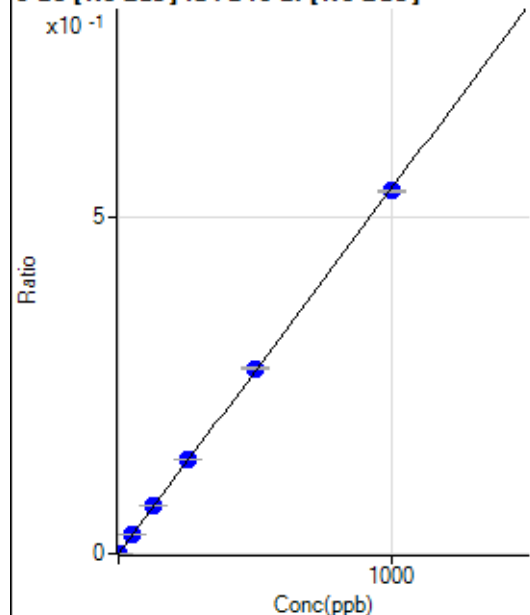


Batch Folder: D:\ICP-MS Data\1\DATA\P7031620 MS1.b\
Analysis File: P7031620 MS1.batch.bin
DA Date-Time: 2020-03-16 21:28:35
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-03-16 17:28:17
2	004CAL.S.d	S02	2020-03-16 17:31:49
3	005CAL.S.d	S03	2020-03-16 17:36:35
4	006CAL.S.d	S04	2020-03-16 17:40:59
5	007CAL.S.d	S05	2020-03-16 17:44:41
6	008CAL.S.d	S06	2020-03-16 17:48:14
7	009CAL.S.d	S07	2020-03-16 17:51:43
8	010CAL.S.d	S08	2020-03-16 17:55:12

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	157.41	0.0000	P	24.6
2	☐	1.000	1.079	4295.17	0.0006	P	1.4
3	☐	50.000	53.515	203639.23	0.0291	P	1.4
4	☐	125.000	132.406	500466.89	0.0719	P	1.0
5	☐	250.000	257.243	964973.92	0.1397	P	1.5
6	☐	500.000	507.592	1834362.43	0.2756	P	1.3
7	☐	1000.000	993.292	3443201.06	0.5394	P	0.6
8	☐			677.81	0.0001	P	14.2

$$y = 5.4300\text{E-}004 * x + 2.2307\text{E-}005$$

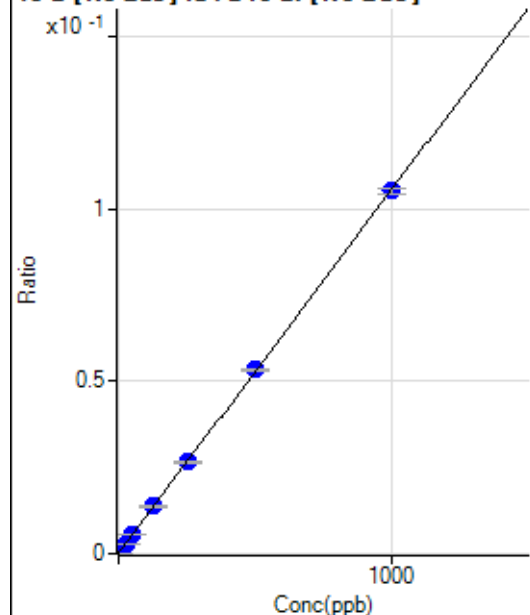
$$R = 0.9999$$

$$DL = 0.03038$$

$$BEC = 0.04108$$

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	888.95	0.0001	P	9.0
2	☐	25.000	25.723	20052.92	0.0028	P	1.3
3	☐	50.000	52.525	39669.85	0.0057	P	3.1
4	☐	125.000	129.020	95569.70	0.0137	P	1.9
5	☐	250.000	251.121	183816.22	0.0266	P	1.7
6	☐	500.000	504.092	354671.63	0.0533	P	1.3
7	☐	1000.000	997.027	672092.76	0.1053	P	1.6
8	☐			15986.86	0.0031	P	5.5

$$y = 1.0547\text{E-}004 * x + 1.2567\text{E-}004$$

$$R = 1.0000$$

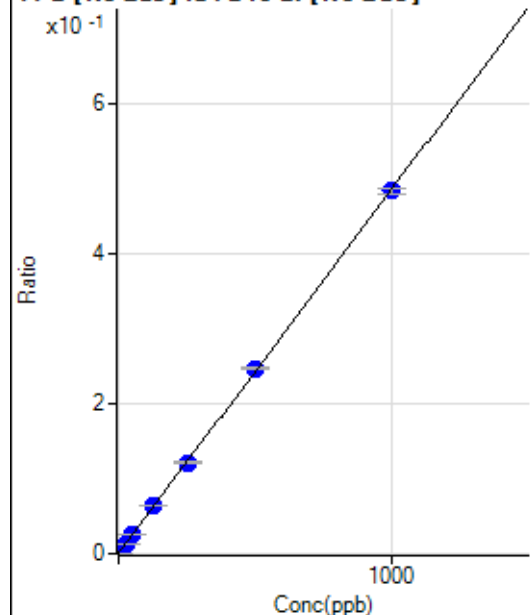
$$DL = 0.3218$$

$$BEC = 1.191$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3872.88	0.0005	P	4.6
2	☐	25.000	26.252	93895.06	0.0133	P	2.0
3	☐	50.000	51.866	180120.24	0.0257	P	2.1
4	☐	125.000	129.398	440887.71	0.0634	P	0.7
5	☐	250.000	249.116	838981.02	0.1215	P	1.8
6	☐	500.000	506.677	1640370.32	0.2465	P	1.0
7	☐	1000.000	996.208	3090236.35	0.4841	P	1.6
8	☐			70838.07	0.0136	P	5.6

$$y = 4.8539\text{E-}004 * x + 5.4770\text{E-}004$$

$$R = 1.0000$$

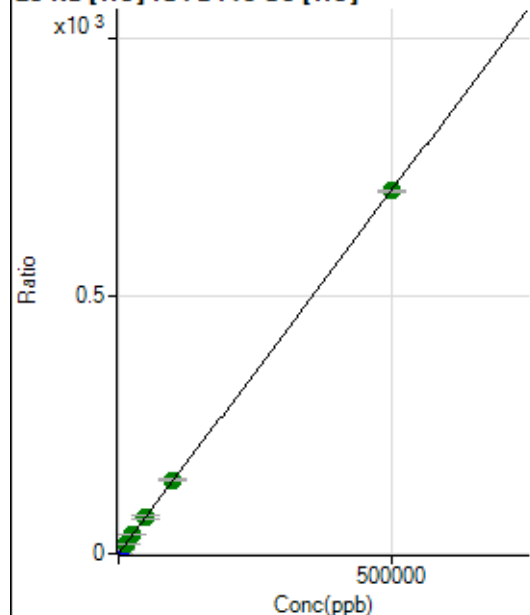
$$DL = 0.1554$$

$$BEC = 1.128$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13592.72	0.0302	P	1.8
2	☐	500.000	531.852	354354.47	0.7805	P	0.9
3	☐	5000.000	5215.366	3304437.79	7.3878	P	1.0
4	☐	12500.000	12658.165	7918069.97	17.8877	A	1.4
5	☐	25000.000	25460.278	15609074.48	35.9482	A	2.2
6	☐	50000.000	50886.081	30519526.03	71.8175	A	12.5
7	☐	100000.00	101458.35	58901509.65	143.1621	A	3.8
8	☐	500000.00	499590.56	273353856.1	704.8253	A	0.6

$$y = 0.0014 * x + 0.0302$$

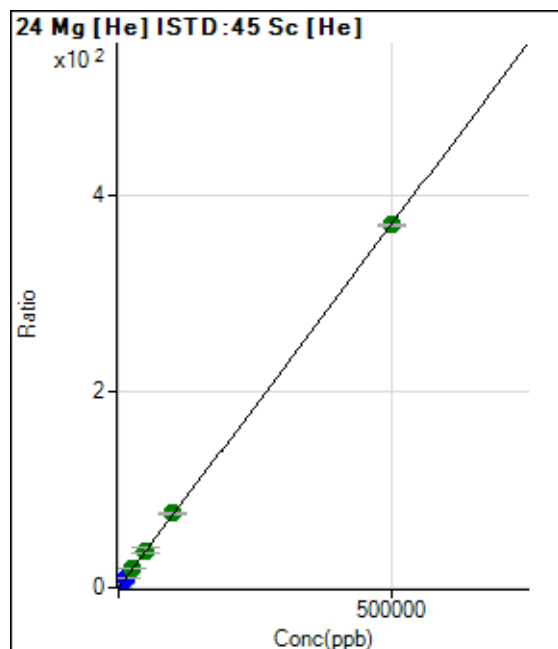
$$R = 1.0000$$

$$DL = 1.152$$

$$BEC = 21.42$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	313.91	0.0007	P	31.9
2	☐	500.000	542.469	182876.58	0.4028	P	0.8
3	☐	5000.000	5332.351	1768299.89	3.9534	P	1.1
4	☐	12500.000	12909.677	4236342.15	9.5703	P	1.7
5	☐	25000.000	25812.950	8309303.31	19.1352	A	1.4
6	☐	50000.000	51606.367	16279374.67	38.2551	A	10.6
7	☐	100000.00	102146.52	31149448.27	75.7192	A	4.2
8	☐	500000.00	499355.80	143557093.4	370.1599	A	0.5

$$y = 7.4127\text{E-}004 * x + 6.9768\text{E-}004$$

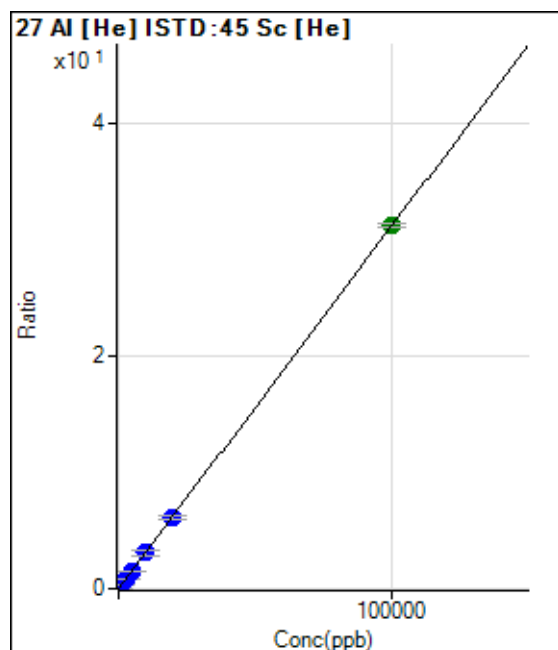
$$R = 1.0000$$

$$DL = 0.8996$$

$$BEC = 0.9412$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0001	P	25.2
2	☐	20.000	20.274	2905.98	0.0064	P	4.1
3	☐	1000.000	1010.487	141085.55	0.3154	P	2.2
4	☐	2500.000	2465.018	340557.18	0.7694	P	1.8
5	☐	5000.000	4953.612	671359.27	1.5460	P	1.3
6	☐	10000.000	9847.831	1306823.22	3.0734	P	11.7
7	☐	20000.000	19610.179	2517779.59	6.1201	P	4.0
8	☐	100000.00	100096.27	12115463.98	31.2386	A	1.0

$$y = 3.1208\text{E-}004 * x + 7.4134\text{E-}005$$

$$R = 1.0000$$

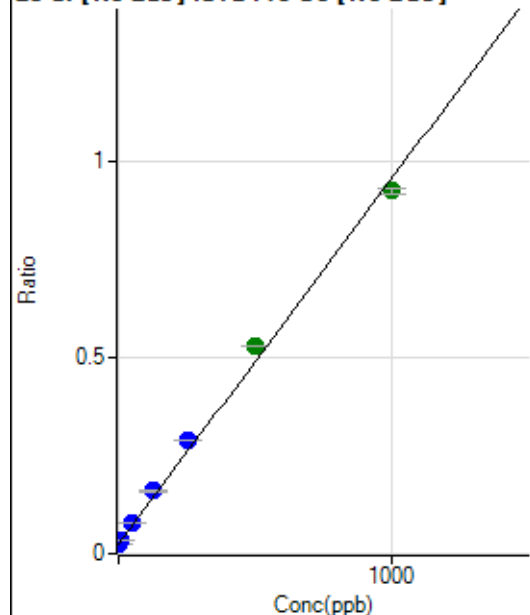
$$DL = 0.1794$$

$$BEC = 0.2375$$

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	307783.71	0.0245	P	2.4
2	☐	10.000	10.028	431232.15	0.0339	P	0.2
3	☐	50.000	58.746	986128.72	0.0792	P	1.8
4	☐	125.000	144.813	1990665.04	0.1593	P	1.0
5	☐	250.000	283.499	3596705.55	0.2884	P	1.1
6	☐	500.000	543.381	6436976.75	0.5304	A	0.3
7	☐	1000.000	967.021	11027616.65	0.9247	A	1.8
8	☐			783804.58	0.0806	P	14.2

$$y = 9.3088\text{E-}004 * x + 0.0245$$

$$R = 0.9978$$

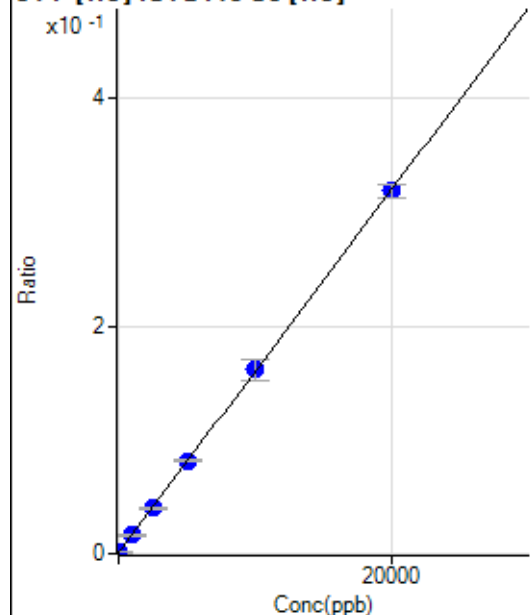
$$DL = 1.884$$

$$BEC = 26.35$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-22.143	188.90	0.0004	P	11.0
2	☐	0.000	22.143	511.14	0.0011	P	4.6
3	☐	1000.000	976.057	7302.08	0.0163	P	4.9
4	☐	2500.000	2463.606	17722.20	0.0400	P	2.3
5	☐	5000.000	5071.353	35431.87	0.0816	P	1.3
6	☐	10000.000	10092.604	68756.36	0.1616	P	10.9
7	☐	20000.000	19941.606	131064.26	0.3186	P	3.9
8	☐			141.67	0.0004	P	11.1

$$y = 1.5936\text{E-}005 * x + 7.7283\text{E-}004$$

$$R = 1.0000$$

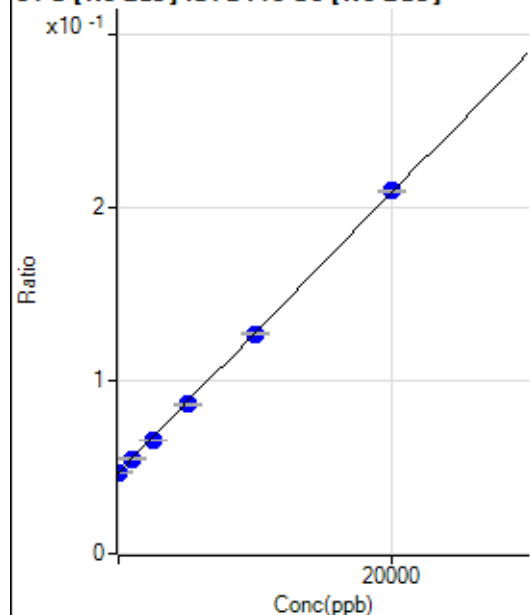
$$DL = 9.182$$

$$BEC = 48.49$$

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	21.778	592634.27	0.0472	P	1.5
2	☐	0.000	-21.778	596870.79	0.0469	P	0.9
3	☐	1000.000	957.890	682277.64	0.0548	P	1.1
4	☐	2500.000	2293.651	819810.23	0.0656	P	0.7
5	☐	5000.000	4838.951	1075152.71	0.0862	P	1.3
6	☐	10000.000	9905.938	1544221.49	0.1272	P	0.8
7	☐	20000.000	20115.192	2503113.51	0.2099	P	0.7
8	☐			487926.35	0.0501	P	11.3

$$y = 8.0949\text{E-}006 * x + 0.0470$$

R = 0.9999

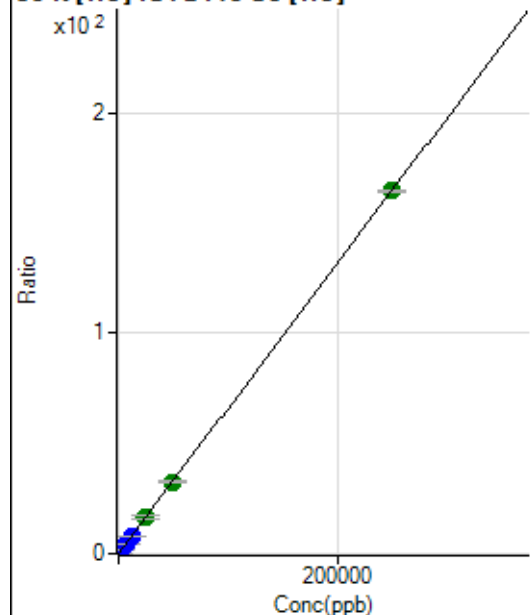
DL = 213.7

BEC = 5812

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	19866.80	0.0442	P	1.4
2	☐	500.000	519.361	175251.61	0.3860	P	1.2
3	☐	2500.000	2520.432	761779.34	1.7031	P	1.3
4	☐	6250.000	6098.666	1796488.10	4.0584	P	1.5
5	☐	12500.000	12308.251	3537188.14	8.1456	P	1.3
6	☐	25000.000	24531.863	6890085.05	16.1913	A	10.6
7	☐	50000.000	49203.247	13343735.71	32.4302	A	3.4
8	☐	250000.00	250219.29	63891543.79	164.7409	A	0.7

$$y = 6.5821\text{E-}004 * x + 0.0442$$

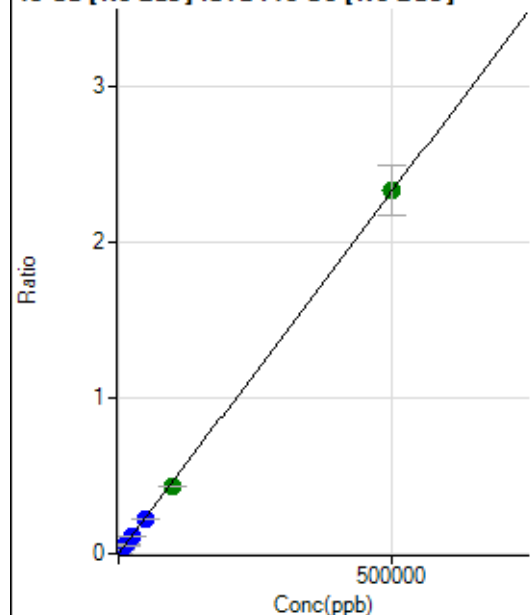
R = 1.0000

DL = 2.843

BEC = 67.11

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	483.36	0.0000	P	9.0
2	☐	500.000	478.168	28759.39	0.0023	P	1.4
3	☐	5000.000	4843.498	280423.82	0.0225	P	1.3
4	☐	12500.000	11970.277	694828.43	0.0556	P	1.1
5	☐	25000.000	23587.879	1366047.57	0.1095	P	1.0
6	☐	50000.000	47283.653	2664651.69	0.2196	P	1.3
7	☐	100000.00	93711.844	5189393.78	0.4351	A	0.3
8	☐	500000.00	501614.70	22643098.77	2.3288	A	13.7

$$y = 4.6426\text{E-}006 * x + 3.8472\text{E-}005$$

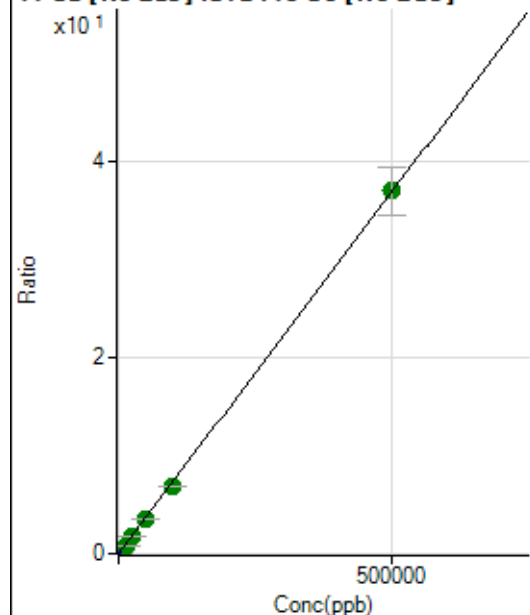
$$R = 0.9999$$

$$DL = 2.243$$

$$BEC = 8.287$$

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	7171.49	0.0006	P	2.1
2	☐	500.000	486.002	464329.90	0.0365	P	0.1
3	☐	5000.000	4857.827	4473533.04	0.3593	P	1.1
4	☐	12500.000	11724.721	10825430.10	0.8664	A	0.4
5	☐	25000.000	23333.424	21494964.71	1.7238	A	1.2
6	☐	50000.000	46873.610	42020888.09	3.4622	A	0.6
7	☐	100000.00	92547.045	81522694.88	6.8352	A	0.8
8	☐	500000.00	501907.37	360518946.9	37.0667	A	13.3

$$y = 7.3851\text{E-}005 * x + 5.7125\text{E-}004$$

$$R = 0.9999$$

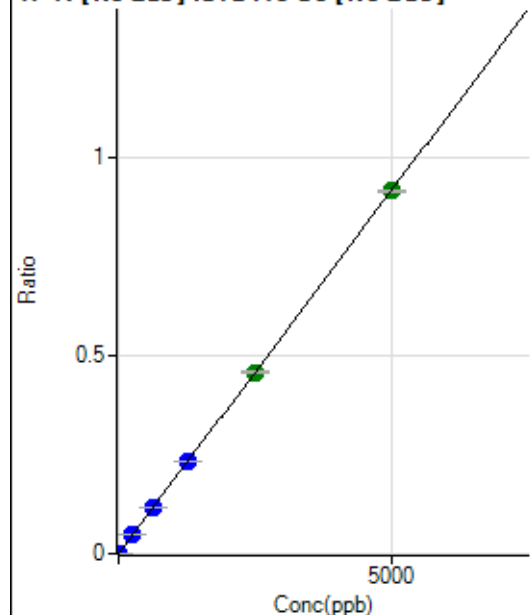
$$DL = 0.4905$$

$$BEC = 7.735$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	247.23	0.0000	P	19.2
2	☐	5.000	5.465	13003.48	0.0010	P	4.2
3	☐	250.000	259.852	593100.09	0.0476	P	1.6
4	☐	625.000	642.403	1471182.18	0.1178	P	0.3
5	☐	1250.000	1266.648	2894967.99	0.2322	P	1.3
6	☐	2500.000	2497.229	5554862.49	0.4577	A	0.5
7	☐	5000.000	4994.555	10917098.68	0.9154	A	0.5
8	☐			3097.69	0.0003	P	9.6

$$y = 1.8327E-004 * x + 1.9661E-005$$

$$R = 1.0000$$

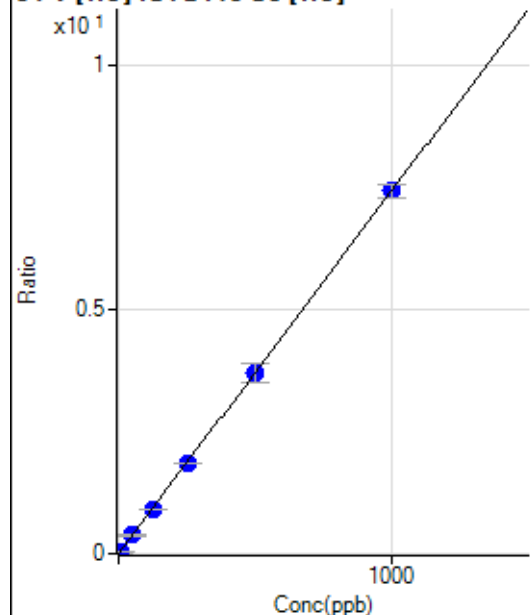
$$DL = 0.06178$$

$$BEC = 0.1073$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.33	0.0000	P	24.9
2	☐	5.000	5.390	18159.16	0.0400	P	0.9
3	☐	50.000	50.396	167158.88	0.3737	P	0.5
4	☐	125.000	122.916	403442.28	0.9114	P	1.7
5	☐	250.000	249.525	803468.69	1.8502	P	1.1
6	☐	500.000	499.782	1576343.92	3.7058	P	11.1
7	☐	1000.000	1000.466	3051943.39	7.4183	P	3.9
8	☐			1162.29	0.0030	P	4.4

$$y = 0.0074 * x + 2.9639E-005$$

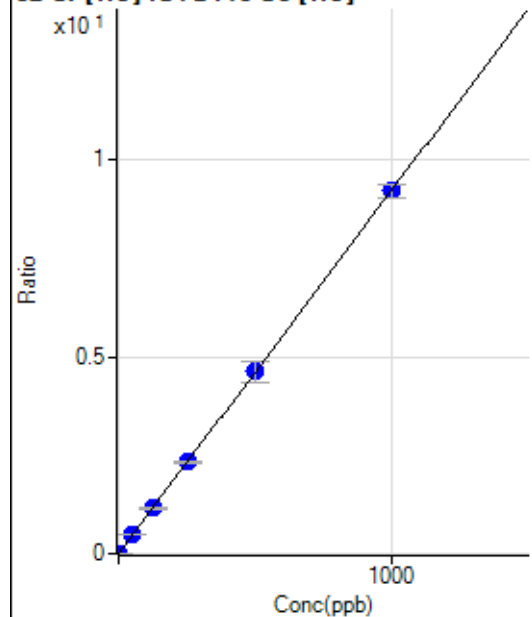
$$R = 1.0000$$

$$DL = 0.002988$$

$$BEC = 0.003997$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	594.47	0.0013	P	7.8
2	☐	2.000	2.146	9574.36	0.0211	P	1.2
3	☐	50.000	51.394	212324.24	0.4747	P	0.5
4	☐	125.000	124.889	509745.13	1.1516	P	1.5
5	☐	250.000	252.060	1008692.41	2.3229	P	1.3
6	☐	500.000	500.646	1961547.73	4.6124	P	11.4
7	☐	1000.000	999.106	3786434.18	9.2033	P	3.8
8	☐			93979.25	0.2423	P	0.9

$$y = 0.0092 * x + 0.0013$$

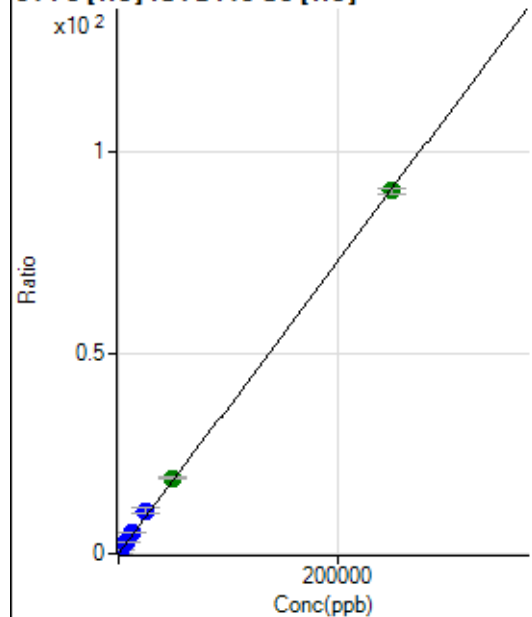
$$R = 1.0000$$

$$DL = 0.03344$$

$$BEC = 0.1435$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	747.48	0.0017	P	8.9
2	☐	50.000	67.486	11877.23	0.0262	P	4.0
3	☐	2500.000	3061.678	497855.66	1.1130	P	1.5
4	☐	6250.000	7398.824	1189593.31	2.6874	P	1.6
5	☐	12500.000	14915.214	2351853.38	5.4158	P	1.2
6	☐	25000.000	29644.657	4576479.65	10.7626	P	11.6
7	☐	50000.000	51924.634	7754871.58	18.8501	A	4.0
8	☐	250000.00	248995.50	35051149.08	90.3863	A	1.3

$$y = 3.6300E-004 * x + 0.0017$$

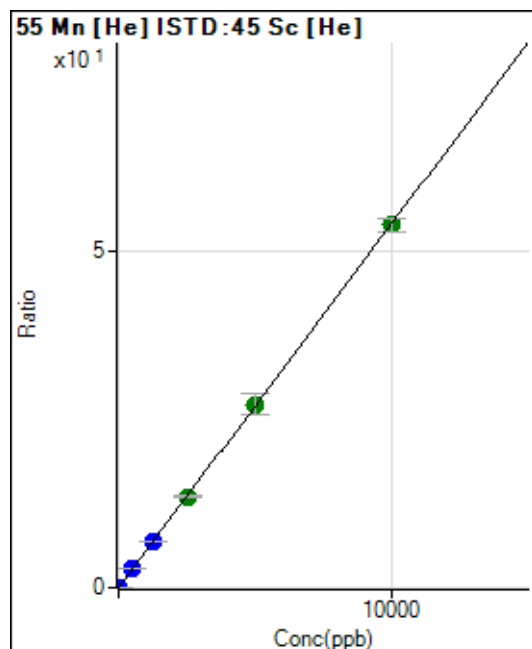
$$R = 0.9998$$

$$DL = 1.226$$

$$BEC = 4.578$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	228.89	0.0005	P	16.3
2	☐	1.000	1.054	2822.55	0.0062	P	1.5
3	☐	500.000	515.640	1249598.43	2.7937	P	0.7
4	☐	1250.000	1256.686	3013611.17	6.8079	P	1.7
5	☐	2500.000	2510.637	5905984.63	13.6004	A	1.3
6	☐	5000.000	5044.979	11617763.99	27.3287	A	12.0
7	☐	10000.000	9973.233	22225356.89	54.0247	A	4.0
8	☐			21655.02	0.0558	P	0.9

$$y = 0.0054 * x + 5.0897E-004$$

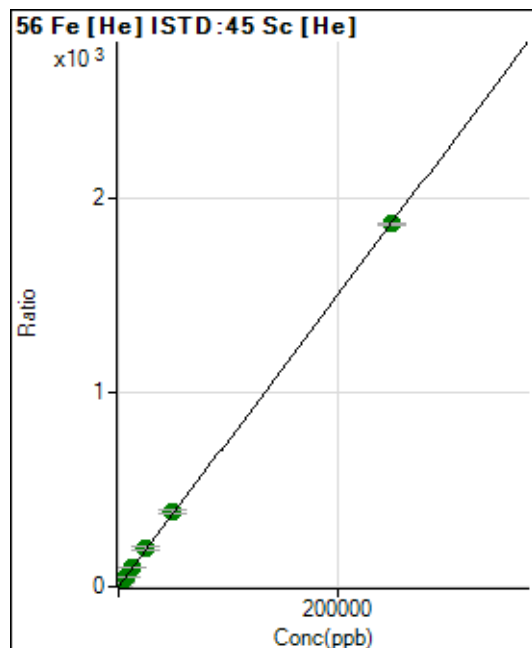
$$R = 1.0000$$

$$DL = 0.04601$$

$$BEC = 0.09396$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8111.71	0.0180	P	4.0
2	☐	50.000	58.207	205688.57	0.4531	P	0.4
3	☐	2500.000	2657.182	8890780.18	19.8766	A	0.4
4	☐	6250.000	6480.870	21448972.94	48.4532	A	1.2
5	☐	12500.000	13070.638	42428827.80	97.7022	A	0.8
6	☐	25000.000	26201.123	83358832.42	195.8336	A	10.2
7	☐	50000.000	51783.691	159209601.7	387.0264	A	4.3
8	☐	250000.00	249487.27	723110023.5	1,864.575	A	0.5

$$y = 0.0075 * x + 0.0180$$

$$R = 1.0000$$

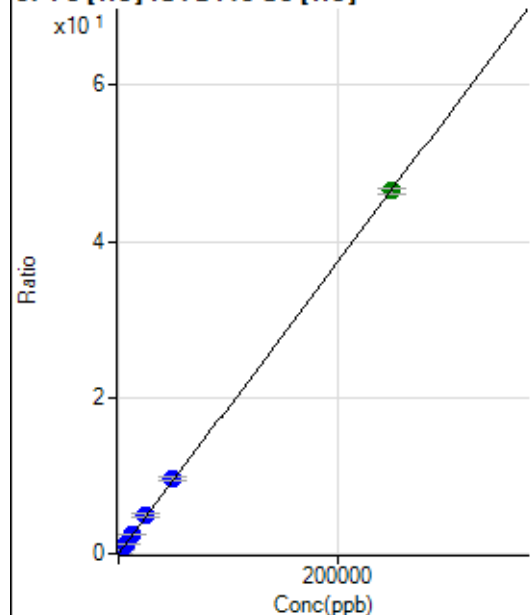
$$DL = 0.2896$$

$$BEC = 2.413$$

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	275.94	0.0006	P	23.1
2	☐	50.000	61.372	5466.00	0.0120	P	4.9
3	☐	2500.000	2668.579	222495.81	0.4974	P	0.9
4	☐	6250.000	6510.168	536782.60	1.2126	P	1.2
5	☐	12500.000	13102.961	1059571.48	2.4400	P	1.5
6	☐	25000.000	26188.985	2074087.41	4.8763	P	11.3
7	☐	50000.000	51734.786	3963024.86	9.6322	P	3.6
8	☐	250000.00	249495.80	18012659.89	46.4498	A	1.6

$$y = 1.8617E-004 * x + 6.1347E-004$$

$$R = 1.0000$$

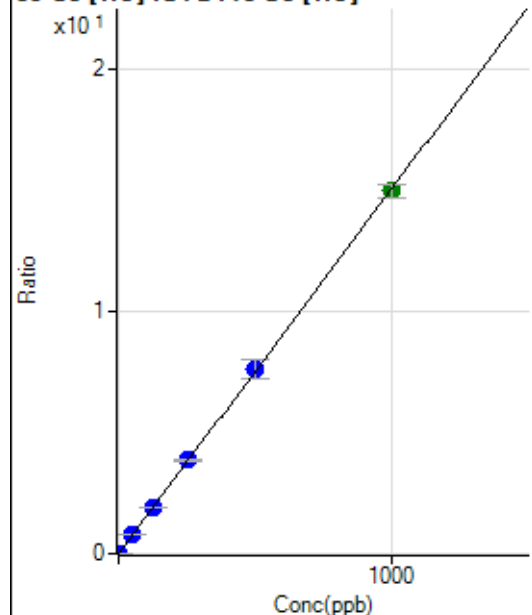
$$DL = 2.283$$

$$BEC = 3.295$$

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	301.12	0.0007	P	4.6
2	☐	1.000	1.066	7598.75	0.0167	P	1.4
3	☐	50.000	52.736	355782.94	0.7955	P	1.7
4	☐	125.000	127.510	850966.12	1.9224	P	1.5
5	☐	250.000	256.951	1681917.13	3.8732	P	1.5
6	☐	500.000	505.429	3241116.76	7.6181	P	10.9
7	☐	1000.000	995.097	6170493.24	14.9981	A	3.8
8	☐			11834.94	0.0305	P	2.0

$$y = 0.0151 * x + 6.6951E-004$$

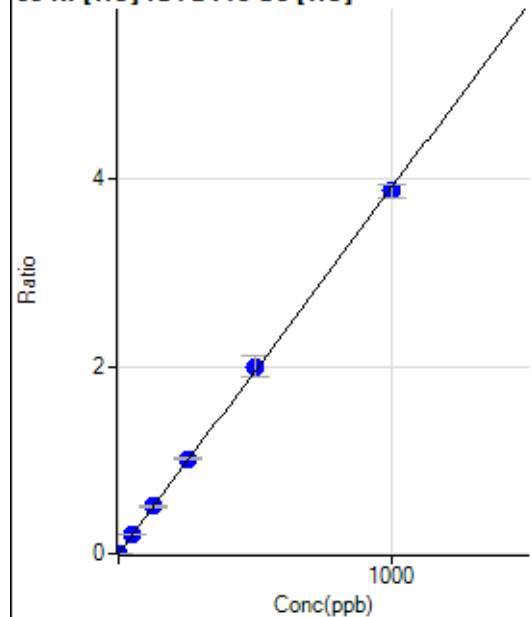
$$R = 1.0000$$

$$DL = 0.006141$$

$$BEC = 0.04442$$

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	141.11	0.0003	P	20.3
2	☐	1.000	1.243	2349.12	0.0052	P	1.5
3	☐	50.000	53.897	94376.65	0.2110	P	1.2
4	☐	125.000	129.381	224015.46	0.5061	P	1.5
5	☐	250.000	258.381	438736.34	1.0103	P	1.4
6	☐	500.000	510.772	849226.60	1.9970	P	11.5
7	☐	1000.000	991.776	1595178.66	3.8772	P	3.8
8	☐			25694.93	0.0663	P	1.0

$$y = 0.0039 * x + 3.1382E-004$$

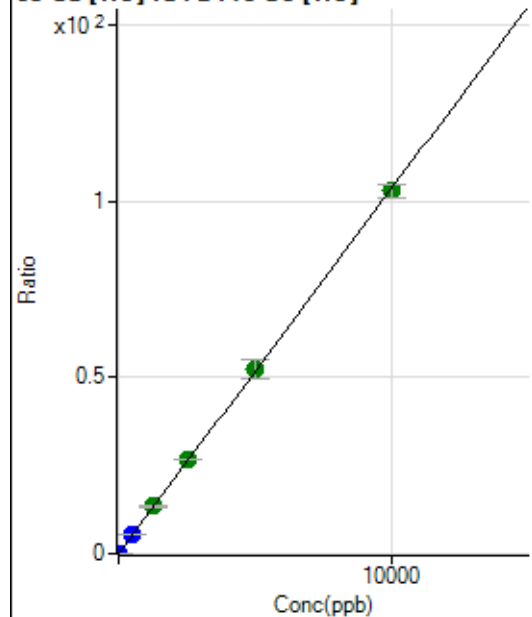
$$R = 0.9999$$

$$DL = 0.04881$$

$$BEC = 0.08028$$

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	968.94	0.0022	P	1.1
2	☐	2.000	2.256	11573.62	0.0255	P	0.4
3	☐	500.000	537.061	2486219.15	5.5586	P	1.5
4	☐	1250.000	1292.291	5919582.55	13.3723	A	0.9
5	☐	2500.000	2571.547	11554476.63	26.6076	A	1.2
6	☐	5000.000	5071.161	22328756.33	52.4689	A	10.5
7	☐	10000.000	9939.393	42307404.37	102.8361	A	3.9
8	☐			14174.82	0.0366	P	1.9

$$y = 0.0103 * x + 0.0022$$

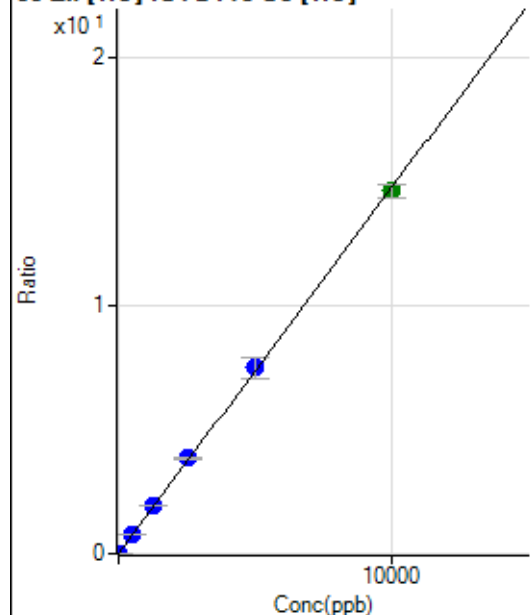
$$R = 0.9999$$

$$DL = 0.007092$$

$$BEC = 0.2082$$

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	1579.00	0.0035	P	6.4
2	☐	2.000	1.630	2684.74	0.0059	P	3.8
3	☐	500.000	540.049	357545.26	0.7994	P	0.6
4	☐	1250.000	1319.459	862245.87	1.9479	P	1.8
5	☐	2500.000	2621.647	1679081.50	3.8669	P	1.9
6	☐	5000.000	5085.733	3189609.19	7.4981	P	11.1
7	☐	10000.000	9916.037	6013187.41	14.6162	A	3.9
8	☐			22435.22	0.0579	P	0.6

$$y = 0.0015 * x + 0.0035$$

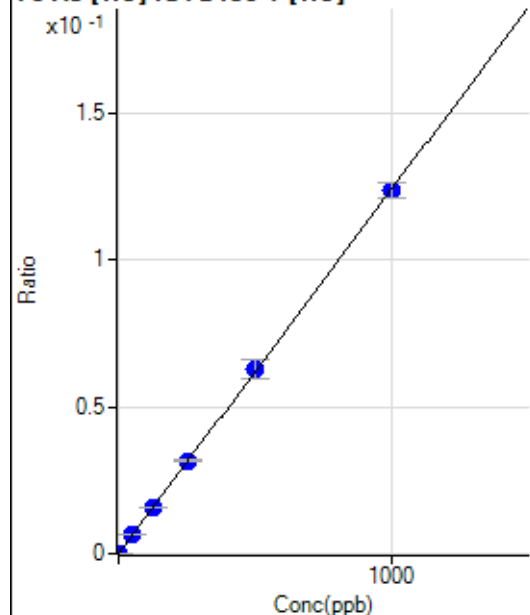
$$R = 0.9999$$

$$DL = 0.4571$$

$$BEC = 2.382$$

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	11.9
2	☐	1.000	1.114	458.03	0.0001	P	7.3
3	☐	50.000	51.626	20339.61	0.0064	P	0.8
4	☐	125.000	125.864	49367.92	0.0156	P	2.3
5	☐	250.000	254.105	97841.63	0.0315	P	2.0
6	☐	500.000	505.759	191150.16	0.0628	P	10.1
7	☐	1000.000	995.905	361985.91	0.1236	P	4.4
8	☐			217.91	0.0001	P	7.5

$$y = 1.2409E-004 * x + 5.6320E-006$$

$$R = 1.0000$$

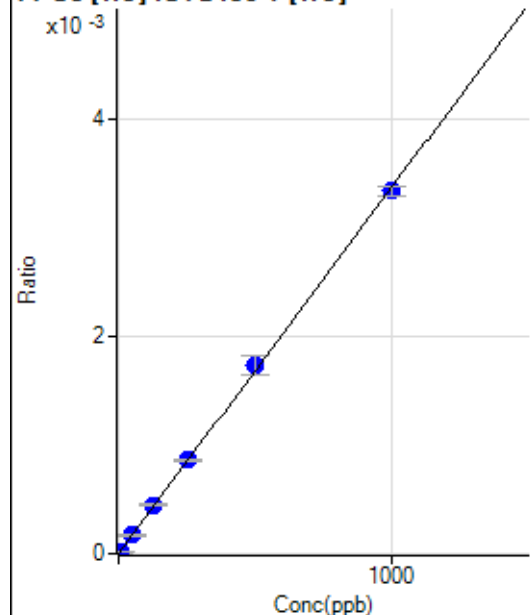
$$DL = 0.01622$$

$$BEC = 0.04539$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	5.483	61.11	0.0000	P	14.1
3	☐	50.000	50.530	543.36	0.0002	P	9.2
4	☐	125.000	133.248	1423.42	0.0005	P	4.6
5	☐	250.000	254.901	2672.51	0.0009	P	1.9
6	☐	500.000	513.039	5276.60	0.0017	P	10.3
7	☐	1000.000	991.195	9806.79	0.0033	P	2.8
8	☐			4.45	0.0000	P	86.6

$$y = 3.3752\text{E-}006 * x + 6.9339\text{E-}007$$

$$R = 0.9998$$

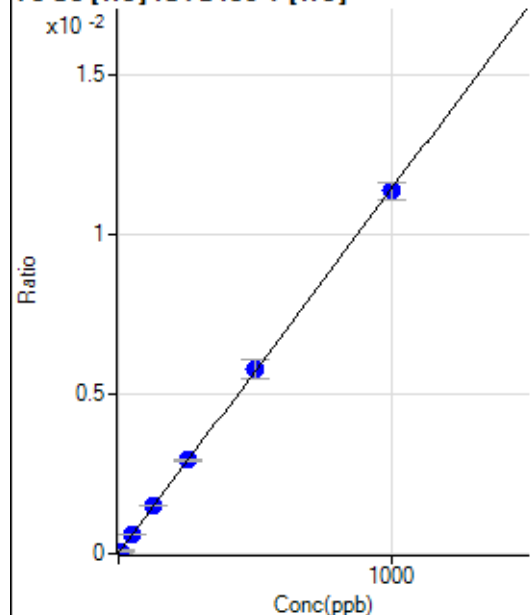
$$DL = 0.5338$$

$$BEC = 0.2054$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.62	0.0000	P	20.4
2	☐	5.000	6.427	283.96	0.0001	P	6.8
3	☐	50.000	52.577	1951.38	0.0006	P	2.0
4	☐	125.000	130.498	4750.20	0.0015	P	2.5
5	☐	250.000	256.481	9119.59	0.0029	P	1.7
6	☐	500.000	506.283	17616.96	0.0058	P	10.7
7	☐	1000.000	994.415	33242.34	0.0114	P	4.8
8	☐			64.82	0.0000	P	10.2

$$y = 1.1398\text{E-}005 * x + 1.5929\text{E-}005$$

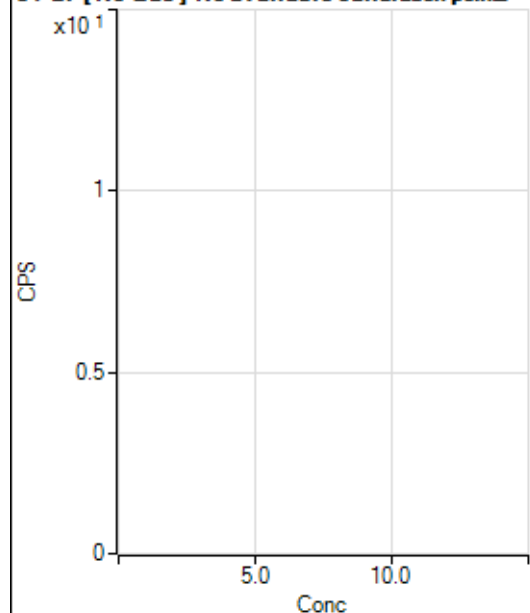
$$R = 0.9999$$

$$DL = 0.8567$$

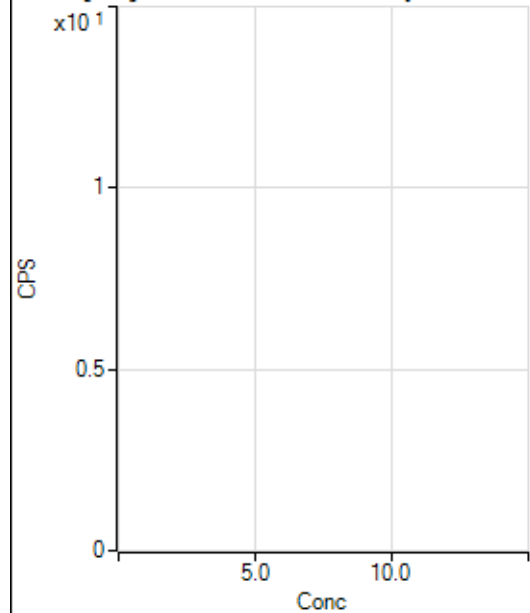
$$BEC = 1.398$$

Weight: <None>

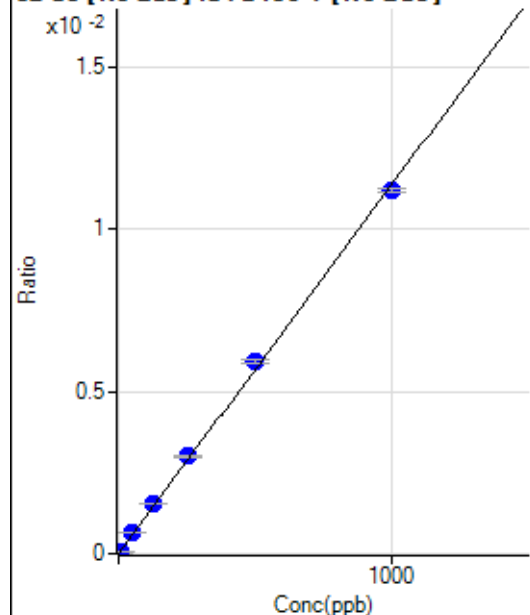
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			57868.64		P	2.6
2	☐			56555.64		P	1.7
3	☐			54555.92		P	0.8
4	☐			53946.16		P	0.5
5	☐			53171.82		P	3.4
6	☐			53407.08		P	0.4
7	☐			53282.91		P	2.3
8	☐			47379.79		P	0.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			176.85		P	17.3
2	☐			103.44		P	40.3
3	☐			113.46		P	27.0
4	☐			136.81		P	23.5
5	☐			116.79		P	19.8
6	☐			150.16		P	6.7
7	☐			86.76		P	29.0
8	☐			140.15		P	37.8

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9.96	0.0000	P	432.
2	☐	5.000	6.106	1878.86	0.0001	P	4.5
3	☐	50.000	55.977	16896.73	0.0006	P	1.0
4	☐	125.000	136.939	41503.80	0.0016	P	0.4
5	☐	250.000	264.288	80522.93	0.0030	P	1.4
6	☐	500.000	521.132	155239.31	0.0059	P	2.5
7	☐	1000.000	984.065	292439.49	0.0112	P	1.0
8	☐			241.69	0.0000	P	33.3

$$y = 1.1354\text{E-}005 * x + 3.6079\text{E-}007$$

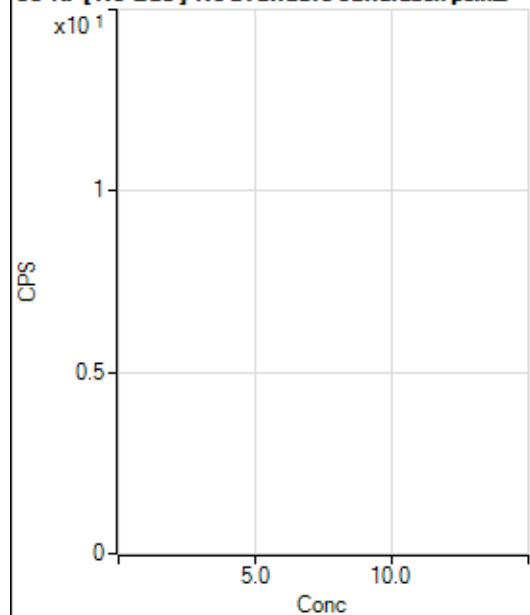
R = 0.9995

DL = 0.4122

BEC = 0.03178

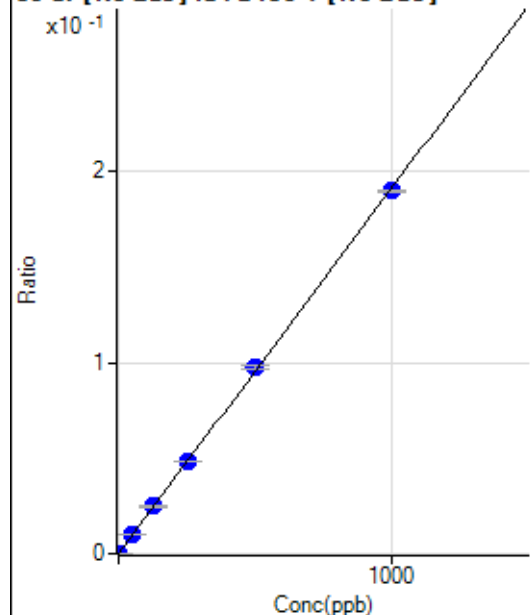
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			393.34		P	8.1
2	☐			393.35		P	6.1
3	☐			392.23		P	10.6
4	☐			420.01		P	14.0
5	☐			423.34		P	13.1
6	☐			407.79		P	10.1
7	☐			458.90		P	9.2
8	☐			467.79		P	5.8

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	666.71	0.0000	P	9.9
2	☐	1.000	1.062	6143.27	0.0002	P	3.9
3	☐	50.000	52.428	267087.91	0.0101	P	0.7
4	☐	125.000	129.179	660021.77	0.0247	P	0.5
5	☐	250.000	253.180	1299935.05	0.0484	P	0.9
6	☐	500.000	510.266	2561159.93	0.0976	P	1.6
7	☐	1000.000	993.428	4973626.76	0.1900	P	0.2
8	☐			10384.74	0.0005	P	13.8

$$y = 1.9126\text{E-}004 * x + 2.4699\text{E-}005$$

R = 0.9999

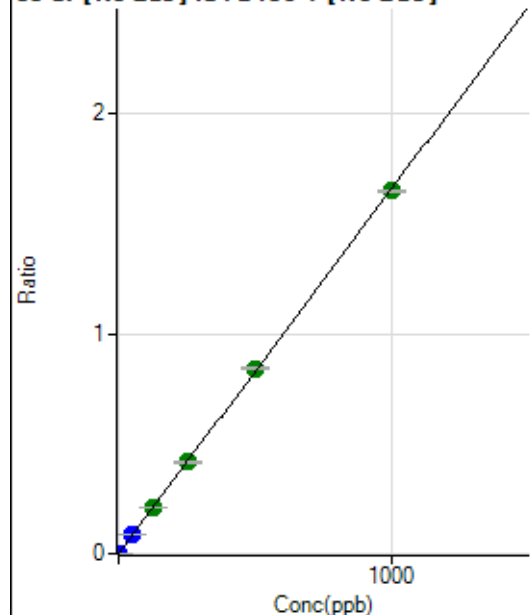
DL = 0.03824

BEC = 0.1291

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	536.15	0.0000	P	3.4
2	☐	1.000	1.065	48129.28	0.0018	P	1.7
3	☐	50.000	52.566	2314169.30	0.0871	P	1.6
4	☐	125.000	128.320	5673763.88	0.2126	A	0.5
5	☐	250.000	251.919	11197928.55	0.4173	A	1.4
6	☐	500.000	508.362	22096588.51	0.8422	A	1.6
7	☐	1000.000	994.796	43132709.65	1.6480	A	0.7
8	☐			88011.42	0.0041	P	12.4

$$y = 0.0017 * x + 1.9841\text{E-}005$$

R = 0.9999

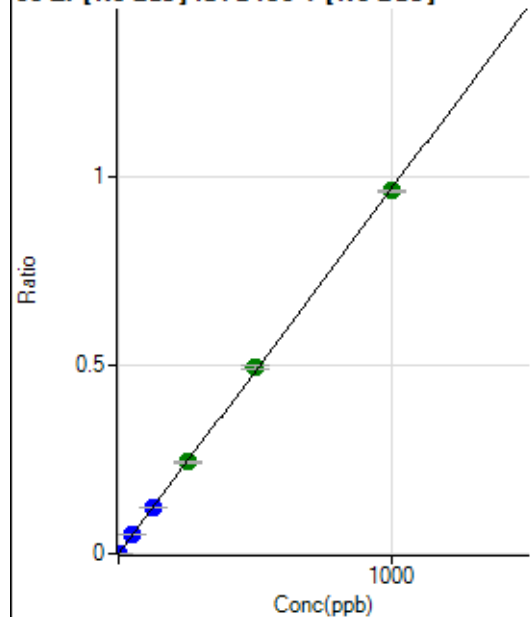
DL = 0.001237

BEC = 0.01198

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	1708.51	0.0001	P	3.8
2	☐	1.000	0.812	22947.08	0.0009	P	1.3
3	☐	50.000	51.342	1324201.24	0.0498	P	1.2
4	☐	125.000	128.374	3323151.72	0.1245	P	0.6
5	☐	250.000	251.731	6549767.72	0.2441	A	1.6
6	☐	500.000	509.408	12958663.66	0.4939	A	2.1
7	☐	1000.000	994.374	25233689.45	0.9641	A	0.5
8	☐			9031.00	0.0004	P	18.3

$$y = 9.6950\text{E-}004 * x + 6.3247\text{E-}005$$

$$R = 0.9999$$

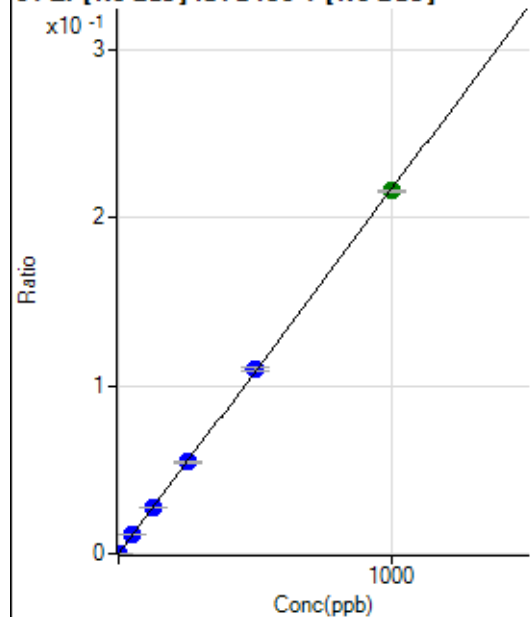
$$DL = 0.007367$$

$$BEC = 0.06524$$

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	333.35	0.0000	P	6.2
2	☐	1.000	0.816	5112.25	0.0002	P	2.1
3	☐	50.000	50.911	293929.95	0.0111	P	0.9
4	☐	125.000	127.501	738841.88	0.0277	P	0.4
5	☐	250.000	251.497	1464849.98	0.0546	P	1.5
6	☐	500.000	507.479	2889975.19	0.1102	P	2.0
7	☐	1000.000	995.528	5655350.52	0.2161	A	0.6
8	☐			2047.45	0.0001	P	18.4

$$y = 2.1703\text{E-}004 * x + 1.2333\text{E-}005$$

$$R = 1.0000$$

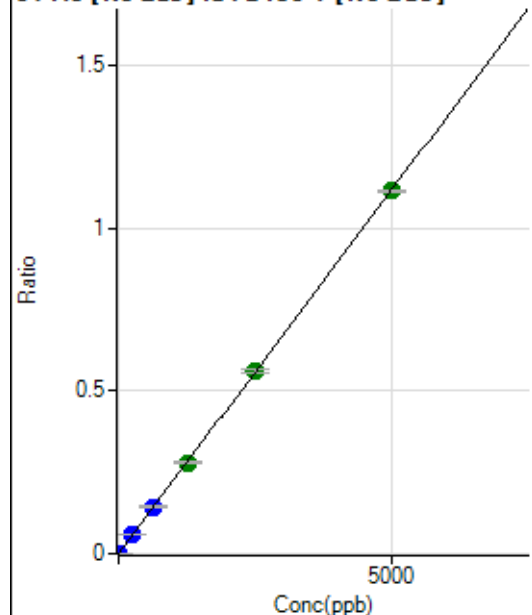
$$DL = 0.01055$$

$$BEC = 0.05683$$

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	630.60	0.0000	P	21.6
2	☐	5.000	5.012	30834.20	0.0011	P	1.0
3	☐	250.000	258.762	1536871.19	0.0578	P	1.0
4	☐	625.000	646.143	3853649.26	0.1444	P	0.7
5	☐	1250.000	1248.285	7484044.96	0.2789	A	1.9
6	☐	2500.000	2516.783	14754610.23	0.5624	A	1.8
7	☐	5000.000	4988.956	29176553.78	1.1148	A	0.5
8	☐			22187.60	0.0010	P	14.4

$$y = 2.2344\text{E-}004 * x + 2.3388\text{E-}005$$

$$R = 1.0000$$

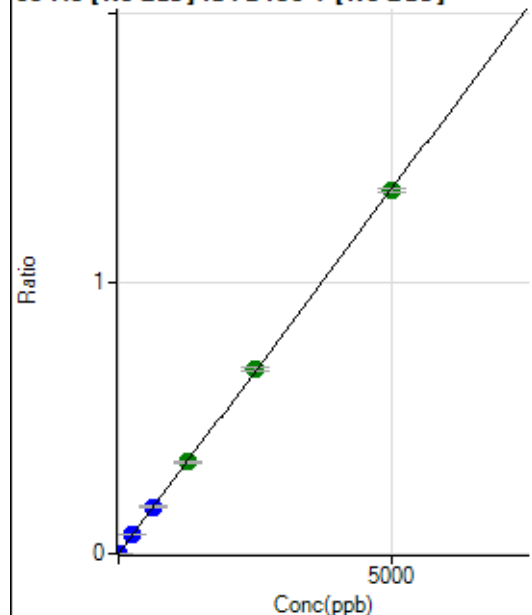
$$DL = 0.06777$$

$$BEC = 0.1047$$

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	172.23	0.0000	P	18.5
2	☐	5.000	5.494	40096.19	0.0015	P	3.0
3	☐	250.000	259.994	1861861.78	0.0701	P	1.2
4	☐	625.000	644.928	4638651.88	0.1738	P	0.8
5	☐	1250.000	1257.351	9091777.03	0.3389	A	1.8
6	☐	2500.000	2538.245	17947052.83	0.6841	A	1.9
7	☐	5000.000	4976.049	35101127.87	1.3411	A	0.9
8	☐			31290.79	0.0014	P	14.8

$$y = 2.6950\text{E-}004 * x + 6.3865\text{E-}006$$

$$R = 1.0000$$

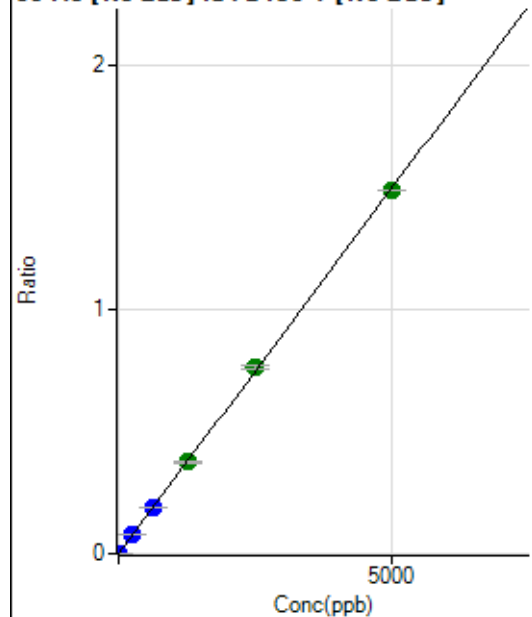
$$DL = 0.01317$$

$$BEC = 0.0237$$

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	375.03	0.0000	P	13.0
2	☐	5.000	5.499	44618.11	0.0017	P	2.0
3	☐	250.000	259.636	2058772.92	0.0775	P	1.0
4	☐	625.000	642.554	5117165.65	0.1917	P	0.5
5	☐	1250.000	1256.411	10059230.52	0.3749	A	1.1
6	☐	2500.000	2553.282	19988176.32	0.7619	A	1.9
7	☐	5000.000	4969.080	38807267.19	1.4827	A	0.1
8	☐			51906.60	0.0024	P	13.7

$$y = 2.9838\text{E-}004 * x + 1.3893\text{E-}005$$

$$R = 0.9999$$

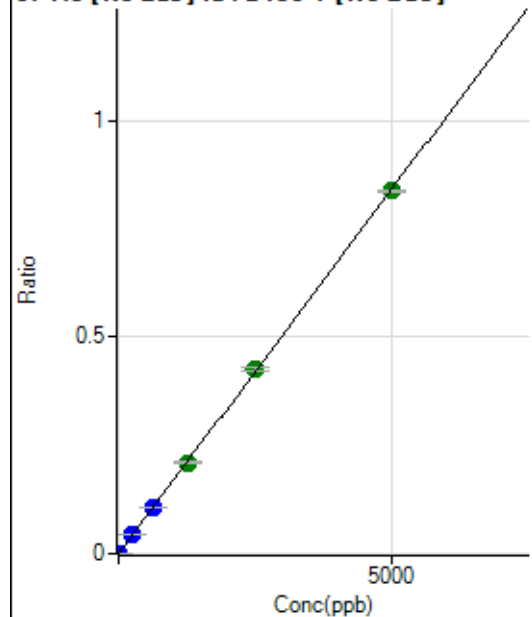
$$DL = 0.01814$$

$$BEC = 0.04656$$

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	113.90	0.0000	P	23.0
2	☐	5.000	5.484	24978.27	0.0009	P	1.8
3	☐	250.000	260.718	1164902.61	0.0438	P	1.2
4	☐	625.000	644.334	2891511.44	0.1083	P	0.3
5	☐	1250.000	1253.982	5657523.39	0.2109	A	1.8
6	☐	2500.000	2530.102	11161731.41	0.4254	A	1.9
7	☐	5000.000	4981.001	21920994.59	0.8375	A	0.5
8	☐			19758.92	0.0009	P	16.6

$$y = 1.6815\text{E-}004 * x + 4.2100\text{E-}006$$

$$R = 1.0000$$

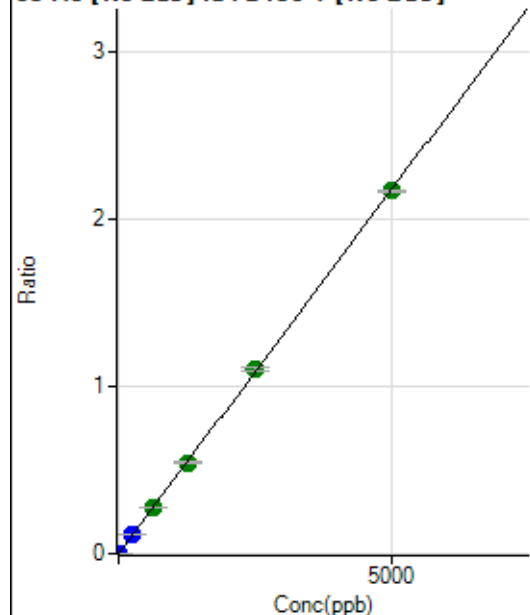
$$DL = 0.01729$$

$$BEC = 0.02504$$

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	252.79	0.0000	P	19.7
2	☐	5.000	5.502	64859.45	0.0024	P	2.0
3	☐	250.000	258.855	2995077.35	0.1127	P	1.2
4	☐	625.000	631.690	7341276.81	0.2751	A	1.5
5	☐	1250.000	1253.589	14646206.75	0.5459	A	1.5
6	☐	2500.000	2528.759	28890093.01	1.1011	A	1.7
7	☐	5000.000	4983.444	56797204.05	2.1700	A	0.6
8	☐			50036.09	0.0023	P	13.5

$$y = 4.3544\text{E-}004 * x + 9.3750\text{E-}006$$

$$R = 1.0000$$

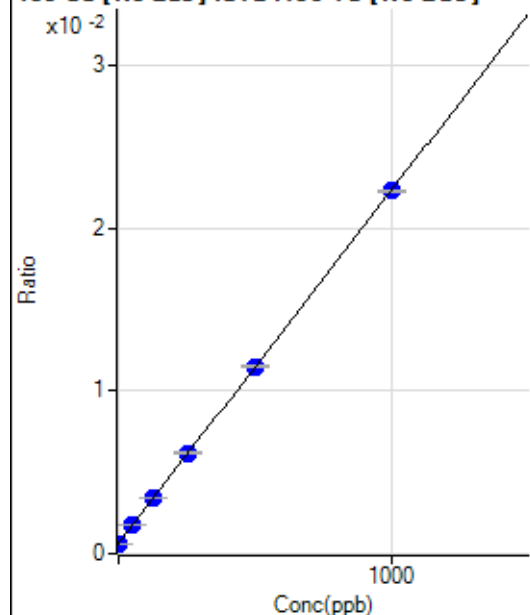
$$DL = 0.01276$$

$$BEC = 0.02153$$

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	14302.20	0.0006	P	2.1
2	☐	1.000	-0.358	14207.67	0.0006	P	3.5
3	☐	50.000	52.125	38871.06	0.0018	P	4.1
4	☐	125.000	129.759	76864.85	0.0035	P	1.5
5	☐	250.000	255.962	139581.68	0.0062	P	1.6
6	☐	500.000	499.232	254856.29	0.0115	P	1.2
7	☐	1000.000	998.194	487318.64	0.0223	P	0.6
8	☐			11149.37	0.0006	P	2.5

$$y = 2.1702\text{E-}005 * x + 6.4346\text{E-}004$$

$$R = 1.0000$$

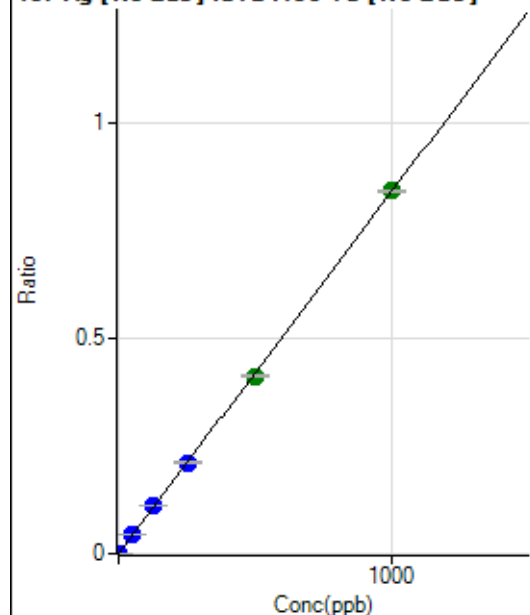
$$DL = 1.839$$

$$BEC = 29.65$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	277.79	0.0000	P	8.0
2	☐	1.000	1.096	20804.94	0.0009	P	2.6
3	☐	50.000	54.325	997639.24	0.0455	P	1.7
4	☐	125.000	130.956	2438750.94	0.1098	P	0.8
5	☐	250.000	252.280	4761665.17	0.2114	P	0.9
6	☐	500.000	490.810	9133276.51	0.4113	A	1.6
7	☐	1000.000	1003.064	18365345.72	0.8406	A	0.5
8	☐			4931.65	0.0003	P	18.5

$$y = 8.3804\text{E-}004 * x + 1.2491\text{E-}005$$

$$R = 0.9999$$

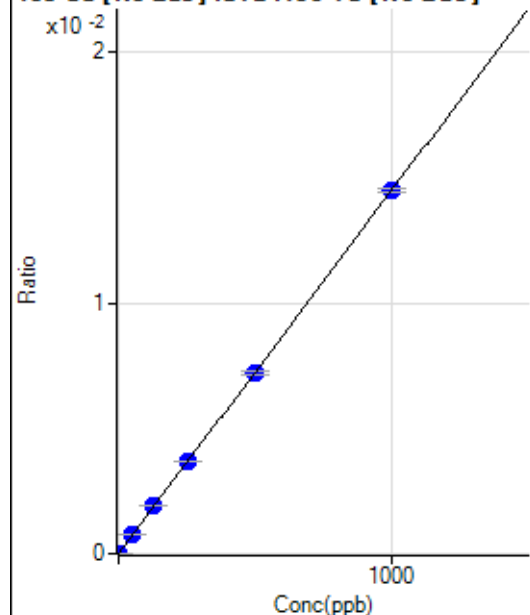
$$DL = 0.003569$$

$$BEC = 0.01491$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	51.39	0.0000	P	5.6
2	☐	1.000	1.043	388.90	0.0000	P	6.4
3	☐	50.000	53.799	17107.83	0.0008	P	1.6
4	☐	125.000	131.735	42412.17	0.0019	P	1.2
5	☐	250.000	253.312	82618.47	0.0037	P	0.4
6	☐	500.000	497.862	160035.29	0.0072	P	1.4
7	☐	1000.000	999.209	315973.87	0.0145	P	1.0
8	☐			176.39	0.0000	P	11.7

$$y = 1.4472\text{E-}005 * x + 2.3126\text{E-}006$$

$$R = 1.0000$$

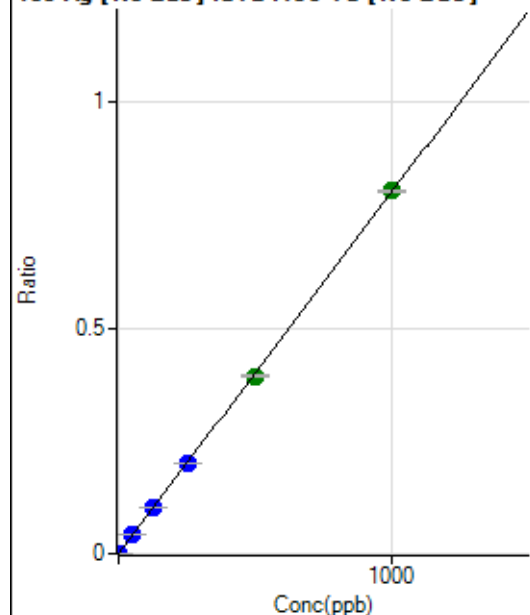
$$DL = 0.02707$$

$$BEC = 0.1598$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	75.00	0.0000	P	12.3
2	☐	1.000	1.123	20179.08	0.0009	P	1.1
3	☐	50.000	54.247	951817.59	0.0434	P	1.8
4	☐	125.000	130.012	2313575.38	0.1041	P	0.3
5	☐	250.000	251.501	4536277.32	0.2014	P	0.6
6	☐	500.000	490.054	8714569.29	0.3925	A	1.2
7	☐	1000.000	1003.759	17562447.09	0.8039	A	0.6
8	☐			4445.36	0.0003	P	16.0

$$y = 8.0086\text{E-}004 * x + 3.3773\text{E-}006$$

$$R = 0.9999$$

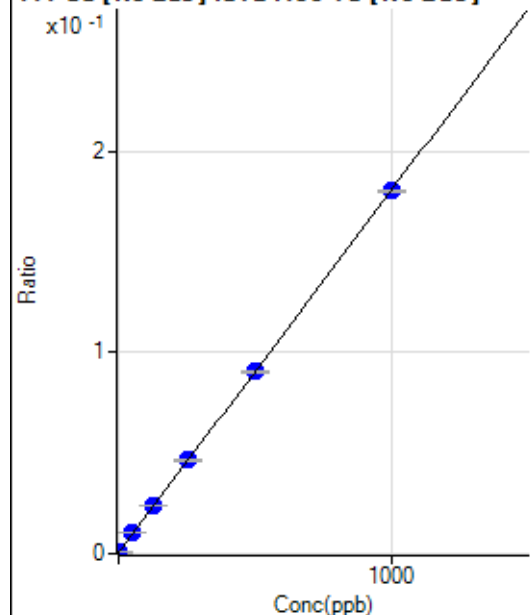
$$DL = 0.001551$$

$$BEC = 0.004217$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10057.52	0.0005	P	2.0
2	☐	1.000	0.961	13982.21	0.0006	P	2.4
3	☐	50.000	53.930	222817.25	0.0102	P	1.8
4	☐	125.000	130.789	533736.07	0.0240	P	0.4
5	☐	250.000	255.011	1045085.71	0.0464	P	1.3
6	☐	500.000	499.571	2008973.35	0.0905	P	1.5
7	☐	1000.000	998.042	3939160.56	0.1803	P	0.4
8	☐			8770.04	0.0005	P	3.6

$$y = 1.8021\text{E-}004 * x + 4.5249\text{E-}004$$

$$R = 1.0000$$

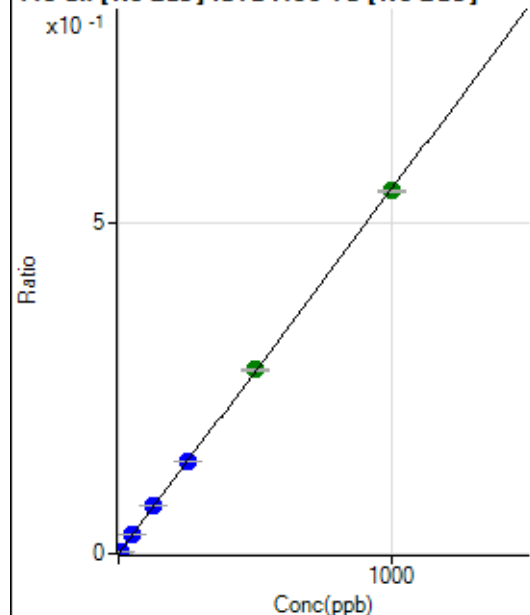
$$DL = 0.1504$$

$$BEC = 2.511$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	936.19	0.0000	P	12.4
2	☐	5.000	5.312	66254.11	0.0030	P	0.3
3	☐	50.000	53.057	640511.42	0.0292	P	1.1
4	☐	125.000	130.071	1591150.32	0.0716	P	0.2
5	☐	250.000	254.549	3155374.31	0.1401	P	0.5
6	☐	500.000	505.215	6173371.45	0.2780	A	1.3
7	☐	1000.000	995.467	11967490.29	0.5478	A	0.9
8	☐			12998.15	0.0007	P	9.9

$$y = 5.5023\text{E-}004 * x + 4.2158\text{E-}005$$

$$R = 1.0000$$

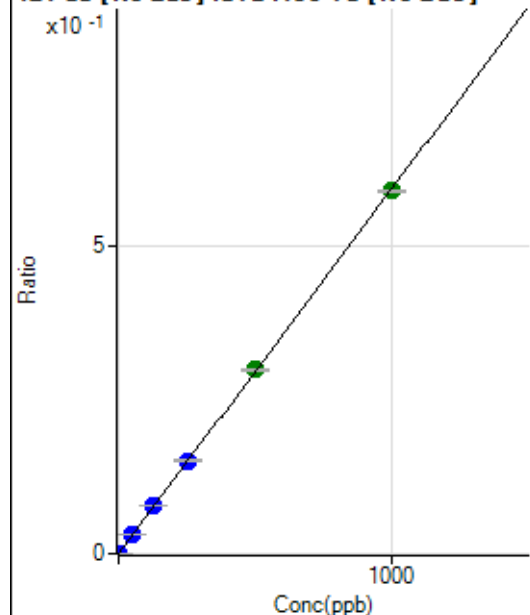
$$DL = 0.02852$$

$$BEC = 0.07662$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144.45	0.0000	P	24.9
2	☐	2.000	2.183	29047.75	0.0013	P	2.5
3	☐	50.000	52.779	684978.41	0.0313	P	1.5
4	☐	125.000	130.729	1720526.93	0.0774	P	0.5
5	☐	250.000	255.465	3407740.22	0.1513	P	0.8
6	☐	500.000	504.567	6635888.73	0.2989	A	1.1
7	☐	1000.000	995.495	12881521.99	0.5896	A	0.6
8	☐			16071.04	0.0009	P	18.0

$$y = 5.9228\text{E-}004 * x + 6.5081\text{E-}006$$

$$R = 1.0000$$

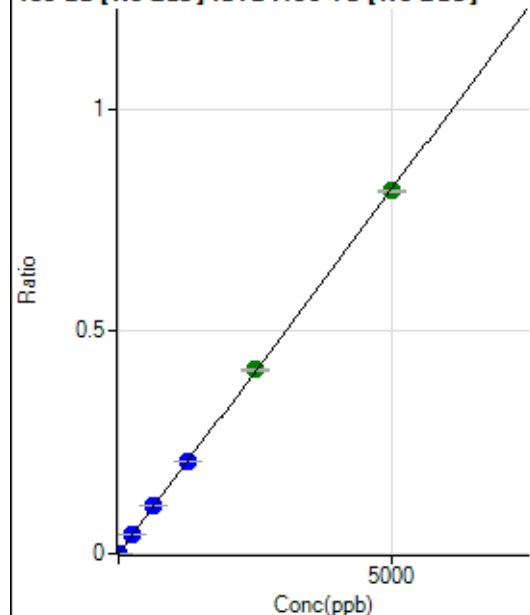
$$DL = 0.008209$$

$$BEC = 0.01099$$

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	80.56	0.0000	P	23.2
2	☐	10.000	10.773	39554.39	0.0018	P	1.1
3	☐	250.000	266.907	958805.59	0.0438	P	1.7
4	☐	625.000	649.794	2367318.61	0.1065	P	0.9
5	☐	1250.000	1268.911	4685553.75	0.2081	P	1.1
6	☐	2500.000	2521.568	9180079.29	0.4134	A	1.7
7	☐	5000.000	4980.542	17840975.40	0.8166	A	0.6
8	☐			32268.87	0.0018	P	12.4

$$y = 1.6396E-004 * x + 3.6195E-006$$

$$R = 1.0000$$

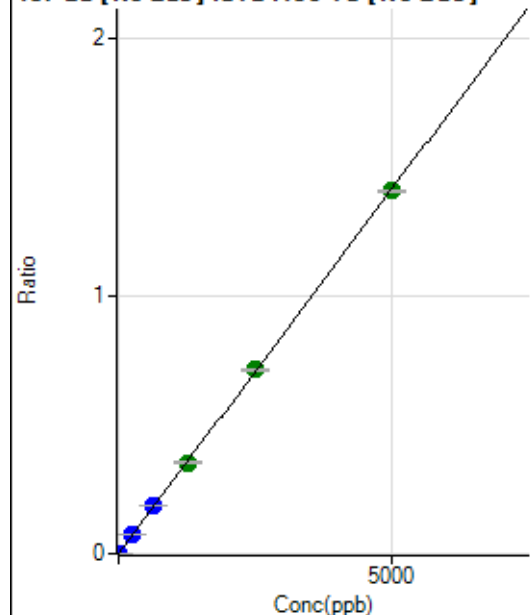
$$DL = 0.0154$$

$$BEC = 0.02208$$

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	113.89	0.0000	P	19.5
2	☐	10.000	10.968	69477.03	0.0031	P	1.2
3	☐	250.000	267.318	1657458.20	0.0757	P	2.0
4	☐	625.000	652.812	4105198.36	0.1848	P	0.3
5	☐	1250.000	1253.847	7991879.09	0.3549	A	1.0
6	☐	2500.000	2528.047	15886730.04	0.7155	A	1.2
7	☐	5000.000	4980.670	30795910.06	1.4096	A	0.5
8	☐			56864.81	0.0032	P	12.9

$$y = 2.8301E-004 * x + 5.1135E-006$$

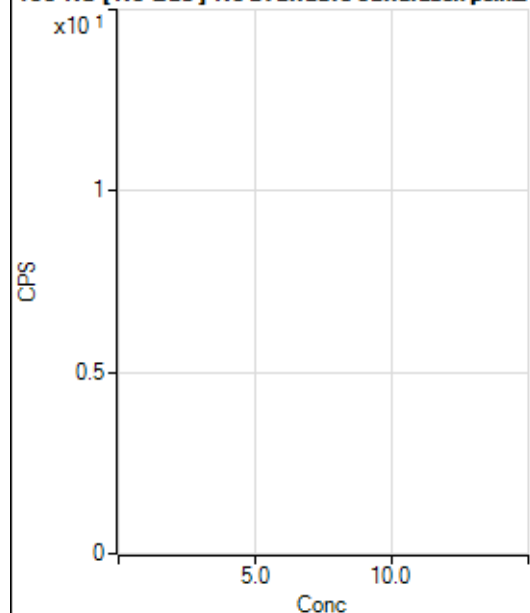
$$R = 1.0000$$

$$DL = 0.0106$$

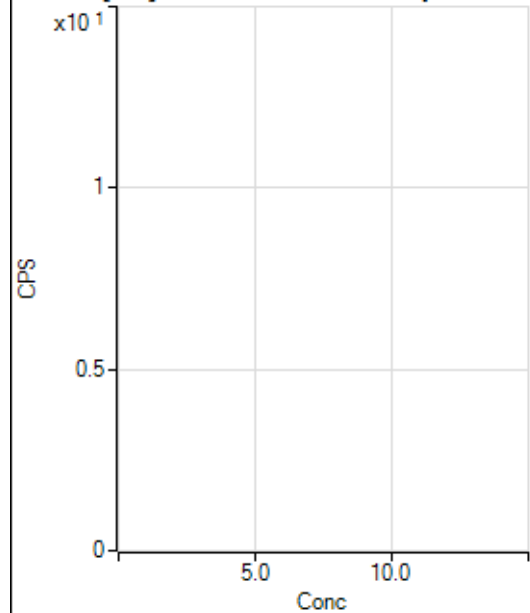
$$BEC = 0.01807$$

Weight: <None>

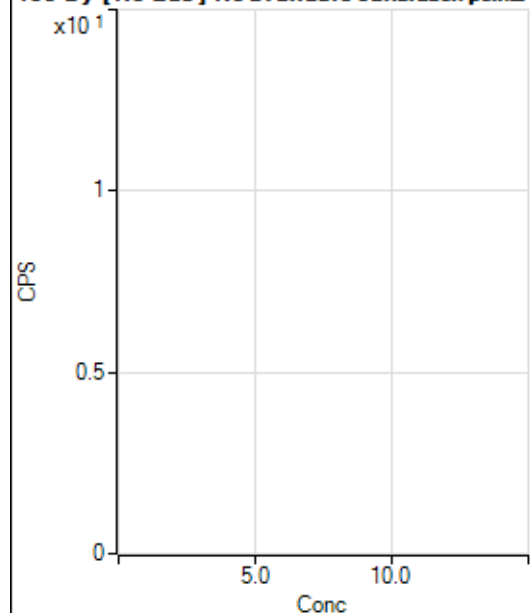
Min Conc: 0

150 Nd [No Gas] No available calibration points

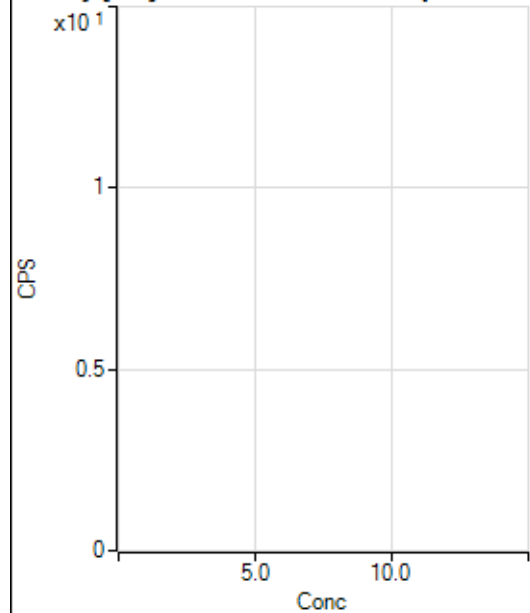
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			11.11		P	69.3
3	☐			122.23		P	11.4
4	☐			322.24		P	11.9
5	☐			597.81		P	2.3
6	☐			1175.64		P	6.6
7	☐			2460.31		P	2.3
8	☐			157.79		P	29.7

150 Nd [He] No available calibration points

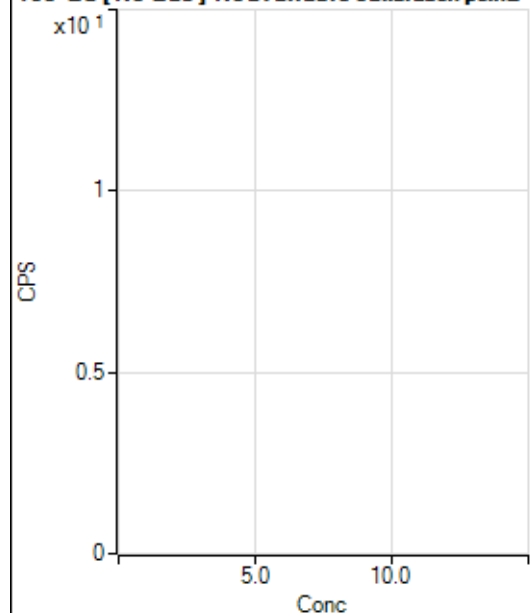
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			0.00		P	
3	☐			12.22		P	15.7
4	☐			26.67		P	45.1
5	☐			47.78		P	10.7
6	☐			96.67		P	10.3
7	☐			171.11		P	11.7
8	☐			68.89		P	18.3

156 Dy [No Gas] No available calibration points

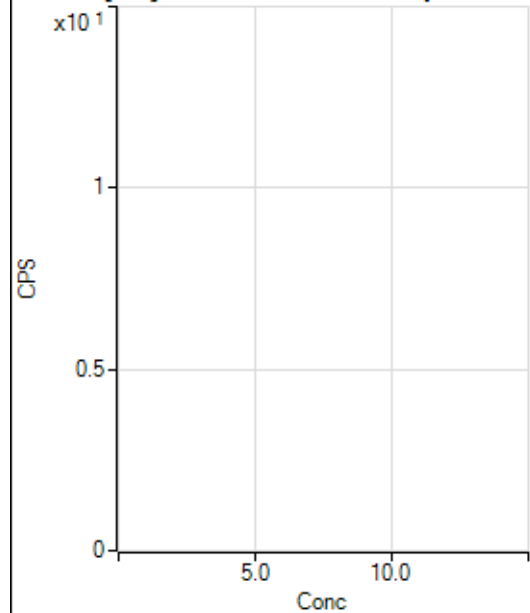
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80.56		P	29.9
2	☐			72.22		P	6.7
3	☐			69.45		P	56.7
4	☐			122.23		P	34.3
5	☐			219.45		P	8.8
6	☐			294.46		P	8.6
7	☐			605.60		P	11.1
8	☐			986.20		P	7.7

156 Dy [He] No available calibration points

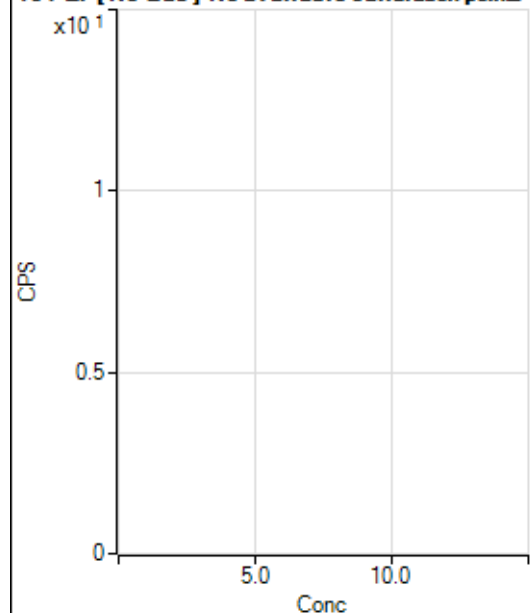
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	50.0
2	☐			16.67		P	34.6
3	☐			35.55		P	37.9
4	☐			78.89		P	16.0
5	☐			112.22		P	20.9
6	☐			203.34		P	12.8
7	☐			451.13		P	4.8
8	☐			490.02		P	3.1

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

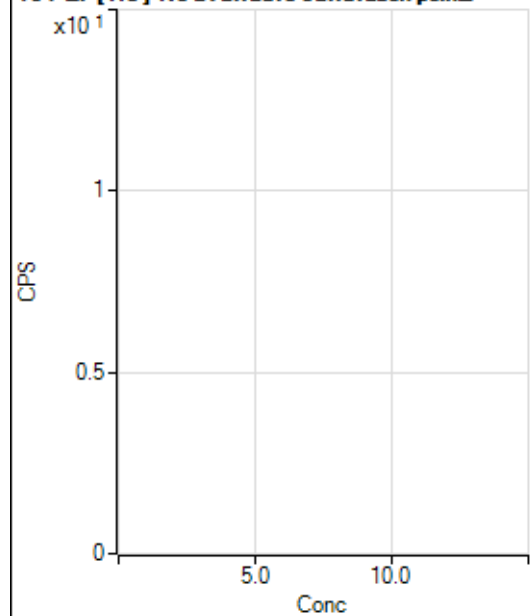
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			119.45		P	28.2
2	☐			122.23		P	15.7
3	☐			161.12		P	7.9
4	☐			138.90		P	12.5
5	☐			147.23		P	16.3
6	☐			263.90		P	25.3
7	☐			386.14		P	25.3
8	☐			1019.53		P	11.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			313.34		P	12.9
2	☐			288.90		P	3.5
3	☐			331.12		P	10.9
4	☐			318.90		P	4.0
5	☐			326.68		P	3.7
6	☐			352.23		P	16.1
7	☐			434.46		P	4.4
8	☐			760.03		P	3.5

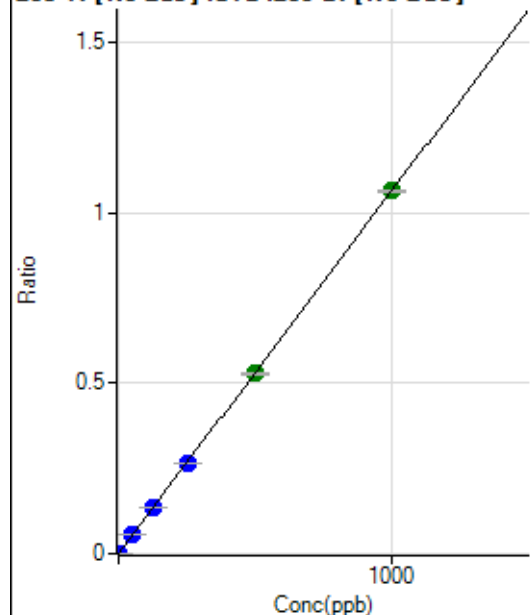
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			94.45		P	28.4
2	☐			97.23		P	17.8
3	☐			127.78		P	39.3
4	☐			122.23		P	10.4
5	☐			91.67		P	27.3
6	☐			150.01		P	11.1
7	☐			211.12		P	35.4
8	☐			202.79		P	16.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.55		P	19.5
2	☐			51.11		P	44.4
3	☐			46.67		P	25.8
4	☐			44.45		P	15.6
5	☐			46.67		P	14.3
6	☐			64.45		P	32.9
7	☐			67.78		P	10.2
8	☐			94.45		P	30.8

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	386.13	0.0000	P	14.4
2	☐	1.000	1.036	14789.35	0.0011	P	1.7
3	☐	50.000	50.594	695971.45	0.0538	P	0.9
4	☐	125.000	125.269	1738131.44	0.1332	P	1.0
5	☐	250.000	250.825	3467194.04	0.2667	P	0.9
6	☐	500.000	497.593	6656613.00	0.5291	A	1.0
7	☐	1000.000	1000.934	12792971.03	1.0642	A	0.4
8	☐			3850.74	0.0004	P	16.9

$$y = 0.0011 * x + 2.9473E-005$$

$$R = 1.0000$$

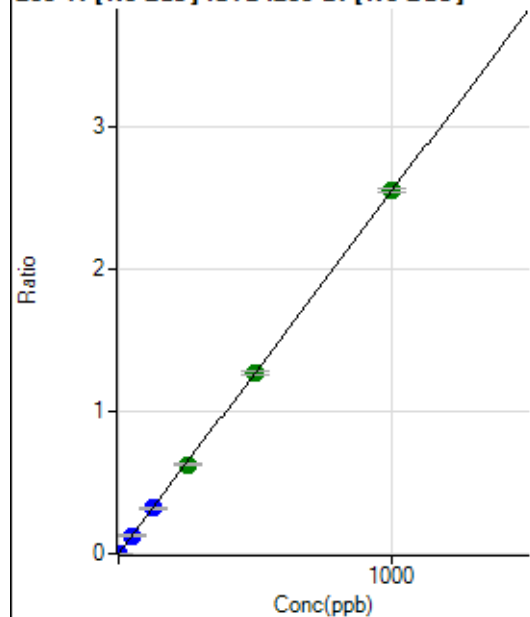
$$DL = 0.01196$$

$$BEC = 0.02772$$

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	938.96	0.0001	P	4.9
2	☐	1.000	1.032	35236.65	0.0027	P	3.2
3	☐	50.000	50.384	1658205.67	0.1282	P	0.8
4	☐	125.000	124.909	4146451.35	0.3178	P	0.9
5	☐	250.000	246.685	8157760.77	0.6275	A	1.8
6	☐	500.000	498.636	15958413.90	1.2684	A	1.5
7	☐	1000.000	1001.503	30623409.36	2.5475	A	1.0
8	☐			9373.16	0.0011	P	19.0

$$y = 0.0025 * x + 7.1670E-005$$

$$R = 1.0000$$

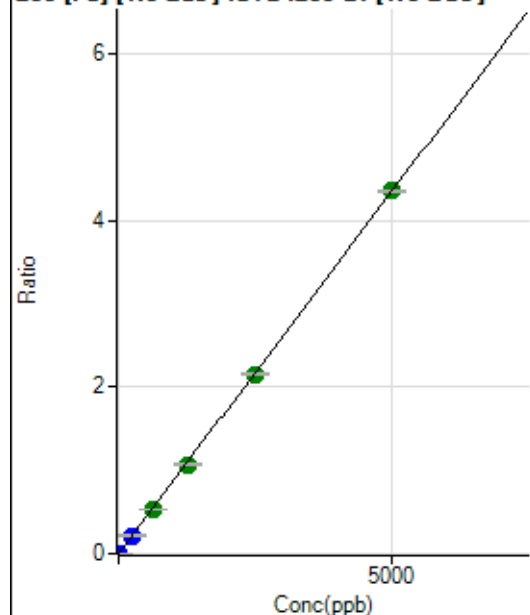
$$DL = 0.004134$$

$$BEC = 0.02818$$

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	920.43	0.0001	P	4.6
2	☐	1.000	1.022	12535.85	0.0010	P	1.7
3	☐	250.000	251.995	2833699.25	0.2191	P	0.9
4	☐	625.000	617.265	7002130.37	0.5366	A	0.8
5	☐	1250.000	1231.407	13917190.01	1.0705	A	1.3
6	☐	2500.000	2483.275	27161187.87	2.1587	A	1.3
7	☐	5000.000	5013.878	52394109.97	4.3586	A	0.7
8	☐			47514.86	0.0054	P	13.1

$$y = 8.6929\text{E-}004 * x + 7.0250\text{E-}005$$

$$R = 1.0000$$

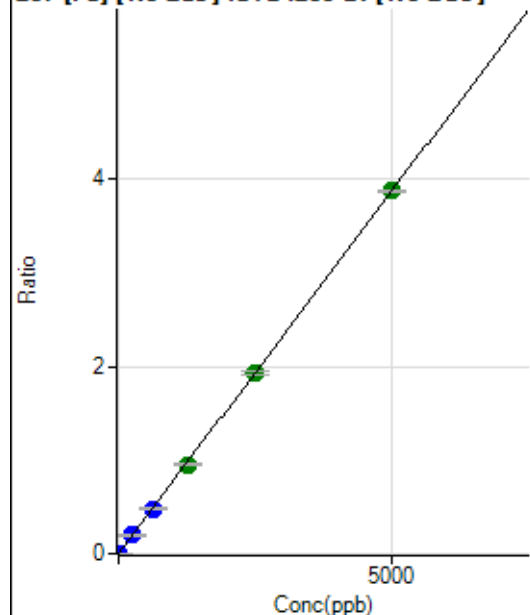
$$DL = 0.01117$$

$$BEC = 0.08081$$

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	703.74	0.0001	P	5.7
2	☐	1.000	0.978	10585.98	0.0008	P	1.6
3	☐	250.000	252.389	2524084.84	0.1952	P	0.8
4	☐	625.000	622.610	6281484.34	0.4814	P	0.7
5	☐	1250.000	1223.983	12302331.75	0.9464	A	1.9
6	☐	2500.000	2497.905	24297296.84	1.9313	A	2.2
7	☐	5000.000	5007.731	46541539.00	3.8717	A	0.7
8	☐			42548.31	0.0048	P	12.8

$$y = 7.7313\text{E-}004 * x + 5.3712\text{E-}005$$

$$R = 1.0000$$

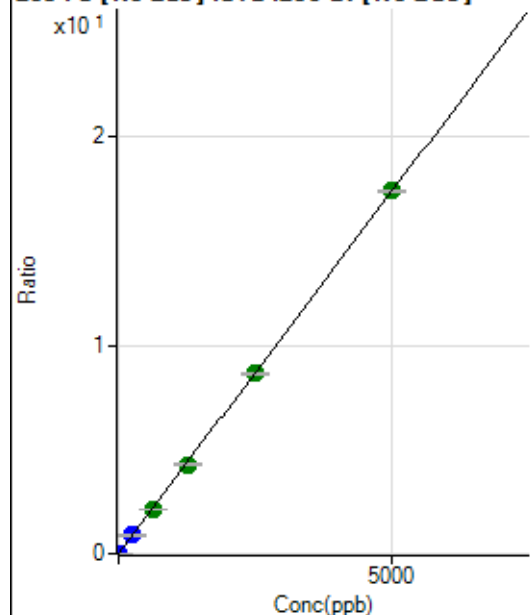
$$DL = 0.01196$$

$$BEC = 0.06947$$

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	3439.17	0.0003	P	2.5
2	☐	1.000	0.998	48774.96	0.0037	P	1.0
3	☐	250.000	253.011	11373997.59	0.8795	P	0.8
4	☐	625.000	618.312	28040868.05	2.1490	A	0.5
5	☐	1250.000	1225.945	55388996.95	4.2607	A	1.7
6	☐	2500.000	2488.613	108818554.5	8.6488	A	1.2
7	☐	5000.000	5012.393	209403576.4	17.4195	A	0.4
8	☐			190117.48	0.0216	P	12.6

$$y = 0.0035 * x + 2.6250E-004$$

$$R = 1.0000$$

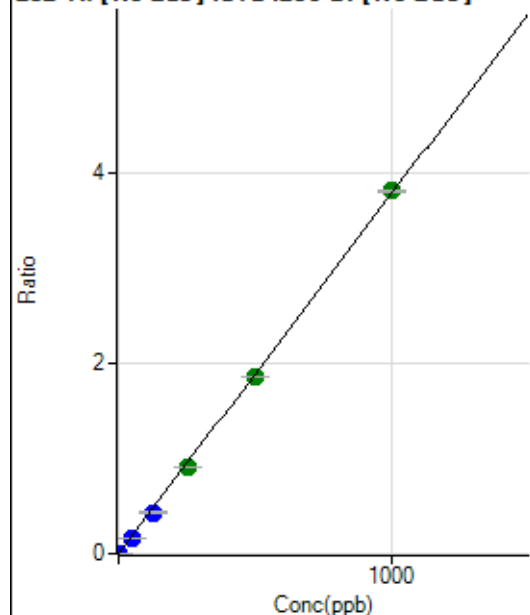
$$DL = 0.005552$$

$$BEC = 0.07554$$

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	4532.42	0.0003	P	3.5
2	☐	1.000	0.674	37801.85	0.0029	P	2.5
3	☐	50.000	44.419	2174828.03	0.1682	P	0.4
4	☐	125.000	114.813	5664637.92	0.4341	P	0.6
5	☐	250.000	238.901	11740078.85	0.9030	A	0.9
6	☐	500.000	492.040	23395386.17	1.8594	A	0.9
7	☐	1000.000	1008.308	45800435.75	3.8100	A	0.5
8	☐			19952.98	0.0023	P	11.2

$$y = 0.0038 * x + 3.4597E-004$$

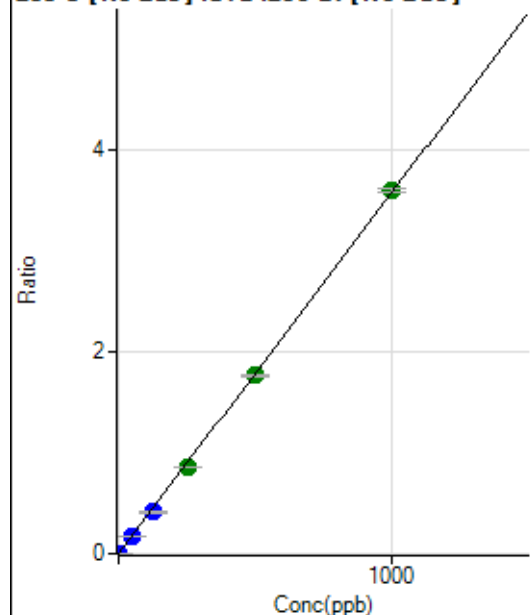
$$R = 0.9999$$

$$DL = 0.009685$$

$$BEC = 0.09157$$

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	211.12	0.0000	P	9.8
2	☐	1.000	0.907	42539.04	0.0033	P	2.0
3	☐	50.000	45.465	2098832.76	0.1623	P	0.4
4	☐	125.000	114.794	5346449.68	0.4098	P	0.7
5	☐	250.000	240.577	11164214.74	0.8587	A	0.7
6	☐	500.000	494.818	22222808.66	1.7662	A	0.8
7	☐	1000.000	1006.449	43183607.91	3.5924	A	1.1
8	☐			6579.79	0.0007	P	15.4

$$y = 0.0036 * x + 1.6113E-005$$

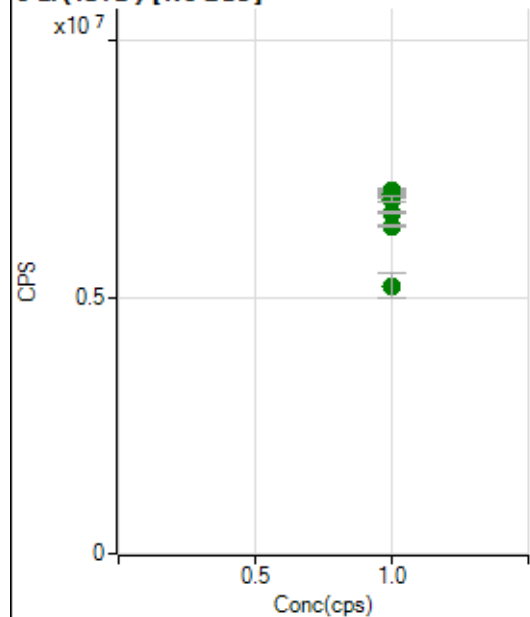
$$R = 0.9999$$

$$DL = 0.001324$$

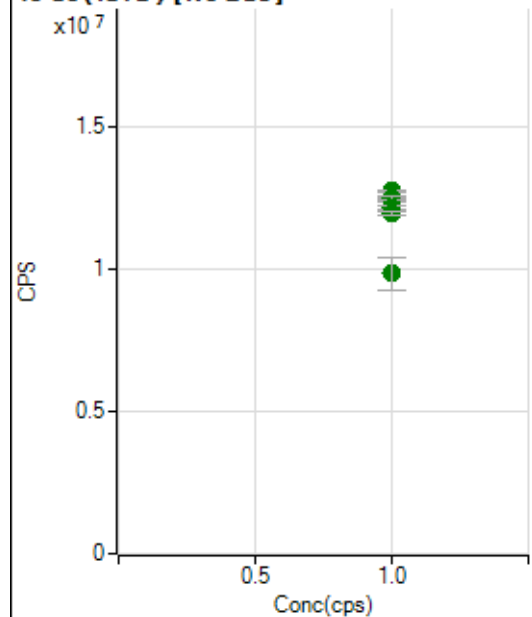
$$BEC = 0.004514$$

Weight: <None>

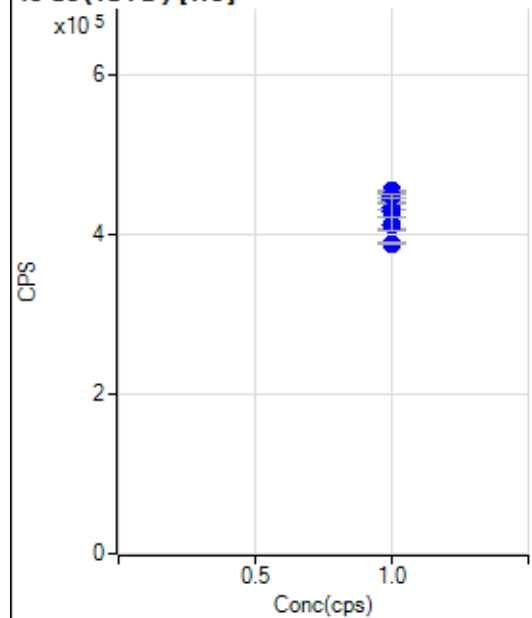
Min Conc: 0

6 Li (ISTD) [No Gas]

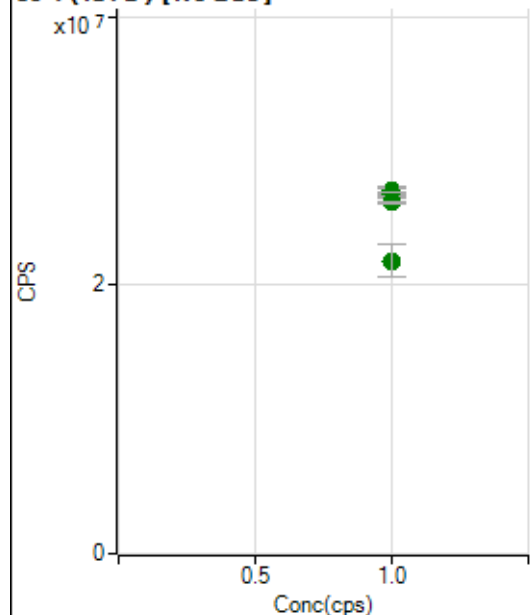
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7075088.85		A	1.8
2	☐	1.000		7064626.91		A	1.0
3	☐	1.000		7003214.06		A	1.0
4	☐	1.000		6959092.88		A	0.8
5	☐	1.000		6908338.85		A	1.6
6	☐	1.000		6655164.21		A	0.6
7	☐	1.000		6383882.06		A	0.7
8	☐	1.000		5228729.12		A	9.0

45 Sc (ISTD) [No Gas]

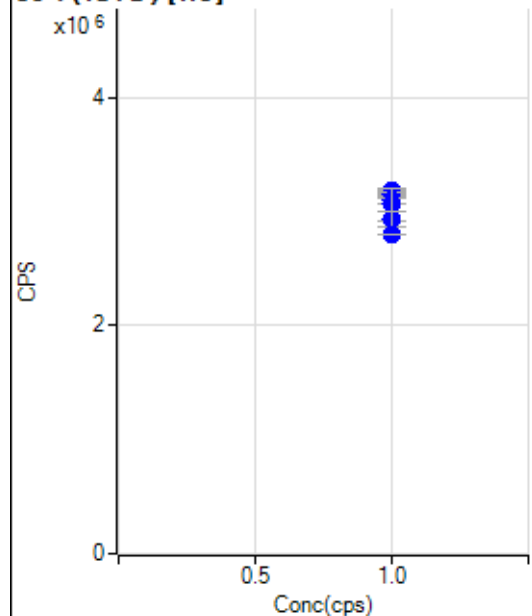
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12551325.79		A	1.7
2	☐	1.000		12734408.56		A	0.5
3	☐	1.000		12450760.51		A	1.2
4	☐	1.000		12494153.01		A	0.4
5	☐	1.000		12470857.46		A	1.2
6	☐	1.000		12137266.62		A	0.9
7	☐	1.000		11926926.07		A	1.0
8	☐	1.000		9829290.00		A	11.8

45 Sc (ISTD) [He]

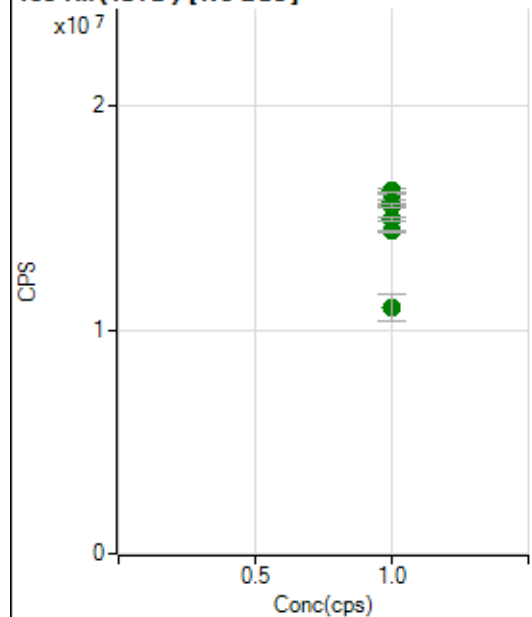
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		449764.34		P	0.2
2	☐	1.000		454002.65		P	0.4
3	☐	1.000		447306.46		P	0.8
4	☐	1.000		442697.73		P	1.1
5	☐	1.000		434303.34		P	1.5
6	☐	1.000		428650.05		P	10.3
7	☐	1.000		411838.25		P	4.0
8	☐	1.000		387819.32		P	0.8

89 Y (ISTD) [No Gas]

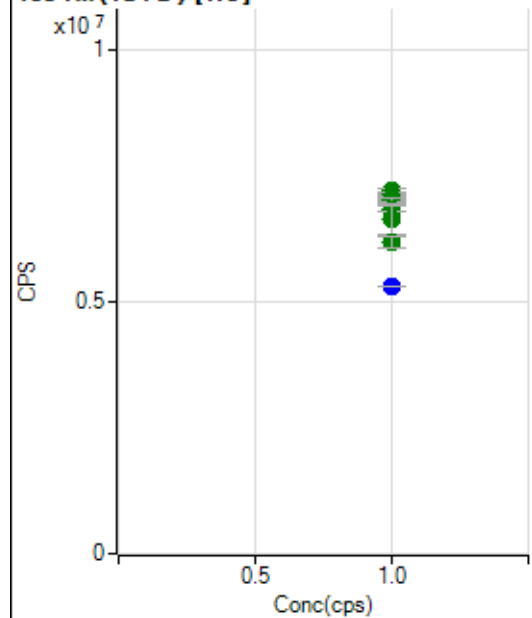
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27025976.82		A	1.9
2	☐	1.000		26971317.10		A	1.5
3	☐	1.000		26571594.05		A	0.9
4	☐	1.000		26687814.88		A	0.6
5	☐	1.000		26833548.21		A	1.1
6	☐	1.000		26241347.11		A	1.6
7	☐	1.000		26173516.00		A	0.6
8	☐	1.000		21823666.48		A	10.8

89 Y (ISTD) [He]

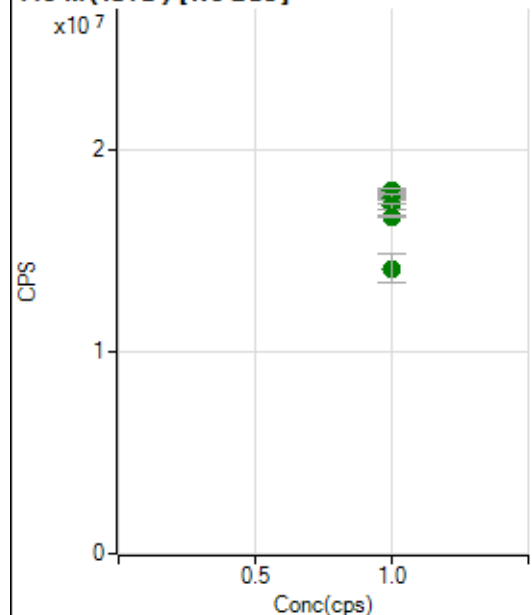
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3179067.17		P	1.4
2	☐	1.000		3183796.34		P	0.4
3	☐	1.000		3172248.98		P	0.7
4	☐	1.000		3160252.56		P	0.9
5	☐	1.000		3103156.17		P	1.7
6	☐	1.000		3064229.33		P	9.1
7	☐	1.000		2932951.55		P	4.5
8	☐	1.000		2802372.08		P	0.1

103 Rh (ISTD) [No Gas]

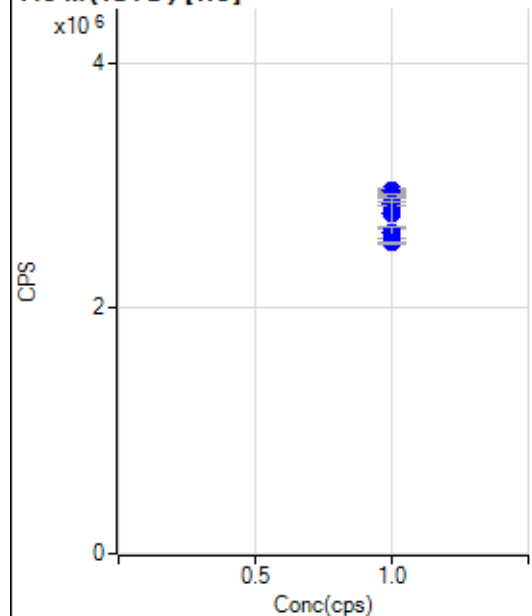
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16201023.65		A	1.0
2	☐	1.000		16122205.45		A	0.3
3	☐	1.000		15722039.90		A	0.9
4	☐	1.000		15704629.07		A	1.6
5	☐	1.000		15547137.96		A	1.1
6	☐	1.000		14946166.30		A	0.9
7	☐	1.000		14389602.42		A	0.7
8	☐	1.000		10980842.96		A	11.3

103 Rh (ISTD) [He]

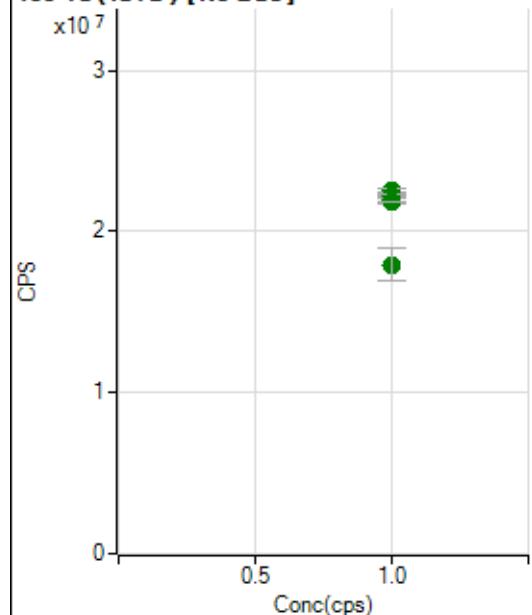
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7207692.95		A	1.5
2	☐	1.000		7149755.24		A	0.7
3	☐	1.000		7080684.41		A	1.2
4	☐	1.000		7031673.23		A	1.1
5	☐	1.000		6852973.02		A	1.7
6	☐	1.000		6645553.58		A	9.2
7	☐	1.000		6200103.93		A	3.9
8	☐	1.000		5308534.61		P	0.2

115 In (ISTD) [No Gas]

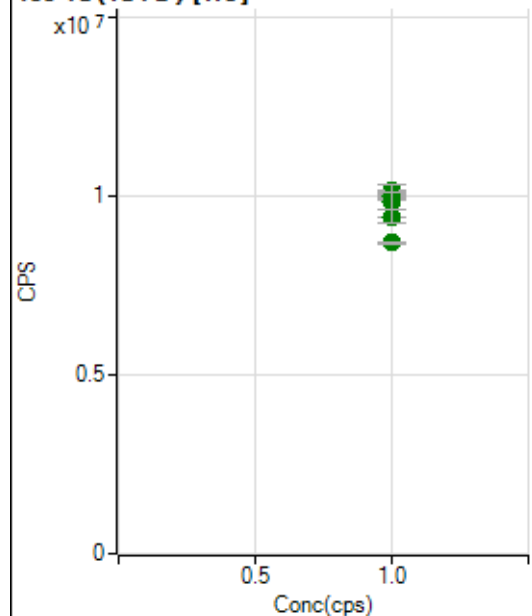
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17952872.35		A	1.1
2	☐	1.000		18002226.40		A	1.1
3	☐	1.000		17691128.73		A	1.0
4	☐	1.000		17632782.99		A	0.4
5	☐	1.000		17698861.45		A	1.7
6	☐	1.000		17228503.86		A	1.4
7	☐	1.000		16742465.07		A	0.7
8	☐	1.000		14149698.40		A	10.2

115 In (ISTD) [He]

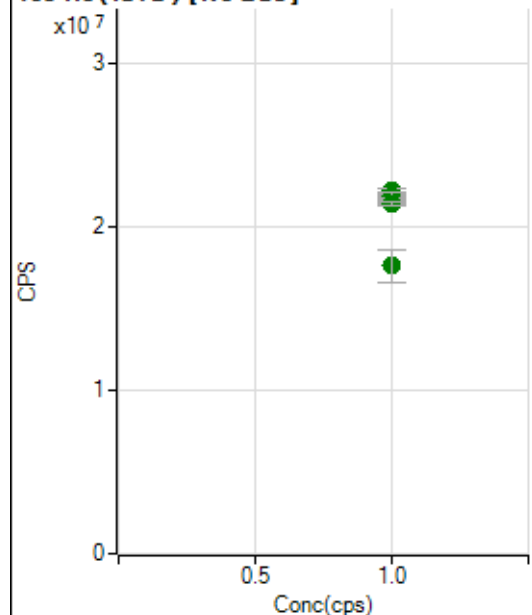
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2948317.42		P	0.6
2	☐	1.000		2958234.42		P	0.9
3	☐	1.000		2932431.49		P	1.4
4	☐	1.000		2921928.88		P	0.9
5	☐	1.000		2852682.87		P	1.4
6	☐	1.000		2774409.45		P	9.2
7	☐	1.000		2618632.79		P	3.7
8	☐	1.000		2533700.31		P	0.6

159 Tb (ISTD) [No Gas]

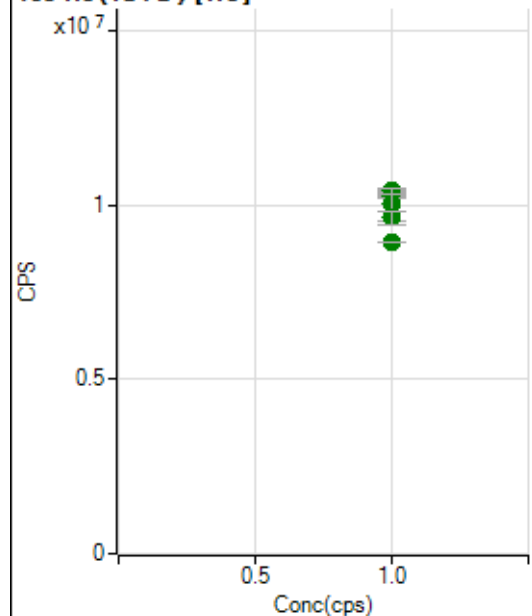
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22230886.61		A	1.5
2	☐	1.000		22347208.84		A	0.8
3	☐	1.000		21910851.90		A	1.4
4	☐	1.000		22219294.11		A	0.3
5	☐	1.000		22522551.89		A	1.3
6	☐	1.000		22206253.28		A	1.0
7	☐	1.000		21847160.23		A	0.2
8	☐	1.000		17945715.57		A	11.3

159 Tb (ISTD) [He]

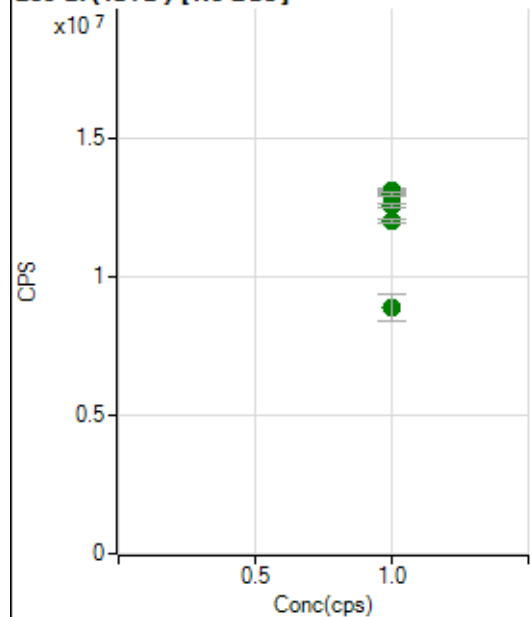
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10131906.79		A	0.7
2	☐	1.000		10055981.86		A	1.6
3	☐	1.000		9948522.91		A	1.0
4	☐	1.000		10100796.52		A	1.2
5	☐	1.000		10015499.50		A	1.8
6	☐	1.000		9849769.99		A	8.9
7	☐	1.000		9413033.47		A	4.0
8	☐	1.000		8681869.80		A	0.7

165 Ho (ISTD) [No Gas]

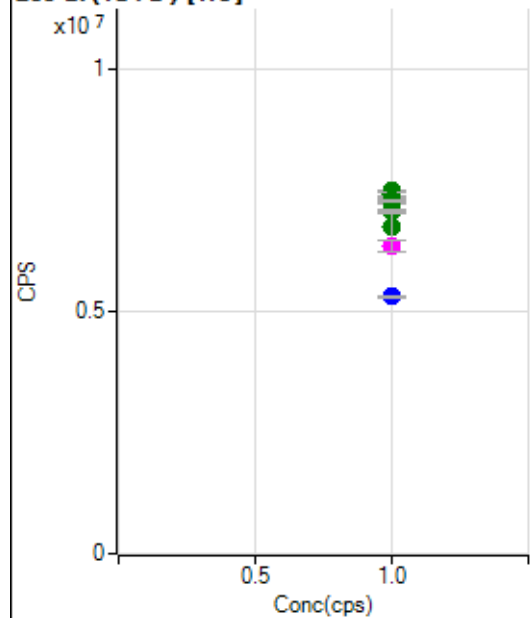
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21573812.87		A	1.3
2	☐	1.000		21951635.78		A	0.3
3	☐	1.000		21433785.79		A	0.8
4	☐	1.000		21800246.06		A	1.1
5	☐	1.000		22213511.34		A	1.9
6	☐	1.000		21928196.34		A	1.5
7	☐	1.000		21460120.24		A	0.8
8	☐	1.000		17613674.74		A	10.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10407484.85		A	0.1
2	☐	1.000		10414142.07		A	1.4
3	☐	1.000		10298232.49		A	1.7
4	☐	1.000		10314190.33		A	0.5
5	☐	1.000		10252227.83		A	0.9
6	☐	1.000		10023962.21		A	9.2
7	☐	1.000		9644666.66		A	4.1
8	☐	1.000		8939693.48		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13101185.08		A	0.2
2	☐	1.000		13076720.92		A	1.7
3	☐	1.000		12932272.45		A	0.7
4	☐	1.000		13048175.50		A	0.4
5	☐	1.000		13001299.25		A	1.0
6	☐	1.000		12583268.01		A	1.4
7	☐	1.000		12021546.35		A	1.2
8	☐	1.000		8888910.21		A	11.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7499264.89		A	0.5
2	☐	1.000		7442309.89		A	1.0
3	☐	1.000		7301195.59		A	1.8
4	☐	1.000		7292827.39		A	0.4
5	☐	1.000		7057679.41		A	1.1
6	☐	1.000		6768360.53		A	9.0
7	☐	1.000		6356968.45		M	3.8
8	☐	1.000		5316010.27		P	0.7

US EPA Tune Check Sample Report

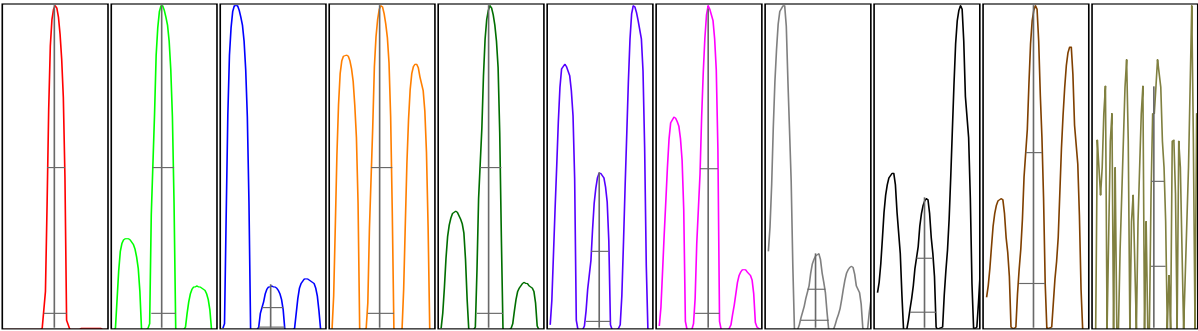
Batch Folder D:\ICP-MS Data\1\DATA\P7031620 MS1.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	17164	0.88	5.00	
24	234280	0.78	5.00	
25	31705	1.15	5.00	
26	36168	1.08	5.00	
59	117985	0.84	5.00	
113	21494	0.61	5.00	
115	67425	1.56	5.00	
206	26898	1.27	5.00	
207	23575	0.95	5.00	
208	55504	0.74	5.00	
220	0	50.85		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	17040	16989	17199	17223	17367
24	232424	232260	234948	235604	236166
25	31586	31149	31740	32045	32005
26	36054	35647	36037	36474	36627
59	117699	116446	118141	119005	118635
113	21470	21340	21459	21699	21502
115	69245	67314	66998	67028	66540
206	26759	26419	26860	27184	27265
207	23508	23265	23523	23831	23747
208	55267	55112	55244	55995	55900
220	0	0	0	0	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	34106	9.00	8.9 - 9.1		0.677	0.900	
24	403005	23.95	23.9 - 24.1		0.739	0.900	
25	53707	24.95	24.9 - 25.1		0.744	0.900	
26	63274	25.95	25.9 - 26.1		0.763	0.900	
59	206652	58.95	58.9 - 59.1		0.778	0.900	
113	40422	113.00	112.9 - 113.1		0.732	0.900	
115	126556	115.00	114.9 - 115.1		0.726	0.900	
206	52050	205.95	205.9 - 206.1		0.788	0.900	
207	43574	206.95	206.9 - 207.1		0.751	0.900	
208	108023	207.95	207.9 - 208.1		0.776	0.900	
220	0	220.30	-		0.447		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.0	V	Deflect	11.6	V
Extract 2	-95.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-45	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	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	26846	0.40	
89	75878	0.52	
205	66072	0.61	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	26994	26775	26927	26751	26784
89	76486	75832	75588	75494	75987
205	66727	66126	66024	65698	65782

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.5	V	Deflect	0.6	V
Extract 2	-105.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-50	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			