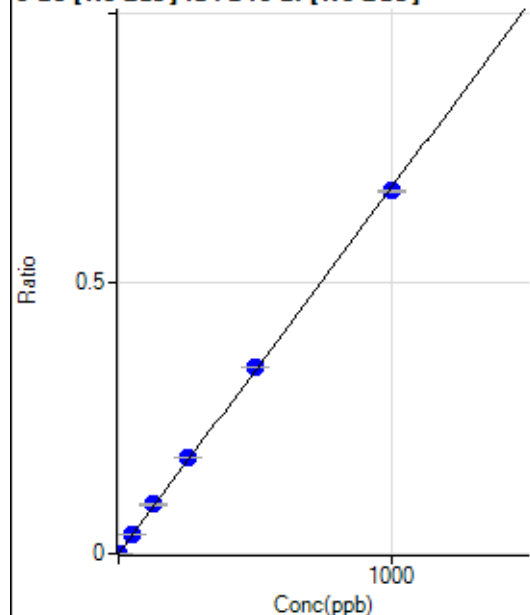


Batch Folder: D:\ICP-MS Data\1\DATA\P7071420-MS.b\
Analysis File: P7071420-MS.batch.bin
DA Date-Time: 2020-07-14 18:15:29
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-07-14 08:23:51
2	004CALS.d	S01	2020-07-14 08:27:34
3	005CALS.d	S02	2020-07-14 08:32:46
4	006CALS.d	S03	2020-07-14 08:36:51
5	007CALS.d	S04	2020-07-14 08:41:12
6	008CALS.d	S05	2020-07-14 08:44:57
7	009CALS.d	S06	2020-07-14 08:48:37
8	010CALS.d	S07	2020-07-14 08:52:11
9	011CALS.d	S08	2020-07-14 08:55:44

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.34	0.0000	P	20.6
2	☐	0.100	0.095	435.21	0.0001	P	7.3
3	☐	1.000	0.942	3637.57	0.0007	P	2.5
4	☐	50.000	53.937	201313.07	0.0365	P	0.5
5	☐	125.000	134.458	497805.00	0.0910	P	1.0
6	☐	250.000	261.225	942428.36	0.1768	P	0.4
7	☐	500.000	509.779	1761827.63	0.3449	P	0.4
8	☐	1000.000	990.925	3457343.83	0.6705	P	0.6
9	☐			759.30	0.0002	P	1.0

$$y = 6.7663\text{E-}004 * x + 1.5657\text{E-}005$$

$$R = 0.9998$$

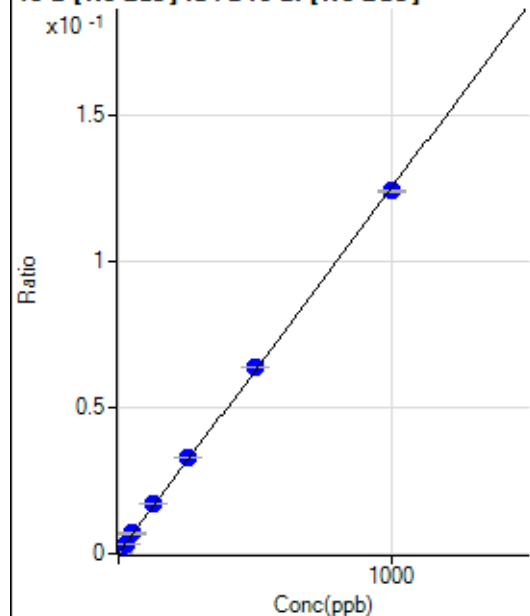
$$DL = 0.01428$$

$$BEC = 0.02314$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1238.99	0.0002	P	13.6
2	☐	2.500	2.050	2664.23	0.0005	P	0.7
3	☐	25.000	23.468	17644.21	0.0032	P	1.1
4	☐	50.000	53.570	38218.67	0.0069	P	1.1
5	☐	125.000	134.035	92969.41	0.0170	P	0.5
6	☐	250.000	260.307	174776.42	0.0328	P	0.7
7	☐	500.000	508.539	325981.65	0.0638	P	0.5
8	☐	1000.000	991.885	640763.39	0.1243	P	0.3
9	☐			17007.39	0.0037	P	7.2

$$y = 1.2505\text{E-}004 * x + 2.3272\text{E-}004$$

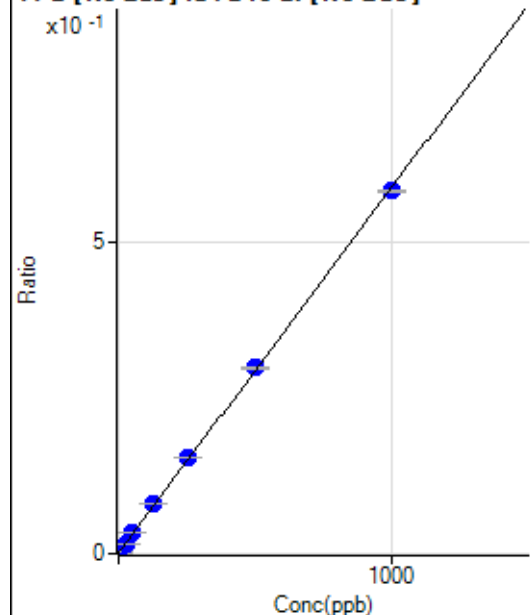
$$R = 0.9999$$

$$DL = 0.762$$

$$BEC = 1.861$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5798.59	0.0011	P	2.3
2	☐	2.500	2.104	12647.44	0.0023	P	3.7
3	☐	25.000	22.923	80905.69	0.0145	P	1.0
4	☐	50.000	54.725	182860.94	0.0332	P	1.0
5	☐	125.000	133.876	435250.18	0.0796	P	1.1
6	☐	250.000	261.182	821922.86	0.1542	P	0.8
7	☐	500.000	508.619	1528119.44	0.2992	P	1.0
8	☐	1000.000	991.602	3002495.70	0.5823	P	0.7
9	☐			78403.81	0.0172	P	4.9

$$y = 5.8612\text{E-}004 * x + 0.0011$$

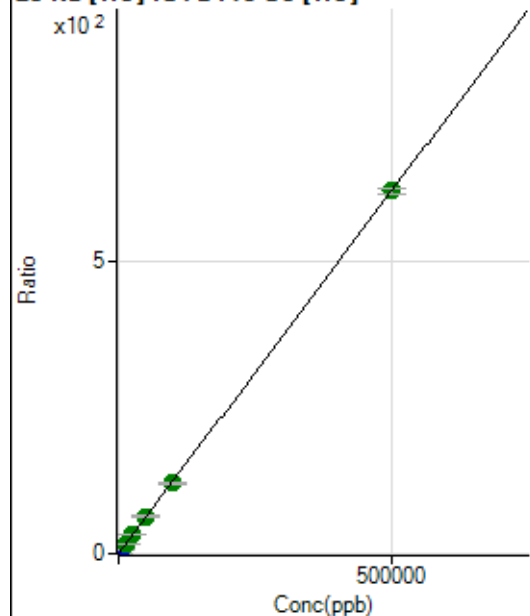
$$R = 0.9998$$

$$DL = 0.1306$$

$$BEC = 1.857$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26994.16	0.0505	P	0.3
2	☐	5.000	50.440	60251.11	0.1131	P	1.6
3	☐	500.000	526.140	354709.90	0.7038	P	9.4
4	☐	5000.000	5594.170	3709848.74	6.9962	P	0.5
5	☐	12500.000	13402.924	8754034.23	16.6915	A	0.9
6	☐	25000.000	26440.168	16449729.51	32.8785	A	0.4
7	☐	50000.000	51427.316	30963114.02	63.9025	A	1.6
8	☐	100000.00	97634.975	62293313.27	121.2737	A	3.5
9	☐	500000.00	500229.72	301992930.0	621.1337	A	1.7

$$y = 0.0012 * x + 0.0505$$

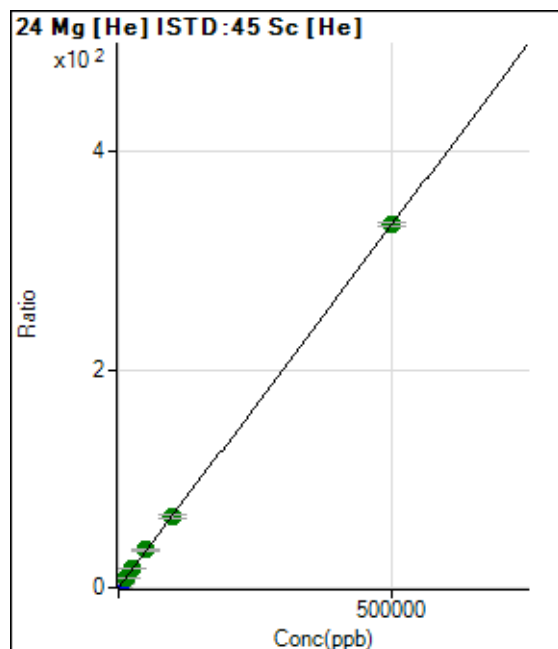
$$R = 1.0000$$

$$DL = 0.3305$$

$$BEC = 40.68$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2401.07	0.0045	P	1.2
2	☐	5.000	50.688	20345.78	0.0382	P	1.5
3	☐	500.000	524.743	178156.26	0.3535	P	9.3
4	☐	5000.000	5693.378	2010142.84	3.7908	P	0.6
5	☐	12500.000	13591.263	4742754.71	9.0432	A	1.2
6	☐	25000.000	26790.613	8916322.86	17.8213	A	0.6
7	☐	50000.000	51778.878	16688406.10	34.4394	A	0.7
8	☐	100000.00	97634.057	33352279.10	64.9349	A	3.8
9	☐	500000.00	500171.53	161728904.8	332.6378	A	0.9

$$y = 6.6504\text{E-}004 * x + 0.0045$$

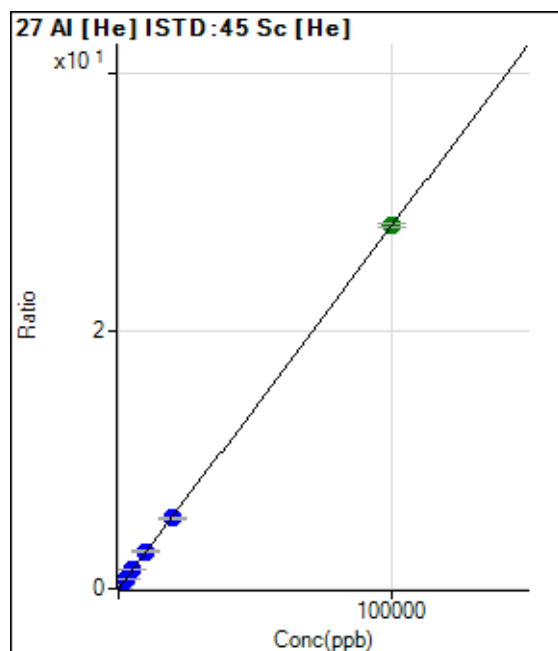
$$R = 1.0000$$

$$DL = 0.238$$

$$BEC = 6.756$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	174.64	0.0003	P	4.5
2	☐	2.000	2.108	489.25	0.0009	P	5.4
3	☐	20.000	21.098	3150.39	0.0063	P	12.0
4	☐	1000.000	1116.124	166446.68	0.3139	P	0.6
5	☐	2500.000	2730.478	402489.59	0.7674	P	0.7
6	☐	5000.000	5347.664	751838.30	1.5027	P	0.3
7	☐	10000.000	10328.392	1406171.44	2.9020	P	1.3
8	☐	20000.000	19440.994	2805691.85	5.4621	P	3.4
9	☐	100000.00	100054.65	13667157.62	28.1100	A	1.0

$$y = 2.8094\text{E-}004 * x + 3.2675\text{E-}004$$

$$R = 1.0000$$

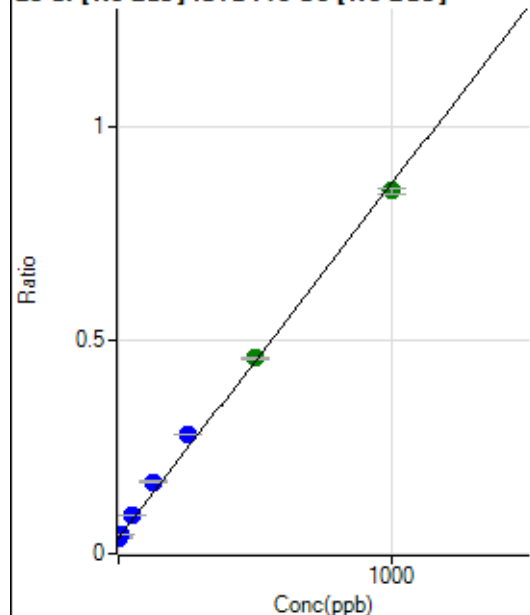
$$DL = 0.1579$$

$$BEC = 1.163$$

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	500882.93	0.0363	P	0.9
2	☐	1.000	6.386	566412.10	0.0416	P	0.2
3	☐	10.000	9.351	609337.13	0.0441	P	0.8
4	☐	50.000	65.727	1230128.06	0.0909	P	0.5
5	☐	125.000	158.962	2288502.37	0.1683	P	1.8
6	☐	250.000	293.778	3779957.76	0.2802	P	0.4
7	☐	500.000	507.787	5838065.15	0.4579	A	0.4
8	☐	1000.000	980.132	11296761.28	0.8501	A	1.3
9	☐			687374.12	0.0574	P	0.9

$$y = 8.3027\text{E-}004 * x + 0.0363$$

$$R = 0.9986$$

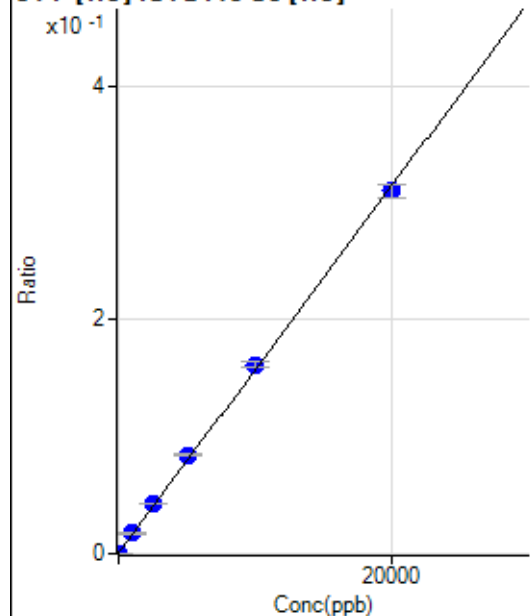
$$DL = 1.212$$

$$BEC = 43.72$$

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	-6.701	186.12	0.0003	P	14.1
2	☐	0.000	3.350	269.46	0.0005	P	1.8
3	☐	0.000	3.351	258.35	0.0005	P	14.8
4	☐	1000.000	1072.754	9169.85	0.0173	P	2.7
5	☐	2500.000	2711.955	22562.33	0.0430	P	1.2
6	☐	5000.000	5362.625	42338.84	0.0846	P	1.7
7	☐	10000.000	10277.577	78378.51	0.1618	P	2.8
8	☐	20000.000	19740.423	159383.24	0.3103	P	3.7
9	☐			288.90	0.0006	P	21.9

$$y = 1.5696\text{E-}005 * x + 4.5334\text{E-}004$$

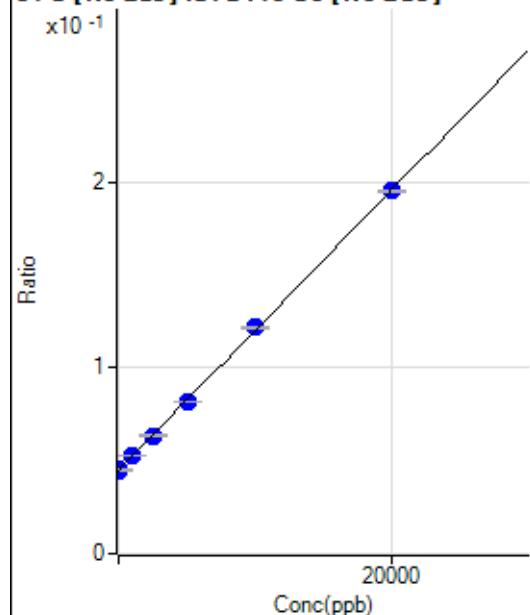
$$R = 0.9996$$

$$DL = 8.489$$

$$BEC = 28.88$$

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	5.505	621089.00	0.0450	P	1.7
2	☐	0.000	-26.412	609580.65	0.0448	P	1.1
3	☐	0.000	20.907	624081.21	0.0451	P	0.8
4	☐	1000.000	1081.190	719210.98	0.0531	P	0.1
5	☐	2500.000	2461.927	864276.00	0.0635	P	1.2
6	☐	5000.000	4883.189	1103729.98	0.0818	P	0.4
7	☐	10000.000	10202.395	1554951.15	0.1220	P	0.5
8	☐	20000.000	19928.705	2596212.15	0.1954	P	0.7
9	☐			502167.48	0.0420	P	1.0

$$y = 7.5462\text{E-}006 * x + 0.0450$$

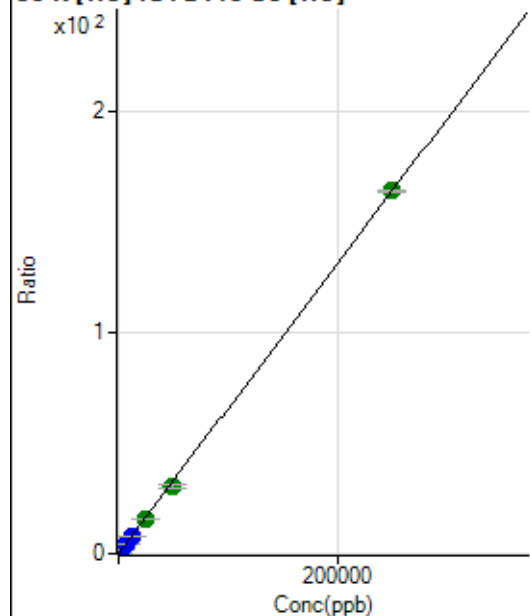
R = 0.9999

DL = 213.9

BEC = 5959

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27486.65	0.0514	P	1.3
2	☐	5.000	47.061	43812.14	0.0823	P	2.0
3	☐	500.000	492.780	188622.40	0.3744	P	9.9
4	☐	2500.000	2652.295	948933.07	1.7895	P	0.6
5	☐	6250.000	6420.019	2233488.69	4.2586	P	0.6
6	☐	12500.000	12451.363	4108175.77	8.2111	P	0.2
7	☐	25000.000	24334.081	7751899.78	15.9981	A	1.2
8	☐	50000.000	46585.740	15707401.67	30.5801	A	3.6
9	☐	250000.00	250746.11	79917991.08	164.3708	A	0.5

$$y = 6.5532\text{E-}004 * x + 0.0514$$

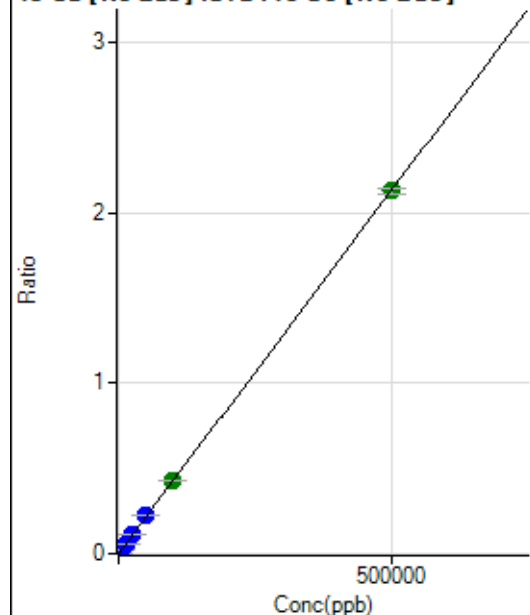
R = 0.9999

DL = 3.053

BEC = 78.48

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	642.56	0.0000	P	3.8
2	☐	5.000	55.998	3886.43	0.0003	P	1.2
3	☐	500.000	479.776	28947.09	0.0021	P	0.5
4	☐	5000.000	5631.522	325821.13	0.0241	P	0.1
5	☐	12500.000	13668.549	793608.69	0.0584	P	1.1
6	☐	25000.000	26318.586	1515056.79	0.1123	P	0.7
7	☐	50000.000	52325.396	2846345.49	0.2233	P	0.2
8	☐	100000.00	101388.07	5748317.31	0.4325	A	0.7
9	☐	500000.00	499388.40	25495539.38	2.1303	A	1.3

$$y = 4.2657\text{E-}006 * x + 4.6568\text{E-}005$$

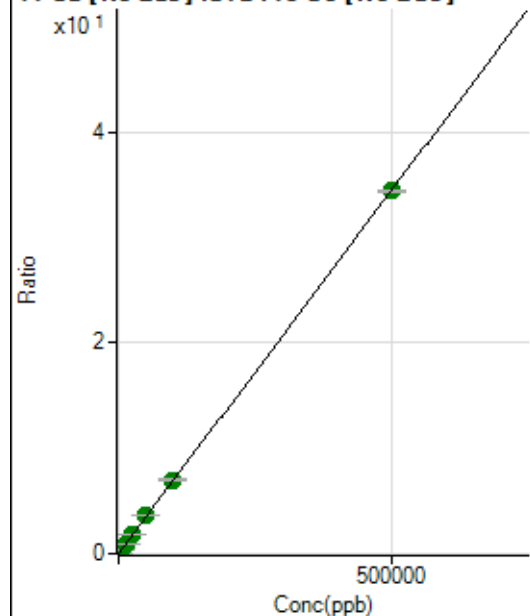
$$R = 1.0000$$

$$DL = 1.243$$

$$BEC = 10.92$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	26400.29	0.0019	P	1.0
2	☐	5.000	55.832	78440.78	0.0058	P	0.6
3	☐	500.000	468.932	473406.50	0.0342	P	1.1
4	☐	5000.000	5484.244	5142595.60	0.3799	A	0.6
5	☐	12500.000	13398.916	12585430.08	0.9254	A	0.9
6	☐	25000.000	26019.910	24216722.18	1.7952	A	0.6
7	☐	50000.000	51867.696	45601185.25	3.5767	A	0.3
8	☐	100000.00	101506.15	92997208.14	6.9978	A	0.8
9	☐	500000.00	499433.71	411985727.8	34.4232	A	0.5

$$y = 6.8921\text{E-}005 * x + 0.0019$$

$$R = 1.0000$$

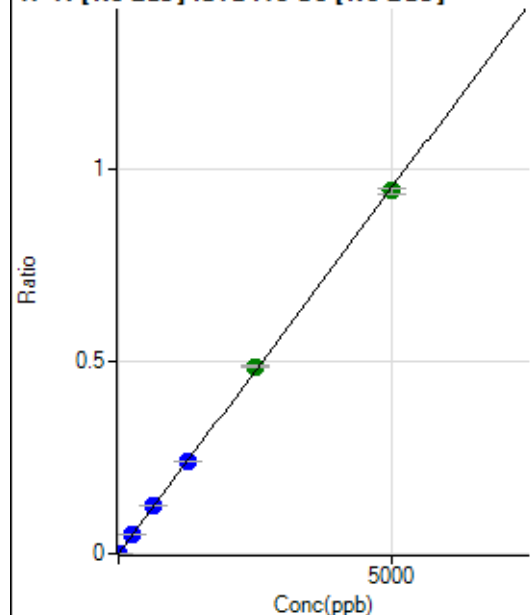
$$DL = 0.7926$$

$$BEC = 27.76$$

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	277.79	0.0000	P	7.7
2	☐	0.500	0.484	1527.92	0.0001	P	8.4
3	☐	5.000	4.562	12272.22	0.0009	P	1.9
4	☐	250.000	267.839	689627.79	0.0509	P	0.4
5	☐	625.000	655.186	1694476.38	0.1246	P	1.1
6	☐	1250.000	1258.679	3228520.43	0.2393	P	0.4
7	☐	2500.000	2562.720	6212556.56	0.4873	A	0.1
8	☐	5000.000	4961.805	12537168.60	0.9434	A	1.5
9	☐			4864.91	0.0004	P	2.0

$$y = 1.9013\text{E-}004 * x + 2.0138\text{E-}005$$

$$R = 0.9999$$

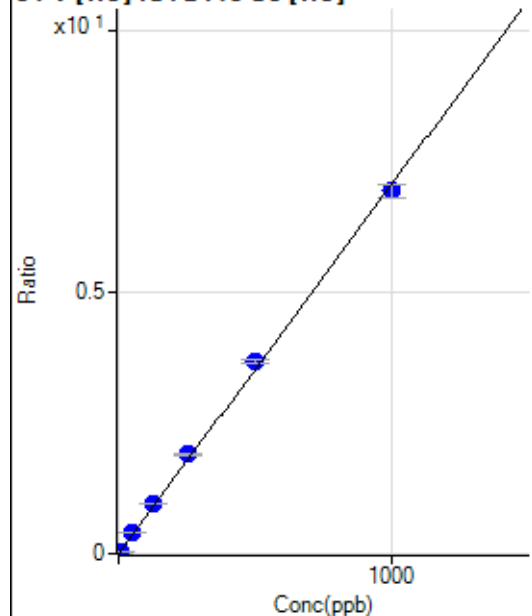
$$DL = 0.02434$$

$$BEC = 0.1059$$

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	36.66	0.0001	P	15.6
2	☐	0.500	0.464	1779.02	0.0033	P	3.5
3	☐	5.000	5.254	18717.61	0.0372	P	10.0
4	☐	50.000	55.268	206867.74	0.3901	P	0.5
5	☐	125.000	136.810	506424.30	0.9656	P	0.4
6	☐	250.000	268.474	948010.11	1.8948	P	0.3
7	☐	500.000	520.719	1780717.16	3.6750	P	1.4
8	☐	1000.000	983.281	3564439.53	6.9395	P	3.6
9	☐			785.59	0.0016	P	2.9

$$y = 0.0071 * x + 6.8593\text{E-}005$$

$$R = 0.9995$$

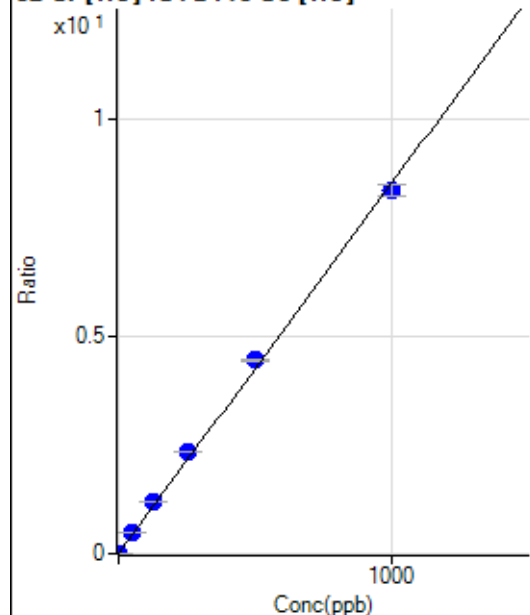
$$DL = 0.004557$$

$$BEC = 0.009719$$

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	761.15	0.0014	P	9.9
2	☐	0.200	0.222	1763.46	0.0033	P	2.1
3	☐	2.000	2.162	9983.51	0.0198	P	9.8
4	☐	50.000	56.686	256445.79	0.4836	P	0.6
5	☐	125.000	139.840	624612.80	1.1910	P	0.3
6	☐	250.000	273.111	1163044.28	2.3246	P	0.2
7	☐	500.000	524.367	2162053.85	4.4619	P	1.0
8	☐	1000.000	979.849	4282125.74	8.3364	P	3.3
9	☐			6618.24	0.0136	P	3.2

$$y = 0.0085 * x + 0.0014$$

$$R = 0.9992$$

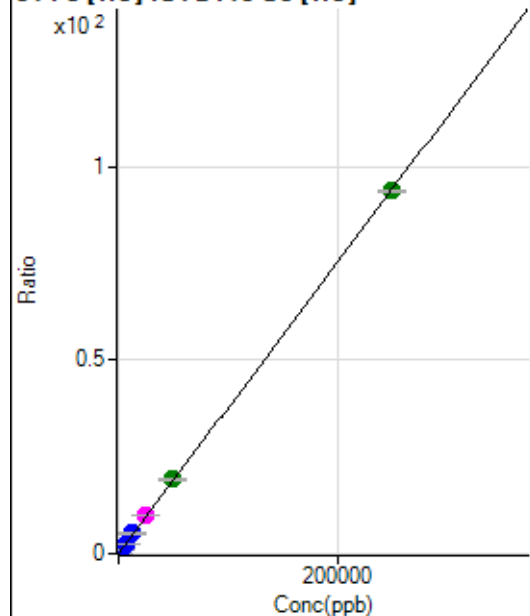
$$DL = 0.04988$$

$$BEC = 0.1675$$

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	1037.84	0.0019	P	5.1
2	☐	5.000	5.842	2201.08	0.0041	P	7.4
3	☐	50.000	55.338	11438.91	0.0227	P	10.6
4	☐	2500.000	2917.970	581750.14	1.0971	P	0.7
5	☐	6250.000	7136.161	1405705.65	2.6803	P	0.1
6	☐	12500.000	13902.617	2611586.68	5.2198	P	0.5
7	☐	25000.000	26722.883	4861239.47	10.0314	M	1.8
8	☐	50000.000	51267.829	9885443.42	19.2435	A	3.0
9	☐	250000.00	249477.68	45525157.46	93.6347	A	0.5

$$y = 3.7532E-004 * x + 0.0019$$

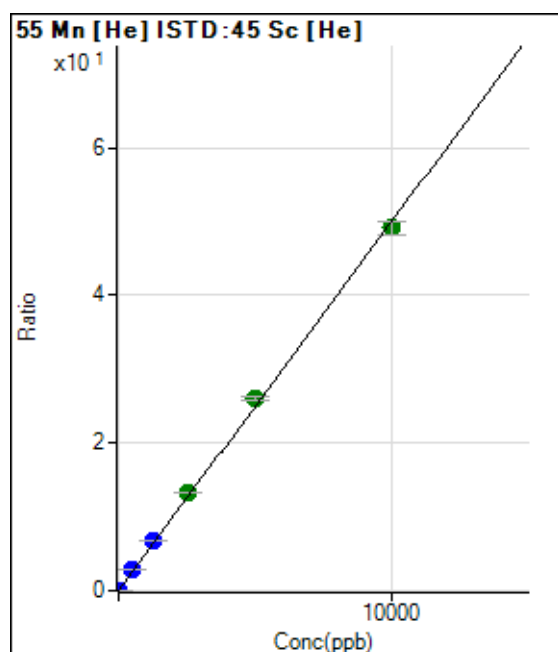
$$R = 1.0000$$

$$DL = 0.784$$

$$BEC = 5.174$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	470.02	0.0009	P	3.4
2	☒	0.100					
3	☐	1.000	0.995	2952.57	0.0059	P	7.4
4	☐	500.000	560.614	1485181.52	2.8008	P	0.6
5	☐	1250.000	1355.457	3550984.88	6.7706	P	0.3
6	☐	2500.000	2669.157	6670260.04	13.3318	A	0.7
7	☐	5000.000	5208.925	12605942.73	26.0166	A	1.7
8	☐	10000.000	9837.036	25236206.57	49.1315	A	3.6
9	☐			16926.59	0.0348	P	1.1

$$y = 0.0050 * x + 8.7950E-004$$

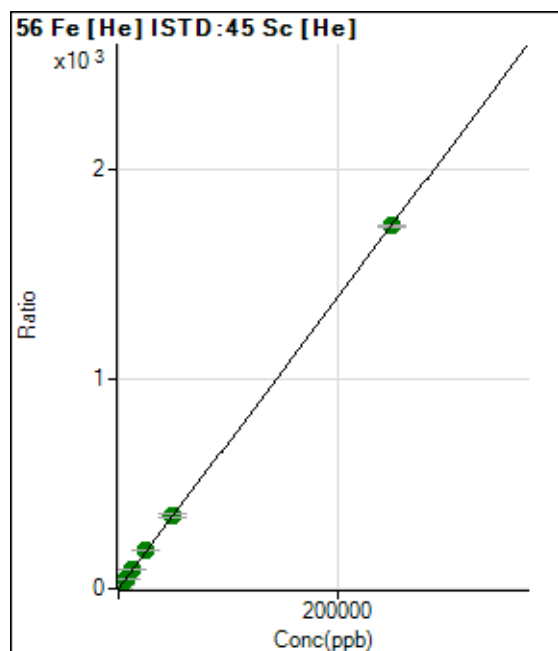
$$R = 0.9995$$

$$DL = 0.0178$$

$$BEC = 0.1761$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11644.36	0.0218	P	1.1
2	☐	5.000	5.434	31620.96	0.0594	P	2.3
3	☐	50.000	53.380	197089.09	0.3911	P	9.5
4	☐	2500.000	2824.587	10372779.93	19.5615	A	0.7
5	☐	6250.000	6956.566	25250544.22	48.1453	A	0.3
6	☐	12500.000	13684.759	47374617.51	94.6890	A	0.8
7	☐	25000.000	26633.151	89285527.93	184.2622	A	1.1
8	☐	50000.000	50177.363	178303513.3	347.1341	A	3.6
9	☐	250000.00	249721.06	839924520.5	1,727.519	A	0.6

$$y = 0.0069 * x + 0.0218$$

$$R = 1.0000$$

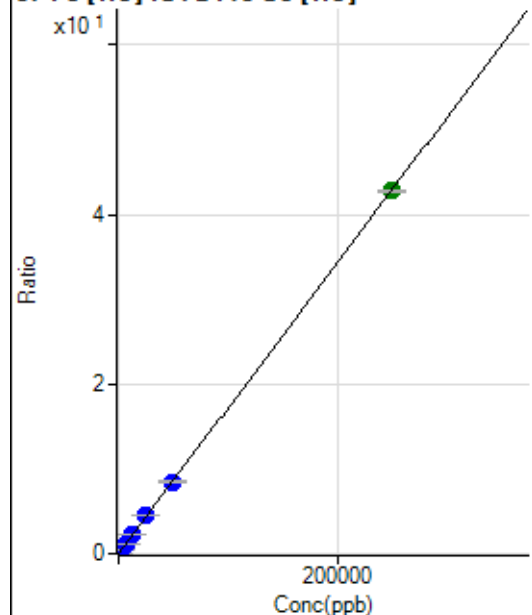
$$DL = 0.103$$

$$BEC = 3.15$$

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	403.93	0.0008	P	6.5
2	☐	5.000	5.560	909.19	0.0017	P	3.4
3	☐	50.000	55.334	5154.59	0.0102	P	9.4
4	☐	2500.000	2896.064	263230.88	0.4964	P	0.1
5	☐	6250.000	7102.588	637928.36	1.2163	P	0.4
6	☐	12500.000	13854.180	1186688.02	2.3719	P	0.1
7	☐	25000.000	26613.643	2207402.22	4.5556	P	1.4
8	☐	50000.000	49595.180	4360295.42	8.4888	P	3.5
9	☐	250000.00	249826.61	20788687.41	42.7578	A	0.9

$$y = 1.7115\text{E-}004 * x + 7.5591\text{E-}004$$

$$R = 1.0000$$

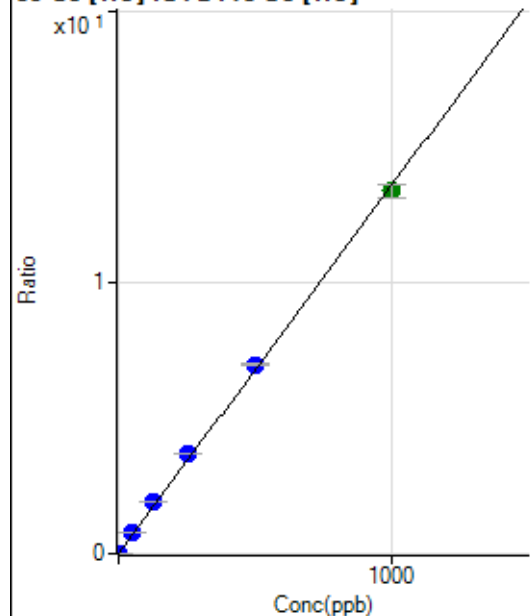
$$DL = 0.8558$$

$$BEC = 4.417$$

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	144.45	0.0003	P	5.6
2	☐	0.100	0.100	866.70	0.0016	P	4.4
3	☐	1.000	1.088	7592.07	0.0150	P	6.7
4	☐	50.000	56.946	410101.30	0.7734	P	0.8
5	☐	125.000	139.576	993964.45	1.8952	P	0.5
6	☐	250.000	270.339	1836424.50	3.6705	P	0.3
7	☐	500.000	514.475	3384541.89	6.9850	P	1.4
8	☐	1000.000	985.509	6872384.13	13.3799	A	3.7
9	☐			10796.34	0.0222	P	1.5

$$y = 0.0136 * x + 2.7026\text{E-}004$$

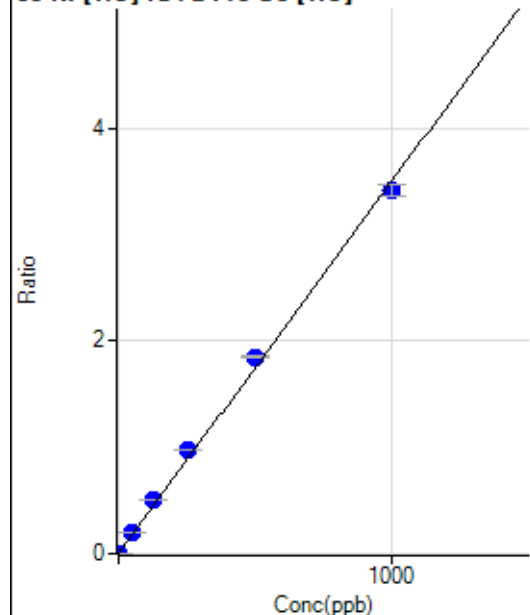
$$R = 0.9996$$

$$DL = 0.003332$$

$$BEC = 0.01991$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.56	0.0004	P	2.3
2	☐	0.100	0.115	438.90	0.0008	P	10.0
3	☐	1.000	1.192	2315.78	0.0046	P	8.4
4	☐	50.000	59.064	109754.34	0.2070	P	0.6
5	☐	125.000	144.507	265266.84	0.5058	P	0.6
6	☐	250.000	278.164	486911.93	0.9732	P	0.5
7	☐	500.000	529.575	897609.64	1.8524	P	1.1
8	☐	1000.000	975.280	1752192.60	3.4111	P	3.3
9	☐			2622.51	0.0054	P	4.9

$$y = 0.0035 * x + 4.2205E-004$$

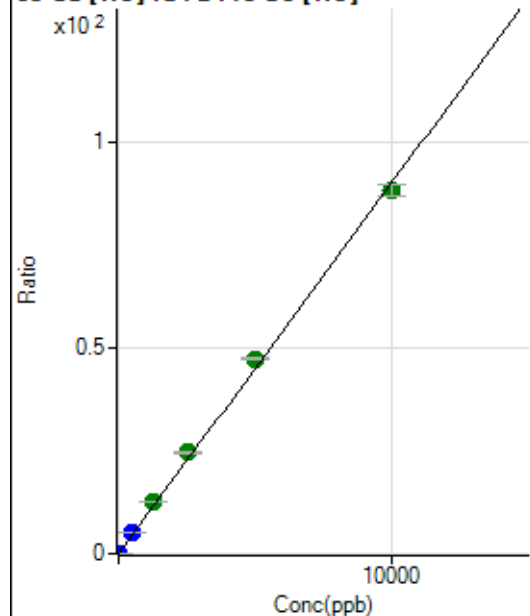
$$R = 0.9988$$

$$DL = 0.008251$$

$$BEC = 0.1207$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	907.82	0.0017	P	6.1
2	☒	0.200					
3	☐	2.000	2.415	11817.14	0.0235	P	11.4
4	☐	500.000	583.584	2791696.73	5.2647	P	0.2
5	☐	1250.000	1401.300	6628807.54	12.6391	A	0.4
6	☐	2500.000	2730.080	12319156.76	24.6225	A	0.7
7	☐	5000.000	5257.416	22975298.82	47.4149	A	1.1
8	☐	10000.000	9790.680	45356770.99	88.2974	A	3.2
9	☐			9439.85	0.0194	P	2.7

$$y = 0.0090 * x + 0.0017$$

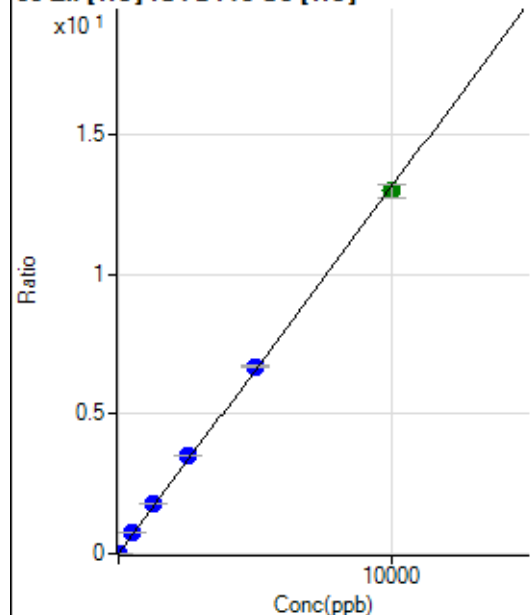
$$R = 0.9992$$

$$DL = 0.0344$$

$$BEC = 0.1883$$

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	750.03	0.0014	P	4.1
2	☐	0.200	0.216	898.93	0.0017	P	0.8
3	☐	2.000	2.587	2419.13	0.0048	P	9.6
4	☐	500.000	572.690	399498.46	0.7534	P	1.0
5	☐	1250.000	1379.436	950719.70	1.8127	P	0.4
6	☐	2500.000	2676.068	1758795.04	3.5154	P	0.5
7	☐	5000.000	5099.085	3245052.77	6.6970	P	1.3
8	☐	10000.000	9886.626	6668849.97	12.9836	A	3.7
9	☐			8240.25	0.0169	P	1.6

$$y = 0.0013 * x + 0.0014$$

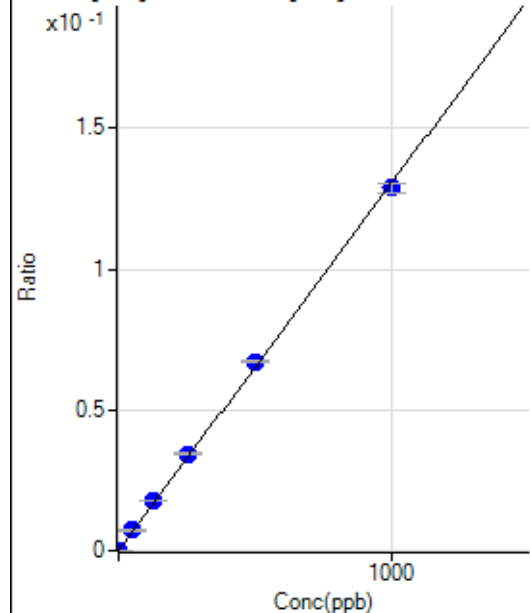
$$R = 0.9997$$

$$DL = 0.1321$$

$$BEC = 1.069$$

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	17.90	0.0000	P	26.0
2	☐	0.100	0.098	61.11	0.0000	P	25.1
3	☐	1.000	1.062	456.80	0.0001	P	11.8
4	☐	50.000	55.067	24290.06	0.0072	P	0.9
5	☐	125.000	135.879	59192.55	0.0177	P	0.7
6	☐	250.000	264.211	111363.43	0.0345	P	0.4
7	☐	500.000	515.226	211650.75	0.0672	P	1.2
8	☐	1000.000	987.221	426375.33	0.1288	P	3.0
9	☐			174.69	0.0001	P	2.0

$$y = 1.3045E-004 * x + 5.3144E-006$$

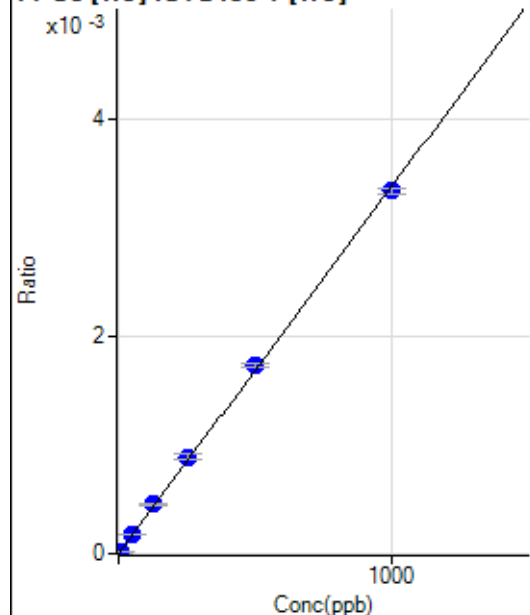
$$R = 0.9997$$

$$DL = 0.03177$$

$$BEC = 0.04074$$

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	0.585	6.66	0.0000	P	85.8
3	☐	5.000	5.774	62.22	0.0000	P	9.3
4	☐	50.000	51.543	587.80	0.0002	P	1.3
5	☐	125.000	135.787	1530.11	0.0005	P	3.6
6	☐	250.000	262.638	2863.66	0.0009	P	6.3
7	☐	500.000	513.519	5457.77	0.0017	P	2.1
8	☐	1000.000	988.651	11048.80	0.0033	P	1.8
9	☐			3.33	0.0000	P	99.7

$$y = 3.3750\text{E-}006 * x + 0.0000\text{E+}000$$

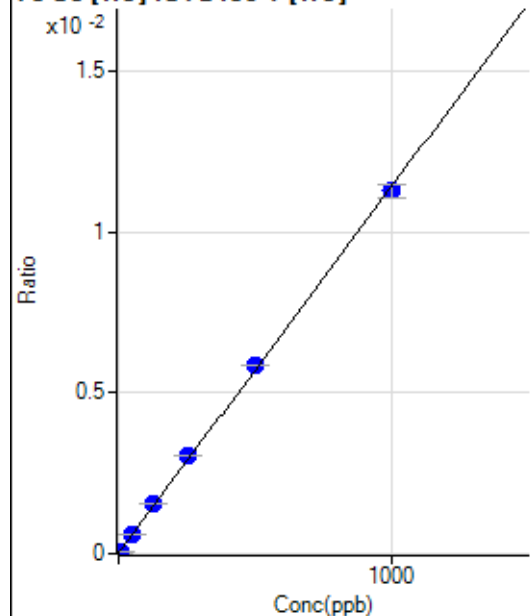
$$R = 0.9997$$

$$DL = 0$$

$$BEC = 0$$

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	60.49	0.0000	P	15.4
2	☐	0.500	0.621	83.95	0.0000	P	9.3
3	☐	5.000	4.829	231.49	0.0001	P	13.9
4	☐	50.000	52.333	2073.62	0.0006	P	2.5
5	☐	125.000	134.762	5181.84	0.0016	P	1.8
6	☐	250.000	264.753	9794.73	0.0030	P	0.8
7	☐	500.000	513.069	18448.22	0.0059	P	0.7
8	☐	1000.000	988.441	37308.31	0.0113	P	3.8
9	☐			78.40	0.0000	P	12.7

$$y = 1.1384\text{E-}005 * x + 1.7962\text{E-}005$$

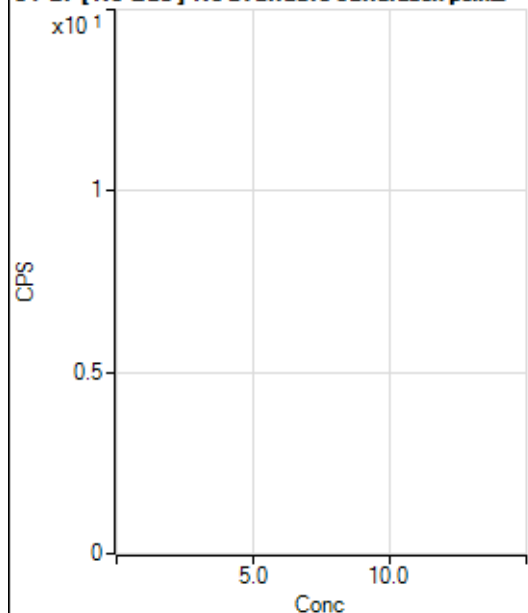
$$R = 0.9997$$

$$DL = 0.7303$$

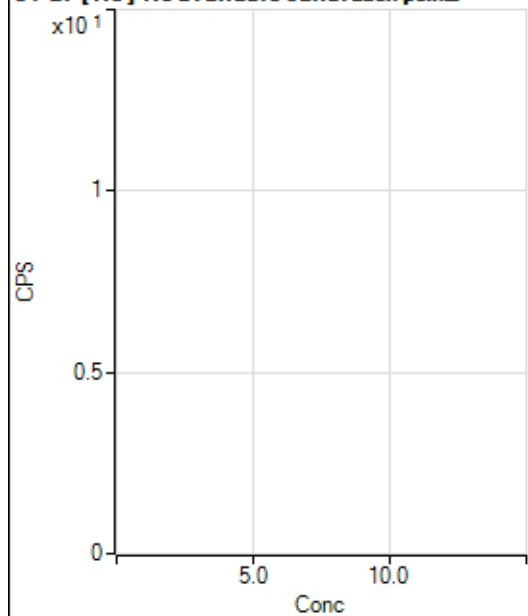
$$BEC = 1.578$$

Weight: <None>

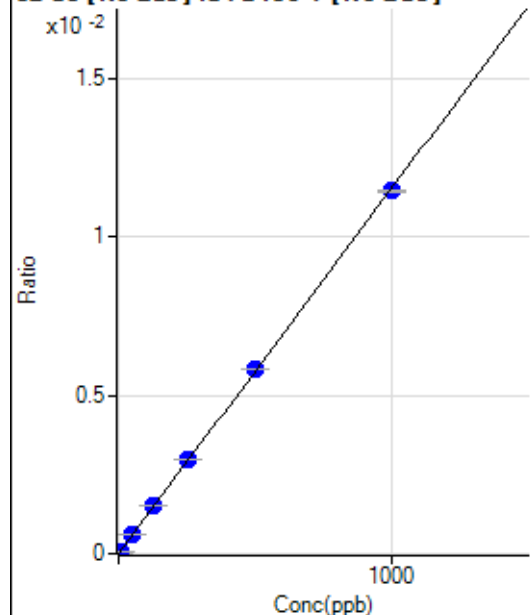
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46877.73		P	2.1
2	☐			47372.65		P	2.1
3	☐			47932.20		P	1.6
4	☐			47225.91		P	3.1
5	☐			46341.91		P	2.3
6	☐			44564.93		P	2.2
7	☐			42870.81		P	0.7
8	☐			42951.44		P	2.4
9	☐			42697.19		P	0.6

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.42		P	6.9
2	☐			136.81		P	11.2
3	☐			106.78		P	47.2
4	☐			100.10		P	52.9
5	☐			106.78		P	21.6
6	☐			100.11		P	20.0
7	☐			46.71		P	49.5
8	☐			90.09		P	22.2
9	☐			143.48		P	42.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	32.75	0.0000	P	70.8
2	☐	0.500	0.414	162.76	0.0000	P	19.8
3	☐	5.000	4.593	1506.13	0.0001	P	2.5
4	☐	50.000	53.500	16983.49	0.0006	P	0.5
5	☐	125.000	132.714	42135.74	0.0015	P	0.5
6	☐	250.000	258.064	80708.28	0.0030	P	1.3
7	☐	500.000	506.266	153704.15	0.0058	P	0.5
8	☐	1000.000	993.714	311829.86	0.0115	P	0.5
9	☐			232.76	0.0000	P	6.3

$$y = 1.1531\text{E-}005 * x + 1.1912\text{E-}006$$

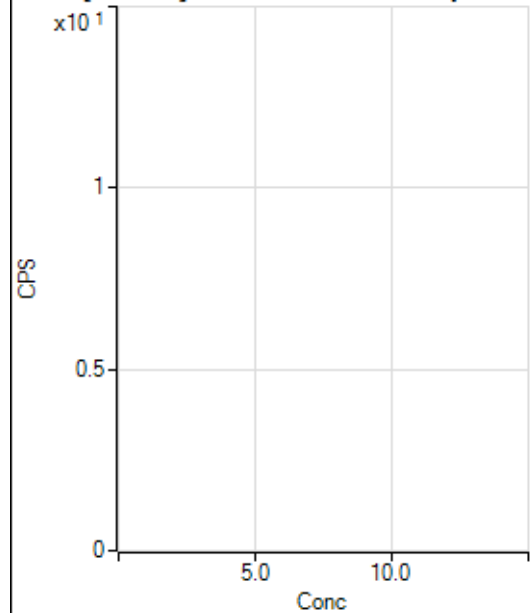
$$R = 0.9999$$

$$DL = 0.2194$$

$$BEC = 0.1033$$

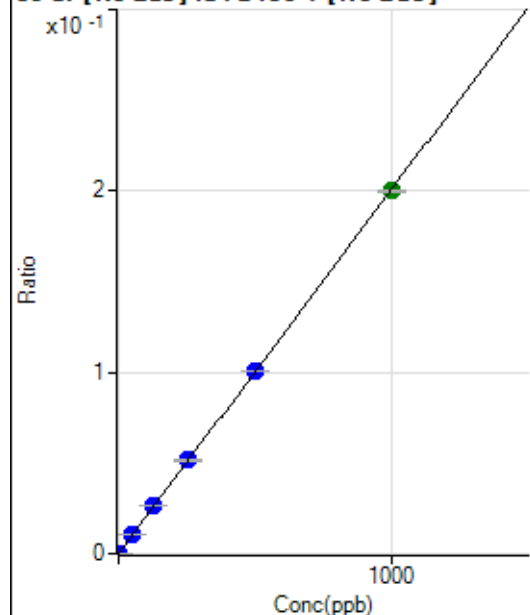
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			368.90		P	3.2
2	☐			372.23		P	6.8
3	☐			413.35		P	4.9
4	☐			394.46		P	7.0
5	☐			403.35		P	3.8
6	☐			371.12		P	9.9
7	☐			416.68		P	7.6
8	☐			406.68		P	20.9
9	☐			502.24		P	6.8

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	647.27	0.0000	P	13.2
2	☐	0.100	0.106	1222.33	0.0000	P	6.7
3	☐	1.000	0.935	5876.47	0.0002	P	1.7
4	☐	50.000	53.560	296068.92	0.0108	P	0.8
5	☐	125.000	132.209	730815.09	0.0266	P	0.4
6	☐	250.000	256.627	1397185.62	0.0515	P	1.5
7	☐	500.000	501.634	2651367.57	0.1007	P	0.4
8	☐	1000.000	996.447	5443594.91	0.2000	A	0.6
9	☐			27744.30	0.0012	P	1.0

$$y = 2.0073\text{E-}004 * x + 2.3579\text{E-}005$$

$$R = 1.0000$$

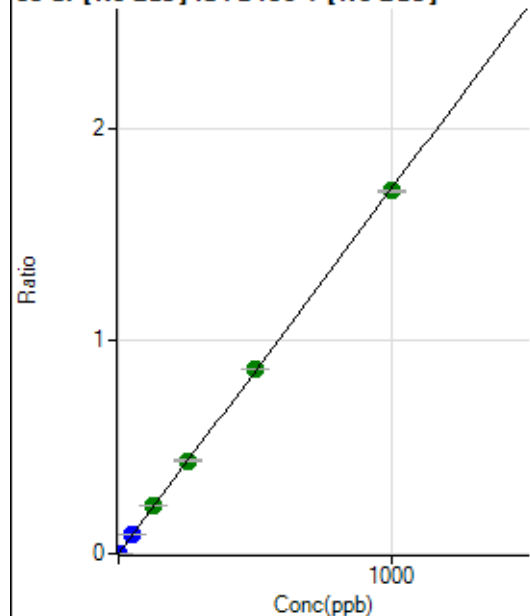
$$DL = 0.04634$$

$$BEC = 0.1175$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	725.05	0.0000	P	6.6
2	☐	0.100	0.108	5787.50	0.0002	P	1.3
3	☐	1.000	0.957	46414.96	0.0017	P	2.6
4	☐	50.000	53.617	2527964.77	0.0920	P	0.5
5	☐	125.000	130.863	6177068.84	0.2245	A	0.8
6	☐	250.000	255.288	11873500.70	0.4380	A	1.1
7	☐	500.000	507.535	22919956.76	0.8707	A	0.2
8	☐	1000.000	993.997	46400680.20	1.7052	A	0.4
9	☐			233996.83	0.0098	P	0.8

$$y = 0.0017 * x + 2.6404\text{E-}005$$

$$R = 0.9999$$

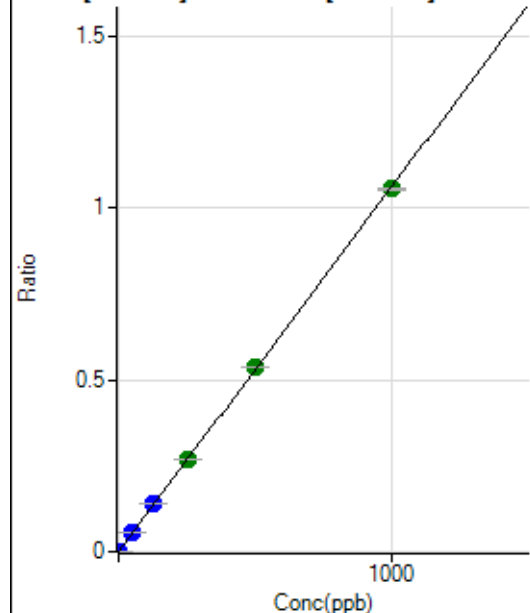
$$DL = 0.003064$$

$$BEC = 0.01539$$

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	1552.93	0.0001	P	12.7
2	☐	0.100	0.112	4776.01	0.0002	P	4.6
3	☐	1.000	0.849	26589.58	0.0010	P	3.7
4	☐	50.000	52.586	1532031.10	0.0558	P	0.3
5	☐	125.000	129.888	3786685.59	0.1376	P	0.7
6	☐	250.000	254.666	7315082.89	0.2698	A	0.7
7	☐	500.000	506.090	14112849.10	0.5361	A	0.3
8	☐	1000.000	995.048	28681329.46	1.0540	A	0.7
9	☐			11221.51	0.0005	P	3.1

$$y = 0.0011 * x + 5.6543E-005$$

$$R = 1.0000$$

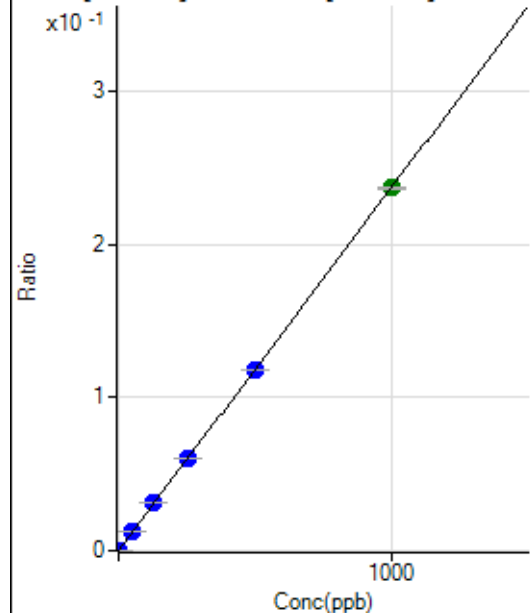
$$DL = 0.02031$$

$$BEC = 0.05338$$

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	305.57	0.0000	P	20.7
2	☐	0.100	0.123	1100.09	0.0000	P	6.9
3	☐	1.000	0.861	5987.60	0.0002	P	4.2
4	☐	50.000	52.870	344890.28	0.0126	P	0.7
5	☐	125.000	131.879	860932.61	0.0313	P	0.7
6	☐	250.000	254.776	1638810.68	0.0604	P	0.3
7	☐	500.000	497.255	3105222.71	0.1180	P	0.5
8	☐	1000.000	999.175	6449423.84	0.2370	A	0.8
9	☐			2380.86	0.0001	P	7.7

$$y = 2.3720E-004 * x + 1.1131E-005$$

$$R = 1.0000$$

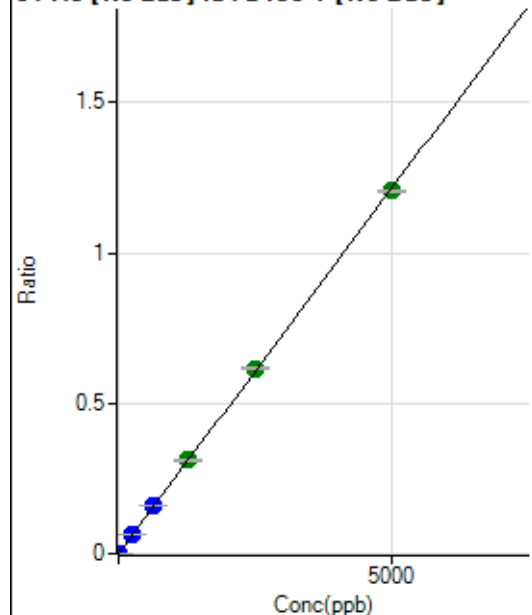
$$DL = 0.02917$$

$$BEC = 0.04693$$

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	652.82	0.0000	P	17.3
2	☐	0.500	0.529	4153.55	0.0002	P	4.0
3	☐	5.000	4.561	31452.09	0.0011	P	1.1
4	☐	250.000	263.350	1757013.64	0.0639	P	0.3
5	☐	625.000	650.037	4341382.61	0.1578	P	1.0
6	☐	1250.000	1280.219	8425498.28	0.3108	A	0.5
7	☐	2500.000	2538.333	16219260.95	0.6161	A	0.6
8	☐	5000.000	4969.482	32822631.64	1.2062	A	0.6
9	☐			14396.66	0.0006	P	4.0

$$y = 2.4272\text{E-}004 * x + 2.3774\text{E-}005$$

$$R = 0.9999$$

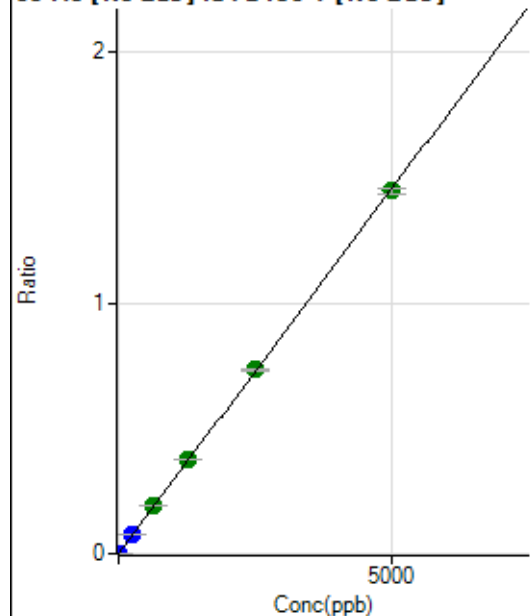
$$DL = 0.05087$$

$$BEC = 0.09795$$

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	241.68	0.0000	P	9.4
2	☐	0.500	0.515	4331.40	0.0002	P	2.1
3	☐	5.000	4.709	38363.55	0.0014	P	3.7
4	☐	250.000	265.670	2125153.37	0.0773	P	0.4
5	☐	625.000	658.573	5274366.00	0.1917	A	0.8
6	☐	1250.000	1284.746	10139816.20	0.3740	A	0.3
7	☐	2500.000	2522.572	19329991.58	0.7343	A	0.4
8	☐	5000.000	4975.048	39406042.89	1.4482	A	1.2
9	☐			16663.06	0.0007	P	3.6

$$y = 2.9109\text{E-}004 * x + 8.8043\text{E-}006$$

$$R = 0.9999$$

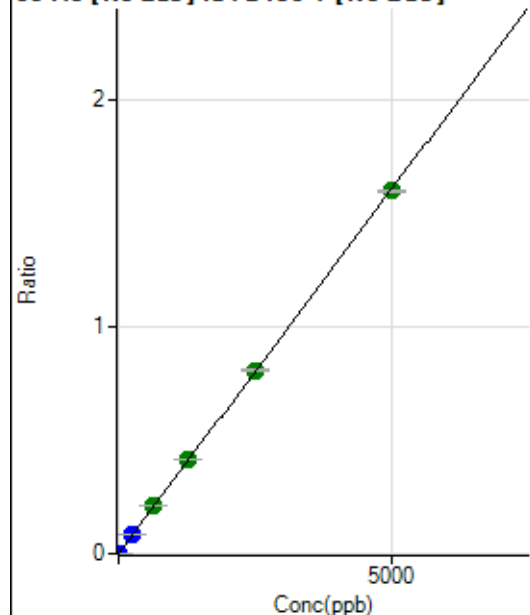
$$DL = 0.008543$$

$$BEC = 0.03025$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	344.46	0.0000	P	28.3
2	☐	0.500	0.532	5015.01	0.0002	P	2.6
3	☐	5.000	4.756	42873.73	0.0015	P	1.6
4	☐	250.000	265.381	2344441.85	0.0853	P	0.1
5	☐	625.000	658.678	5825700.69	0.2118	A	1.0
6	☐	1250.000	1289.078	11235378.03	0.4144	A	0.6
7	☐	2500.000	2512.387	21260873.22	0.8076	A	0.7
8	☐	5000.000	4979.058	43554979.79	1.6006	A	0.7
9	☐			36848.71	0.0015	P	1.8

$$y = 3.2146\text{E-}004 * x + 1.2545\text{E-}005$$

$$R = 0.9999$$

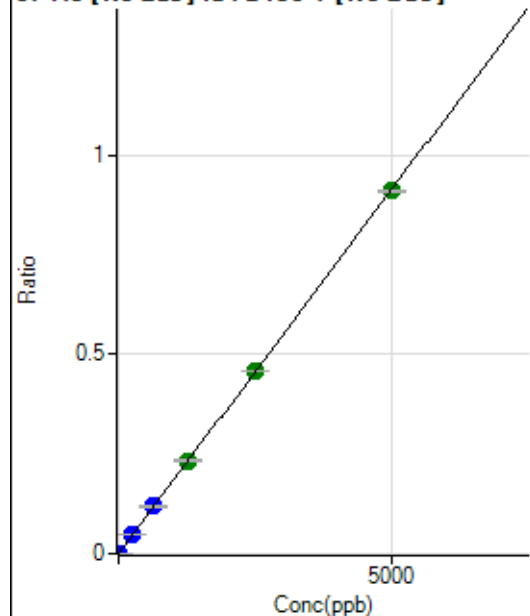
$$DL = 0.03309$$

$$BEC = 0.03902$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.90	0.0000	P	38.5
2	☐	0.500	0.479	2555.90	0.0001	P	9.5
3	☐	5.000	4.672	23923.58	0.0009	P	0.9
4	☐	250.000	264.514	1329005.54	0.0484	P	0.2
5	☐	625.000	647.528	3257201.14	0.1184	P	1.3
6	☐	1250.000	1280.402	6346914.46	0.2341	A	0.8
7	☐	2500.000	2511.481	12087660.43	0.4592	A	0.4
8	☐	5000.000	4983.118	24791490.31	0.9111	A	0.8
9	☐			10192.94	0.0004	P	3.8

$$y = 1.8283\text{E-}004 * x + 5.9656\text{E-}006$$

$$R = 1.0000$$

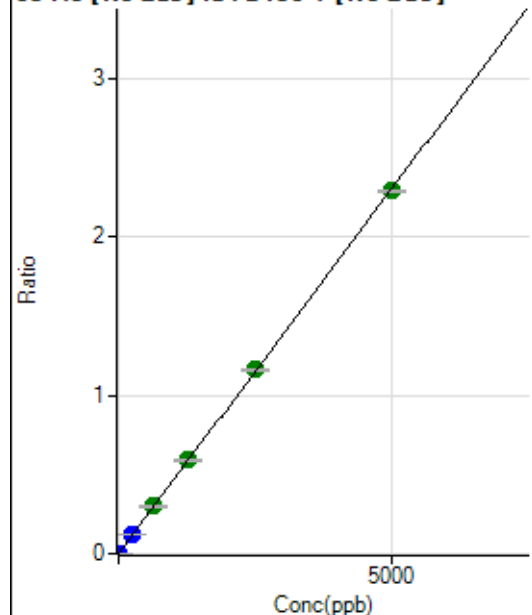
$$DL = 0.03769$$

$$BEC = 0.03263$$

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	413.91	0.0000	P	11.9
2	☐	0.500	0.519	6943.64	0.0003	P	3.0
3	☐	5.000	4.803	61954.79	0.0022	P	0.9
4	☐	250.000	265.260	3357766.00	0.1222	P	0.3
5	☐	625.000	650.553	8244466.68	0.2997	A	1.8
6	☐	1250.000	1284.720	16044278.66	0.5918	A	1.0
7	☐	2500.000	2521.827	30579619.43	1.1616	A	0.5
8	☐	5000.000	4976.449	62377053.48	2.2923	A	0.5
9	☐			24766.78	0.0010	P	3.6

$$y = 4.6063\text{E-}004 * x + 1.5071\text{E-}005$$

$$R = 1.0000$$

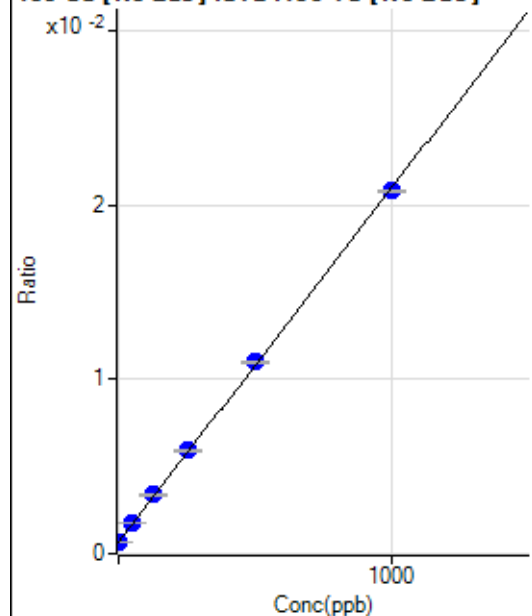
$$DL = 0.01169$$

$$BEC = 0.03272$$

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	15484.09	0.0007	P	3.2
2	☐	0.100	0.046	15167.02	0.0007	P	2.6
3	☐	1.000	0.123	15517.42	0.0007	P	2.5
4	☐	50.000	54.967	41509.01	0.0018	P	0.5
5	☐	125.000	134.237	79258.18	0.0034	P	1.5
6	☐	250.000	258.892	137875.94	0.0059	P	2.3
7	☐	500.000	508.613	249511.23	0.0110	P	1.1
8	☐	1000.000	992.068	488861.58	0.0208	P	0.2
9	☐			12636.64	0.0006	P	3.8

$$y = 2.0306\text{E-}005 * x + 6.5855\text{E-}004$$

$$R = 0.9999$$

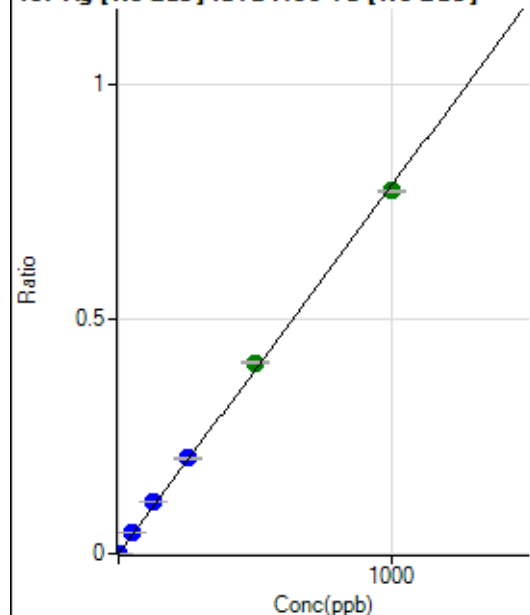
$$DL = 3.085$$

$$BEC = 32.43$$

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	227.79	0.0000	P	29.0
2	☐	0.100	0.113	2255.83	0.0001	P	5.1
3	☐	1.000	1.044	19413.96	0.0008	P	2.5
4	☐	50.000	57.848	1060064.51	0.0453	P	1.2
5	☐	125.000	139.656	2562176.66	0.1094	P	1.3
6	☐	250.000	259.609	4740235.57	0.2034	P	1.1
7	☐	500.000	518.447	9223910.02	0.4061	A	0.9
8	☐	1000.000	986.150	18153700.41	0.7725	A	0.8
9	☐			4714.84	0.0002	P	2.5

$$y = 7.8335E-004 * x + 9.6738E-006$$

$$R = 0.9996$$

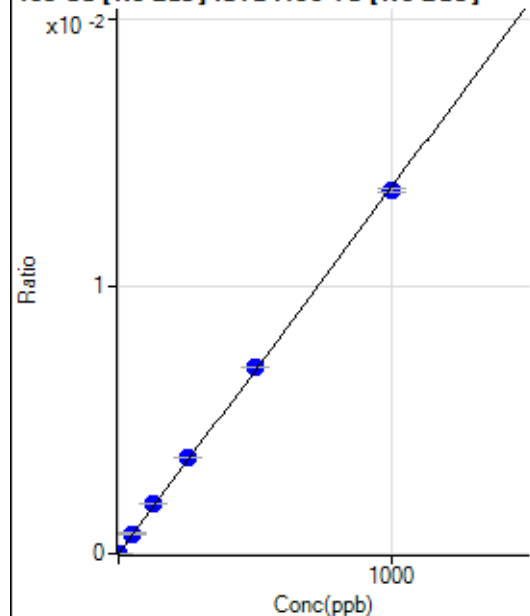
$$DL = 0.01074$$

$$BEC = 0.01235$$

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	31.94	0.0000	P	45.8
2	☐	0.100	0.104	63.89	0.0000	P	29.1
3	☐	1.000	0.990	350.01	0.0000	P	16.1
4	☐	50.000	54.682	17541.66	0.0007	P	1.5
5	☐	125.000	137.130	43993.36	0.0019	P	1.4
6	☐	250.000	263.499	84107.43	0.0036	P	0.3
7	☐	500.000	509.888	158562.45	0.0070	P	0.5
8	☐	1000.000	989.931	318478.46	0.0136	P	1.0
9	☐			305.57	0.0000	P	4.5

$$y = 1.3689E-005 * x + 1.3597E-006$$

$$R = 0.9998$$

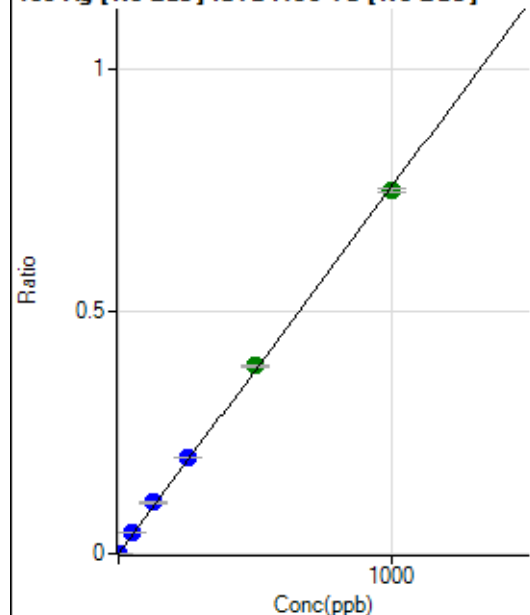
$$DL = 0.1364$$

$$BEC = 0.09932$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	119.45	0.0000	P	14.6
2	☐	0.100	0.112	2064.13	0.0001	P	3.0
3	☐	1.000	1.038	18543.40	0.0008	P	1.7
4	☐	50.000	57.232	1012139.20	0.0433	P	0.2
5	☐	125.000	138.994	2461012.08	0.1051	P	0.9
6	☐	250.000	260.401	4588640.51	0.1969	P	0.4
7	☐	500.000	512.428	8798603.93	0.3874	A	0.7
8	☐	1000.000	989.075	17571132.16	0.7478	A	1.1
9	☐			4375.86	0.0002	P	4.5

$$y = 7.5601\text{E-}004 * x + 5.0804\text{E-}006$$

$$R = 0.9998$$

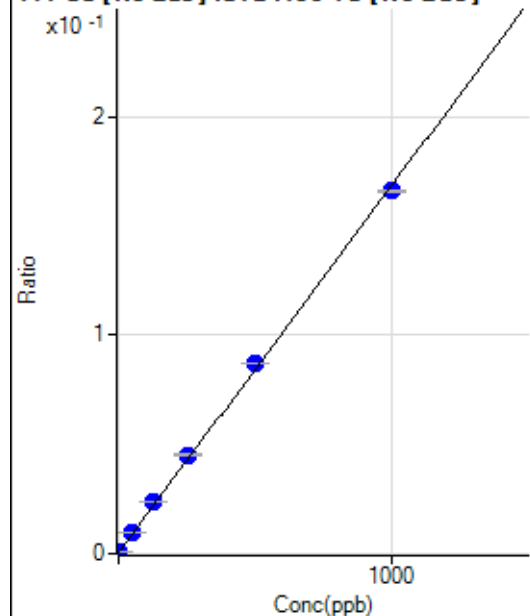
$$DL = 0.002943$$

$$BEC = 0.00672$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10847.06	0.0005	P	3.0
2	☐	0.100	0.100	10994.43	0.0005	P	2.6
3	☐	1.000	0.906	14399.71	0.0006	P	2.5
4	☐	50.000	56.235	231646.81	0.0099	P	0.5
5	☐	125.000	138.041	553627.72	0.0236	P	1.4
6	☐	250.000	266.915	1055358.41	0.0453	P	1.0
7	☐	500.000	515.357	1975889.99	0.0870	P	0.1
8	☐	1000.000	986.151	3901961.16	0.1660	P	0.8
9	☐			10116.58	0.0005	P	3.8

$$y = 1.6791\text{E-}004 * x + 4.6133\text{E-}004$$

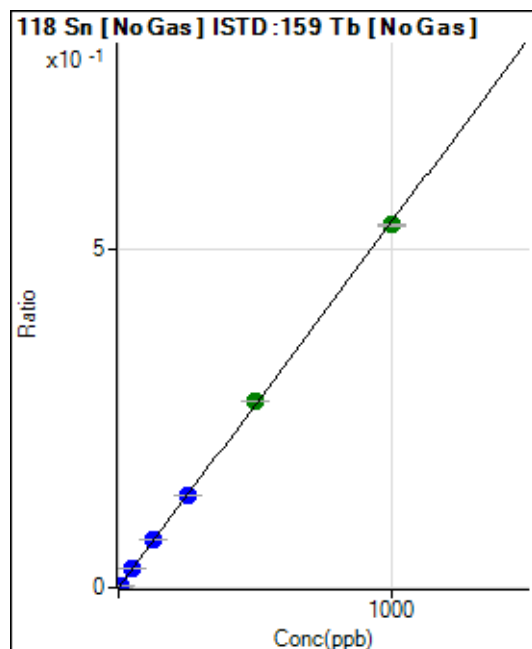
$$R = 0.9996$$

$$DL = 0.2499$$

$$BEC = 2.747$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1216.78	0.0001	P	5.2
2	☐	0.500	0.460	6888.10	0.0003	P	4.5
3	☐	5.000	4.726	61035.89	0.0026	P	0.6
4	☐	50.000	53.763	679321.42	0.0290	P	1.2
5	☐	125.000	131.684	1664300.09	0.0711	P	1.0
6	☐	250.000	252.596	3176214.79	0.1363	P	0.5
7	☐	500.000	512.191	6274792.68	0.2763	A	0.2
8	☐	1000.000	992.233	12575529.97	0.5351	A	0.5
9	☐			6832.51	0.0003	P	0.5

$$y = 5.3928\text{E-}004 * x + 5.1762\text{E-}005$$

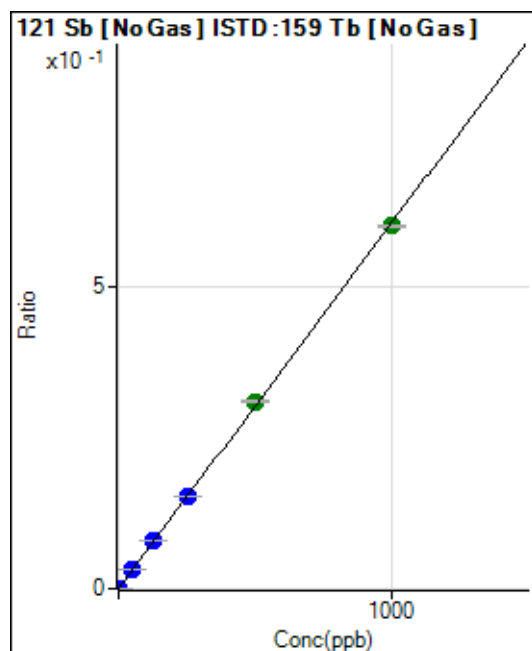
$$R = 0.9999$$

$$DL = 0.01509$$

$$BEC = 0.09598$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	50.6
2	☐	0.200	0.187	2700.36	0.0001	P	2.6
3	☐	2.000	1.809	25794.05	0.0011	P	1.4
4	☐	50.000	52.977	750012.85	0.0321	P	0.8
5	☐	125.000	131.484	1863631.66	0.0796	P	1.2
6	☐	250.000	252.291	3558883.76	0.1527	P	0.6
7	☐	500.000	511.796	7034781.58	0.3097	A	0.8
8	☐	1000.000	992.570	14116523.41	0.6007	A	0.5
9	☐			14672.09	0.0007	P	9.6

$$y = 6.0520\text{E-}004 * x + 4.4732\text{E-}006$$

$$R = 0.9999$$

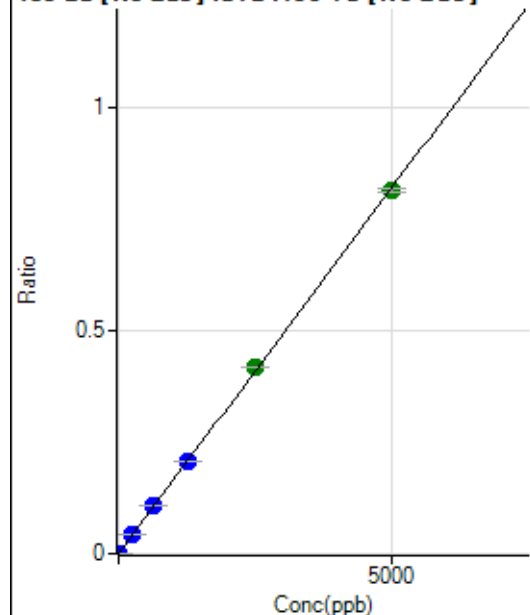
$$DL = 0.01123$$

$$BEC = 0.007391$$

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	238.90	0.0000	P	21.8
2	☐	1.000	0.938	3764.55	0.0002	P	4.9
3	☐	10.000	9.390	36281.90	0.0015	P	2.2
4	☐	250.000	269.832	1032488.25	0.0441	P	0.1
5	☐	625.000	662.981	2539588.43	0.1084	P	1.4
6	☐	1250.000	1262.211	4811918.16	0.2065	P	0.6
7	☐	2500.000	2553.257	9484745.96	0.4176	A	0.4
8	☐	5000.000	4964.581	19080795.05	0.8120	A	1.0
9	☐			31725.85	0.0016	P	1.7

$$y = 1.6355E-004 * x + 1.0151E-005$$

$$R = 0.9999$$

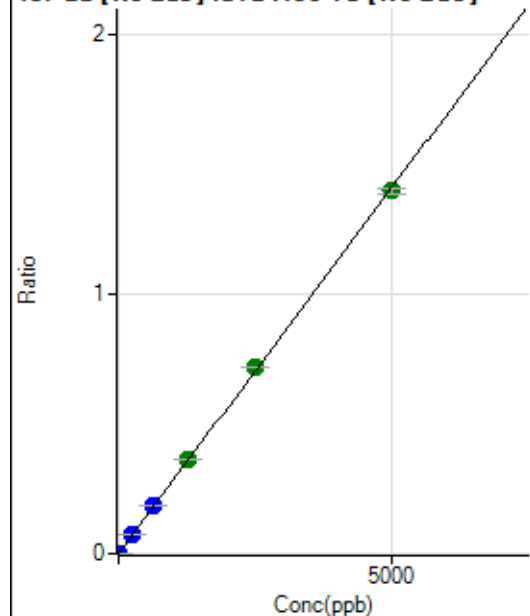
$$DL = 0.04053$$

$$BEC = 0.06207$$

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	311.13	0.0000	P	14.2
2	☐	1.000	1.039	7038.19	0.0003	P	0.4
3	☐	10.000	9.597	63794.55	0.0027	P	1.0
4	☐	250.000	269.233	1775016.42	0.0759	P	0.2
5	☐	625.000	657.000	4336602.61	0.1852	P	1.1
6	☐	1250.000	1282.528	8424727.36	0.3615	A	0.8
7	☐	2500.000	2549.888	16321357.14	0.7186	A	0.7
8	☐	5000.000	4961.963	32861071.57	1.3984	A	1.3
9	☐			54287.71	0.0027	P	2.2

$$y = 2.8182E-004 * x + 1.3217E-005$$

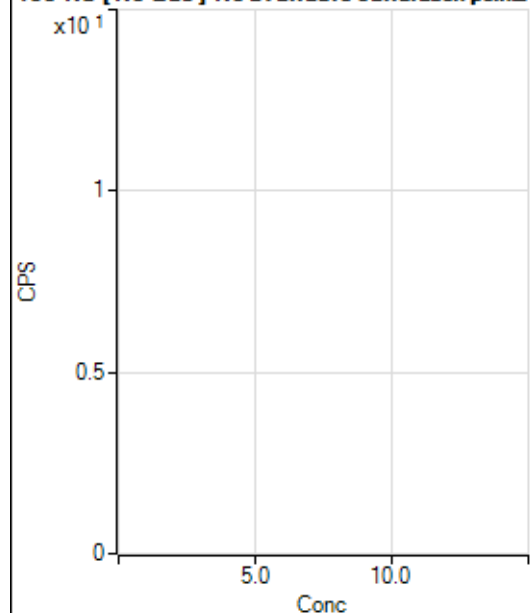
$$R = 0.9999$$

$$DL = 0.02003$$

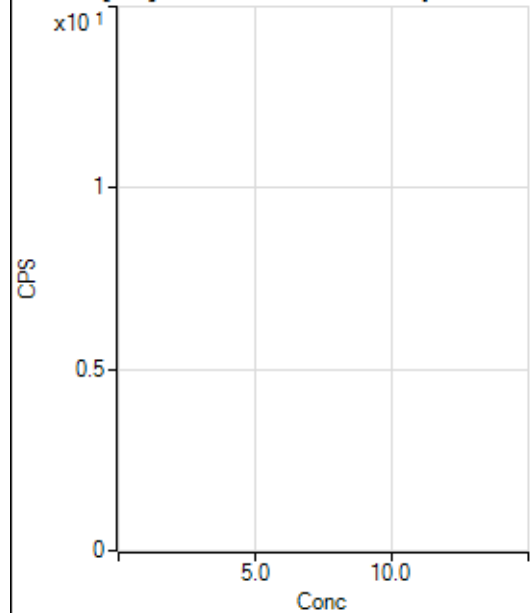
$$BEC = 0.0469$$

Weight: <None>

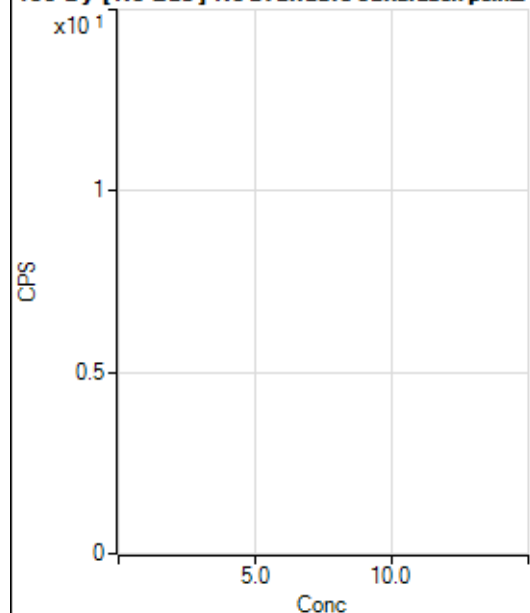
Min Conc: 0

150 Nd [No Gas] No available calibration points

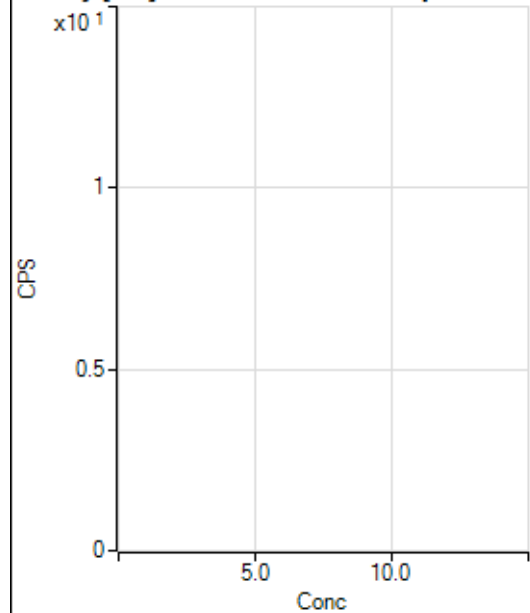
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	34.6
2	☐			11.11		P	69.3
3	☐			15.56		P	65.5
4	☐			160.01		P	14.4
5	☐			346.68		P	24.1
6	☐			624.48		P	8.6
7	☐			1113.42		P	6.7
8	☐			2295.83		P	5.1
9	☐			68.89		P	5.6

150 Nd [He] No available calibration points

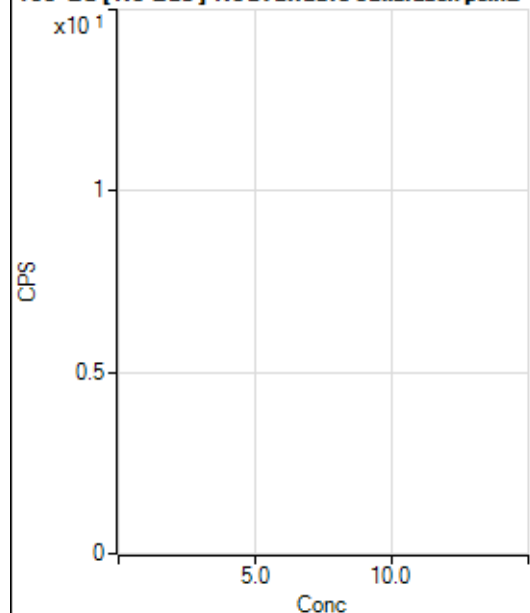
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			1.11		P	173.
3	☐			1.11		P	173.
4	☐			8.89		P	43.3
5	☐			30.00		P	29.4
6	☐			46.67		P	46.8
7	☐			84.45		P	26.9
8	☐			153.34		P	7.5
9	☐			24.44		P	20.8

156 Dy [No Gas] No available calibration points

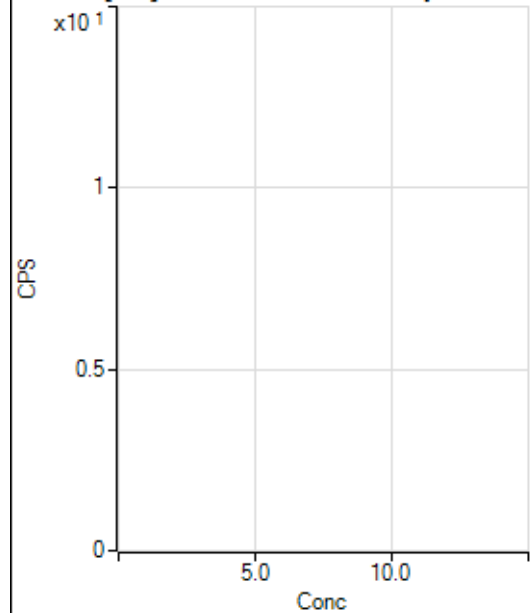
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.45		P	24.7
2	☐			36.11		P	35.3
3	☐			33.33		P	25.0
4	☐			80.56		P	52.1
5	☐			144.45		P	8.8
6	☐			175.01		P	25.2
7	☐			341.68		P	2.4
8	☐			591.71		P	8.8
9	☐			1052.87		P	13.5

156 Dy [He] No available calibration points

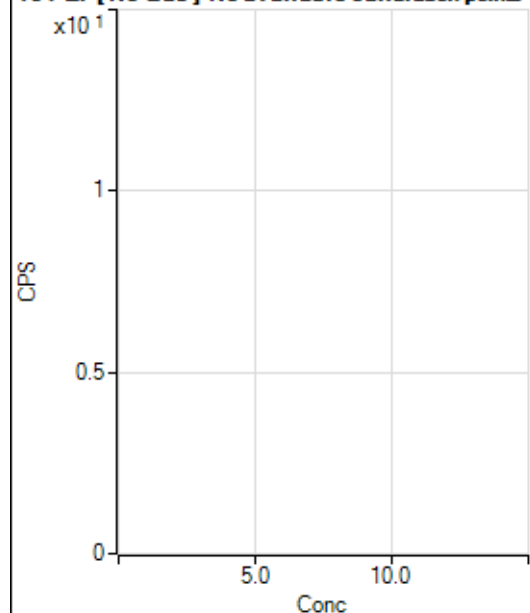
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	33.3
2	☐			14.44		P	13.4
3	☐			12.22		P	87.7
4	☐			51.11		P	3.8
5	☐			71.11		P	13.5
6	☐			141.11		P	17.7
7	☐			225.56		P	5.6
8	☐			414.46		P	7.5
9	☐			541.13		P	3.4

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

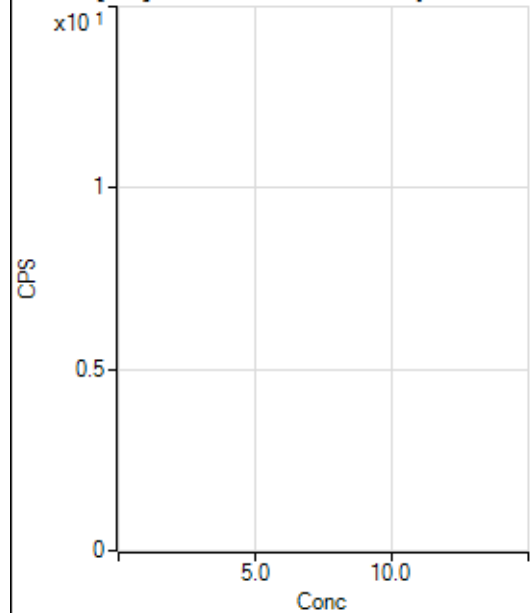
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			197.23		P	12.9
2	☐			175.01		P	20.8
3	☐			161.12		P	34.4
4	☐			238.90		P	4.0
5	☐			261.13		P	3.7
6	☐			275.01		P	8.0
7	☐			372.24		P	15.2
8	☐			522.26		P	15.2
9	☐			1144.54		P	8.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			384.46		P	8.7
2	☐			332.23		P	4.1
3	☐			331.12		P	11.7
4	☐			388.90		P	3.9
5	☐			400.01		P	14.8
6	☐			393.35		P	11.4
7	☐			404.46		P	6.3
8	☐			540.02		P	6.1
9	☐			892.27		P	3.8

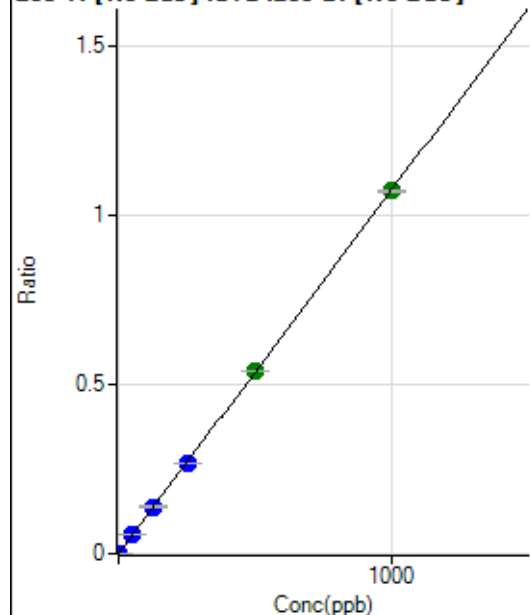
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			102.78		P	16.9
2	☐			136.12		P	40.8
3	☐			91.67		P	41.7
4	☐			127.79		P	16.4
5	☐			141.67		P	10.2
6	☐			119.45		P	14.5
7	☐			133.34		P	38.0
8	☐			186.12		P	26.2
9	☐			236.12		P	28.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	34.1
2	☐			40.00		P	22.0
3	☐			38.89		P	26.2
4	☐			51.11		P	37.1
5	☐			55.56		P	15.1
6	☐			53.34		P	43.3
7	☐			67.78		P	12.4
8	☐			91.11		P	11.2
9	☐			103.34		P	33.5

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	194.45	0.0000	P	9.1
2	☐	0.100	0.099	1608.51	0.0001	P	6.1
3	☐	1.000	0.902	13115.39	0.0010	P	1.4
4	☐	50.000	52.199	742648.94	0.0562	P	0.4
5	☐	125.000	128.786	1824141.51	0.1386	P	1.5
6	☐	250.000	249.380	3487251.64	0.2684	P	0.9
7	☐	500.000	503.225	6761520.73	0.5415	A	0.2
8	☐	1000.000	997.960	13483170.26	1.0738	A	0.7
9	☐			1950.22	0.0002	P	4.0

$$y = 0.0011 * x + 1.4253E-005$$

$$R = 1.0000$$

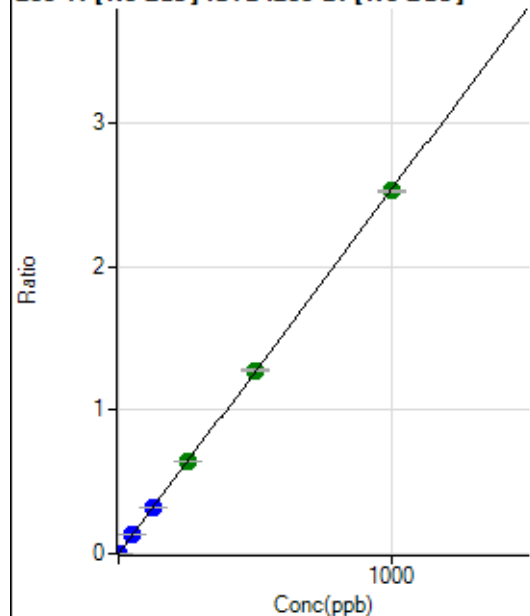
$$DL = 0.003617$$

$$BEC = 0.01325$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	402.80	0.0000	P	7.9
2	☐	0.100	0.099	3736.78	0.0003	P	1.6
3	☐	1.000	0.905	31017.68	0.0023	P	0.4
4	☐	50.000	52.482	1763071.39	0.1334	P	0.2
5	☐	125.000	127.810	4274789.29	0.3248	P	0.5
6	☐	250.000	254.803	8413448.62	0.6474	A	0.8
7	☐	500.000	503.580	15977117.03	1.2795	A	0.5
8	☐	1000.000	996.534	31792056.61	2.5320	A	0.2
9	☐			4759.37	0.0005	P	8.5

$$y = 0.0025 * x + 2.9512E-005$$

$$R = 1.0000$$

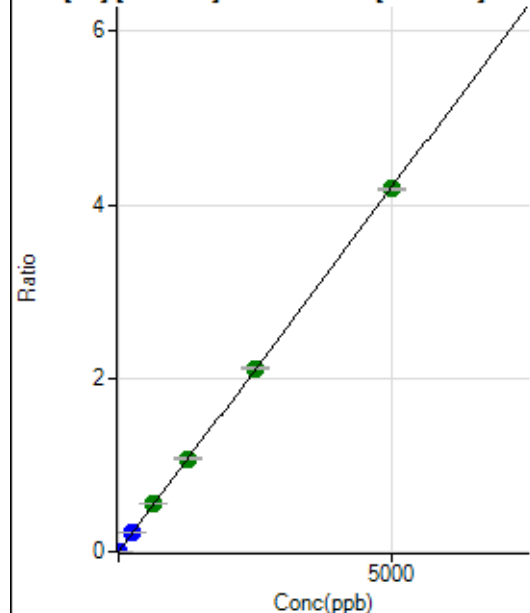
$$DL = 0.002741$$

$$BEC = 0.01162$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	655.59	0.0000	P	8.5
2	☐	0.100	0.137	2172.47	0.0002	P	1.3
3	☐	1.000	0.981	11605.39	0.0009	P	3.7
4	☐	250.000	263.624	2927372.08	0.2215	P	0.6
5	☐	625.000	649.579	7181828.52	0.5456	A	0.5
6	☐	1250.000	1277.821	13946682.26	1.0733	A	1.3
7	☐	2500.000	2516.988	26398007.07	2.1141	A	0.5
8	☐	5000.000	4980.797	52526644.23	4.1834	A	0.3
9	☐			13136.40	0.0014	P	4.2

$$y = 8.3989\text{E-}004 * x + 4.8034\text{E-}005$$

$$R = 1.0000$$

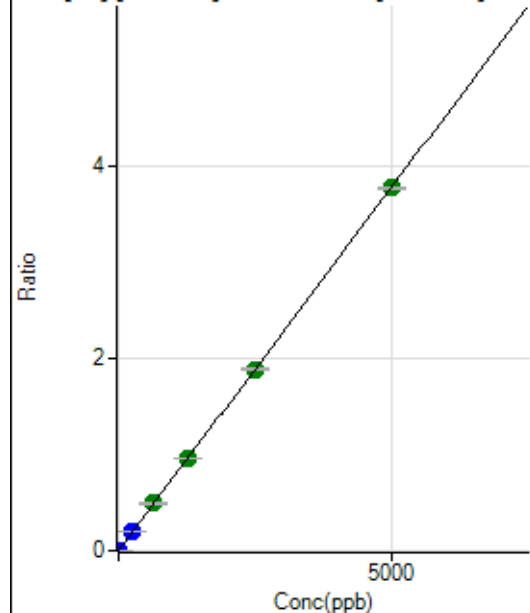
$$DL = 0.01454$$

$$BEC = 0.05719$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	570.40	0.0000	P	16.0
2	☐	0.100	0.122	1781.66	0.0001	P	3.7
3	☐	1.000	0.912	9746.48	0.0007	P	1.8
4	☐	250.000	261.391	2616333.88	0.1979	P	0.8
5	☐	625.000	649.807	6475930.93	0.4920	A	1.0
6	☐	1250.000	1267.403	12469997.27	0.9596	A	1.1
7	☐	2500.000	2499.530	23629429.46	1.8924	A	0.6
8	☐	5000.000	4992.214	47455191.34	3.7796	A	0.5
9	☐			11340.34	0.0012	P	2.9

$$y = 7.5709\text{E-}004 * x + 4.1800\text{E-}005$$

$$R = 1.0000$$

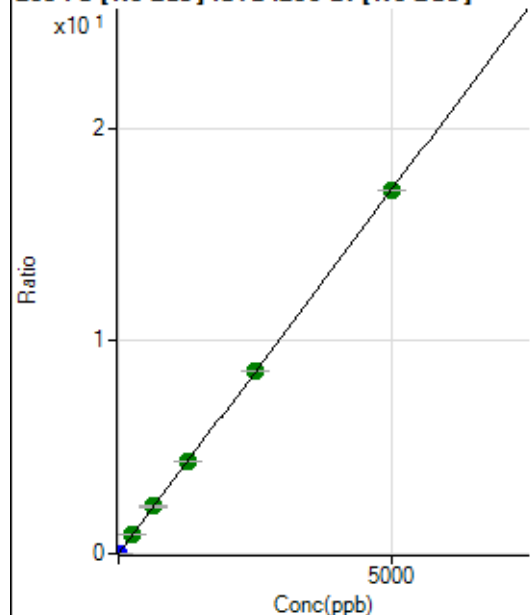
$$DL = 0.02643$$

$$BEC = 0.05521$$

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	2757.61	0.0002	P	3.0
2	☐	0.100	0.126	8443.89	0.0006	P	1.6
3	☐	1.000	0.933	45220.09	0.0034	P	1.8
4	☐	250.000	261.411	11829895.57	0.8950	A	0.4
5	☐	625.000	647.796	29186991.74	2.2175	A	0.8
6	☐	1250.000	1269.018	56448502.19	4.3438	A	0.7
7	☐	2500.000	2508.747	107223084.1	8.5871	A	0.5
8	☐	5000.000	4987.452	214343556.6	17.0712	A	0.1
9	☐			51950.07	0.0054	P	3.1

$$y = 0.0034 * x + 2.0208E-004$$

$$R = 1.0000$$

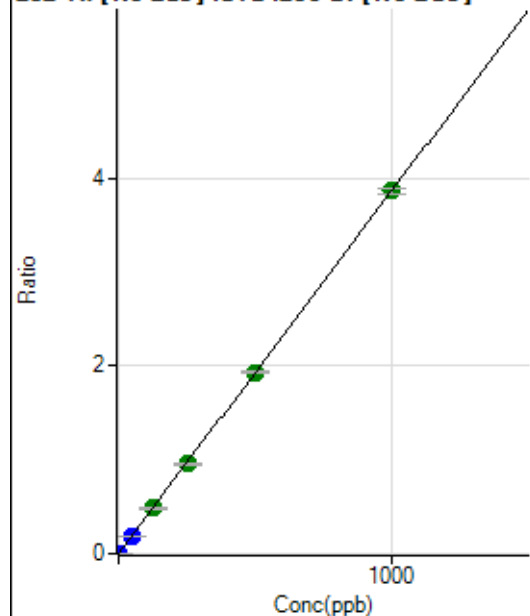
$$DL = 0.005259$$

$$BEC = 0.05904$$

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	1777.95	0.0001	P	6.9
2	☐	0.100	0.003	1865.01	0.0001	P	4.7
3	☐	1.000	-0.011	1179.72	0.0001	P	6.5
4	☐	50.000	47.928	2450749.88	0.1854	P	0.3
5	☐	125.000	124.928	6358118.14	0.4831	A	1.3
6	☐	250.000	247.240	12421670.30	0.9559	A	0.6
7	☐	500.000	499.878	24129035.96	1.9325	A	1.3
8	☐	1000.000	1000.865	48576531.64	3.8691	A	1.5
9	☐			21123.42	0.0022	P	7.0

$$y = 0.0039 * x + 1.3033E-004$$

$$R = 1.0000$$

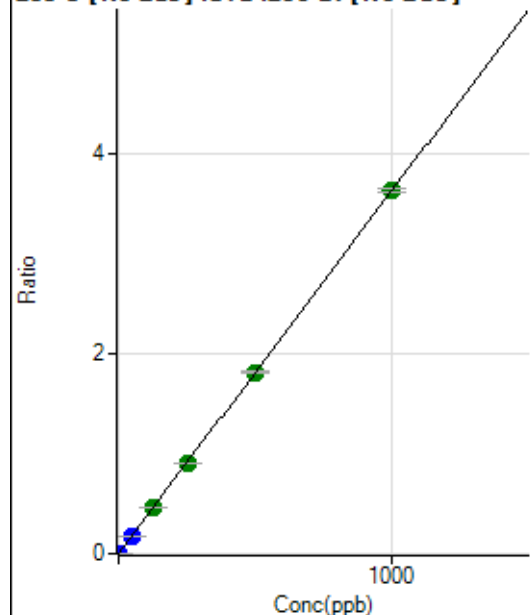
$$DL = 0.007001$$

$$BEC = 0.03372$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	241.68	0.0000	P	6.5
2	☐	0.100	0.090	4578.84	0.0003	P	4.5
3	☐	1.000	0.834	40504.41	0.0030	P	2.3
4	☐	50.000	48.149	2310087.18	0.1748	P	0.7
5	☐	125.000	126.252	6031142.49	0.4582	A	1.1
6	☐	250.000	248.175	11704075.69	0.9007	A	1.1
7	☐	500.000	499.368	22628975.51	1.8123	A	0.9
8	☐	1000.000	1000.709	45598028.80	3.6317	A	1.0
9	☐			6993.88	0.0007	P	0.6

$$y = 0.0036 * x + 1.7709E-005$$

$$R = 1.0000$$

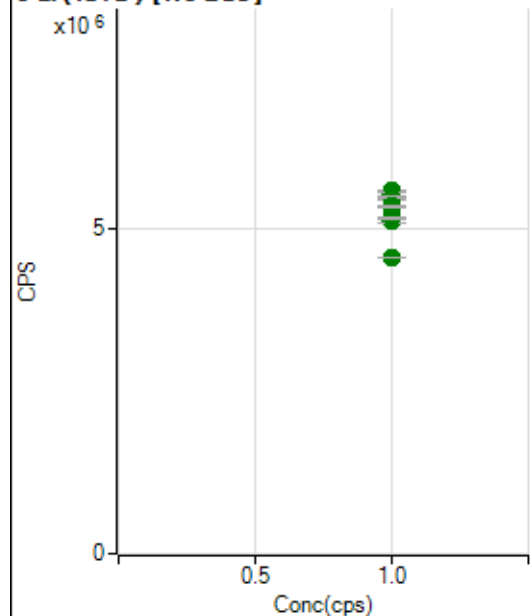
$$DL = 0.000948$$

$$BEC = 0.00488$$

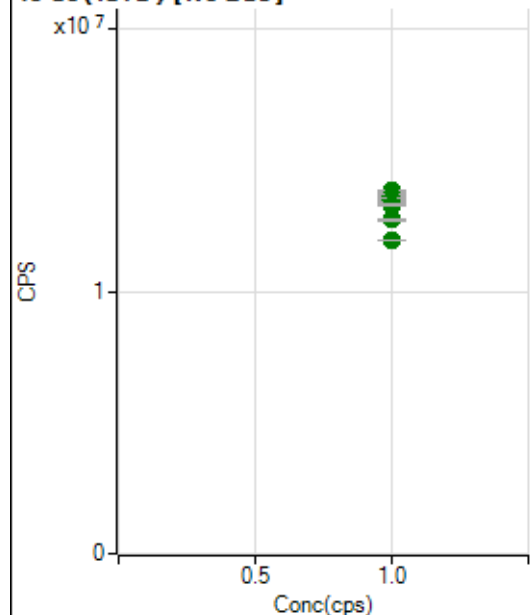
Weight: <None>

Min Conc: 0

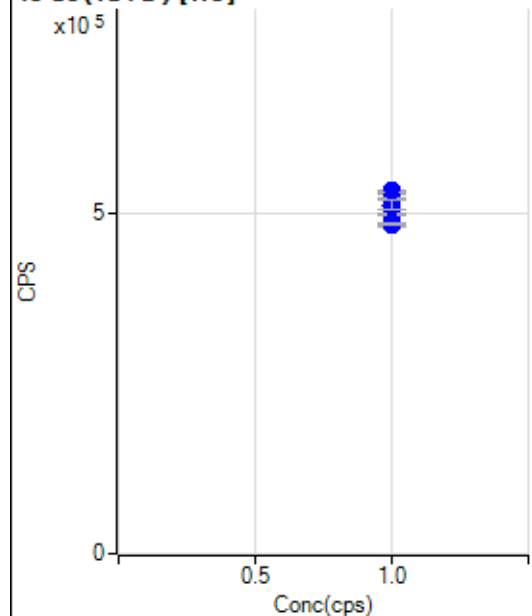
6 Li (ISTD) [No Gas]



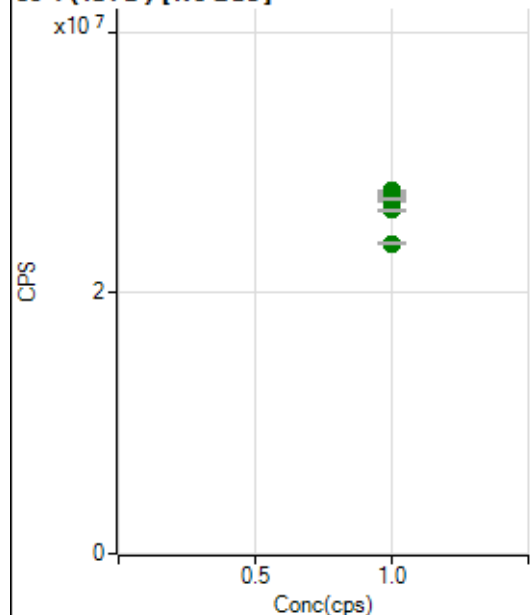
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5327498.63		A	0.8
2	☐	1.000		5447418.39		A	0.5
3	☐	1.000		5570361.58		A	0.7
4	☐	1.000		5513647.35		A	0.9
5	☐	1.000		5470970.89		A	0.5
6	☐	1.000		5331390.34		A	0.8
7	☐	1.000		5107552.08		A	0.8
8	☐	1.000		5156405.55		A	0.2
9	☐	1.000		4546444.41		A	0.3

45 Sc (ISTD) [No Gas]

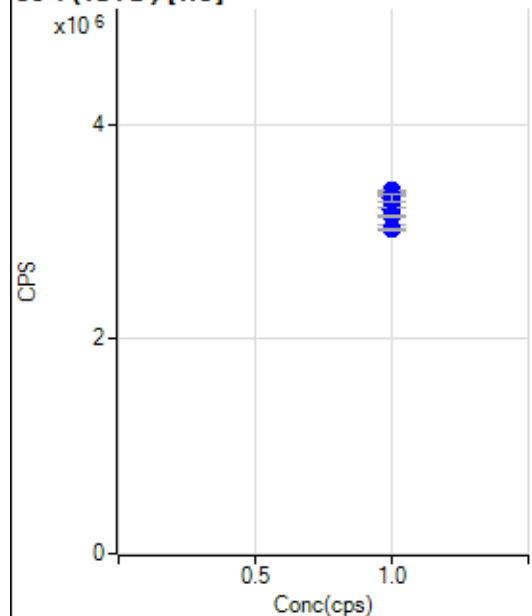
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13799825.08		A	1.0
2	☐	1.000		13615517.85		A	0.2
3	☐	1.000		13829563.82		A	0.8
4	☐	1.000		13536912.99		A	0.6
5	☐	1.000		13601351.19		A	1.2
6	☐	1.000		13489944.24		A	0.9
7	☐	1.000		12749588.14		A	0.5
8	☐	1.000		13290072.58		A	0.8
9	☐	1.000		11968316.07		A	0.2

45 Sc (ISTD) [He]

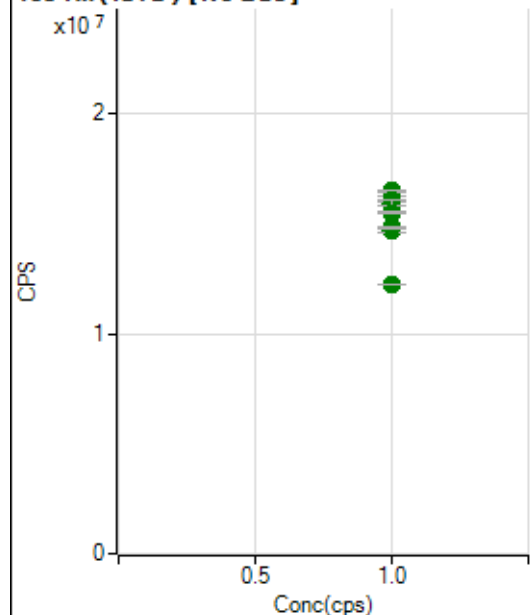
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		534447.41		P	0.4
2	☐	1.000		532649.67		P	1.5
3	☐	1.000		506718.50		P	8.5
4	☐	1.000		530273.26		P	0.5
5	☐	1.000		524468.36		P	0.3
6	☐	1.000		500322.06		P	0.3
7	☐	1.000		484603.75		P	1.3
8	☐	1.000		513970.12		P	2.6
9	☐	1.000		486207.09		P	0.5

89 Y (ISTD) [No Gas]

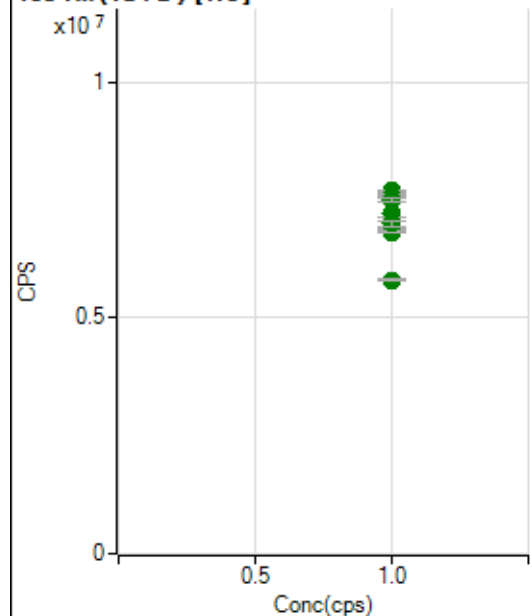
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27455312.09		A	0.4
2	☐	1.000		27302890.98		A	0.3
3	☐	1.000		27814528.20		A	0.9
4	☐	1.000		27477501.81		A	0.4
5	☐	1.000		27513492.37		A	0.9
6	☐	1.000		27113702.65		A	1.3
7	☐	1.000		26324541.27		A	0.2
8	☐	1.000		27211620.43		A	0.4
9	☐	1.000		23776834.64		A	0.4

89 Y (ISTD) [He]

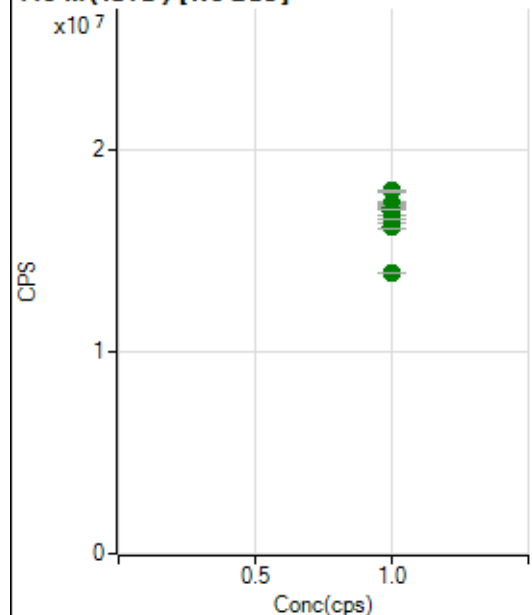
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3368021.10		P	0.1
2	☐	1.000		3357182.03		P	1.6
3	☐	1.000		3197240.13		P	8.5
4	☐	1.000		3378925.95		P	0.5
5	☐	1.000		3338453.14		P	0.4
6	☐	1.000		3230565.12		P	0.1
7	☐	1.000		3148955.72		P	0.7
8	☐	1.000		3312294.53		P	2.5
9	☐	1.000		3024533.63		P	0.5

103 Rh (ISTD) [No Gas]

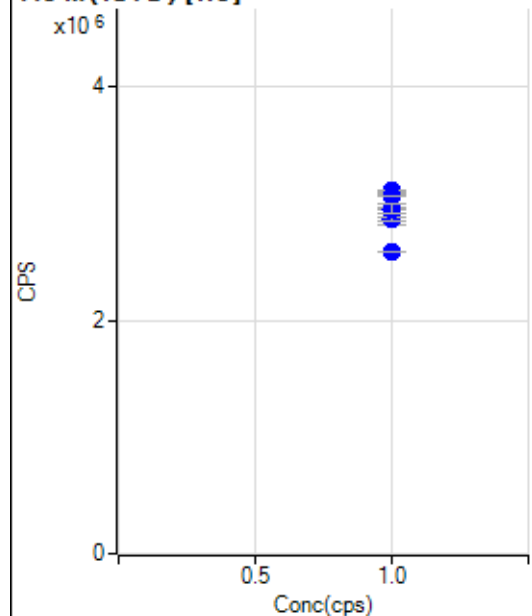
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16481632.39		A	0.9
2	☐	1.000		16236971.84		A	0.1
3	☐	1.000		16500853.64		A	0.7
4	☐	1.000		16049841.42		A	0.3
5	☐	1.000		15955875.04		A	1.2
6	☐	1.000		15516736.71		A	0.9
7	☐	1.000		14708766.03		A	1.1
8	☐	1.000		14857239.36		A	0.6
9	☐	1.000		12246996.90		A	0.5

103 Rh (ISTD) [He]

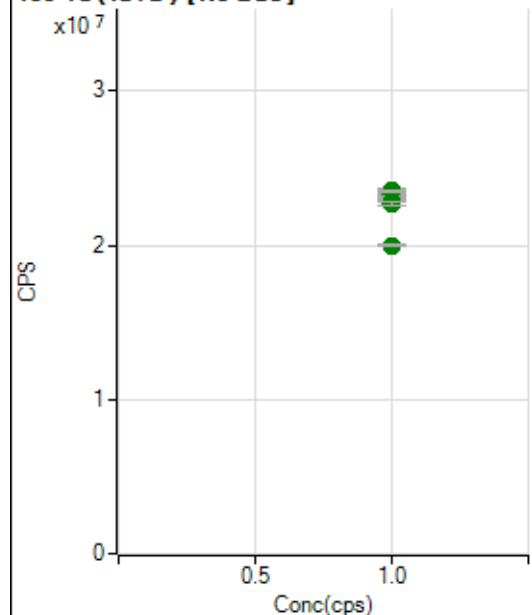
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7691101.55		A	0.3
2	☐	1.000		7599394.61		A	1.8
3	☐	1.000		7207679.34		A	9.2
4	☐	1.000		7590805.65		A	0.6
5	☐	1.000		7498114.47		A	0.7
6	☐	1.000		7147527.12		A	0.0
7	☐	1.000		6821388.09		A	0.7
8	☐	1.000		6995588.71		A	2.2
9	☐	1.000		5807734.64		A	0.3

115 In (ISTD) [No Gas]

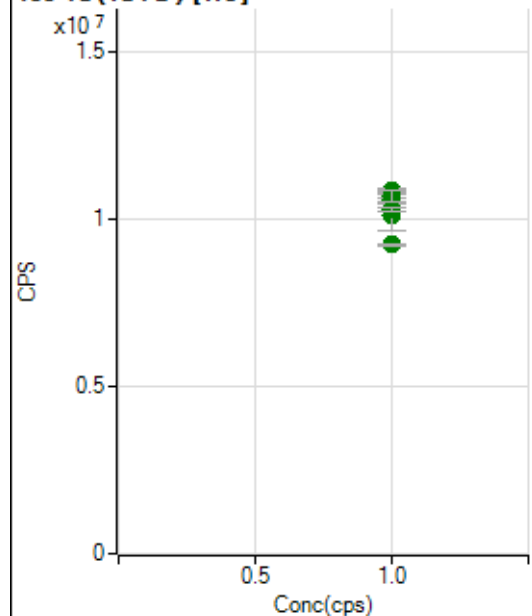
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17930050.11		A	0.5
2	☐	1.000		17052497.99		A	1.0
3	☐	1.000		17333774.70		A	0.8
4	☐	1.000		17206119.66		A	0.9
5	☐	1.000		17130825.61		A	1.0
6	☐	1.000		16875766.80		A	1.4
7	☐	1.000		16201419.82		A	1.7
8	☐	1.000		16522121.63		A	0.3
9	☐	1.000		13897233.24		A	0.2

115 In (ISTD) [He]

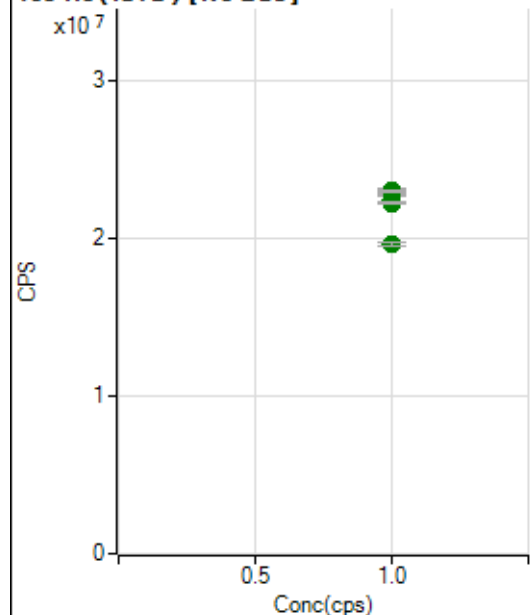
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3110743.02		P	0.1
2	☐	1.000		3102370.97		P	1.1
3	☐	1.000		2947861.35		P	8.7
4	☐	1.000		3108783.09		P	0.4
5	☐	1.000		3064184.19		P	0.3
6	☐	1.000		2961609.78		P	0.2
7	☐	1.000		2872005.19		P	1.1
8	☐	1.000		2955172.44		P	2.8
9	☐	1.000		2582897.40		P	0.2

159 Tb (ISTD) [No Gas]

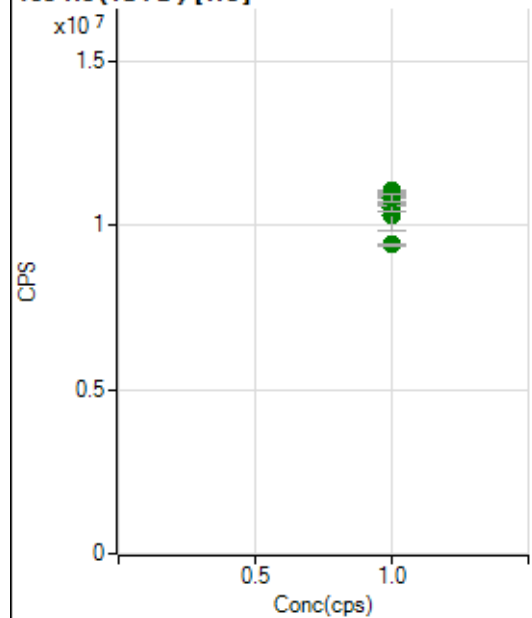
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		23515962.15		A	1.1
2	☐	1.000		22998520.49		A	0.9
3	☐	1.000		23471284.93		A	0.9
4	☐	1.000		23389827.71		A	0.8
5	☐	1.000		23420971.60		A	1.3
6	☐	1.000		23308242.43		A	0.6
7	☐	1.000		22712524.11		A	0.8
8	☐	1.000		23499689.65		A	0.6
9	☐	1.000		19957063.73		A	0.5

159 Tb (ISTD) [He]

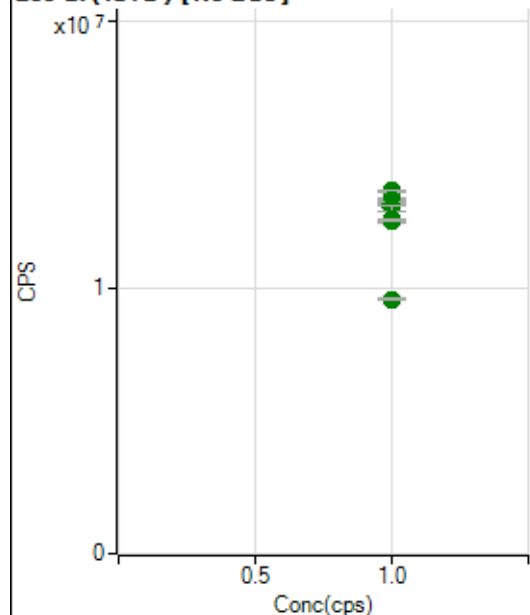
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10854434.42		A	0.5
2	☐	1.000		10591753.80		A	1.3
3	☐	1.000		10146173.81		A	9.3
4	☐	1.000		10853912.41		A	1.2
5	☐	1.000		10766720.26		A	0.4
6	☐	1.000		10485587.14		A	0.8
7	☐	1.000		10290589.71		A	0.8
8	☐	1.000		10707650.67		A	2.9
9	☐	1.000		9247747.78		A	0.5

165 Ho (ISTD) [No Gas]

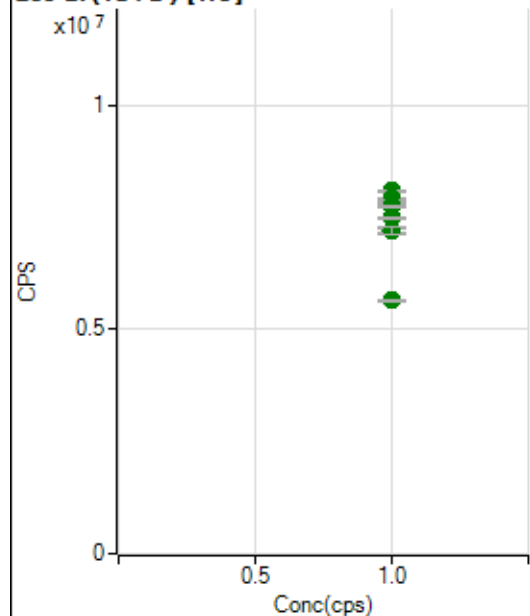
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22987162.44		A	1.3
2	☐	1.000		22511050.50		A	1.3
3	☐	1.000		22878842.99		A	1.1
4	☐	1.000		22747656.88		A	0.8
5	☐	1.000		22960254.94		A	0.7
6	☐	1.000		22880022.44		A	0.5
7	☐	1.000		22222047.72		A	0.6
8	☐	1.000		23029803.82		A	0.6
9	☐	1.000		19661508.87		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11057094.70		A	0.6
2	☐	1.000		10863272.34		A	0.3
3	☐	1.000		10287674.92		A	8.9
4	☐	1.000		10925824.07		A	0.6
5	☐	1.000		10940887.34		A	0.4
6	☐	1.000		10705078.73		A	0.2
7	☐	1.000		10529306.16		A	1.4
8	☐	1.000		10822900.12		A	2.3
9	☐	1.000		9429276.87		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13644970.35		A	0.5
2	☐	1.000		13302554.11		A	0.8
3	☐	1.000		13311950.91		A	0.5
4	☐	1.000		13218869.39		A	1.3
5	☐	1.000		13162925.22		A	0.9
6	☐	1.000		12995975.22		A	1.3
7	☐	1.000		12486731.48		A	0.5
8	☐	1.000		12555896.48		A	0.6
9	☐	1.000		9574235.14		A	0.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8083302.93		A	0.6
2	☐	1.000		7912937.73		A	0.5
3	☐	1.000		7484956.62		A	8.8
4	☐	1.000		7857638.91		A	0.6
5	☐	1.000		7737579.75		A	0.8
6	☐	1.000		7482097.25		A	0.9
7	☐	1.000		7203575.93		A	0.9
8	☐	1.000		7194481.35		A	2.7
9	☐	1.000		5643518.39		A	0.7

US EPA Tune Check Sample Report

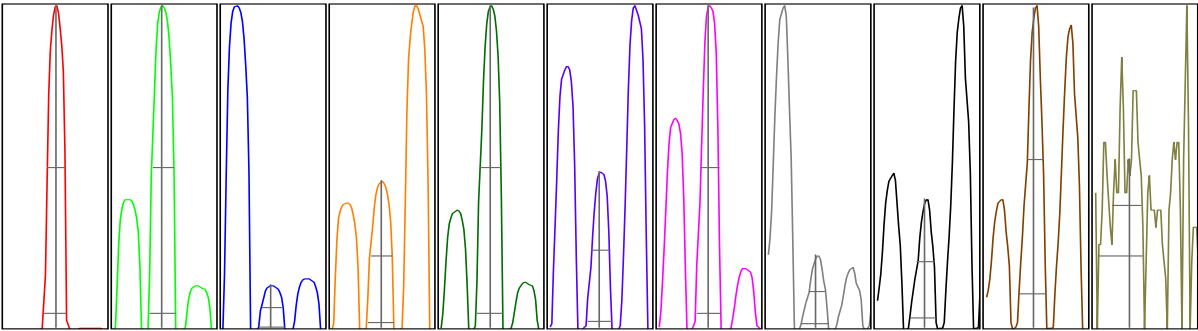
Batch Folder D:\ICP-MS Data\1\DATA\P7071420-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13021	0.86	5.00	
24	192350	1.04	5.00	
25	25675	1.12	5.00	
26	30241	0.89	5.00	
59	95982	1.24	5.00	
113	15897	0.80	5.00	
115	50051	2.90	5.00	
206	19618	1.39	5.00	
207	16733	1.77	5.00	
208	40556	1.25	5.00	
220	0	53.94		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	12889	12943	13178	13071	13026
24	189759	190675	193978	194152	193184
25	25363	25382	25995	25863	25770
26	29988	29942	30564	30310	30400
59	94289	95262	97229	96621	96507
113	15724	15825	16012	16026	15896
115	51685	50793	50608	49137	48031
206	19225	19453	19840	19713	19859
207	16235	16694	16868	16954	16915
208	39718	40517	41000	40635	40910
220	0	0	0	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	24936	9.05	8.9 - 9.1		0.684	0.900	
24	315424	23.95	23.9 - 24.1		0.781	0.900	
25	42486	24.95	24.9 - 25.1		0.744	0.900	
26	49522	26.00	25.9 - 26.1		0.783	0.900	
59	164335	59.00	58.9 - 59.1		0.779	0.900	
113	30309	113.00	112.9 - 113.1		0.732	0.900	
115	95361	115.00	114.9 - 115.1		0.733	0.900	
206	38690	205.95	205.9 - 206.1		0.779	0.900	
207	32496	206.95	206.9 - 207.1		0.752	0.900	
208	80449	207.95	207.9 - 208.1		0.779	0.900	
220	1	219.60	-		1.271		

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	0.76	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	7.3	V	Deflect	13.2	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	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	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	21416	4.02	
89	64367	4.21	
205	49403	4.84	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	21945	22086	20650	20320	22080
89	65650	66161	62215	60782	67025
205	51135	51016	45826	48036	51004

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	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	7.9	V	Deflect	2.0	V
Extract 2	-170.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	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			