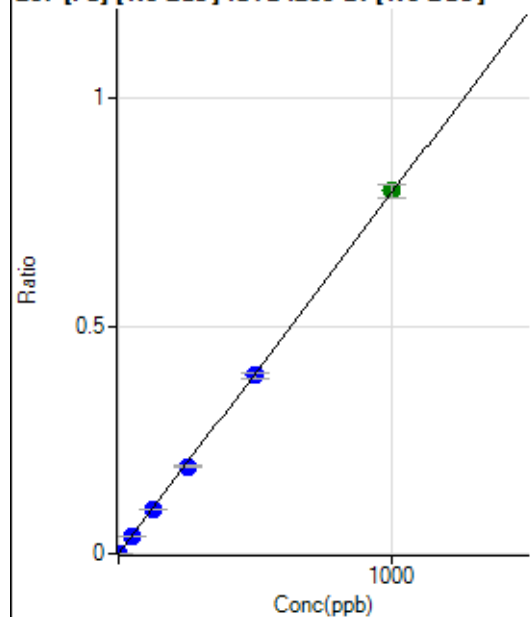
$$DL = 0.03572$$

$$BEC = 0.09514$$

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	1103.78	0.0001	P	11.7
2	☐	1.000	0.965	11093.85	0.0009	P	2.6
3	☐	50.000	47.307	476123.55	0.0376	P	0.4
4	☐	125.000	121.048	1242663.03	0.0960	P	0.7
5	☐	250.000	241.378	2463629.43	0.1913	P	1.6
6	☐	500.000	493.840	4852289.40	0.3913	P	2.5
7	☐	1000.000	1005.864	9386427.64	0.7969	A	4.1
8	☐			30819.65	0.0030	P	0.6

$$y = 7.9221\text{E-}004 * x + 8.7215\text{E-}005$$

$$R = 0.9999$$

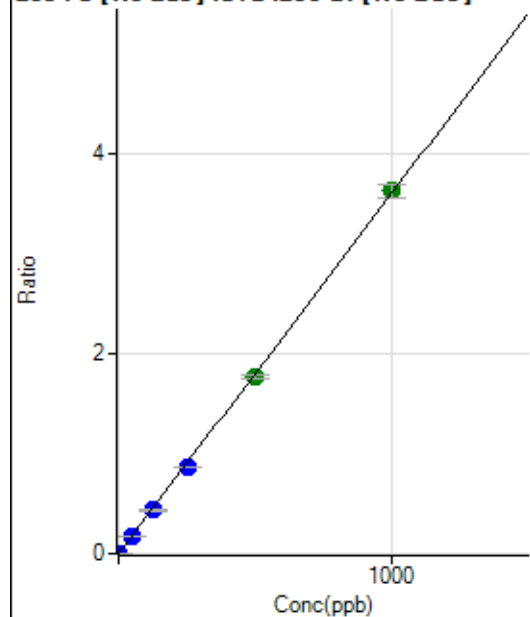
$$DL = 0.03871$$

$$BEC = 0.1101$$

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	4144.81	0.0003	P	6.7
2	☐	1.000	0.955	49120.00	0.0038	P	2.0
3	☐	50.000	47.455	2174881.86	0.1716	P	0.4
4	☐	125.000	120.487	5633792.23	0.4352	P	0.7
5	☐	250.000	240.161	11165597.04	0.8670	P	1.3
6	☐	500.000	490.930	21972867.33	1.7720	A	2.6
7	☐	1000.000	1007.686	42838681.97	3.6369	A	3.9
8	☐			137943.86	0.0134	P	0.5

$$y = 0.0036 * x + 3.2730\text{E-}004$$

$$R = 0.9999$$

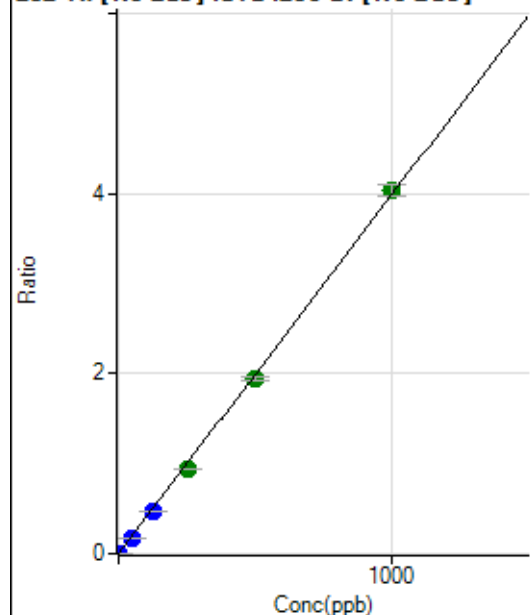
$$DL = 0.01809$$

$$BEC = 0.09069$$

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	1831.67	0.0001	P	4.0
2	☐	1.000	0.667	36462.52	0.0028	P	4.1
3	☐	50.000	44.384	2241355.73	0.1768	P	0.9
4	☐	125.000	115.927	5976716.57	0.4616	P	0.2
5	☐	250.000	234.521	12024790.43	0.9337	A	0.7
6	☐	500.000	487.297	24054055.17	1.9400	A	2.9
7	☐	1000.000	1011.637	47446029.30	4.0273	A	3.1
8	☐			12545.26	0.0012	P	2.2

$$y = 0.0040 * x + 1.4466E-004$$

$$R = 0.9997$$

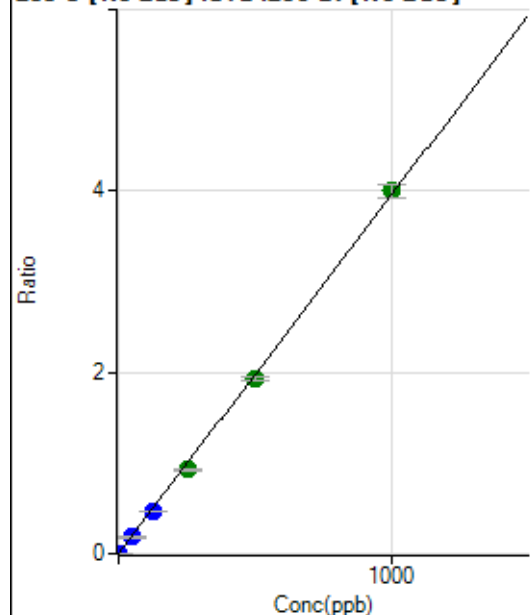
$$DL = 0.004385$$

$$BEC = 0.03634$$

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	2116.94	0.0002	P	4.9
2	☐	1.000	0.917	49414.53	0.0038	P	1.0
3	☐	50.000	45.708	2294432.95	0.1810	P	0.9
4	☐	125.000	117.307	6011407.82	0.4643	P	0.6
5	☐	250.000	233.690	11909567.02	0.9248	A	0.8
6	☐	500.000	488.017	23945557.48	1.9311	A	2.4
7	☐	1000.000	1011.246	47135011.82	4.0013	A	3.5
8	☐			7874.98	0.0008	P	5.0

$$y = 0.0040 * x + 1.6716E-004$$

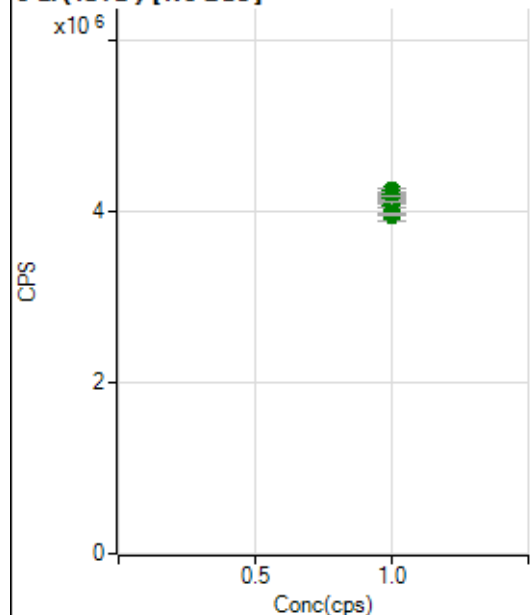
$$R = 0.9997$$

$$DL = 0.006218$$

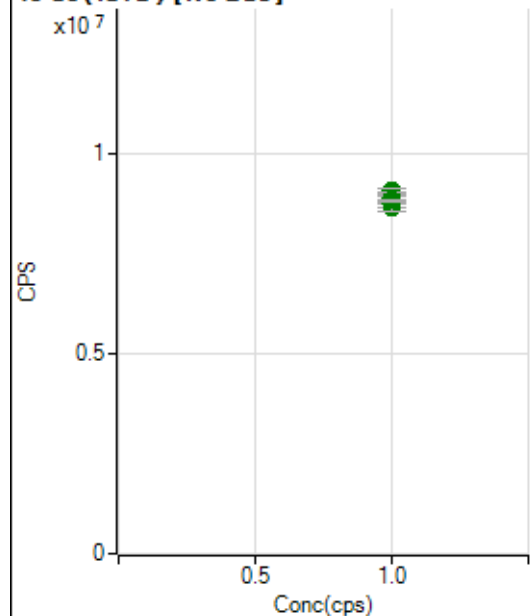
$$BEC = 0.04225$$

Weight: <None>

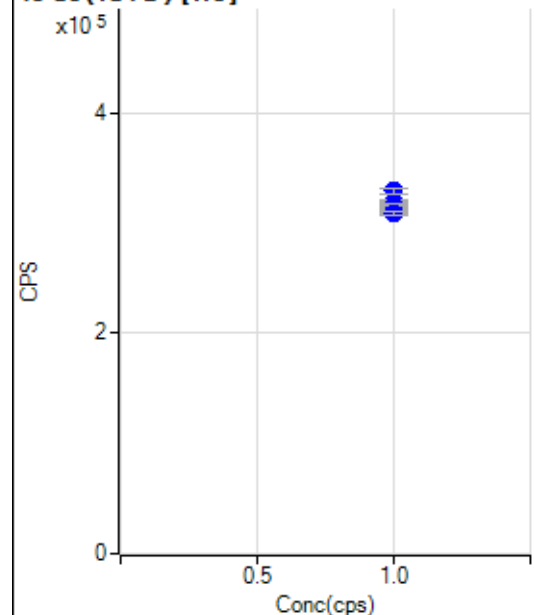
Min Conc: 0

6 Li (ISTD) [No Gas]

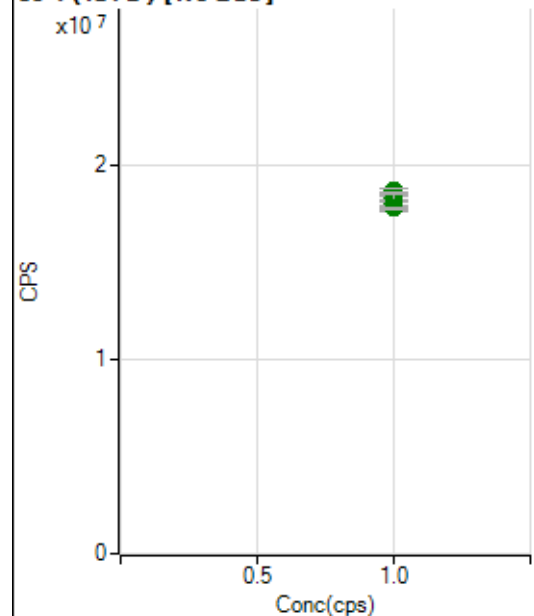
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4246500.36		A	1.4
2	☐	1.000		4206417.96		A	0.9
3	☐	1.000		4102395.01		A	0.4
4	☐	1.000		4141604.17		A	1.3
5	☐	1.000		4156146.40		A	1.1
6	☐	1.000		4075366.99		A	1.7
7	☐	1.000		3969674.14		A	3.8
8	☐	1.000		3972709.66		A	0.4

45 Sc (ISTD) [No Gas]

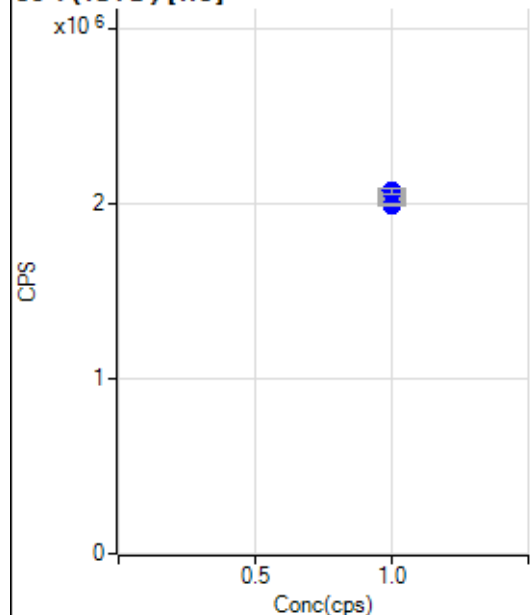
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8804237.00		A	1.4
2	☐	1.000		8875928.67		A	1.4
3	☐	1.000		8651972.85		A	0.3
4	☐	1.000		8989504.63		A	0.8
5	☐	1.000		9075021.65		A	1.3
6	☐	1.000		8912569.65		A	2.9
7	☐	1.000		8771968.25		A	4.4
8	☐	1.000		8839121.29		A	0.7

45 Sc (ISTD) [He]

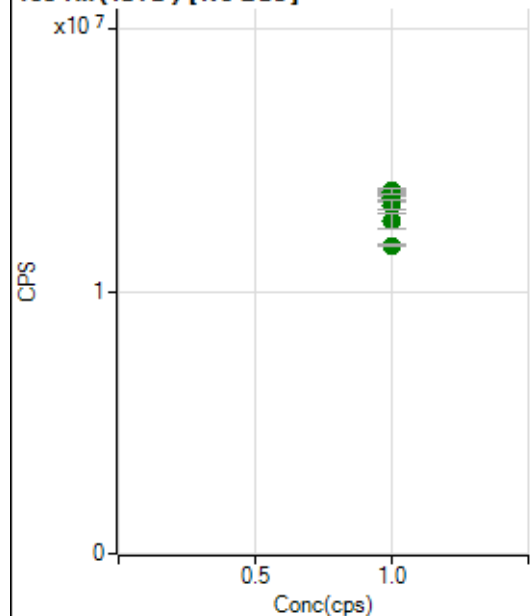
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		312480.19		P	0.4
2	☐	1.000		308324.07		P	1.2
3	☐	1.000		315597.97		P	0.6
4	☐	1.000		310885.82		P	1.3
5	☐	1.000		320025.65		P	0.7
6	☐	1.000		316938.88		P	0.7
7	☐	1.000		309650.80		P	1.0
8	☐	1.000		329524.57		P	1.4

89 Y (ISTD) [No Gas]

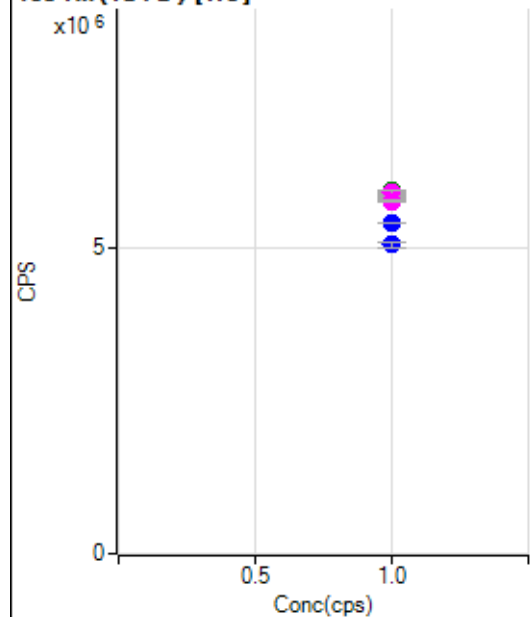
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18090046.54		A	1.4
2	☐	1.000		18240339.31		A	0.5
3	☐	1.000		17816125.85		A	0.3
4	☐	1.000		18552240.14		A	1.1
5	☐	1.000		18706786.25		A	1.4
6	☐	1.000		18385738.34		A	2.7
7	☐	1.000		18077679.73		A	4.8
8	☐	1.000		17836466.54		A	0.6

89 Y(ISTD) [He]

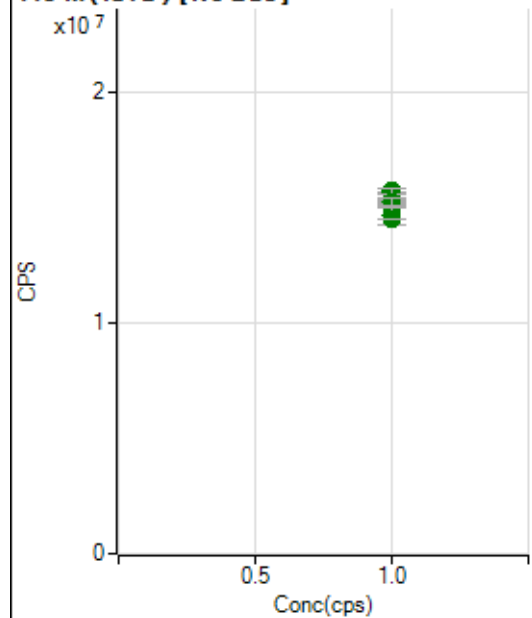
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2019191.52		P	0.3
2	☐	1.000		2014771.58		P	0.3
3	☐	1.000		2048856.72		P	0.7
4	☐	1.000		2028285.21		P	0.6
5	☐	1.000		2075090.82		P	0.1
6	☐	1.000		2063820.75		P	0.6
7	☐	1.000		1994704.59		P	0.5
8	☐	1.000		2074818.53		P	1.4

103 Rh(ISTD) [No Gas]

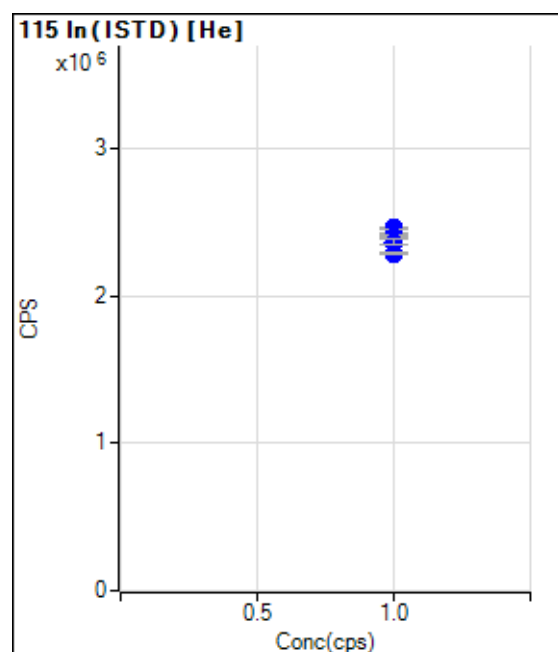
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13556543.01		A	1.4
2	☐	1.000		13838692.15		A	0.9
3	☐	1.000		13514122.87		A	0.2
4	☐	1.000		13830095.10		A	0.9
5	☐	1.000		13804606.04		A	1.7
6	☐	1.000		13311894.92		A	2.7
7	☐	1.000		12713480.49		A	4.8
8	☐	1.000		11753449.39		A	0.6

103 Rh (ISTD) [He]

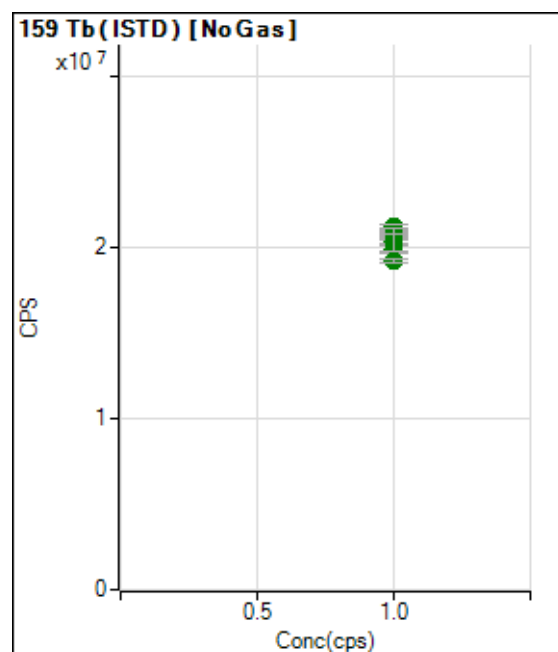
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5801702.41		A	1.1
2	☐	1.000		5842039.98		M	0.2
3	☐	1.000		5935465.40		A	0.6
4	☐	1.000		5837716.44		M	1.3
5	☐	1.000		5899219.29		M	1.5
6	☐	1.000		5771882.69		M	0.1
7	☐	1.000		5414752.76		P	0.4
8	☐	1.000		5055456.00		P	2.0

115 In (ISTD) [No Gas]

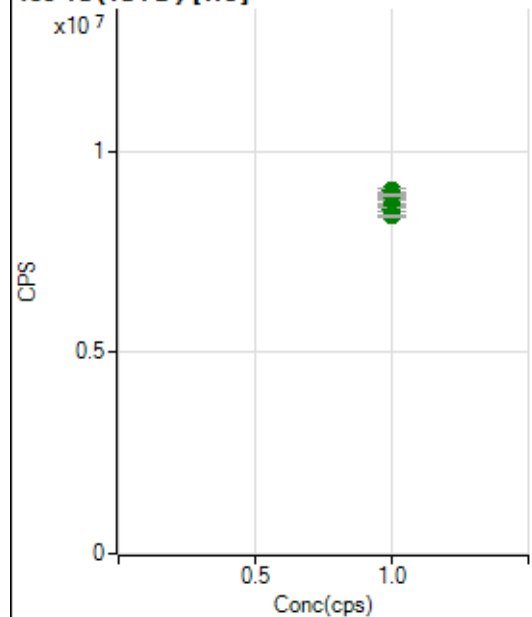
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15070655.60		A	1.4
2	☐	1.000		15621454.43		A	1.0
3	☐	1.000		15265193.73		A	0.5
4	☐	1.000		15719951.45		A	1.6
5	☐	1.000		15682486.65		A	1.4
6	☐	1.000		15257695.54		A	2.2
7	☐	1.000		14625696.30		A	4.8
8	☐	1.000		14478994.14		A	0.3



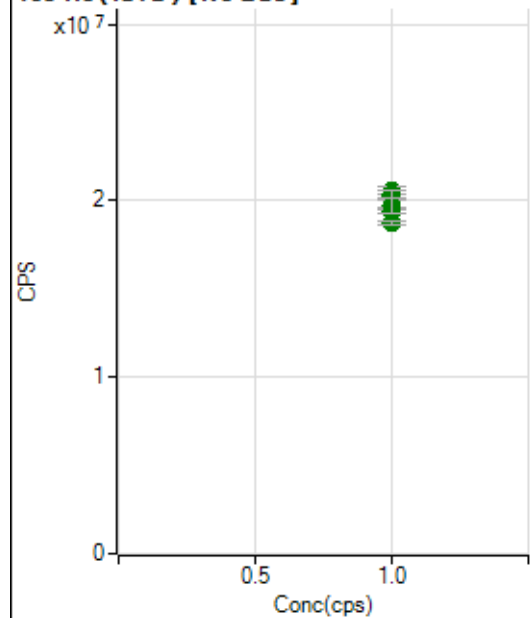
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2417280.28		P	0.3
2	☐	1.000		2406179.35		P	0.7
3	☐	1.000		2460795.28		P	0.3
4	☐	1.000		2409992.26		P	0.4
5	☐	1.000		2449502.57		P	0.2
6	☐	1.000		2402789.04		P	0.7
7	☐	1.000		2288311.34		P	0.6
8	☐	1.000		2364093.94		P	1.5



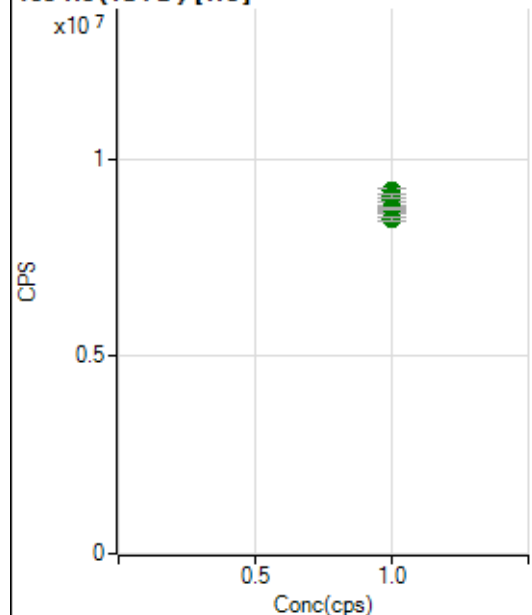
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19925019.01		A	2.0
2	☐	1.000		20583381.22		A	1.0
3	☐	1.000		20224906.50		A	0.5
4	☐	1.000		21059850.94		A	1.2
5	☐	1.000		21225313.99		A	1.3
6	☐	1.000		20832451.64		A	2.7
7	☐	1.000		20328291.92		A	4.7
8	☐	1.000		19261550.96		A	1.3

159 Tb (ISTD) [He]

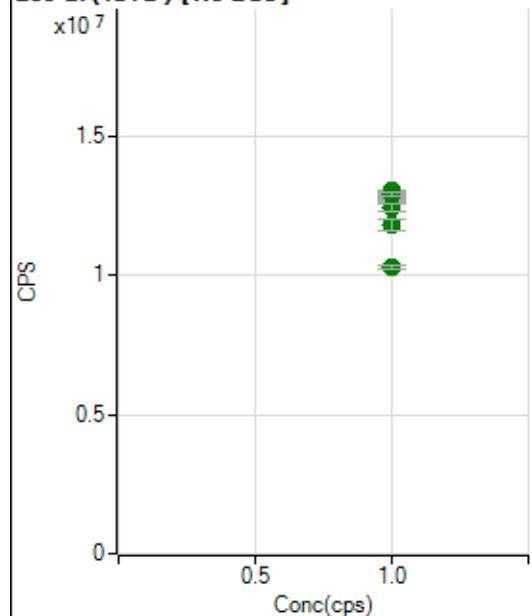
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8536452.30		A	1.1
2	☐	1.000		8652500.70		A	0.4
3	☐	1.000		8863703.62		A	0.6
4	☐	1.000		8804111.12		A	0.6
5	☐	1.000		9008088.75		A	0.9
6	☐	1.000		8906290.84		A	0.3
7	☐	1.000		8537195.84		A	1.1
8	☐	1.000		8382357.17		A	1.0

165 Ho (ISTD) [No Gas]

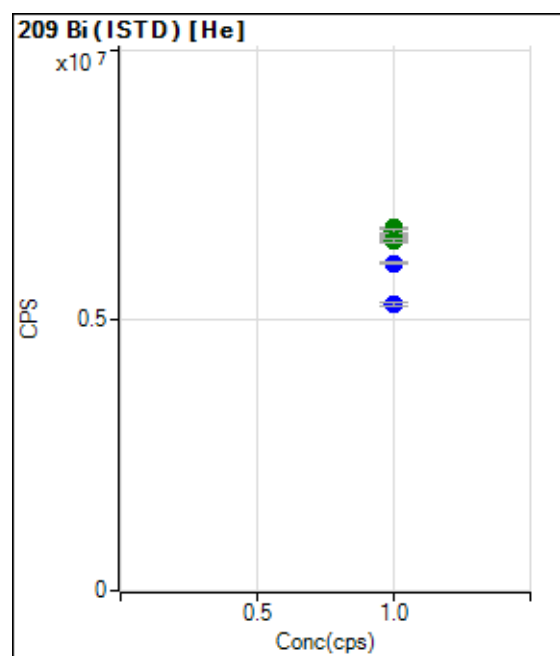
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19385044.88		A	1.4
2	☐	1.000		20038904.44		A	0.3
3	☐	1.000		19583696.96		A	0.6
4	☐	1.000		20261113.82		A	1.0
5	☐	1.000		20551804.63		A	2.1
6	☐	1.000		20326834.48		A	2.9
7	☐	1.000		19737024.57		A	4.5
8	☐	1.000		18735554.24		A	1.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8639859.66		A	0.9
2	☐	1.000		8787635.49		A	1.0
3	☐	1.000		9013881.60		A	0.3
4	☐	1.000		8969415.08		A	1.5
5	☐	1.000		9193876.74		A	1.3
6	☐	1.000		9061734.87		A	0.6
7	☐	1.000		8756945.63		A	0.7
8	☐	1.000		8487209.73		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12666434.26		A	1.4
2	☐	1.000		13021119.11		A	0.6
3	☐	1.000		12675132.17		A	0.3
4	☐	1.000		12947060.09		A	1.0
5	☐	1.000		12878854.25		A	1.0
6	☐	1.000		12404752.18		A	2.3
7	☐	1.000		11790479.55		A	3.9
8	☐	1.000		10284713.94		A	1.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6486475.74		A	1.1
2	☐	1.000		6590854.76		A	0.8
3	☐	1.000		6702949.62		A	0.7
4	☐	1.000		6594659.76		A	0.9
5	☐	1.000		6639762.33		A	1.2
6	☐	1.000		6459329.21		A	0.9
7	☐	1.000		6056043.45		P	0.5
8	☐	1.000		5295230.37		P	1.7

US EPA Tune Check Sample Report

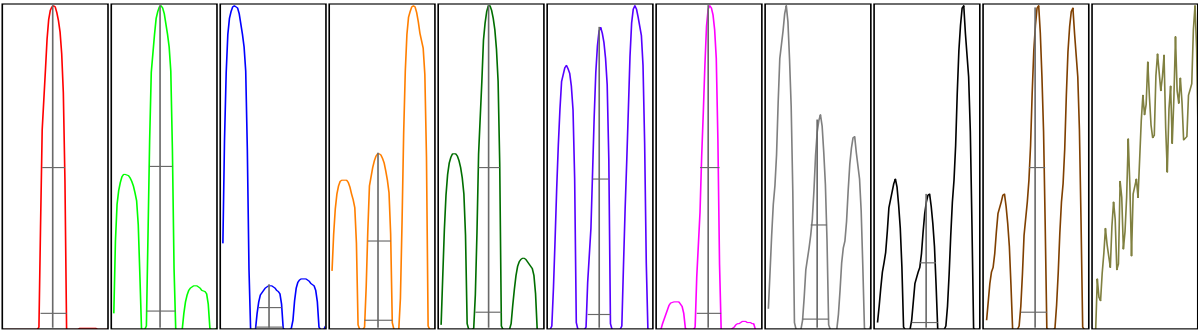
Batch Folder D:\ICP-MS Data\P7122619MS3.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	11732	1.19	5.00	
24	133353	1.31	5.00	
25	18139	1.49	5.00	
26	20870	1.36	5.00	
59	100780	1.19	5.00	
113	15099	0.65	5.00	
115	188643	2.64	5.00	
206	38317	0.90	5.00	
207	35071	0.95	5.00	
208	82835	0.82	5.00	
220	89	1.96		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	11613	11653	11629	11845	11918
24	131554	131901	132964	135106	135239
25	17879	17958	17997	18393	18470
26	20583	20680	20738	21161	21188
59	99695	100250	99903	101578	102473
113	15216	15187	15041	15065	14986
115	193730	193645	187431	186148	182263
206	37913	38132	38187	38642	38710
207	34823	34925	34746	35435	35426
208	82136	82537	82369	83530	83604
220	87	88	90	91	89

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	18504	8.95	8.9 - 9.1		0.788	0.900	
24	207900	23.90	23.9 - 24.1		0.828	0.900	
25	27799	24.90	24.9 - 25.1		0.791	0.900	
26	32626	25.90	25.9 - 26.1		0.789	0.900	
59	171749	58.95	58.9 - 59.1		0.773	0.900	
113	30408	113.00	112.9 - 113.1		0.683	0.900	
115	376116	115.00	114.9 - 115.1		0.724	0.900	
206	81445	206.00	205.9 - 206.1		0.743	0.900	
207	74696	207.00	206.9 - 207.1		0.758	0.900	
208	178767	208.00	207.9 - 208.1		0.755	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	6.8	V	Deflect	13.0	V
Extract 2	-115.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	23219	0.51	
89	8513	2.52	
205	32024	0.57	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	23235	23010	23279	23294	23280
89	8788	8625	8557	8319	8277
205	31992	31881	32074	31860	32311

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	7.0	V	Deflect	1.8	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

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