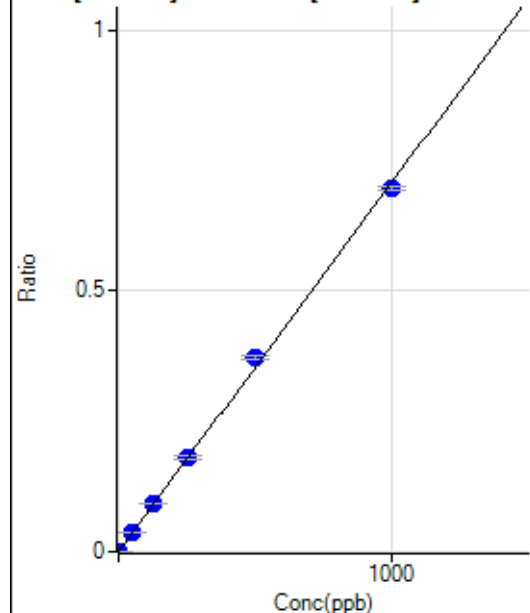


Batch Folder: D:\ICP-MS Data\1\DATA\P7031220P.b\
Analysis File: P7031120P.batch.bin
DA Date-Time: 2020-03-13 15:05:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-03-12 13:07:58
2	004CALS.d	S01	2020-03-12 13:11:31
3	005CALS.d	S02	2020-03-12 13:16:08
4	006CALS.d	S03	2020-03-12 13:20:03
5	007CALS.d	S04	2020-03-12 13:24:29
6	008CALS.d	S05	2020-03-12 13:28:10
7	009CALS.d	S06	2020-03-12 13:31:43
8	010CALS.d	S07	2020-03-12 13:35:12
9	011CALS.d	S08	2020-03-12 13:38:42

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	58.4
2	☐	0.100	0.092	401.87	0.0001	P	9.4
3	☐	1.000	1.015	3791.31	0.0007	P	2.7
4	☐	50.000	52.539	190128.91	0.0371	P	0.9
5	☐	125.000	129.822	475212.85	0.0918	P	1.6
6	☐	250.000	256.089	923928.78	0.1810	P	3.3
7	☐	500.000	527.995	1788784.60	0.3732	P	2.0
8	☐	1000.000	983.751	3385490.79	0.6953	P	0.9
9	☐			570.40	0.0001	P	10.6

$$y = 7.0674\text{E-}004 * x + 1.2528\text{E-}005$$

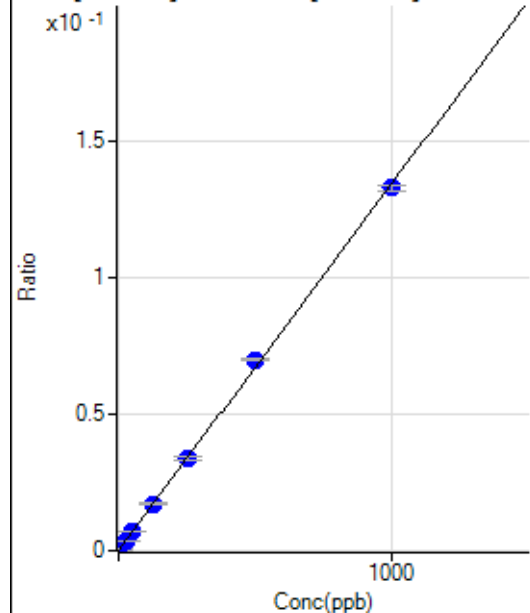
$$R = 0.9994$$

$$DL = 0.03106$$

$$BEC = 0.01773$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	463.91	0.0001	P	16.3
2	☐	2.500	2.544	2261.37	0.0004	P	9.0
3	☐	25.000	24.182	17371.71	0.0033	P	1.8
4	☐	50.000	51.728	36069.24	0.0070	P	2.6
5	☐	125.000	125.858	88077.15	0.0170	P	3.2
6	☐	250.000	250.623	172421.46	0.0338	P	3.5
7	☐	500.000	520.531	335831.92	0.0701	P	1.4
8	☐	1000.000	989.405	647972.78	0.1331	P	1.3
9	☐			16014.69	0.0037	P	9.7

$$y = 1.3439\text{E-}004 * x + 9.5534\text{E-}005$$

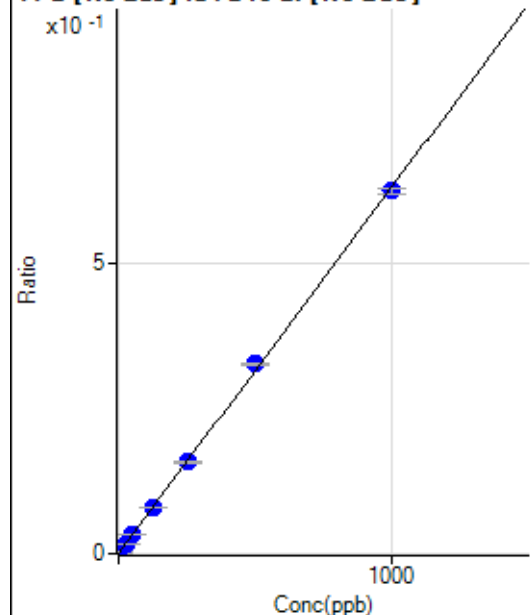
$$R = 0.9997$$

$$DL = 0.3482$$

$$BEC = 0.7109$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2114.13	0.0004	P	7.4
2	☐	2.500	2.340	9884.19	0.0019	P	0.7
3	☐	25.000	24.563	82669.09	0.0159	P	1.5
4	☐	50.000	51.746	169212.91	0.0331	P	1.5
5	☐	125.000	125.315	411345.32	0.0794	P	2.3
6	☐	250.000	249.995	806779.53	0.1580	P	2.9
7	☐	500.000	518.417	1568933.04	0.3272	P	1.3
8	☐	1000.000	990.677	3043322.74	0.6250	P	1.3
9	☐			73754.35	0.0172	P	9.6

$$y = 6.3041\text{E-}004 * x + 4.3600\text{E-}004$$

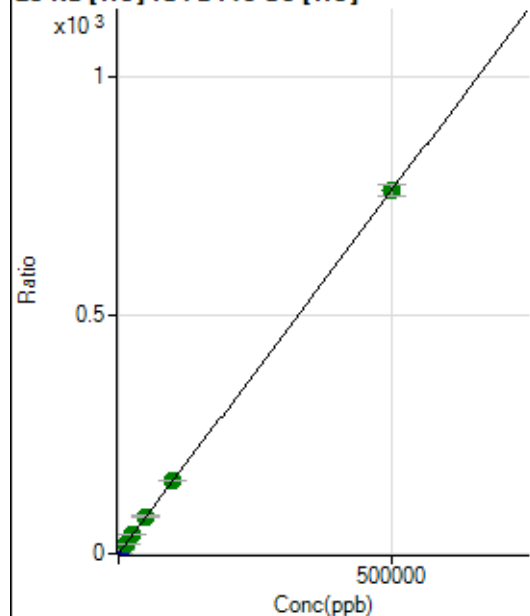
$$R = 0.9998$$

$$DL = 0.1537$$

$$BEC = 0.6916$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10189.97	0.0297	P	8.1
2	☐	50.000	51.652	38578.35	0.1082	P	1.7
3	☐	500.000	548.152	306264.02	0.8631	P	0.9
4	☐	5000.000	5321.152	2945159.94	8.1203	P	0.7
5	☐	12500.000	13283.629	7441473.00	20.2269	A	0.5
6	☐	25000.000	25856.490	14920134.36	39.3434	A	0.8
7	☐	50000.000	51038.433	30201959.36	77.6316	A	3.6
8	☐	100000.00	100129.62	58599965.89	152.2728	A	1.1
9	☐	500000.00	499804.55	281001714.6	759.9629	A	3.3

$$y = 0.0015 * x + 0.0297$$

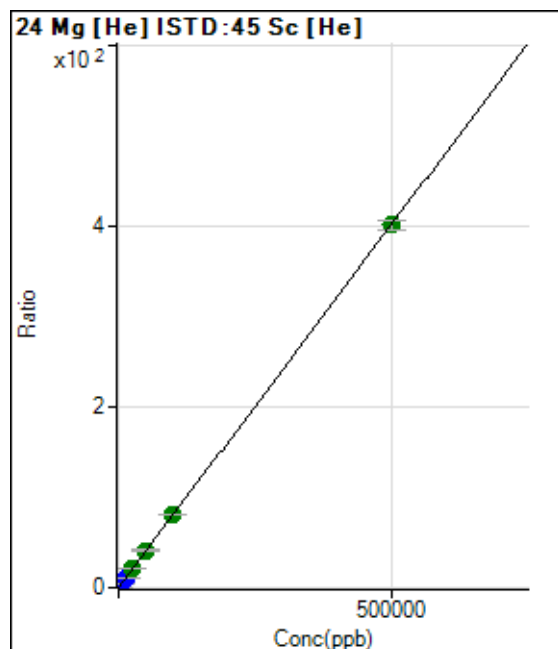
$$R = 1.0000$$

$$DL = 4.768$$

$$BEC = 19.5$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0004	P	23.1
2	☐	50.000	53.442	15450.26	0.0433	P	2.6
3	☐	500.000	555.623	158667.21	0.4472	P	1.3
4	☐	5000.000	5480.074	1598449.77	4.4071	P	0.7
5	☐	12500.000	13588.749	4020279.91	10.9277	P	0.4
6	☐	25000.000	26377.616	8044370.06	21.2118	A	0.6
7	☐	50000.000	51455.507	16099059.73	41.3781	A	3.2
8	☐	100000.00	101189.58	31315639.94	81.3716	A	0.7
9	☐	500000.00	499515.57	148546022.7	401.6842	A	2.5

$$y = 8.0415\text{E-}004 * x + 3.5565\text{E-}004$$

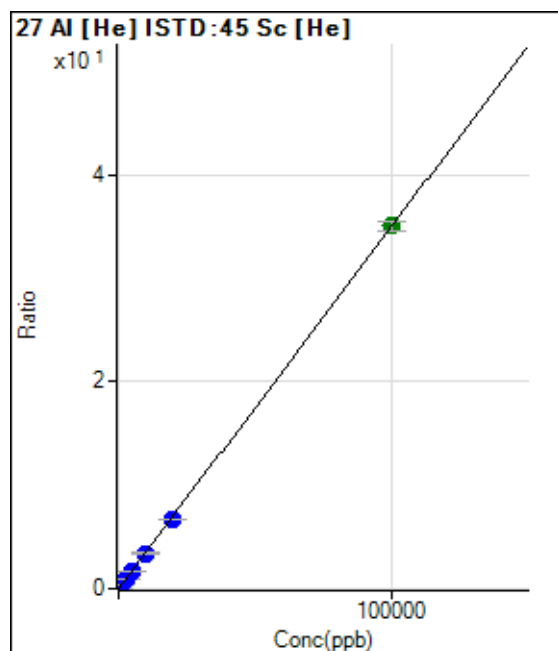
$$R = 1.0000$$

$$DL = 0.306$$

$$BEC = 0.4423$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0001	P	41.9
2	☐	2.000	1.877	277.79	0.0008	P	15.4
3	☐	20.000	21.226	2678.13	0.0075	P	7.7
4	☐	1000.000	1029.511	130633.14	0.3602	P	1.9
5	☐	2500.000	2569.703	330700.54	0.8989	P	1.0
6	☐	5000.000	4977.835	660293.80	1.7411	P	0.5
7	☐	10000.000	9758.729	1328020.59	3.4133	P	3.2
8	☐	20000.000	19194.421	2583578.01	6.7134	P	0.7
9	☐	100000.00	100184.31	12958099.34	35.0399	A	2.5

$$y = 3.4975\text{E-}004 * x + 1.2250\text{E-}004$$

$$R = 1.0000$$

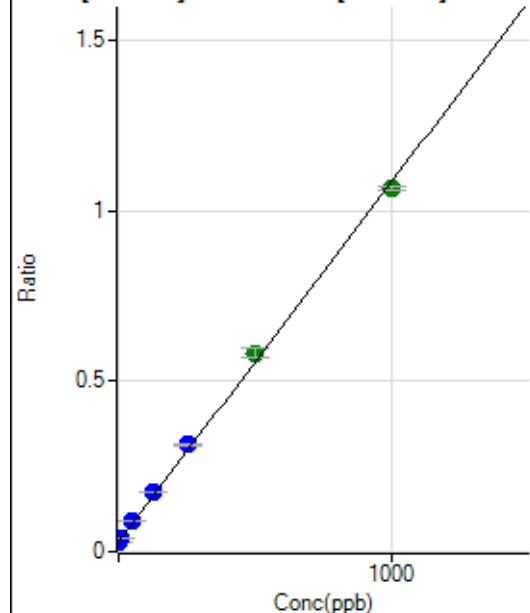
$$DL = 0.4408$$

$$BEC = 0.3502$$

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	297200.36	0.0286	P	3.8
2	☐	1.000	0.519	309682.67	0.0291	P	0.9
3	☐	10.000	10.381	415838.19	0.0396	P	0.9
4	☐	50.000	56.208	936673.91	0.0880	P	0.8
5	☐	125.000	138.304	1884582.83	0.1749	P	0.4
6	☐	250.000	269.762	3481483.54	0.3139	P	2.5
7	☐	500.000	524.990	6236096.62	0.5839	A	4.7
8	☐	1000.000	980.588	11934546.01	1.0658	A	1.0
9	☐			712521.28	0.0705	P	1.1

$$y = 0.0011 * x + 0.0286$$

$$R = 0.9993$$

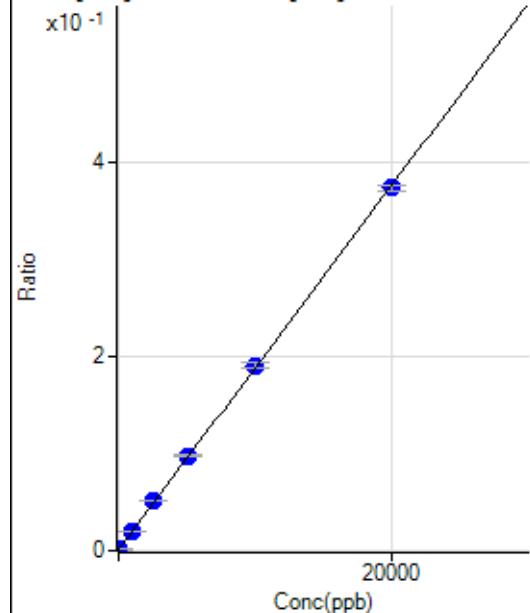
$$DL = 3.121$$

$$BEC = 27.02$$

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	-18.062	166.68	0.0005	P	28.2
2	☐	0.000	-19.597	163.90	0.0005	P	17.5
3	☐	0.000	37.659	544.48	0.0015	P	12.3
4	☐	1000.000	1010.886	7190.92	0.0198	P	2.2
5	☐	2500.000	2681.769	18846.02	0.0512	P	1.1
6	☐	5000.000	5160.478	37094.34	0.0978	P	2.3
7	☐	10000.000	10120.043	74316.09	0.1910	P	3.6
8	☐	20000.000	19876.594	144068.03	0.3744	P	1.4
9	☐			263.91	0.0007	P	14.6

$$y = 1.8793E-005 * x + 8.2771E-004$$

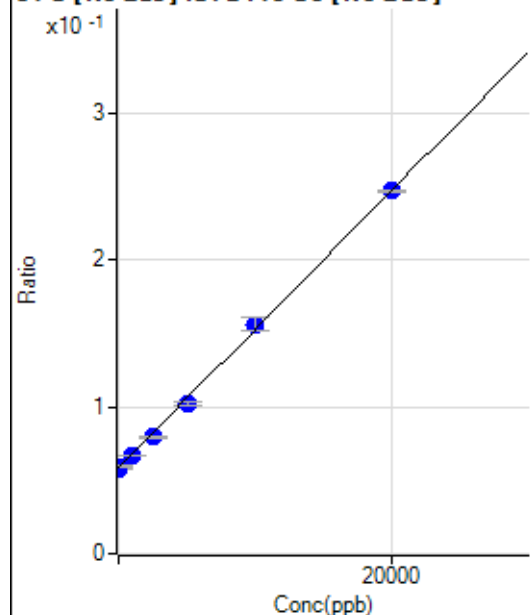
$$R = 0.9999$$

$$DL = 21.66$$

$$BEC = 44.04$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.405	607677.20	0.0584	P	4.5
2	☐	0.000	-107.430	610552.66	0.0574	P	0.6
3	☐	0.000	107.025	624926.62	0.0595	P	1.2
4	☐	1000.000	910.773	713269.30	0.0670	P	0.6
5	☐	2500.000	2216.515	855189.20	0.0794	P	1.3
6	☐	5000.000	4580.489	1127474.55	0.1017	P	2.1
7	☐	10000.000	10368.964	1668763.60	0.1563	P	5.2
8	☐	20000.000	19960.293	2763283.78	0.2468	P	0.4
9	☐			491807.03	0.0487	P	1.0

$$y = 9.4353\text{E-}006 * x + 0.0584$$

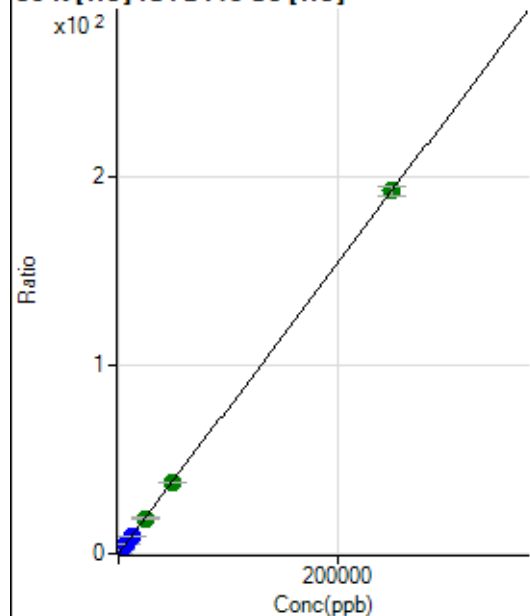
R = 0.9995

DL = 388.9

BEC = 6194

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19101.86	0.0556	P	8.9
2	☐	50.000	46.694	32664.78	0.0916	P	2.8
3	☐	500.000	518.983	161661.32	0.4556	P	1.0
4	☐	2500.000	2493.986	717270.22	1.9776	P	0.6
5	☐	6250.000	6337.986	1817418.81	4.9400	P	0.4
6	☐	12500.000	12494.132	3672593.10	9.6843	P	0.5
7	☐	25000.000	24471.681	7358295.74	18.9149	A	3.8
8	☐	50000.000	48585.061	14430595.11	37.4980	A	0.8
9	☐	250000.00	250333.93	71364748.13	192.9769	A	2.5

$$y = 7.7066\text{E-}004 * x + 0.0556$$

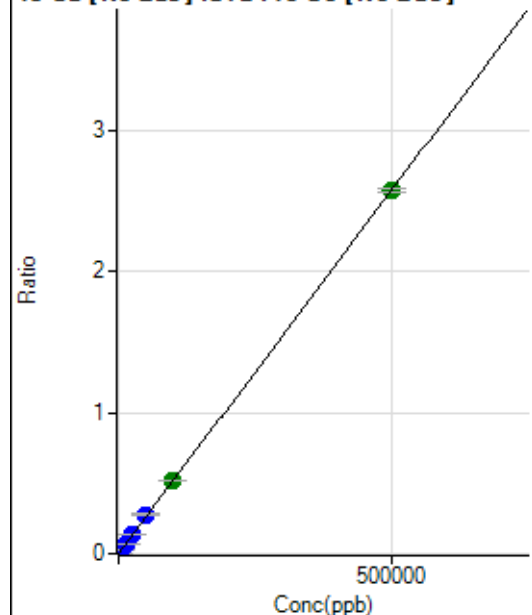
R = 1.0000

DL = 19.31

BEC = 72.19

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	325.02	0.0000	P	25.3
2	☐	50.000	52.947	3228.25	0.0003	P	2.8
3	☐	500.000	539.599	29491.35	0.0028	P	2.2
4	☐	5000.000	5261.777	288190.26	0.0271	P	0.3
5	☐	12500.000	13035.729	722638.23	0.0671	P	1.9
6	☐	25000.000	25908.294	1477779.76	0.1332	P	1.8
7	☐	50000.000	53719.873	2950207.23	0.2762	P	4.7
8	☐	100000.00	101218.60	5827840.15	0.5205	A	1.2
9	☐	500000.00	499322.82	25950343.46	2.5674	A	1.2

$$y = 5.1417\text{E-}006 * x + 3.1416\text{E-}005$$

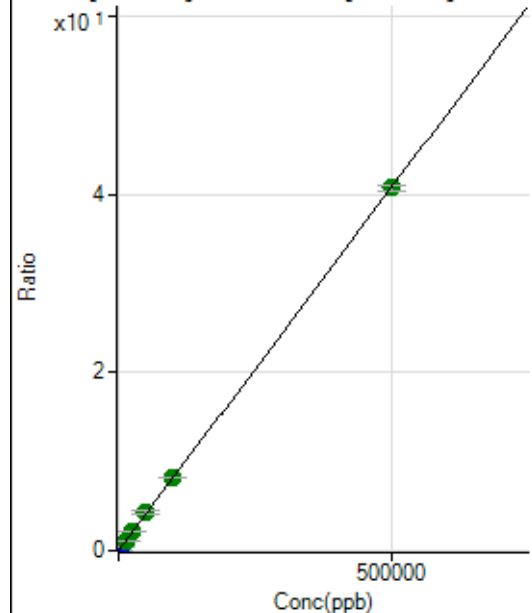
$$R = 1.0000$$

$$DL = 4.638$$

$$BEC = 6.11$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6993.61	0.0007	P	6.4
2	☐	50.000	51.451	51797.48	0.0049	P	1.0
3	☐	500.000	530.152	461959.65	0.0439	P	0.5
4	☐	5000.000	5265.662	4580527.23	0.4305	P	0.5
5	☐	12500.000	12904.138	11358519.96	1.0540	A	1.6
6	☐	25000.000	25616.421	23198415.45	2.0917	A	2.1
7	☐	50000.000	53281.048	46431031.59	4.3500	A	6.4
8	☐	100000.00	101113.87	92429802.07	8.2546	A	1.1
9	☐	500000.00	499405.50	412049892.5	40.7671	A	1.6

$$y = 8.1630\text{E-}005 * x + 6.7241\text{E-}004$$

$$R = 1.0000$$

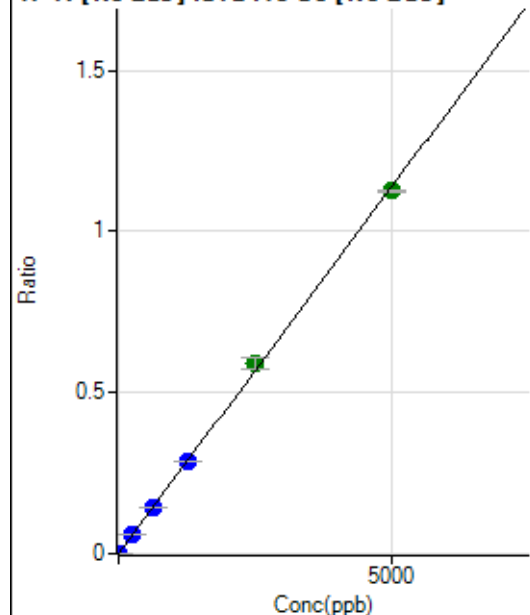
$$DL = 1.592$$

$$BEC = 8.237$$

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	130.56	0.0000	P	29.0
2	☐	0.500	0.547	1455.69	0.0001	P	5.3
3	☐	5.000	5.304	12814.42	0.0012	P	3.2
4	☐	250.000	251.375	608554.40	0.0572	P	0.4
5	☐	625.000	635.783	1558715.55	0.1446	P	1.0
6	☐	1250.000	1259.531	3177869.82	0.2865	P	1.9
7	☐	2500.000	2595.137	6301943.46	0.5904	A	6.1
8	☐	5000.000	4948.632	12605680.58	1.1257	A	0.5
9	☐			6223.80	0.0006	P	1.7

$$y = 2.2748E-004 * x + 1.2480E-005$$

$$R = 0.9997$$

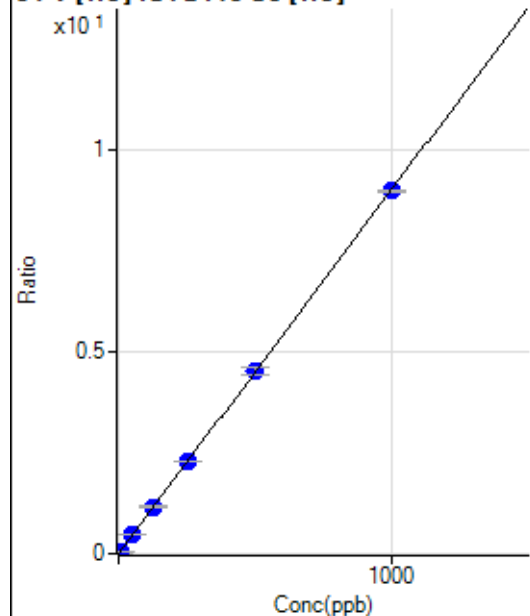
$$DL = 0.04774$$

$$BEC = 0.05486$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	64.9
2	☐	0.500	0.542	1749.03	0.0049	P	5.4
3	☐	5.000	5.454	17440.47	0.0491	P	0.7
4	☐	50.000	51.286	167546.33	0.4619	P	0.6
5	☐	125.000	129.437	428917.99	1.1659	P	0.6
6	☐	250.000	254.149	868119.81	2.2891	P	0.3
7	☐	500.000	503.065	1762697.75	4.5311	P	3.8
8	☐	1000.000	996.809	3455184.08	8.9782	P	0.5
9	☐			1644.56	0.0045	P	7.0

$$y = 0.0090 * x + 2.2292E-005$$

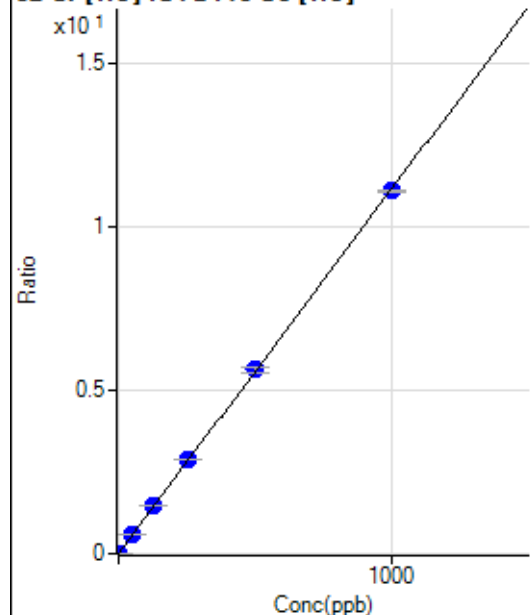
$$R = 1.0000$$

$$DL = 0.004816$$

$$BEC = 0.002475$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1358.98	0.0040	P	8.1
2	☐	0.200	0.203	2217.98	0.0062	P	1.2
3	☐	2.000	2.124	9812.28	0.0277	P	2.1
4	☐	50.000	51.997	211857.01	0.5841	P	0.5
5	☐	125.000	131.337	540578.37	1.4694	P	0.6
6	☐	250.000	257.040	1089102.80	2.8719	P	0.8
7	☐	500.000	504.048	2189586.38	5.6280	P	3.4
8	☐	1000.000	995.324	4275352.12	11.1094	P	0.4
9	☐			109330.14	0.2956	P	2.7

$$y = 0.0112 * x + 0.0040$$

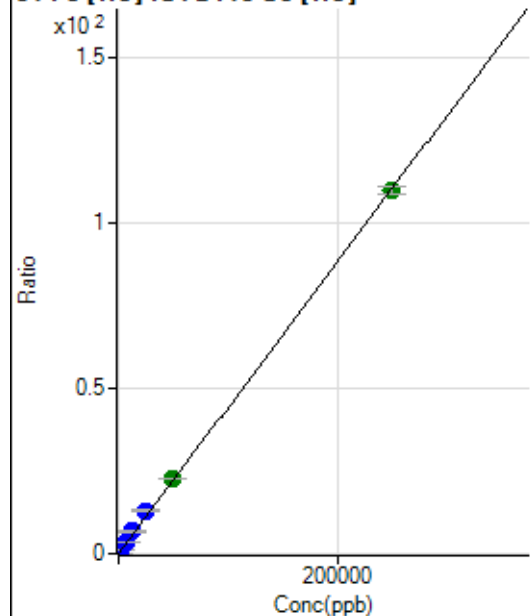
$$R = 0.9999$$

$$DL = 0.08637$$

$$BEC = 0.3546$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	503.87	0.0015	P	12.7
2	☐	5.000	7.276	1668.52	0.0047	P	8.2
3	☐	50.000	68.783	11286.13	0.0318	P	2.6
4	☐	2500.000	3109.653	498016.27	1.3731	P	0.8
5	☐	6250.000	7788.325	1264382.04	3.4368	P	0.3
6	☐	12500.000	15178.850	2539595.29	6.6966	P	0.3
7	☐	25000.000	29625.712	5084503.23	13.0689	P	3.4
8	☐	50000.000	51917.862	8813507.47	22.9017	A	0.4
9	☐	250000.00	248975.35	40616118.02	109.8208	A	2.1

$$y = 4.4109E-004 * x + 0.0015$$

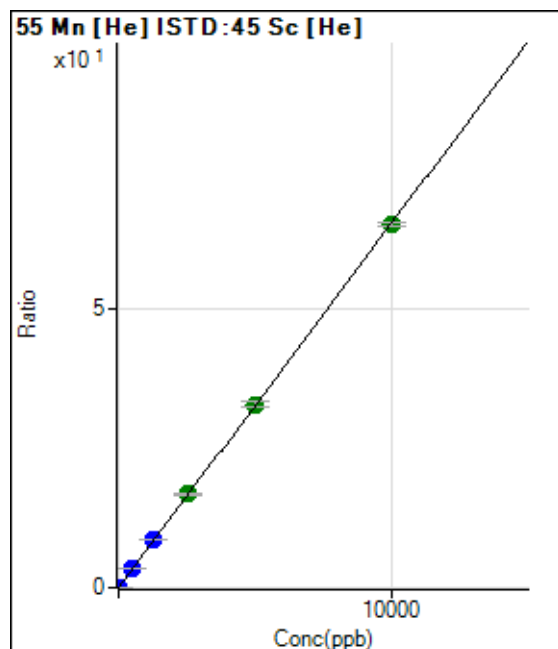
$$R = 0.9998$$

$$DL = 1.272$$

$$BEC = 3.333$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0001	P	49.6
2	☐	0.100	0.116	301.12	0.0008	P	15.4
3	☐	1.000	1.067	2512.48	0.0071	P	5.2
4	☐	500.000	524.704	1246709.70	3.4373	P	0.4
5	☐	1250.000	1311.361	3160461.76	8.5906	P	0.4
6	☐	2500.000	2562.172	6365052.20	16.7845	A	1.0
7	☐	5000.000	5037.793	12838682.45	33.0019	A	3.7
8	☐	10000.000	9956.655	25101106.29	65.2245	A	1.1
9	☐			24748.78	0.0669	P	1.5

$$y = 0.0066 * x + 8.6311E-005$$

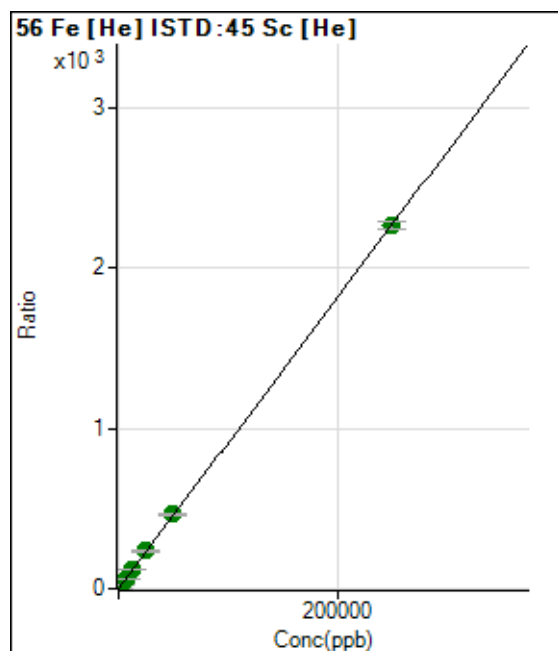
$$R = 1.0000$$

$$DL = 0.01962$$

$$BEC = 0.01318$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4508.23	0.0131	P	7.6
2	☐	5.000	5.656	22975.86	0.0644	P	2.9
3	☐	50.000	58.483	193013.10	0.5439	P	0.7
4	☐	2500.000	2702.386	8901440.54	24.5416	A	0.8
5	☐	6250.000	6734.779	22493977.35	61.1420	A	0.7
6	☐	12500.000	13251.482	45618863.06	120.2916	A	0.2
7	☐	25000.000	26095.004	92158740.02	236.8672	A	3.2
8	☐	50000.000	51054.208	178338561.3	463.4121	A	0.6
9	☐	250000.00	249627.93	837951840.9	2265.787	A	2.2

$$y = 0.0091 * x + 0.0131$$

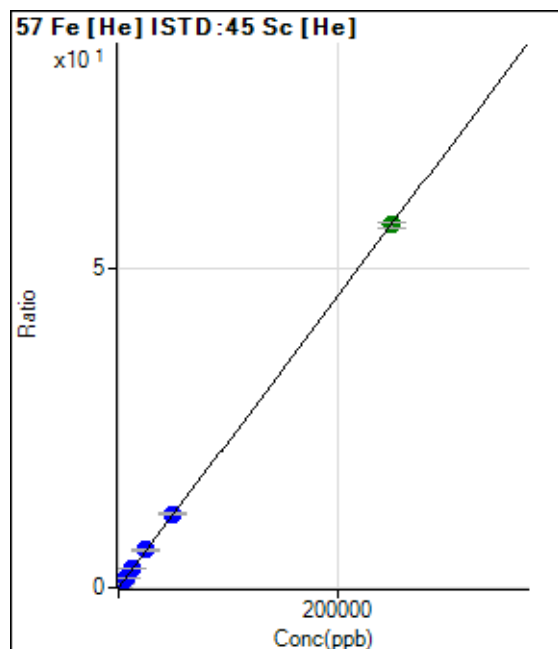
$$R = 1.0000$$

$$DL = 0.3274$$

$$BEC = 1.444$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.90	0.0005	P	8.1
2	☐	5.000	5.788	664.85	0.0019	P	7.1
3	☐	50.000	58.823	4950.97	0.0140	P	3.6
4	☐	2500.000	2701.705	223584.83	0.6165	P	0.7
5	☐	6250.000	6793.637	569974.22	1.5493	P	0.7
6	☐	12500.000	13294.532	1149584.13	3.0313	P	0.2
7	☐	25000.000	25975.514	2304023.89	5.9222	P	3.4
8	☐	50000.000	50902.742	4465954.73	11.6048	P	0.7
9	☐	250000.00	249666.56	21050434.73	56.9168	A	1.9

$$y = 2.2797\text{E-}004 * x + 5.4507\text{E-}004$$

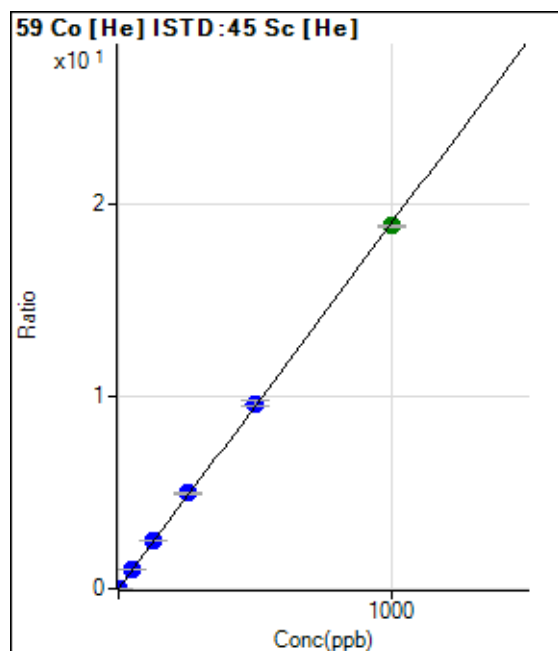
$$R = 1.0000$$

$$DL = 0.5788$$

$$BEC = 2.391$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	62.22	0.0002	P	27.6
2	☐	0.100	0.106	778.92	0.0022	P	5.2
3	☐	1.000	1.086	7389.75	0.0208	P	1.6
4	☐	50.000	53.176	366565.49	1.0107	P	0.4
5	☐	125.000	133.477	933207.70	2.5366	P	0.6
6	☐	250.000	260.537	1877595.28	4.9511	P	0.6
7	☐	500.000	506.758	3746531.47	9.6300	P	3.5
8	☐	1000.000	992.769	7260295.86	18.8655	A	0.7
9	☐			14103.62	0.0381	P	1.5

$$y = 0.0190 * x + 1.7864\text{E-}004$$

$$R = 0.9999$$

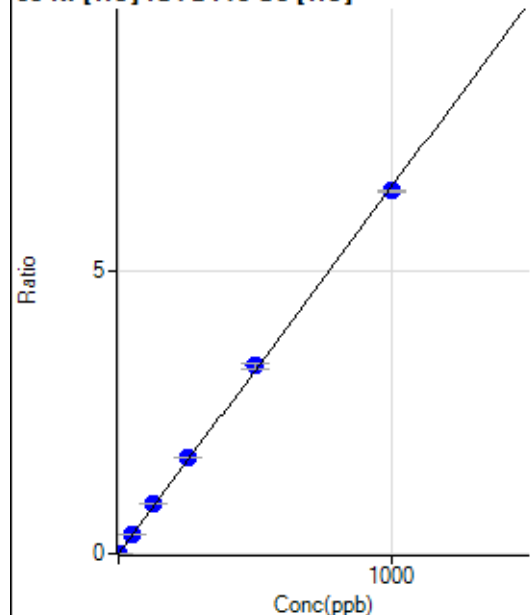
$$DL = 0.007792$$

$$BEC = 0.009401$$

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	74.98	0.0002	P	24.3
2	☐	0.100	0.127	371.21	0.0010	P	7.1
3	☐	1.000	1.196	2821.39	0.0080	P	1.6
4	☐	50.000	53.871	126407.23	0.3485	P	0.2
5	☐	125.000	135.287	321871.17	0.8749	P	0.6
6	☐	250.000	263.198	645407.40	1.7019	P	0.5
7	☐	500.000	512.068	1288079.54	3.3109	P	3.6
8	☐	1000.000	989.187	2461313.49	6.3957	P	0.6
9	☐			32262.57	0.0873	P	3.7

$$y = 0.0065 * x + 2.1943E-004$$

$$R = 0.9998$$

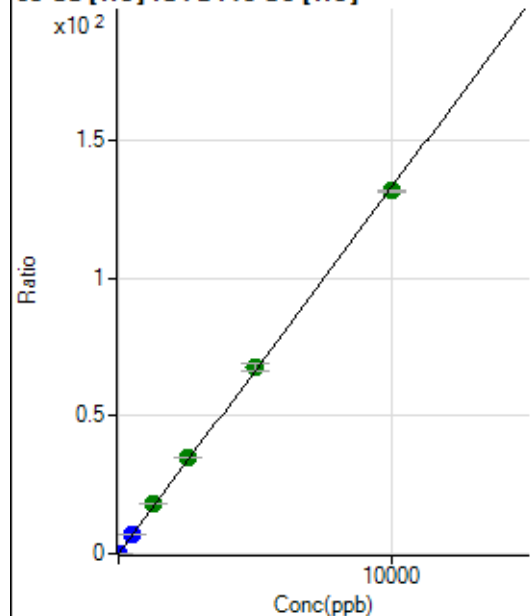
$$DL = 0.02471$$

$$BEC = 0.03394$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	762.26	0.0022	P	6.7
2	☐	0.200	0.200	1735.69	0.0049	P	2.1
3	☐	2.000	2.208	11201.10	0.0316	P	2.2
4	☐	500.000	538.351	2595946.66	7.1575	P	0.8
5	☐	1250.000	1347.541	6589969.83	17.9126	A	0.8
6	☐	2500.000	2616.861	13190948.83	34.7833	A	0.4
7	☐	5000.000	5100.219	26372285.16	67.7900	A	3.8
8	☐	10000.000	9906.565	50673014.80	131.6719	A	0.8
9	☐			17459.53	0.0472	P	1.9

$$y = 0.0133 * x + 0.0022$$

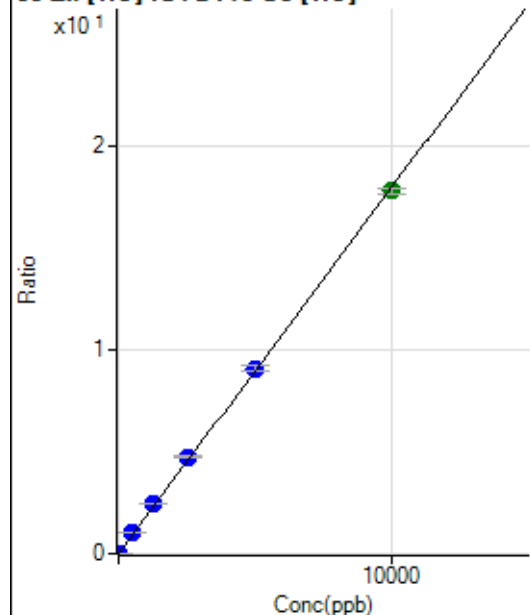
$$R = 0.9998$$

$$DL = 0.03344$$

$$BEC = 0.1667$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	497.75	0.0014	P	3.5
2	☒	0.200					
3	☐	2.000	2.391	2032.90	0.0057	P	1.6
4	☐	500.000	558.394	363474.88	1.0022	P	0.3
5	☐	1250.000	1382.498	912029.88	2.4790	P	0.3
6	☐	2500.000	2650.864	1802126.33	4.7521	P	0.7
7	☐	5000.000	5061.965	3529782.08	9.0731	P	3.6
8	☐	10000.000	9911.819	6836565.78	17.7645	A	1.3
9	☐			20735.75	0.0561	P	2.8

$$y = 0.0018 * x + 0.0014$$

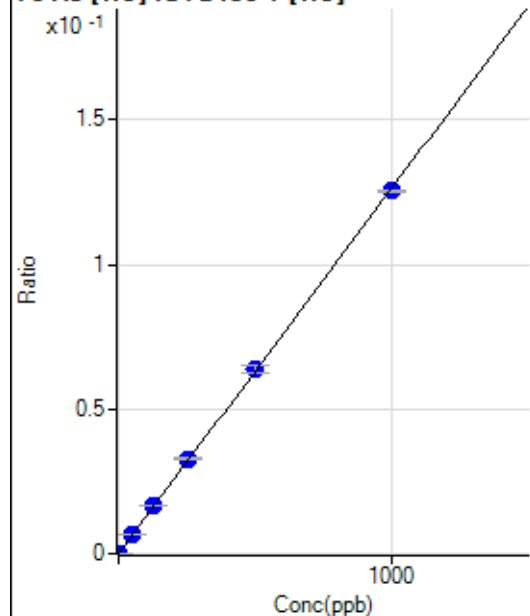
$$R = 0.9998$$

$$DL = 0.08544$$

$$BEC = 0.8062$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.32	0.0000	P	64.1
2	☐	0.100	0.105	47.53	0.0000	P	15.7
3	☐	1.000	1.086	445.08	0.0001	P	10.4
4	☐	50.000	51.768	21433.76	0.0065	P	0.7
5	☐	125.000	131.406	55423.53	0.0166	P	0.9
6	☐	250.000	259.331	111856.68	0.0327	P	1.2
7	☐	500.000	505.943	223884.61	0.0639	P	3.2
8	☐	1000.000	993.806	430204.76	0.1255	P	0.6
9	☐			227.78	0.0001	P	3.4

$$y = 1.2624E-004 * x + 1.3811E-006$$

$$R = 0.9999$$

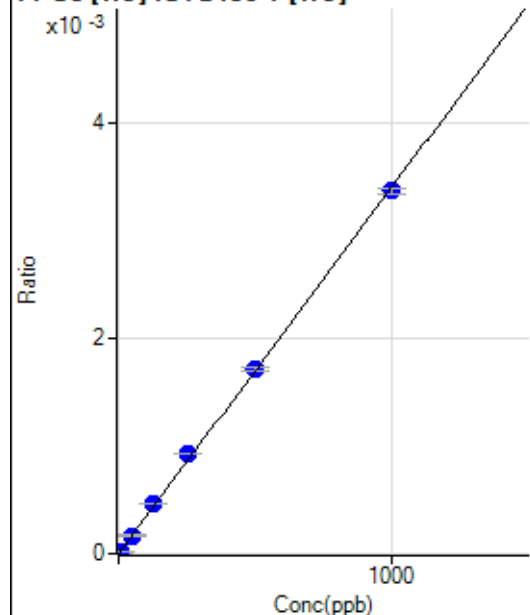
$$DL = 0.02103$$

$$BEC = 0.01094$$

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	☐	0.500	0.503	5.56	0.0000	P	35.0
3	☐	5.000	6.195	67.78	0.0000	P	25.7
4	☐	50.000	49.158	548.91	0.0002	P	9.9
5	☐	125.000	135.630	1543.44	0.0005	P	2.5
6	☐	250.000	272.106	3167.07	0.0009	P	0.9
7	☐	500.000	504.564	6026.91	0.0017	P	2.5
8	☐	1000.000	990.899	11574.78	0.0034	P	1.3
9	☐			4.45	0.0000	P	86.7

$$y = 3.4066\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

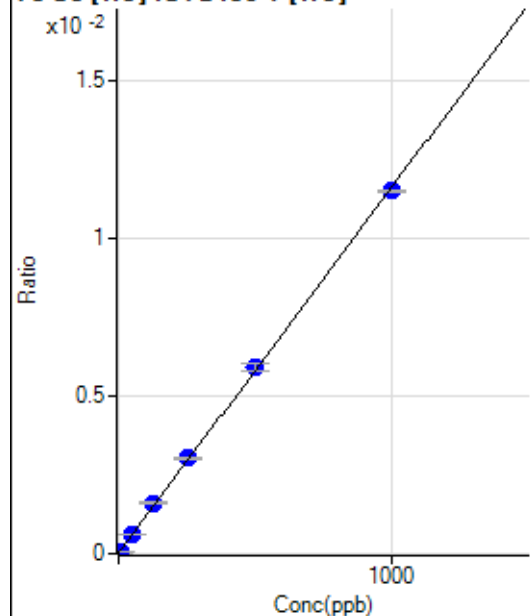
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	56.17	0.0000	P	9.4
2	☐	0.500	0.539	78.40	0.0000	P	9.6
3	☐	5.000	5.688	269.76	0.0001	P	4.4
4	☐	50.000	52.423	2053.87	0.0006	P	4.5
5	☐	125.000	136.936	5370.79	0.0016	P	1.4
6	☐	250.000	259.145	10339.55	0.0030	P	1.5
7	☐	500.000	509.726	20803.87	0.0059	P	3.4
8	☐	1000.000	991.234	39520.96	0.0115	P	0.4
9	☐			72.84	0.0000	P	19.3

$$y = 1.1609\text{E-}005 * x + 1.7876\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.4344$$

$$BEC = 1.54$$

Weight: <None>

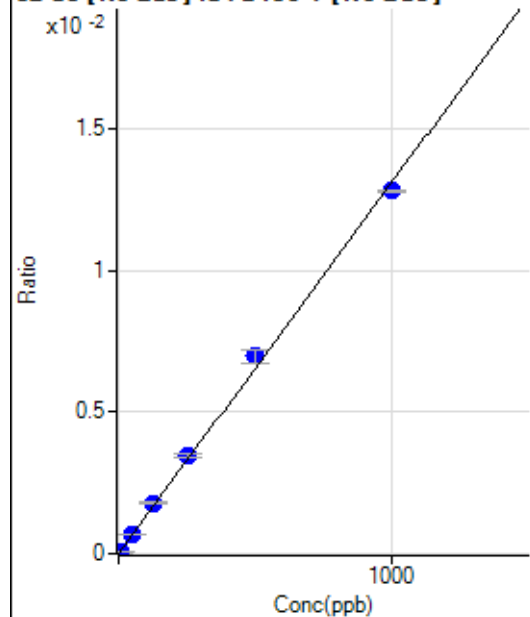
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66200.38		P	3.0
2	☐			66591.51		P	0.7
3	☐			65060.10		P	1.1
4	☐			67801.84		P	2.2
5	☐			68455.45		P	1.1
6	☐			71547.03		P	0.3
7	☐			75564.17		P	4.0
8	☐			78741.07		P	1.4
9	☐			73981.27		P	1.2

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.72		P	44.6
2	☐			63.40		P	32.9
3	☐			53.39		P	39.0
4	☐			40.04		P	43.3
5	☐			40.04		P	43.3
6	☐			43.38		P	13.3
7	☐			46.71		P	12.4
8	☐			43.38		P	93.3
9	☐			40.04		P	43.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	19.42	0.0000	P	277.
2	☐	0.500	0.599	238.17	0.0000	P	9.6
3	☐	5.000	5.331	1942.54	0.0001	P	2.9
4	☐	50.000	54.126	19859.53	0.0007	P	0.3
5	☐	125.000	137.166	50932.00	0.0018	P	0.9
6	☐	250.000	264.606	101085.47	0.0035	P	2.8
7	☐	500.000	532.345	200998.05	0.0070	P	6.7
8	☐	1000.000	978.447	386758.54	0.0128	P	0.5
9	☐			426.55	0.0000	P	15.1

$$y = 1.3076E-005 * x + 6.9823E-007$$

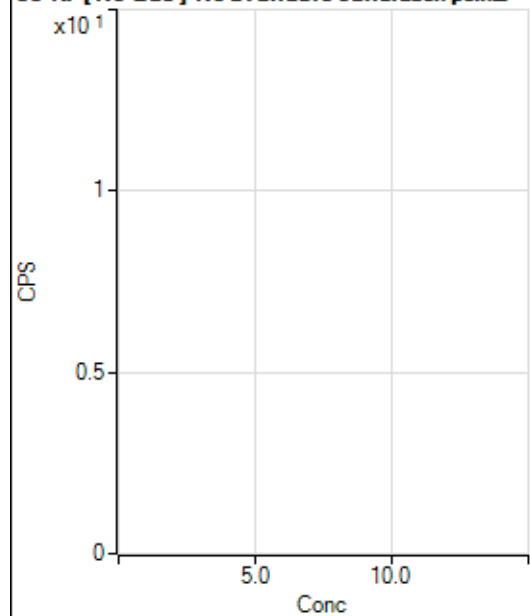
$$R = 0.9991$$

$$DL = 0.4448$$

$$BEC = 0.0534$$

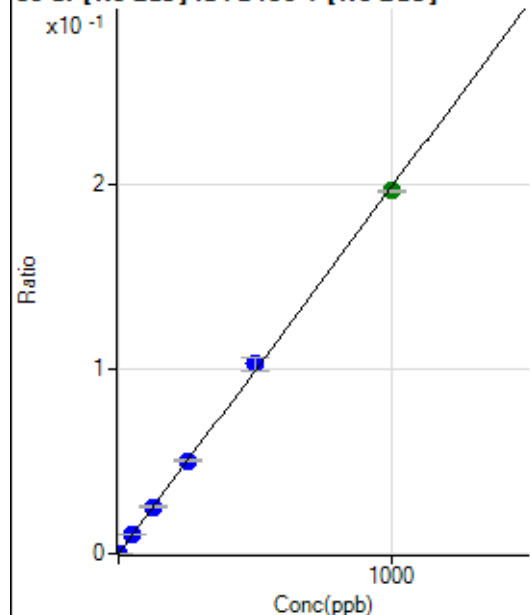
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			421.12		P	7.6
2	☐			355.57		P	10.0
3	☐			417.79		P	7.2
4	☐			404.46		P	21.9
5	☐			446.68		P	9.7
6	☐			410.01		P	6.1
7	☐			487.79		P	2.1
8	☐			510.02		P	7.3
9	☐			602.25		P	7.4

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	658.38	0.0000	P	0.5
2	☐	0.100	0.090	1175.10	0.0000	P	7.3
3	☐	1.000	1.019	6259.98	0.0002	P	4.2
4	☐	50.000	50.685	283226.63	0.0101	P	0.4
5	☐	125.000	128.187	724306.05	0.0255	P	0.7
6	☐	250.000	252.621	1468186.25	0.0503	P	2.5
7	☐	500.000	518.506	2977562.67	0.1031	P	6.9
8	☐	1000.000	989.659	5949982.03	0.1968	A	0.5
9	☐			13109.29	0.0005	P	2.1

$$y = 1.9887\text{E-}004 * x + 2.4190\text{E-}005$$

$$R = 0.9998$$

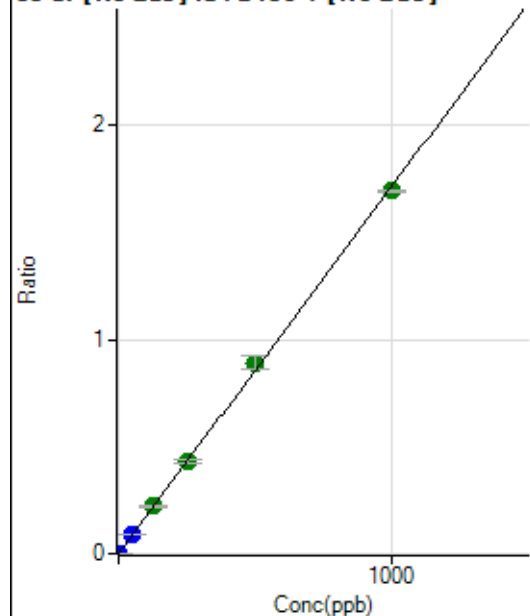
$$DL = 0.00177$$

$$BEC = 0.1216$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	138.90	0.0000	P	26.3
2	☐	0.100	0.099	4870.47	0.0002	P	4.1
3	☐	1.000	1.043	49458.90	0.0018	P	1.0
4	☐	50.000	51.006	2450692.94	0.0874	P	0.2
5	☐	125.000	128.710	6261616.46	0.2206	A	1.6
6	☐	250.000	252.989	12663978.49	0.4336	A	3.4
7	☐	500.000	520.028	25727278.87	0.8913	A	7.2
8	☐	1000.000	988.725	51223662.60	1.6946	A	0.4
9	☐			106393.00	0.0038	P	2.7

$$y = 0.0017 * x + 5.1191\text{E-}006$$

$$R = 0.9997$$

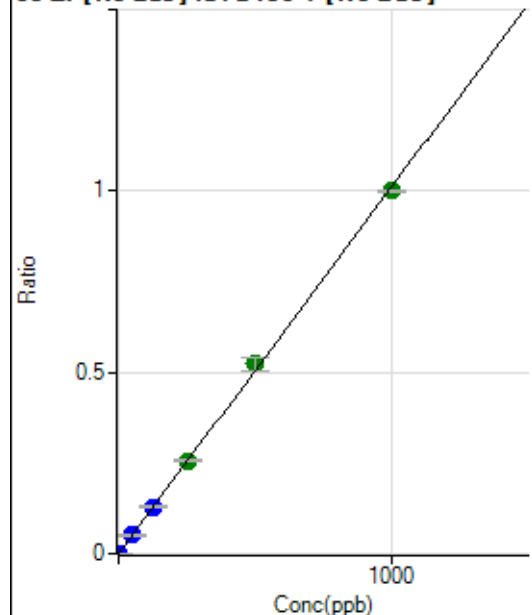
$$DL = 0.002355$$

$$BEC = 0.002987$$

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	1311.23	0.0000	P	3.9
2	☐	0.100	0.074	3431.11	0.0001	P	5.6
3	☐	1.000	0.828	24421.82	0.0009	P	3.3
4	☐	50.000	49.873	1414068.53	0.0504	P	0.4
5	☐	125.000	128.398	3684360.80	0.1298	P	0.3
6	☐	250.000	253.130	7473520.56	0.2558	A	2.1
7	☐	500.000	518.023	15113762.84	0.5235	A	6.8
8	☐	1000.000	989.788	30234190.95	1.0002	A	0.2
9	☐			11202.05	0.0004	P	2.1

$$y = 0.0010 * x + 4.8152E-005$$

$$R = 0.9998$$

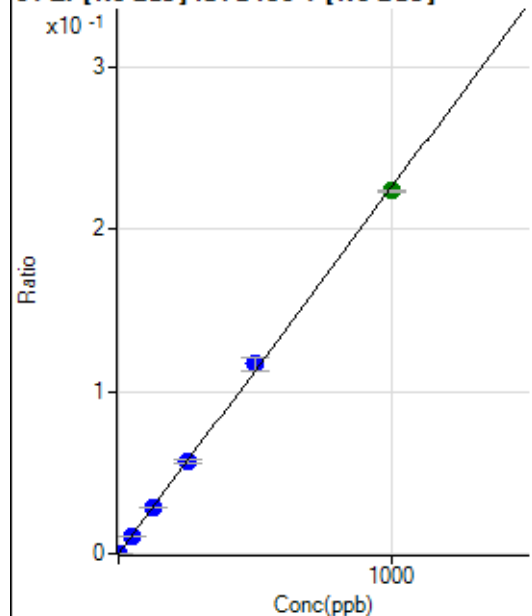
$$DL = 0.005627$$

$$BEC = 0.04765$$

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	244.46	0.0000	P	18.5
2	☐	0.100	0.090	816.73	0.0000	P	6.8
3	☐	1.000	0.839	5470.74	0.0002	P	2.4
4	☐	50.000	49.517	313250.50	0.0112	P	0.8
5	☐	125.000	128.100	820221.78	0.0289	P	0.5
6	☐	250.000	253.053	1666939.46	0.0571	P	3.1
7	☐	500.000	517.324	3367520.04	0.1167	P	7.3
8	☐	1000.000	990.211	6749771.94	0.2233	A	0.6
9	☐			2366.98	0.0001	P	6.1

$$y = 2.2550E-004 * x + 8.9805E-006$$

$$R = 0.9998$$

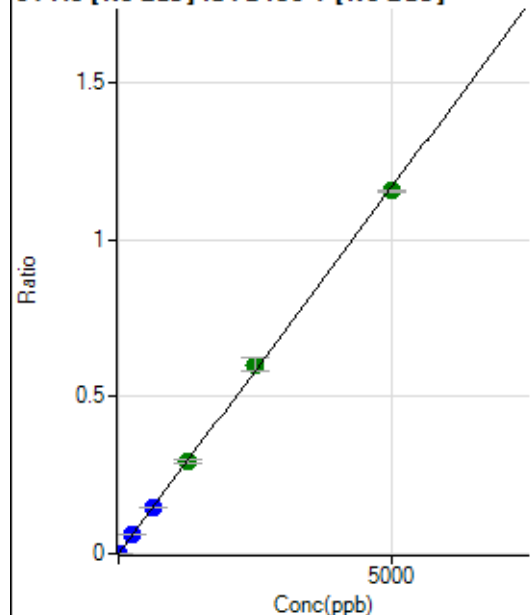
$$DL = 0.02213$$

$$BEC = 0.03982$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.36	0.0000	P	7.2
2	☐	0.500	0.482	3556.14	0.0001	P	5.9
3	☐	5.000	4.910	32039.56	0.0012	P	0.8
4	☐	250.000	252.484	1652499.20	0.0590	P	0.6
5	☐	625.000	641.060	4248134.43	0.1497	P	0.4
6	☐	1250.000	1267.274	8639498.03	0.2958	A	3.8
7	☐	2500.000	2582.432	17404279.73	0.6028	A	6.8
8	☐	5000.000	4952.334	34943340.71	1.1560	A	0.2
9	☐			28028.37	0.0010	P	1.3

$$y = 2.3343\text{E-}004 * x + 1.4989\text{E-}005$$

$$R = 0.9998$$

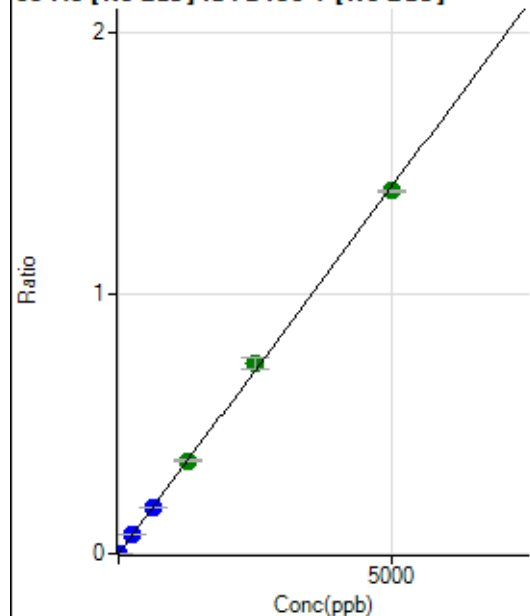
$$DL = 0.0139$$

$$BEC = 0.06421$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	44.2
2	☐	0.500	0.515	4117.46	0.0001	P	3.8
3	☐	5.000	5.372	41834.50	0.0015	P	0.9
4	☐	250.000	253.398	2001936.55	0.0714	P	0.4
5	☐	625.000	640.429	5123606.84	0.1805	P	0.3
6	☐	1250.000	1266.573	10427174.11	0.3570	A	2.4
7	☐	2500.000	2596.867	21139159.15	0.7319	A	5.8
8	☐	5000.000	4945.324	42129257.54	1.3938	A	0.3
9	☐			39940.11	0.0014	P	2.2

$$y = 2.8184\text{E-}004 * x + 2.2495\text{E-}006$$

$$R = 0.9997$$

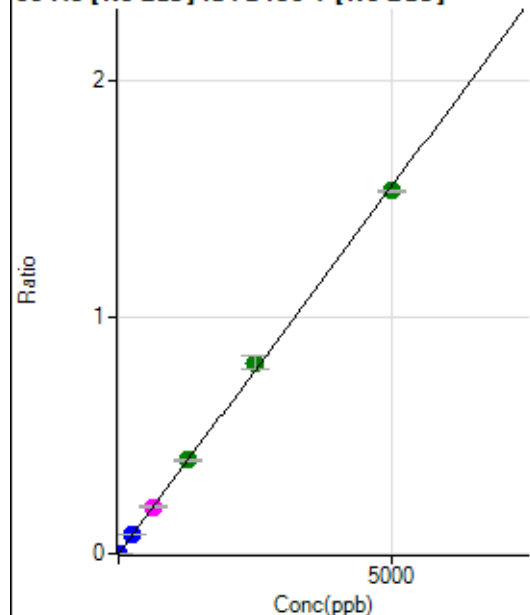
$$DL = 0.01058$$

$$BEC = 0.007982$$

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	222.23	0.0000	P	7.3
2	☐	0.500	0.500	4559.26	0.0002	P	3.4
3	☐	5.000	5.325	45777.52	0.0017	P	2.9
4	☐	250.000	254.959	2216190.48	0.0791	P	0.5
5	☐	625.000	641.193	5643609.54	0.1988	M	0.3
6	☐	1250.000	1275.412	11550881.42	0.3955	A	2.8
7	☐	2500.000	2598.219	23259166.15	0.8056	A	6.7
8	☐	5000.000	4942.265	46319241.31	1.5324	A	0.8
9	☐			75721.16	0.0027	P	2.9

$$y = 3.1006\text{E-}004 * x + 8.1726\text{E-}006$$

$$R = 0.9997$$

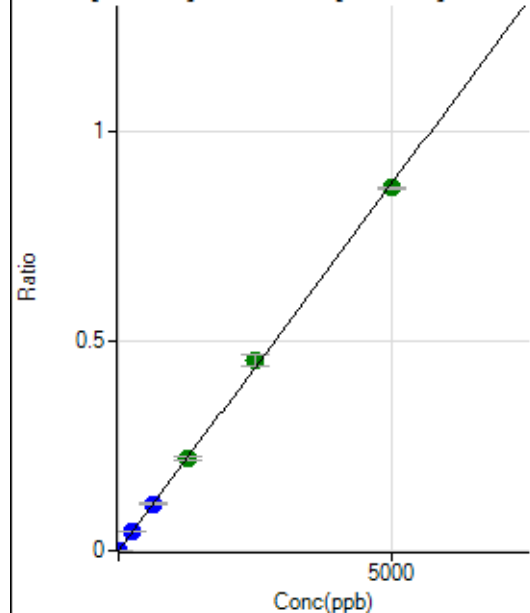
$$DL = 0.005787$$

$$BEC = 0.02636$$

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	58.34	0.0000	P	51.4
2	☐	0.500	0.509	2544.79	0.0001	P	3.7
3	☐	5.000	5.275	25501.50	0.0009	P	1.3
4	☐	250.000	253.522	1242459.20	0.0443	P	0.3
5	☐	625.000	640.196	3176930.41	0.1119	P	0.9
6	☐	1250.000	1263.859	6452602.49	0.2210	A	3.8
7	☐	2500.000	2598.864	13117717.91	0.4543	A	6.7
8	☐	5000.000	4945.027	26131327.67	0.8645	A	0.4
9	☐			25111.89	0.0009	P	5.5

$$y = 1.7482\text{E-}004 * x + 2.1563\text{E-}006$$

$$R = 0.9997$$

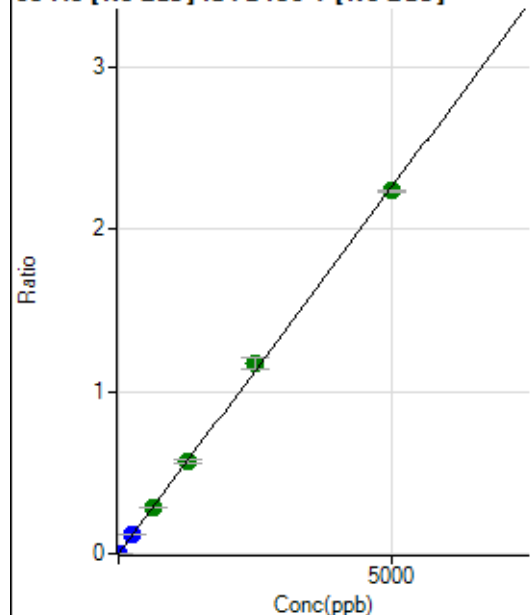
$$DL = 0.01902$$

$$BEC = 0.01233$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	41.9
2	☐	0.500	0.513	6554.57	0.0002	P	3.6
3	☐	5.000	5.320	66274.73	0.0024	P	1.1
4	☐	250.000	252.061	3185972.25	0.1137	P	0.9
5	☐	625.000	629.312	8054912.60	0.2838	A	0.5
6	☐	1250.000	1260.995	16607638.57	0.5686	A	2.9
7	☐	2500.000	2588.484	33705208.39	1.1672	A	6.2
8	☐	5000.000	4952.367	67499168.87	2.2331	A	0.3
9	☐			61837.72	0.0022	P	2.2

$$y = 4.5091\text{E-}004 * x + 3.2580\text{E-}006$$

$$R = 0.9998$$

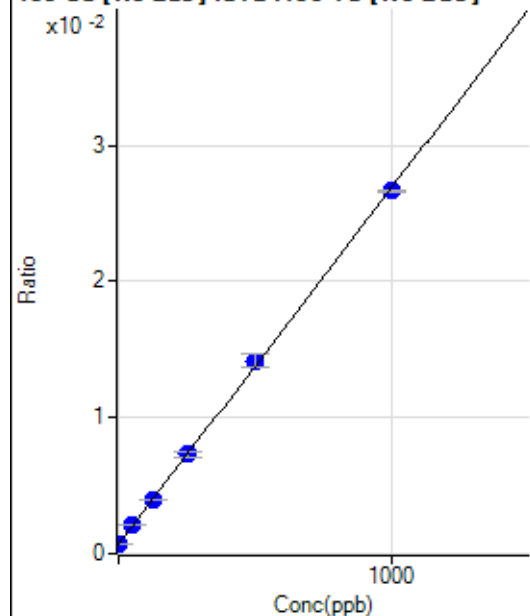
$$DL = 0.009086$$

$$BEC = 0.007225$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14085.32	0.0007	P	2.4
2	☐	0.100	0.128	14388.43	0.0007	P	2.6
3	☐	1.000	1.302	14733.23	0.0007	P	1.9
4	☐	50.000	52.651	42790.72	0.0021	P	1.0
5	☐	125.000	125.771	83794.83	0.0040	P	0.9
6	☐	250.000	251.356	156138.67	0.0073	P	4.9
7	☐	500.000	515.449	292812.36	0.0142	P	6.3
8	☐	1000.000	991.707	577542.26	0.0267	P	0.4
9	☐			13479.19	0.0007	P	1.3

$$y = 2.6177\text{E-}005 * x + 6.9864\text{E-}004$$

$$R = 0.9998$$

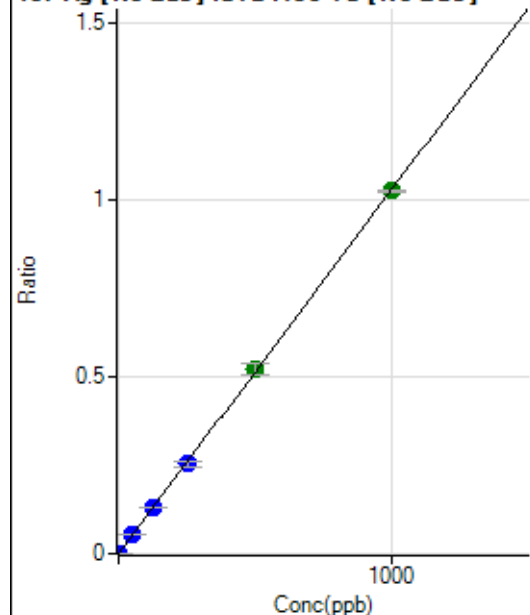
$$DL = 1.898$$

$$BEC = 26.69$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	252.79	0.0000	P	11.8
2	☐	0.100	0.094	2239.19	0.0001	P	4.7
3	☐	1.000	1.081	22568.84	0.0011	P	1.4
4	☐	50.000	51.172	1082238.65	0.0525	P	1.6
5	☐	125.000	125.194	2697963.99	0.1285	P	0.6
6	☐	250.000	245.916	5414180.24	0.2524	P	5.0
7	☐	500.000	507.306	10744513.95	0.5207	A	5.9
8	☐	1000.000	997.285	22174885.39	1.0235	A	0.6
9	☐			5645.80	0.0003	P	3.1

$$y = 0.0010 * x + 1.2548E-005$$

$$R = 1.0000$$

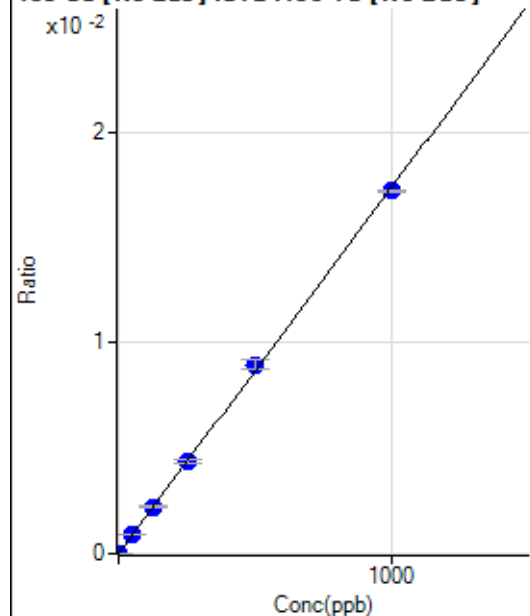
$$DL = 0.00432$$

$$BEC = 0.01223$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29.17	0.0000	P	26.4
2	☐	0.100	0.050	47.22	0.0000	P	18.8
3	☐	1.000	1.009	381.96	0.0000	P	11.8
4	☐	50.000	51.262	18391.41	0.0009	P	1.1
5	☐	125.000	128.188	46823.18	0.0022	P	1.3
6	☐	250.000	250.918	93634.58	0.0044	P	4.0
7	☐	500.000	517.045	185585.76	0.0090	P	5.0
8	☐	1000.000	990.786	373210.42	0.0172	P	0.4
9	☐			147.23	0.0000	P	18.0

$$y = 1.7386E-005 * x + 1.4407E-006$$

$$R = 0.9998$$

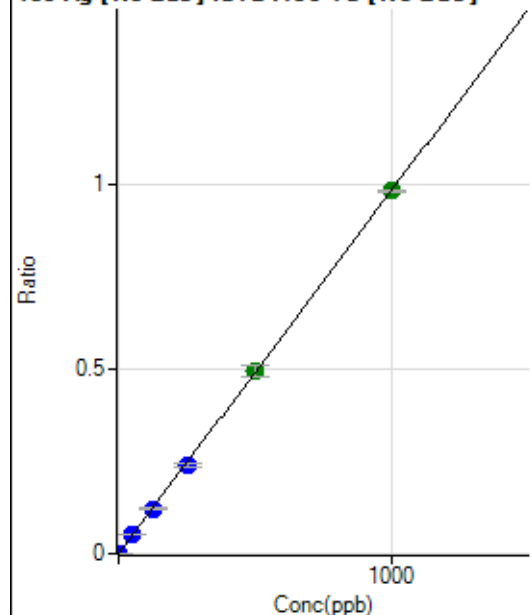
$$DL = 0.06565$$

$$BEC = 0.08287$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	18.2
2	☐	0.100	0.097	2014.12	0.0001	P	7.1
3	☐	1.000	1.083	21450.40	0.0011	P	3.0
4	☐	50.000	50.913	1030737.49	0.0500	P	1.3
5	☐	125.000	124.398	2566438.38	0.1222	P	0.5
6	☐	250.000	244.118	5146652.42	0.2399	P	4.1
7	☐	500.000	504.375	10225499.36	0.4956	A	6.2
8	☐	1000.000	999.313	21272344.92	0.9819	A	0.6
9	☐			5081.68	0.0003	P	2.3

$$y = 9.8259\text{E-}004 * x + 2.4850\text{E-}006$$

$$R = 1.0000$$

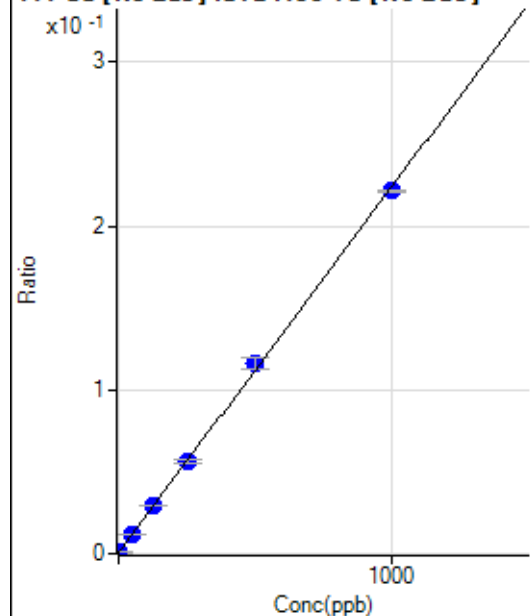
$$DL = 0.001384$$

$$BEC = 0.002529$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9868.90	0.0005	P	2.4
2	☐	0.100	0.103	10504.42	0.0005	P	2.5
3	☐	1.000	1.091	14737.70	0.0007	P	1.9
4	☐	50.000	51.545	247132.28	0.0120	P	0.9
5	☐	125.000	127.482	607723.93	0.0289	P	0.1
6	☐	250.000	250.125	1208325.69	0.0563	P	4.3
7	☐	500.000	519.344	2401769.36	0.1164	P	6.3
8	☐	1000.000	989.909	4797430.46	0.2214	P	0.7
9	☐			10715.52	0.0006	P	1.4

$$y = 2.2321\text{E-}004 * x + 4.8950\text{E-}004$$

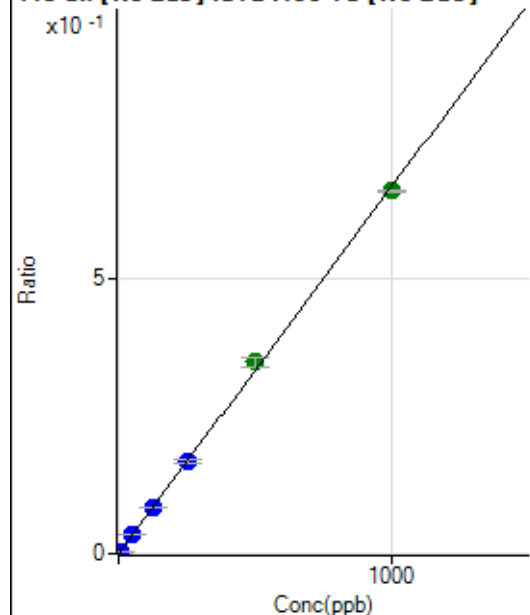
$$R = 0.9997$$

$$DL = 0.157$$

$$BEC = 2.193$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1408.47	0.0001	P	5.3
2	☐	0.500	0.512	8427.92	0.0004	P	1.4
3	☐	5.000	5.265	72021.27	0.0036	P	1.2
4	☐	50.000	50.428	694447.93	0.0337	P	0.6
5	☐	125.000	126.313	1770378.66	0.0843	P	0.4
6	☐	250.000	250.166	3581765.45	0.1669	P	3.9
7	☐	500.000	521.574	7179889.57	0.3480	A	6.0
8	☐	1000.000	988.984	14292186.08	0.6597	A	0.6
9	☐			14966.88	0.0008	P	3.2

$$y = 6.6699\text{E-}004 * x + 6.9794\text{E-}005$$

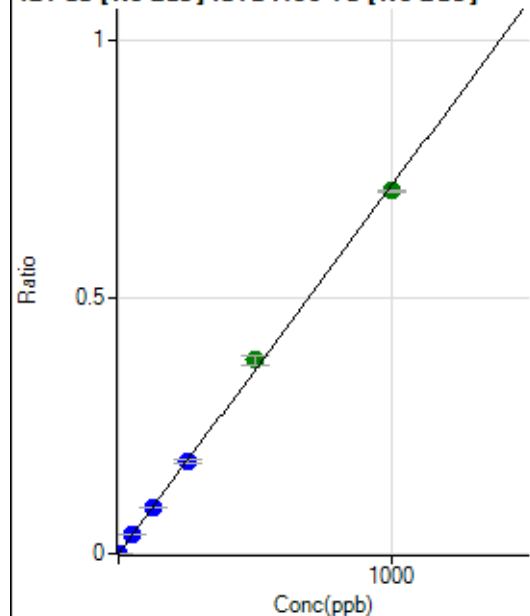
$$R = 0.9997$$

$$DL = 0.01677$$

$$BEC = 0.1046$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	97.23	0.0000	P	15.6
2	☐	0.200	0.191	2911.54	0.0001	P	5.2
3	☐	2.000	2.015	29156.13	0.0014	P	1.1
4	☐	50.000	50.255	742777.41	0.0361	P	0.9
5	☐	125.000	126.342	1902734.31	0.0906	P	0.2
6	☐	250.000	251.388	3869054.95	0.1803	P	3.8
7	☐	500.000	526.361	7792362.76	0.3775	A	5.3
8	☐	1000.000	986.292	15325678.99	0.7074	A	0.7
9	☐			20532.56	0.0011	P	7.8

$$y = 7.1725\text{E-}004 * x + 4.8110\text{E-}006$$

$$R = 0.9995$$

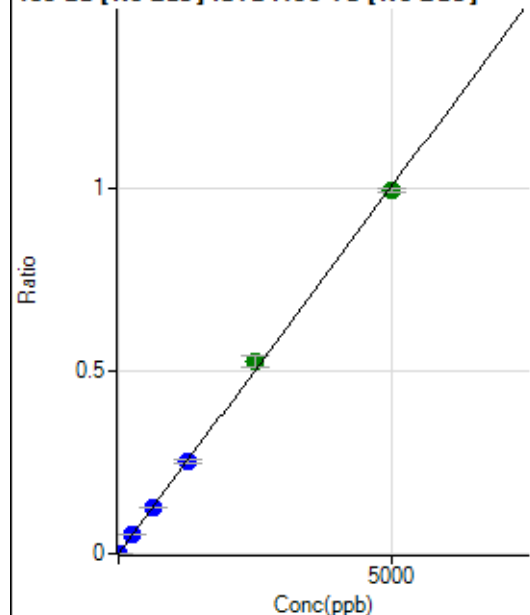
$$DL = 0.003145$$

$$BEC = 0.006708$$

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	44.45	0.0000	P	55.2
2	☐	1.000	0.986	4106.33	0.0002	P	8.3
3	☐	10.000	10.440	42248.50	0.0021	P	2.0
4	☐	250.000	253.155	1048759.18	0.0509	P	0.6
5	☐	625.000	634.058	2676649.23	0.1275	P	0.4
6	☐	1250.000	1254.187	5411052.34	0.2522	P	3.6
7	☐	2500.000	2615.305	10851399.81	0.5258	A	5.7
8	☐	5000.000	4940.010	21516903.08	0.9932	A	1.0
9	☐			38744.14	0.0020	P	2.8

$$y = 2.0106\text{E-}004 * x + 2.2227\text{E-}006$$

$$R = 0.9996$$

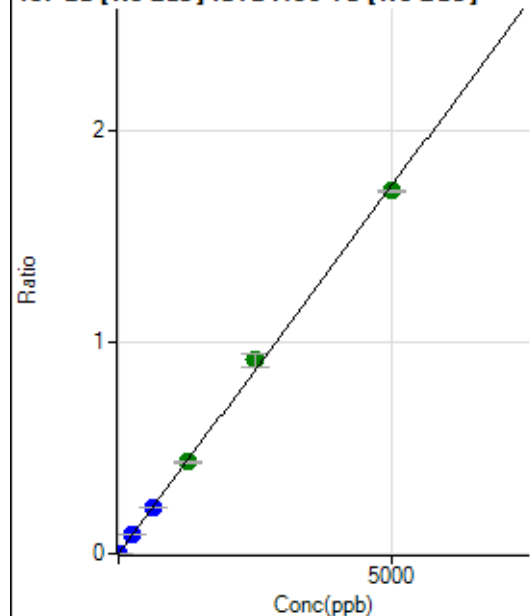
$$DL = 0.01831$$

$$BEC = 0.01106$$

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	58.34	0.0000	P	84.1
2	☐	1.000	1.056	7574.63	0.0004	P	5.5
3	☐	10.000	10.529	73516.81	0.0037	P	1.7
4	☐	250.000	255.031	1823041.56	0.0885	P	1.0
5	☐	625.000	635.965	4632670.37	0.2206	P	0.3
6	☐	1250.000	1244.972	9270398.99	0.4319	A	2.8
7	☐	2500.000	2632.018	18839114.83	0.9132	A	6.5
8	☐	5000.000	4933.625	37082590.06	1.7117	A	0.5
9	☐			68318.30	0.0035	P	1.4

$$y = 3.4694\text{E-}004 * x + 2.8656\text{E-}006$$

$$R = 0.9995$$

$$DL = 0.02084$$

$$BEC = 0.00826$$

Weight: <None>

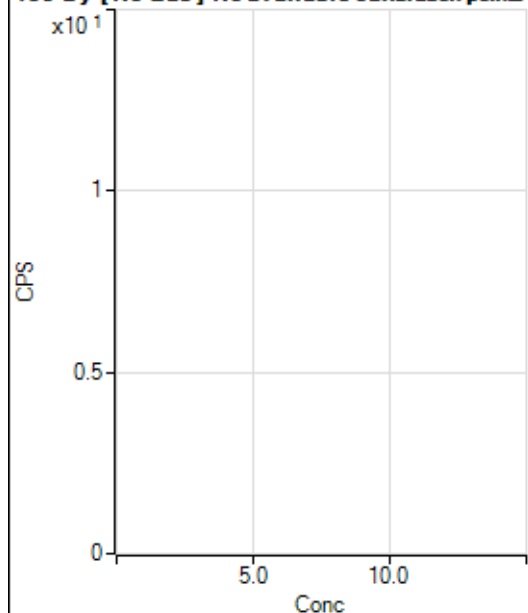
Min Conc: 0

150 Nd [No Gas] No available calibration points

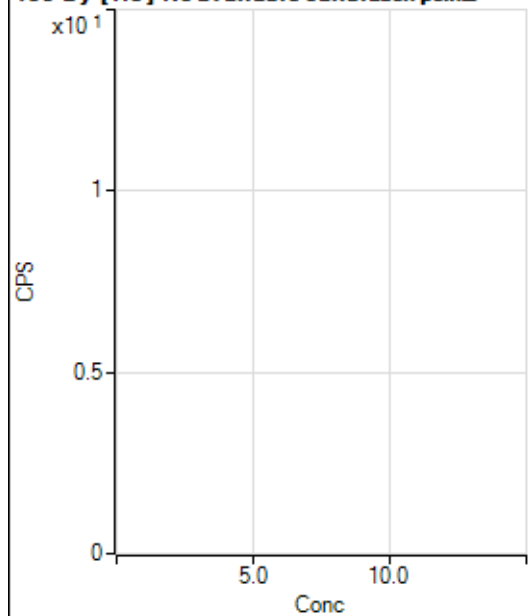
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			11.11		P	69.3
3	☐			8.89		P	114.
4	☐			133.34		P	26.0
5	☐			362.24		P	4.6
6	☐			680.04		P	23.2
7	☐			1491.26		P	9.4
8	☐			2780.39		P	3.8
9	☐			242.24		P	15.7

150 Nd [He] No available calibration points

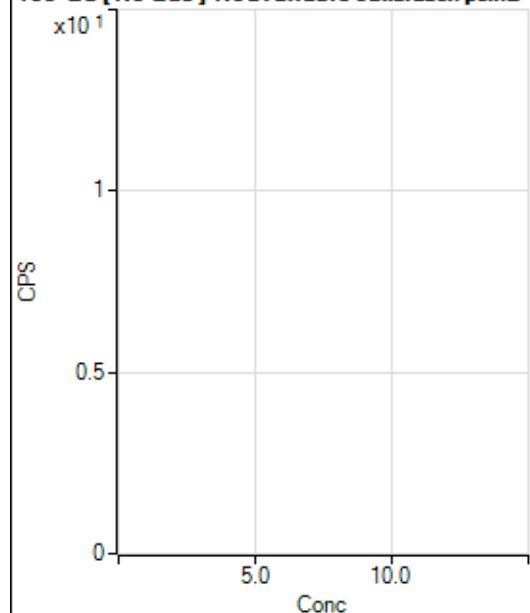
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐			0.00		P	
3	☐			1.11		P	173.
4	☐			5.56		P	34.7
5	☐			16.67		P	20.0
6	☐			46.67		P	37.8
7	☐			102.22		P	16.4
8	☐			225.57		P	15.9
9	☐			93.34		P	12.9

156 Dy [No Gas] No available calibration points

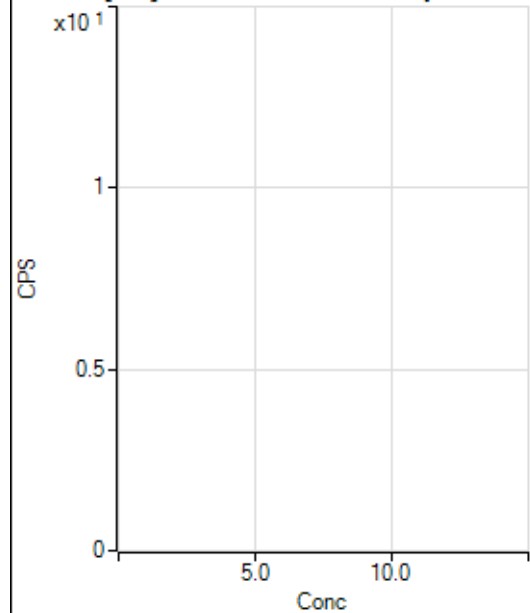
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	100.
2	☐			19.44		P	65.5
3	☐			25.00		P	33.3
4	☐			63.89		P	19.9
5	☐			125.01		P	30.6
6	☐			144.45		P	27.3
7	☐			380.57		P	17.6
8	☐			691.72		P	21.2
9	☐			1030.64		P	6.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	89.2
2	☐			11.11		P	62.5
3	☐			12.22		P	15.7
4	☐			37.78		P	18.4
5	☐			65.55		P	10.6
6	☐			106.67		P	5.4
7	☐			266.68		P	15.2
8	☐			490.02		P	2.5
9	☐			582.25		P	2.8

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

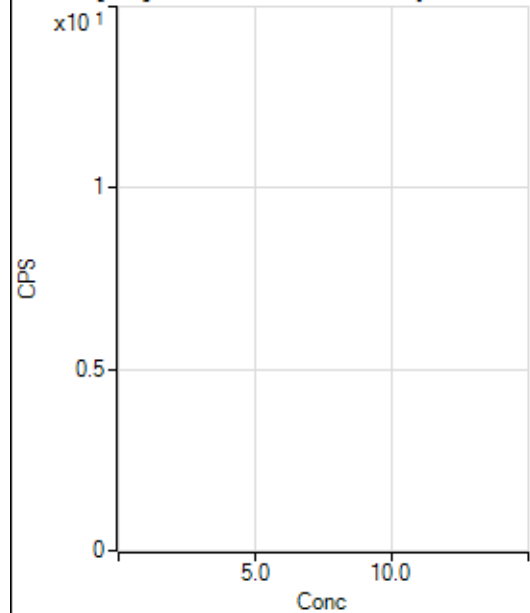
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136.12		P	12.7
2	☐			91.67		P	55.3
3	☐			83.34		P	43.6
4	☐			161.12		P	11.9
5	☐			136.12		P	23.2
6	☐			188.90		P	54.5
7	☐			313.91		P	6.7
8	☐			483.36		P	3.4
9	☐			1389.03		P	4.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			362.23		P	12.9
2	☐			303.34		P	5.7
3	☐			346.68		P	7.6
4	☐			335.56		P	4.7
5	☐			353.34		P	4.3
6	☐			383.35		P	6.1
7	☐			404.46		P	1.3
8	☐			478.91		P	7.4
9	☐			971.17		P	7.4

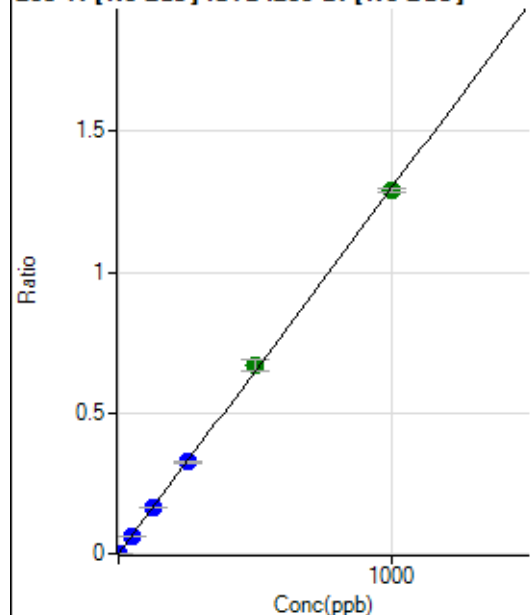
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			116.67		P	21.4
2	☐			108.34		P	13.3
3	☐			127.78		P	21.0
4	☐			108.34		P	33.5
5	☐			136.12		P	12.7
6	☐			127.79		P	27.2
7	☐			88.89		P	23.6
8	☐			205.56		P	27.6
9	☐			227.79		P	11.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.11		P	12.4
2	☐			53.34		P	39.0
3	☐			45.56		P	11.2
4	☐			50.00		P	43.7
5	☐			51.11		P	13.6
6	☐			62.22		P	17.2
7	☐			57.78		P	3.3
8	☐			60.00		P	48.4
9	☐			115.56		P	21.3

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	330.58	0.0000	P	12.5
2	☐	0.100	0.089	1769.64	0.0001	P	4.8
3	☐	1.000	0.994	16371.83	0.0013	P	4.7
4	☐	50.000	49.674	803204.22	0.0645	P	0.5
5	☐	125.000	125.145	1996142.56	0.1624	P	1.0
6	☐	250.000	251.666	3999676.87	0.3266	P	1.7
7	☐	500.000	513.765	7707324.83	0.6667	A	6.0
8	☐	1000.000	992.699	15016570.30	1.2881	A	1.2
9	☐			4823.31	0.0005	P	1.5

$$y = 0.0013 * x + 2.6638E-005$$

$$R = 0.9999$$

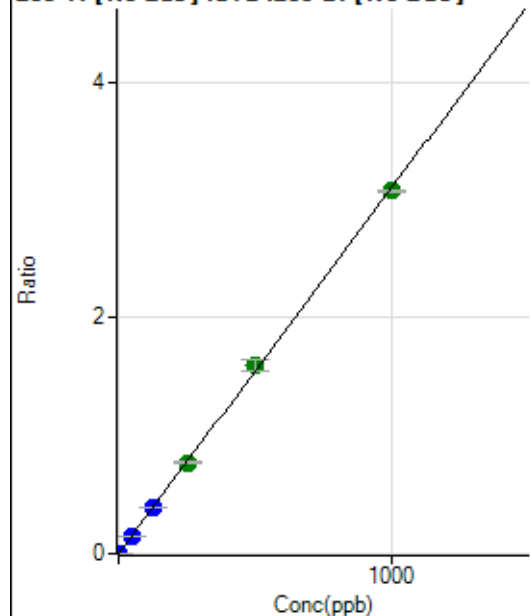
$$DL = 0.007706$$

$$BEC = 0.02053$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	652.83	0.0001	P	17.4
2	☐	0.100	0.093	4250.88	0.0003	P	6.1
3	☐	1.000	0.986	38682.70	0.0031	P	1.9
4	☐	50.000	49.498	1913884.25	0.1536	P	0.3
5	☐	125.000	125.009	4768272.63	0.3880	P	0.9
6	☐	250.000	249.109	9467282.07	0.7730	A	2.1
7	☐	500.000	516.369	18523801.28	1.6024	A	6.1
8	☐	1000.000	992.062	35889323.72	3.0785	A	0.4
9	☐			11291.41	0.0012	P	3.2

$$y = 0.0031 * x + 5.2342E-005$$

$$R = 0.9998$$

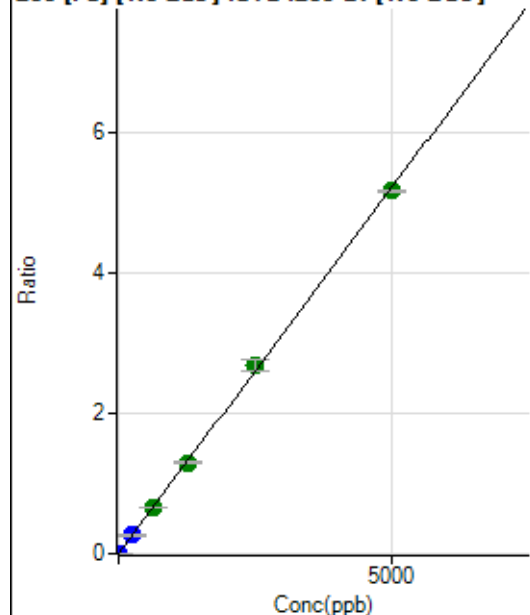
$$DL = 0.008786$$

$$BEC = 0.01687$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	868.57	0.0001	P	5.6
2	☐	0.100	0.098	2152.09	0.0002	P	7.3
3	☐	1.000	1.004	13892.79	0.0011	P	0.8
4	☐	250.000	250.127	3253108.84	0.2612	P	0.4
5	☐	625.000	625.532	8026239.13	0.6530	A	0.5
6	☐	1250.000	1248.385	15958838.78	1.3032	A	3.5
7	☐	2500.000	2579.608	31127976.62	2.6928	A	6.3
8	☐	5000.000	4960.527	60366193.02	5.1781	A	0.6
9	☐			55417.36	0.0059	P	1.7

$$y = 0.0010 * x + 6.9860E-005$$

$$R = 0.9998$$

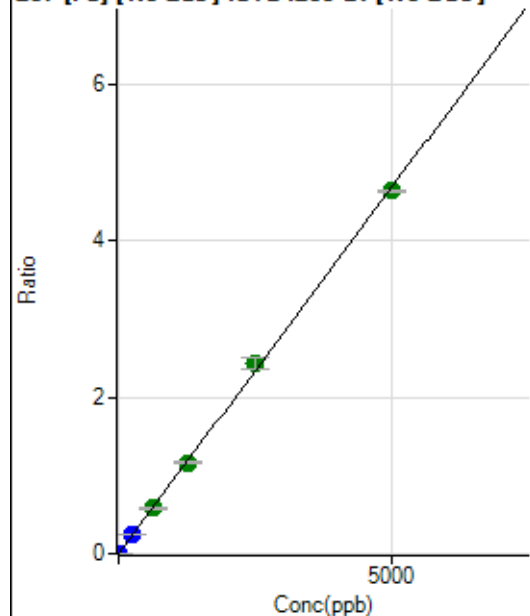
$$DL = 0.01122$$

$$BEC = 0.06693$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	727.82	0.0001	P	6.8
2	☐	0.100	0.089	1770.54	0.0001	P	4.2
3	☐	1.000	0.951	11781.45	0.0009	P	2.8
4	☐	250.000	250.202	2913382.07	0.2339	P	0.4
5	☐	625.000	621.588	7140669.08	0.5810	A	1.5
6	☐	1250.000	1243.789	14237792.45	1.1625	A	1.0
7	☐	2500.000	2590.838	27993940.91	2.4214	A	6.0
8	☐	5000.000	4956.550	54004523.43	4.6324	A	0.6
9	☐			49020.10	0.0052	P	1.0

$$y = 9.3458E-004 * x + 5.8463E-005$$

$$R = 0.9998$$

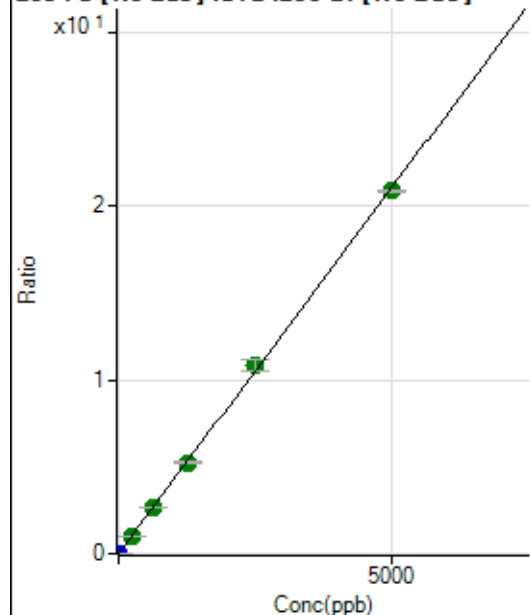
$$DL = 0.01267$$

$$BEC = 0.06256$$

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	3379.90	0.0003	P	2.7
2	☐	0.100	0.095	8386.48	0.0007	P	1.6
3	☐	1.000	0.991	55135.07	0.0044	P	1.8
4	☐	250.000	247.538	12961930.12	1.0406	A	0.1
5	☐	625.000	621.847	32124296.67	2.6137	A	1.1
6	☐	1250.000	1243.923	64028225.04	5.2281	A	2.1
7	☐	2500.000	2581.963	125423543.5	10.8515	A	6.5
8	☐	5000.000	4961.055	243074581.3	20.8502	A	0.4
9	☐			220760.30	0.0236	P	1.4

$$y = 0.0042 * x + 2.7175E-004$$

$$R = 0.9998$$

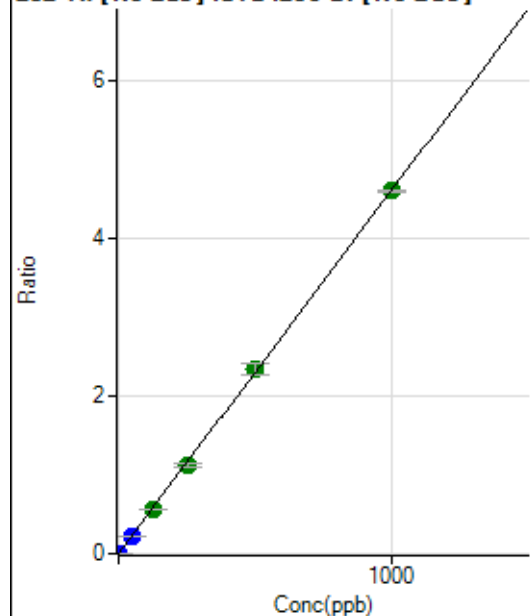
$$DL = 0.005188$$

$$BEC = 0.06466$$

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	1507.54	0.0001	P	6.9
2	☐	0.100	0.064	5175.26	0.0004	P	8.0
3	☐	1.000	0.725	43030.44	0.0035	P	2.3
4	☐	50.000	45.559	2617037.93	0.2101	P	0.9
5	☐	125.000	120.124	6806017.69	0.5538	A	0.7
6	☐	250.000	242.501	13688409.33	1.1178	A	3.1
7	☐	500.000	507.856	27056074.91	2.3407	A	6.4
8	☐	1000.000	998.778	53665858.14	4.6033	A	0.5
9	☐			17067.15	0.0018	P	3.0

$$y = 0.0046 * x + 1.2108E-004$$

$$R = 0.9999$$

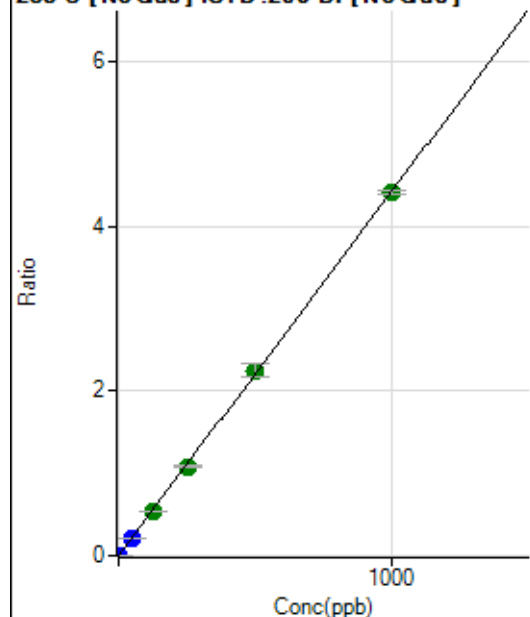
$$DL = 0.005416$$

$$BEC = 0.02627$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	53.9
2	☐	0.100	0.089	4948.39	0.0004	P	2.1
3	☐	1.000	0.922	50692.10	0.0041	P	0.5
4	☐	50.000	47.190	2597590.86	0.2085	P	0.6
5	☐	125.000	122.022	6627339.56	0.5392	A	1.3
6	☐	250.000	244.665	13240525.99	1.0812	A	2.9
7	☐	500.000	509.703	26032146.24	2.2524	A	6.7
8	☐	1000.000	996.995	51361408.79	4.4057	A	1.2
9	☐			9278.72	0.0010	P	3.5

$$y = 0.0044 * x + 3.5664E-006$$

$$R = 0.9999$$

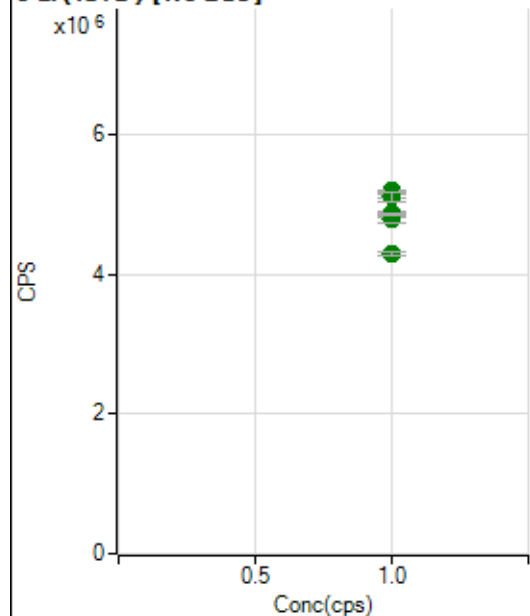
$$DL = 0.001304$$

$$BEC = 0.0008071$$

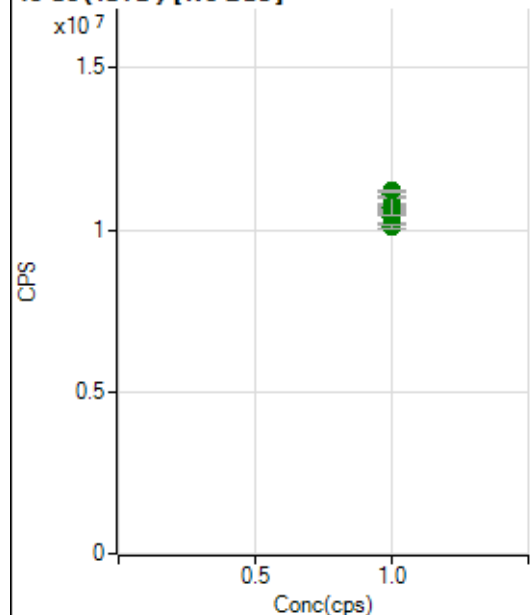
Weight: <None>

Min Conc: 0

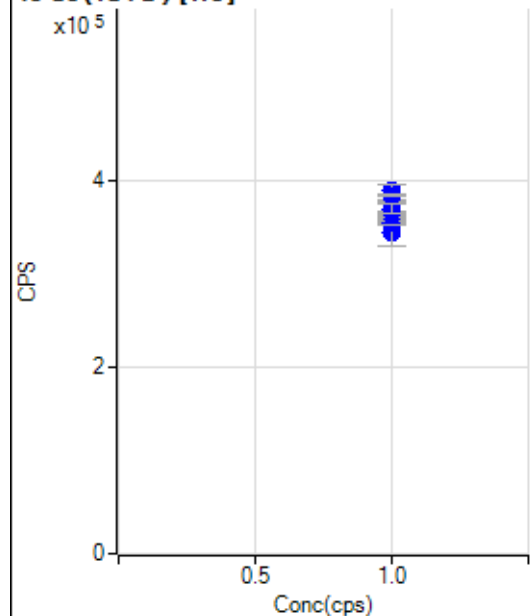
6 Li (ISTD) [No Gas]



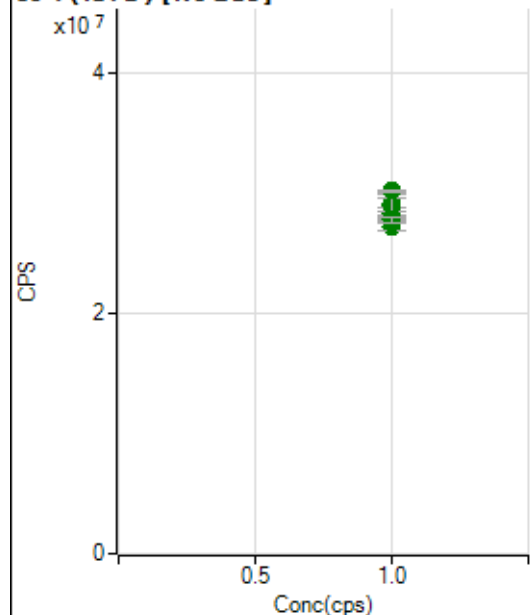
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4849369.23		A	1.6
2	☐	1.000		5171521.97		A	0.7
3	☐	1.000		5192491.42		A	0.5
4	☐	1.000		5118625.10		A	0.7
5	☐	1.000		5179455.96		A	1.4
6	☐	1.000		5107408.78		A	2.5
7	☐	1.000		4795173.16		A	2.6
8	☐	1.000		4869381.59		A	0.5
9	☐	1.000		4297897.09		A	1.3

45 Sc (ISTD) [No Gas]

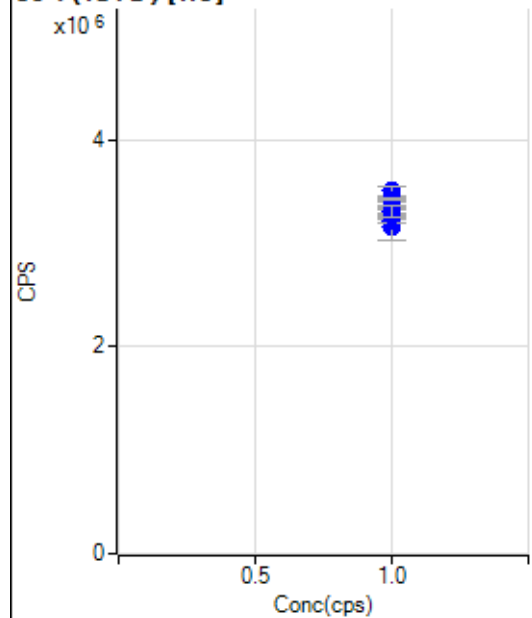
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10408536.86		A	3.8
2	☐	1.000		10631223.24		A	0.5
3	☐	1.000		10511521.79		A	0.6
4	☐	1.000		10639975.05		A	0.6
5	☐	1.000		10776815.95		A	0.5
6	☐	1.000		11092659.83		A	1.5
7	☐	1.000		10697232.55		A	5.2
8	☐	1.000		11197676.50		A	0.4
9	☐	1.000		10108412.98		A	1.0

45 Sc (ISTD) [He]

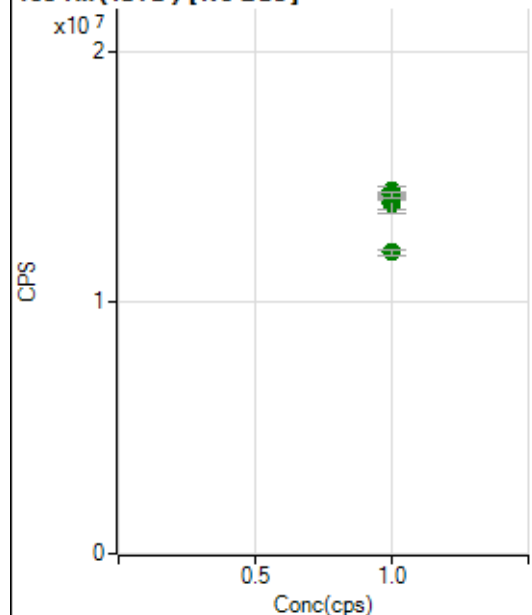
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		345082.41		P	8.5
2	☐	1.000		356568.25		P	0.4
3	☐	1.000		354859.29		P	0.9
4	☐	1.000		362699.87		P	0.7
5	☐	1.000		367897.56		P	0.2
6	☐	1.000		379238.51		P	0.7
7	☐	1.000		389337.61		P	3.2
8	☐	1.000		384844.32		P	0.4
9	☐	1.000		369971.08		P	2.6

89 Y (ISTD) [No Gas]

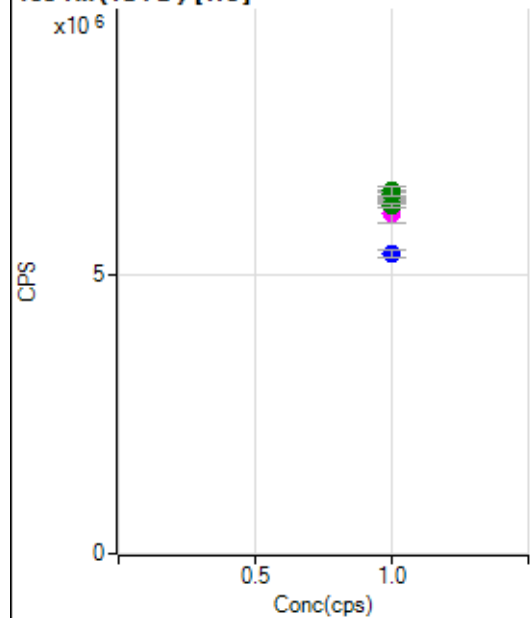
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27215868.76		A	2.1
2	☐	1.000		27921252.36		A	0.7
3	☐	1.000		27591771.81		A	0.8
4	☐	1.000		28031294.86		A	0.5
5	☐	1.000		28386130.41		A	0.8
6	☐	1.000		29221648.46		A	2.5
7	☐	1.000		28957250.68		A	6.6
8	☐	1.000		30227045.94		A	0.6
9	☐	1.000		27855763.19		A	1.6

89 Y (ISTD) [He]

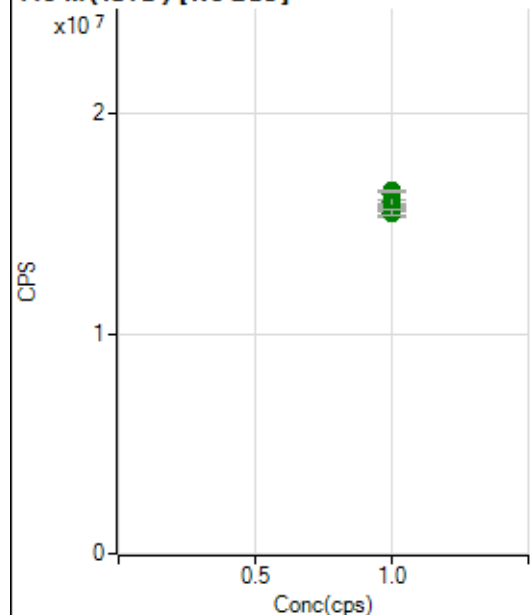
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3152323.11		P	7.8
2	☐	1.000		3247743.25		P	0.6
3	☐	1.000		3214744.54		P	0.7
4	☐	1.000		3279153.11		P	0.8
5	☐	1.000		3340838.70		P	0.5
6	☐	1.000		3416685.92		P	0.5
7	☐	1.000		3507128.28		P	2.6
8	☐	1.000		3429056.55		P	0.5
9	☐	1.000		3306850.68		P	2.9

103 Rh (ISTD) [No Gas]

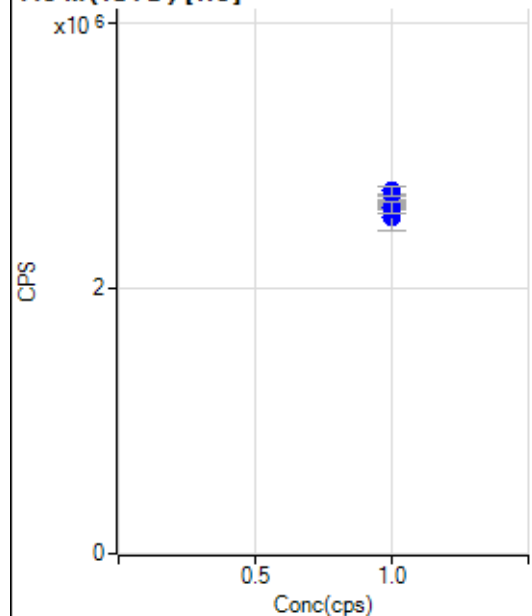
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13912035.35		A	3.0
2	☐	1.000		14182111.04		A	0.5
3	☐	1.000		14220613.40		A	0.4
4	☐	1.000		14120596.60		A	0.5
5	☐	1.000		14191262.29		A	0.5
6	☐	1.000		14451673.54		A	2.3
7	☐	1.000		14002360.21		A	6.2
8	☐	1.000		14314722.57		A	1.5
9	☐	1.000		11995323.43		A	1.5

103 Rh (ISTD) [He]

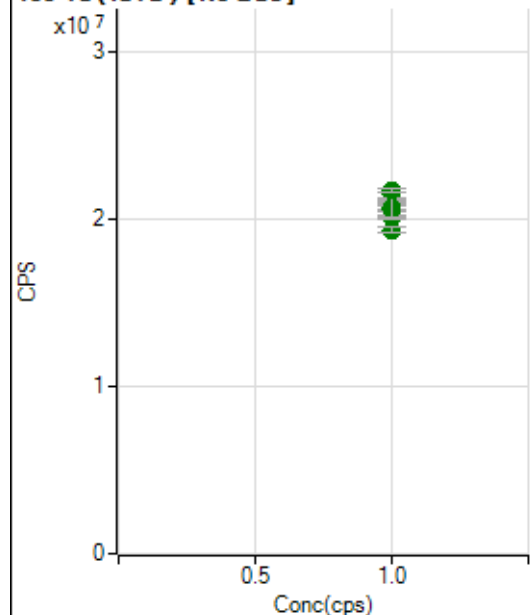
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6105517.55		M	5.8
2	☐	1.000		6355023.59		A	1.4
3	☐	1.000		6328747.75		A	0.1
4	☐	1.000		6354974.49		A	0.5
5	☐	1.000		6455568.45		A	1.1
6	☐	1.000		6506326.78		A	0.6
7	☐	1.000		6519118.31		A	2.7
8	☐	1.000		6245929.63		A	1.2
9	☐	1.000		5384311.27		P	2.6

115 In (ISTD) [No Gas]

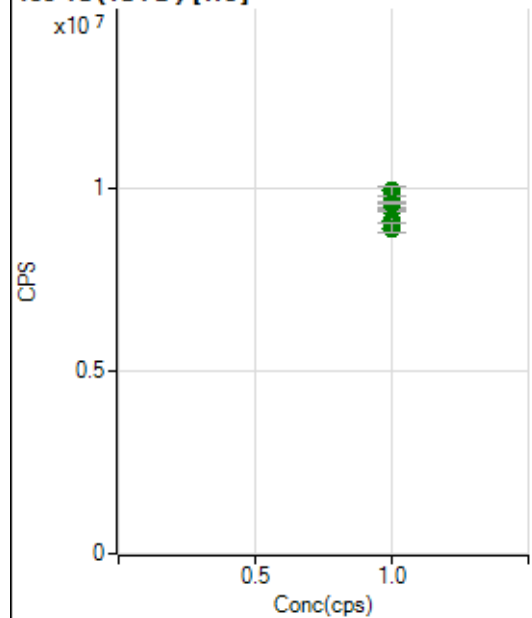
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15532965.63		A	2.7
2	☐	1.000		15798614.05		A	0.5
3	☐	1.000		15885471.88		A	0.3
4	☐	1.000		15835956.73		A	0.2
5	☐	1.000		15847551.75		A	0.8
6	☐	1.000		16295613.90		A	2.5
7	☐	1.000		15952752.13		A	5.4
8	☐	1.000		16483746.40		A	0.7
9	☐	1.000		15504522.70		A	1.5

115 In (ISTD) [He]

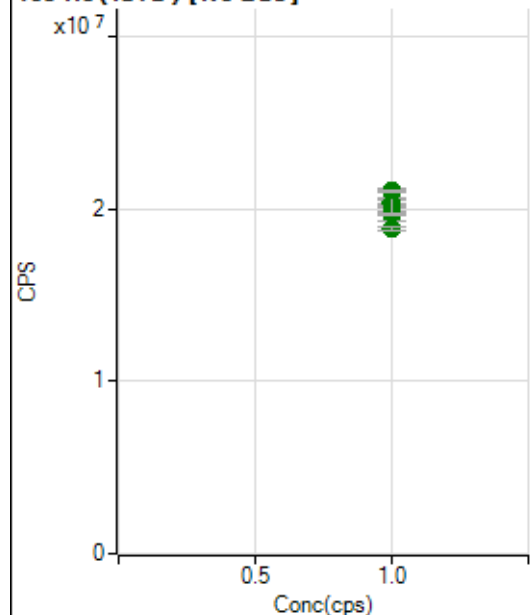
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2529991.61		P	7.9
2	☐	1.000		2620212.77		P	0.6
3	☐	1.000		2599394.37		P	0.4
4	☐	1.000		2639123.04		P	0.4
5	☐	1.000		2656574.90		P	0.3
6	☐	1.000		2704196.35		P	0.6
7	☐	1.000		2733900.49		P	2.9
8	☐	1.000		2629443.88		P	0.1
9	☐	1.000		2607643.52		P	3.1

159 Tb (ISTD) [No Gas]

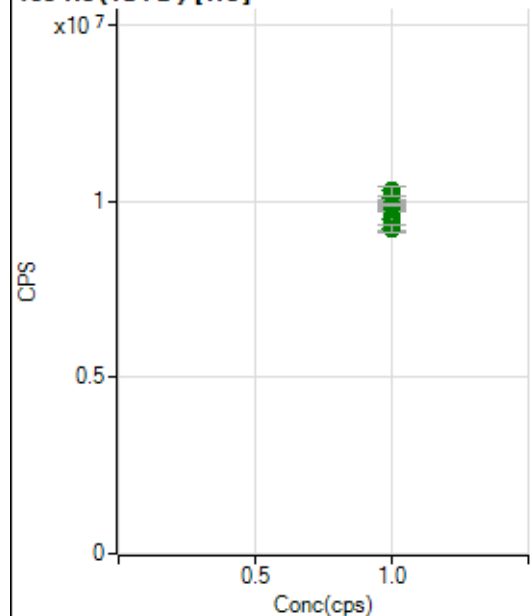
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20167028.73		A	2.3
2	☐	1.000		20499403.17		A	0.9
3	☐	1.000		20108798.45		A	0.8
4	☐	1.000		20604771.64		A	1.2
5	☐	1.000		20996088.30		A	0.4
6	☐	1.000		21476705.10		A	3.6
7	☐	1.000		20682545.25		A	5.8
8	☐	1.000		21664937.74		A	0.9
9	☐	1.000		19304744.58		A	1.9

159 Tb (ISTD) [He]

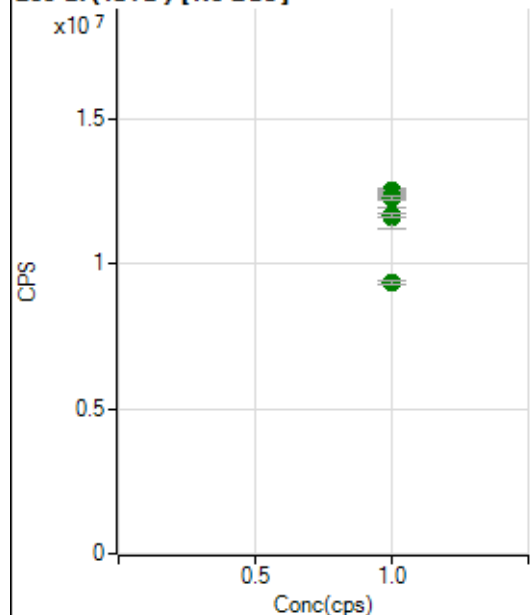
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9127572.57		A	7.2
2	☐	1.000		9477259.16		A	0.4
3	☐	1.000		9411884.51		A	0.7
4	☐	1.000		9602556.73		A	0.3
5	☐	1.000		9633600.76		A	0.5
6	☐	1.000		9775473.74		A	0.1
7	☐	1.000		9936164.71		A	2.7
8	☐	1.000		9599999.65		A	0.4
9	☐	1.000		8910249.66		A	2.9

165 Ho (ISTD) [No Gas]

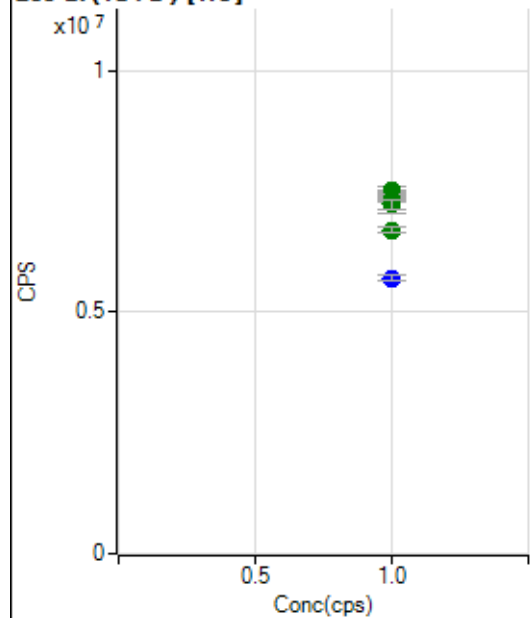
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19599506.93		A	2.3
2	☐	1.000		20130342.90		A	0.4
3	☐	1.000		19766674.15		A	0.5
4	☐	1.000		20269043.45		A	0.7
5	☐	1.000		20443481.22		A	1.5
6	☐	1.000		20989653.99		A	2.7
7	☐	1.000		20338286.92		A	6.3
8	☐	1.000		21066355.38		A	0.2
9	☐	1.000		18872522.50		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9475154.79		A	7.0
2	☐	1.000		9737486.59		A	0.2
3	☐	1.000		9740109.09		A	0.8
4	☐	1.000		9893192.84		A	0.6
5	☐	1.000		9926173.05		A	1.1
6	☐	1.000		10079577.35		A	0.7
7	☐	1.000		10287450.54		A	2.8
8	☐	1.000		9894922.84		A	0.7
9	☐	1.000		9215447.78		A	2.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12436141.06		A	2.6
2	☐	1.000		12497895.65		A	0.5
3	☐	1.000		12431935.37		A	0.5
4	☐	1.000		12456147.04		A	0.5
5	☐	1.000		12291027.18		A	0.5
6	☐	1.000		12248477.18		A	1.0
7	☐	1.000		11590031.22		A	6.3
8	☐	1.000		11658345.66		A	0.6
9	☐	1.000		9355311.11		A	1.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7314620.93		A	7.6
2	☐	1.000		7511765.51		A	0.3
3	☐	1.000		7398317.32		A	0.4
4	☐	1.000		7433525.03		A	0.5
5	☐	1.000		7323792.32		A	0.5
6	☐	1.000		7303923.08		A	0.7
7	☐	1.000		7237103.99		A	2.8
8	☐	1.000		6701594.41		A	1.5
9	☐	1.000		5712204.57		P	2.1

US EPA Tune Check Sample Report

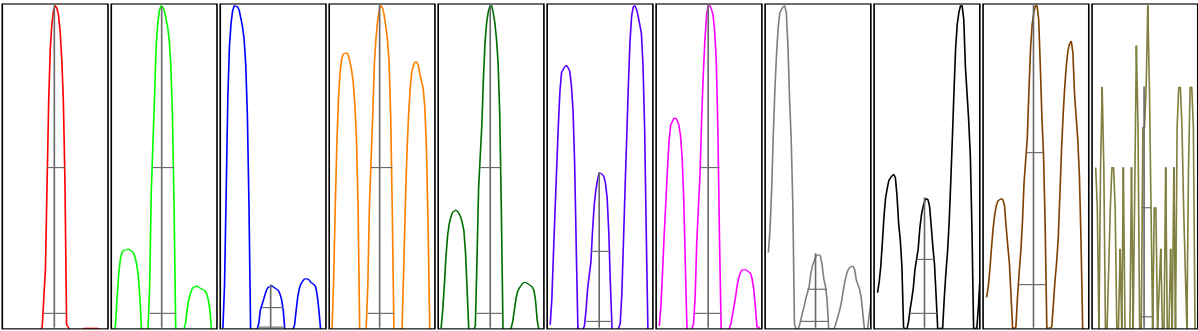
Batch Folder D:\ICP-MS Data\1\DATA\P7031120P.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	15852	0.55	5.00	
24	216526	0.23	5.00	
25	29216	0.43	5.00	
26	33144	0.54	5.00	
59	120323	0.27	5.00	
113	21994	0.64	5.00	
115	69648	1.74	5.00	
206	30285	0.35	5.00	
207	26365	0.41	5.00	
208	62732	0.62	5.00	
220	0	24.85		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	15933	15755	15764	15876	15933
24	215758	216395	216823	216612	217042
25	29109	29184	29101	29288	29399
26	32867	33277	33076	33198	33299
59	119788	120342	120342	120614	120529
113	21778	21997	21962	22119	22116
115	67745	69241	70004	70814	70435
206	30212	30156	30277	30380	30399
207	26312	26312	26386	26272	26542
208	62735	62401	62287	63141	63094
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	31026	9.00	8.9 - 9.1		0.684	0.900	
24	364159	23.95	23.9 - 24.1		0.776	0.900	
25	48683	24.95	24.9 - 25.1		0.774	0.900	
26	57063	25.95	25.9 - 26.1		0.775	0.900	
59	205352	59.00	58.9 - 59.1		0.783	0.900	
113	40673	113.00	112.9 - 113.1		0.778	0.900	
115	128519	115.00	114.9 - 115.1		0.772	0.900	
206	55661	205.95	205.9 - 206.1		0.800	0.900	
207	47201	206.95	206.9 - 207.1		0.789	0.900	
208	116816	207.95	207.9 - 208.1		0.800	0.900	
220	0	220.00	-		0.342		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.6	V	Deflect	12.2	V
Extract 2	-105.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-50	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	26739	0.54	
89	79160	0.44	
205	81991	0.53	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	26626	26883	26738	26885	26565
89	78769	79221	78893	79657	79262
205	82361	82055	82069	82225	81248

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	8.5	V	Deflect	1.2	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			