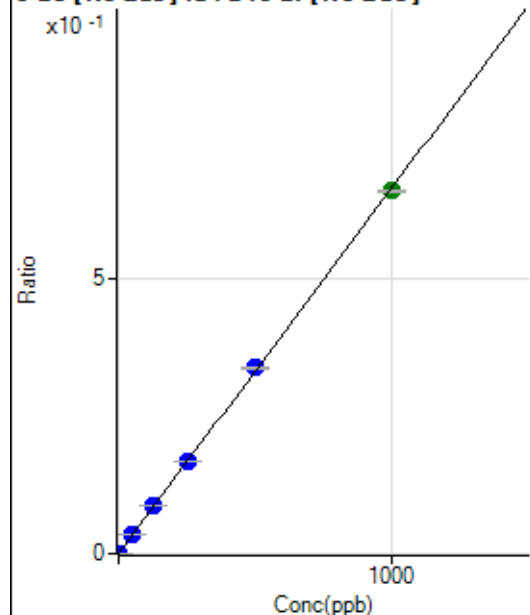


Batch Folder: D:\ICP-MS Data\P7101819N.b\
Analysis File: P7101819N.batch.bin
DA Date-Time: 2019-10-19 04:42:50
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-10-18 14:40:59
2	004CAL.S.d	S02	2019-10-18 14:44:35
3	005CAL.S.d	S03	2019-10-18 14:49:11
4	006CAL.S.d	S04	2019-10-18 14:53:14
5	007CAL.S.d	S05	2019-10-18 14:57:02
6	008CAL.S.d	S06	2019-10-18 15:00:48
7	009CAL.S.d	S07	2019-10-18 15:04:32
8	010CAL.S.d	S08	2019-10-18 15:08:19

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	27.7
2	☐	1.000	1.035	5569.99	0.0007	P	2.5
3	☐	50.000	53.183	284136.77	0.0352	P	0.8
4	☐	125.000	131.405	686370.33	0.0871	P	0.7
5	☐	250.000	254.116	1307568.28	0.1684	P	0.8
6	☐	500.000	509.399	2615560.31	0.3375	P	0.8
7	☐	1000.000	993.311	5073699.40	0.6581	A	0.9
8	☐			1043.39	0.0001	P	5.8

$$y = 6.6248\text{E-}004 * x + 9.6636\text{E-}006$$

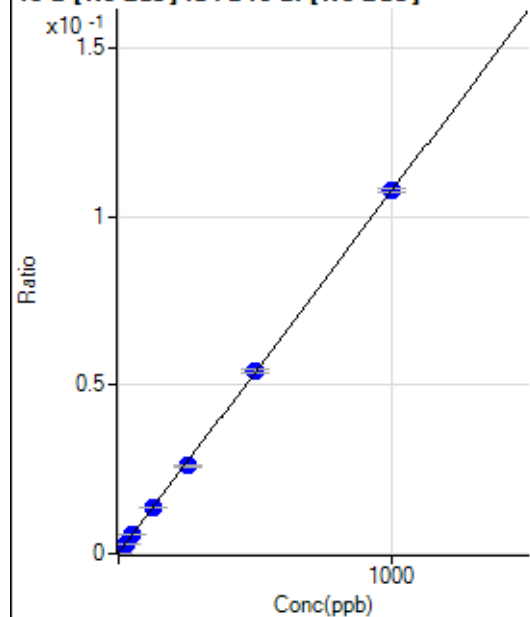
$$R = 0.9999$$

$$DL = 0.01212$$

$$BEC = 0.01459$$

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	1055.64	0.0001	P	0.5
2	☐	25.000	23.722	21452.11	0.0027	P	3.4
3	☐	50.000	49.886	44240.69	0.0055	P	1.5
4	☐	125.000	124.438	106361.69	0.0135	P	1.1
5	☐	250.000	242.670	203370.03	0.0262	P	2.0
6	☐	500.000	502.107	418861.01	0.0540	P	1.9
7	☐	1000.000	1000.887	829609.92	0.1076	P	1.1
8	☐			30927.10	0.0043	P	7.2

$$y = 1.0737\text{E-}004 * x + 1.3117\text{E-}004$$

$$R = 1.0000$$

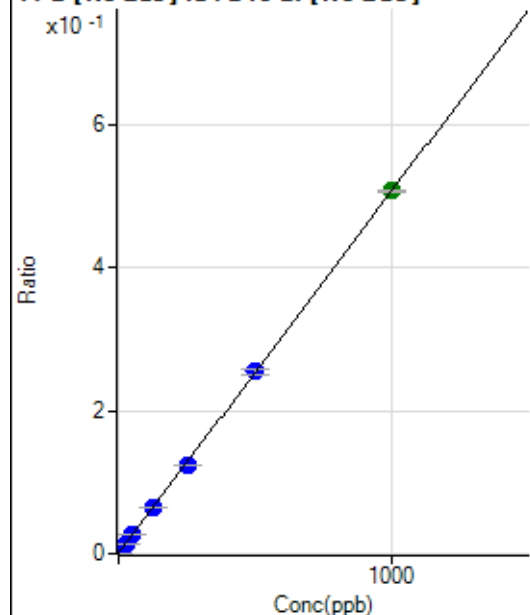
$$DL = 0.01957$$

$$BEC = 1.222$$

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	5162.20	0.0006	P	2.0
2	☐	25.000	23.979	102307.46	0.0128	P	1.8
3	☐	50.000	49.732	208022.80	0.0258	P	0.7
4	☐	125.000	124.890	503161.97	0.0638	P	0.9
5	☐	250.000	243.075	960030.82	0.1236	P	2.1
6	☐	500.000	501.041	1969641.43	0.2541	P	2.5
7	☐	1000.000	1001.264	3910591.62	0.5072	A	0.7
8	☐			145997.94	0.0202	P	8.2

$$y = 5.0590\text{E-}004 * x + 6.4150\text{E-}004$$

$$R = 1.0000$$

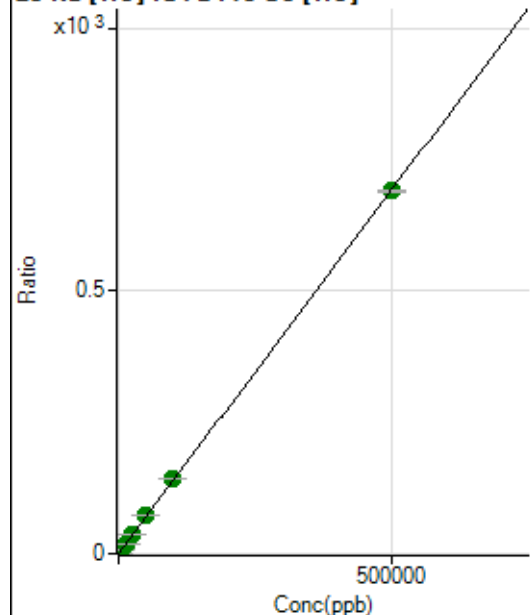
$$DL = 0.07727$$

$$BEC = 1.268$$

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	13211.81	0.0208	P	1.9
2	☐	500.000	515.034	470832.50	0.7329	P	1.4
3	☐	5000.000	5406.861	4604309.22	7.4957	A	0.2
4	☐	12500.000	13624.398	11405407.29	18.8563	A	1.2
5	☐	25000.000	26635.050	22107853.45	36.8433	A	0.6
6	☐	50000.000	52848.258	45560926.02	73.0827	A	0.3
7	☐	100000.00	103173.90	93484642.37	142.6570	A	0.5
8	☐	500000.00	498966.44	490900127.64	689.8336	A	0.2

$$y = 0.0014 * x + 0.0208$$

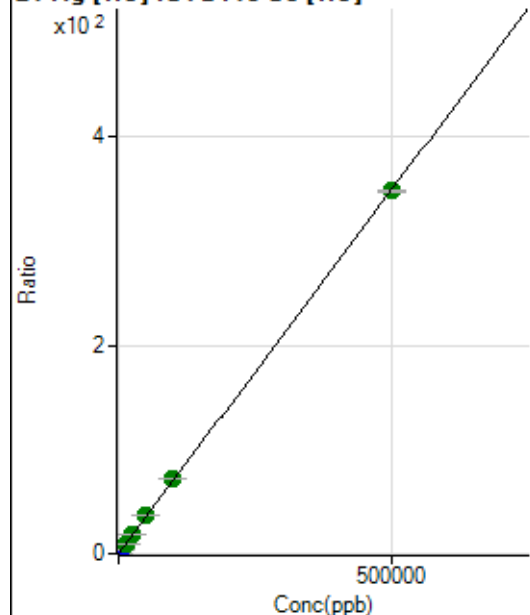
$$R = 1.0000$$

$$DL = 0.8649$$

$$BEC = 15.07$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	544.47	0.0009	P	29.4
2	☐	500.000	539.317	242655.86	0.3777	P	1.9
3	☐	5000.000	5575.709	2393656.58	3.8968	P	0.1
4	☐	12500.000	13907.998	5878724.22	9.7189	A	0.9
5	☐	25000.000	26960.525	11304565.44	18.8392	A	0.5
6	☐	50000.000	53660.277	23375240.80	37.4954	A	0.3
7	☐	100000.00	103662.75	47466931.96	72.4341	A	0.2
8	☐	500000.00	498762.39	247998038.88	348.5059	A	0.7

$$y = 6.9874\text{E-}004 * x + 8.6012\text{E-}004$$

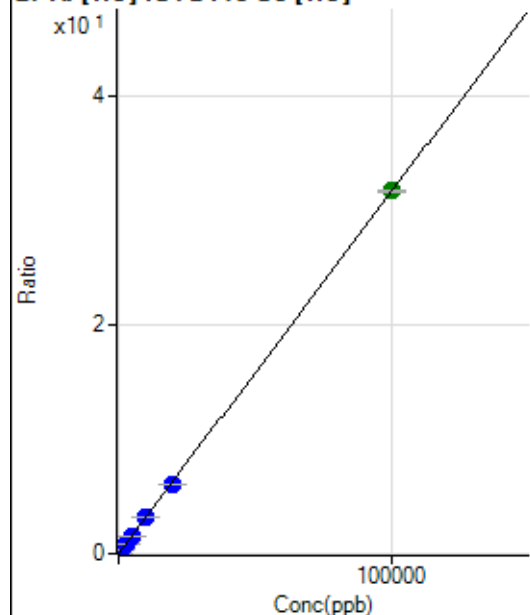
$$R = 1.0000$$

$$DL = 1.085$$

$$BEC = 1.231$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.34	0.0001	P	37.0
2	☐	20.000	19.693	4064.61	0.0063	P	3.4
3	☐	1000.000	1011.345	196745.21	0.3203	P	0.5
4	☐	2500.000	2534.503	485431.74	0.8025	P	1.1
5	☐	5000.000	4927.885	936286.26	1.5603	P	0.4
6	☐	10000.000	9848.851	1944001.61	3.1184	P	0.1
7	☐	20000.000	19117.997	3966617.84	6.0531	P	1.0
8	☐	100000.00	100194.14	22573323.07	31.7228	A	0.9

$$y = 3.1661\text{E-}004 * x + 9.1825\text{E-}005$$

$$R = 1.0000$$

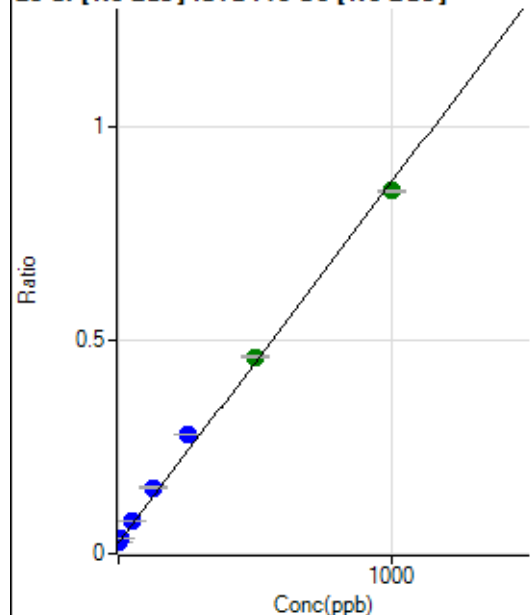
$$DL = 0.322$$

$$BEC = 0.29$$

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	415696.36	0.0257	P	0.6
2	☐	10.000	11.388	566433.33	0.0353	P	1.1
3	☐	50.000	61.286	1218332.63	0.0773	P	0.7
4	☐	125.000	153.216	2365855.76	0.1548	P	1.1
5	☐	250.000	300.279	4213409.12	0.2788	P	1.0
6	☐	500.000	515.710	7116126.03	0.4604	A	1.6
7	☐	1000.000	975.470	13370693.18	0.8480	A	0.8
8	☐			1120757.81	0.0693	P	0.6

$$y = 8.4300\text{E-}004 * x + 0.0257$$

R = 0.9982

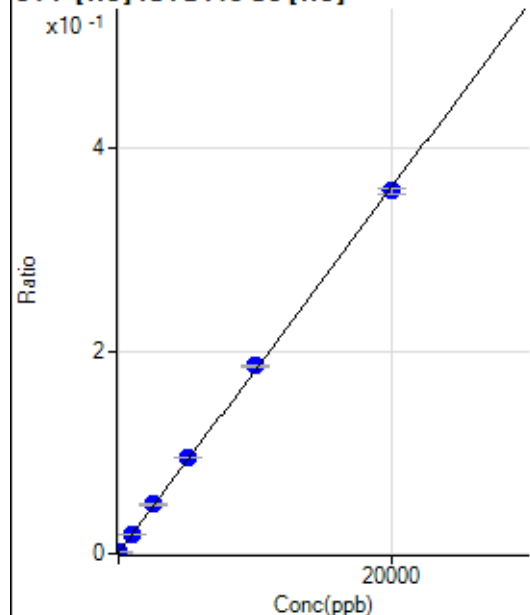
DL = 0.5538

BEC = 30.43

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	-23.872	169.45	0.0003	P	28.8
2	☐	0.000	23.872	725.05	0.0011	P	11.8
3	☐	1000.000	1050.486	12060.95	0.0196	P	1.5
4	☐	2500.000	2665.957	29494.12	0.0488	P	3.0
5	☐	5000.000	5216.777	56851.21	0.0947	P	1.5
6	☐	10000.000	10222.710	115313.22	0.1850	P	1.2
7	☐	20000.000	19811.182	234483.83	0.3578	P	1.5
8	☐			355.57	0.0005	P	24.4

$$y = 1.8027\text{E-}005 * x + 6.9805\text{E-}004$$

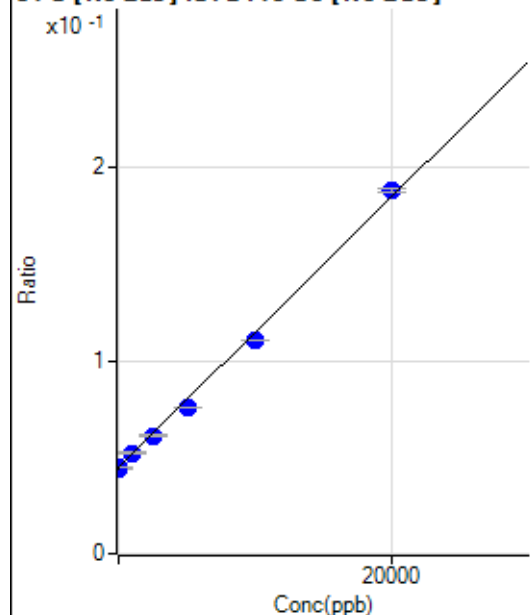
R = 0.9998

DL = 17.45

BEC = 38.72

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	-73.389	710932.20	0.0439	P	0.2
2	☐	0.000	73.389	721507.34	0.0449	P	0.1
3	☐	1000.000	1126.764	824400.70	0.0523	P	0.9
4	☐	2500.000	2398.401	936306.86	0.0613	P	0.5
5	☐	5000.000	4447.775	1143966.99	0.0757	P	0.7
6	☐	10000.000	9424.531	1711334.39	0.1107	P	0.6
7	☐	20000.000	20432.152	2967405.40	0.1882	P	1.1
8	☐			637503.37	0.0394	P	1.8

$$y = 7.0384\text{E-}006 * x + 0.0444$$

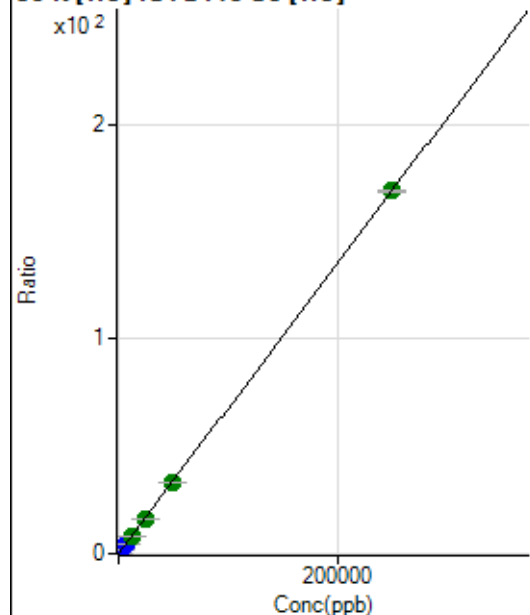
R = 0.9989

DL = 25.75

BEC = 6306

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	34855.79	0.0550	P	2.4
2	☐	500.000	485.056	245745.65	0.3825	P	0.8
3	☐	2500.000	2482.260	1063335.68	1.7311	P	0.7
4	☐	6250.000	6226.247	2576214.55	4.2591	P	0.9
5	☐	12500.000	12106.154	4938203.97	8.2294	A	0.4
6	☐	25000.000	24339.551	10279423.41	16.4897	A	0.7
7	☐	50000.000	48580.600	21532073.40	32.8579	A	0.8
8	☐	250000.00	250370.41	120340492.97	169.1117	A	0.6

$$y = 6.7523\text{E-}004 * x + 0.0550$$

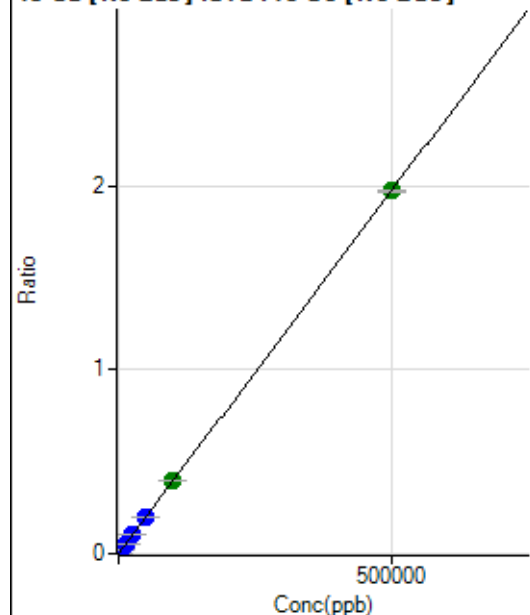
R = 1.0000

DL = 5.75

BEC = 81.43

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	308.35	0.0000	P	19.6
2	☐	500.000	498.963	31954.94	0.0020	P	2.0
3	☐	5000.000	5093.825	317159.72	0.0201	P	0.4
4	☐	12500.000	12758.362	769946.99	0.0504	P	0.9
5	☐	25000.000	25284.127	1508750.07	0.0998	P	0.5
6	☐	50000.000	50280.198	3068072.62	0.1985	P	0.9
7	☐	100000.00	100267.95	6241217.50	0.3958	A	1.0
8	☐	500000.00	499896.78	31901662.52	1.9733	A	0.4

$$y = 3.9475E-006 * x + 1.9030E-005$$

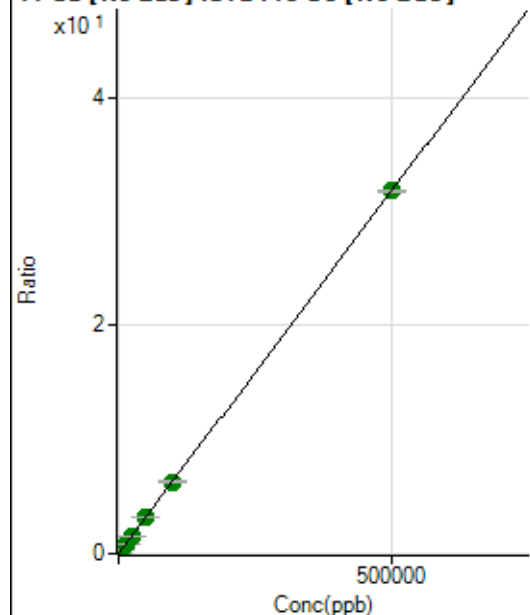
$$R = 1.0000$$

$$DL = 2.838$$

$$BEC = 4.821$$

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	21431.53	0.0013	P	1.8
2	☐	500.000	499.486	532078.79	0.0331	P	0.4
3	☐	5000.000	5048.835	5084535.18	0.3227	A	1.0
4	☐	12500.000	12560.092	12237096.14	0.8007	A	0.7
5	☐	25000.000	24813.801	23889445.44	1.5807	A	0.2
6	☐	50000.000	49596.856	48813362.08	3.1580	A	1.3
7	☐	100000.00	99285.332	99662078.83	6.3206	A	0.5
8	☐	500000.00	500190.56	514685196.05	31.8373	A	0.5

$$y = 6.3648E-005 * x + 0.0013$$

$$R = 1.0000$$

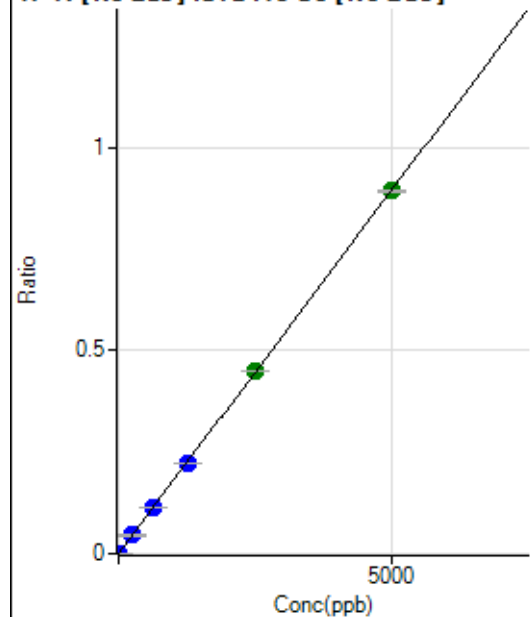
$$DL = 1.112$$

$$BEC = 20.78$$

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	286.12	0.0000	P	4.5
2	☐	5.000	5.242	15339.08	0.0010	P	2.2
3	☐	250.000	251.835	709640.94	0.0450	P	0.6
4	☐	625.000	633.693	1731364.58	0.1133	P	0.4
5	☐	1250.000	1246.951	3369057.24	0.2229	P	0.3
6	☐	2500.000	2511.494	6939440.43	0.4490	A	0.8
7	☐	5000.000	4993.837	14075677.57	0.8927	A	0.7
8	☐			5328.98	0.0003	P	2.7

$$y = 1.7875E-004 * x + 1.7656E-005$$

$$R = 1.0000$$

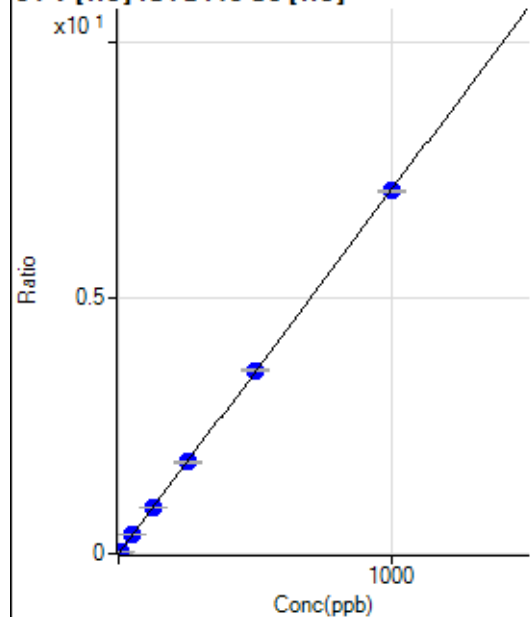
$$DL = 0.01348$$

$$BEC = 0.09877$$

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	18.89	0.0000	P	21.7
2	☐	5.000	5.206	23789.41	0.0370	P	2.9
3	☐	50.000	50.959	222481.79	0.3622	P	0.1
4	☐	125.000	128.351	551758.72	0.9122	P	1.5
5	☐	250.000	251.284	1071617.33	1.7859	P	0.8
6	☐	500.000	504.499	2235242.92	3.5855	P	0.3
7	☐	1000.000	996.962	4643159.17	7.0854	P	0.5
8	☐			1493.44	0.0021	P	4.6

$$y = 0.0071 * x + 2.9844E-005$$

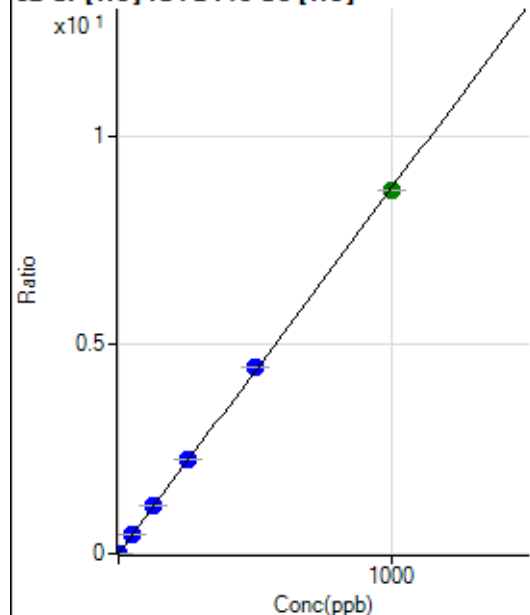
$$R = 1.0000$$

$$DL = 0.002728$$

$$BEC = 0.004199$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	891.15	0.0014	P	3.0
2	☐	2.000	1.980	12039.51	0.0187	P	1.6
3	☐	50.000	52.634	283855.36	0.4621	P	0.6
4	☐	125.000	132.056	699977.51	1.1573	P	1.7
5	☐	250.000	256.456	1347811.67	2.2462	P	0.9
6	☐	500.000	509.335	2780195.34	4.4596	P	0.5
7	☐	1000.000	992.705	5695028.11	8.6905	A	0.1
8	☐			216455.40	0.3042	P	1.0

$$y = 0.0088 * x + 0.0014$$

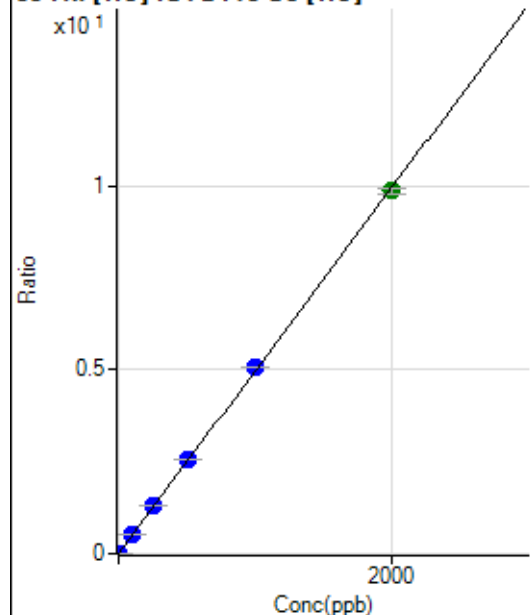
$$R = 0.9999$$

$$DL = 0.01466$$

$$BEC = 0.1606$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	67.78	0.0001	P	31.7
2	☐	1.000	1.075	3502.70	0.0055	P	1.4
3	☐	100.000	104.661	319709.23	0.5205	P	0.5
4	☐	250.000	263.194	791589.82	1.3087	P	1.1
5	☐	500.000	512.438	1528896.92	2.5480	P	0.8
6	☐	1000.000	1021.487	3166301.27	5.0789	P	0.7
7	☐	2000.000	1984.264	6465195.81	9.8659	A	1.3
8	☐			26555.26	0.0373	P	0.1

$$y = 0.0050 * x + 1.0689E-004$$

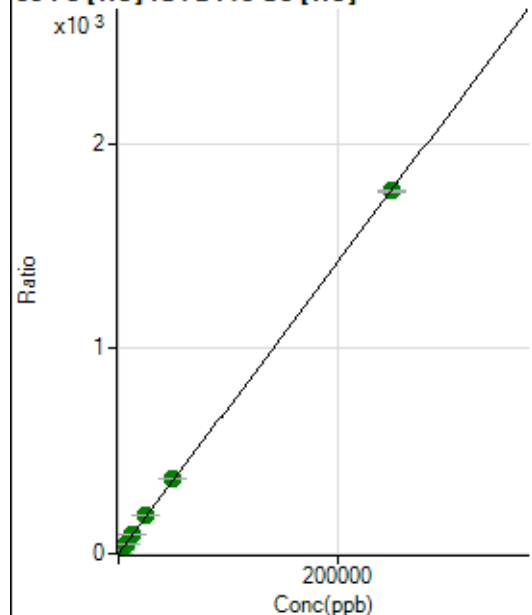
$$R = 0.9999$$

$$DL = 0.02044$$

$$BEC = 0.0215$$

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	7131.59	0.0112	P	2.3
2	☐	50.000	55.514	260178.77	0.4050	P	1.8
3	☐	2500.000	2730.158	11901094.94	19.3748	A	0.2
4	☐	6250.000	6832.463	29318066.17	48.4702	A	0.9
5	☐	12500.000	13289.551	56564431.82	94.2668	A	0.8
6	☐	25000.000	26406.390	116764202.61	187.2974	A	0.4
7	☐	50000.000	51304.051	238456820.14	363.8829	A	1.0
8	☐	250000.00	249542.20	1259508650.3	1,769.878	A	0.2

$$y = 0.0071 * x + 0.0112$$

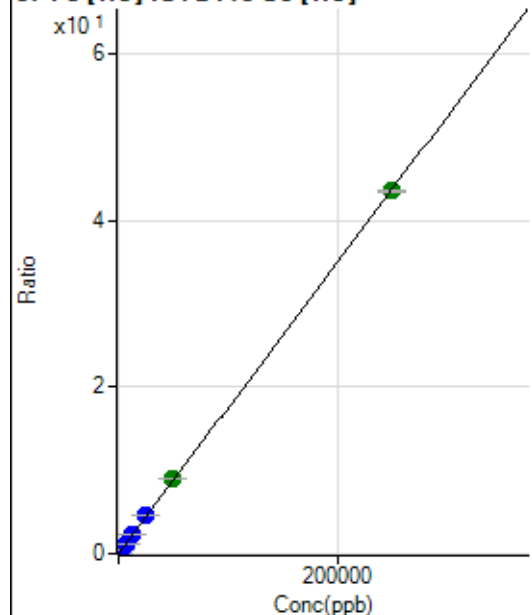
R = 1.0000

DL = 0.1118

BEC = 1.586

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	564.84	0.0009	P	7.4
2	☐	50.000	57.367	7016.68	0.0109	P	3.8
3	☐	2500.000	2728.351	293585.67	0.4779	P	0.5
4	☐	6250.000	6844.307	724376.37	1.1976	P	1.8
5	☐	12500.000	13281.573	1394021.27	2.3232	P	1.1
6	☐	25000.000	26520.455	2891344.19	4.6380	P	0.7
7	☐	50000.000	51637.352	5917331.67	9.0298	A	0.1
8	☐	250000.00	249464.26	31040083.33	43.6202	A	0.6

$$y = 1.7485E-004 * x + 8.9094E-004$$

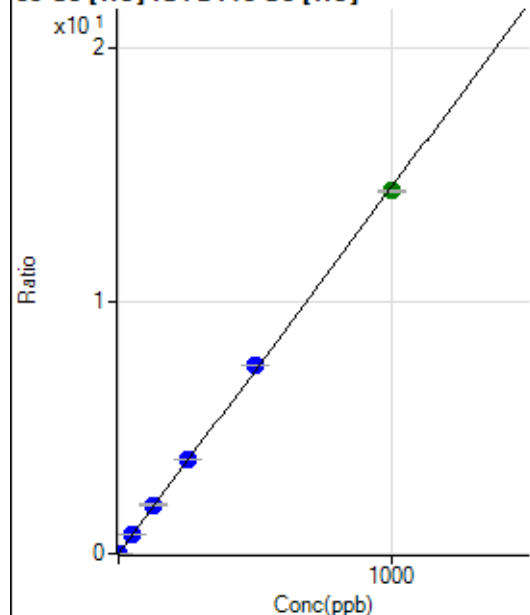
R = 1.0000

DL = 1.134

BEC = 5.095

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.11	0.0003	P	2.4
2	☐	1.000	1.032	9791.19	0.0152	P	3.4
3	☐	50.000	53.161	474161.02	0.7719	P	0.4
4	☐	125.000	132.874	1166756.42	1.9290	P	1.6
5	☐	250.000	257.199	2240401.58	3.7337	P	0.5
6	☐	500.000	513.894	4650490.21	7.4598	P	0.1
7	☐	1000.000	990.111	9418443.06	14.3724	A	0.4
8	☐			119156.61	0.1675	P	1.1

$$y = 0.0145 * x + 2.5408E-004$$

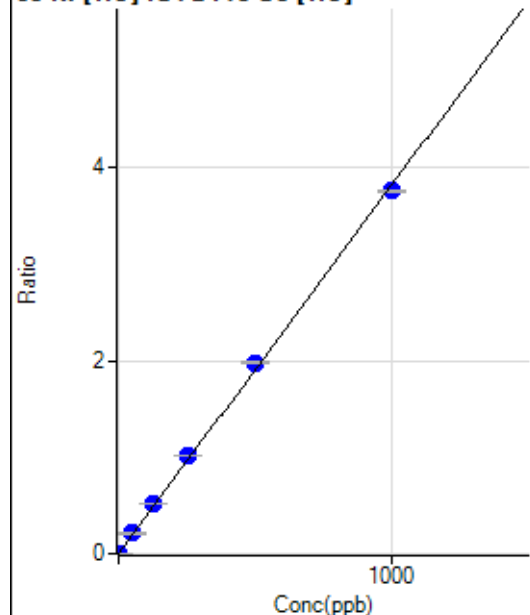
$$R = 0.9998$$

$$DL = 0.00128$$

$$BEC = 0.0175$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0001	P	20.3
2	☐	1.000	1.108	2773.64	0.0043	P	3.3
3	☐	50.000	54.848	128445.70	0.2091	P	0.5
4	☐	125.000	137.263	316449.77	0.5232	P	1.0
5	☐	250.000	264.172	604145.71	1.0068	P	0.2
6	☐	500.000	518.901	1232775.07	1.9775	P	0.5
7	☐	1000.000	985.231	2460428.39	3.7546	P	0.7
8	☐			82627.94	0.1161	P	1.7

$$y = 0.0038 * x + 9.4683E-005$$

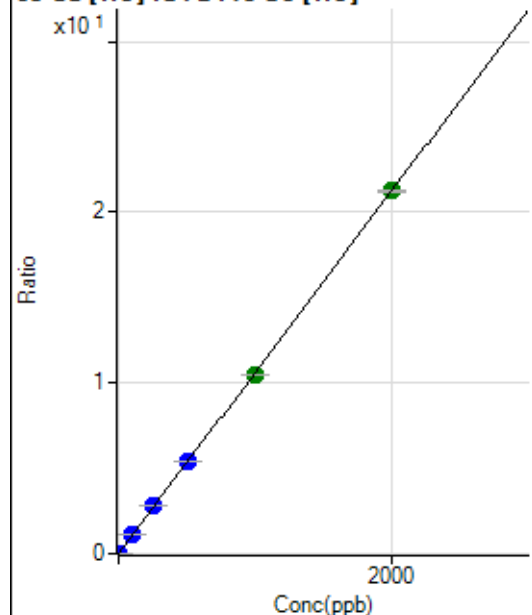
$$R = 0.9996$$

$$DL = 0.01511$$

$$BEC = 0.02485$$

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	1035.61	0.0016	P	2.4
2	☐	2.000	2.067	15155.83	0.0236	P	2.4
3	☐	100.000	105.961	692314.80	1.1271	P	0.4
4	☐	250.000	265.152	1704423.24	2.8179	P	1.3
5	☐	500.000	510.627	3255403.01	5.4252	P	0.4
6	☐	1000.000	987.992	6542758.23	10.4954	A	0.6
7	☐	2000.000	2001.155	13929579.10	21.2565	A	0.6
8	☐			29365.24	0.0413	P	0.3

$$y = 0.0106 * x + 0.0016$$

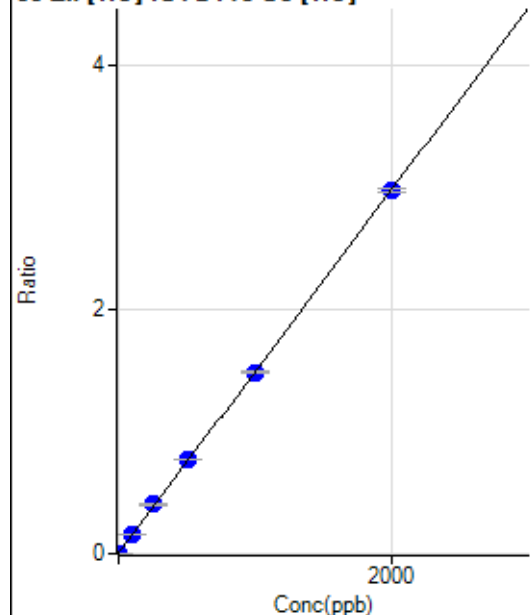
$$R = 0.9999$$

$$DL = 0.0109$$

$$BEC = 0.1538$$

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	1772.36	0.0028	P	3.7
2	☐	2.000	2.275	3968.38	0.0062	P	3.5
3	☐	100.000	107.472	99800.56	0.1625	P	0.4
4	☐	250.000	269.148	243570.65	0.4027	P	1.1
5	☐	500.000	516.226	461921.73	0.7698	P	0.5
6	☐	1000.000	997.652	925823.79	1.4851	P	0.7
7	☐	2000.000	1994.350	1943601.45	2.9659	P	0.9
8	☐			25702.80	0.0361	P	0.8

$$y = 0.0015 * x + 0.0028$$

$$R = 0.9999$$

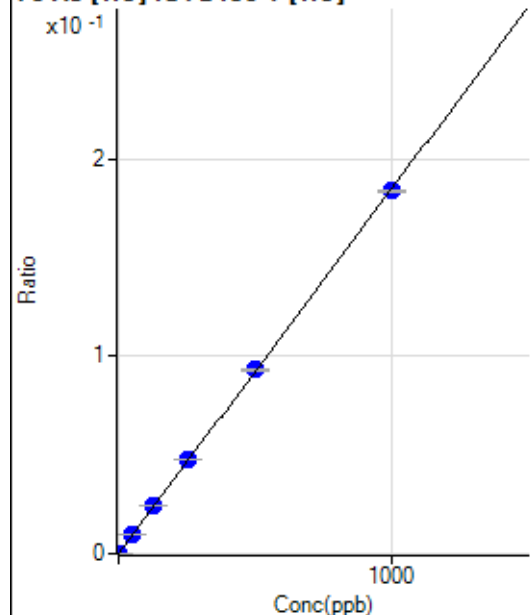
$$DL = 0.2101$$

$$BEC = 1.882$$

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	19.13	0.0000	P	20.4
2	☐	1.000	1.021	629.03	0.0002	P	5.8
3	☐	50.000	52.146	29714.98	0.0096	P	0.9
4	☐	125.000	131.721	73796.95	0.0243	P	1.1
5	☐	250.000	257.787	142713.13	0.0476	P	1.3
6	☐	500.000	504.121	291918.35	0.0931	P	0.6
7	☐	1000.000	995.045	593938.12	0.1837	P	0.6
8	☐			972.88	0.0003	P	5.1

$$y = 1.8459E-004 * x + 6.0225E-006$$

$$R = 0.9999$$

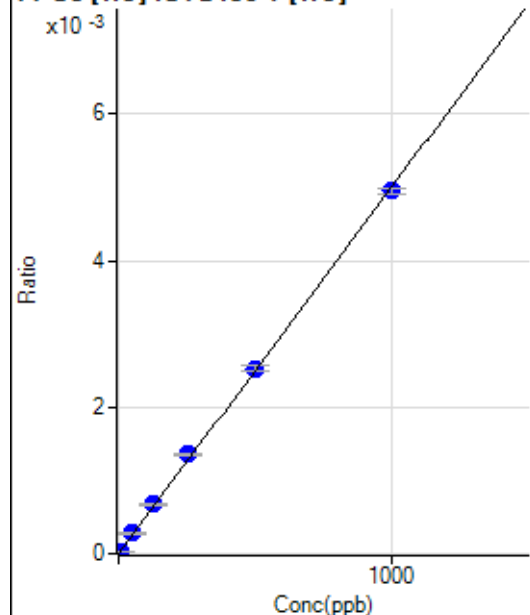
$$DL = 0.01996$$

$$BEC = 0.03263$$

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	0.00	0.0000	P	
2	☐	5.000	5.706	92.23	0.0000	P	12.9
3	☐	50.000	55.558	856.71	0.0003	P	5.3
4	☐	125.000	133.894	2030.17	0.0007	P	3.4
5	☐	250.000	270.371	4052.85	0.0014	P	2.4
6	☐	500.000	506.384	7937.84	0.0025	P	2.8
7	☐	1000.000	990.322	16004.61	0.0049	P	1.7
8	☐			18.89	0.0000	P	57.2

$$y = 4.9976E-006 * x + 0.0000E+000$$

$$R = 0.9997$$

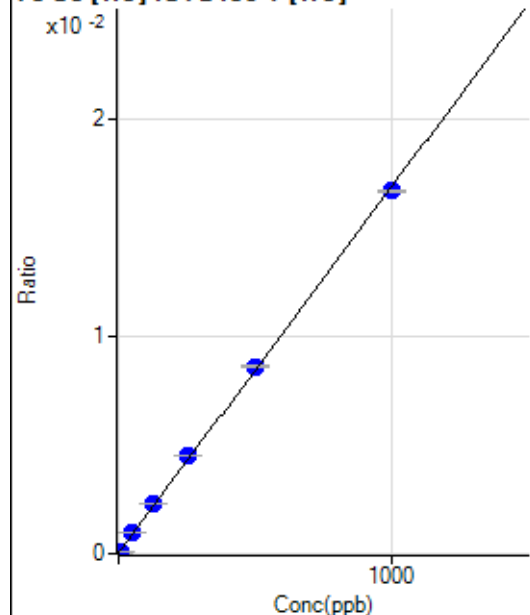
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.15	0.0000	P	15.1
2	☐	5.000	5.347	391.37	0.0001	P	11.4
3	☐	50.000	54.942	2952.80	0.0010	P	1.7
4	☐	125.000	136.267	7063.51	0.0023	P	1.3
5	☐	250.000	264.399	13460.01	0.0045	P	0.6
6	☐	500.000	510.384	27085.82	0.0086	P	0.5
7	☐	1000.000	989.551	54040.87	0.0167	P	0.9
8	☐			156.79	0.0000	P	7.3

$$y = 1.6858\text{E-}005 * x + 3.0872\text{E-}005$$

R = 0.9998

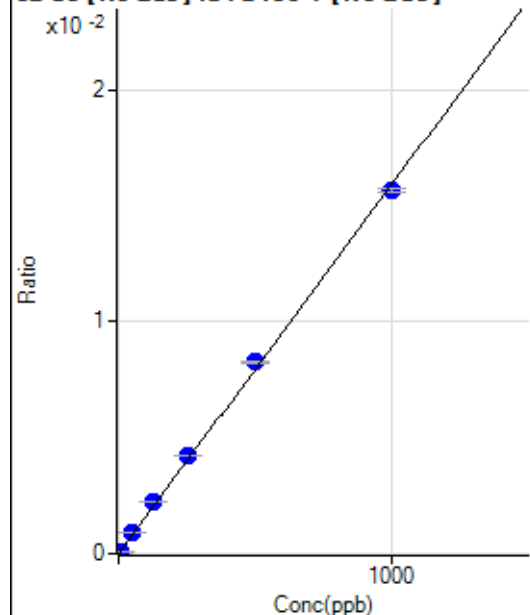
DL = 0.8287

BEC = 1.831

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	-128.41	0.0000	P	-79.
2	☐	5.000	6.047	2289.81	0.0001	P	3.9
3	☐	50.000	55.372	21522.64	0.0009	P	1.6
4	☐	125.000	139.143	52899.03	0.0022	P	0.6
5	☐	250.000	267.229	101230.47	0.0042	P	0.6
6	☐	500.000	519.748	200036.41	0.0083	P	0.8
7	☐	1000.000	983.777	388064.12	0.0157	P	0.9
8	☐			514.52	0.0000	P	14.6

$$y = 1.5914\text{E-}005 * x - 5.0341\text{E-}006$$

R = 0.9995

DL = 0.7575

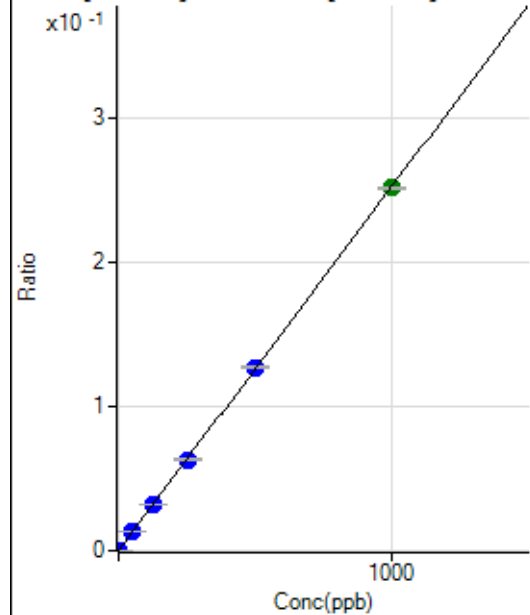
BEC = -0.3163

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2530.27		P	4.4
2	☐			2459.14		P	0.5
3	☐			2388.02		P	4.3
4	☐			2332.45		P	1.9
5	☐			2203.55		P	1.5
6	☐			2389.12		P	1.6
7	☐			2375.80		P	6.7
8	☐			2552.49		P	2.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3972.93	0.0002	P	8.6
2	☐	1.000	0.979	10126.27	0.0004	P	1.8
3	☐	50.000	50.885	319080.00	0.0130	P	0.8
4	☐	125.000	127.744	775145.39	0.0324	P	0.6
5	☐	250.000	250.312	1508171.97	0.0633	P	1.3
6	☐	500.000	503.970	3079663.66	0.1273	P	0.7
7	☐	1000.000	997.550	6241900.88	0.2517	A	0.6
8	☐			30669.89	0.0012	P	0.3

$$y = 2.5220\text{E-}004 * x + 1.5654\text{E-}004$$

$$R = 1.0000$$

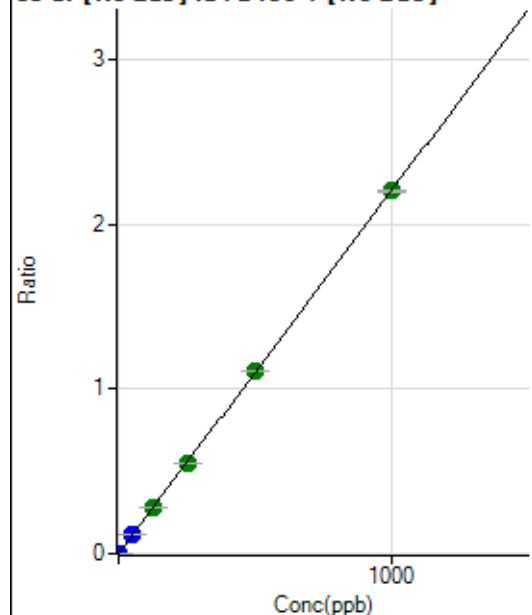
$$DL = 0.1601$$

$$BEC = 0.6207$$

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	327.80	0.0000	P	17.7
2	☐	1.000	0.985	54922.87	0.0022	P	2.3
3	☐	50.000	50.942	2762649.72	0.1125	P	0.4
4	☐	125.000	126.902	6707979.57	0.2801	A	0.2
5	☐	250.000	247.586	13026212.10	0.5466	A	0.6
6	☐	500.000	501.817	26808162.41	1.1078	A	0.3
7	☐	1000.000	999.410	54704419.28	2.2062	A	0.4
8	☐			232048.66	0.0092	P	1.7

$$y = 0.0022 * x + 1.2897E-005$$

$$R = 1.0000$$

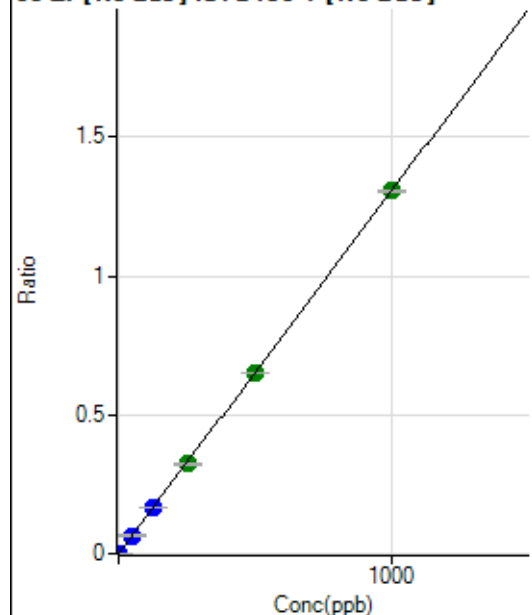
$$DL = 0.003096$$

$$BEC = 0.005842$$

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	1614.04	0.0001	P	1.8
2	☐	1.000	0.853	29578.75	0.0012	P	0.5
3	☐	50.000	50.272	1615111.66	0.0658	P	0.6
4	☐	125.000	128.144	4010566.67	0.1675	P	1.0
5	☐	250.000	247.175	7698488.37	0.3230	A	0.7
6	☐	500.000	500.353	15823200.53	0.6538	A	0.1
7	☐	1000.000	1000.123	32405084.75	1.3069	A	0.4
8	☐			13034.21	0.0005	P	2.0

$$y = 0.0013 * x + 6.3566E-005$$

$$R = 1.0000$$

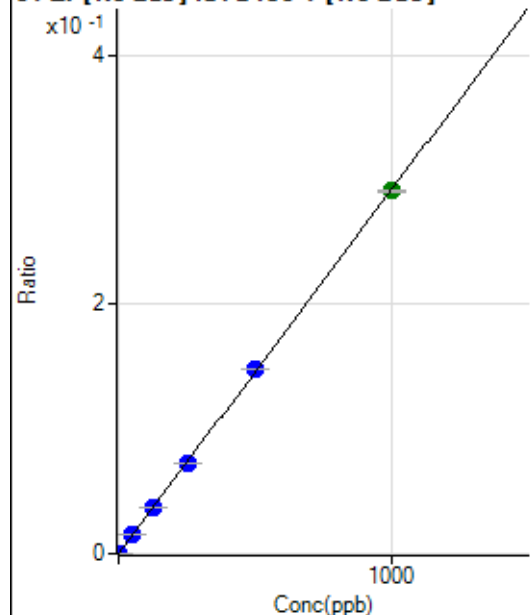
$$DL = 0.002664$$

$$BEC = 0.04865$$

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	361.13	0.0000	P	15.5
2	☐	1.000	0.848	6571.22	0.0003	P	1.7
3	☐	50.000	50.545	362882.00	0.0148	P	0.1
4	☐	125.000	126.712	886228.63	0.0370	P	0.8
5	☐	250.000	249.076	1733602.40	0.0727	P	0.5
6	☐	500.000	506.094	3576529.68	0.1478	P	0.1
7	☐	1000.000	996.943	7218237.23	0.2911	A	0.5
8	☐			2944.88	0.0001	P	4.0

$$y = 2.9199\text{E-}004 * x + 1.4210\text{E-}005$$

$$R = 1.0000$$

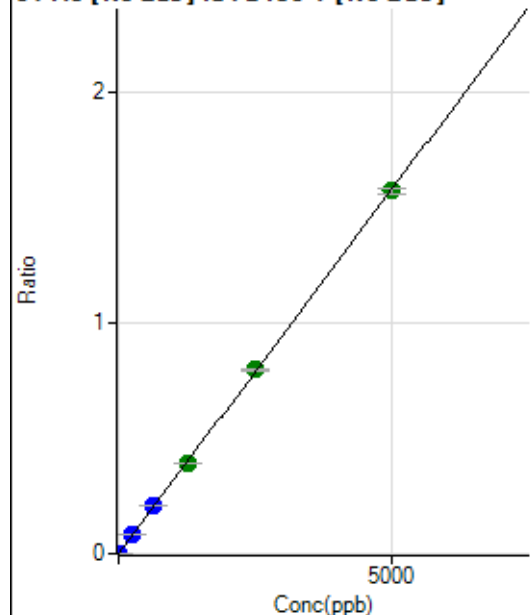
$$DL = 0.02267$$

$$BEC = 0.04867$$

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	658.38	0.0000	P	20.7
2	☐	5.000	4.908	39449.95	0.0016	P	2.3
3	☐	250.000	255.433	1976136.87	0.0804	P	0.1
4	☐	625.000	649.201	4894841.65	0.2044	P	0.2
5	☐	1250.000	1245.542	9346475.30	0.3922	A	0.8
6	☐	2500.000	2527.737	19259469.35	0.7959	A	0.7
7	☐	5000.000	4983.949	38908579.00	1.5692	A	1.3
8	☐			37472.59	0.0015	P	1.3

$$y = 3.1485\text{E-}004 * x + 2.5960\text{E-}005$$

$$R = 1.0000$$

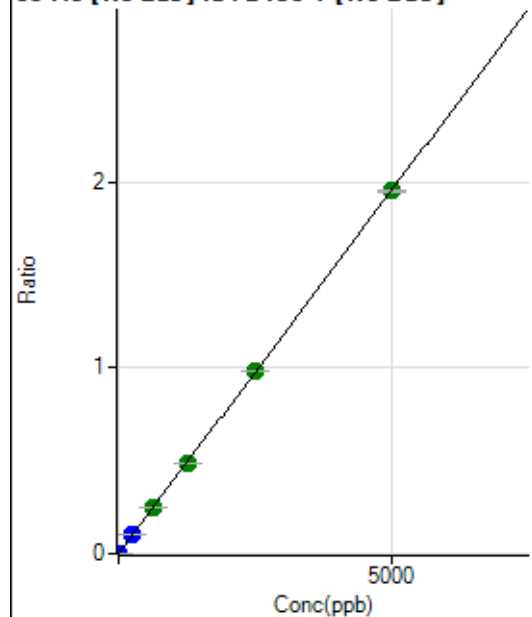
$$DL = 0.05126$$

$$BEC = 0.08245$$

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	197.23	0.0000	P	39.0
2	☐	5.000	5.086	50044.44	0.0020	P	1.2
3	☐	250.000	253.778	2433858.22	0.0991	P	0.5
4	☐	625.000	635.227	5938204.56	0.2480	A	0.4
5	☐	1250.000	1242.402	11559601.73	0.4850	A	0.5
6	☐	2500.000	2510.653	23720295.32	0.9801	A	0.2
7	☐	5000.000	4995.106	48352188.58	1.9501	A	0.9
8	☐			56401.39	0.0022	P	2.0

$$y = 3.9039E-004 * x + 7.7593E-006$$

R = 1.0000

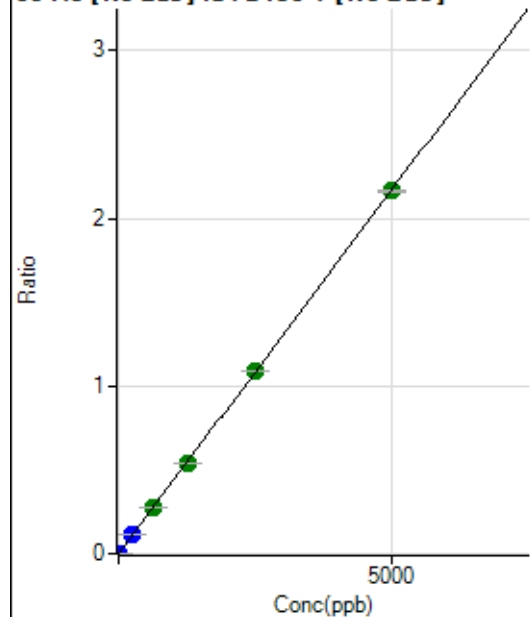
DL = 0.02323

BEC = 0.01988

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	347.24	0.0000	P	6.6
2	☐	5.000	5.008	54864.79	0.0022	P	0.8
3	☐	250.000	254.530	2711605.01	0.1104	P	0.0
4	☐	625.000	639.153	6636834.35	0.2772	A	0.3
5	☐	1250.000	1242.929	12845856.62	0.5390	A	0.5
6	☐	2500.000	2519.522	26440975.59	1.0926	A	0.1
7	☐	5000.000	4990.011	53655276.89	2.1639	A	0.5
8	☐			84777.34	0.0034	P	0.2

$$y = 4.3364E-004 * x + 1.3679E-005$$

R = 1.0000

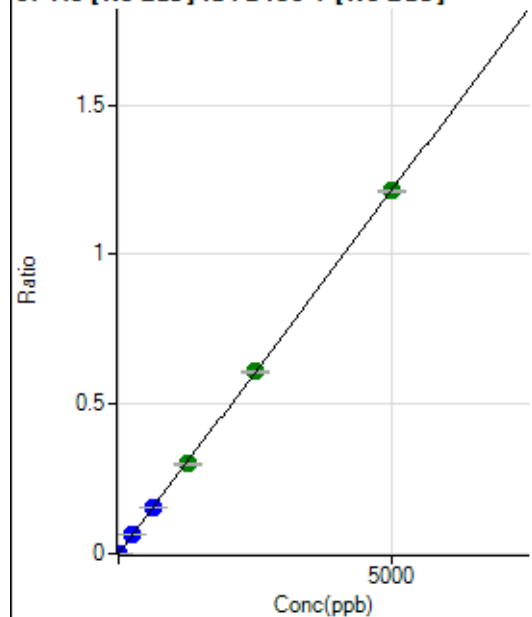
DL = 0.006271

BEC = 0.03154

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	26.5
2	☐	5.000	5.046	30887.36	0.0012	P	0.3
3	☐	250.000	255.009	1520740.81	0.0619	P	0.7
4	☐	625.000	638.356	3710544.66	0.1550	P	0.8
5	☐	1250.000	1236.325	7152812.57	0.3001	A	0.9
6	☐	2500.000	2509.147	14740015.26	0.6091	A	0.5
7	☐	5000.000	4996.925	30078175.33	1.2130	A	0.2
8	☐			34283.96	0.0014	P	0.5

$$y = 2.4275E-004 * x + 5.2430E-006$$

$$R = 1.0000$$

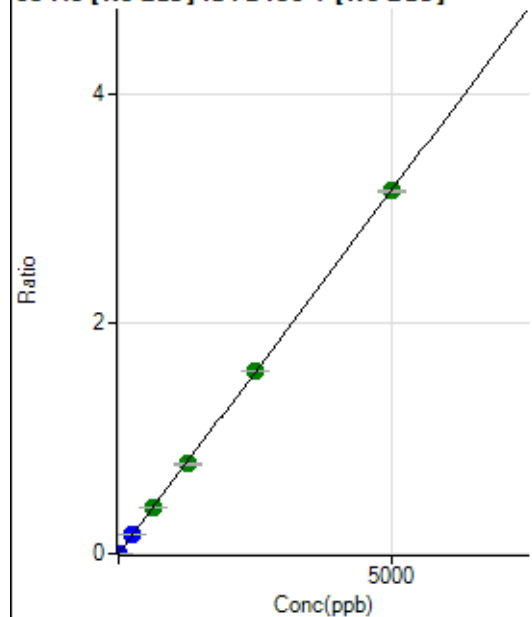
$$DL = 0.01718$$

$$BEC = 0.0216$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	313.91	0.0000	P	10.2
2	☐	5.000	4.972	79134.03	0.0032	P	0.4
3	☐	250.000	254.934	3954178.78	0.1610	P	0.5
4	☐	625.000	633.327	9574984.07	0.3999	A	0.5
5	☐	1250.000	1235.094	18585482.71	0.7798	A	0.8
6	☐	2500.000	2519.026	38489914.40	1.5905	A	0.3
7	☐	5000.000	4992.926	78169558.69	3.1525	A	0.3
8	☐			88018.54	0.0035	P	0.6

$$y = 6.3139E-004 * x + 1.2355E-005$$

$$R = 1.0000$$

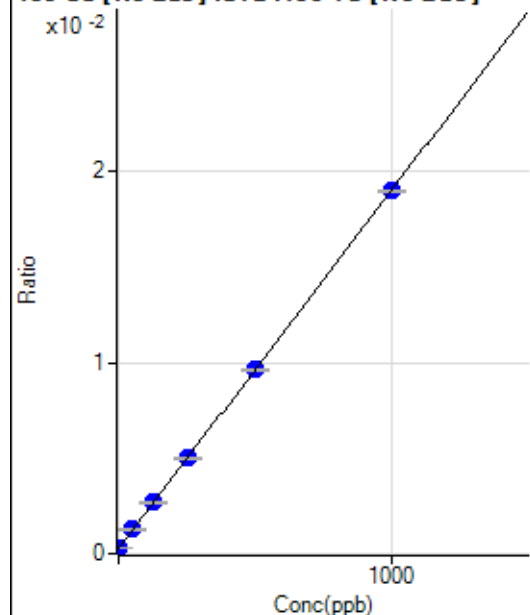
$$DL = 0.005984$$

$$BEC = 0.01957$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8280.58	0.0003	P	1.9
2	☐	1.000	2.004	9336.81	0.0003	P	4.6
3	☐	50.000	53.662	38779.15	0.0013	P	2.1
4	☐	125.000	128.529	80809.28	0.0027	P	1.6
5	☐	250.000	252.931	150211.63	0.0050	P	1.1
6	☐	500.000	500.064	293316.64	0.0096	P	1.3
7	☐	1000.000	998.610	581210.07	0.0190	P	0.7
8	☐			8975.47	0.0003	P	3.7

$$y = 1.8746\text{E-}005 * x + 2.6508\text{E-}004$$

$$R = 1.0000$$

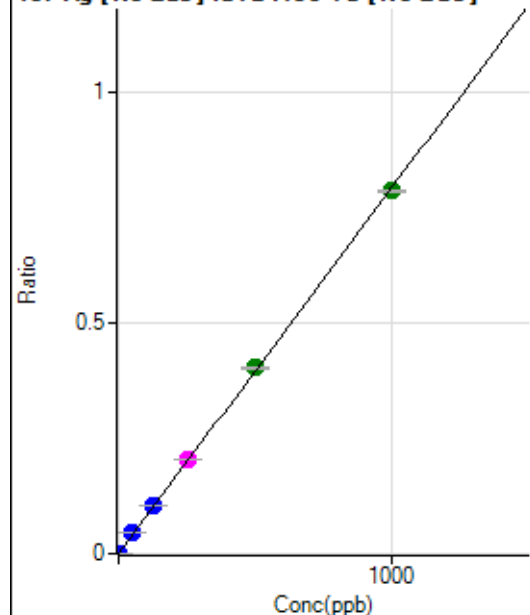
$$DL = 0.8097$$

$$BEC = 14.14$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	286.13	0.0000	P	34.1
2	☐	1.000	1.076	26578.70	0.0009	P	0.3
3	☐	50.000	55.476	1340975.92	0.0439	P	0.4
4	☐	125.000	132.986	3182837.38	0.1053	P	0.4
5	☐	250.000	257.785	6126330.91	0.2042	M	0.7
6	☐	500.000	508.162	12248023.36	0.4025	A	1.1
7	☐	1000.000	992.701	24070237.52	0.7863	A	0.8
8	☐			6776.94	0.0002	P	3.1

$$y = 7.9205\text{E-}004 * x + 9.1392\text{E-}006$$

$$R = 0.9999$$

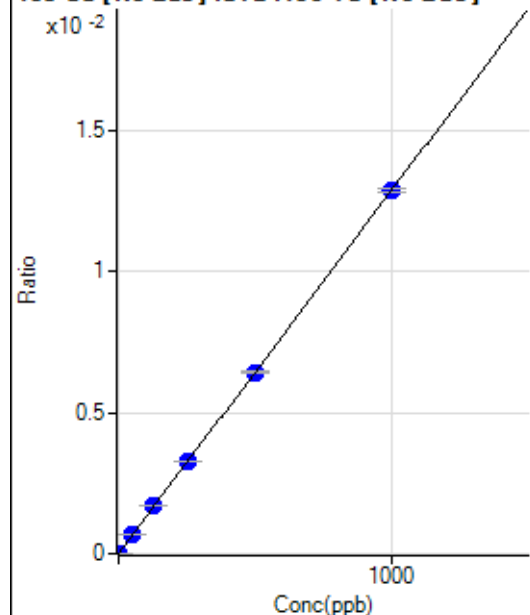
$$DL = 0.01182$$

$$BEC = 0.01154$$

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	23.61	0.0000	P	61.2
2	☐	1.000	0.971	408.35	0.0000	P	9.9
3	☐	50.000	53.033	20829.55	0.0007	P	2.0
4	☐	125.000	130.846	50861.99	0.0017	P	0.7
5	☐	250.000	254.255	98117.57	0.0033	P	1.2
6	☐	500.000	498.292	195006.66	0.0064	P	1.2
7	☐	1000.000	998.908	393239.22	0.0128	P	1.2
8	☐			163.89	0.0000	P	9.6

$$y = 1.2859\text{E-}005 * x + 7.5261\text{E-}007$$

$$R = 1.0000$$

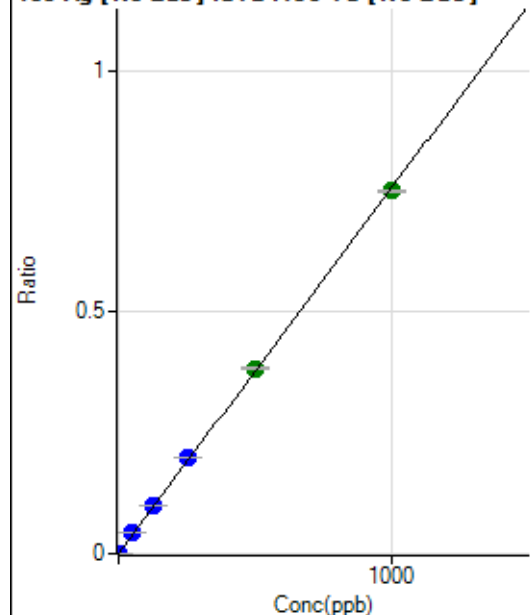
$$DL = 0.1075$$

$$BEC = 0.05853$$

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	136.11	0.0000	P	25.2
2	☐	1.000	1.110	26035.90	0.0008	P	1.6
3	☐	50.000	55.476	1280342.12	0.0420	P	0.9
4	☐	125.000	133.234	3044843.80	0.1008	P	0.7
5	☐	250.000	261.034	5923627.39	0.1974	P	0.4
6	☐	500.000	506.984	11668141.58	0.3835	A	1.6
7	☐	1000.000	992.446	22978217.53	0.7506	A	0.8
8	☐			6426.76	0.0002	P	1.7

$$y = 7.5634\text{E-}004 * x + 4.3609\text{E-}006$$

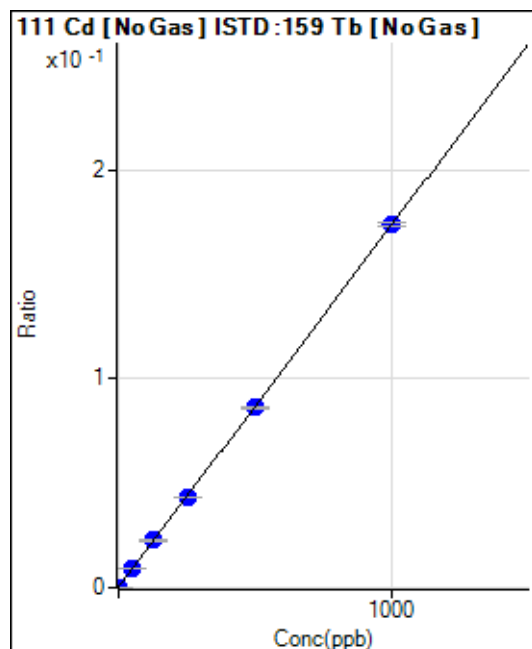
$$R = 0.9999$$

$$DL = 0.004365$$

$$BEC = 0.005766$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5842.38	0.0002	P	1.9
2	☐	1.000	1.122	11773.35	0.0004	P	2.7
3	☐	50.000	52.500	283503.87	0.0093	P	0.8
4	☐	125.000	129.195	682603.06	0.0226	P	0.9
5	☐	250.000	250.464	1308813.65	0.0436	P	0.3
6	☐	500.000	497.502	2631141.35	0.0865	P	1.0
7	☐	1000.000	1000.484	5316964.52	0.1737	P	1.1
8	☐			7668.21	0.0003	P	4.7

$$y = 1.7342\text{E-}004 * x + 1.8703\text{E-}004$$

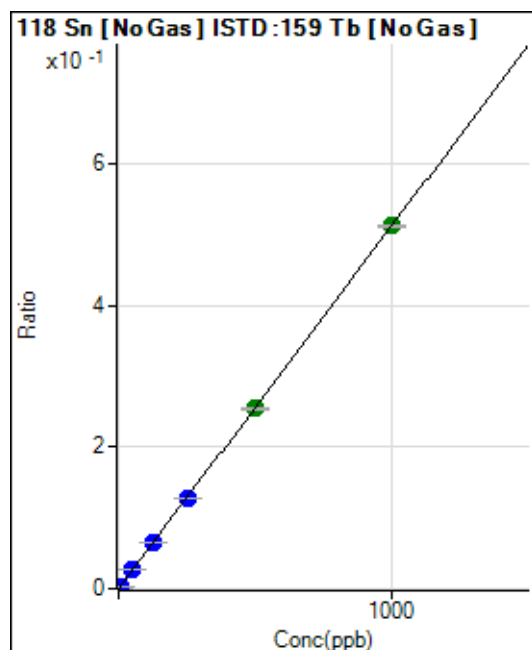
$$R = 1.0000$$

$$DL = 0.06177$$

$$BEC = 1.078$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1236.23	0.0000	P	12.2
2	☐	5.000	5.192	83120.74	0.0027	P	1.4
3	☐	50.000	51.277	801324.52	0.0263	P	0.8
4	☐	125.000	127.536	1971778.78	0.0653	P	0.7
5	☐	250.000	250.582	3845882.99	0.1282	P	0.7
6	☐	500.000	497.441	7742226.65	0.2544	A	0.9
7	☐	1000.000	1000.752	15667767.02	0.5118	A	0.5
8	☐			9962.28	0.0003	P	5.0

$$y = 5.1139\text{E-}004 * x + 3.9555\text{E-}005$$

$$R = 1.0000$$

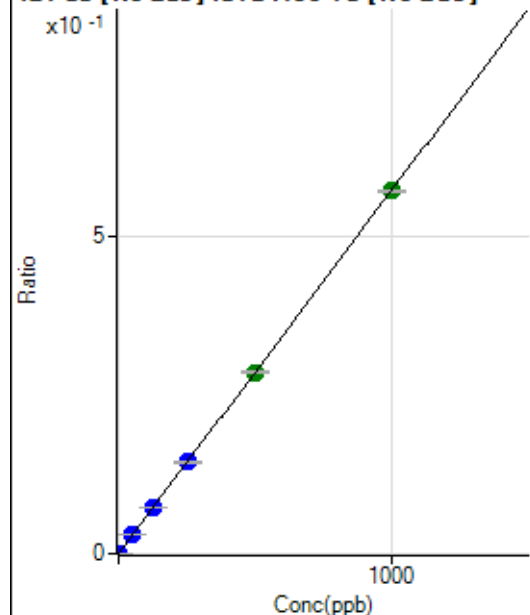
$$DL = 0.0282$$

$$BEC = 0.07735$$

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	188.90	0.0000	P	20.4
2	☐	2.000	1.974	35041.81	0.0011	P	0.7
3	☐	50.000	50.954	889893.36	0.0292	P	0.7
4	☐	125.000	128.505	2222137.27	0.0735	P	1.0
5	☐	250.000	252.496	4335501.18	0.1445	P	1.1
6	☐	500.000	499.809	8704611.83	0.2860	A	0.2
7	☐	1000.000	998.986	17501344.49	0.5717	A	0.5
8	☐			28819.55	0.0010	P	3.9

$$y = 5.7228\text{E-}004 * x + 6.0487\text{E-}006$$

$$R = 1.0000$$

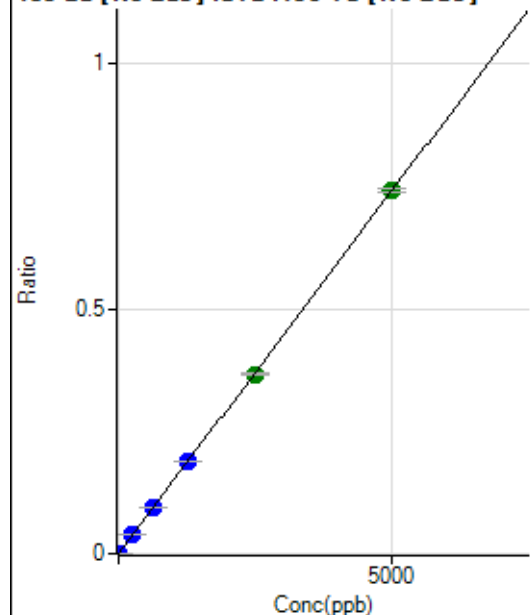
$$DL = 0.00648$$

$$BEC = 0.01057$$

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	169.46	0.0000	P	12.1
2	☐	10.000	10.411	47654.75	0.0015	P	0.8
3	☐	250.000	256.970	1159532.43	0.0380	P	0.4
4	☐	625.000	642.068	2868739.23	0.0949	P	0.6
5	☐	1250.000	1268.225	5626562.93	0.1875	P	0.5
6	☐	2500.000	2475.755	11140197.91	0.3661	A	1.3
7	☐	5000.000	5005.083	22655209.01	0.7401	A	0.9
8	☐			5581.94	0.0002	P	4.7

$$y = 1.4787\text{E-}004 * x + 5.4240\text{E-}006$$

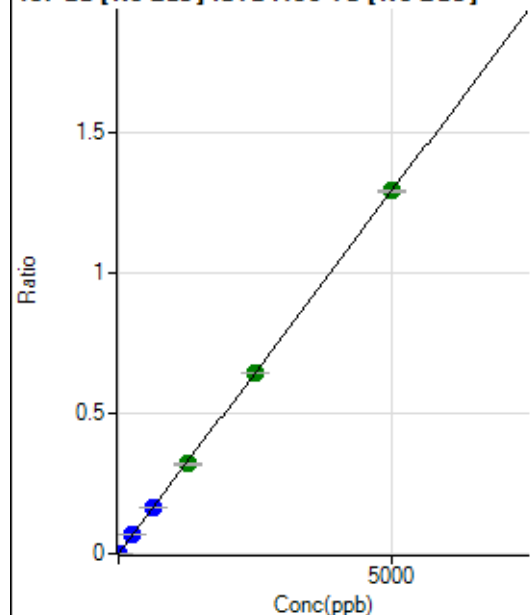
$$R = 1.0000$$

$$DL = 0.01329$$

$$BEC = 0.03668$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.79	0.0000	P	21.6
2	☐	10.000	10.349	82693.30	0.0027	P	0.7
3	☐	250.000	257.267	2028053.84	0.0665	P	0.3
4	☐	625.000	644.792	5032969.30	0.1666	P	1.0
5	☐	1250.000	1237.321	9590350.65	0.3196	A	0.7
6	☐	2500.000	2490.649	19580234.46	0.6434	A	0.7
7	☐	5000.000	5005.007	39580065.12	1.2930	A	0.7
8	☐			10206.95	0.0003	P	0.5

$$y = 2.5833E-004 * x + 7.2873E-006$$

$$R = 1.0000$$

$$DL = 0.0183$$

$$BEC = 0.02821$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			11.11		P	91.7
2	☐			11.11		P	91.7
3	☐			80.00		P	36.3
4	☐			200.01		P	31.8
5	☐			351.13		P	13.3
6	☐			755.60		P	2.2
7	☐			1517.92		P	0.9
8	☐			213.34		P	8.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	25.0
2	☐			11.11		P	75.5
3	☐			15.55		P	44.6
4	☐			32.22		P	6.0
5	☐			37.78		P	18.4
6	☐			72.22		P	16.2
7	☐			112.23		P	14.7
8	☐			71.11		P	16.5

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	40.0
2	☐			38.89		P	24.7
3	☐			44.45		P	39.0
4	☐			116.67		P	7.1
5	☐			97.23		P	35.7
6	☐			163.90		P	22.9
7	☐			350.02		P	17.2
8	☐			125.01		P	11.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45.55		P	29.6
2	☐			40.00		P	14.4
3	☐			55.56		P	18.3
4	☐			70.00		P	19.0
5	☐			106.67		P	17.4
6	☐			210.01		P	1.6
7	☐			436.68		P	13.2
8	☐			51.11		P	13.6

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			233.35		P	7.1
2	☐			233.35		P	16.4
3	☐			247.24		P	9.7
4	☐			222.24		P	12.1
5	☐			180.57		P	18.7
6	☐			233.35		P	12.9
7	☐			283.35		P	14.7
8	☐			269.46		P	6.4

160 Gd [He] No available calibration points

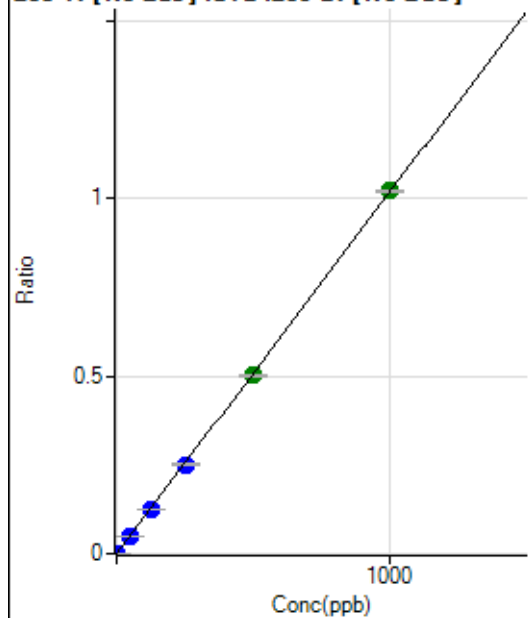
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			486.68		P	6.8
2	☐			471.13		P	2.9
3	☐			451.13		P	5.3
4	☐			455.57		P	7.0
5	☐			446.68		P	16.5
6	☐			448.90		P	16.4
7	☐			508.91		P	3.3
8	☐			482.24		P	9.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			163.90		P	28.0
2	☐			166.67		P	21.8
3	☐			144.45		P	24.0
4	☐			152.79		P	13.7
5	☐			152.79		P	27.5
6	☐			169.45		P	5.7
7	☐			169.45		P	7.5
8	☐			186.12		P	24.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			92.22		P	26.1
2	☐			102.23		P	11.5
3	☐			100.00		P	17.6
4	☐			92.22		P	27.6
5	☐			82.22		P	31.5
6	☐			96.67		P	22.6
7	☐			91.11		P	22.1
8	☐			100.00		P	25.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	827.84	0.0000	P	5.7
2	☐	1.000	0.957	19214.71	0.0010	P	1.5
3	☐	50.000	49.039	937934.08	0.0499	P	0.3
4	☐	125.000	124.201	2342399.60	0.1263	P	1.2
5	☐	250.000	247.465	4574143.37	0.2516	P	0.4
6	☐	500.000	492.887	9056900.64	0.5011	A	0.8
7	☐	1000.000	1004.338	17762254.21	1.0209	A	0.7
8	☐			7049.36	0.0005	P	3.0

$$y = 0.0010 * x + 4.3226E-005$$

$$R = 1.0000$$

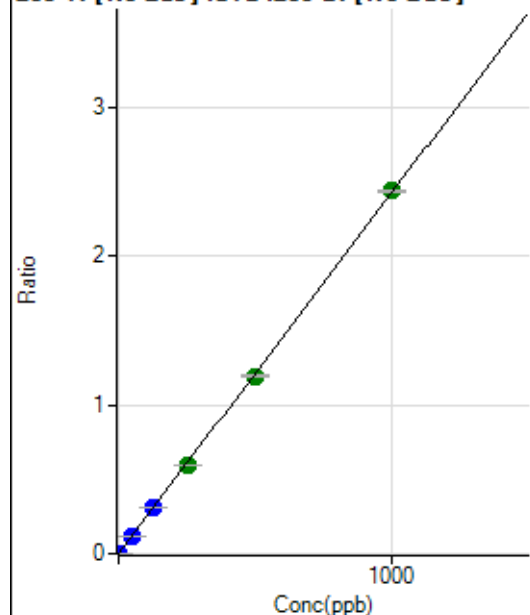
$$DL = 0.007264$$

$$BEC = 0.04253$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1814.09	0.0001	P	2.7
2	☐	1.000	0.940	44882.42	0.0024	P	1.1
3	☐	50.000	49.374	2250562.94	0.1197	P	0.3
4	☐	125.000	126.337	5678569.70	0.3062	P	0.8
5	☐	250.000	242.753	10694739.82	0.5882	A	0.2
6	☐	500.000	492.425	21567022.36	1.1931	A	0.5
7	☐	1000.000	1005.464	42383689.49	2.4361	A	0.8
8	☐			17042.23	0.0011	P	6.4

$$y = 0.0024 * x + 9.4743E-005$$

$$R = 0.9999$$

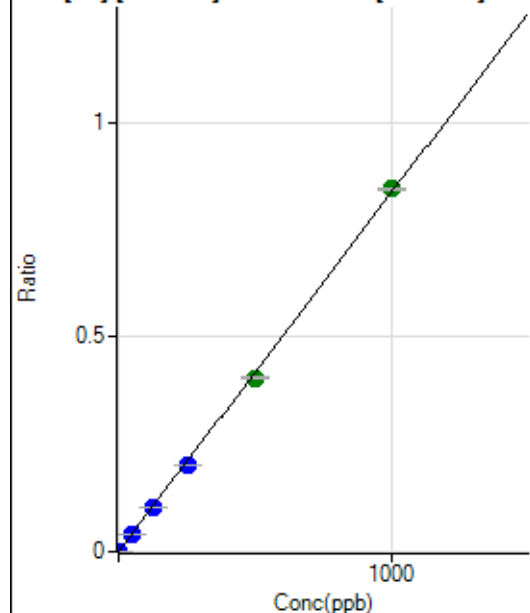
$$DL = 0.003211$$

$$BEC = 0.03911$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1198.24	0.0001	P	5.4
2	☐	1.000	0.938	16021.16	0.0008	P	1.8
3	☐	50.000	48.111	757099.51	0.0403	P	0.3
4	☐	125.000	122.226	1895744.92	0.1022	P	0.6
5	☐	250.000	242.486	3685797.39	0.2027	P	0.4
6	☐	500.000	484.251	7317002.19	0.4048	A	0.6
7	☐	1000.000	1010.194	14689924.06	0.8443	A	0.8
8	☐			16907.46	0.0011	P	1.1

$$y = 8.3577E-004 * x + 6.2608E-005$$

$$R = 0.9998$$

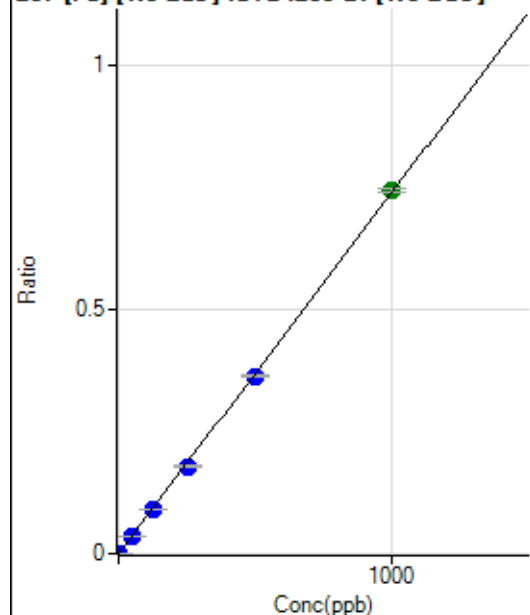
$$DL = 0.01207$$

$$BEC = 0.07491$$

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	1046.37	0.0001	P	5.6
2	☐	1.000	0.929	14022.56	0.0007	P	2.4
3	☐	50.000	48.083	669458.49	0.0356	P	0.9
4	☐	125.000	121.990	1674124.37	0.0903	P	0.7
5	☐	250.000	242.024	3254959.42	0.1790	P	0.5
6	☐	500.000	492.901	6590164.79	0.3646	P	1.3
7	☐	1000.000	1006.016	12944145.20	0.7440	A	0.9
8	☐			15071.89	0.0010	P	0.9

$$y = 7.3949\text{E-}004 * x + 5.4688\text{E-}005$$

$$R = 0.9999$$

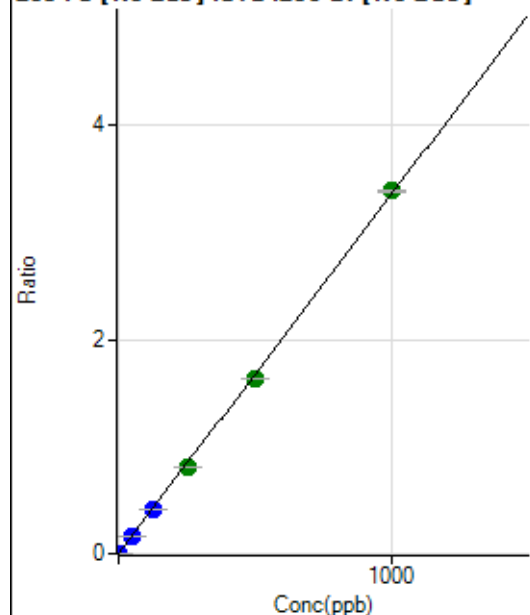
$$DL = 0.01244$$

$$BEC = 0.07395$$

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	4142.95	0.0002	P	3.8
2	☐	1.000	0.929	63102.10	0.0033	P	0.8
3	☐	50.000	48.396	3059074.29	0.1627	P	0.6
4	☐	125.000	123.310	7683627.08	0.4143	P	0.2
5	☐	250.000	240.691	14698305.08	0.8084	A	0.4
6	☐	500.000	486.470	29532145.69	1.6337	A	0.7
7	☐	1000.000	1009.384	58973527.13	3.3896	A	0.8
8	☐			67131.83	0.0045	P	0.4

$$y = 0.0034 * x + 2.1649\text{E-}004$$

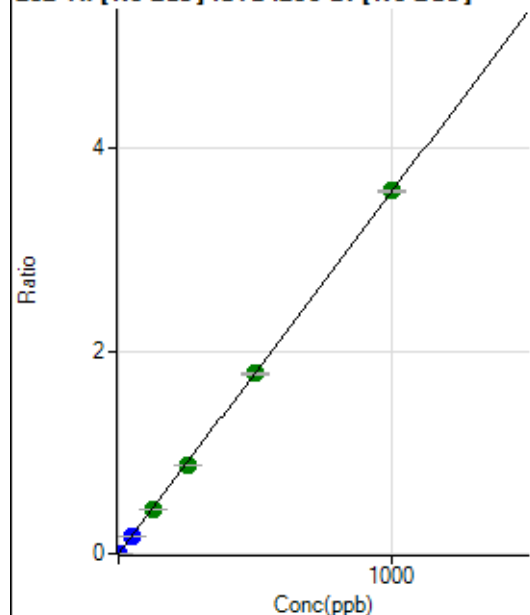
$$R = 0.9998$$

$$DL = 0.007288$$

$$BEC = 0.06447$$

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	2311.39	0.0001	P	7.4
2	☐	1.000	0.787	55492.01	0.0029	P	1.4
3	☐	50.000	47.483	3191227.24	0.1698	P	0.8
4	☐	125.000	121.451	8049369.86	0.4340	A	0.4
5	☐	250.000	242.914	15779688.08	0.8679	A	0.4
6	☐	500.000	498.029	32163586.60	1.7793	A	0.4
7	☐	1000.000	1003.327	62363631.03	3.5844	A	0.2
8	☐			18059.12	0.0012	P	1.2

$$y = 0.0036 * x + 1.2081E-004$$

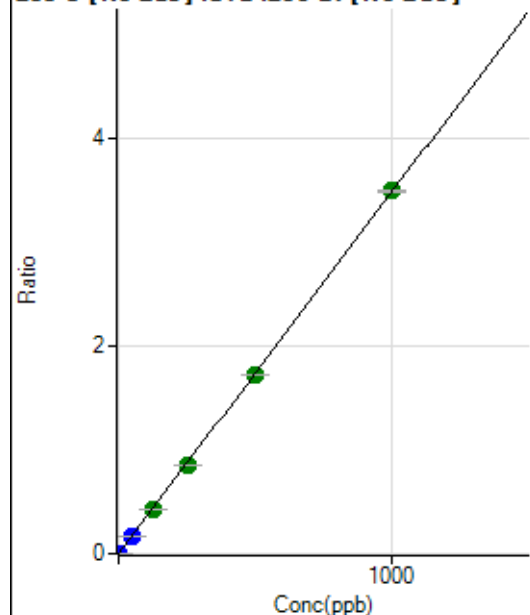
$$R = 1.0000$$

$$DL = 0.007537$$

$$BEC = 0.03382$$

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	2080.83	0.0001	P	8.3
2	☐	1.000	0.887	60435.52	0.0032	P	1.4
3	☐	50.000	47.655	3119899.83	0.1660	P	0.7
4	☐	125.000	121.967	7874829.00	0.4246	A	0.6
5	☐	250.000	243.690	15421749.65	0.8482	A	0.2
6	☐	500.000	495.946	31202665.28	1.7261	A	0.4
7	☐	1000.000	1004.101	60800059.00	3.4947	A	0.8
8	☐			11794.79	0.0008	P	2.0

$$y = 0.0035 * x + 1.0862E-004$$

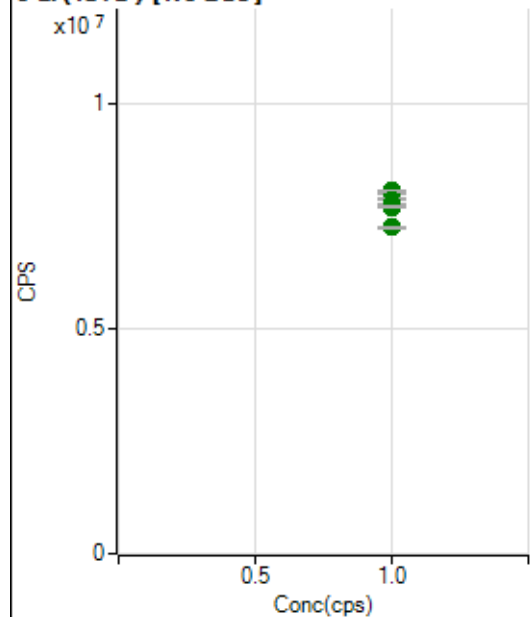
$$R = 1.0000$$

$$DL = 0.00775$$

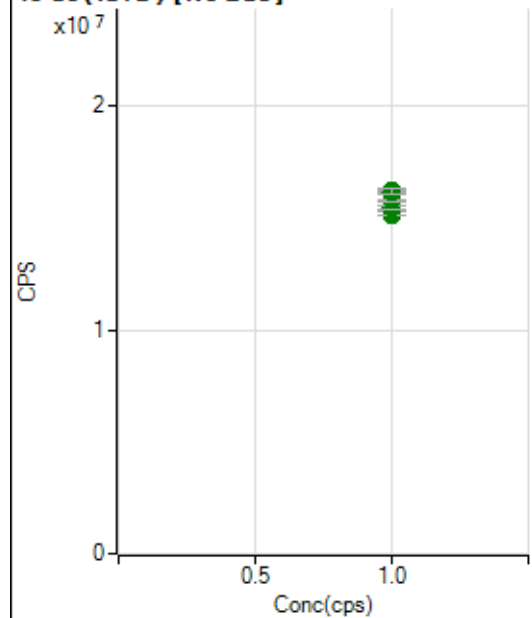
$$BEC = 0.03121$$

Weight: <None>

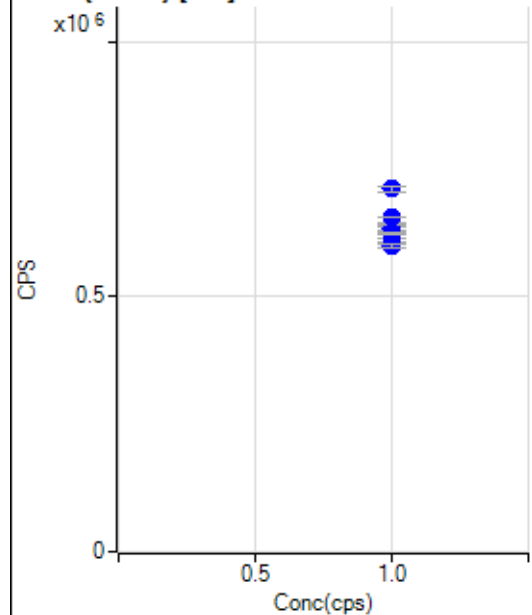
Min Conc: 0

6 Li (ISTD) [No Gas]

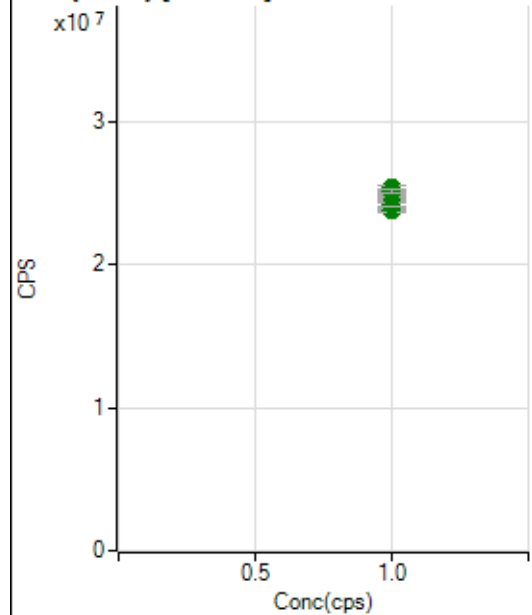
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8047978.18		A	0.8
2	☐	1.000		8010011.00		A	0.4
3	☐	1.000		8062552.25		A	0.4
4	☐	1.000		7883949.07		A	0.9
5	☐	1.000		7766867.03		A	0.6
6	☐	1.000		7750283.49		A	0.5
7	☐	1.000		7710352.11		A	0.5
8	☐	1.000		7248013.45		A	0.8

45 Sc (ISTD) [No Gas]

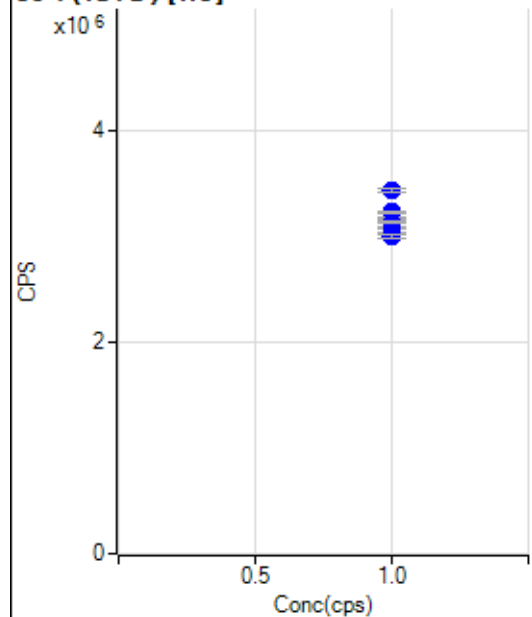
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16205683.00		A	0.4
2	☐	1.000		16068300.01		A	0.1
3	☐	1.000		15757998.96		A	0.3
4	☐	1.000		15282328.81		A	0.3
5	☐	1.000		15113590.97		A	0.2
6	☐	1.000		15456444.96		A	0.7
7	☐	1.000		15767975.35		A	0.3
8	☐	1.000		16166726.75		A	1.4

45 Sc (ISTD) [He]

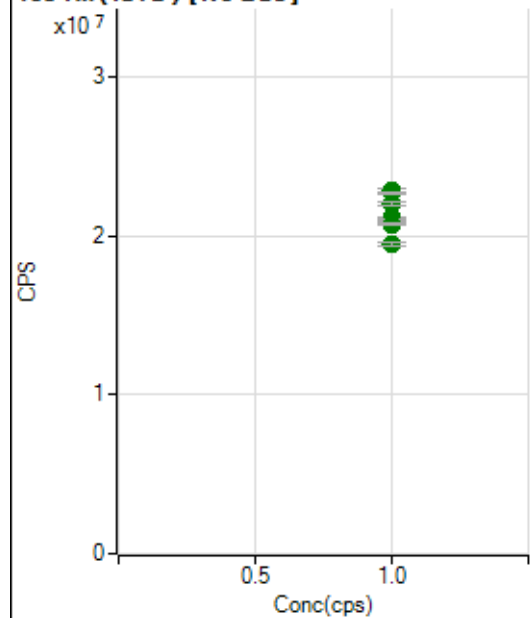
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		634044.01		P	1.2
2	☐	1.000		642466.16		P	0.2
3	☐	1.000		614258.29		P	0.3
4	☐	1.000		604894.40		P	0.8
5	☐	1.000		600070.94		P	0.9
6	☐	1.000		623407.70		P	0.7
7	☐	1.000		655313.32		P	0.2
8	☐	1.000		711631.47		P	1.3

89 Y (ISTD) [No Gas]

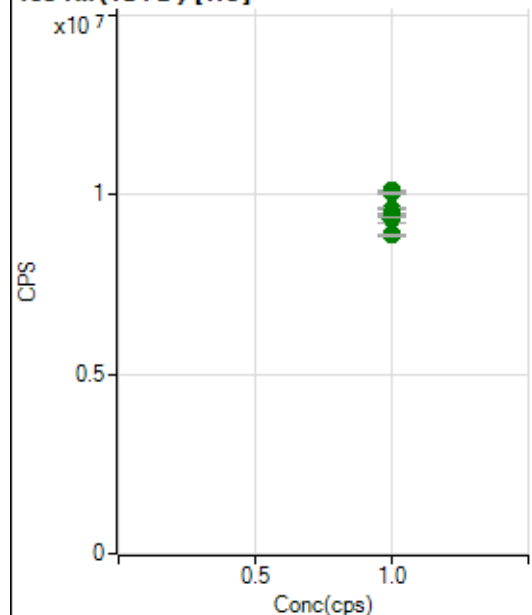
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		25392328.79		A	0.9
2	☐	1.000		25107070.46		A	0.5
3	☐	1.000		24564176.30		A	0.3
4	☐	1.000		23944621.59		A	0.6
5	☐	1.000		23832919.37		A	0.7
6	☐	1.000		24200504.64		A	1.2
7	☐	1.000		24796218.80		A	0.8
8	☐	1.000		25190143.79		A	1.0

89 Y(ISTD) [He]

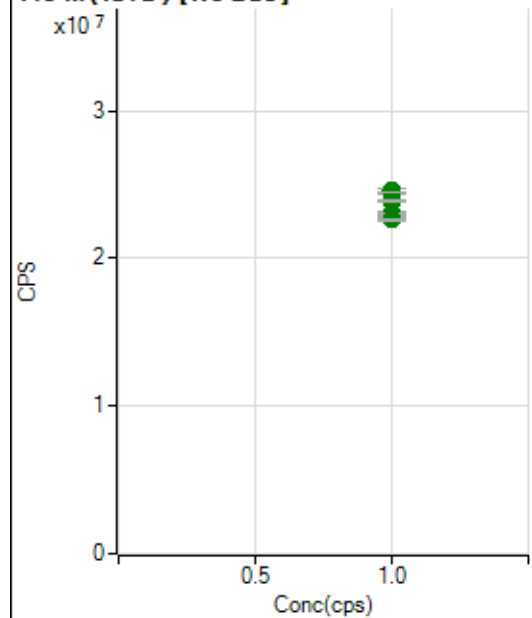
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3178235.23		P	0.3
2	☐	1.000		3234487.24		P	0.3
3	☐	1.000		3085138.63		P	0.4
4	☐	1.000		3034321.87		P	0.6
5	☐	1.000		2999007.39		P	1.2
6	☐	1.000		3136868.91		P	0.9
7	☐	1.000		3233537.31		P	0.7
8	☐	1.000		3433442.24		P	1.2

103 Rh(ISTD) [No Gas]

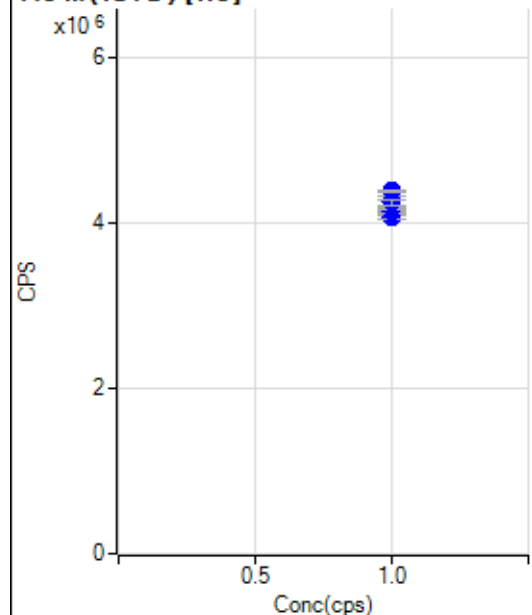
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22841388.18		A	1.0
2	☐	1.000		22719903.29		A	0.5
3	☐	1.000		22027805.70		A	0.8
4	☐	1.000		21220964.88		A	0.2
5	☐	1.000		20904764.53		A	0.1
6	☐	1.000		21001444.22		A	1.1
7	☐	1.000		20734506.71		A	0.6
8	☐	1.000		19529420.23		A	1.2

103 Rh (ISTD) [He]

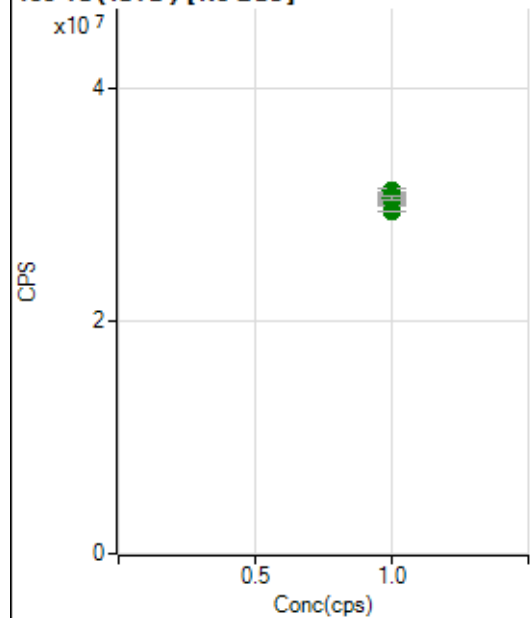
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10109683.53		A	0.5
2	☐	1.000		10059350.20		A	0.4
3	☐	1.000		9596151.59		A	0.6
4	☐	1.000		9488574.44		A	0.2
5	☐	1.000		9298230.56		A	1.4
6	☐	1.000		9462436.18		A	0.2
7	☐	1.000		9384134.24		A	0.3
8	☐	1.000		8884462.23		A	0.4

115 In (ISTD) [No Gas]

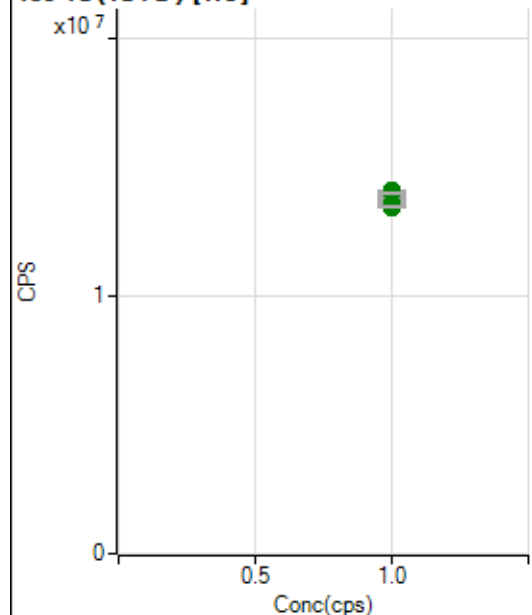
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24580837.60		A	1.4
2	☐	1.000		24453039.92		A	0.1
3	☐	1.000		23869235.72		A	0.4
4	☐	1.000		23122558.90		A	0.6
5	☐	1.000		22841622.41		A	0.5
6	☐	1.000		23092325.89		A	1.4
7	☐	1.000		23033404.18		A	0.5
8	☐	1.000		22659157.89		A	0.6

115 In (ISTD) [He]

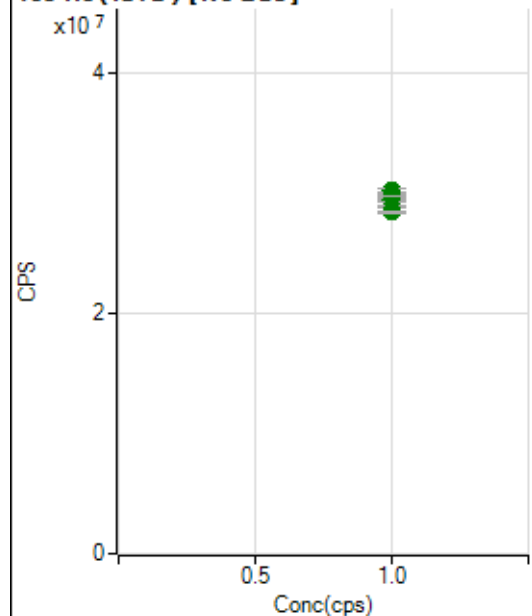
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4325913.42		P	0.2
2	☐	1.000		4389445.85		P	0.3
3	☐	1.000		4196338.46		P	0.4
4	☐	1.000		4133028.90		P	0.1
5	☐	1.000		4064637.32		P	1.0
6	☐	1.000		4144872.05		P	0.9
7	☐	1.000		4180425.08		P	0.2
8	☐	1.000		4249235.34		P	1.3

159 Tb (ISTD) [No Gas]

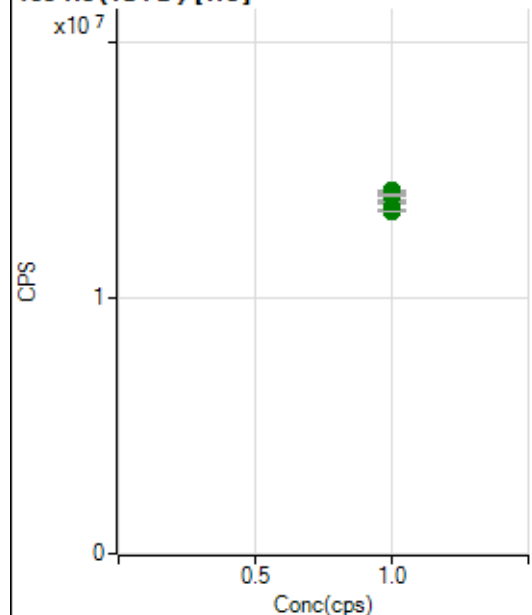
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		31233906.48		A	1.1
2	☐	1.000		30847721.49		A	0.5
3	☐	1.000		30512522.32		A	0.7
4	☐	1.000		30215004.00		A	0.5
5	☐	1.000		30003110.39		A	0.2
6	☐	1.000		30432018.16		A	1.3
7	☐	1.000		30613008.99		A	0.7
8	☐	1.000		29424687.62		A	0.1

159 Tb (ISTD) [He]

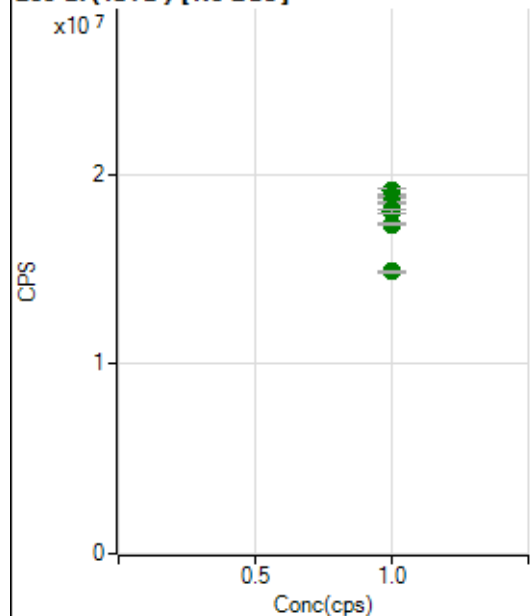
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14078271.87		A	0.3
2	☐	1.000		14092077.15		A	0.7
3	☐	1.000		13728853.96		A	0.2
4	☐	1.000		13717640.49		A	0.2
5	☐	1.000		13507344.24		A	1.2
6	☐	1.000		13829920.90		A	0.5
7	☐	1.000		14024215.76		A	0.3
8	☐	1.000		13464872.99		A	0.8

165 Ho (ISTD) [No Gas]

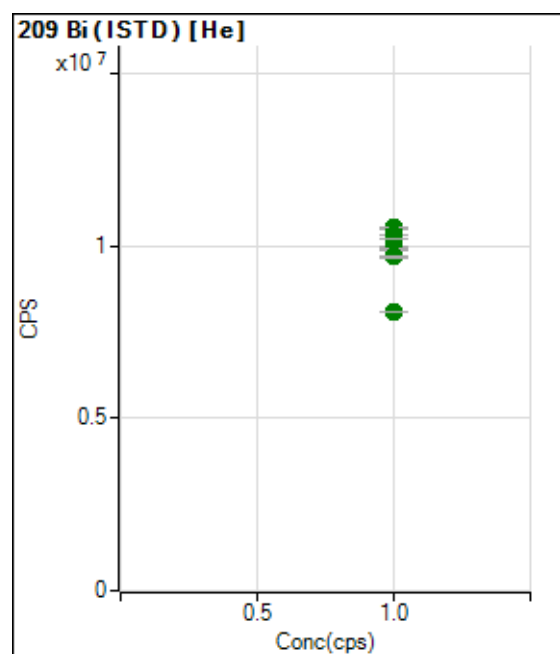
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		30146116.30		A	1.0
2	☐	1.000		29942343.73		A	0.5
3	☐	1.000		29596345.80		A	0.4
4	☐	1.000		29282112.11		A	0.7
5	☐	1.000		28872886.06		A	0.4
6	☐	1.000		29418750.31		A	0.9
7	☐	1.000		29688271.84		A	0.1
8	☐	1.000		28421000.63		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14172649.65		A	0.8
2	☐	1.000		14075969.79		A	0.2
3	☐	1.000		13747608.69		A	0.7
4	☐	1.000		13774073.13		A	0.3
5	☐	1.000		13462965.21		A	0.1
6	☐	1.000		13789702.30		A	0.6
7	☐	1.000		13993744.37		A	0.3
8	☐	1.000		13345890.77		A	0.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19143684.43		A	1.5
2	☐	1.000		18915839.72		A	0.7
3	☐	1.000		18799651.11		A	0.8
4	☐	1.000		18547027.36		A	0.5
5	☐	1.000		18181322.09		A	0.3
6	☐	1.000		18076651.26		A	1.1
7	☐	1.000		17398713.35		A	0.9
8	☐	1.000		14879754.92		A	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10503668.59		A	0.5
2	☐	1.000		10517148.80		A	0.2
3	☐	1.000		10305288.32		A	0.4
4	☐	1.000		10209103.32		A	0.3
5	☐	1.000		9918135.55		A	0.8
6	☐	1.000		9905846.66		A	0.5
7	☐	1.000		9675480.90		A	0.4
8	☐	1.000		8082122.86		A	0.2

US EPA Tune Check Sample Report

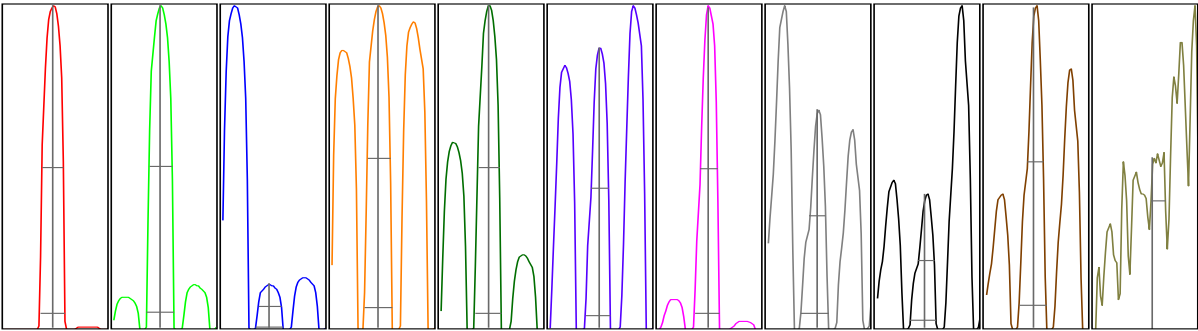
Batch Folder D:\ICP-MS Data\P7101819N.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	25034	0.45	5.00	
24	1223480	0.48	5.00	
25	169817	0.48	5.00	
26	197118	0.47	5.00	
59	187487	0.40	5.00	
113	22573	0.74	5.00	
115	270408	0.32	5.00	
206	60672	0.48	5.00	
207	55679	0.39	5.00	
208	131634	0.32	5.00	
220	92	5.29		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	24889	25029	25115	25170	24966
24	1217305	1221584	1228986	1230475	1219051
25	169060	169227	169701	171111	169986
26	196074	196564	197938	198258	196757
59	186944	186783	187820	188606	187281
113	22504	22362	22715	22769	22514
115	271373	269014	270600	270657	270394
206	60584	60251	61046	60786	60692
207	55416	55775	55945	55763	55494
208	131097	131699	132213	131751	131408
220	95	94	97	87	87

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	42698	8.95	8.9 - 9.1		0.738	0.900	
24	1940294	23.90	23.9 - 24.1		0.787	0.900	
25	266118	24.90	24.9 - 25.1		0.787	0.900	
26	309194	25.90	25.9 - 26.1		0.813	0.900	
59	317304	58.95	58.9 - 59.1		0.781	0.900	
113	43653	113.00	112.9 - 113.1		0.723	0.900	
115	530660	115.00	114.9 - 115.1		0.726	0.900	
206	122932	206.00	205.9 - 206.1		0.790	0.900	
207	110784	206.95	206.9 - 207.1		0.739	0.900	
208	265499	207.95	207.9 - 208.1		0.781	0.900	
220	94	220.25	-				

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	6.2	V	Deflect	13.8	V
Extract 2	-140.0	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	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	44108	0.69	
89	36115	0.45	
205	49206	0.59	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	43795	44398	44394	44161	43793
89	35970	36255	36317	36058	35974
205	49083	49542	49134	49446	48824

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	6.0	V	Deflect	2.2	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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			