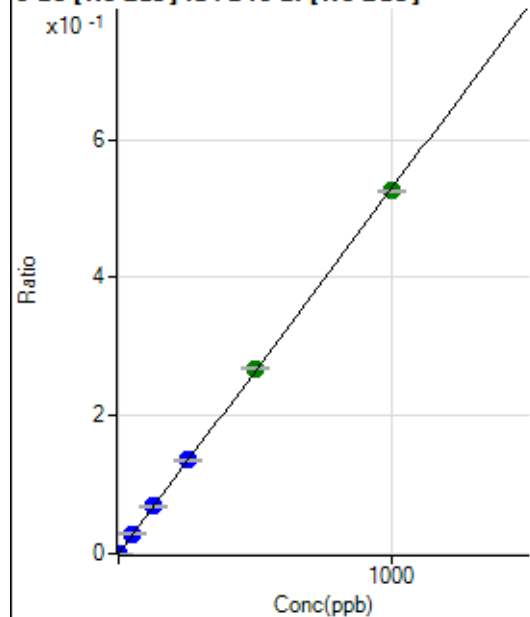


Calibration for 004CALB.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7082523 MS.b\
 Analysis File: P7082523 MS.batch.bin
 DA Date-Time: 2023-08-25 17:42:18
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-08-25 10:47:43
2	006CALS.d	S02	2023-08-25 10:54:13
3	007CALS.d	S03	2023-08-25 10:57:27
4	008CALS.d	S04	2023-08-25 11:00:27
5	009CALS.d	S05	2023-08-25 11:03:16
6	010CALS.d	S06	2023-08-25 11:06:03
7	011CALS.d	S07	2023-08-25 11:08:48
8	012CALS.d	S08	2023-08-25 11:11:35

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	185.56	0.0000	P	9.4
2	☐	1.000	1.073	2858.07	0.0006	P	4.3
3	☐	50.000	54.113	133735.14	0.0287	P	5.9
4	☐	125.000	129.936	322694.69	0.0687	P	2.4
5	☐	250.000	255.668	632528.08	0.1352	P	2.3
6	☐	500.000	507.614	1242904.76	0.2684	A	0.7
7	☐	1000.000	993.953	2397874.25	0.5256	A	0.8
8	☐			944.48	0.0002	P	18.

$$y = 5.2872\text{E-}004 * x + 3.9824\text{E-}005$$

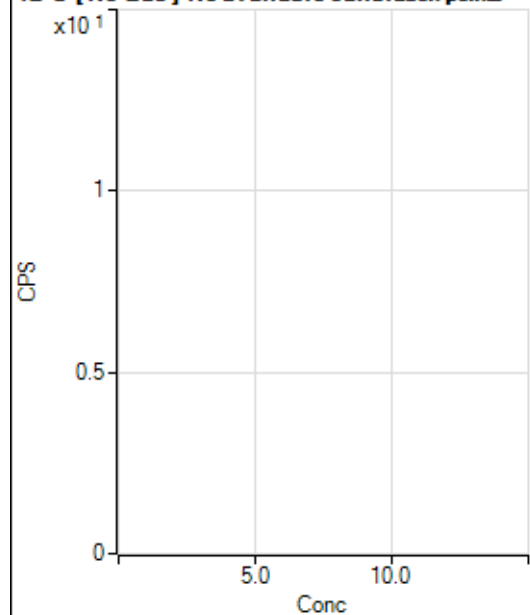
$$R = 0.9999$$

$$DL = 0.02128$$

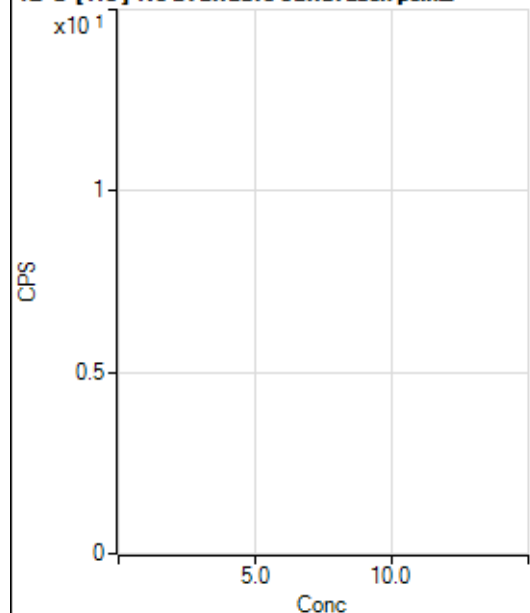
$$BEC = 0.07532$$

Weight: <None>

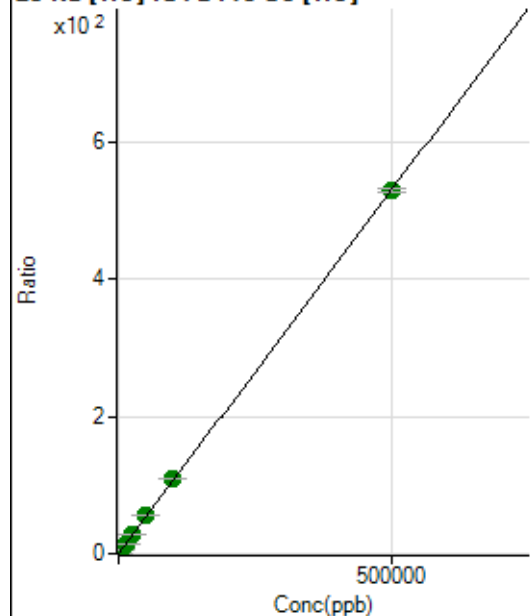
Min Conc: 0

12 C [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	138659.22	0.1612	P	0.1
2	☐	500.000	478.766	583951.14	0.6681	P	1.2
3	☐	5000.000	5265.511	4917243.64	5.7358	A	0.5
4	☐	12500.000	13160.524	11820696.07	14.0943	A	0.8
5	☐	25000.000	26175.357	23028178.55	27.8732	A	0.4
6	☐	50000.000	51817.099	44749181.00	55.0202	A	0.2
7	☐	100000.00	103903.42	88889592.01	110.1643	A	0.6
8	☐	500000.00	498959.69	418281682.66	528.4124	A	1.2

$$y = 0.0011 * x + 0.1612$$

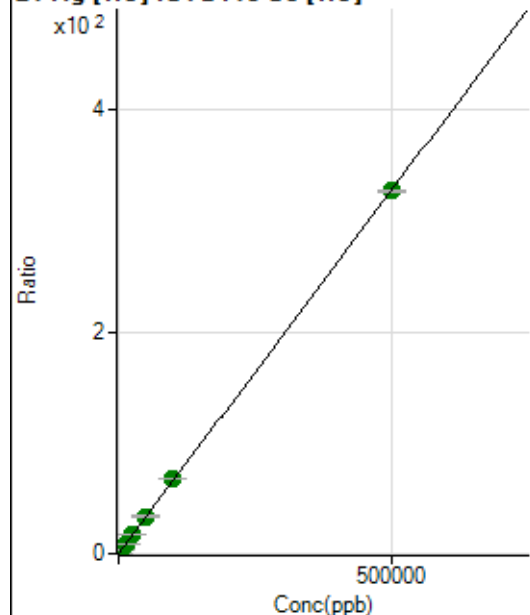
$$R = 1.0000$$

$$DL = 0.2528$$

$$BEC = 152.3$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	933.37	0.0011	P	2.6
2	☐	500.000	480.998	276396.28	0.3162	P	1.5
3	☐	5000.000	5315.964	2986756.73	3.4839	A	0.5
4	☐	12500.000	13013.203	7151445.80	8.5269	A	0.9
5	☐	25000.000	26248.684	14208768.68	17.1984	A	1.3
6	☐	50000.000	51454.755	27419113.76	33.7127	A	0.8
7	☐	100000.00	103048.45	54477323.63	67.5153	A	0.5
8	☐	500000.00	499166.42	258879320.58	327.0397	A	0.5

$$y = 6.5517E-004 * x + 0.0011$$

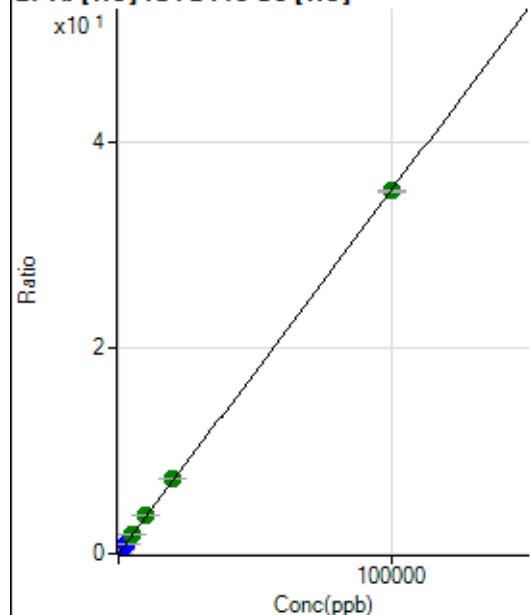
$$R = 1.0000$$

$$DL = 0.1295$$

$$BEC = 1.656$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	428.90	0.0005	P	2.6
2	☐	20.000	20.023	6605.92	0.0076	P	2.2
3	☐	1000.000	1057.323	319986.62	0.3733	P	0.4
4	☐	2500.000	2672.703	790691.46	0.9428	P	0.9
5	☐	5000.000	5217.122	1519911.83	1.8398	A	1.3
6	☐	10000.000	10401.869	2983018.25	3.6677	A	0.4
7	☐	20000.000	20705.157	5890279.77	7.3001	A	0.5
8	☐	100000.00	99803.035	27852788.20	35.1860	A	0.6

$$y = 3.5255E-004 * x + 4.9864E-004$$

$$R = 1.0000$$

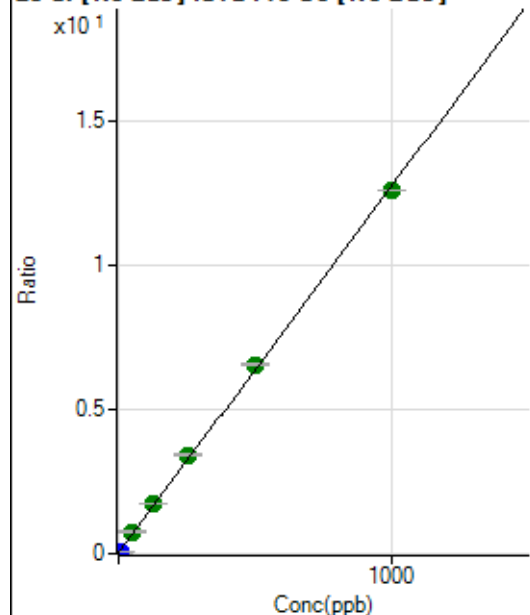
$$DL = 0.1116$$

$$BEC = 1.414$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	352752.09	0.0320	P	1.4
2	☐	10.000	0.511	423469.86	0.0385	P	0.1
3	☐	50.000	56.326	8206623.63	0.7483	A	8.0
4	☐	125.000	133.882	18996575.41	1.7345	A	1.3
5	☐	250.000	267.127	36522054.73	3.4289	A	0.8
6	☐	500.000	513.373	69302386.19	6.5603	A	0.9
7	☐	1000.000	987.700	132408038.03	12.5921	A	0.1
8	☐			1344885.66	0.1333	A	5.5

$$y = 0.0127 * x + 0.0320$$

$$R = 0.9996$$

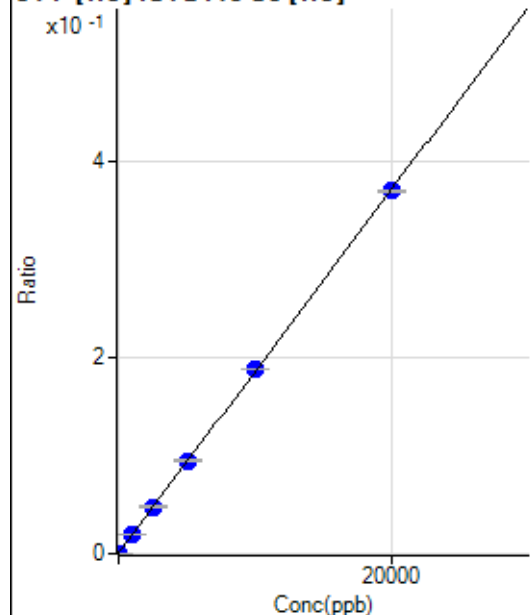
$$DL = 0.1081$$

$$BEC = 2.519$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-7.233	416.67	0.0005	P	7.3
2	☐	0.000	7.233	657.80	0.0008	P	1.9
3	☐	1000.000	1027.990	16864.97	0.0197	P	0.8
4	☐	2500.000	2558.288	40288.39	0.0480	P	0.3
5	☐	5000.000	5074.157	78216.32	0.0947	P	0.9
6	☐	10000.000	10096.736	152711.67	0.1878	P	0.5
7	☐	20000.000	19924.407	298475.92	0.3699	P	0.7
8	☐			518.90	0.0007	P	4.0

$$y = 1.8535E-005 * x + 6.1850E-004$$

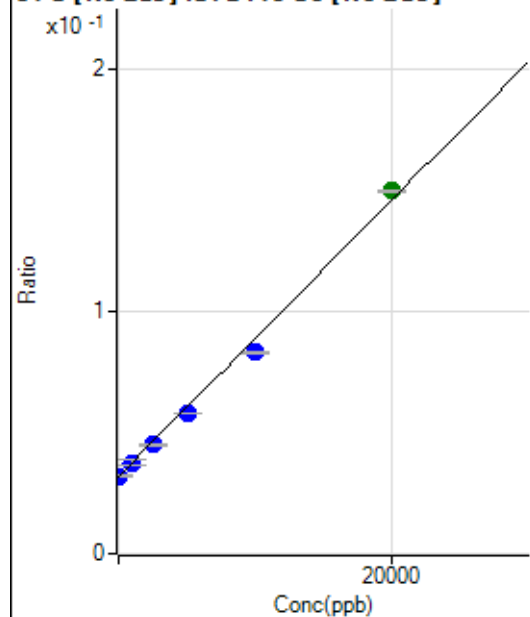
$$R = 1.0000$$

$$DL = 4.055$$

$$BEC = 33.37$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-27.272	349659.04	0.0318	P	1.5
2	☐	0.000	27.272	352394.56	0.0321	P	0.6
3	☐	1000.000	987.069	411827.62	0.0375	P	6.6
4	☐	2500.000	2284.207	491868.85	0.0449	P	1.4
5	☐	5000.000	4558.574	616265.79	0.0579	P	0.5
6	☐	10000.000	8963.328	876091.40	0.0829	P	1.0
7	☐	20000.000	20656.313	1571971.56	0.1495	A	0.7
8	☐			302385.82	0.0300	P	0.5

$$y = 5.6925E-006 * x + 0.0319$$

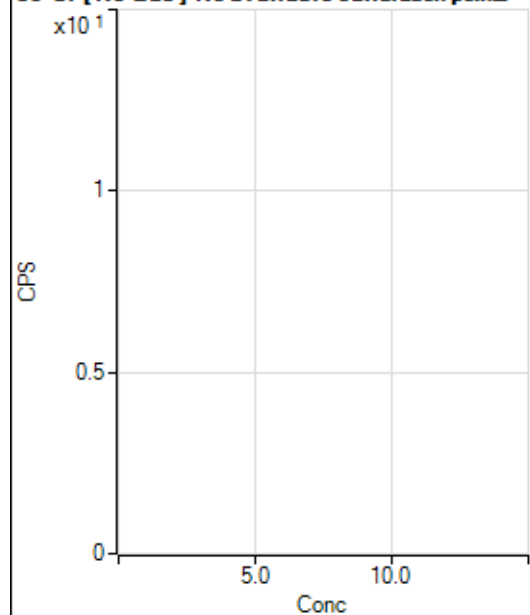
$$R = 0.9978$$

$$DL = 179.1$$

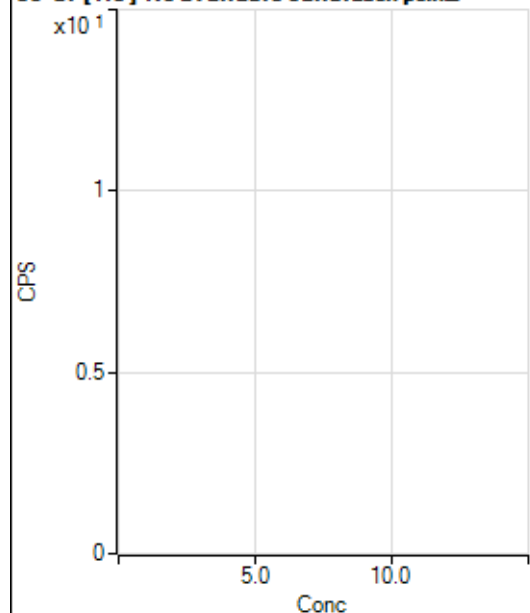
$$BEC = 5605$$

Weight: <None>

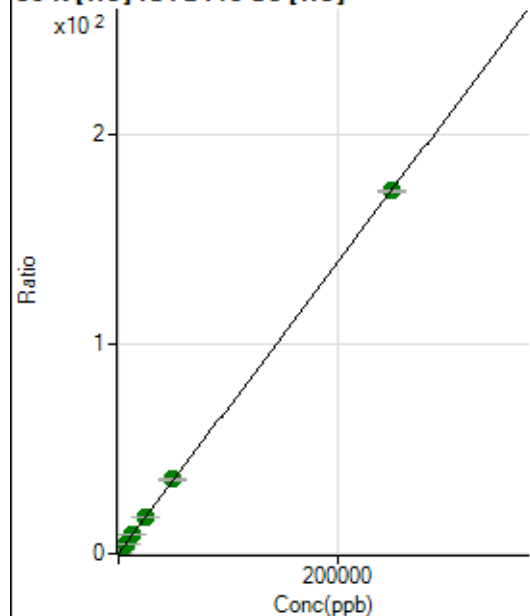
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	89227.23	0.1037	P	0.6
2	☐	500.000	489.473	387037.12	0.4428	P	0.6
3	☐	2500.000	2607.188	1637211.59	1.9097	A	1.8
4	☐	6250.000	6472.381	3847261.30	4.5871	A	1.0
5	☐	12500.000	12852.261	7441264.89	9.0064	A	1.2
6	☐	25000.000	25562.108	14485587.70	17.8103	A	0.1
7	☐	50000.000	50917.389	28542200.13	35.3737	A	0.5
8	☐	250000.00	249736.08	137016396.85	173.0933	A	0.6

$$y = 6.9269E-004 * x + 0.1037$$

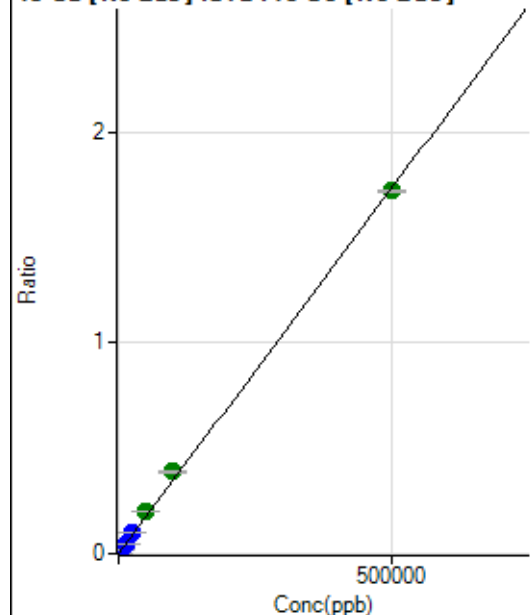
$$R = 1.0000$$

$$DL = 2.735$$

$$BEC = 149.8$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1598.99	0.0001	P	1.8
2	☐	500.000	475.429	19706.25	0.0018	P	0.5
3	☐	5000.000	5839.725	223651.31	0.0204	P	7.2
4	☐	12500.000	14244.004	542259.91	0.0495	P	1.5
5	☐	25000.000	28425.496	1050855.23	0.0987	P	1.4
6	☐	50000.000	57236.354	2097098.96	0.1985	A	1.5
7	☐	100000.00	112013.26	4083747.47	0.3884	A	0.9
8	☐	500000.00	496650.46	17354136.82	1.7215	A	0.8

$$y = 3.4659\text{E-}006 * x + 1.4521\text{E-}004$$

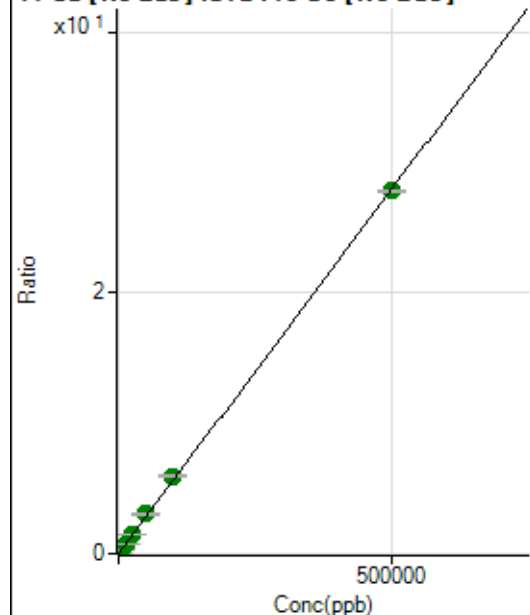
$$R = 0.9996$$

$$DL = 2.2$$

$$BEC = 41.9$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44578.74	0.0040	P	2.3
2	☐	500.000	477.048	337083.04	0.0307	P	1.2
3	☐	5000.000	5517.064	3420657.80	0.3119	A	8.3
4	☐	12500.000	13491.360	8290161.12	0.7570	A	1.9
5	☐	25000.000	27086.528	16142874.90	1.5157	A	1.9
6	☐	50000.000	54101.448	31938905.36	3.0234	A	1.4
7	☐	100000.00	106554.73	62571784.62	5.9507	A	1.1
8	☐	500000.00	498144.65	280309071.38	27.8047	A	0.8

$$y = 5.5808\text{E-}005 * x + 0.0040$$

$$R = 0.9999$$

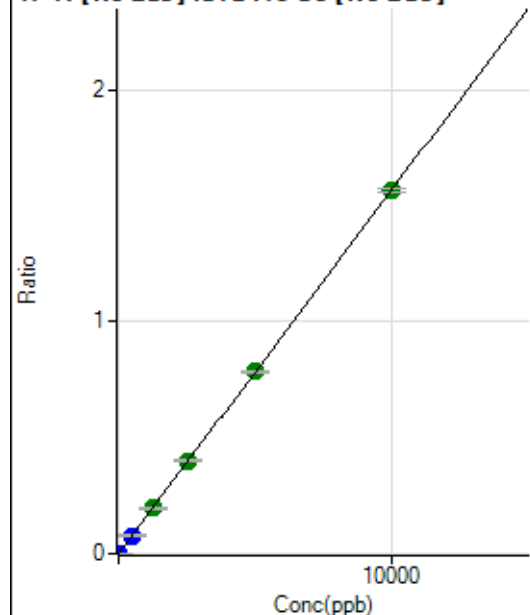
$$DL = 5.071$$

$$BEC = 72.55$$

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	522.24	0.0000	P	3.6
2	☐	5.000	4.843	8854.90	0.0008	P	2.3
3	☐	500.000	497.877	855258.15	0.0780	P	8.5
4	☐	1250.000	1251.172	2145856.93	0.1959	A	2.4
5	☐	2500.000	2542.621	4240614.55	0.3982	A	1.9
6	☐	5000.000	5014.416	8295255.22	0.7852	A	1.0
7	☐	10000.000	9982.097	16434898.64	1.5630	A	1.1
8	☐			5223.21	0.0005	P	22.

$$y = 1.5657E-004 * x + 4.7406E-005$$

$$R = 1.0000$$

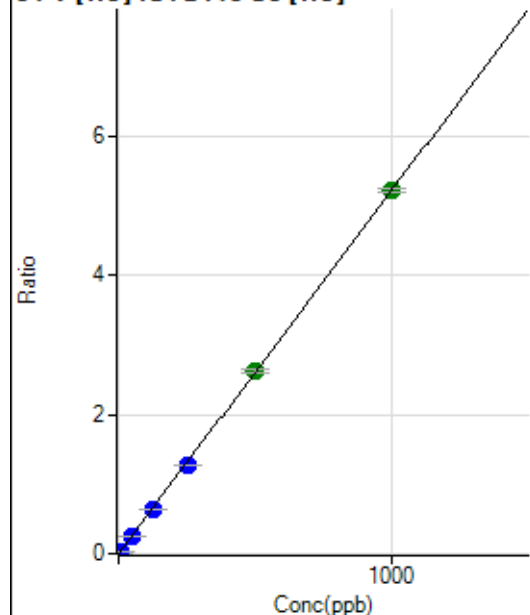
$$DL = 0.0326$$

$$BEC = 0.3028$$

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	105.55	0.0001	P	12.
2	☐	5.000	4.624	21164.95	0.0242	P	1.6
3	☐	50.000	49.462	221007.75	0.2578	P	0.8
4	☐	125.000	123.200	538387.15	0.6419	P	0.5
5	☐	250.000	245.640	1057342.32	1.2798	P	0.4
6	☐	500.000	503.610	2133897.73	2.6237	A	1.4
7	☐	1000.000	999.539	4201558.55	5.2073	A	0.9
8	☐			1743.45	0.0022	P	1.8

$$y = 0.0052 * x + 1.2271E-004$$

$$R = 1.0000$$

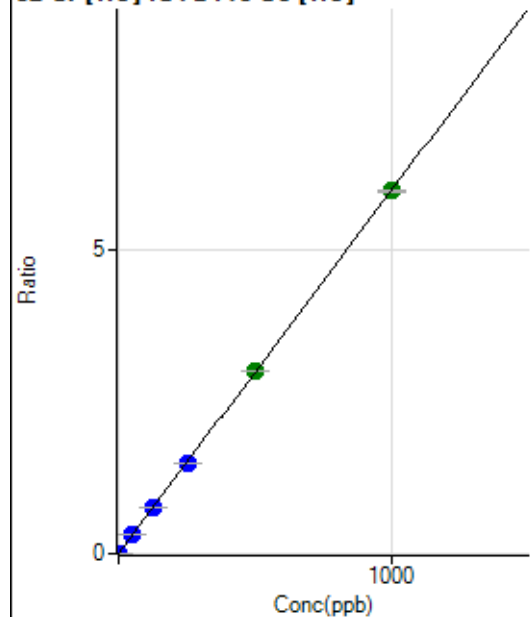
$$DL = 0.008932$$

$$BEC = 0.02355$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2254.64	0.0026	P	0.9
2	☐	2.000	2.031	12887.83	0.0147	P	1.9
3	☐	50.000	50.654	261492.09	0.3050	P	0.5
4	☐	125.000	126.531	635744.35	0.7580	P	0.7
5	☐	250.000	249.095	1230764.68	1.4897	P	0.3
6	☐	500.000	503.106	2444988.68	3.0062	A	0.4
7	☐	1000.000	998.449	4811658.64	5.9633	A	0.8
8	☐			18185.52	0.0230	P	0.6

$$y = 0.0060 * x + 0.0026$$

$$R = 1.0000$$

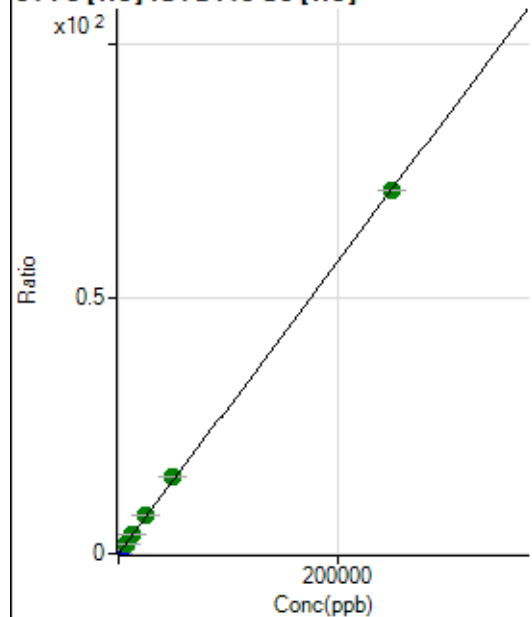
$$DL = 0.01209$$

$$BEC = 0.4391$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2549.13	0.0030	P	2.8
2	☐	50.000	53.037	15812.87	0.0181	P	0.6
3	☐	2500.000	2777.431	681631.08	0.7951	P	0.8
4	☐	6250.000	6751.248	1617438.03	1.9285	A	0.8
5	☐	12500.000	13435.482	3168264.40	3.8349	A	0.4
6	☐	25000.000	26369.409	6119226.30	7.5237	A	0.3
7	☐	50000.000	52406.610	12062848.99	14.9498	A	0.4
8	☐	250000.00	249319.65	56290053.61	71.1111	A	0.2

$$y = 2.8521E-004 * x + 0.0030$$

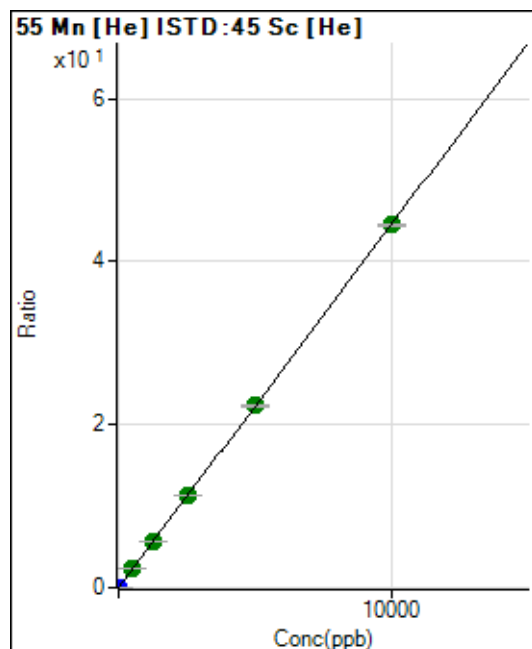
$$R = 0.9999$$

$$DL = 0.8729$$

$$BEC = 10.39$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	675.58	0.0008	P	5.7
2	☐	1.000	1.056	4800.82	0.0055	P	2.2
3	☐	500.000	512.370	1958716.86	2.2848	A	0.7
4	☐	1250.000	1280.763	4789017.08	5.7101	A	1.0
5	☐	2500.000	2527.827	9310411.04	11.2692	A	0.1
6	☐	5000.000	5010.217	18165731.26	22.3350	A	0.5
7	☐	10000.000	9983.471	35910278.63	44.5045	A	0.4
8	☐			16174.36	0.0204	P	1.7

$$y = 0.0045 * x + 7.8545E-004$$

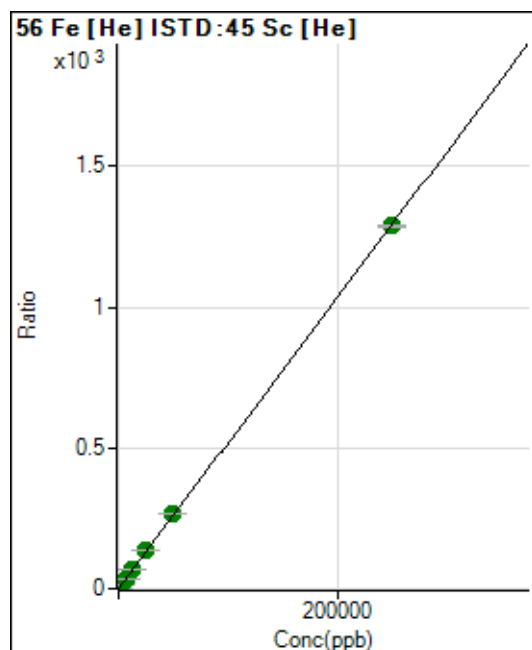
$$R = 1.0000$$

$$DL = 0.03011$$

$$BEC = 0.1762$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19933.30	0.0232	P	1.6
2	☐	50.000	51.911	254580.88	0.2913	P	0.8
3	☐	2500.000	2656.978	11782839.82	13.7445	A	1.3
4	☐	6250.000	6646.099	28805226.24	34.3453	A	1.3
5	☐	12500.000	13171.742	56218677.50	68.0454	A	0.1
6	☐	25000.000	26053.890	109451042.82	134.5720	A	0.4
7	☐	50000.000	51761.418	215706616.78	267.3322	A	0.2
8	☐	250000.00	249497.26	1019946020.3	1,288.489	A	0.3

$$y = 0.0052 * x + 0.0232$$

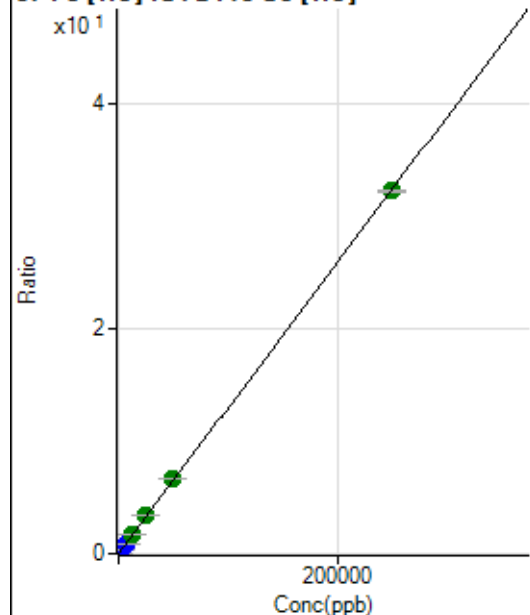
$$R = 1.0000$$

$$DL = 0.2093$$

$$BEC = 4.488$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1098.94	0.0013	P	3.3
2	☐	50.000	52.530	7057.28	0.0081	P	0.3
3	☐	2500.000	2695.326	300037.48	0.3500	P	0.4
4	☐	6250.000	6760.143	734588.75	0.8759	P	0.5
5	☐	12500.000	13327.319	1425635.55	1.7255	A	0.7
6	☐	25000.000	26121.835	2749667.25	3.3808	A	0.6
7	☐	50000.000	51388.017	5365453.39	6.6496	A	0.4
8	☐	250000.00	249554.14	25557837.67	32.2874	A	0.6

$$y = 1.2938\text{E-}004 * x + 0.0013$$

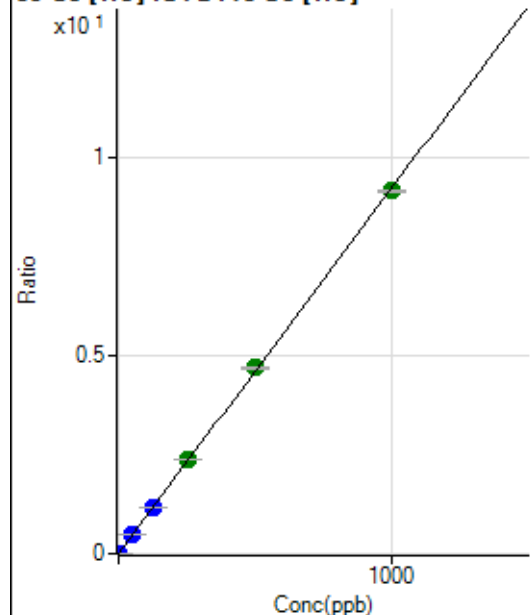
R = 1.0000

DL = 0.9885

BEC = 9.876

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	374.45	0.0004	P	6.7
2	☐	1.000	0.965	8166.72	0.0093	P	0.7
3	☐	50.000	51.319	406596.77	0.4743	P	0.6
4	☐	125.000	127.039	984178.60	1.1734	P	0.9
5	☐	250.000	257.310	1963263.46	2.3763	A	0.5
6	☐	500.000	508.724	3820786.96	4.6977	A	0.7
7	☐	1000.000	993.490	7402150.10	9.1738	A	0.4
8	☐			7712.05	0.0097	P	2.8

$$y = 0.0092 * x + 4.3536\text{E-}004$$

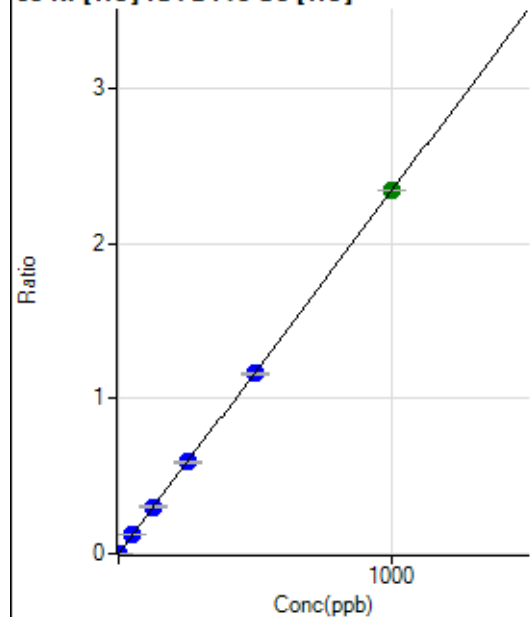
R = 0.9999

DL = 0.009528

BEC = 0.04715

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	430.01	0.0005	P	9.4
2	☐	1.000	1.071	2626.93	0.0030	P	0.4
3	☐	50.000	52.790	106264.08	0.1240	P	0.4
4	☐	125.000	129.589	254591.80	0.3036	P	1.1
5	☐	250.000	252.713	488648.84	0.5915	P	1.3
6	☐	500.000	496.909	945536.77	1.1626	P	0.9
7	☐	1000.000	1000.154	1887689.31	2.3394	A	0.2
8	☐			4401.79	0.0056	P	2.3

$$y = 0.0023 * x + 4.9991E-004$$

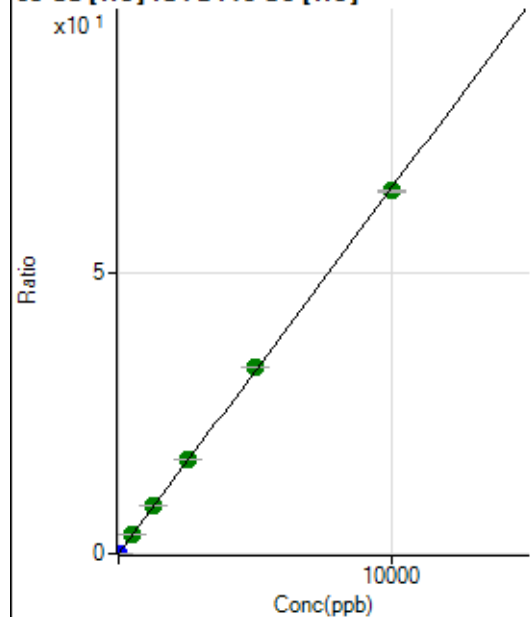
$$R = 1.0000$$

$$DL = 0.06048$$

$$BEC = 0.2138$$

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	2384.66	0.0028	P	2.4
2	☐	2.000	1.980	13662.99	0.0156	P	1.6
3	☐	500.000	531.081	2959745.09	3.4525	A	0.8
4	☐	1250.000	1309.387	7135784.20	8.5081	A	0.9
5	☐	2500.000	2581.163	13854211.46	16.7691	A	0.4
6	☐	5000.000	5089.483	26890435.43	33.0623	A	0.3
7	☐	10000.000	9925.990	52026700.33	64.4787	A	0.5
8	☐			10900.71	0.0138	P	0.6

$$y = 0.0065 * x + 0.0028$$

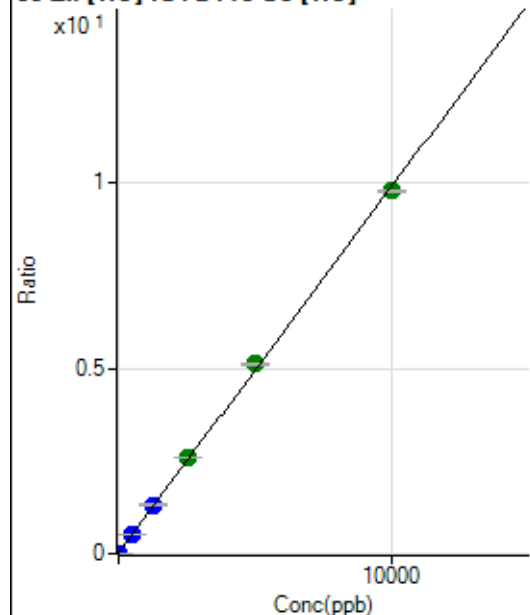
$$R = 0.9999$$

$$DL = 0.03097$$

$$BEC = 0.4268$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16890.75	0.0196	P	2.5
2	☐	2.000	2.178	19045.56	0.0218	P	1.0
3	☐	500.000	526.244	462482.77	0.5395	P	0.3
4	☐	1250.000	1316.590	1107249.98	1.3202	P	0.8
5	☐	2500.000	2603.274	2140805.61	2.5912	A	0.3
6	☐	5000.000	5156.607	4158906.36	5.1135	A	0.4
7	☐	10000.000	9886.242	7895878.91	9.7855	A	0.4
8	☐			20292.75	0.0256	P	1.1

$$y = 9.8782\text{E-}004 * x + 0.0196$$

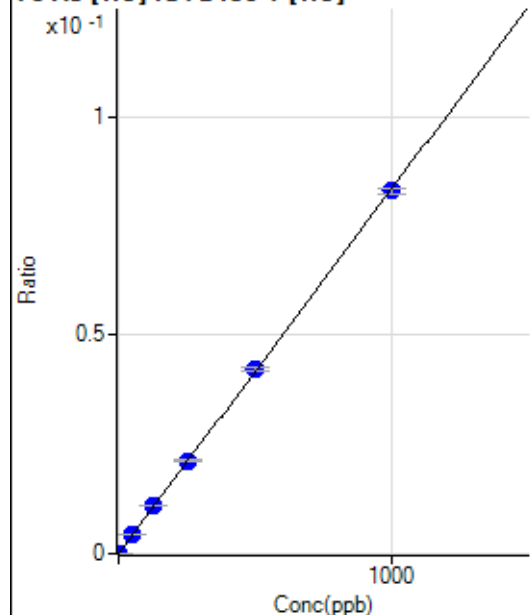
$$R = 0.9997$$

$$DL = 1.467$$

$$BEC = 19.88$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.33	0.0000	P	43.
2	☐	1.000	0.989	567.79	0.0001	P	3.2
3	☐	50.000	52.887	29091.89	0.0044	P	1.3
4	☐	125.000	130.572	71320.13	0.0109	P	0.6
5	☐	250.000	254.416	138425.95	0.0212	P	1.4
6	☐	500.000	506.080	271400.13	0.0422	P	1.3
7	☐	1000.000	995.015	532236.85	0.0829	P	1.7
8	☐			131.11	0.0000	P	4.5

$$y = 8.3363\text{E-}005 * x + 2.0075\text{E-}006$$

$$R = 1.0000$$

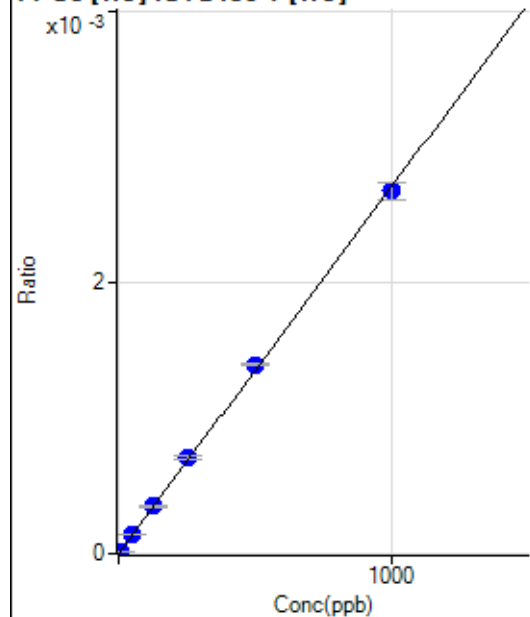
$$DL = 0.03136$$

$$BEC = 0.02408$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.100	74.45	0.0000	P	9.5
3	☐	50.000	52.510	935.60	0.0001	P	4.0
4	☐	125.000	129.572	2293.54	0.0004	P	4.2
5	☐	250.000	261.300	4606.32	0.0007	P	3.2
6	☐	500.000	515.097	8952.76	0.0014	P	1.2
7	☐	1000.000	988.934	17135.55	0.0027	P	5.0
8	☐			85.55	0.0000	P	16.

$$y = 2.7015\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

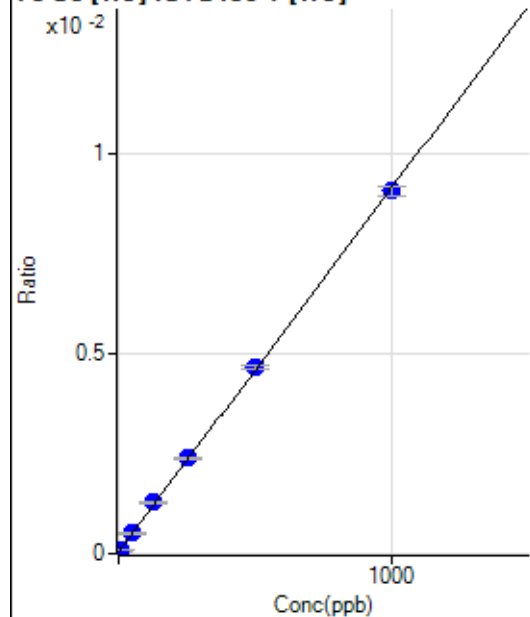
$$DL = 0$$

$$BEC = 0$$

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	295.56	0.0000	P	0.6
2	☐	5.000	5.077	610.02	0.0001	P	6.2
3	☐	50.000	51.671	3399.31	0.0005	P	4.3
4	☐	125.000	135.683	8391.35	0.0013	P	2.4
5	☐	250.000	258.054	15637.27	0.0024	P	1.6
6	☐	500.000	508.135	30071.71	0.0047	P	1.8
7	☐	1000.000	992.500	58309.84	0.0091	P	2.7
8	☐			583.35	0.0001	P	0.7

$$y = 9.1126\text{E-}006 * x + 4.4487\text{E-}005$$

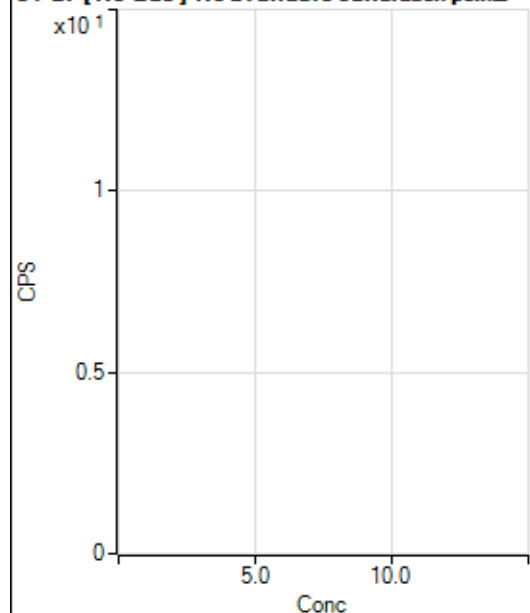
$$R = 0.9999$$

$$DL = 0.08683$$

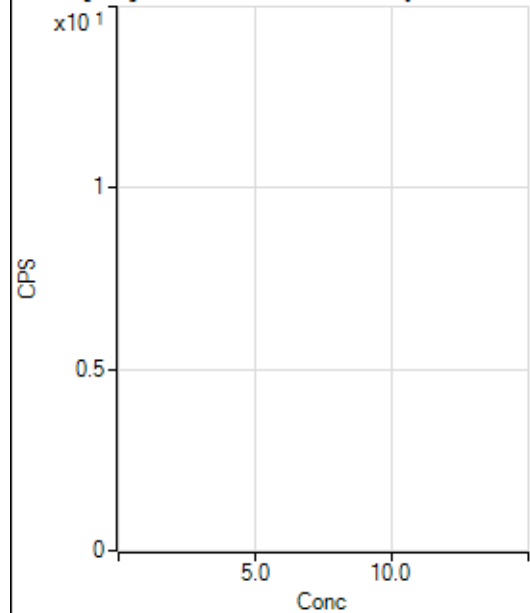
$$BEC = 4.882$$

Weight: <None>

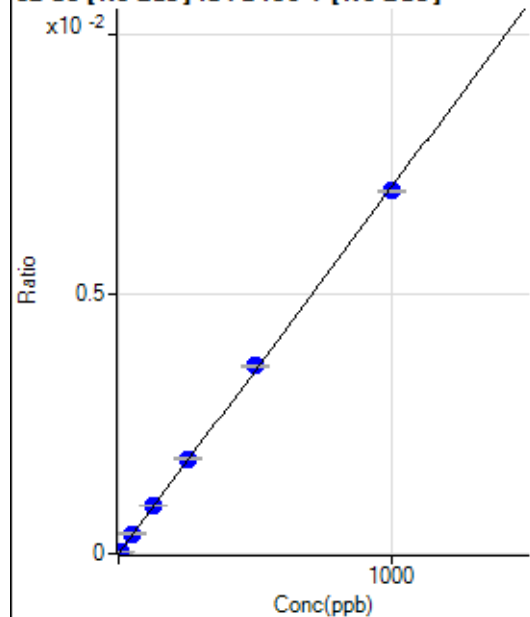
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			29873.67		P	1.2
2	☐			30368.00		P	2.1
3	☐			30207.72		P	2.2
4	☐			29349.29		P	0.1
5	☐			28711.33		P	0.5
6	☐			28863.85		P	0.5
7	☐			28937.29		P	0.7
8	☐			34642.93		P	4.0

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			170.00		P	9.0
2	☐			172.23		P	15.
3	☐			148.89		P	6.8
4	☐			170.00		P	10.
5	☐			146.67		P	6.8
6	☐			194.45		P	11.
7	☐			190.00		P	6.3
8	☐			1276.74		P	8.0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.94	0.0000	P	34.
2	☐	5.000	5.186	1093.85	0.0000	P	5.7
3	☐	50.000	54.484	11226.84	0.0004	P	7.0
4	☐	125.000	132.503	27647.56	0.0009	P	1.9
5	☐	250.000	259.229	53768.97	0.0018	P	1.3
6	☐	500.000	512.557	104329.44	0.0036	P	1.4
7	☐	1000.000	990.251	202415.93	0.0070	P	0.2
8	☐			1154.68	0.0000	P	2.7

$$y = 7.0539\text{E-}006 * x + 5.0936\text{E-}007$$

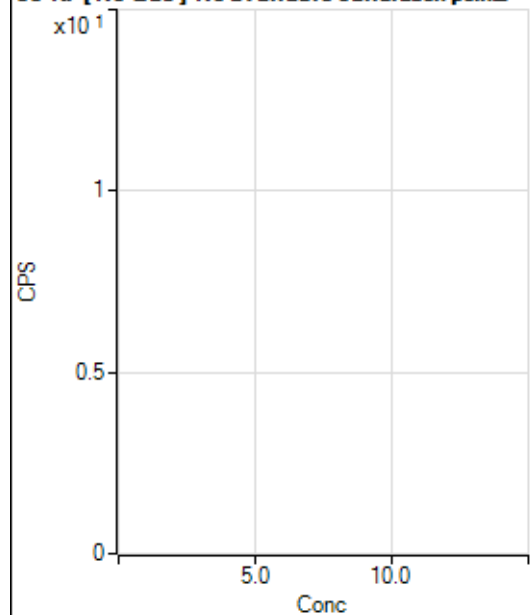
$$R = 0.9998$$

$$DL = 0.07371$$

$$BEC = 0.07221$$

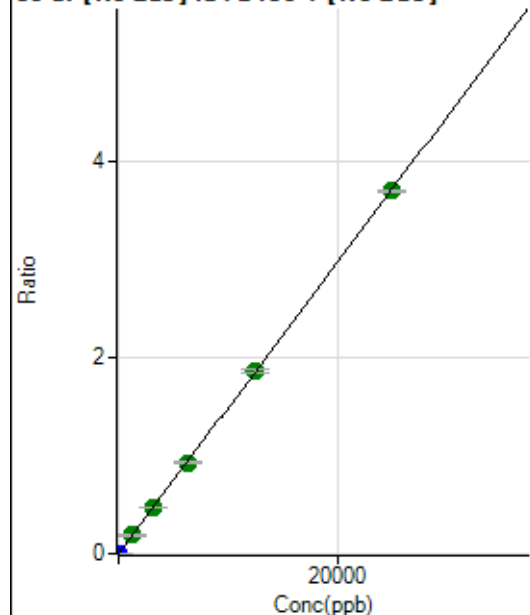
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			201.11		P	8.5
2	☐			192.22		P	15.
3	☐			183.34		P	26.
4	☐			178.89		P	15.
5	☐			161.11		P	10.
6	☐			210.01		P	11.
7	☐			263.34		P	3.8
8	☐			332.23		P	7.1

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	314.45	0.0000	P	3.8
2	☐	1.000	0.946	4451.82	0.0002	P	2.5
3	☐	1250.000	1310.205	5660656.58	0.1942	A	9.1
4	☐	3125.000	3153.169	13818663.68	0.4674	A	1.2
5	☐	6250.000	6266.169	27304638.76	0.9288	A	1.4
6	☐	12500.000	12589.041	53838819.19	1.8661	A	2.1
7	☐	25000.000	24944.906	107142945.07	3.6976	A	0.2
8	☐			23763.30	0.0009	P	36.

$$y = 1.4823E-004 * x + 1.0716E-005$$

$$R = 1.0000$$

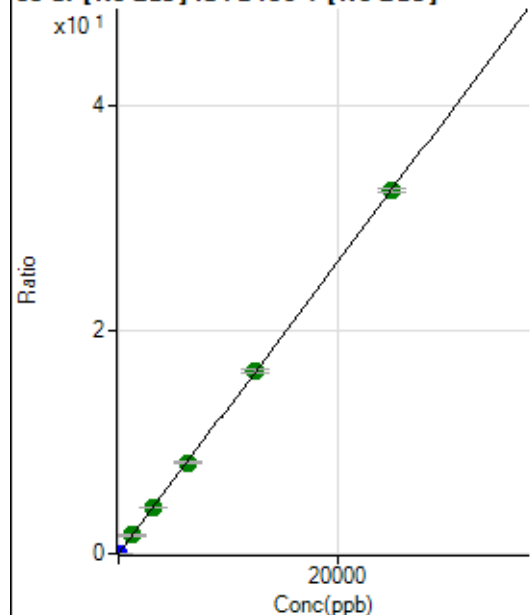
$$DL = 0.008152$$

$$BEC = 0.07229$$

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	273.34	0.0000	P	4.5
2	☐	1.000	0.943	36448.49	0.0012	P	2.0
3	☐	1250.000	1281.160	48605826.50	1.6667	A	7.7
4	☐	3125.000	3135.043	120577183.76	4.0784	A	1.5
5	☐	6250.000	6254.088	239165165.32	8.1360	A	1.9
6	☐	12500.000	12597.376	472851472.95	16.3881	A	1.8
7	☐	25000.000	24947.477	940464910.43	32.4545	A	0.9
8	☐			203826.02	0.0077	P	36.

$$y = 0.0013 * x + 9.3133E-006$$

$$R = 1.0000$$

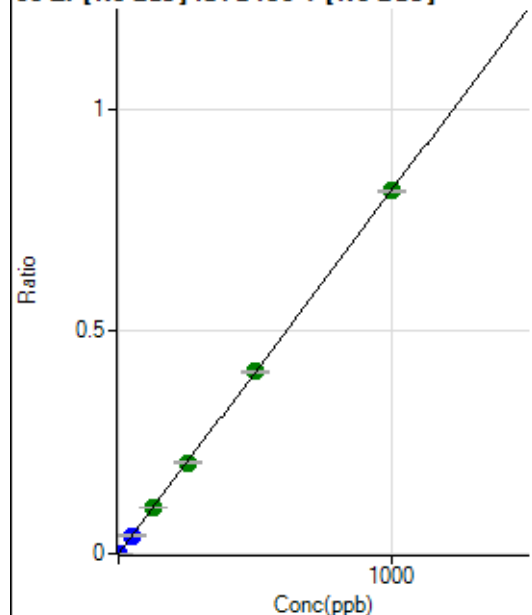
$$DL = 0.0009761$$

$$BEC = 0.007159$$

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	1050.05	0.0000	P	7.1
2	☐	1.000	0.870	22035.47	0.0007	P	1.1
3	☐	50.000	49.927	1191265.23	0.0408	P	7.4
4	☐	125.000	126.283	3052616.76	0.1033	A	1.3
5	☐	250.000	251.136	6035174.70	0.2053	A	1.5
6	☐	500.000	500.926	11813700.93	0.4095	A	1.7
7	☐	1000.000	999.097	23664499.09	0.8166	A	0.7
8	☐			12769.06	0.0005	P	14.

$$y = 8.1735\text{E-}004 * x + 3.5775\text{E-}005$$

$$R = 1.0000$$

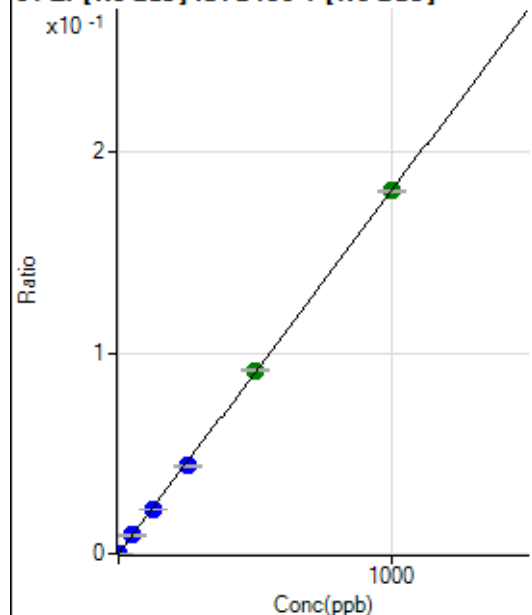
$$DL = 0.009272$$

$$BEC = 0.04377$$

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	192.23	0.0000	P	9.7
2	☐	1.000	0.874	4851.96	0.0002	P	1.4
3	☐	50.000	50.340	265494.74	0.0091	P	7.5
4	☐	125.000	121.618	649950.33	0.0220	P	1.7
5	☐	250.000	241.970	1285606.58	0.0437	P	1.1
6	☐	500.000	505.022	2633581.50	0.0913	A	1.6
7	☐	1000.000	999.902	5236274.54	0.1807	A	0.8
8	☐			2848.09	0.0001	P	11.

$$y = 1.8071\text{E-}004 * x + 6.5488\text{E-}006$$

$$R = 0.9999$$

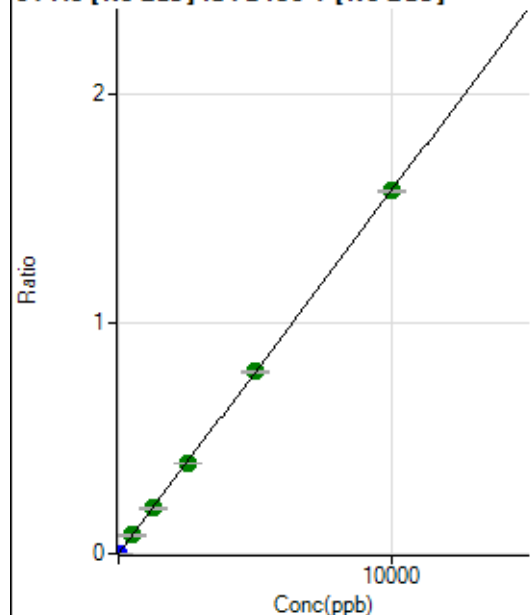
$$DL = 0.01054$$

$$BEC = 0.03624$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	471.12	0.0000	P	2.0
2	☐	5.000	5.573	26404.93	0.0009	P	1.3
3	☐	500.000	521.113	2397467.74	0.0822	A	8.2
4	☐	1250.000	1251.745	5839002.21	0.1975	A	1.5
5	☐	2500.000	2492.634	11560808.86	0.3933	A	1.7
6	☐	5000.000	5019.136	22847211.88	0.7919	A	1.3
7	☐	10000.000	9990.999	45675420.99	1.5763	A	0.4
8	☐			14948.05	0.0006	P	24.

$$y = 1.5777E-004 * x + 1.6055E-005$$

$$R = 1.0000$$

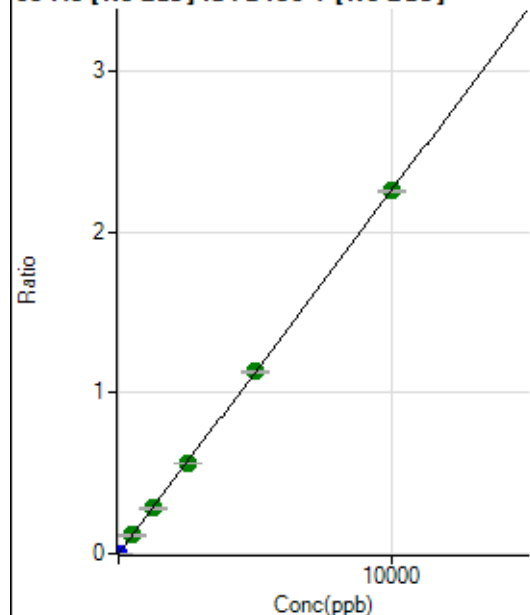
$$DL = 0.006029$$

$$BEC = 0.1018$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.00	0.0000	P	12.
2	☐	5.000	4.768	31918.14	0.0011	P	2.0
3	☐	500.000	513.540	3376329.05	0.1158	A	8.3
4	☐	1250.000	1249.615	8330944.04	0.2818	A	1.1
5	☐	2500.000	2492.324	16520972.26	0.5620	A	1.3
6	☐	5000.000	5019.039	32653228.96	1.1318	A	1.4
7	☐	10000.000	9991.771	65283665.14	2.2531	A	0.5
8	☐			17227.61	0.0006	P	31.

$$y = 2.2549E-004 * x + 7.1542E-006$$

$$R = 1.0000$$

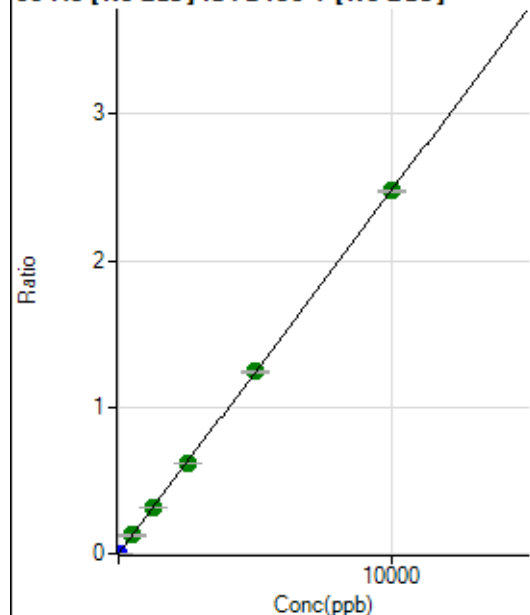
$$DL = 0.01172$$

$$BEC = 0.03173$$

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	274.45	0.0000	P	9.8
2	☐	5.000	4.847	35680.12	0.0012	P	0.4
3	☐	500.000	516.276	3727794.22	0.1279	A	8.6
4	☐	1250.000	1257.212	9206196.39	0.3114	A	1.1
5	☐	2500.000	2494.126	18159604.18	0.6177	A	1.3
6	☐	5000.000	5016.558	35851084.19	1.2425	A	0.8
7	☐	10000.000	9991.475	71705271.71	2.4747	A	0.5
8	☐			34507.09	0.0013	P	17.

$$y = 2.4768E-004 * x + 9.3500E-006$$

$$R = 1.0000$$

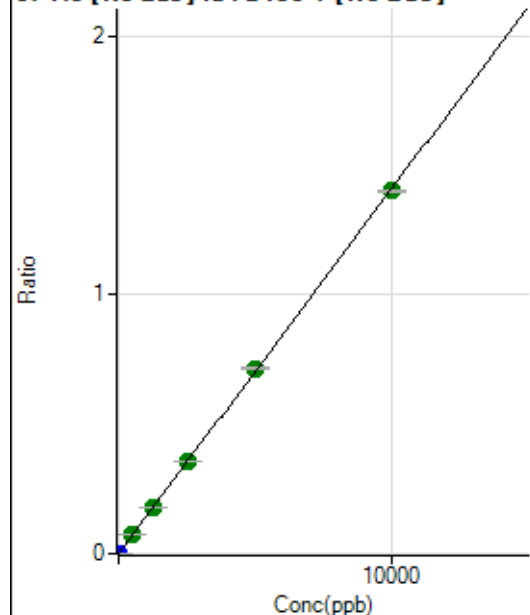
$$DL = 0.01108$$

$$BEC = 0.03775$$

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	112.22	0.0000	P	2.0
2	☐	5.000	4.915	20513.36	0.0007	P	1.8
3	☐	500.000	523.690	2149303.39	0.0737	A	7.9
4	☐	1250.000	1260.029	5243158.01	0.1773	A	1.3
5	☐	2500.000	2517.385	10415706.02	0.3543	A	0.8
6	☐	5000.000	5087.901	20662461.63	0.7161	A	1.6
7	☐	10000.000	9949.265	40575321.34	1.4003	A	0.3
8	☐			10513.01	0.0004	P	31.

$$y = 1.4074E-004 * x + 3.8242E-006$$

$$R = 0.9999$$

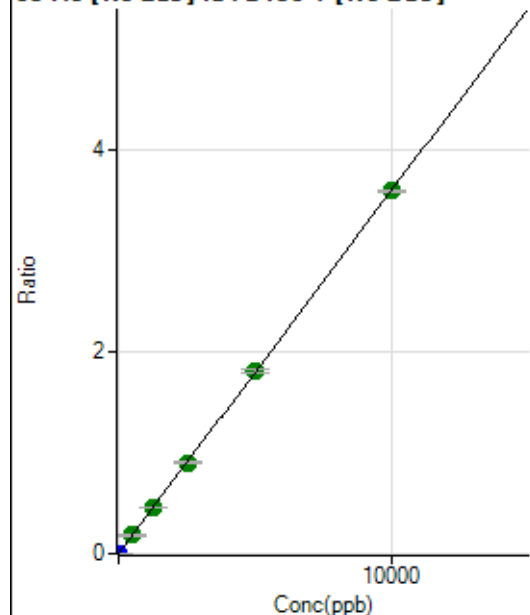
$$DL = 0.00161$$

$$BEC = 0.02717$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	330.01	0.0000	P	15.
2	☐	5.000	4.815	51544.93	0.0017	P	1.8
3	☐	500.000	516.585	5432192.87	0.1863	A	8.0
4	☐	1250.000	1254.521	13375342.02	0.4524	A	1.5
5	☐	2500.000	2510.161	26609982.10	0.9052	A	0.8
6	☐	5000.000	5016.203	52186779.22	1.8089	A	2.6
7	☐	10000.000	9987.964	104368145.11	3.6018	A	0.5
8	☐			26090.82	0.0010	P	34.

$$y = 3.6061E-004 * x + 1.1245E-005$$

$$R = 1.0000$$

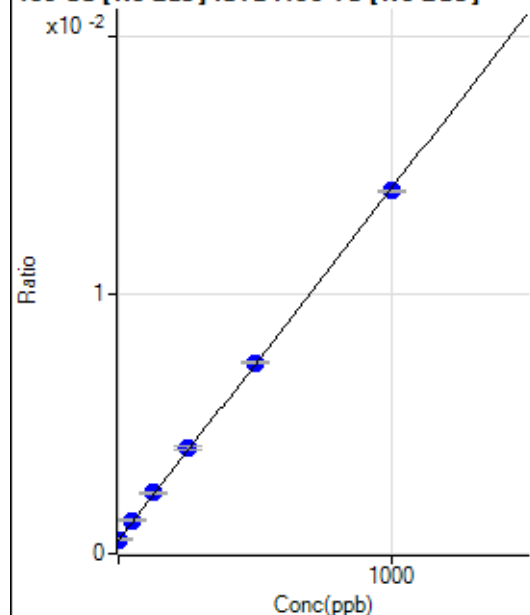
$$DL = 0.0143$$

$$BEC = 0.03118$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13098.21	0.0005	P	0.6
2	☐	1.000	1.621	13682.12	0.0005	P	4.3
3	☐	50.000	55.680	31818.17	0.0013	P	4.1
4	☐	125.000	133.829	59601.59	0.0023	P	1.9
5	☐	250.000	262.422	103240.05	0.0041	P	2.4
6	☐	500.000	504.601	188136.10	0.0074	P	0.7
7	☐	1000.000	993.206	355859.07	0.0140	P	0.7
8	☐			11798.21	0.0005	P	1.8

$$y = 1.3593E-005 * x + 5.2577E-004$$

$$R = 0.9999$$

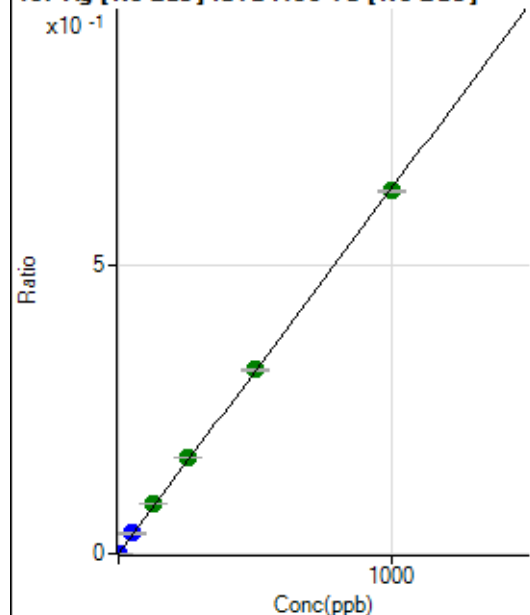
$$DL = 0.7074$$

$$BEC = 38.68$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	146.67	0.0000	P	30.
2	☐	1.000	1.048	16689.71	0.0007	P	3.0
3	☐	50.000	55.721	872628.97	0.0352	P	7.9
4	☐	125.000	135.643	2180003.89	0.0858	A	1.8
5	☐	250.000	263.174	4197614.14	0.1664	A	1.3
6	☐	500.000	503.480	8110426.96	0.3183	A	0.8
7	☐	1000.000	993.350	15934215.87	0.6281	A	0.4
8	☐			8323.58	0.0004	P	15.

$$y = 6.3225\text{E-}004 * x + 5.8790\text{E-}006$$

$$R = 0.9999$$

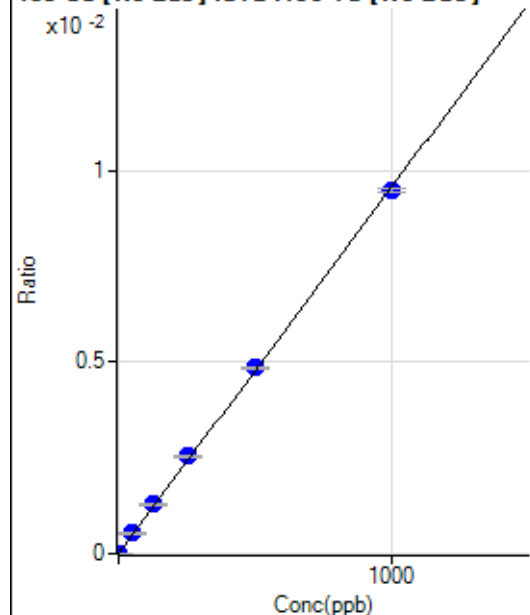
$$DL = 0.008595$$

$$BEC = 0.009298$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	42.22	0.0000	P	17.
2	☐	1.000	1.139	314.45	0.0000	P	3.7
3	☐	50.000	56.847	13486.38	0.0005	P	10.
4	☐	125.000	134.492	32723.59	0.0013	P	1.7
5	☐	250.000	265.874	64161.06	0.0025	P	1.7
6	☐	500.000	508.542	123895.75	0.0049	P	1.0
7	☐	1000.000	990.232	240218.84	0.0095	P	1.1
8	☐			207.78	0.0000	P	27.

$$y = 9.5598\text{E-}006 * x + 1.6972\text{E-}006$$

$$R = 0.9998$$

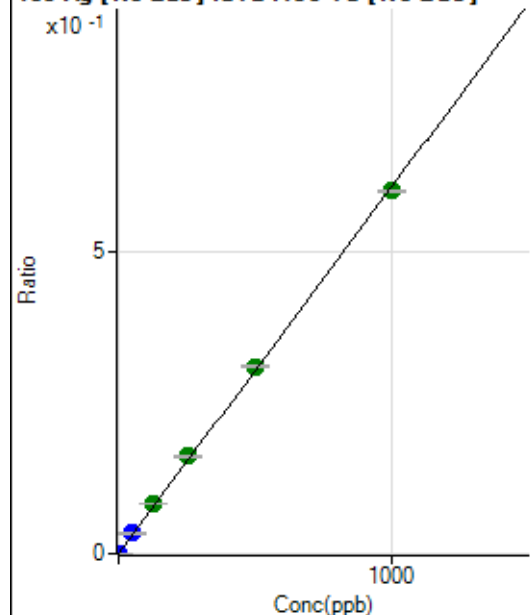
$$DL = 0.09416$$

$$BEC = 0.1775$$

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	23.
2	☐	1.000	1.031	15675.25	0.0006	P	0.6
3	☐	50.000	55.273	830945.11	0.0335	P	7.8
4	☐	125.000	134.881	2080817.36	0.0819	A	1.4
5	☐	250.000	266.425	4079151.92	0.1617	A	1.7
6	☐	500.000	509.274	7874247.87	0.3091	A	1.0
7	☐	1000.000	989.758	15240350.88	0.6007	A	0.8
8	☐			7355.29	0.0003	P	15.

$$y = 6.0692\text{E-}004 * x + 2.0035\text{E-}006$$

$$R = 0.9998$$

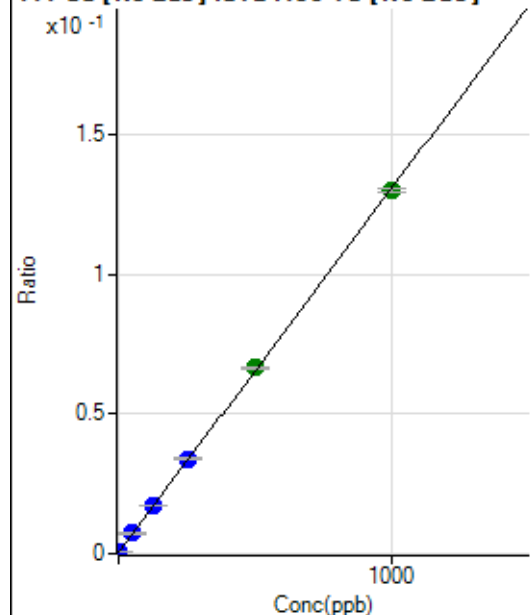
$$DL = 0.002282$$

$$BEC = 0.003301$$

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	9210.31	0.0004	P	0.5
2	☐	1.000	1.114	12855.61	0.0005	P	4.5
3	☐	50.000	54.488	184819.50	0.0075	P	7.4
4	☐	125.000	130.267	440337.75	0.0173	P	1.4
5	☐	250.000	257.693	855335.72	0.0339	P	2.0
6	☐	500.000	507.277	1691343.36	0.0664	A	1.3
7	☐	1000.000	993.555	3290102.38	0.1297	A	1.0
8	☐			9870.09	0.0004	P	1.7

$$y = 1.3015\text{E-}004 * x + 3.6971\text{E-}004$$

$$R = 0.9999$$

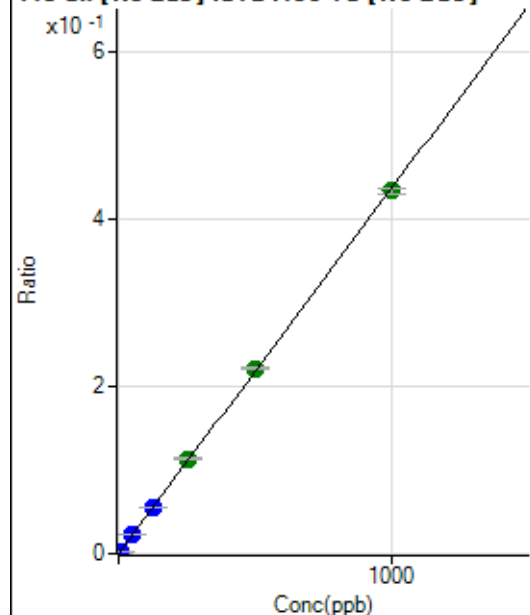
$$DL = 0.04241$$

$$BEC = 2.841$$

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	1766.80	0.0001	P	5.9
2	☐	5.000	4.905	55254.27	0.0022	P	0.8
3	☐	50.000	52.575	569955.19	0.0230	P	8.7
4	☐	125.000	126.511	1405392.53	0.0553	P	1.7
5	☐	250.000	259.207	2855839.64	0.1132	A	1.7
6	☐	500.000	507.913	5649832.55	0.2218	A	0.9
7	☐	1000.000	993.425	11003207.89	0.4337	A	1.7
8	☐			7739.95	0.0003	P	11.

$$y = 4.3649\text{E-}004 * x + 7.0887\text{E-}005$$

$$R = 0.9999$$

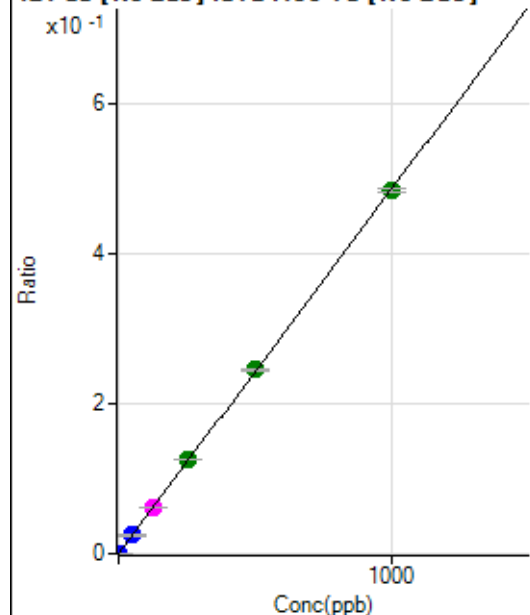
$$DL = 0.02893$$

$$BEC = 0.1624$$

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	360.01	0.0000	P	7.6
2	☐	2.000	1.937	23862.05	0.0010	P	2.1
3	☐	50.000	51.796	623435.58	0.0252	P	7.9
4	☐	125.000	126.306	1559681.80	0.0614	M	3.1
5	☐	250.000	258.094	3162698.29	0.1254	A	1.6
6	☐	500.000	504.215	6240169.91	0.2449	A	1.0
7	☐	1000.000	995.616	12269447.46	0.4836	A	1.1
8	☐			8300.24	0.0004	P	6.9

$$y = 4.8572\text{E-}004 * x + 1.4448\text{E-}005$$

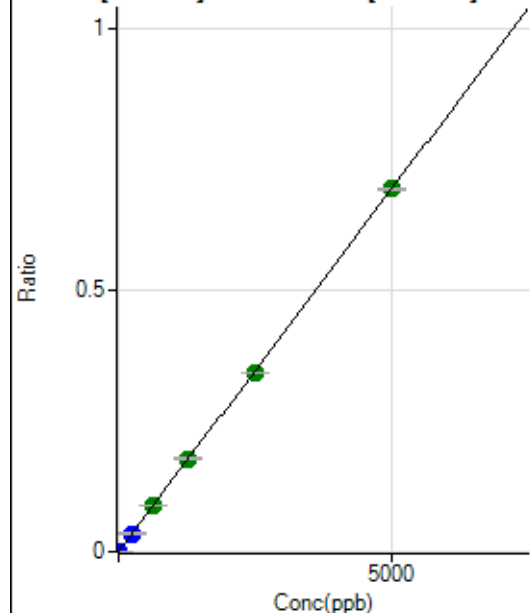
$$R = 1.0000$$

$$DL = 0.006753$$

$$BEC = 0.02975$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	172.22	0.0000	P	7.8
2	☐	10.000	9.176	31925.78	0.0013	P	1.1
3	☐	250.000	250.459	859163.55	0.0347	P	8.6
4	☐	625.000	640.936	2256890.89	0.0888	A	2.1
5	☐	1250.000	1278.713	4468572.19	0.1771	A	1.5
6	☐	2500.000	2472.549	8726374.80	0.3425	A	0.5
7	☐	5000.000	5004.534	17588725.85	0.6933	A	0.7
8	☐			10868.72	0.0005	P	12.

$$y = 1.3852E-004 * x + 6.9134E-006$$

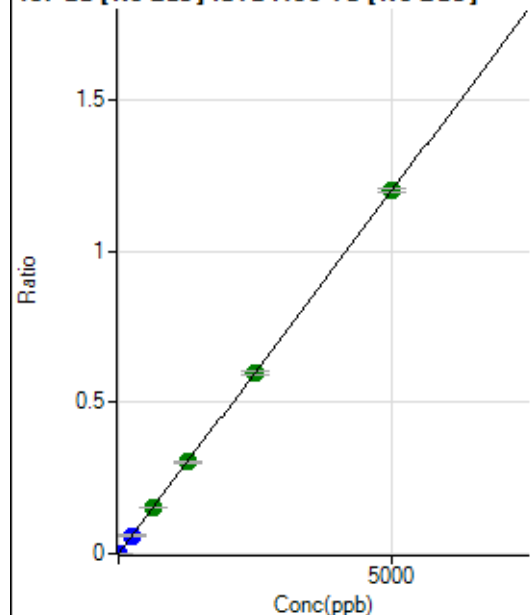
$$R = 1.0000$$

$$DL = 0.01162$$

$$BEC = 0.04991$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	311.12	0.0000	P	5.6
2	☐	10.000	9.345	56361.07	0.0023	P	1.1
3	☐	250.000	250.768	1491484.77	0.0602	P	8.1
4	☐	625.000	631.303	3853330.74	0.1516	A	1.0
5	☐	1250.000	1265.843	7667612.59	0.3040	A	1.6
6	☐	2500.000	2488.680	15222378.80	0.5976	A	2.2
7	☐	5000.000	5000.874	30465215.10	1.2008	A	0.9
8	☐			19228.77	0.0008	P	12.

$$y = 2.4011E-004 * x + 1.2494E-005$$

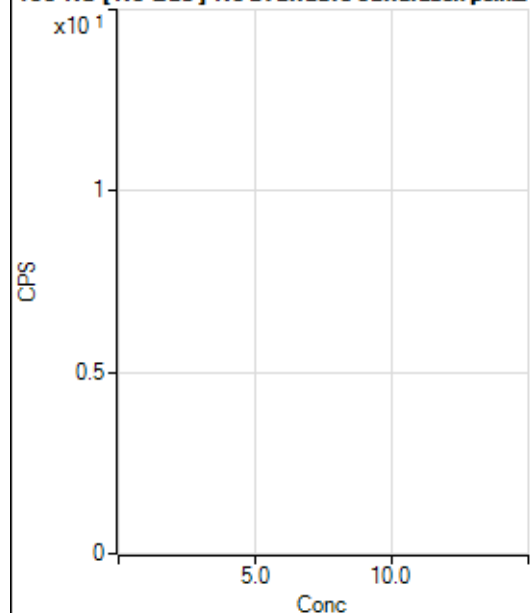
$$R = 1.0000$$

$$DL = 0.0088$$

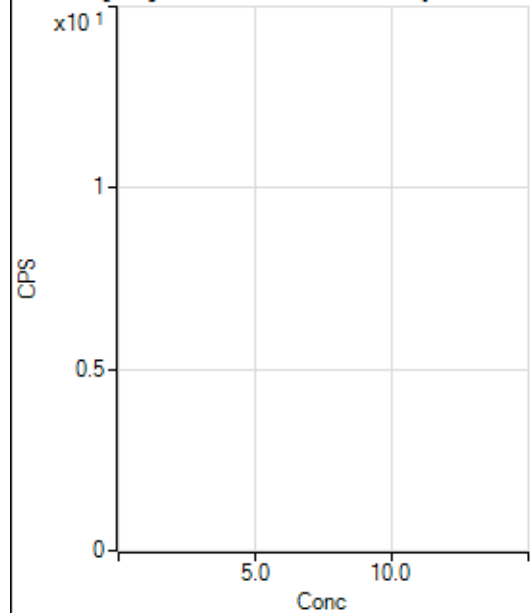
$$BEC = 0.05203$$

Weight: <None>

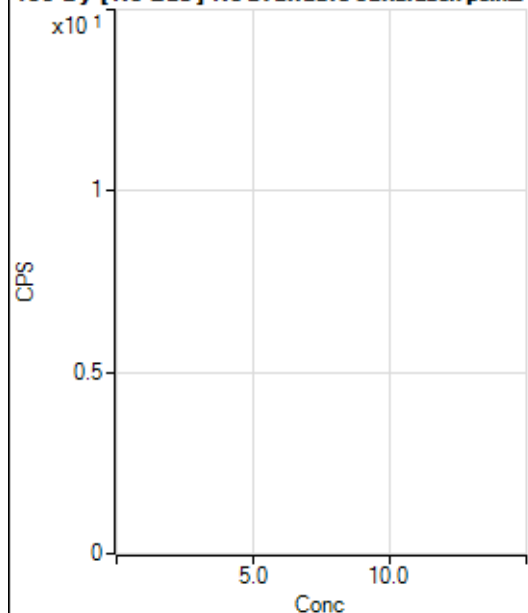
Min Conc: 0

150 Nd [No Gas] No available calibration points

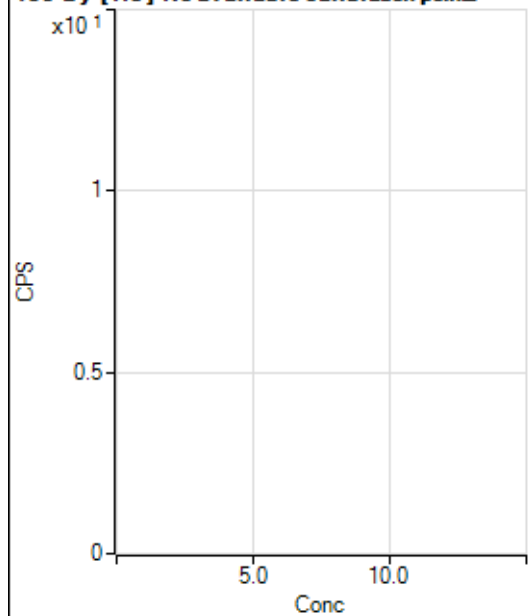
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	10.
2	☐			16.67		P	60.
3	☐			101.11		P	15.
4	☐			244.45		P	5.7
5	☐			493.35		P	9.8
6	☐			888.93		P	3.8
7	☐			1880.15		P	2.6
8	☐			486.68		P	3.1

150 Nd [He] No available calibration points

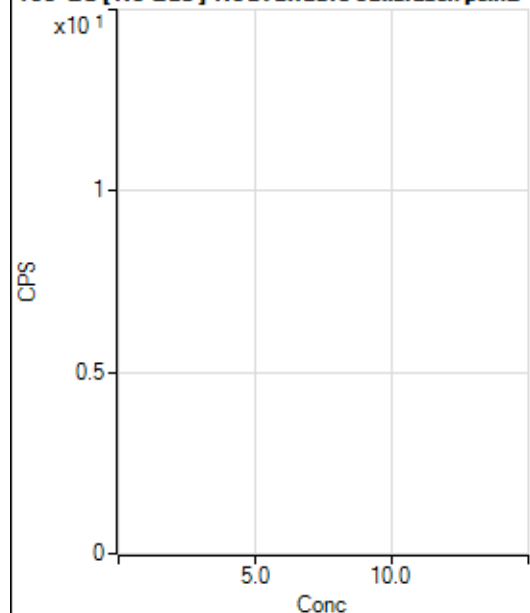
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.
2	☐			8.89		P	57.
3	☐			31.11		P	6.2
4	☐			71.11		P	25.
5	☐			105.56		P	18.
6	☐			206.67		P	6.4
7	☐			390.01		P	5.2
8	☐			253.34		P	13.

156 Dy [No Gas] No available calibration points

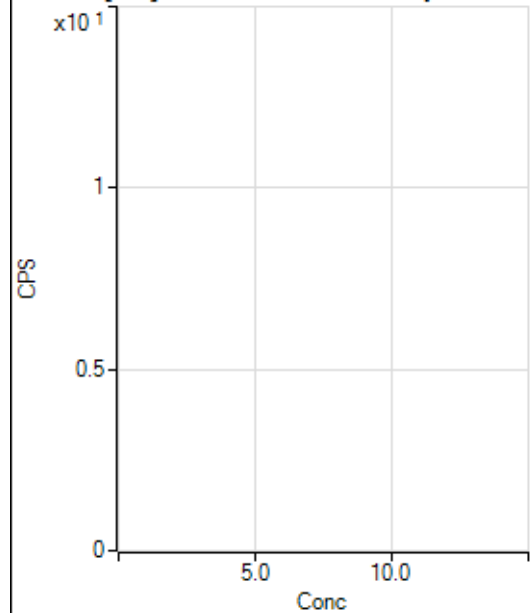
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.56		P	46.
2	☐			24.45		P	28.
3	☐			64.45		P	10.
4	☐			160.00		P	4.2
5	☐			291.12		P	8.0
6	☐			553.35		P	1.0
7	☐			1064.50		P	1.8
8	☐			3821.67		P	3.9

156 Dy [He] No available calibration points

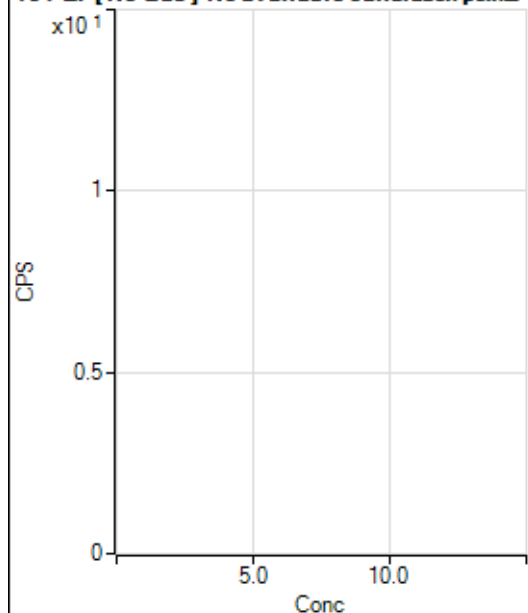
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	28.
2	☐			20.00		P	44.
3	☐			76.66		P	7.5
4	☐			153.33		P	16.
5	☐			300.01		P	2.2
6	☐			542.24		P	7.9
7	☐			1033.38		P	5.0
8	☐			2536.92		P	0.3

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

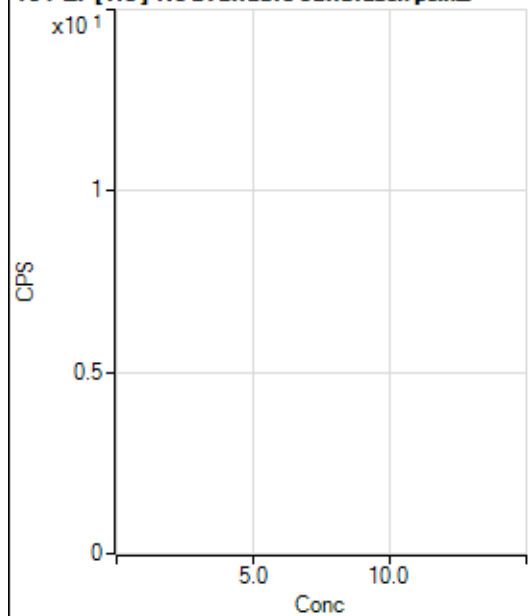
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			204.45		P	1.9
2	☐			198.89		P	7.7
3	☐			220.00		P	7.6
4	☐			281.12		P	15.
5	☐			374.46		P	6.3
6	☐			567.79		P	6.3
7	☐			980.05		P	6.8
8	☐			4412.96		P	1.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			822.26		P	11.
2	☐			826.70		P	12.
3	☐			865.59		P	4.0
4	☐			852.26		P	2.5
5	☐			994.49		P	9.4
6	☐			1151.17		P	2.5
7	☐			1320.08		P	3.0
8	☐			3517.14		P	1.3

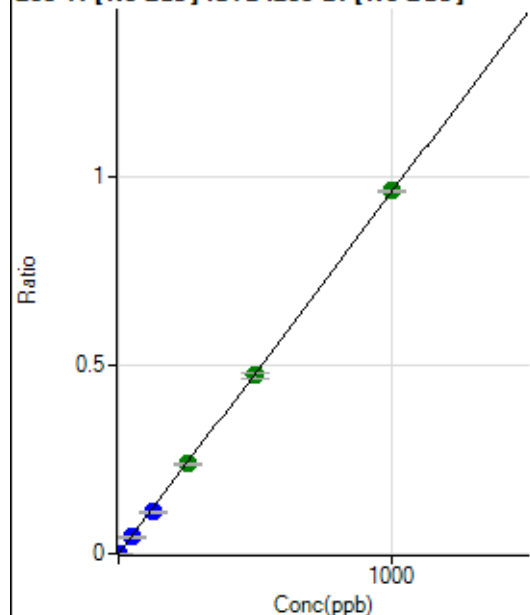
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			162.22		P	14.
2	☐			140.00		P	19.
3	☐			205.56		P	33.
4	☐			218.89		P	5.3
5	☐			254.45		P	17.
6	☐			291.11		P	12.
7	☐			441.13		P	12.
8	☐			518.90		P	11.

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			108.89		P	23.
2	☐			105.56		P	29.
3	☐			133.34		P	4.3
4	☐			123.34		P	9.7
5	☐			164.45		P	3.1
6	☐			225.56		P	6.7
7	☐			316.68		P	12.
8	☐			331.12		P	14.

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	595.57	0.0000	P	8.5
2	☐	1.000	0.875	12468.01	0.0009	P	1.8
3	☐	50.000	46.680	635345.70	0.0448	P	7.8
4	☐	125.000	115.975	1586441.07	0.1113	P	2.9
5	☐	250.000	249.306	3396758.77	0.2393	A	1.5
6	☐	500.000	493.201	6639427.40	0.4733	A	2.7
7	☐	1000.000	1004.867	13285004.38	0.9643	A	0.6
8	☐			3951.76	0.0003	P	30.

$$y = 9.5960E-004 * x + 4.1889E-005$$

$$R = 0.9999$$

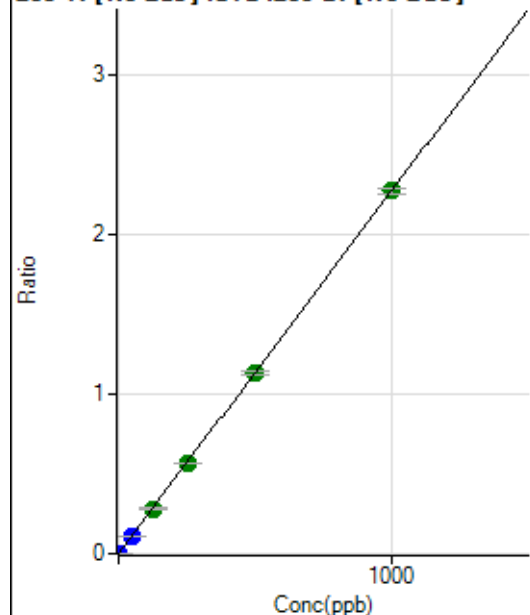
$$DL = 0.01114$$

$$BEC = 0.04365$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1381.20	0.0001	P	8.5
2	☐	1.000	0.881	29704.64	0.0021	P	1.8
3	☐	50.000	47.273	1524808.85	0.1076	P	8.5
4	☐	125.000	124.160	4026335.49	0.2825	A	2.9
5	☐	250.000	250.501	8091661.41	0.5700	A	0.3
6	☐	500.000	499.750	15949939.90	1.1370	A	1.9
7	☐	1000.000	1000.241	31349678.14	2.2755	A	1.3
8	☐			9397.94	0.0008	P	27.

$$y = 0.0023 * x + 9.7161E-005$$

$$R = 1.0000$$

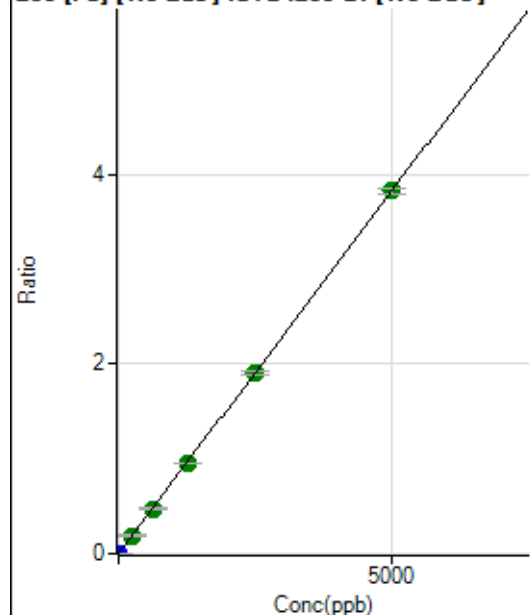
$$DL = 0.01094$$

$$BEC = 0.04271$$

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	1587.89	0.0001	P	1.3
2	☐	1.000	0.885	11141.31	0.0008	P	1.4
3	☐	250.000	250.379	2712073.05	0.1914	A	8.4
4	☐	625.000	618.818	6739780.11	0.4730	A	3.3
5	☐	1250.000	1250.834	13571269.80	0.9560	A	1.2
6	☐	2500.000	2486.018	26651578.49	1.8999	A	2.2
7	☐	5000.000	5007.537	52721307.55	3.8268	A	1.4
8	☐			30322.04	0.0027	P	12.

$$y = 7.6418\text{E-}004 * x + 1.1166\text{E-}004$$

$$R = 1.0000$$

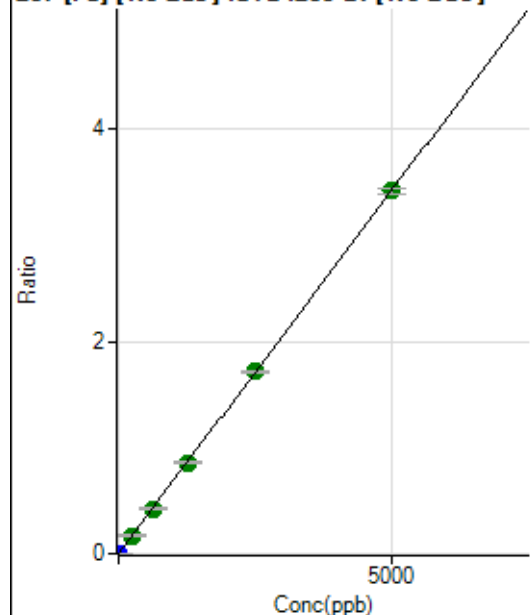
$$DL = 0.00552$$

$$BEC = 0.1461$$

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	1316.75	0.0001	P	4.8
2	☐	1.000	0.875	9773.59	0.0007	P	3.3
3	☐	250.000	251.322	2437545.89	0.1720	A	8.2
4	☐	625.000	620.525	6051211.09	0.4246	A	2.6
5	☐	1250.000	1251.008	12151701.76	0.8560	A	1.4
6	☐	2500.000	2504.348	24038997.70	1.7135	A	1.0
7	☐	5000.000	4998.067	47108824.30	3.4196	A	1.4
8	☐			26549.58	0.0023	P	12.

$$y = 6.8417\text{E-}004 * x + 9.2576\text{E-}005$$

$$R = 1.0000$$

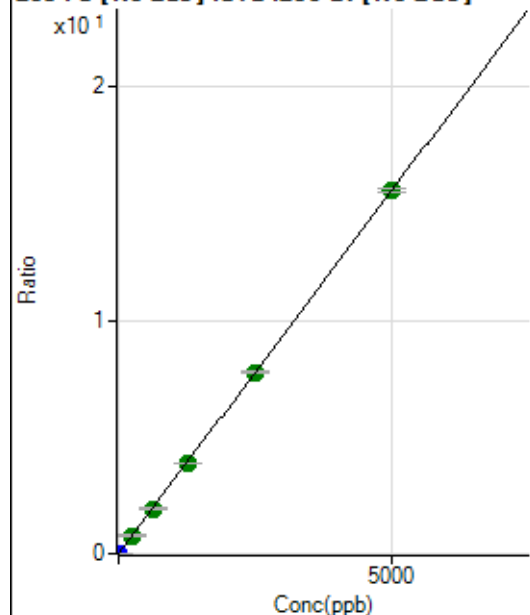
$$DL = 0.01951$$

$$BEC = 0.1353$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6207.29	0.0004	P	1.6
2	☐	1.000	0.878	44712.48	0.0032	P	1.4
3	☐	250.000	249.824	10998420.51	0.7763	A	8.2
4	☐	625.000	619.249	27410825.84	1.9235	A	2.7
5	☐	1250.000	1251.882	55198596.68	3.8882	A	0.8
6	☐	2500.000	2500.452	108945696.98	7.7657	A	1.5
7	☐	5000.000	5000.031	213922877.92	15.5282	A	1.1
8	☐			122316.99	0.0108	P	13.

$$y = 0.0031 * x + 4.3653E-004$$

$$R = 1.0000$$

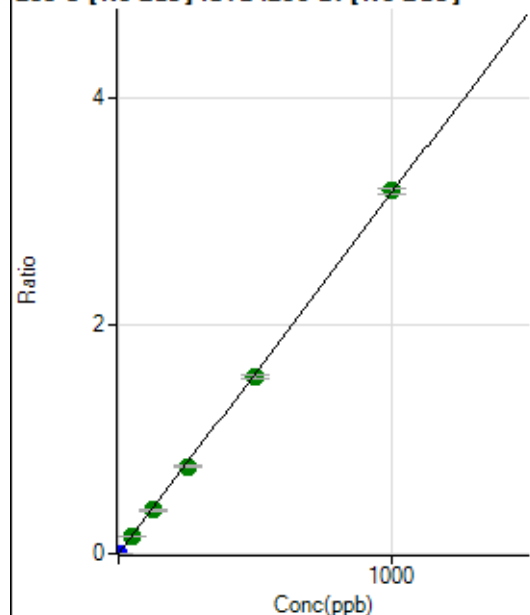
$$DL = 0.006926$$

$$BEC = 0.1406$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1547.89	0.0001	P	3.3
2	☐	1.000	0.825	38397.46	0.0027	P	0.8
3	☐	50.000	48.271	2163447.00	0.1527	A	7.5
4	☐	125.000	121.052	5452342.77	0.3827	A	3.4
5	☐	250.000	242.172	10866301.78	0.7654	A	0.9
6	☐	500.000	491.826	21805348.29	1.5544	A	2.1
7	☐	1000.000	1006.624	43827605.46	3.1812	A	1.4
8	☐			10128.70	0.0009	P	32.

$$y = 0.0032 * x + 1.0883E-004$$

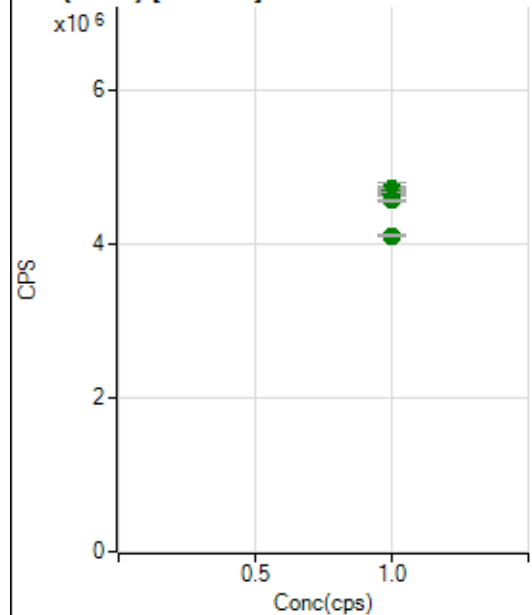
$$R = 0.9999$$

$$DL = 0.003435$$

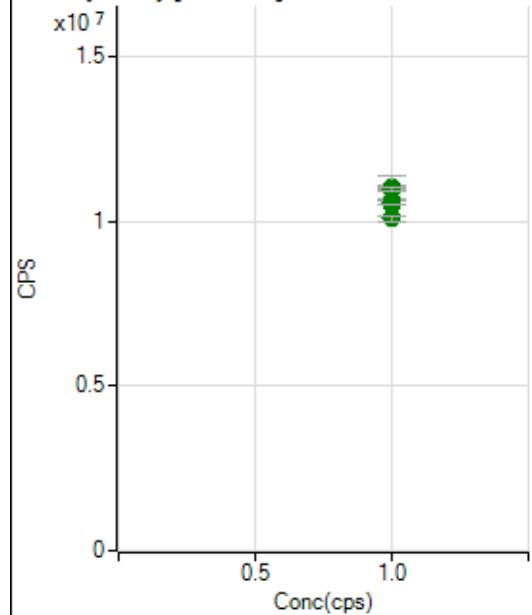
$$BEC = 0.03444$$

Weight: <None>

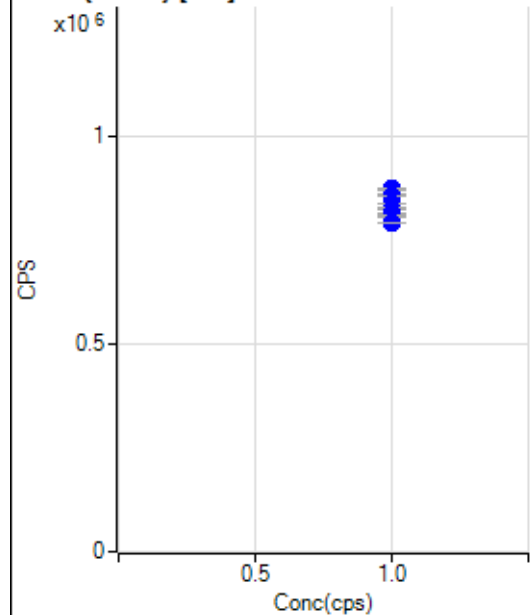
Min Conc: 0

6 Li (ISTD) [No Gas]

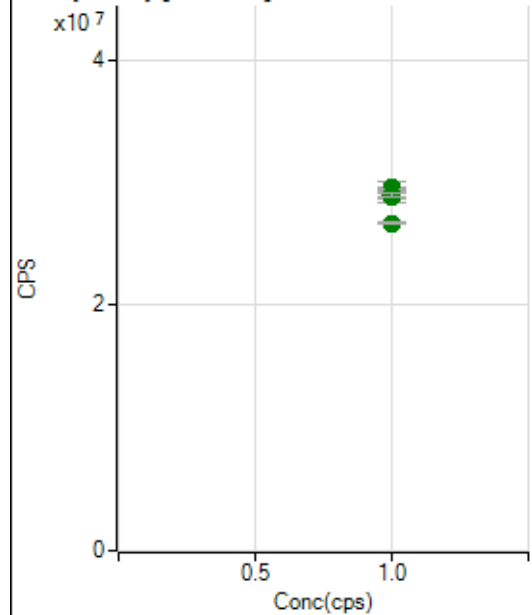
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4658282.85		A	0.9
2	☐	1.000		4707142.26		A	1.3
3	☐	1.000		4675675.24		A	4.7
4	☐	1.000		4695481.84		A	1.3
5	☐	1.000		4679242.98		A	2.0
6	☐	1.000		4630615.70		A	1.0
7	☐	1.000		4562471.14		A	0.6
8	☐	1.000		4101747.68		A	0.2

45 Sc (ISTD) [No Gas]

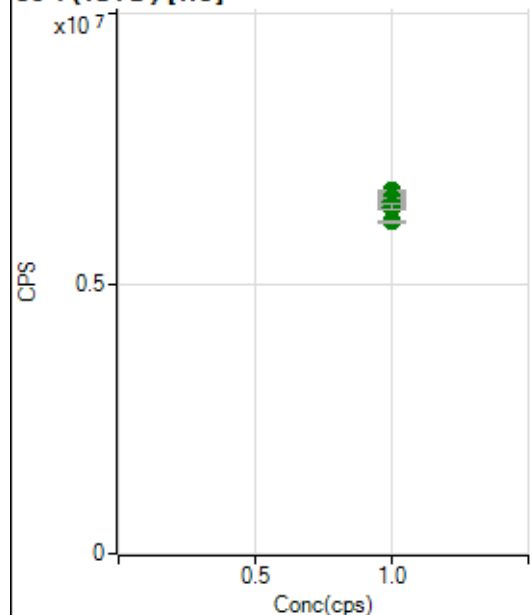
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11013023.17		A	1.3
2	☐	1.000		10990469.84		A	0.6
3	☐	1.000		11006922.41		A	6.9
4	☐	1.000		10952926.50		A	1.1
5	☐	1.000		10651625.68		A	1.1
6	☐	1.000		10564668.66		A	1.3
7	☐	1.000		10515166.51		A	0.2
8	☐	1.000		10081690.13		A	1.5

45 Sc (ISTD) [He]

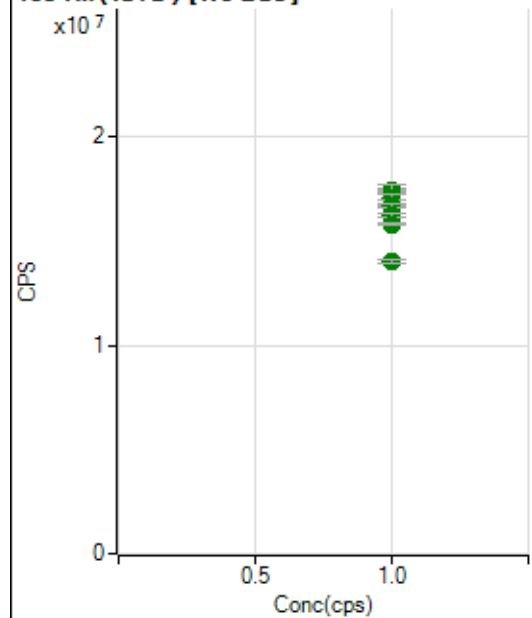
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		860124.54		P	0.1
2	☐	1.000		874104.55		P	0.5
3	☐	1.000		857286.30		P	0.2
4	☐	1.000		838699.87		P	0.4
5	☐	1.000		826189.71		P	0.8
6	☐	1.000		813324.56		P	0.2
7	☐	1.000		806890.88		P	0.5
8	☐	1.000		791580.18		P	0.2

89 Y (ISTD) [No Gas]

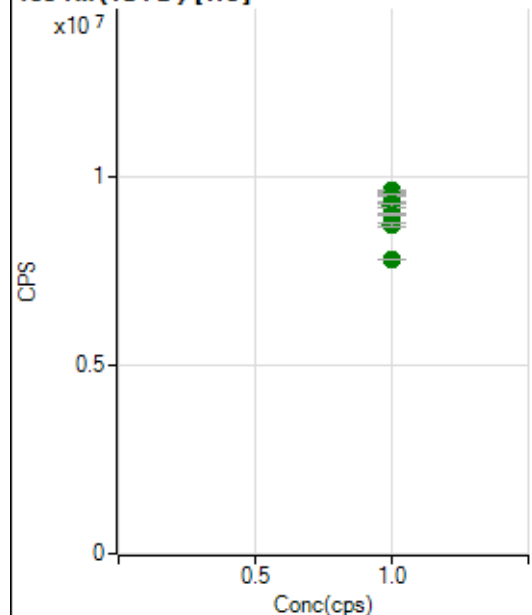
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		29346415.39		A	0.3
2	☐	1.000		29495110.67		A	0.7
3	☐	1.000		29251096.79		A	6.0
4	☐	1.000		29565490.11		A	0.4
5	☐	1.000		29397446.79		A	0.5
6	☐	1.000		28855767.90		A	1.6
7	☐	1.000		28976158.18		A	1.0
8	☐	1.000		26684949.60		A	0.9

89 Y(ISTD) [He]

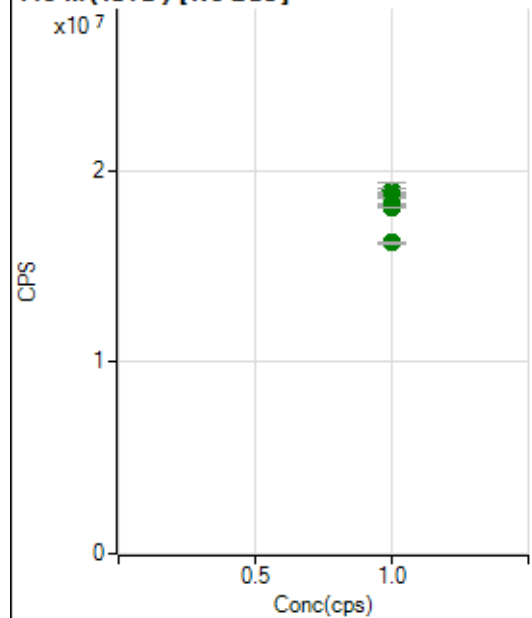
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6643733.31		A	0.9
2	☐	1.000		6722488.16		A	0.3
3	☐	1.000		6595723.72		A	0.4
4	☐	1.000		6551132.54		A	0.6
5	☐	1.000		6527364.00		A	1.9
6	☐	1.000		6433279.97		A	0.9
7	☐	1.000		6417537.61		A	1.7
8	☐	1.000		6153782.13		A	0.9

103 Rh(ISTD) [No Gas]

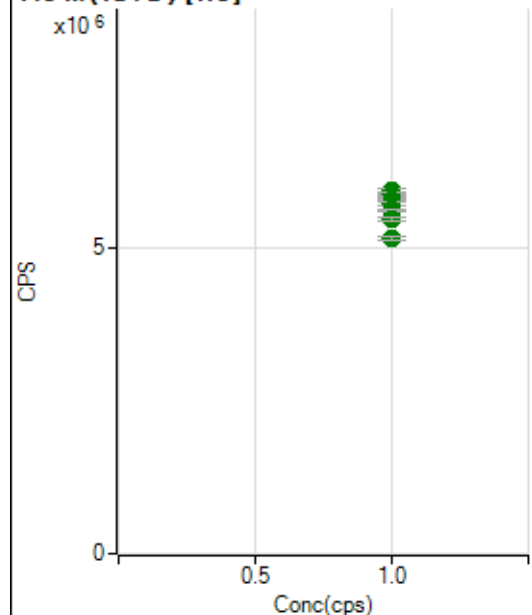
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17407400.16		A	1.2
2	☐	1.000		17403031.54		A	0.7
3	☐	1.000		17223727.25		A	6.1
4	☐	1.000		17109158.63		A	1.6
5	☐	1.000		16689002.67		A	1.3
6	☐	1.000		16204181.70		A	1.2
7	☐	1.000		15819817.68		A	0.4
8	☐	1.000		14003026.88		A	1.7

103 Rh (ISTD) [He]

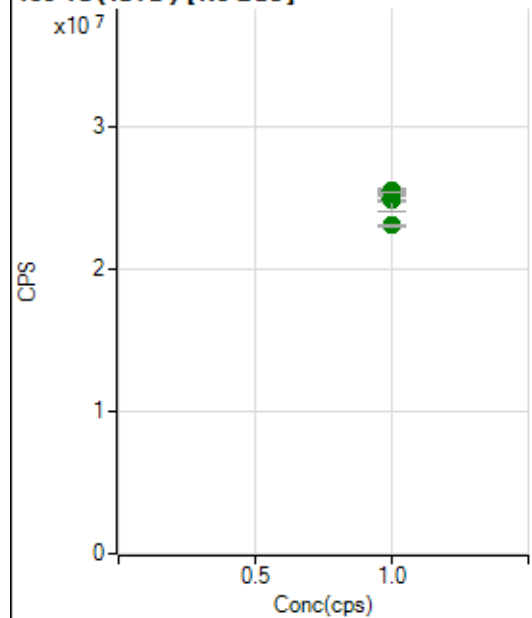
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9570627.77		A	1.1
2	☐	1.000		9623812.50		A	0.7
3	☐	1.000		9510097.50		A	0.4
4	☐	1.000		9305546.25		A	0.4
5	☐	1.000		9215475.91		A	1.1
6	☐	1.000		8997064.10		A	0.5
7	☐	1.000		8725175.01		A	1.0
8	☐	1.000		7801214.47		A	0.1

115 In (ISTD) [No Gas]

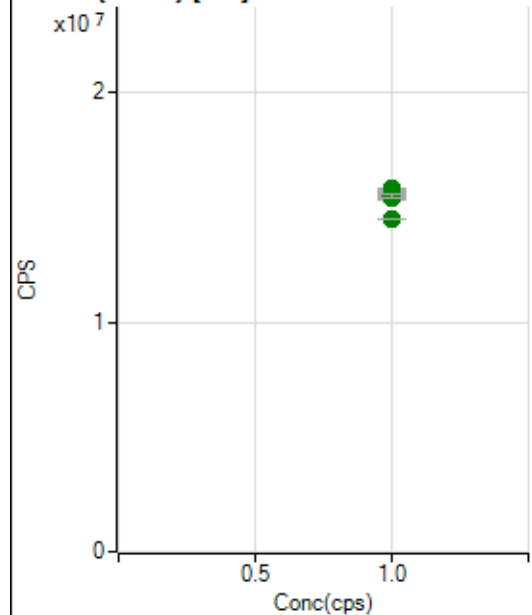
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		18811671.48		A	1.3
2	☐	1.000		18959304.44		A	1.0
3	☐	1.000		18795806.56		A	6.5
4	☐	1.000		18779896.07		A	0.4
5	☐	1.000		18585111.51		A	0.2
6	☐	1.000		18306811.35		A	0.3
7	☐	1.000		18050092.28		A	0.1
8	☐	1.000		16246047.64		A	0.3

115 In (ISTD) [He]

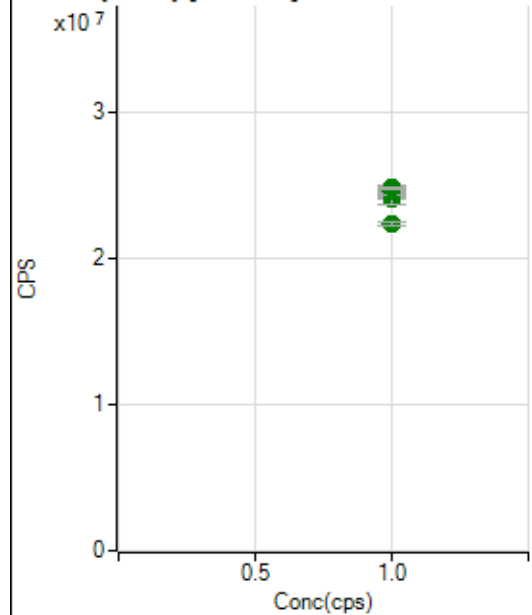
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5835698.63		A	1.2
2	☐	1.000		5916951.24		A	1.1
3	☐	1.000		5860046.88		A	1.4
4	☐	1.000		5777105.10		A	0.1
5	☐	1.000		5715278.73		A	1.0
6	☐	1.000		5599340.28		A	0.6
7	☐	1.000		5449899.25		A	1.3
8	☐	1.000		5146370.11		A	0.8

159 Tb (ISTD) [No Gas]

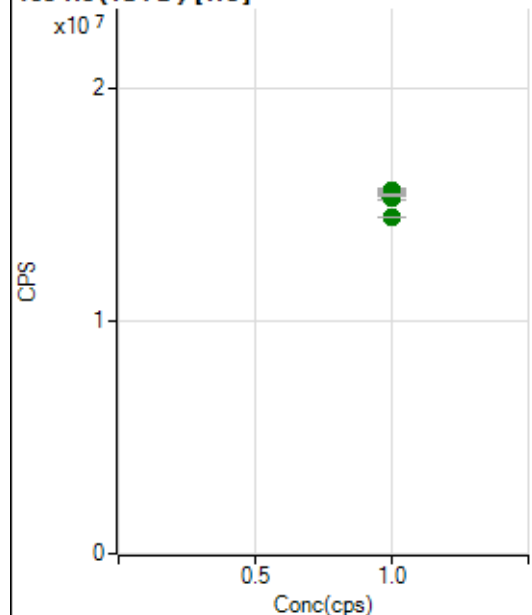
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24912591.02		A	1.2
2	☐	1.000		24981809.07		A	1.1
3	☐	1.000		24852035.18		A	6.6
4	☐	1.000		25418844.07		A	0.3
5	☐	1.000		25228451.57		A	0.9
6	☐	1.000		25478441.84		A	1.7
7	☐	1.000		25370881.01		A	0.2
8	☐	1.000		23047790.77		A	0.4

159 Tb (ISTD) [He]

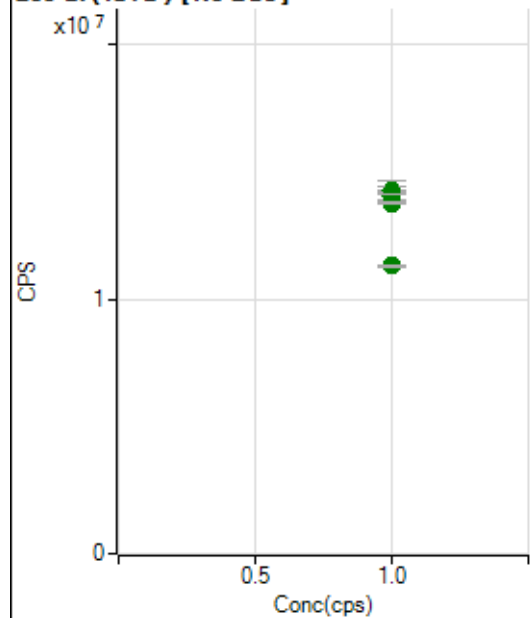
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		15397584.21		A	0.8
2	☐	1.000		15621268.24		A	0.5
3	☐	1.000		15798516.99		A	0.7
4	☐	1.000		15613388.24		A	0.5
5	☐	1.000		15555836.71		A	1.0
6	☐	1.000		15630881.99		A	0.5
7	☐	1.000		15488001.57		A	0.8
8	☐	1.000		14490542.28		A	0.2

165 Ho (ISTD) [No Gas]

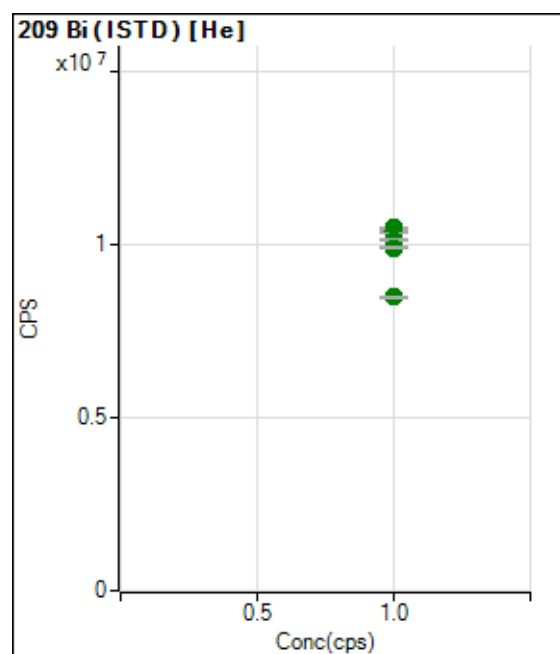
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		24098847.14		A	1.0
2	☐	1.000		24114211.58		A	0.4
3	☐	1.000		24329915.47		A	5.2
4	☐	1.000		24505619.63		A	0.8
5	☐	1.000		24589833.80		A	0.8
6	☐	1.000		24503586.30		A	1.8
7	☐	1.000		24777934.35		A	0.6
8	☐	1.000		22346074.39		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		15310823.10		A	0.6
2	☐	1.000		15613886.85		A	1.5
3	☐	1.000		15307976.44		A	1.1
4	☐	1.000		15391466.16		A	0.2
5	☐	1.000		15582038.93		A	0.8
6	☐	1.000		15449620.88		A	0.8
7	☐	1.000		15454126.30		A	0.4
8	☐	1.000		14461776.03		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14220048.68		A	0.8
2	☐	1.000		14138555.90		A	0.4
3	☐	1.000		14219507.43		A	6.7
4	☐	1.000		14256018.54		A	2.3
5	☐	1.000		14196870.90		A	0.6
6	☐	1.000		14030478.82		A	1.4
7	☐	1.000		13776392.43		A	0.6
8	☐	1.000		11312278.93		A	1.0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10434567.76		A	1.2
2	☐	1.000		10468748.04		A	0.8
3	☐	1.000		10383849.08		A	1.2
4	☐	1.000		10393769.22		A	1.1
5	☐	1.000		10328343.39		A	0.3
6	☐	1.000		10123858.60		A	0.8
7	☐	1.000		9895169.30		A	0.6
8	☐	1.000		8472218.14		A	0.9

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7082523 MS.b

Acq. Date-Time 2023-08-25 09:21:32

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		12634	126340.63			0.373	5.000
24		529644	5296443.38			0.749	5.000
25		68069	680688.76			1.284	5.000
26		78478	784784.77			0.683	5.000
59		123579	1235785.21			0.614	5.000
113		16577	165771.91			0.496	5.000
115		207966	2079658.97			1.050	5.000
206		121554	1215543.20			1.282	5.000
207		104686	1046861.70			1.667	5.000
208		256565	2565650.89			1.084	5.000
220		0	2.80			44.821	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

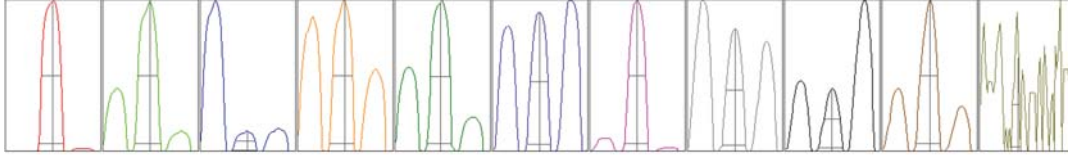
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	12603	12676	12668	12657	12566
24	523858	528680	529876	530993	534815
25	66608	68919	68280	68073	68464
26	78106	78818	79194	77864	78411
59	123181	124917	123453	123142	123200
113	16646	16583	16628	16438	16592
115	208795	210716	208270	207288	204761
206	122065	122684	121692	118851	122479
207	107046	104407	105340	102230	104407
208	258272	258065	258416	251850	256222

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	21416.27	9.00	8.90 - 9.10	
24	895271.44	24.00	23.90 - 24.10	
25	117310.06	25.00	24.90 - 25.10	
26	131682.82	26.00	25.90 - 26.10	
59	205040.59	58.95	58.90 - 59.10	
113	31304.04	113.00	112.90 - 113.10	
115	393515.42	115.00	114.90 - 115.10	
206	232888.28	206.05	205.90 - 206.10	
207	208836.91	207.00	206.90 - 207.10	
208	500676.73	208.05	207.90 - 208.10	
220	0.40	219.75	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.776	0.900	
24	0.63	0.824	0.900	
25	0.63	0.774	0.900	
26	0.64	0.784	0.900	
59	0.62	0.782	0.900	
113	0.55	0.759	0.900	
115	0.54	0.748	0.900	
206	0.54	0.739	0.900	
207	0.50	0.774	0.900	
208	0.54	0.775	0.900	
220	0.23	0.293		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	14.8 V
Extract 2	-150.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	131	Axis Gain	0.9973	QP Bias	-3.0 V
Mass Offset	130	Axis Offset	0.15		

Hardware Settings

Torch

Torch H	-1.1 mm	Torch V	1.0 mm
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EM

Discriminator	4.8 mV	Analog HV	2296 V	Pulse HV	1486 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		39132	391324.70			0.902	
89		437866	4378656.40			1.468	
205		98911	989114.40			1.264	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	39420	38517	39240	39227	39258
89	444270	427696	437098	442372	437892
205	100741	97428	99335	98861	98192

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.4 V	Deflect	2.6 V
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US EPA Tune Check Report

Extract 2	-145.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-75 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	131	Axis Gain	0.9973	QP Bias	-13.0 V
Mass Offset	130	Axis Offset	0.15		

Hardware Settings

Torch

Torch H	-1.1 mm	Torch V	1.0 mm
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EM

Discriminator	4.8 mV	Analog HV	2296 V	Pulse HV	1486 V
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