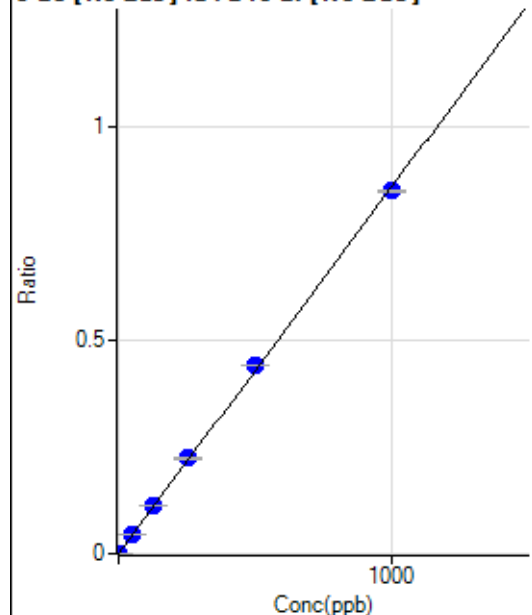


Batch Folder: D:\ICP-MS Data\P7072719 MS.b\
Analysis File: P7072719 MS.batch.bin
DA Date-Time: 2019-07-27 20:52:06
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-07-27 14:36:50
2	003CAL.S.d	S01	2019-07-27 14:40:26
3	004CAL.S.d	S02	2019-07-27 14:45:04
4	005CAL.S.d	S03	2019-07-27 14:49:01
5	006CAL.S.d	S04	2019-07-27 14:53:12
6	007CAL.S.d	S05	2019-07-27 14:57:02
7	008CAL.S.d	S06	2019-07-27 15:00:50
8	009CAL.S.d	S07	2019-07-27 15:04:36
9	010CAL.S.d	S08	2019-07-27 15:08:24

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	51.11	0.0000	P	21.
2	☐	0.100	0.076	207.78	0.0001	P	19.
3	☐	1.000	0.997	2066.84	0.0009	P	2.4
4	☐	50.000	51.801	103769.98	0.0444	P	0.6
5	☐	125.000	129.621	248195.94	0.1111	P	0.4
6	☐	250.000	260.022	467608.84	0.2229	P	0.7
7	☐	500.000	513.648	907199.12	0.4404	P	0.5
8	☐	1000.000	990.003	1751731.00	0.8487	P	0.2
9	☐			270.01	0.0001	P	8.9

$$y = 8.5726E-004 * x + 2.2185E-005$$

$$R = 0.9998$$

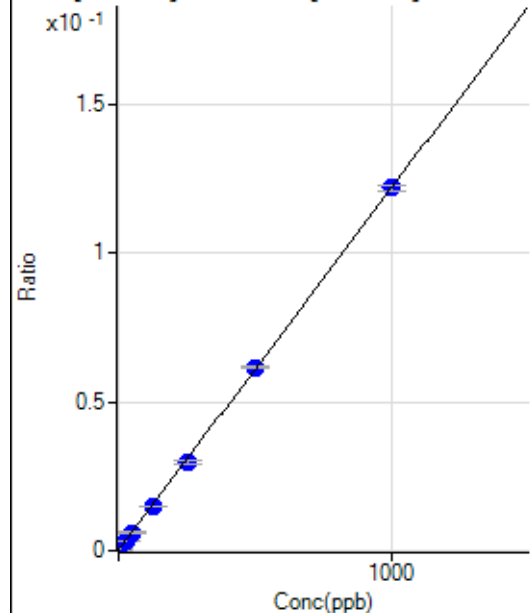
$$DL = 0.01647$$

$$BEC = 0.02588$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	333.35	0.0001	P	10.
2	☐	2.500	2.241	988.97	0.0004	P	12.
3	☐	25.000	23.126	6974.16	0.0030	P	3.3
4	☐	50.000	48.547	14140.53	0.0061	P	3.0
5	☐	125.000	119.525	32811.32	0.0147	P	1.1
6	☐	250.000	243.174	62376.55	0.0297	P	3.1
7	☐	500.000	504.932	126921.40	0.0616	P	1.1
8	☐	1000.000	1000.045	251547.44	0.1219	P	1.4
9	☐			13520.42	0.0066	P	5.2

$$y = 1.2172E-004 * x + 1.4468E-004$$

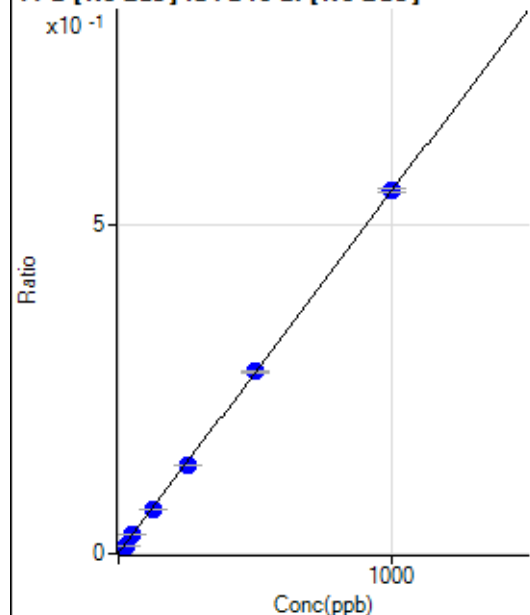
$$R = 1.0000$$

$$DL = 0.3652$$

$$BEC = 1.189$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1366.79	0.0006	P	7.2
2	☐	2.500	2.352	4475.87	0.0019	P	1.9
3	☐	25.000	22.538	30676.49	0.0130	P	1.5
4	☐	50.000	49.804	65526.20	0.0281	P	1.5
5	☐	125.000	119.969	149053.66	0.0667	P	0.9
6	☐	250.000	243.856	283262.92	0.1351	P	1.7
7	☐	500.000	501.780	571282.51	0.2773	P	1.0
8	☐	1000.000	1001.347	1140915.83	0.5528	P	1.1
9	☐			60851.55	0.0298	P	6.4

$$y = 5.5142\text{E-}004 * x + 5.9310\text{E-}004$$

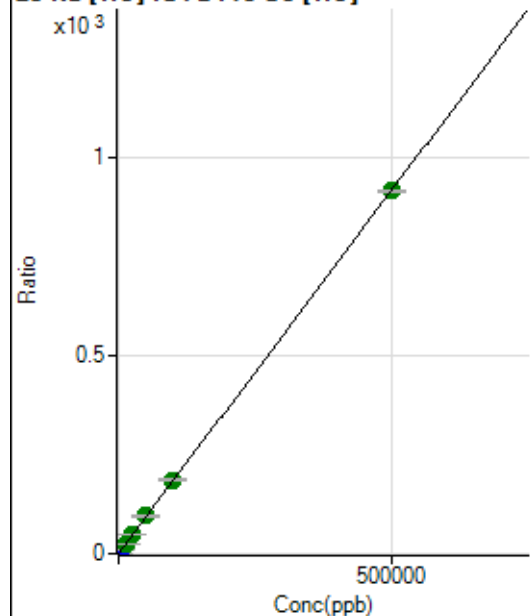
$$R = 1.0000$$

$$DL = 0.2333$$

$$BEC = 1.076$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11679.96	0.0461	P	2.9
2	☐	50.000	45.788	33287.85	0.1299	P	0.3
3	☐	500.000	478.294	238214.43	0.9216	P	0.8
4	☐	5000.000	5073.025	2335665.05	9.3319	P	0.1
5	☐	12500.000	12697.503	5466992.18	23.2879	A	1.1
6	☐	25000.000	25558.248	10622588.08	46.8285	A	0.6
7	☐	50000.000	51761.971	21455156.73	94.7924	A	0.7
8	☐	100000.00	101726.69	43351908.61	186.2490	A	0.6
9	☐	500000.00	499444.90	215431911.7	914.2414	A	0.6

$$y = 0.0018 * x + 0.0461$$

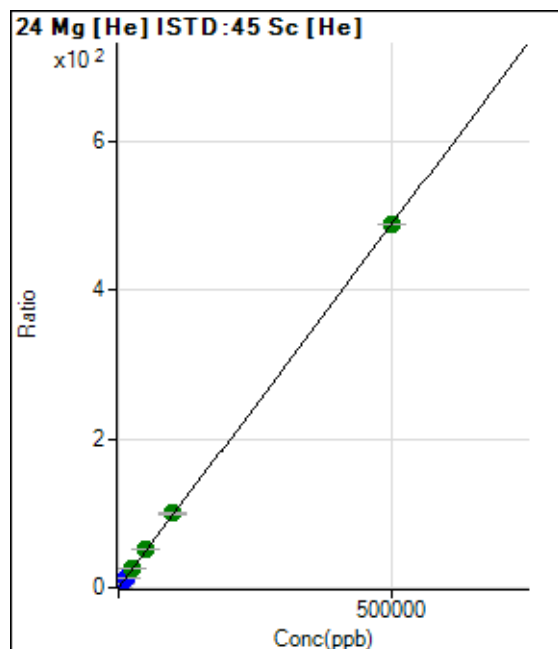
$$R = 1.0000$$

$$DL = 2.206$$

$$BEC = 25.2$$

Weight: <None>

Min Conc: 0



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0003	P	73.
2	☐	50.000	49.323	12411.18	0.0484	P	2.4
3	☐	500.000	503.042	126979.54	0.4913	P	0.2
4	☐	5000.000	5167.336	1262290.69	5.0434	P	0.3
5	☐	12500.000	12814.298	2936010.50	12.5064	P	0.8
6	☐	25000.000	25719.308	5693975.78	25.1011	A	0.4
7	☐	50000.000	52210.952	11533257.98	50.9556	A	0.5
8	☐	100000.00	102053.06	23183095.83	99.5991	A	0.5
9	☐	500000.00	499322.79	114830597.0	487.3148	A	0.2

$$y = 9.7595\text{E-}004 * x + 3.0737\text{E-}004$$

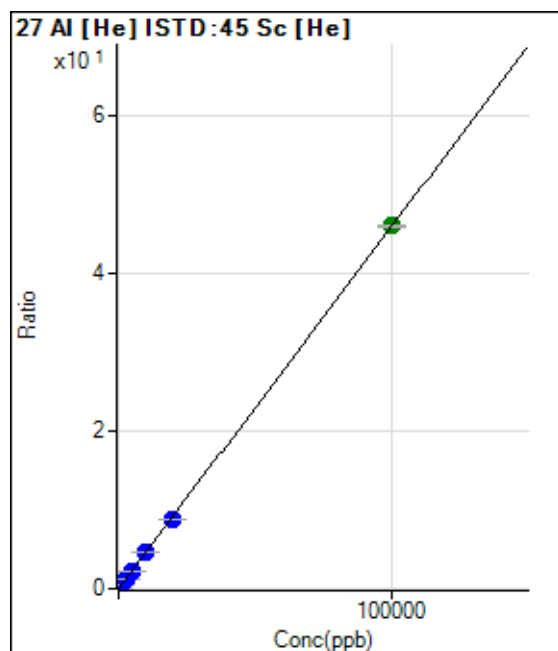
$$R = 1.0000$$

$$DL = 0.6904$$

$$BEC = 0.3149$$

Weight: <None>

Min Conc: 0



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0001	P	57.
2	☒	2.000		191.67	0.0007	P	22.
3	☐	20.000	17.711	2141.92	0.0083	P	6.6
4	☐	1000.000	988.683	113806.40	0.4547	P	1.3
5	☐	2500.000	2438.279	263262.16	1.1212	P	0.9
6	☐	5000.000	4872.799	508268.03	2.2406	P	0.1
7	☐	10000.000	9858.852	1026026.12	4.5331	P	0.5
8	☐	20000.000	19092.966	2043413.07	8.7789	P	0.3
9	☐	100000.00	100203.53	10856643.64	46.0725	A	0.7

$$y = 4.5979\text{E-}004 * x + 1.4251\text{E-}004$$

$$R = 1.0000$$

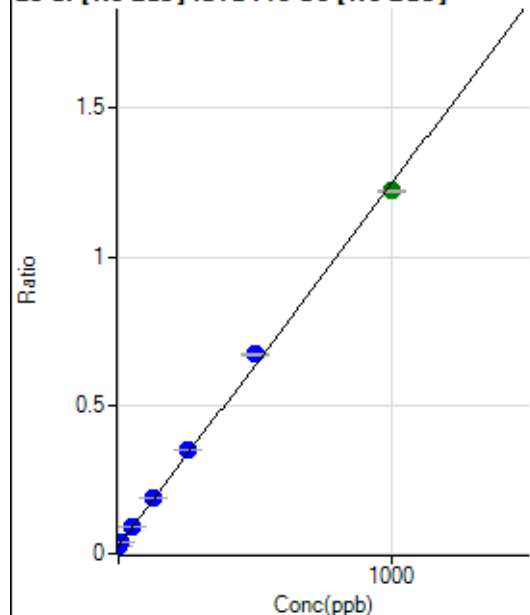
$$DL = 0.5388$$

$$BEC = 0.31$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	125453.22	0.0258	P	0.4
2	☒	1.000		131961.38	0.0267	P	0.6
3	☐	10.000	8.902	180589.03	0.0366	P	1.3
4	☐	50.000	54.688	448120.08	0.0925	P	0.8
5	☐	125.000	133.462	875219.61	0.1885	P	0.3
6	☐	250.000	265.549	1518800.96	0.3495	P	0.7
7	☐	500.000	528.533	2853781.25	0.6701	P	0.1
8	☐	1000.000	980.565	5268047.51	1.2212	A	0.3
9	☐			333881.09	0.0771	P	0.4

$$y = 0.0012 * x + 0.0258$$

$$R = 0.9992$$

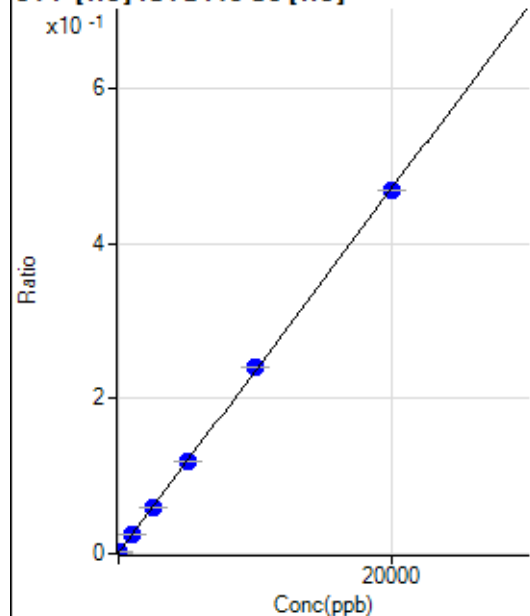
$$DL = 0.2353$$

$$BEC = 21.16$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-22.916	119.45	0.0005	P	52.
2	☒	0.000		119.45	0.0005	P	54.
3	☐	0.000	22.916	400.02	0.0015	P	11.
4	☐	1000.000	1016.446	6226.58	0.0249	P	5.2
5	☐	2500.000	2512.661	14087.77	0.0600	P	1.1
6	☐	5000.000	5019.541	26963.98	0.1189	P	1.1
7	☐	10000.000	10225.651	54573.06	0.2411	P	0.5
8	☐	20000.000	19879.884	108887.39	0.4678	P	0.1
9	☐			177.79	0.0008	P	25.

$$y = 2.3480E-005 * x + 0.0010$$

$$R = 0.9999$$

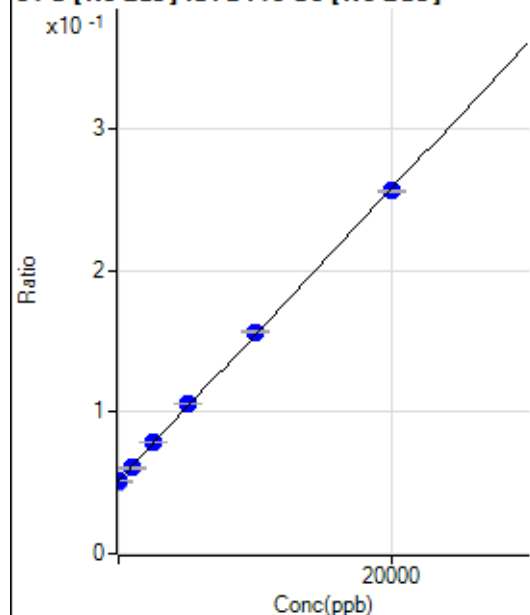
$$DL = 27.35$$

$$BEC = 42.99$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	2.159	251588.21	0.0517	P	2.1
2	☒	0.000		251583.15	0.0509	P	0.8
3	☐	0.000	-2.159	254668.47	0.0517	P	1.8
4	☐	1000.000	886.264	294943.78	0.0609	P	1.2
5	☐	2500.000	2632.063	366348.63	0.0789	P	0.5
6	☐	5000.000	5248.789	460382.55	0.1059	P	0.8
7	☐	10000.000	10191.532	668676.30	0.1570	P	0.6
8	☐	20000.000	19831.216	1107091.64	0.2566	P	0.3
9	☐			206189.15	0.0476	P	1.1

$$y = 1.0335E-005 * x + 0.0517$$

R = 0.9998

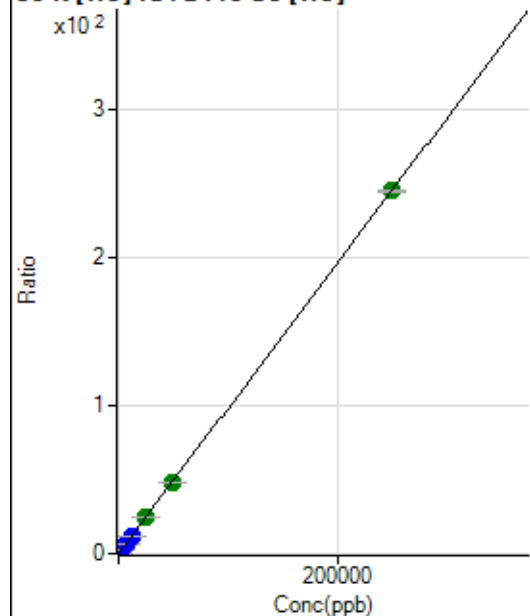
DL = 288.8

BEC = 5002

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	17630.59	0.0696	P	0.9
2	☐	50.000	45.131	29151.65	0.1138	P	2.8
3	☐	500.000	462.908	135085.90	0.5226	P	0.9
4	☐	2500.000	2480.309	624921.18	2.4968	P	0.6
5	☐	6250.000	6118.805	1421958.79	6.0573	P	1.1
6	☐	12500.000	12129.028	2708169.81	11.9388	P	1.1
7	☐	25000.000	25084.833	5571765.93	24.6170	A	0.7
8	☐	50000.000	49151.821	11212036.10	48.1683	A	0.1
9	☐	250000.00	250183.25	57706895.74	244.8926	A	0.6

$$y = 9.7857E-004 * x + 0.0696$$

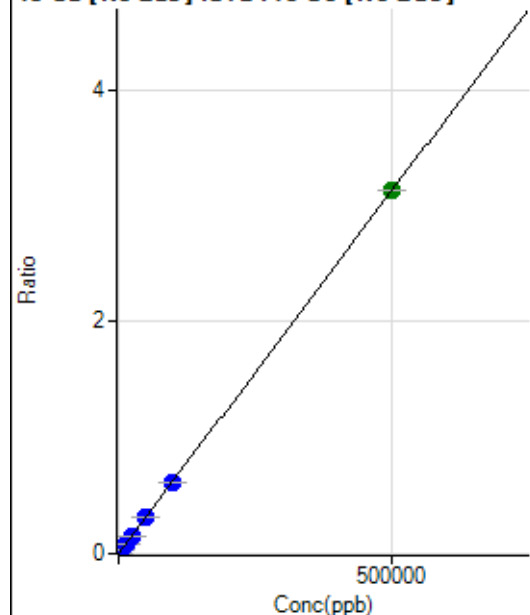
R = 1.0000

DL = 2.026

BEC = 71.14

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	23.
2	☐	50.000	48.190	1636.29	0.0003	P	9.9
3	☐	500.000	459.164	14304.72	0.0029	P	3.3
4	☐	5000.000	4989.338	151455.12	0.0313	P	0.9
5	☐	12500.000	12288.611	357168.46	0.0769	P	1.1
6	☐	25000.000	24775.470	673819.25	0.1551	P	0.3
7	☐	50000.000	50198.484	1337781.63	0.3141	P	0.3
8	☐	100000.00	98202.768	2650891.92	0.6145	P	0.4
9	☐	500000.00	500356.25	13565441.63	3.1310	A	0.2

$$y = 6.2574E-006 * x + 2.9698E-005$$

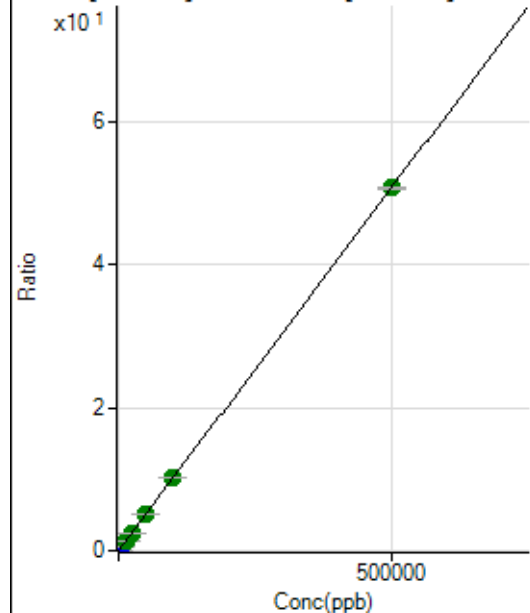
$$R = 1.0000$$

$$DL = 3.327$$

$$BEC = 4.746$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7388.59	0.0015	P	2.7
2	☐	50.000	45.642	30365.69	0.0061	P	2.3
3	☐	500.000	463.476	239046.41	0.0485	P	0.8
4	☐	5000.000	4953.256	2440934.28	0.5036	P	0.5
5	☐	12500.000	12308.506	5800429.47	1.2492	A	0.6
6	☐	25000.000	24974.393	11008154.59	2.5332	A	0.1
7	☐	50000.000	50771.990	21924101.01	5.1483	A	0.3
8	☐	100000.00	100338.25	43883438.83	10.1729	A	0.4
9	☐	500000.00	499861.72	219549618.8	50.6728	A	0.4

$$y = 1.0137E-004 * x + 0.0015$$

$$R = 1.0000$$

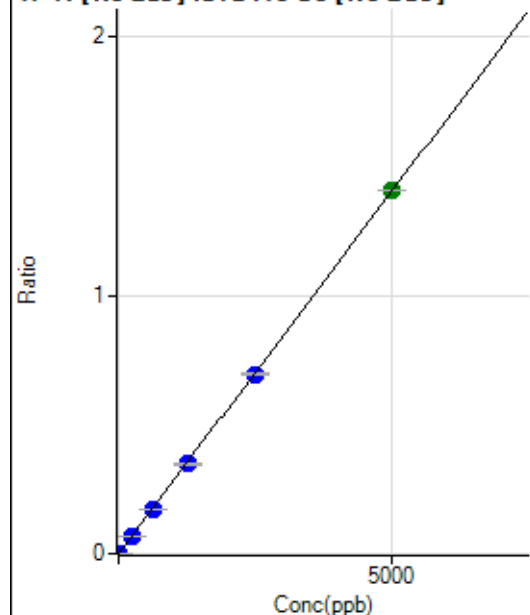
$$DL = 1.197$$

$$BEC = 14.98$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.89	0.0000	P	39.
2	☐	0.500	0.480	755.61	0.0002	P	5.1
3	☐	5.000	4.894	6849.11	0.0014	P	2.9
4	☐	250.000	246.494	334901.06	0.0691	P	1.0
5	☐	625.000	610.190	794094.09	0.1710	P	0.9
6	☐	1250.000	1235.888	1505219.67	0.3464	P	0.2
7	☐	2500.000	2483.322	2963849.94	0.6960	P	0.3
8	☐	5000.000	5013.894	6061607.17	1.4052	A	0.0
9	☐			2072.46	0.0005	P	5.6

$$y = 2.8025E-004 * x + 1.8268E-005$$

$$R = 1.0000$$

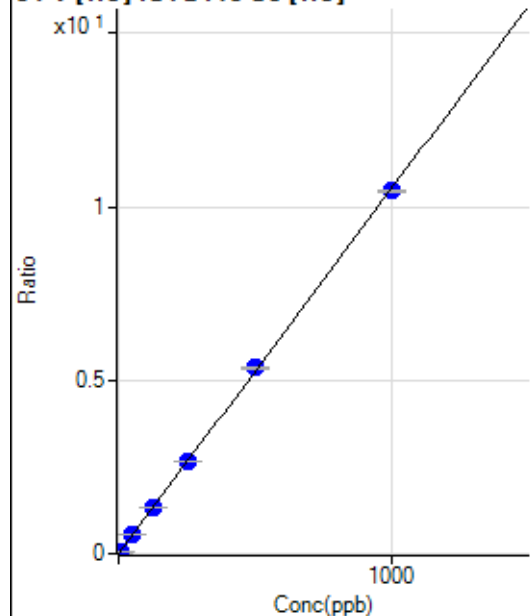
$$DL = 0.0762$$

$$BEC = 0.06518$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10.00	0.0000	P	33.
2	☐	0.500	0.485	1317.86	0.0051	P	6.0
3	☐	5.000	5.040	13712.10	0.0531	P	2.0
4	☐	50.000	51.163	134713.02	0.5382	P	0.3
5	☐	125.000	126.748	312982.08	1.3333	P	1.6
6	☐	250.000	252.907	603480.56	2.6604	P	0.5
7	☐	500.000	510.202	1214726.67	5.3669	P	0.7
8	☐	1000.000	993.896	2433487.33	10.4548	P	0.7
9	☐			398.90	0.0017	P	8.4

$$y = 0.0105 * x + 3.9480E-005$$

$$R = 0.9999$$

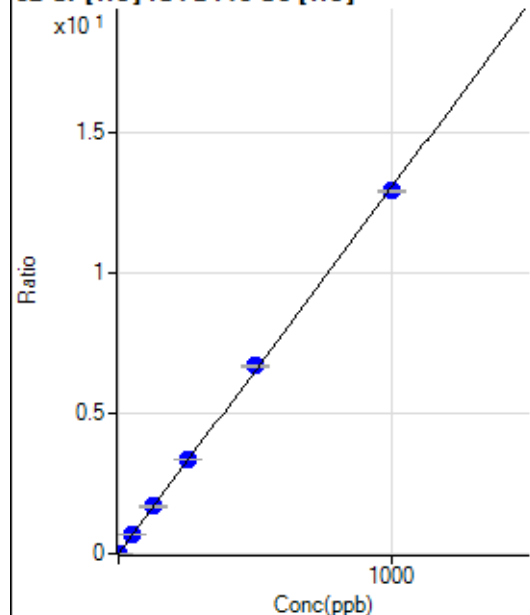
$$DL = 0.003738$$

$$BEC = 0.003753$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	833.37	0.0033	P	7.6
2	☐	0.200	0.150	1345.64	0.0053	P	7.7
3	☐	2.000	1.904	7268.56	0.0281	P	1.6
4	☐	50.000	51.425	168672.45	0.6739	P	0.2
5	☐	125.000	128.911	395412.02	1.6844	P	1.0
6	☐	250.000	256.693	760076.53	3.3507	P	0.8
7	☐	500.000	513.983	1517800.39	6.7059	P	0.9
8	☐	1000.000	990.776	3008084.26	12.9236	P	0.9
9	☐			44367.82	0.1883	P	0.7

$$y = 0.0130 * x + 0.0033$$

$$R = 0.9998$$

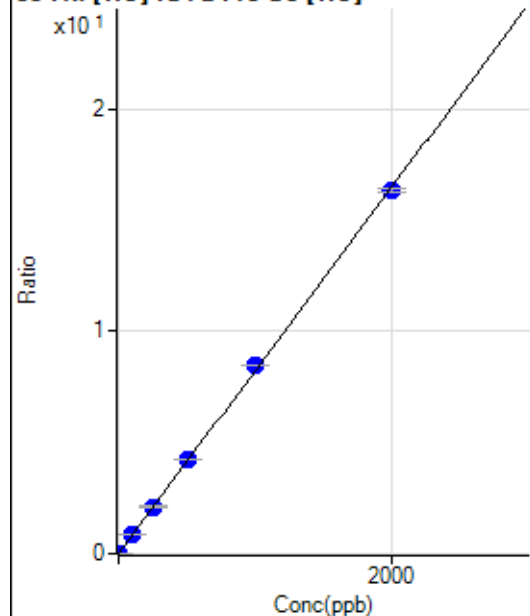
$$DL = 0.05788$$

$$BEC = 0.2523$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40.00	0.0002	P	21.
2	☐	0.100	0.108	268.89	0.0010	P	6.0
3	☐	1.000	1.004	2177.98	0.0084	P	4.3
4	☐	100.000	103.070	212544.93	0.8492	P	0.5
5	☐	250.000	256.259	495586.86	2.1111	P	1.2
6	☐	500.000	512.617	957936.28	4.2229	P	0.5
7	☐	1000.000	1029.233	1919017.20	8.4786	P	0.8
8	☐	2000.000	1981.294	3798894.29	16.3212	P	1.0
9	☐			13853.37	0.0588	P	0.7

$$y = 0.0082 * x + 1.5792E-004$$

$$R = 0.9998$$

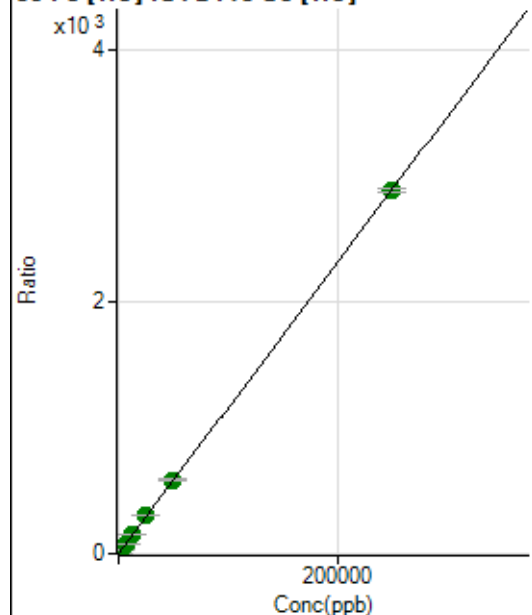
$$DL = 0.0126$$

$$BEC = 0.01917$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3583.87	0.0142	P	3.6
2	☐	5.000	5.024	18495.42	0.0722	P	4.3
3	☐	50.000	51.699	158040.75	0.6114	P	0.5
4	☐	2500.000	2590.793	7494939.29	29.9451	A	0.1
5	☐	6250.000	6505.168	17645458.50	75.1671	A	1.2
6	☐	12500.000	13022.642	34131013.72	150.4622	A	0.5
7	☐	25000.000	26226.291	68580852.00	303.0014	A	0.8
8	☐	50000.000	50919.210	136925155.8	588.2740	A	0.9
9	☐	250000.00	249660.10	679658185.5	2,884.289	A	1.0

$$y = 0.0116 * x + 0.0142$$

$$R = 1.0000$$

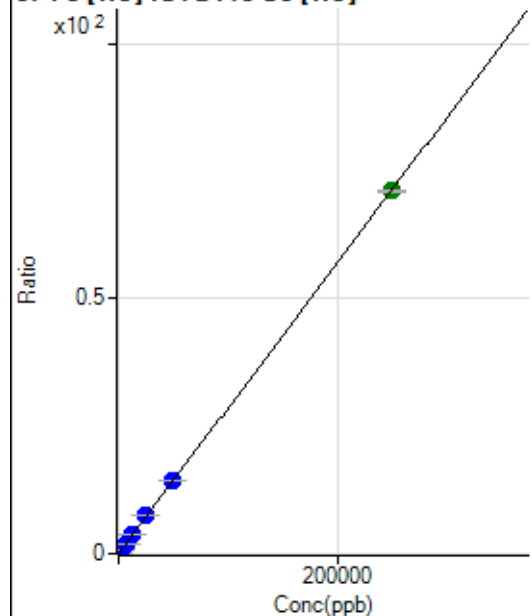
$$DL = 0.1318$$

$$BEC = 1.225$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	161.12	0.0006	P	17.
2	☐	5.000	5.228	544.47	0.0021	P	7.9
3	☐	50.000	53.118	4074.76	0.0158	P	1.6
4	☐	2500.000	2607.925	186057.43	0.7434	P	0.4
5	☐	6250.000	6551.206	438147.56	1.8664	P	1.0
6	☐	12500.000	13118.013	847610.29	3.7366	P	0.4
7	☐	25000.000	26105.104	1682856.72	7.4352	P	1.0
8	☐	50000.000	50072.319	3319302.62	14.2609	P	1.1
9	☐	250000.00	249835.51	16766616.81	71.1523	A	0.7

$$y = 2.8479E-004 * x + 6.3610E-004$$

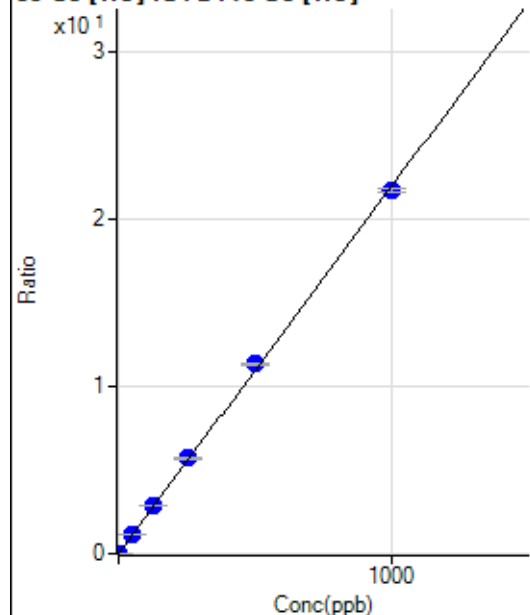
$$R = 1.0000$$

$$DL = 1.19$$

$$BEC = 2.234$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0003	P	27.
2	☐	0.100	0.093	603.35	0.0024	P	6.0
3	☐	1.000	0.989	5682.31	0.0220	P	4.7
4	☐	50.000	52.592	288496.13	1.1527	P	0.2
5	☐	125.000	130.706	672386.00	2.8642	P	1.1
6	☐	250.000	259.996	1292339.90	5.6971	P	0.8
7	☐	500.000	517.141	2564714.15	11.3314	P	0.9
8	☐	1000.000	988.088	5039245.52	21.6504	P	1.1
9	☐			59703.16	0.2534	P	0.9

$$y = 0.0219 * x + 3.0722E-004$$

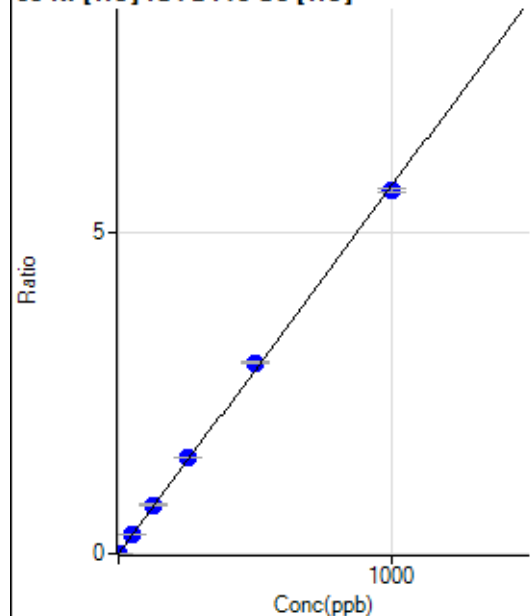
$$R = 0.9997$$

$$DL = 0.01165$$

$$BEC = 0.01402$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.78	0.0002	P	10.
2	☐	0.100	0.090	181.12	0.0007	P	2.3
3	☐	1.000	1.045	1597.89	0.0062	P	3.6
4	☐	50.000	53.240	76483.73	0.3056	P	0.4
5	☐	125.000	132.365	178282.08	0.7595	P	1.6
6	☐	250.000	260.389	338869.88	1.4938	P	0.9
7	☐	500.000	518.860	673698.62	2.9765	P	0.7
8	☐	1000.000	986.890	1317688.70	5.6612	P	1.0
9	☐			22221.47	0.0943	P	0.7

$$y = 0.0057 * x + 1.8867E-004$$

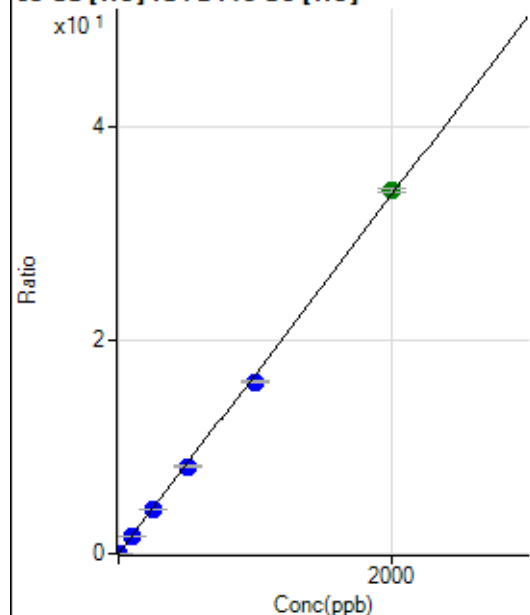
$$R = 0.9997$$

$$DL = 0.01063$$

$$BEC = 0.03289$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	632.25	0.0025	P	3.2
2	☐	0.200	0.176	1395.65	0.0054	P	2.5
3	☐	2.000	1.866	8743.84	0.0338	P	3.0
4	☐	100.000	99.451	418672.54	1.6727	P	0.3
5	☐	250.000	247.501	976387.69	4.1592	P	1.1
6	☐	500.000	487.853	1859119.66	8.1958	P	0.7
7	☐	1000.000	959.062	3646214.42	16.1095	P	0.6
8	☐	2000.000	2023.846	7911846.83	33.9920	A	1.1
9	☐			9050.71	0.0384	P	3.1

$$y = 0.0168 * x + 0.0025$$

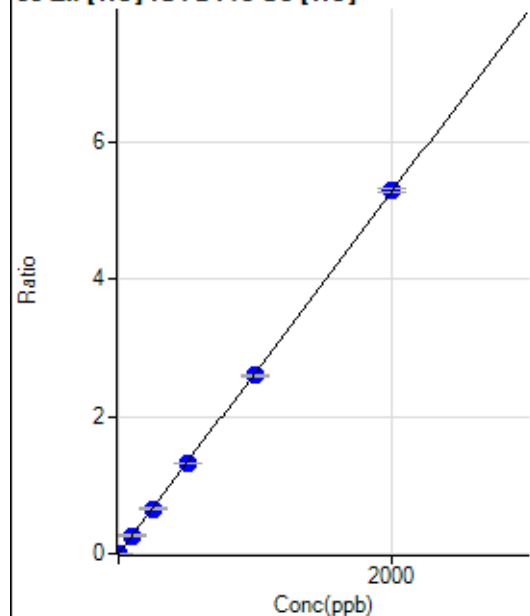
$$R = 0.9997$$

$$DL = 0.01445$$

$$BEC = 0.1487$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	293.34	0.0012	P	14.
2	☐	0.200	0.140	391.12	0.0015	P	4.7
3	☐	2.000	1.884	1583.45	0.0061	P	2.9
4	☐	100.000	100.079	66316.56	0.2650	P	1.1
5	☐	250.000	249.089	154404.14	0.6578	P	1.6
6	☐	500.000	497.743	297899.04	1.3132	P	0.4
7	☐	1000.000	988.155	589837.23	2.6060	P	1.2
8	☐	2000.000	2006.597	1231439.98	5.2907	P	1.1
9	☐			10429.47	0.0443	P	4.1

$$y = 0.0026 * x + 0.0012$$

$$R = 1.0000$$

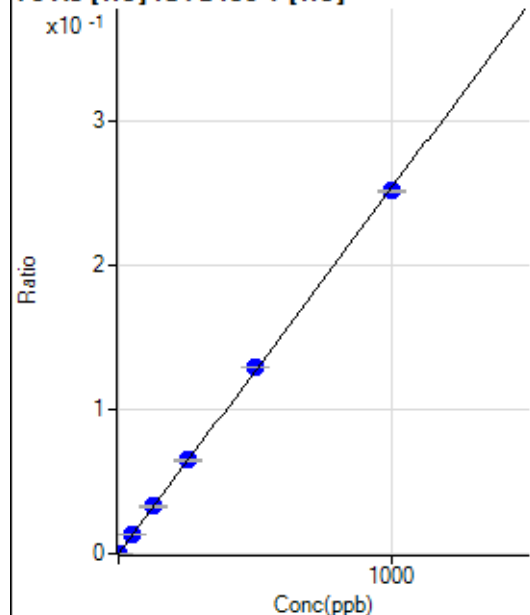
$$DL = 0.1851$$

$$BEC = 0.4394$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.03	0.0000	P	35.
2	☒	0.100		61.11	0.0000	P	15.
3	☐	1.000	0.988	393.84	0.0003	P	7.9
4	☐	50.000	51.752	19825.34	0.0131	P	0.6
5	☐	125.000	128.862	46807.16	0.0326	P	1.3
6	☐	250.000	256.560	90815.06	0.0649	P	1.4
7	☐	500.000	511.072	179861.62	0.1293	P	0.2
8	☐	1000.000	992.254	356450.68	0.2511	P	0.9
9	☐			492.61	0.0004	P	7.3

$$y = 2.5302\text{E-}004 * x + 5.2819\text{E-}006$$

$$R = 0.9999$$

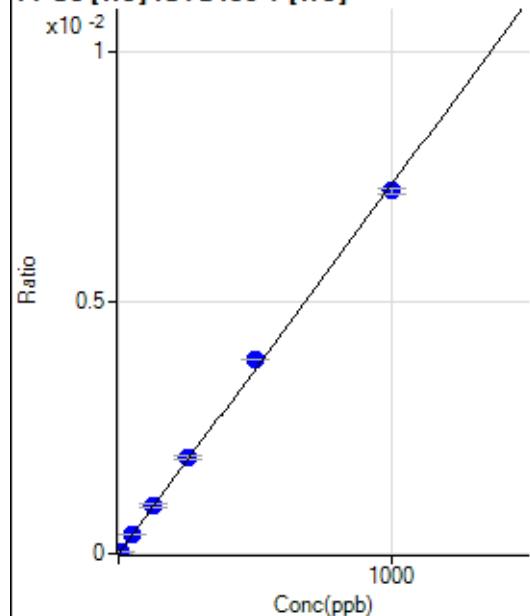
$$DL = 0.02191$$

$$BEC = 0.02088$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500	0.592	6.67	0.0000	P	50.
3	☐	5.000	5.594	63.33	0.0000	P	11.
4	☐	50.000	50.016	555.58	0.0004	P	1.2
5	☐	125.000	131.157	1381.20	0.0010	P	5.8
6	☐	250.000	259.705	2666.96	0.0019	P	4.4
7	☐	500.000	526.592	5375.52	0.0039	P	0.7
8	☐	1000.000	983.505	10248.22	0.0072	P	1.3
9	☐			3.33	0.0000	P	99.

$$y = 7.3394\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9994$$

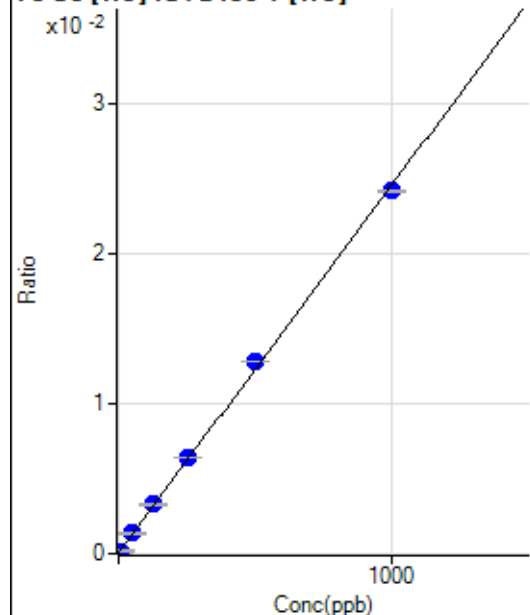
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.42	0.0001	P	10.
2	☐	0.500	0.501	106.17	0.0001	P	19.
3	☐	5.000	5.341	289.51	0.0002	P	8.9
4	☐	50.000	53.018	2049.55	0.0014	P	2.5
5	☐	125.000	131.906	4715.62	0.0033	P	2.6
6	☐	250.000	260.460	8995.45	0.0064	P	1.0
7	☐	500.000	522.070	17847.47	0.0128	P	0.6
8	☐	1000.000	985.334	34312.74	0.0242	P	0.7
9	☐			70.37	0.0001	P	15.

$$y = 2.4470\text{E-}005 * x + 5.6904\text{E-}005$$

$$R = 0.9996$$

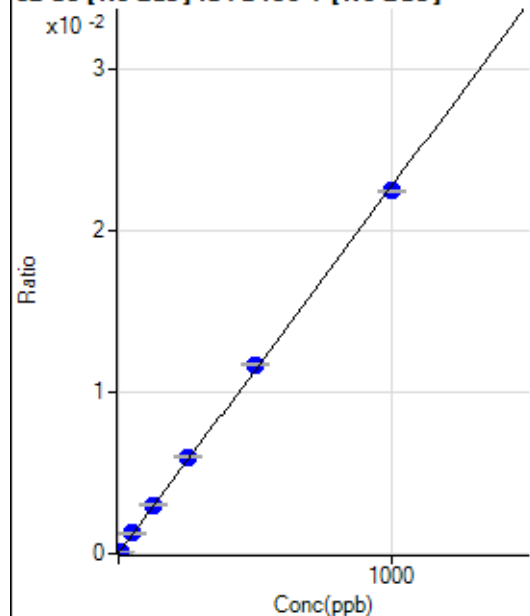
$$DL = 0.7627$$

$$BEC = 2.326$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	194.82	0.0000	P	15.
2	☒	0.500		342.15	0.0000	P	5.0
3	☐	5.000	5.659	1437.77	0.0001	P	2.1
4	☐	50.000	54.477	11976.64	0.0013	P	1.5
5	☐	125.000	132.433	28121.62	0.0030	P	1.2
6	☐	250.000	263.647	53440.67	0.0060	P	1.1
7	☐	500.000	514.571	103448.79	0.0117	P	1.2
8	☐	1000.000	988.147	201933.73	0.0225	P	0.3
9	☐			268.40	0.0000	P	27.

$$y = 2.2743\text{E-}005 * x + 2.0473\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.4221$$

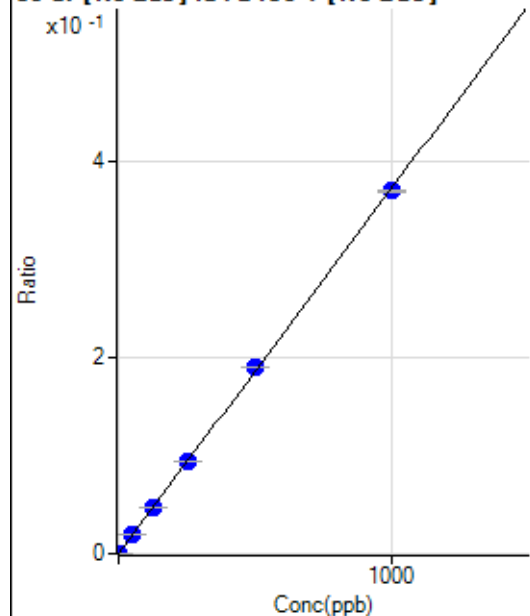
$$BEC = 0.9002$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			308.90		P	12.
2	☐			308.90		P	6.5
3	☐			305.56		P	8.3
4	☐			305.57		P	7.1
5	☐			277.78		P	13.
6	☐			314.45		P	10.
7	☐			275.56		P	3.9
8	☐			278.90		P	13.
9	☐			337.79		P	15.

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

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	558.37	0.0001	P	22.
2	☐	0.100	0.128	1027.86	0.0001	P	9.9
3	☐	1.000	0.980	4089.67	0.0004	P	2.5
4	☐	50.000	51.403	183030.41	0.0192	P	0.8
5	☐	125.000	126.935	439967.56	0.0474	P	1.0
6	☐	250.000	254.017	842771.64	0.0949	P	0.3
7	☐	500.000	510.846	1683348.01	0.1908	P	0.1
8	☐	1000.000	993.261	3329149.14	0.3708	P	0.7
9	☐			14026.81	0.0016	P	1.6

$$y = 3.7330E-004 * x + 5.8676E-005$$

$$R = 0.9999$$

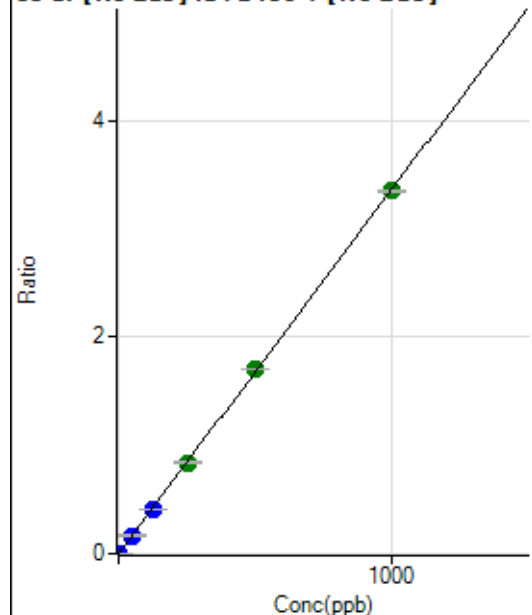
$$DL = 0.1054$$

$$BEC = 0.1572$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	127.78	0.0000	P	52.
2	☐	0.100	0.089	3014.36	0.0003	P	4.3
3	☐	1.000	0.953	31015.11	0.0032	P	2.4
4	☐	50.000	50.184	1605325.64	0.1688	P	0.4
5	☐	125.000	123.494	3852266.93	0.4154	P	0.6
6	☐	250.000	250.575	7486625.52	0.8429	A	0.5
7	☐	500.000	506.388	15030890.96	1.7033	A	0.6
8	☐	1000.000	996.841	30101040.95	3.3531	A	0.3
9	☐			121435.51	0.0140	P	0.5

$$y = 0.0034 * x + 1.3428E-005$$

$$R = 1.0000$$

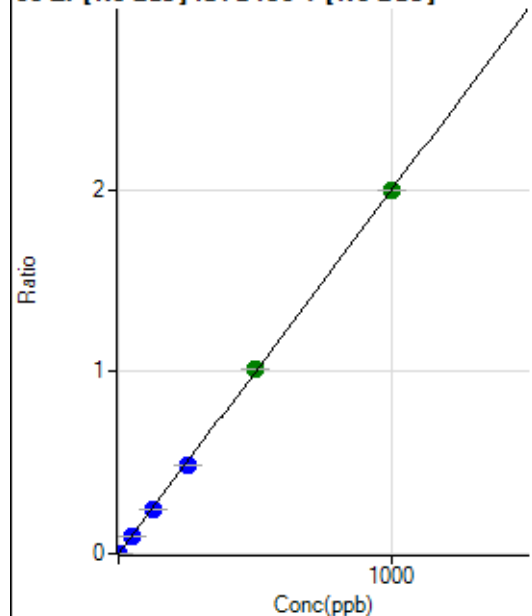
$$DL = 0.00632$$

$$BEC = 0.003992$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	683.39	0.0001	P	14.
2	☐	0.100	0.088	2383.65	0.0002	P	10.
3	☐	1.000	0.897	17942.39	0.0019	P	2.9
4	☐	50.000	49.789	945242.51	0.0994	P	0.8
5	☐	125.000	122.978	2275854.82	0.2454	P	0.5
6	☐	250.000	245.414	4349505.05	0.4897	P	0.4
7	☐	500.000	506.588	8919173.12	1.0107	A	0.3
8	☐	1000.000	998.116	17876592.76	1.9914	A	0.1
9	☐			5165.01	0.0006	P	4.0

$$y = 0.0020 * x + 7.1812E-005$$

$$R = 1.0000$$

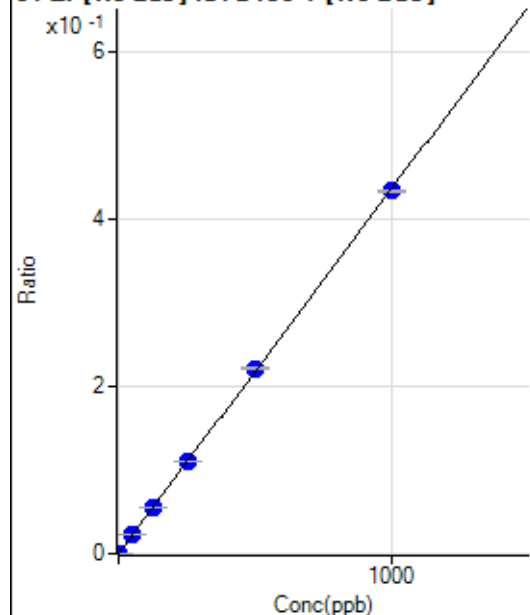
$$DL = 0.01587$$

$$BEC = 0.036$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	169.45	0.0000	P	27.
2	☒	0.100		436.14	0.0000	P	7.6
3	☐	1.000	0.894	3922.93	0.0004	P	1.4
4	☐	50.000	51.092	211715.38	0.0223	P	0.9
5	☐	125.000	125.764	507971.18	0.0548	P	0.3
6	☐	250.000	253.011	978678.41	0.1102	P	0.3
7	☐	500.000	508.707	1954750.80	0.2215	P	0.4
8	☐	1000.000	994.744	3888427.69	0.4331	P	0.4
9	☐			1186.22	0.0001	P	3.8

$$y = 4.3542\text{E-}004 * x + 1.7804\text{E-}005$$

$$R = 0.9999$$

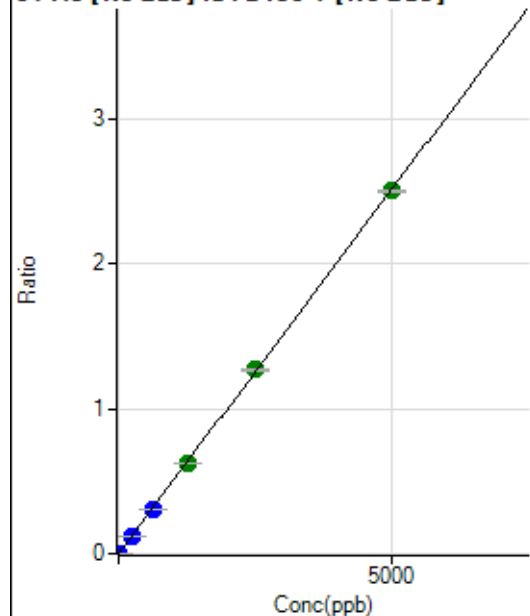
$$DL = 0.03427$$

$$BEC = 0.04089$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	272.24	0.0000	P	6.3
2	☐	0.500	0.469	2553.12	0.0003	P	10.
3	☐	5.000	4.521	22142.96	0.0023	P	0.7
4	☐	250.000	247.331	1180678.42	0.1242	P	1.0
5	☐	625.000	615.946	2866995.70	0.3092	P	0.9
6	☐	1250.000	1248.838	5567512.97	0.6268	A	0.6
7	☐	2500.000	2532.963	11218438.18	1.2713	A	0.8
8	☐	5000.000	4985.075	22460636.96	2.5020	A	0.3
9	☐			10885.12	0.0013	P	3.2

$$y = 5.0189\text{E-}004 * x + 2.8604\text{E-}005$$

$$R = 1.0000$$

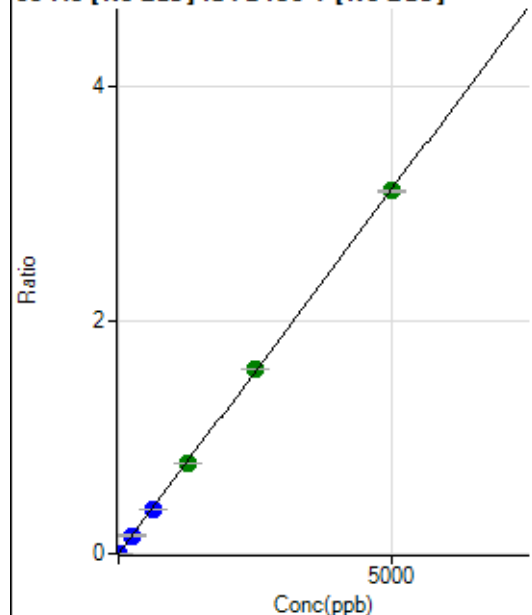
$$DL = 0.01073$$

$$BEC = 0.05699$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0000	P	30.
2	☐	0.500	0.468	2903.21	0.0003	P	0.8
3	☐	5.000	4.608	27758.39	0.0029	P	1.3
4	☐	250.000	250.375	1484418.21	0.1561	P	0.9
5	☐	625.000	617.293	3568927.51	0.3849	P	0.5
6	☐	1250.000	1249.037	6916732.45	0.7787	A	0.3
7	☐	2500.000	2539.069	13968711.95	1.5830	A	0.5
8	☐	5000.000	4981.651	27880862.08	3.1058	A	0.2
9	☐			15706.41	0.0018	P	2.2

$$y = 6.2344\text{E-}004 * x + 8.1717\text{E-}006$$

$$R = 1.0000$$

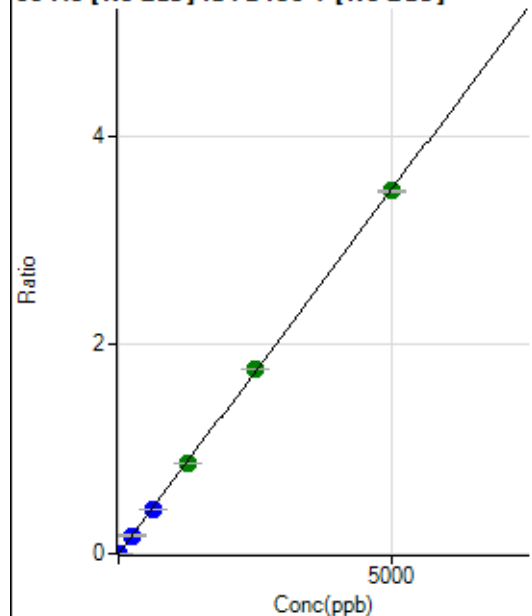
$$DL = 0.01214$$

$$BEC = 0.01311$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	34.
2	☐	0.500	0.462	3261.64	0.0003	P	5.1
3	☐	5.000	4.588	30931.67	0.0032	P	1.7
4	☐	250.000	250.474	1658942.52	0.1745	P	0.4
5	☐	625.000	617.791	3990026.13	0.4303	P	0.5
6	☐	1250.000	1245.542	7705039.93	0.8675	A	0.6
7	☐	2500.000	2537.100	15592319.45	1.7669	A	0.4
8	☐	5000.000	4983.442	31156718.06	3.4707	A	0.3
9	☐			24065.56	0.0028	P	2.7

$$y = 6.9644\text{E-}004 * x + 1.5181\text{E-}005$$

$$R = 1.0000$$

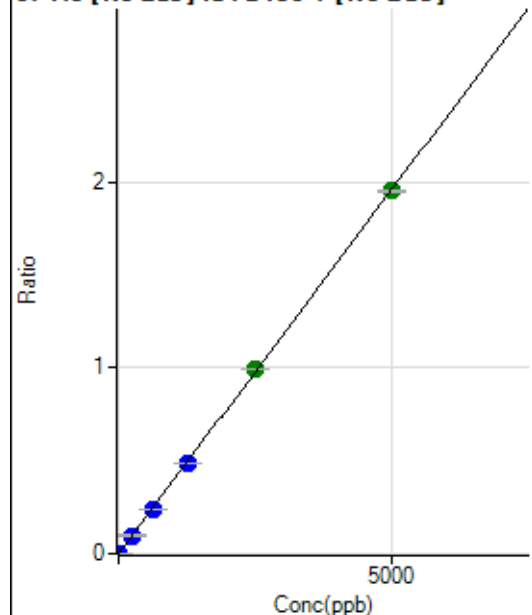
$$DL = 0.02278$$

$$BEC = 0.0218$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	9.2
2	☐	0.500	0.442	1725.18	0.0002	P	5.9
3	☐	5.000	4.645	17561.39	0.0018	P	1.7
4	☐	250.000	250.437	931385.32	0.0979	P	1.0
5	☐	625.000	619.041	2245082.21	0.2421	P	0.5
6	☐	1250.000	1236.136	4293986.99	0.4834	P	0.8
7	☐	2500.000	2535.403	8749887.78	0.9915	A	0.1
8	☐	5000.000	4986.488	17506250.04	1.9501	A	0.2
9	☐			9320.07	0.0011	P	1.6

$$y = 3.9108\text{E-}004 * x + 5.5460\text{E-}006$$

$$R = 1.0000$$

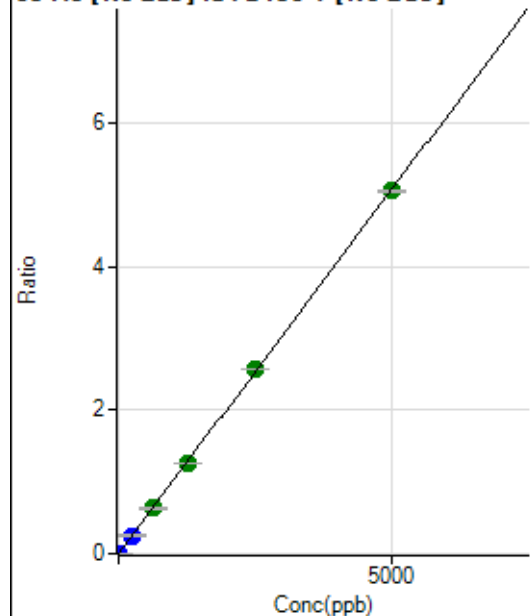
$$DL = 0.003894$$

$$BEC = 0.01418$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	116.67	0.0000	P	24.
2	☐	0.500	0.478	4801.04	0.0005	P	6.5
3	☐	5.000	4.696	45992.12	0.0048	P	3.2
4	☐	250.000	250.259	2413020.30	0.2538	P	0.8
5	☐	625.000	620.888	5838058.16	0.6295	A	0.8
6	☐	1250.000	1250.615	11263060.06	1.2680	A	0.3
7	☐	2500.000	2532.912	22662682.28	2.5682	A	0.5
8	☐	5000.000	4983.892	45363866.64	5.0533	A	0.2
9	☐			24099.03	0.0028	P	3.7

$$y = 0.0010 * x + 1.2258\text{E-}005$$

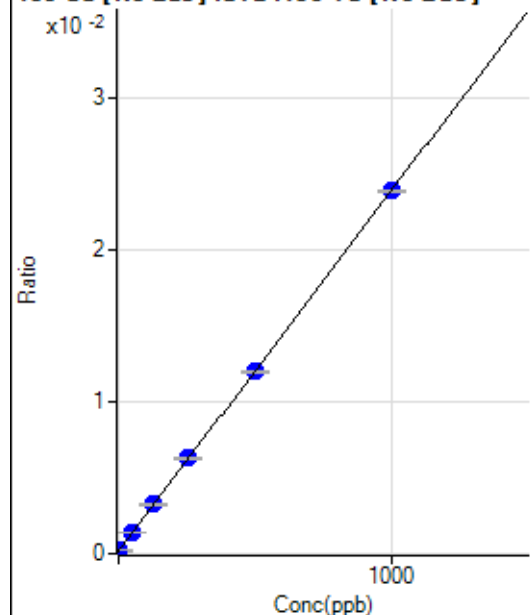
$$R = 1.0000$$

$$DL = 0.008955$$

$$BEC = 0.01209$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2692.04	0.0002	P	3.5
2	☒	0.100		3056.03	0.0002	P	4.6
3	☐	1.000	1.143	3106.04	0.0002	P	4.7
4	☐	50.000	53.195	20879.95	0.0015	P	0.3
5	☐	125.000	128.271	46502.25	0.0032	P	1.3
6	☐	250.000	257.086	88995.83	0.0063	P	0.7
7	☐	500.000	496.652	171110.56	0.0120	P	0.1
8	☐	1000.000	999.334	347802.90	0.0239	P	0.8
9	☐			2989.32	0.0002	P	3.4

$$y = 2.3733\text{E-}005 * x + 1.8856\text{E-}004$$

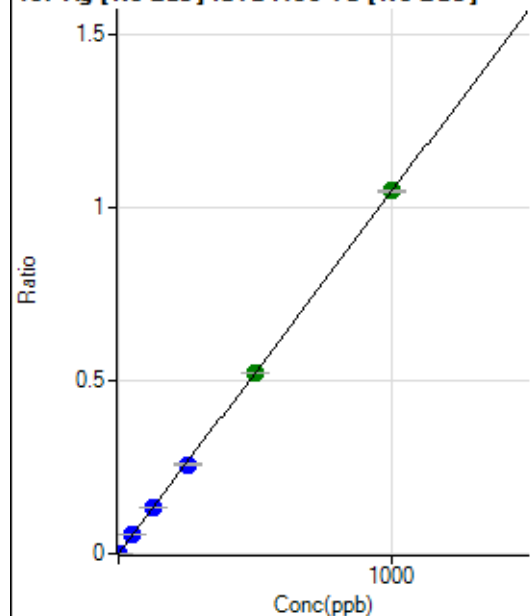
$$R = 1.0000$$

$$DL = 0.8416$$

$$BEC = 7.945$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0000	P	16.
2	☐	0.100	0.115	1811.32	0.0001	P	10.
3	☐	1.000	1.079	16321.22	0.0011	P	2.0
4	☐	50.000	53.382	803128.14	0.0558	P	0.3
5	☐	125.000	127.581	1918631.92	0.1334	P	0.4
6	☐	250.000	246.539	3646713.84	0.2577	P	1.0
7	☐	500.000	497.226	7427403.55	0.5198	A	0.2
8	☐	1000.000	1001.760	15237045.65	1.0473	A	0.5
9	☐			1525.16	0.0001	P	24.

$$y = 0.0010 * x + 5.4499\text{E-}006$$

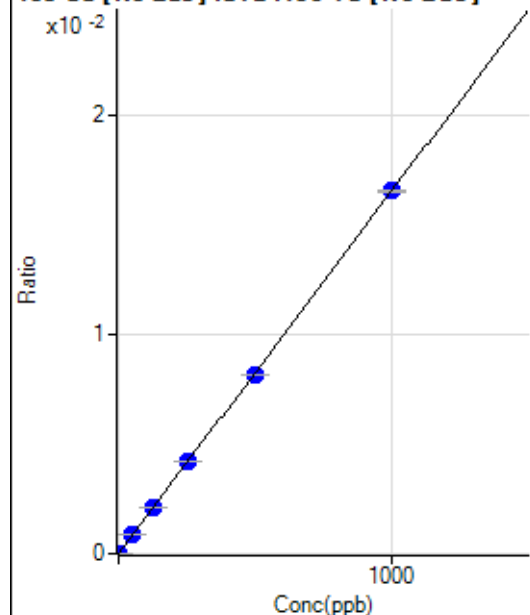
$$R = 1.0000$$

$$DL = 0.002642$$

$$BEC = 0.005213$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9.72	0.0000	P	24.
2	☐	0.100	0.075	27.78	0.0000	P	95.
3	☐	1.000	0.875	218.06	0.0000	P	17.
4	☐	50.000	52.553	12514.05	0.0009	P	1.0
5	☐	125.000	127.974	30448.30	0.0021	P	1.2
6	☐	250.000	254.094	59454.92	0.0042	P	0.7
7	☐	500.000	494.653	116873.16	0.0082	P	0.4
8	☐	1000.000	1001.151	240853.63	0.0166	P	0.4
9	☐			59.72	0.0000	P	22.

$$y = 1.6535E-005 * x + 6.8003E-007$$

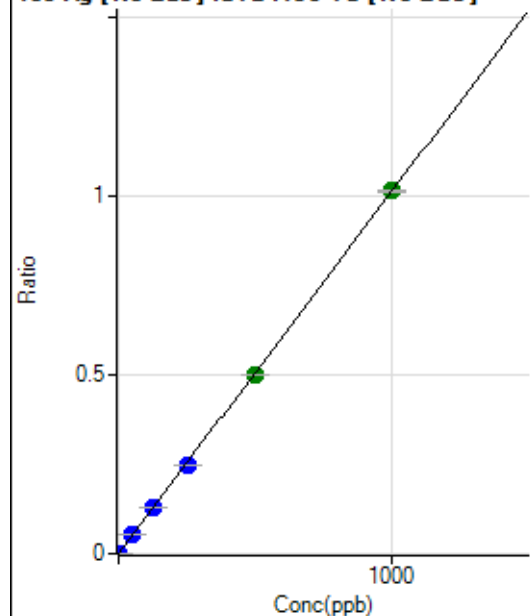
$$R = 1.0000$$

$$DL = 0.02973$$

$$BEC = 0.04113$$

Weight: <None>

Min Conc: 0

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

	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	39.
2	☐	0.100	0.108	1625.17	0.0001	P	5.0
3	☐	1.000	1.071	15637.03	0.0011	P	1.3
4	☐	50.000	53.141	772413.24	0.0537	P	0.7
5	☐	125.000	127.307	1849746.44	0.1286	P	0.5
6	☐	250.000	246.001	3515671.52	0.2485	P	0.9
7	☐	500.000	495.568	7151995.39	0.5006	A	0.4
8	☐	1000.000	1002.770	14736263.18	1.0129	A	0.2
9	☐			1377.91	0.0001	P	7.6

$$y = 0.0010 * x + 3.6989E-006$$

$$R = 1.0000$$

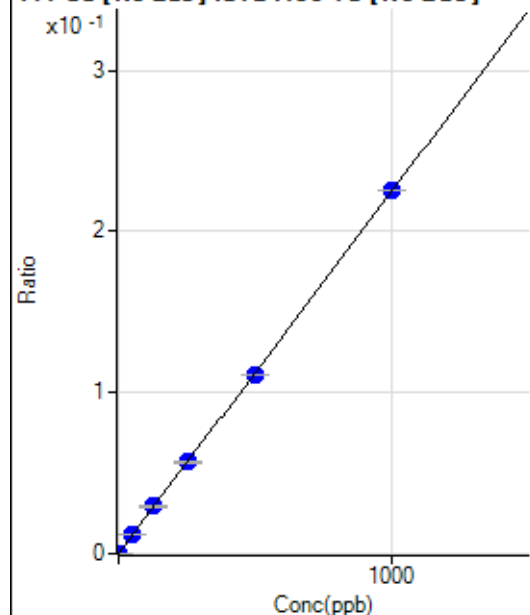
$$DL = 0.004381$$

$$BEC = 0.003662$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1884.57	0.0001	P	3.7
2	☒	0.100		2471.18	0.0002	P	4.3
3	☐	1.000	1.050	5297.03	0.0004	P	2.9
4	☐	50.000	53.585	175034.01	0.0122	P	0.2
5	☐	125.000	129.864	421340.27	0.0293	P	0.4
6	☐	250.000	252.526	804104.51	0.0568	P	0.9
7	☐	500.000	493.337	1584559.52	0.1109	P	0.7
8	☐	1000.000	1001.912	3274978.25	0.2251	P	0.2
9	☐			2524.35	0.0002	P	2.3

$$y = 2.2454\text{E-}004 * x + 1.3200\text{E-}004$$

$$R = 0.9999$$

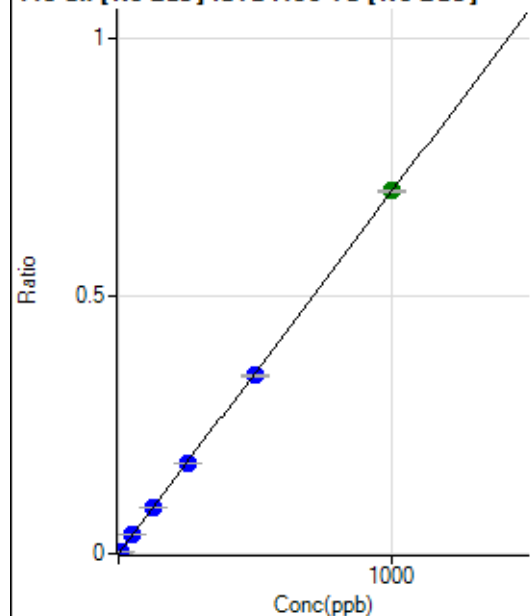
$$DL = 0.06584$$

$$BEC = 0.5879$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2191.94	0.0002	P	3.6
2	☐	0.500	0.376	6009.93	0.0004	P	4.4
3	☐	5.000	4.980	52507.65	0.0036	P	2.3
4	☐	50.000	52.490	531983.18	0.0370	P	0.5
5	☐	125.000	127.240	1285971.45	0.0894	P	0.7
6	☐	250.000	249.479	2477936.06	0.1751	P	1.3
7	☐	500.000	493.181	4944638.65	0.3461	P	0.7
8	☐	1000.000	1003.136	10238793.46	0.7038	A	0.3
9	☐			4631.53	0.0003	P	1.4

$$y = 7.0141\text{E-}004 * x + 1.5353\text{E-}004$$

$$R = 1.0000$$

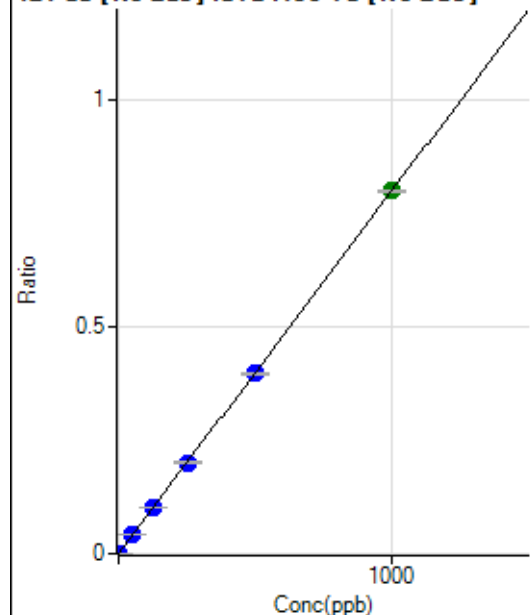
$$DL = 0.02345$$

$$BEC = 0.2189$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	250.01	0.0000	P	36.
2	☐	0.200	0.164	2139.15	0.0001	P	3.1
3	☐	2.000	1.916	22304.72	0.0015	P	1.4
4	☐	50.000	51.901	596906.19	0.0415	P	0.5
5	☐	125.000	126.915	1458715.74	0.1014	P	0.7
6	☐	250.000	251.325	2841018.25	0.2008	P	0.7
7	☐	500.000	496.352	5665913.32	0.3966	P	1.2
8	☐	1000.000	1001.158	11636687.42	0.7998	A	0.3
9	☐			17736.94	0.0013	P	2.6

$$y = 7.9890E-004 * x + 1.7530E-005$$

$$R = 1.0000$$

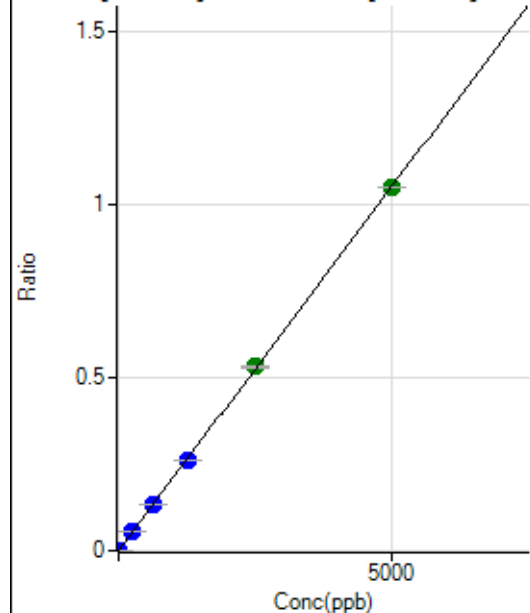
$$DL = 0.02413$$

$$BEC = 0.02194$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	35.
2	☐	1.000	0.967	2981.01	0.0002	P	3.2
3	☐	10.000	10.041	30448.02	0.0021	P	1.0
4	☐	250.000	258.701	782517.15	0.0544	P	0.8
5	☐	625.000	627.843	1898316.82	0.1320	P	0.9
6	☐	1250.000	1240.185	3688254.81	0.2607	P	0.5
7	☐	2500.000	2526.509	7587683.16	0.5311	A	0.4
8	☐	5000.000	4988.409	15254885.76	1.0485	A	0.1
9	☐			2239.17	0.0002	P	7.5

$$y = 2.1019E-004 * x + 3.6908E-006$$

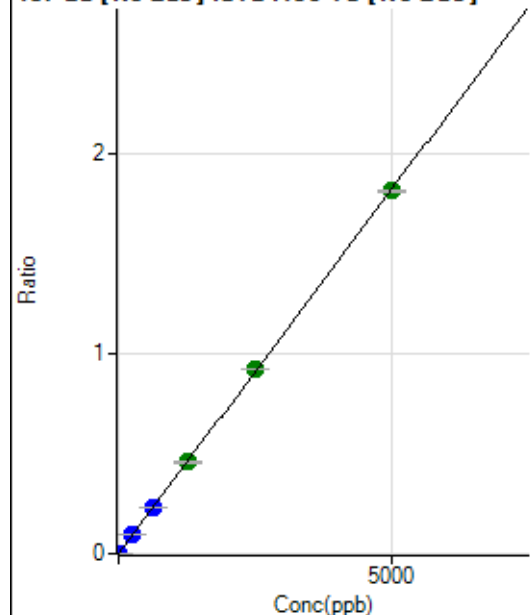
$$R = 1.0000$$

$$DL = 0.01884$$

$$BEC = 0.01756$$

Weight: <None>

Min Conc: 0

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

	R _{jt}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.78	0.0000	P	27.
2	☐	1.000	0.994	5320.72	0.0004	P	2.2
3	☐	10.000	10.026	52745.67	0.0037	P	1.5
4	☐	250.000	258.347	1355348.24	0.0942	P	0.3
5	☐	625.000	630.081	3304250.27	0.2297	P	0.6
6	☐	1250.000	1257.059	6484011.86	0.4583	A	0.8
7	☐	2500.000	2532.042	13188869.83	0.9231	A	0.7
8	☐	5000.000	4981.162	26419626.11	1.8160	A	0.4
9	☐			3986.89	0.0003	P	12.

$$y = 3.6456E-004 * x + 7.1883E-006$$

$$R = 1.0000$$

$$DL = 0.01644$$

$$BEC = 0.01972$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	R _{jt}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.22		P	17.
2	☐			13.33		P	Na
3	☐			22.22		P	34.
4	☐			84.45		P	16.
5	☐			186.67		P	21.
6	☐			251.12		P	11.
7	☐			482.25		P	10.
8	☐			897.84		P	5.6
9	☐			231.12		P	20.

150 Nd [He] No available calibration points

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			21.11		P	39.
2	☐			27.78		P	30.
3	☐			17.78		P	57.
4	☐			47.78		P	29.
5	☐			55.55		P	12.
6	☐			62.23		P	22.
7	☐			91.11		P	8.4
8	☐			143.34		P	20.
9	☐			152.23		P	14.

156 Dy [No Gas] No available calibration points

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			38.89		P	44.
2	☐			36.11		P	35.
3	☐			30.56		P	41.
4	☐			41.67		P	20.
5	☐			80.56		P	21.
6	☐			102.78		P	28.
7	☐			147.23		P	28.
8	☐			216.68		P	16.
9	☐			163.90		P	10.

156 Dy [He] No available calibration points

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			30.00		P	50.
2	☐			47.78		P	20.
3	☐			53.33		P	22.
4	☐			103.34		P	24.
5	☐			106.67		P	18.
6	☐			144.45		P	27.
7	☐			223.34		P	13.
8	☐			360.01		P	10.
9	☐			140.01		P	18.

160 Gd [No Gas] Noavailable calibration poin_

	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			97.23		P	30.
2	☐			175.01		P	24.
3	☐			102.78		P	32.
4	☐			130.56		P	18.
5	☐			155.56		P	6.2
6	☐			127.79		P	32.
7	☐			147.23		P	17.
8	☐			194.45		P	9.9
9	☐			247.24		P	28.

160 Gd [He] No available calibration points

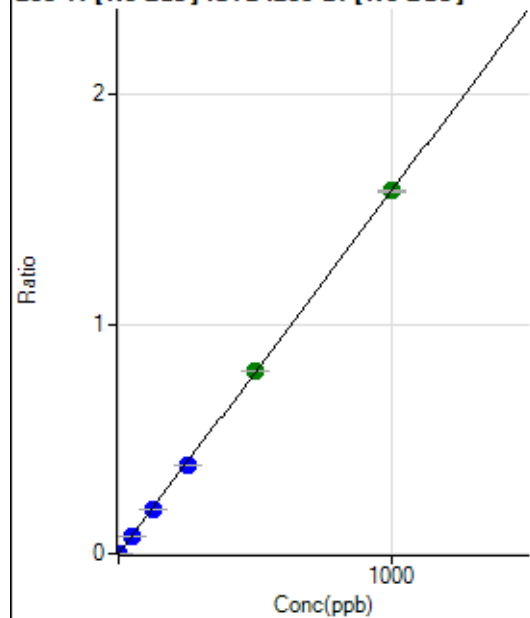
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			284.45		P	10.
2	☐			303.34		P	9.0
3	☐			277.79		P	16.
4	☐			288.90		P	11.
5	☐			246.67		P	6.8
6	☐			316.68		P	1.1
7	☐			300.01		P	15.
8	☐			330.01		P	7.6
9	☐			366.68		P	6.9

164 Er [No Gas] No available calibration points

	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			91.67		P	32.
2	☐			97.23		P	30.
3	☐			122.23		P	27.
4	☐			127.79		P	3.8
5	☐			158.34		P	10.
6	☐			130.56		P	13.
7	☐			166.68		P	13.
8	☐			163.90		P	7.8
9	☐			122.23		P	14.

164 Er [He] No available calibration points

	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			113.34		P	16.
2	☐			126.67		P	16.
3	☐			125.56		P	1.5
4	☐			138.89		P	7.7
5	☐			133.34		P	5.0
6	☐			166.67		P	8.7
7	☐			152.22		P	8.8
8	☐			157.78		P	22.
9	☐			157.78		P	20.

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

	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	980.64	0.0001	P	2.8
2	☐	0.100	0.082	2255.85	0.0002	P	6.2
3	☐	1.000	0.906	14833.86	0.0015	P	2.0
4	☐	50.000	48.863	750335.46	0.0774	P	0.7
5	☐	125.000	121.132	1840461.91	0.1916	P	0.3
6	☐	250.000	242.957	3665529.07	0.3843	P	0.9
7	☐	500.000	504.383	7536563.80	0.7976	A	0.5
8	☐	1000.000	1000.110	14963678.11	1.5815	A	0.5
9	☐			4239.80	0.0005	P	8.2

$$y = 0.0016 * x + 1.0202E-004$$

$$R = 1.0000$$

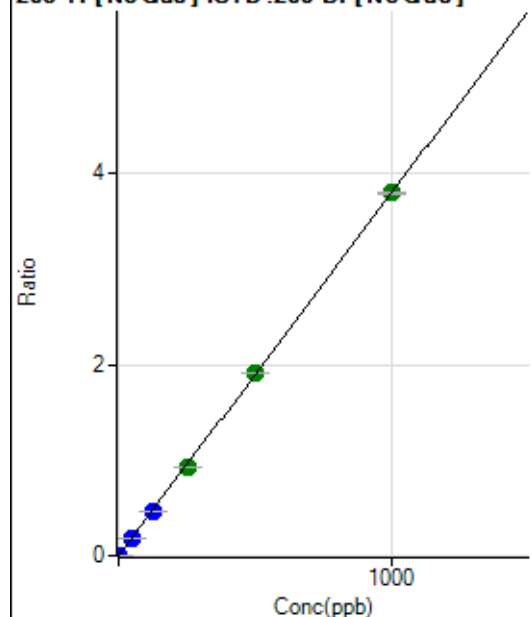
$$DL = 0.005429$$

$$BEC = 0.06452$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1255.68	0.0001	P	6.2
2	☐	0.100	0.090	4601.03	0.0005	P	6.0
3	☐	1.000	0.898	34197.94	0.0035	P	0.3
4	☐	50.000	48.409	1783369.48	0.1839	P	0.2
5	☐	125.000	121.434	4427756.61	0.4610	P	0.4
6	☐	250.000	244.436	8851142.04	0.9279	A	1.2
7	☐	500.000	503.230	18048735.99	1.9102	A	0.4
8	☐	1000.000	1000.301	35925418.17	3.7968	A	0.7
9	☐			8694.97	0.0011	P	11.

$$y = 0.0038 * x + 1.3061E-004$$

$$R = 1.0000$$

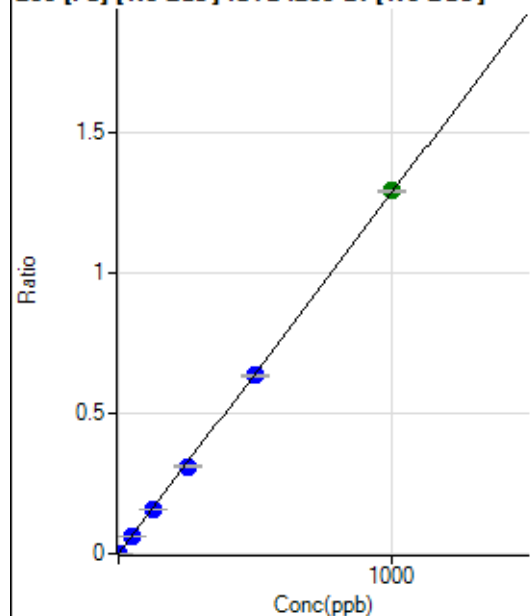
$$DL = 0.006383$$

$$BEC = 0.03441$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1513.10	0.0002	P	13.
2	☐	0.100	0.085	2600.34	0.0003	P	7.2
3	☐	1.000	0.913	12888.13	0.0013	P	0.9
4	☐	50.000	48.894	612245.37	0.0631	P	0.4
5	☐	125.000	121.951	1509832.92	0.1572	P	0.2
6	☐	250.000	242.203	2976920.29	0.3121	P	0.8
7	☐	500.000	493.706	6008963.91	0.6360	P	0.6
8	☐	1000.000	1005.533	12253910.46	1.2951	A	0.3
9	☐			10235.67	0.0013	P	2.1

$$y = 0.0013 * x + 1.5746E-004$$

$$R = 0.9999$$

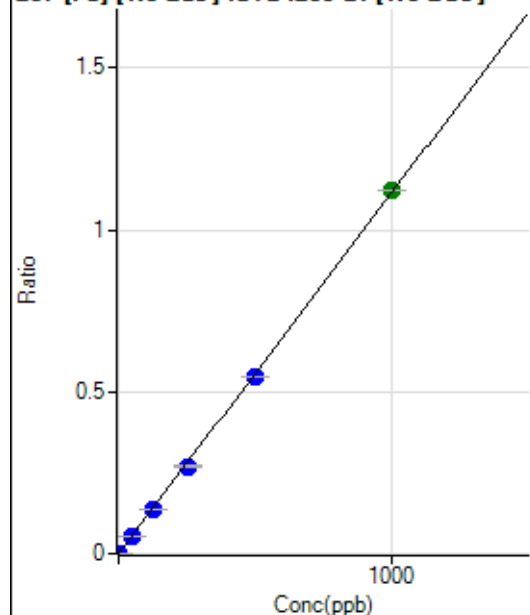
$$DL = 0.04768$$

$$BEC = 0.1223$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1496.43	0.0002	P	10.
2	☒	0.100		2266.93	0.0002	P	1.9
3	☐	1.000	0.880	10977.08	0.0011	P	1.4
4	☐	50.000	48.582	525917.63	0.0542	P	0.5
5	☐	125.000	121.439	1299469.62	0.1353	P	0.6
6	☐	250.000	242.157	2572318.35	0.2697	P	0.5
7	☐	500.000	492.143	5176873.15	0.5479	P	0.3
8	☐	1000.000	1006.405	10598845.84	1.1202	A	0.2
9	☐			8855.07	0.0011	P	2.1

$$y = 0.0011 * x + 1.5568E-004$$

$$R = 0.9999$$

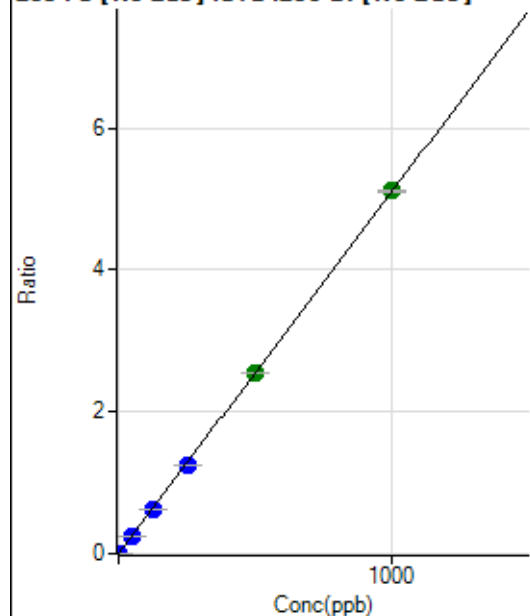
$$DL = 0.04575$$

$$BEC = 0.1399$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5167.19	0.0005	P	12.
2	☐	0.100	0.083	9362.61	0.0010	P	1.6
3	☐	1.000	0.901	49573.95	0.0051	P	0.5
4	☐	50.000	48.719	2412598.13	0.2487	P	0.2
5	☐	125.000	121.143	5932623.79	0.6177	P	0.1
6	☐	250.000	242.407	11786092.48	1.2355	P	0.3
7	☐	500.000	497.933	23974996.37	2.5373	A	0.3
8	☐	1000.000	1003.478	48376365.66	5.1129	A	0.2
9	☐			38716.92	0.0048	P	1.5

$$y = 0.0051 * x + 5.3767E-004$$

$$R = 1.0000$$

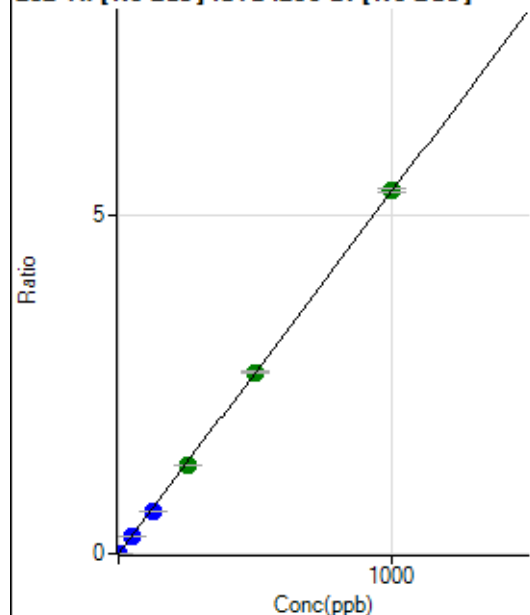
$$DL = 0.03988$$

$$BEC = 0.1055$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3846.99	0.0004	P	9.7
2	☐	0.100	0.072	7639.53	0.0008	P	2.2
3	☐	1.000	0.805	45381.38	0.0047	P	1.8
4	☐	50.000	46.225	2397005.84	0.2471	P	0.3
5	☐	125.000	117.305	6017318.77	0.6266	P	0.6
6	☐	250.000	242.344	12344431.76	1.2940	A	0.4
7	☐	500.000	501.150	25280507.97	2.6755	A	0.4
8	☐	1000.000	1002.490	50634535.39	5.3515	A	0.9
9	☐			12973.49	0.0016	P	6.5

$$y = 0.0053 * x + 4.0034E-004$$

$$R = 0.9999$$

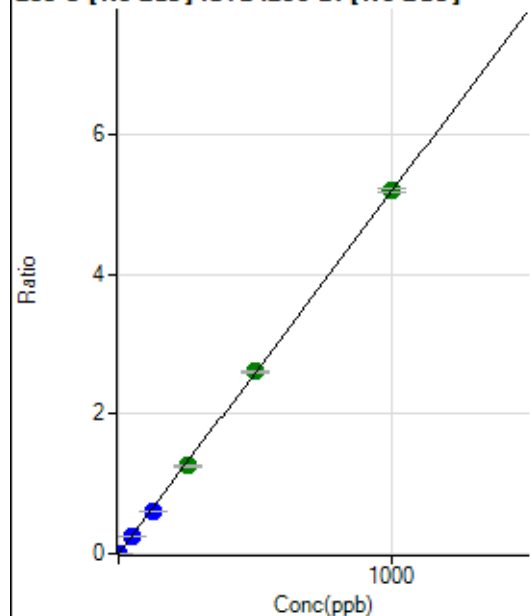
$$DL = 0.02181$$

$$BEC = 0.075$$

Weight: <None>

Min Conc: 0

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



	R _{jc} t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4759.44	0.0005	P	11.
2	☐	0.100	0.080	8872.88	0.0009	P	2.0
3	☐	1.000	0.839	46772.19	0.0048	P	1.1
4	☐	50.000	46.498	2339412.86	0.2412	P	0.4
5	☐	125.000	117.978	5870250.00	0.6112	P	0.3
6	☐	250.000	241.862	11948650.27	1.2525	A	0.3
7	☐	500.000	502.261	24573281.97	2.6005	A	0.4
8	☐	1000.000	1001.957	49080058.04	5.1873	A	1.0
9	☐			9481.62	0.0012	P	3.0

$$y = 0.0052 * x + 4.9521E-004$$

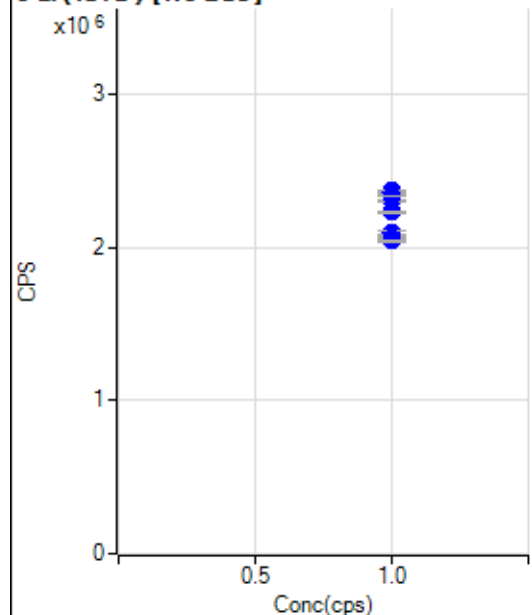
$$R = 0.9999$$

$$DL = 0.03263$$

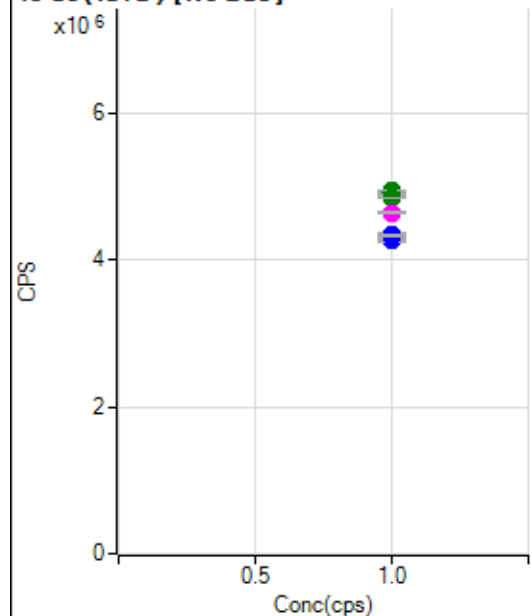
$$BEC = 0.09566$$

Weight: <None>

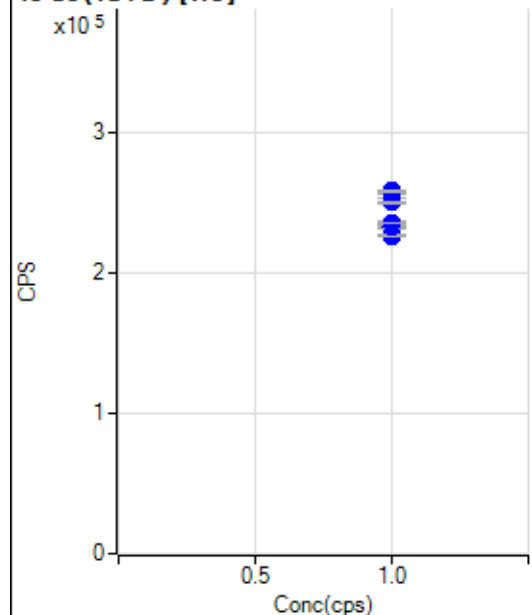
Min Conc: 0

6 Li (ISTD) [No Gas]

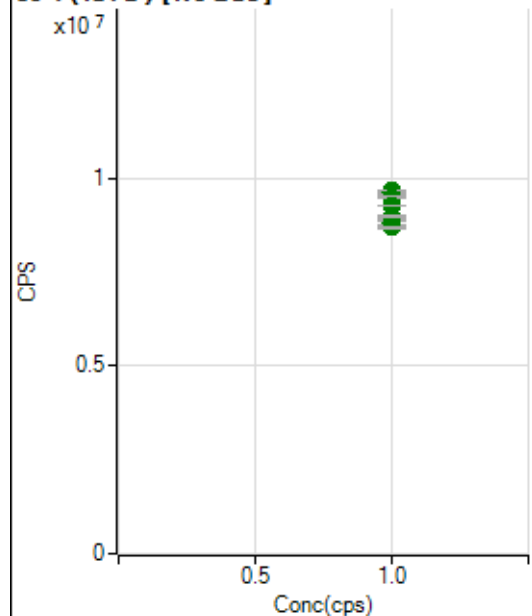
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2304542.58		P	0.4
2	☐	1.000		2368375.47		P	0.7
3	☐	1.000		2356115.55		P	0.9
4	☐	1.000		2335597.59		P	0.5
5	☐	1.000		2233141.86		P	0.5
6	☐	1.000		2097518.92		P	0.9
7	☐	1.000		2060193.82		P	0.5
8	☐	1.000		2063977.85		P	0.6
9	☐	1.000		2041163.01		P	0.6

45 Sc (ISTD) [No Gas]

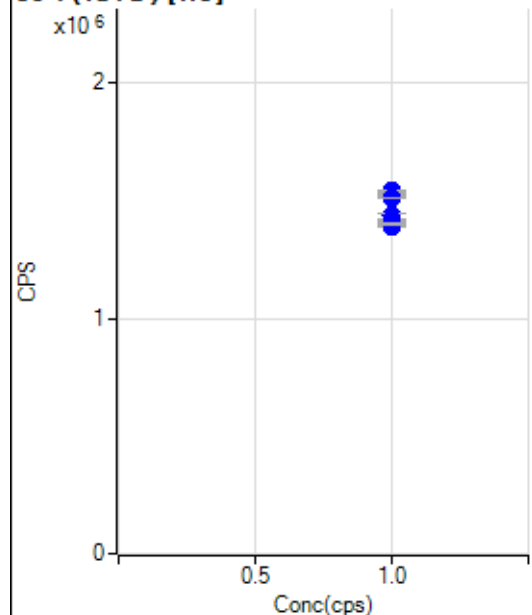
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4864373.89		A	0.2
2	☐	1.000		4941045.90		A	0.7
3	☐	1.000		4928981.06		A	1.3
4	☐	1.000		4846624.98		A	0.3
5	☐	1.000		4643234.26		M	0.5
6	☐	1.000		4345580.83		P	1.2
7	☐	1.000		4258570.97		P	0.8
8	☐	1.000		4313747.75		P	0.8
9	☐	1.000		4332628.22		P	0.7

45 Sc (ISTD) [He]

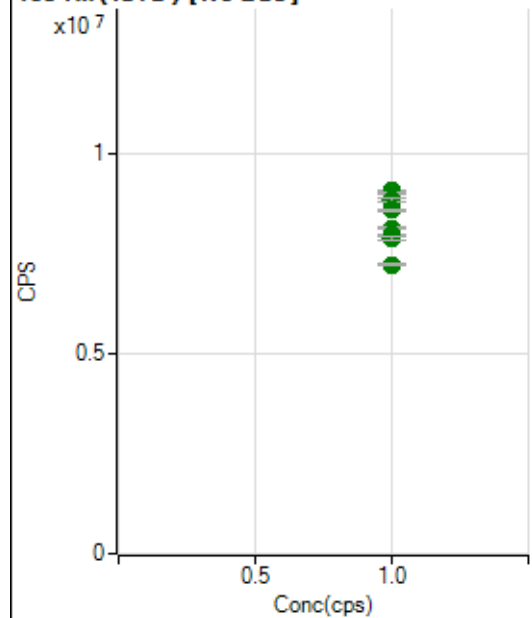
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		253246.45		P	0.2
2	☐	1.000		256196.89		P	0.3
3	☐	1.000		258482.30		P	0.3
4	☐	1.000		250289.26		P	0.7
5	☐	1.000		234778.93		P	1.6
6	☐	1.000		226845.28		P	0.6
7	☐	1.000		226343.08		P	0.5
8	☐	1.000		232769.46		P	0.9
9	☐	1.000		235640.61		P	0.5

89 Y (ISTD) [No Gas]

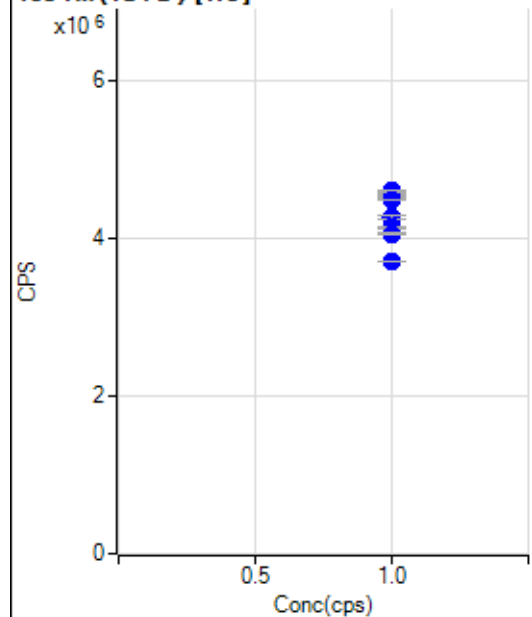
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9516979.79		A	0.1
2	☐	1.000		9671989.86		A	0.6
3	☐	1.000		9636612.77		A	1.0
4	☐	1.000		9509360.69		A	0.2
5	☐	1.000		9273432.01		A	0.3
6	☐	1.000		8882254.80		A	0.3
7	☐	1.000		8824594.73		A	1.0
8	☐	1.000		8977060.28		A	0.6
9	☐	1.000		8694436.61		A	0.7

89 Y (ISTD) [He]

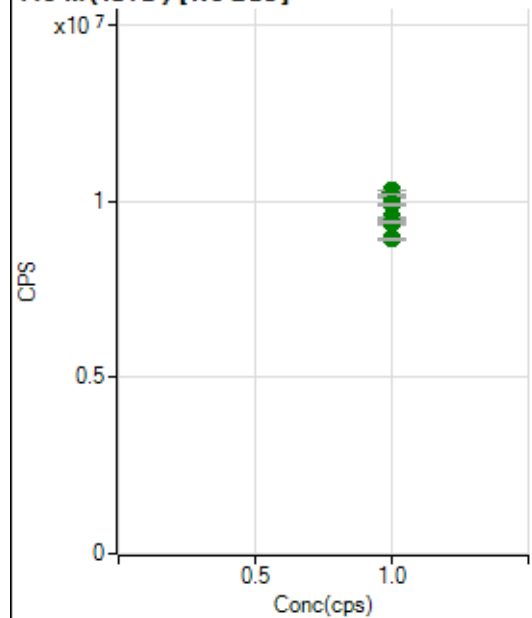
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1518919.78		P	0.2
2	☐	1.000		1536033.93		P	0.5
3	☐	1.000		1543095.22		P	0.5
4	☐	1.000		1513444.70		P	0.1
5	☐	1.000		1435561.72		P	1.5
6	☐	1.000		1398976.86		P	0.7
7	☐	1.000		1390879.55		P	0.4
8	☐	1.000		1419804.16		P	0.7
9	☐	1.000		1406205.64		P	0.5

103 Rh (ISTD) [No Gas]

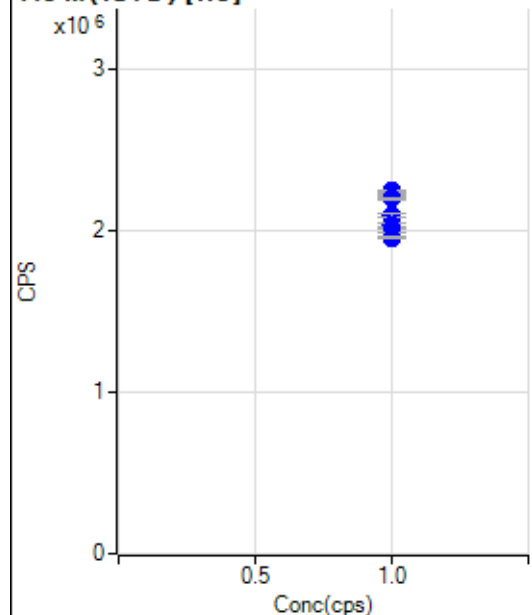
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8886107.23		A	0.2
2	☐	1.000		9069574.60		A	0.8
3	☐	1.000		9016411.75		A	0.9
4	☐	1.000		8852994.47		A	0.8
5	☐	1.000		8583870.94		A	0.5
6	☐	1.000		8137916.50		A	0.7
7	☐	1.000		7961160.59		A	0.7
8	☐	1.000		7887414.15		A	0.9
9	☐	1.000		7229830.28		A	0.8

103 Rh (ISTD) [He]

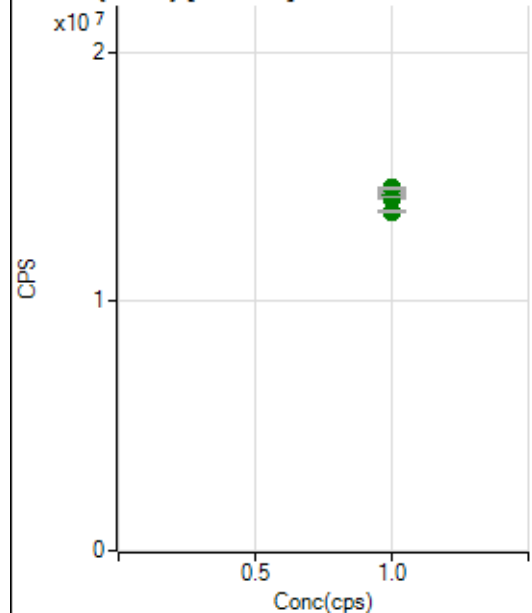
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4526231.18		P	0.6
2	☐	1.000		4565289.03		P	0.2
3	☐	1.000		4596000.70		P	0.7
4	☐	1.000		4476165.28		P	0.3
5	☐	1.000		4264308.27		P	0.8
6	☐	1.000		4135311.92		P	0.5
7	☐	1.000		4055925.12		P	0.2
8	☐	1.000		4050816.30		P	0.6
9	☐	1.000		3699773.66		P	0.3

115 In (ISTD) [No Gas]

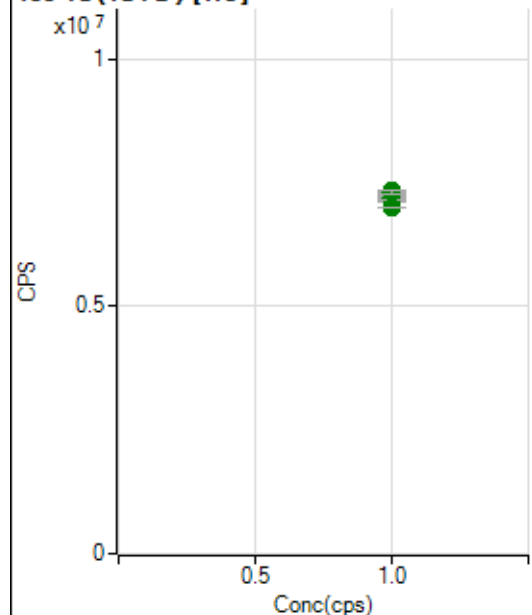
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10148867.89		A	0.4
2	☐	1.000		10304572.38		A	0.1
3	☐	1.000		10261295.63		A	0.9
4	☐	1.000		10182046.52		A	0.6
5	☐	1.000		9930885.92		A	0.5
6	☐	1.000		9537164.06		A	0.4
7	☐	1.000		9414226.03		A	1.3
8	☐	1.000		9403081.92		A	0.6
9	☐	1.000		8937076.42		A	0.6

115 In (ISTD) [He]

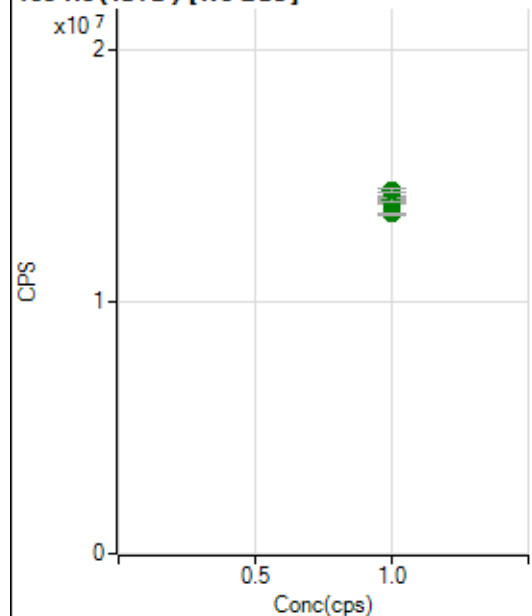
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2210744.98		P	0.2
2	☐	1.000		2230528.89		P	0.4
3	☐	1.000		2242904.79		P	0.7
4	☐	1.000		2196249.07		P	0.3
5	☐	1.000		2088663.73		P	1.0
6	☐	1.000		2032174.39		P	0.8
7	☐	1.000		2010924.86		P	0.3
8	☐	1.000		1987325.86		P	0.3
9	☐	1.000		1953507.05		P	0.4

159 Tb (ISTD) [No Gas]

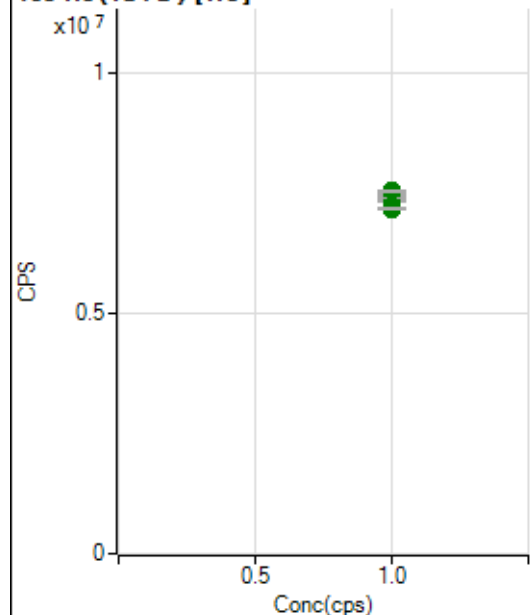
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14279487.98		A	0.7
2	☐	1.000		14398731.59		A	0.6
3	☐	1.000		14402677.01		A	1.2
4	☐	1.000		14389397.98		A	0.8
5	☐	1.000		14384352.29		A	0.1
6	☐	1.000		14148674.79		A	0.5
7	☐	1.000		14288259.65		A	1.3
8	☐	1.000		14548839.78		A	0.7
9	☐	1.000		13599898.27		A	0.3

159 Tb (ISTD) [He]

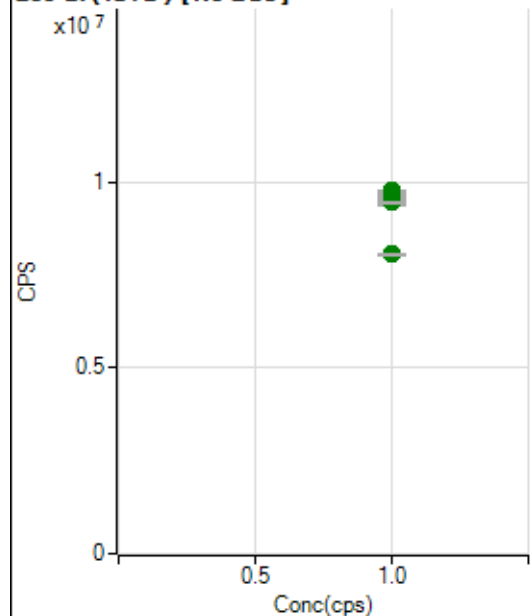
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7267444.27		A	0.3
2	☐	1.000		7284778.36		A	0.2
3	☐	1.000		7312248.43		A	0.5
4	☐	1.000		7331400.80		A	0.3
5	☐	1.000		7155109.76		A	1.1
6	☐	1.000		7120340.66		A	0.5
7	☐	1.000		7195454.61		A	0.9
8	☐	1.000		7304698.36		A	0.8
9	☐	1.000		6987306.77		A	0.1

165 Ho (ISTD) [No Gas]

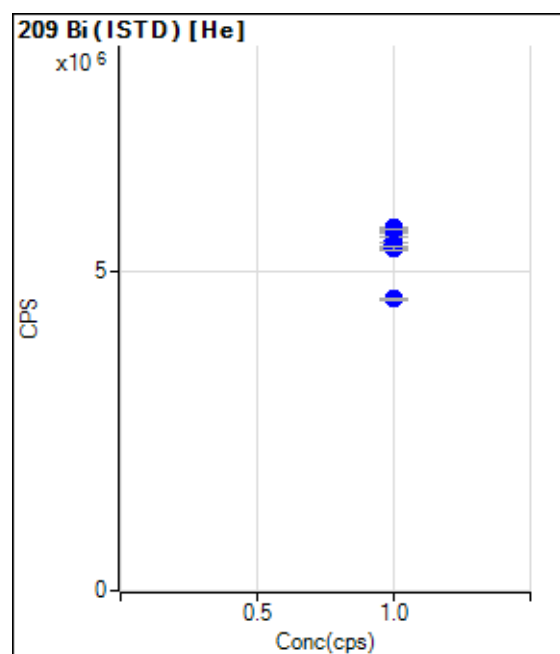
	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		13946774.10		A	0.9
2	☐	1.000		14150381.91		A	0.5
3	☐	1.000		14119864.21		A	0.5
4	☐	1.000		14165493.02		A	0.6
5	☐	1.000		14154361.60		A	0.4
6	☐	1.000		14000972.54		A	0.7
7	☐	1.000		14051684.52		A	1.0
8	☐	1.000		14419903.79		A	1.2
9	☐	1.000		13498621.48		A	0.9

165 Ho (ISTD) [He]

	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7423040.45		A	0.3
2	☐	1.000		7423679.61		A	0.3
3	☐	1.000		7448747.11		A	0.4
4	☐	1.000		7486725.51		A	0.2
5	☐	1.000		7319982.25		A	0.9
6	☐	1.000		7352703.92		A	0.3
7	☐	1.000		7392688.01		A	0.2
8	☐	1.000		7532953.01		A	0.5
9	☐	1.000		7166429.34		A	0.7

209 Bi (ISTD) [No Gas]

	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9613188.61		A	0.7
2	☐	1.000		9760188.05		A	0.4
3	☐	1.000		9666380.90		A	0.7
4	☐	1.000		9699006.10		A	0.5
5	☐	1.000		9604004.85		A	0.6
6	☐	1.000		9539578.89		A	1.0
7	☐	1.000		9449131.94		A	1.6
8	☐	1.000		9461653.96		A	0.6
9	☐	1.000		8056744.95		A	0.7



	Rjc t	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5614009.50		P	0.6
2	☐	1.000		5648590.12		P	0.3
3	☐	1.000		5673357.07		P	0.1
4	☐	1.000		5657231.79		P	0.4
5	☐	1.000		5480658.32		P	1.8
6	☐	1.000		5424715.23		P	1.0
7	☐	1.000		5371083.32		P	0.7
8	☐	1.000		5344458.74		P	0.9
9	☐	1.000		4570061.04		P	0.6

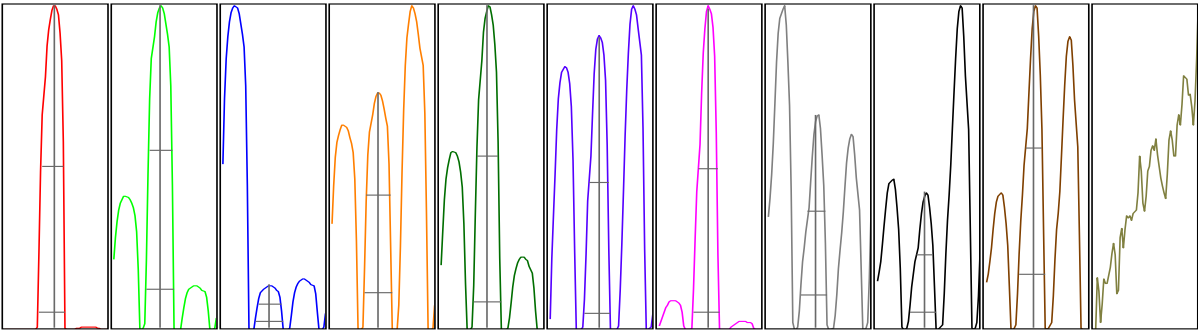
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7072719 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]					
Mass	Count	RSD%	RSD%	RSD%	
	(Mean)	(Actual)	(Required)	(Flag)	
9	7724	0.87	5.00		
24	117508	1.12	5.00		
25	16037	1.18	5.00		
26	18553	1.17	5.00		
59	72144	1.06	5.00		
113	11993	1.44	5.00		
115	147695	2.97	5.00		
206	39176	1.10	5.00		
207	37691	1.09	5.00		
208	85594	0.78	5.00		
220	253	2.69			

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
9	7636	7666	7787	7765	7763
24	116144	116033	118777	118311	118274
25	15819	15848	16224	16156	16137
26	18264	18380	18768	18662	18689
59	71457	71224	72915	72771	72353
113	12186	11953	12138	11935	11756
115	153693	149187	148429	145088	142077
206	38723	38701	39447	39402	39608
207	37210	37329	37926	37803	38186
208	85030	84717	86134	86077	86011
220	243	256	260	257	251

Integration Time [sec] = 0.1



Mass	Peak	Axis	Axis	Axis	Width-X%	Width-X%	Width-
	Height	(Actual)	(Required)	(Flag)	(Actual)	(Required)	X% (Flag)
9	12415	9.00	8.9 - 9.1		0.786	0.900	
24	180797	23.90	23.9 - 24.1		0.808	0.900	
25	24345	24.90	24.9 - 25.1		0.796	0.900	
26	28180	25.90	25.9 - 26.1		0.799	0.900	
59	121883	58.90	58.9 - 59.1		0.800	0.900	
113	22349	113.00	112.9 - 113.1		0.766	0.900	
115	277814	115.00	114.9 - 115.1		0.769	0.900	
206	76041	205.95	205.9 - 206.1		0.752	0.900	
207	69368	206.95	206.9 - 207.1		0.754	0.900	
208	164776	207.95	207.9 - 208.1		0.749	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	8.2	V	Deflect	14.0	V
Extract 2	-140.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	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	150	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	21441	0.39	
89	43106	0.69	
205	35123	0.71	

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
59	21364	21427	21362	21497	21553
89	42822	43006	43273	42887	43541
205	34829	34986	35317	35048	35436

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.1	V	Deflect	1.8	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			