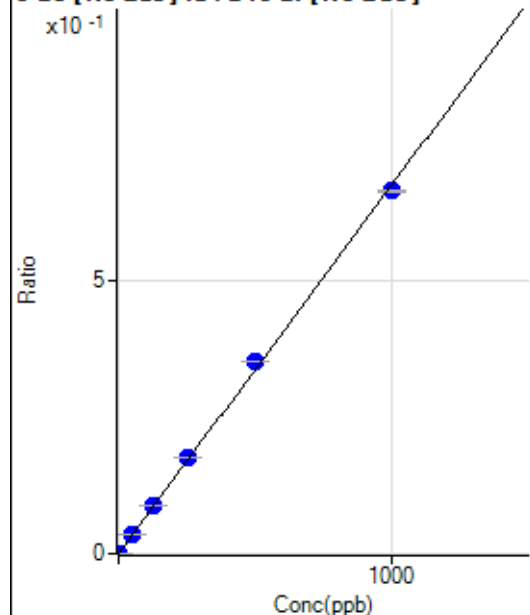


Batch Folder: D:\ICP-MS Data\1\DATA\P7071320-MS.b\
Analysis File: P7071320-MS.batch.bin
DA Date-Time: 2020-07-14 15:21:48
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-07-13 15:52:56
2	004CALS.d	S01	2020-07-13 15:56:39
3	005CALS.d	S02	2020-07-13 16:01:53
4	006CALS.d	S03	2020-07-13 16:05:58
5	007CALS.d	S04	2020-07-13 16:10:33
6	008CALS.d	S05	2020-07-13 16:14:20
7	009CALS.d	S06	2020-07-13 16:18:00
8	010CALS.d	S07	2020-07-13 16:21:34
9	011CALS.d	S08	2020-07-13 16:25:08

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	26.0
2	☐	0.100	0.080	487.06	0.0001	P	6.3
3	☐	1.000	0.909	3607.93	0.0006	P	0.9
4	☐	50.000	54.445	199612.28	0.0369	P	0.3
5	☐	125.000	131.217	470703.73	0.0888	P	0.9
6	☐	250.000	259.765	924596.08	0.1757	P	0.6
7	☐	500.000	522.860	1776464.90	0.3537	P	0.7
8	☐	1000.000	985.129	3301565.67	0.6664	P	0.7
9	☐			788.93	0.0002	P	9.4

$$y = 6.7643\text{E-}004 * x + 3.3442\text{E-}005$$

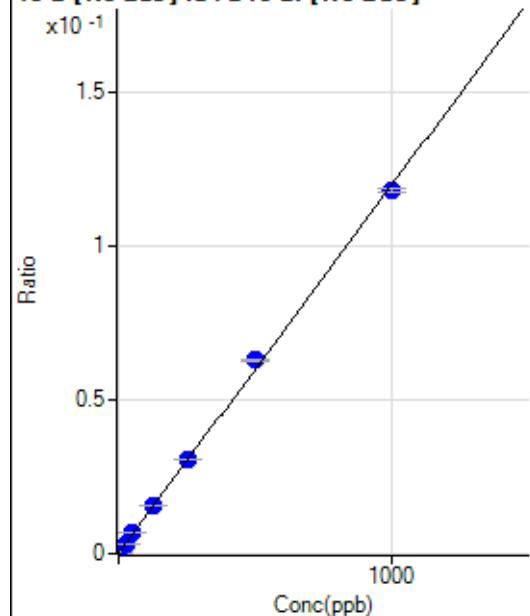
$$R = 0.9996$$

$$DL = 0.03859$$

$$BEC = 0.04944$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1288.99	0.0002	P	14.0
2	☐	2.500	2.051	2664.24	0.0005	P	8.7
3	☐	25.000	22.242	16109.15	0.0029	P	2.5
4	☐	50.000	54.263	36414.26	0.0067	P	0.8
5	☐	125.000	129.984	83647.90	0.0158	P	2.0
6	☐	250.000	254.982	161652.91	0.0307	P	1.2
7	☐	500.000	525.443	316779.46	0.0631	P	1.3
8	☐	1000.000	985.267	584894.44	0.1181	P	1.0
9	☐			22734.45	0.0051	P	4.8

$$y = 1.1959\text{E-}004 * x + 2.3564\text{E-}004$$

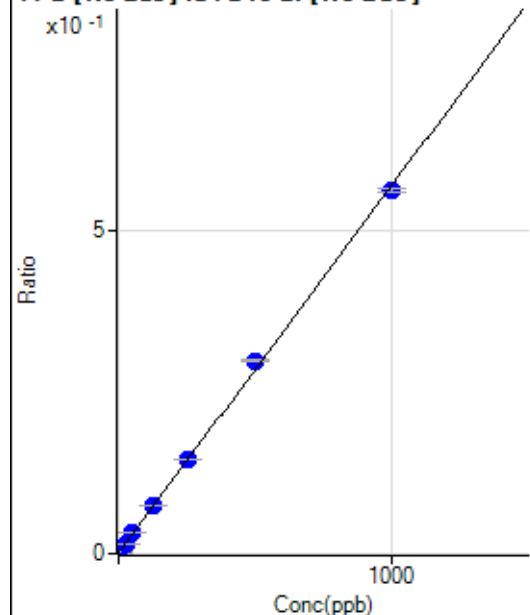
$$R = 0.9995$$

$$DL = 0.8278$$

$$BEC = 1.97$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5956.95	0.0011	P	4.0
2	☐	2.500	2.199	12944.92	0.0023	P	3.3
3	☐	25.000	22.453	76854.02	0.0138	P	3.7
4	☐	50.000	54.402	172900.70	0.0319	P	0.5
5	☐	125.000	130.605	398256.67	0.0751	P	0.9
6	☐	250.000	255.802	768614.03	0.1461	P	0.9
7	☐	500.000	523.143	1494951.42	0.2976	P	0.8
8	☐	1000.000	986.122	2774923.09	0.5601	P	1.0
9	☐			110785.88	0.0251	P	6.2

$$y = 5.6688\text{E-}004 * x + 0.0011$$

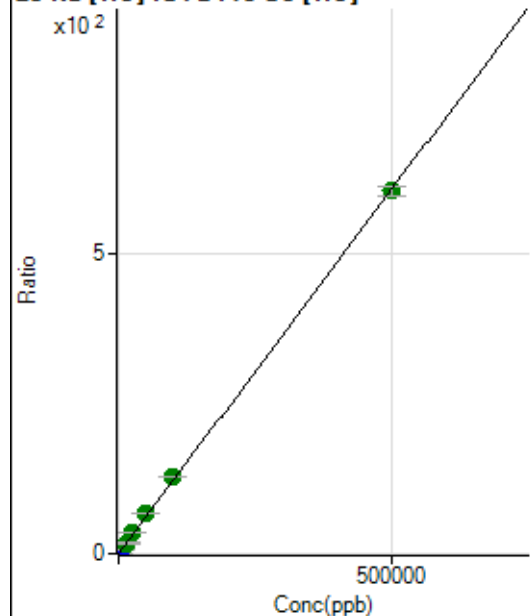
$$R = 0.9996$$

$$DL = 0.2295$$

$$BEC = 1.92$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26823.92	0.0600	P	2.2
2	☐	5.000	58.268	54940.01	0.1305	P	8.7
3	☐	500.000	548.766	311166.52	0.7242	P	5.0
4	☐	5000.000	6019.344	3172158.98	7.3455	P	0.3
5	☐	12500.000	14465.058	7271314.66	17.5679	A	1.4
6	☐	25000.000	28868.907	14377551.85	35.0017	A	0.4
7	☐	50000.000	55847.061	28351220.48	67.6549	A	0.9
8	☐	100000.00	105099.19	53471221.98	127.2676	A	0.4
9	☐	500000.00	498142.64	248475643.2	602.9906	A	2.6

$$y = 0.0012 * x + 0.0600$$

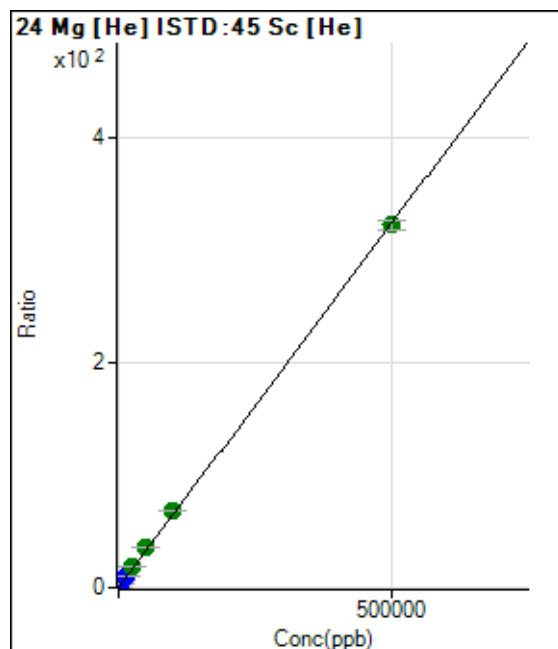
$$R = 0.9999$$

$$DL = 3.243$$

$$BEC = 49.56$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	718.55	0.0016	P	4.2
2	☐	5.000	58.034	16503.84	0.0392	P	9.8
3	☐	500.000	551.234	154214.28	0.3590	P	5.6
4	☐	5000.000	6152.334	1723181.93	3.9902	P	0.2
5	☐	12500.000	14843.198	3983576.57	9.6246	P	1.3
6	☐	25000.000	29223.119	7783163.78	18.9473	A	0.4
7	☐	50000.000	56340.122	15307862.42	36.5276	A	0.1
8	☐	100000.00	105460.21	28727041.31	68.3727	A	0.4
9	☐	500000.00	497992.63	133040491.4	322.8561	A	2.5

$$y = 6.4831\text{E-}004 * x + 0.0016$$

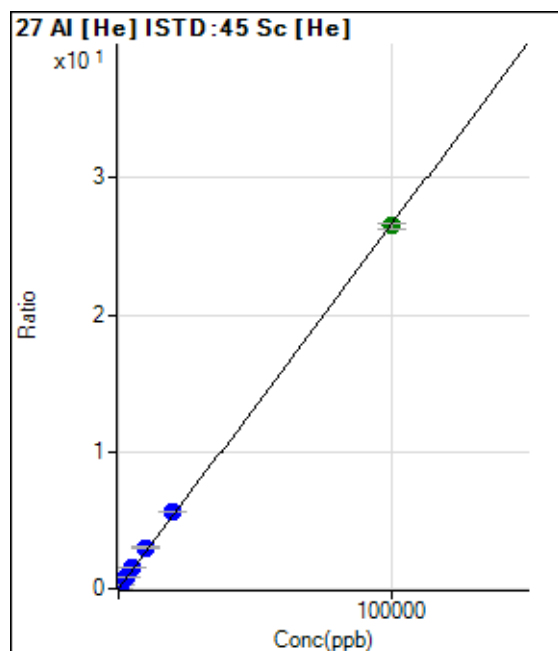
$$R = 0.9999$$

$$DL = 0.3129$$

$$BEC = 2.478$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	62.65	0.0001	P	27.8
2	☐	2.000	2.580	348.61	0.0008	P	5.8
3	☐	20.000	22.083	2581.06	0.0060	P	8.5
4	☐	1000.000	1205.418	138529.08	0.3208	P	0.4
5	☐	2500.000	2959.591	325891.45	0.7874	P	1.7
6	☐	5000.000	5841.468	638333.83	1.5540	P	0.3
7	☐	10000.000	11295.590	1259148.14	3.0048	P	1.1
8	☐	20000.000	20941.593	2340469.93	5.5706	P	0.6
9	☐	100000.00	99626.505	10920762.90	26.5008	A	1.7

$$y = 2.6600\text{E-}004 * x + 1.4033\text{E-}004$$

$$R = 0.9999$$

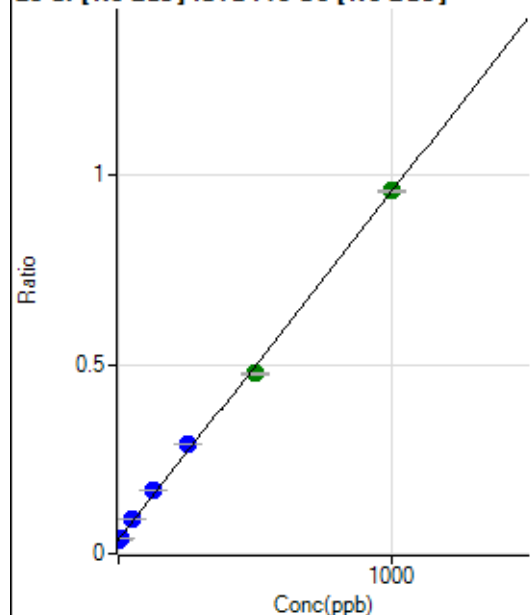
$$DL = 0.4397$$

$$BEC = 0.5276$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	487341.63	0.0369	P	0.9
2	☐	1.000	1.439	518537.26	0.0383	P	2.3
3	☐	10.000	4.488	556480.64	0.0411	P	2.7
4	☐	50.000	59.652	1195648.32	0.0918	P	0.6
5	☐	125.000	141.853	2114483.12	0.1674	P	0.5
6	☐	250.000	274.029	3692763.76	0.2890	P	0.4
7	☐	500.000	477.785	5959180.00	0.4764	A	1.4
8	☐	1000.000	1002.566	11992880.39	0.9591	A	0.9
9	☐			1162951.69	0.1024	P	1.0

$$y = 9.1982\text{E-}004 * x + 0.0369$$

$$R = 0.9992$$

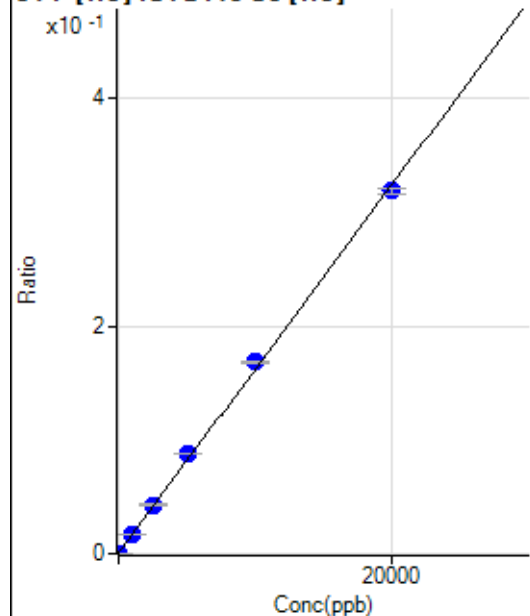
$$DL = 1.114$$

$$BEC = 40.16$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-3.421	188.90	0.0004	P	7.6
2	☐	0.000	2.939	219.45	0.0005	P	21.7
3	☐	0.000	0.482	208.34	0.0005	P	19.6
4	☐	1000.000	1039.925	7457.74	0.0173	P	3.4
5	☐	2500.000	2630.291	17775.09	0.0429	P	0.7
6	☐	5000.000	5387.196	35924.75	0.0875	P	0.6
7	☐	10000.000	10382.180	70450.40	0.1681	P	1.0
8	☐	20000.000	19693.829	133791.70	0.3184	P	1.3
9	☐			233.35	0.0006	P	4.5

$$y = 1.6145\text{E-}005 * x + 4.7779\text{E-}004$$

$$R = 0.9995$$

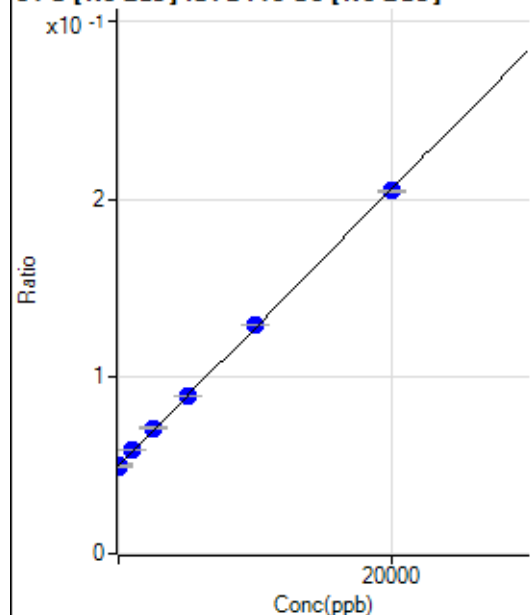
$$DL = 14.91$$

$$BEC = 29.59$$

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	78.998	660649.16	0.0501	P	2.1
2	☐	0.000	-41.323	666018.02	0.0491	P	1.3
3	☐	0.000	-37.675	666265.99	0.0492	P	2.8
4	☐	1000.000	1154.261	761696.24	0.0585	P	0.1
5	☐	2500.000	2728.856	894102.99	0.0708	P	1.7
6	☐	5000.000	5026.274	1134119.87	0.0888	P	0.7
7	☐	10000.000	10217.091	1617865.90	0.1293	P	0.4
8	☐	20000.000	19848.566	2558887.06	0.2046	P	0.4
9	☐			551400.94	0.0485	P	1.2

$$y = 7.8178E-006 * x + 0.0495$$

$$R = 0.9998$$

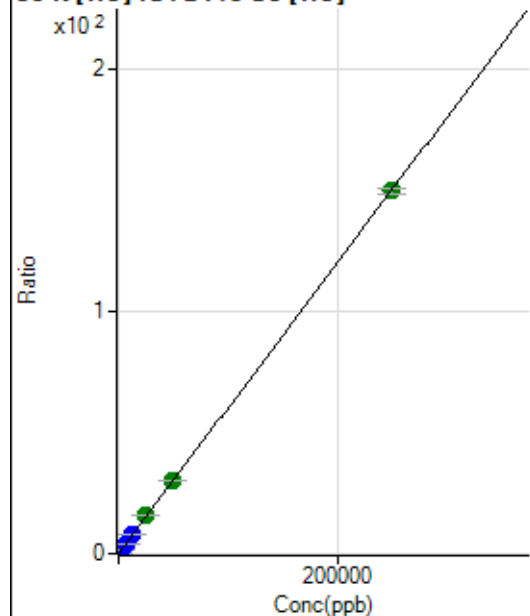
$$DL = 393.4$$

$$BEC = 6327$$

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	24991.40	0.0559	P	1.8
2	☐	5.000	58.485	38278.06	0.0910	P	9.4
3	☐	500.000	515.159	156773.06	0.3649	P	5.2
4	☐	2500.000	2847.456	761708.78	1.7638	P	0.3
5	☐	6250.000	6854.762	1724964.81	4.1675	P	0.6
6	☐	12500.000	13765.382	3414602.88	8.3126	P	0.5
7	☐	25000.000	26559.962	6699333.91	15.9870	A	1.2
8	☐	50000.000	50083.552	12645010.83	30.0968	A	0.6
9	☐	250000.00	249745.39	61755279.56	149.8569	A	1.5

$$y = 5.9982E-004 * x + 0.0559$$

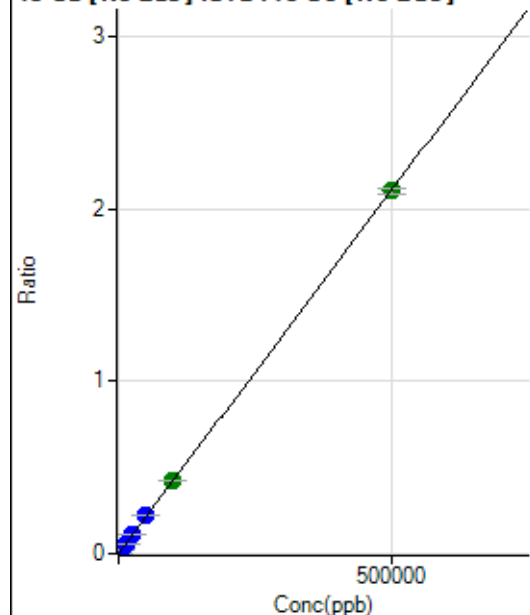
$$R = 1.0000$$

$$DL = 5.148$$

$$BEC = 93.17$$

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	469.25	0.0000	P	7.6
2	☐	5.000	53.878	3564.42	0.0003	P	0.8
3	☐	500.000	474.346	27612.21	0.0020	P	2.5
4	☐	5000.000	5705.092	314059.55	0.0241	P	0.7
5	☐	12500.000	13781.667	735088.89	0.0582	P	1.3
6	☐	25000.000	27100.313	1461968.46	0.1144	P	1.2
7	☐	50000.000	53851.937	2843543.90	0.2273	P	0.5
8	☐	100000.00	101196.75	5341376.55	0.4271	A	0.6
9	☐	500000.00	499231.37	23942899.46	2.1071	A	1.3

$$y = 4.2206\text{E-}006 * x + 3.5566\text{E-}005$$

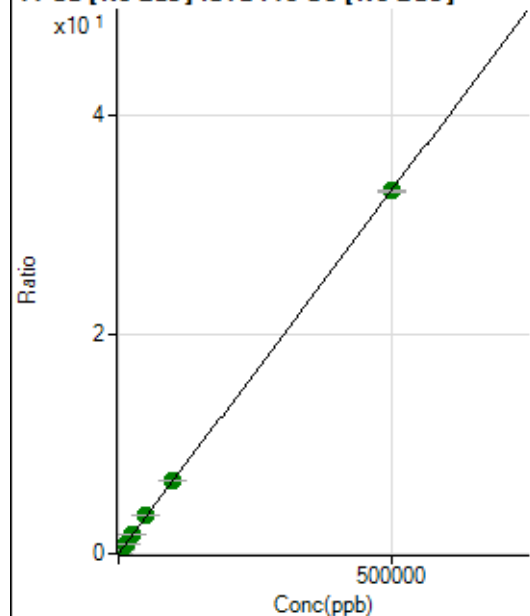
$$R = 1.0000$$

$$DL = 1.915$$

$$BEC = 8.427$$

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	22068.46	0.0017	P	1.7
2	☐	5.000	53.096	70394.09	0.0052	P	2.2
3	☐	500.000	479.213	453252.76	0.0335	P	3.3
4	☐	5000.000	5492.644	4765691.56	0.3659	A	0.7
5	☐	12500.000	13261.629	11128185.95	0.8811	A	1.0
6	☐	25000.000	26149.332	22178789.74	1.7358	A	1.5
7	☐	50000.000	52854.116	43863987.05	3.5067	A	0.7
8	☐	100000.00	99779.943	82762078.90	6.6185	A	0.2
9	☐	500000.00	499677.18	376538227.6	33.1375	A	0.8

$$y = 6.6314\text{E-}005 * x + 0.0017$$

$$R = 1.0000$$

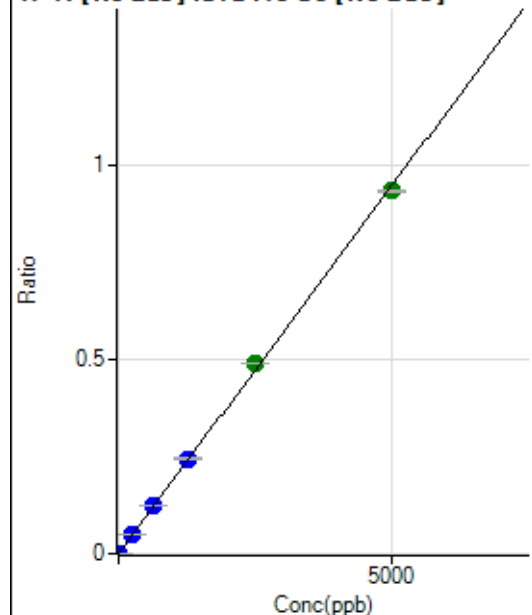
$$DL = 1.31$$

$$BEC = 25.23$$

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	200.01	0.0000	P	34.8
2	☐	0.500	0.455	1372.35	0.0001	P	5.8
3	☐	5.000	4.665	12169.39	0.0009	P	4.3
4	☐	250.000	270.623	667295.09	0.0512	P	0.9
5	☐	625.000	657.646	1572252.18	0.1245	P	1.4
6	☐	1250.000	1289.676	3119260.44	0.2441	P	0.9
7	☐	2500.000	2598.883	6153375.22	0.4919	A	0.3
8	☐	5000.000	4935.528	11681156.94	0.9342	A	0.6
9	☐			3781.20	0.0003	P	3.7

$$y = 1.8927\text{E-}004 * x + 1.5204\text{E-}005$$

$$R = 0.9997$$

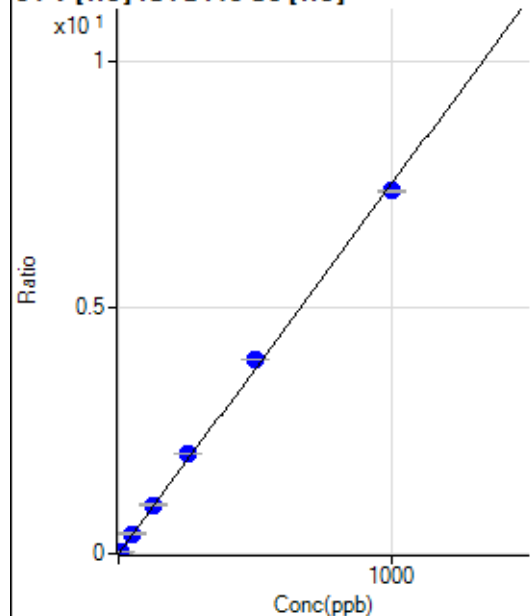
$$DL = 0.08378$$

$$BEC = 0.08033$$

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	10.00	0.0000	P	1.0
2	☐	0.500	0.514	1631.23	0.0039	P	9.4
3	☐	5.000	4.974	16019.99	0.0373	P	7.2
4	☐	50.000	54.544	176593.24	0.4089	P	0.8
5	☐	125.000	132.642	411596.49	0.9944	P	0.2
6	☐	250.000	270.329	832483.88	2.0266	P	0.4
7	☐	500.000	524.163	1646761.87	3.9296	P	0.5
8	☐	1000.000	981.654	3092005.13	7.3593	P	0.4
9	☐			635.58	0.0015	P	5.7

$$y = 0.0075 * x + 2.2361\text{E-}005$$

$$R = 0.9993$$

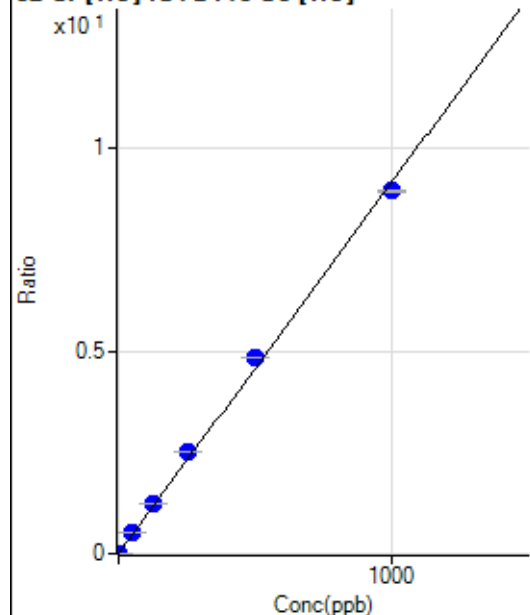
$$DL = 8.566\text{E-}05$$

$$BEC = 0.002983$$

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	677.80	0.0015	P	6.4
2	☐	0.200	0.234	1533.44	0.0037	P	13.9
3	☐	2.000	2.075	8800.53	0.0205	P	6.9
4	☐	50.000	55.937	221546.92	0.5130	P	0.8
5	☐	125.000	136.679	517950.20	1.2513	P	0.3
6	☐	250.000	274.907	1033238.55	2.5153	P	0.5
7	☐	500.000	528.020	2024043.79	4.8299	P	0.5
8	☐	1000.000	978.006	3758054.25	8.9446	P	0.6
9	☐			5944.62	0.0144	P	2.8

$$y = 0.0091 * x + 0.0015$$

$$R = 0.9990$$

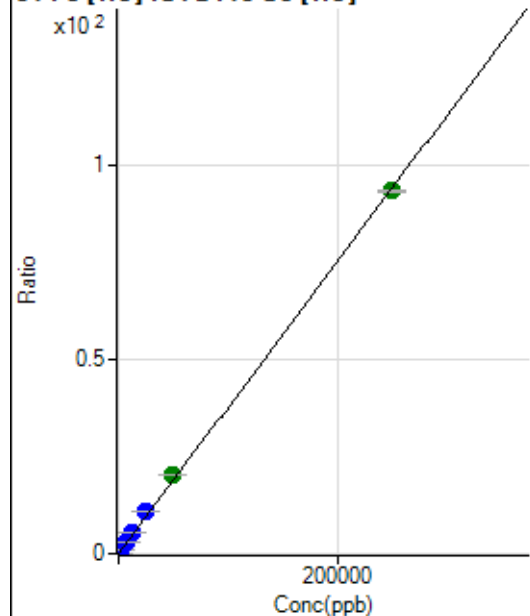
$$DL = 0.03167$$

$$BEC = 0.1658$$

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	699.88	0.0016	P	3.1
2	☐	5.000	6.633	1704.44	0.0041	P	10.2
3	☐	50.000	58.592	10105.52	0.0235	P	6.3
4	☐	2500.000	3108.042	503821.28	1.1667	P	0.7
5	☐	6250.000	7535.975	1169947.99	2.8265	P	0.3
6	☐	12500.000	15085.644	2323625.68	5.6566	P	0.2
7	☐	25000.000	28635.177	4499047.29	10.7359	P	0.5
8	☐	50000.000	53707.150	8459380.68	20.1345	A	0.7
9	☐	250000.00	248727.53	38425533.28	93.2407	A	0.9

$$y = 3.7486E-004 * x + 0.0016$$

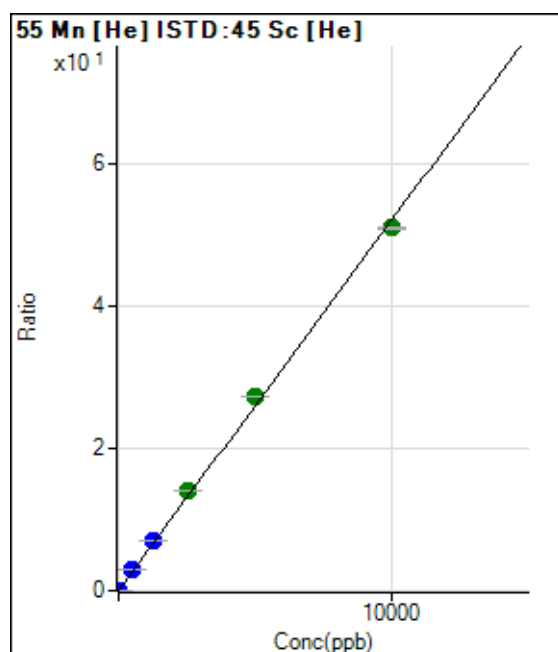
$$R = 0.9998$$

$$DL = 0.3821$$

$$BEC = 4.175$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	463.35	0.0010	P	6.3
2	☒	0.100					
3	☐	1.000	1.047	2786.97	0.0065	P	3.5
4	☐	500.000	559.851	1257367.33	2.9116	P	0.3
5	☐	1250.000	1364.569	2936773.40	7.0951	P	0.1
6	☐	2500.000	2720.759	5810608.45	14.1456	A	0.3
7	☐	5000.000	5253.305	11445449.55	27.3118	A	0.5
8	☐	10000.000	9800.844	21407820.65	50.9534	A	0.7
9	☐			13989.04	0.0339	P	0.4

$$y = 0.0052 * x + 0.0010$$

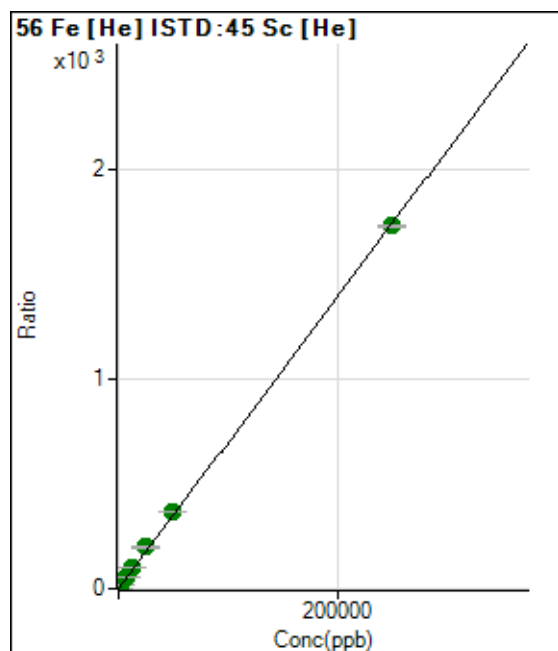
$$R = 0.9992$$

$$DL = 0.03738$$

$$BEC = 0.1993$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6378.83	0.0143	P	4.3
2	☒	5.000					
3	☐	50.000	56.342	174553.33	0.4063	P	5.6
4	☐	2500.000	2964.026	8913288.46	20.6396	A	0.9
5	☐	6250.000	7324.060	21100432.88	50.9790	A	0.6
6	☐	12500.000	14681.943	41971428.65	102.1791	A	0.8
7	☐	25000.000	28396.028	82809565.34	197.6091	A	0.8
8	☐	50000.000	52798.168	154369610.2	367.4123	A	0.3
9	☐	250000.00	248960.17	713982689.1	1,732.413	A	0.5

$$y = 0.0070 * x + 0.0143$$

$$R = 0.9999$$

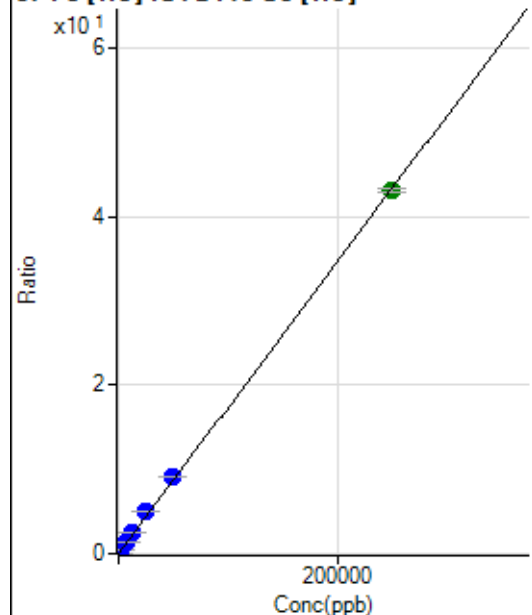
$$DL = 0.266$$

$$BEC = 2.05$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	290.61	0.0007	P	6.3
2	☒	5.000					
3	☐	50.000	59.100	4673.18	0.0109	P	6.3
4	☐	2500.000	3031.698	226912.11	0.5254	P	0.2
5	☐	6250.000	7522.436	539233.51	1.3028	P	0.5
6	☐	12500.000	14911.577	1060549.46	2.5819	P	0.3
7	☐	25000.000	28660.700	2079395.14	4.9618	P	0.1
8	☐	50000.000	52798.957	3840227.99	9.1402	P	0.5
9	☐	250000.00	248916.43	17756832.04	43.0883	A	1.1

$$y = 1.7310\text{E-}004 * x + 6.5007\text{E-}004$$

$$R = 0.9998$$

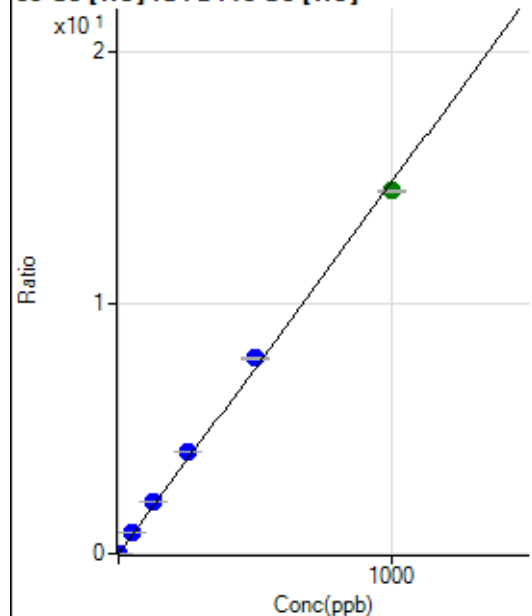
$$DL = 0.712$$

$$BEC = 3.755$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	107.78	0.0002	P	9.2
2	☐	0.100	0.100	725.59	0.0017	P	10.1
3	☐	1.000	1.064	6875.05	0.0160	P	6.3
4	☐	50.000	57.056	365052.78	0.8453	P	0.9
5	☐	125.000	139.974	858225.74	2.0735	P	0.3
6	☐	250.000	276.748	1683860.98	4.0993	P	0.3
7	☐	500.000	526.786	3269838.28	7.8027	P	0.5
8	☐	1000.000	977.695	6084197.34	14.4813	A	0.8
9	☐			9669.98	0.0235	P	1.2

$$y = 0.0148 * x + 2.4089\text{E-}004$$

$$R = 0.9990$$

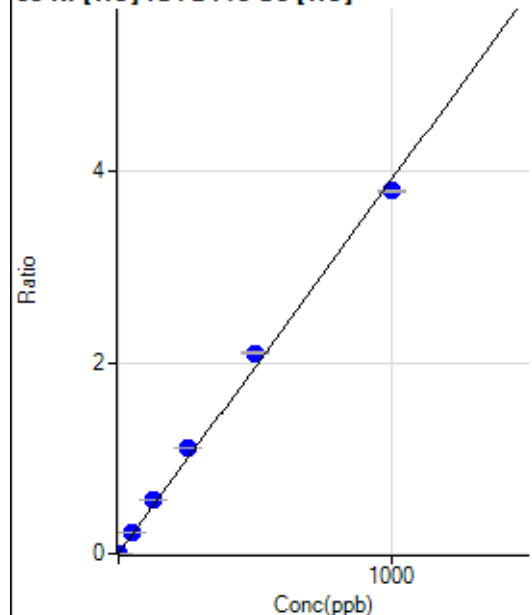
$$DL = 0.004478$$

$$BEC = 0.01626$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	198.89	0.0004	P	13.0
2	☐	0.100	0.103	355.56	0.0008	P	24.0
3	☐	1.000	1.120	2069.07	0.0048	P	10.0
4	☐	50.000	58.205	98447.38	0.2280	P	0.6
5	☐	125.000	142.125	230137.39	0.5560	P	0.7
6	☐	250.000	281.828	452712.13	1.1021	P	0.6
7	☐	500.000	537.177	880156.82	2.1003	P	0.4
8	☐	1000.000	970.904	1594771.10	3.7957	P	0.3
9	☐			2286.89	0.0056	P	6.2

$$y = 0.0039 * x + 4.4476E-004$$

$$R = 0.9983$$

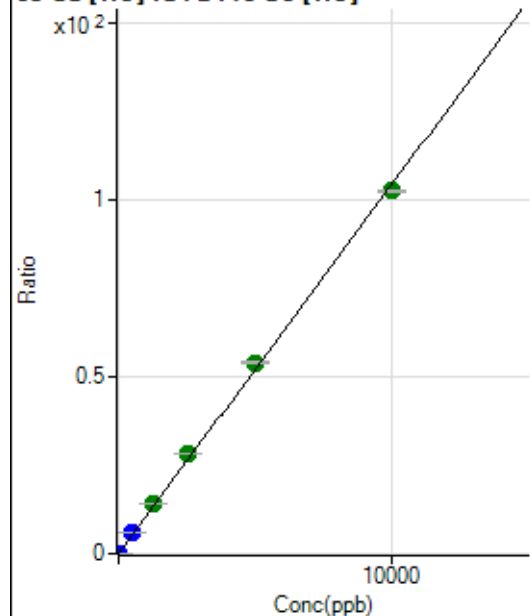
$$DL = 0.04449$$

$$BEC = 0.1138$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	604.47	0.0014	P	6.3
2	☐	0.200	0.255	1687.90	0.0040	P	9.3
3	☐	2.000	2.368	11179.97	0.0260	P	5.4
4	☐	500.000	569.652	2563476.02	5.9360	P	0.2
5	☐	1250.000	1362.689	5876567.83	14.1979	A	0.7
6	☐	2500.000	2706.338	11582359.14	28.1961	A	0.3
7	☐	5000.000	5185.803	22641344.66	54.0272	A	0.3
8	☐	10000.000	9837.945	43062011.58	102.4933	A	0.6
9	☐			8151.27	0.0198	P	0.7

$$y = 0.0104 * x + 0.0014$$

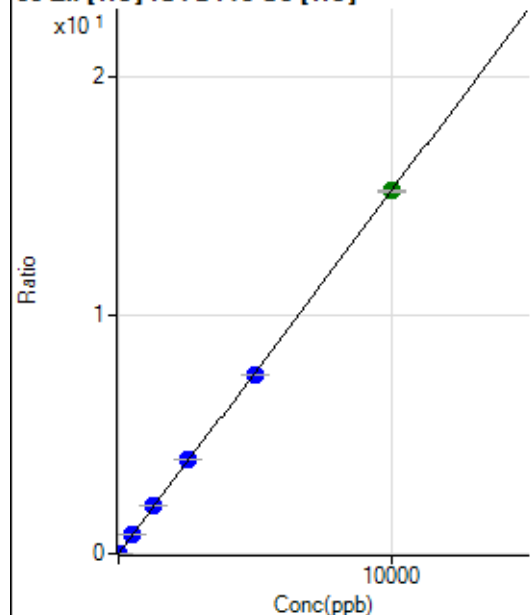
$$R = 0.9995$$

$$DL = 0.02442$$

$$BEC = 0.1297$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	687.81	0.0015	P	6.2
2	☐	0.200	0.197	775.59	0.0018	P	5.4
3	☐	2.000	2.411	2241.33	0.0052	P	4.5
4	☐	500.000	540.695	356459.92	0.8254	P	0.8
5	☐	1250.000	1323.526	835364.84	2.0183	P	0.7
6	☐	2500.000	2606.025	1631777.91	3.9725	P	0.3
7	☐	5000.000	4928.264	3147557.07	7.5110	P	0.7
8	☐	10000.000	9998.136	6401494.07	15.2362	A	0.4
9	☐			5441.11	0.0132	P	0.8

$$y = 0.0015 * x + 0.0015$$

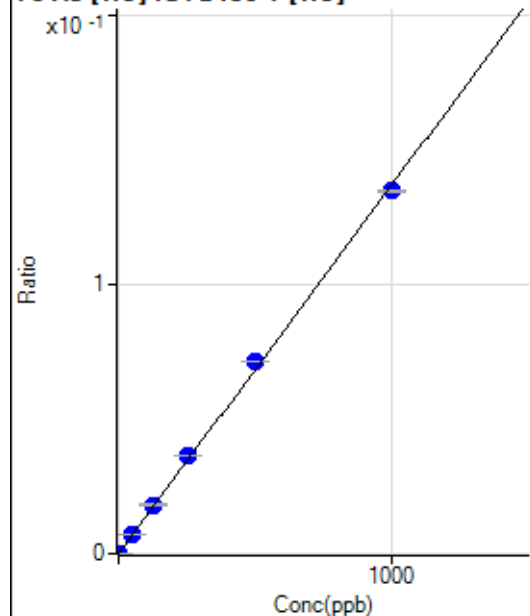
$$R = 0.9999$$

$$DL = 0.1888$$

$$BEC = 1.01$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.69	0.0000	P	24.0
2	☐	0.100	0.109	64.20	0.0000	P	17.9
3	☐	1.000	0.927	379.64	0.0001	P	1.6
4	☐	50.000	54.544	21036.29	0.0075	P	0.4
5	☐	125.000	132.443	49354.41	0.0181	P	1.6
6	☐	250.000	264.836	98910.38	0.0362	P	0.6
7	☐	500.000	520.101	196396.86	0.0711	P	0.2
8	☐	1000.000	985.083	370316.67	0.1347	P	0.2
9	☐			166.67	0.0001	P	9.9

$$y = 1.3673E-004 * x + 8.5789E-006$$

$$R = 0.9996$$

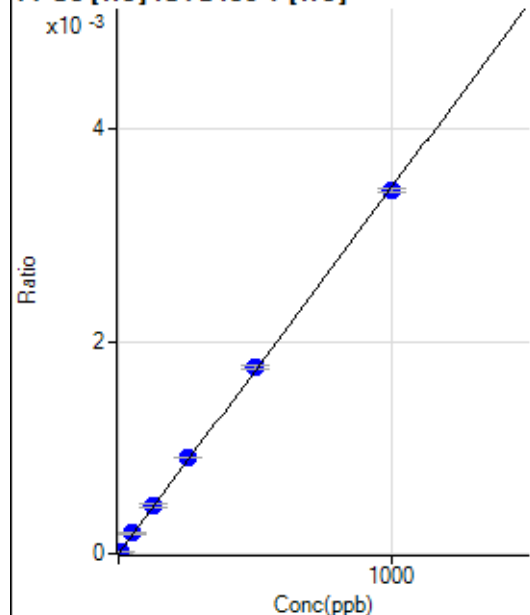
$$DL = 0.04518$$

$$BEC = 0.06274$$

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	0.00	0.0000	P	
2	☐	0.500	0.468	4.44	0.0000	P	110.
3	☐	5.000	5.163	50.00	0.0000	P	23.9
4	☐	50.000	55.409	538.91	0.0002	P	1.0
5	☐	125.000	132.249	1243.41	0.0005	P	7.2
6	☐	250.000	262.625	2475.81	0.0009	P	0.4
7	☐	500.000	509.964	4860.88	0.0018	P	2.5
8	☐	1000.000	990.684	9402.09	0.0034	P	1.0
9	☐			1.11	0.0000	P	173.

$$y = 3.4522\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

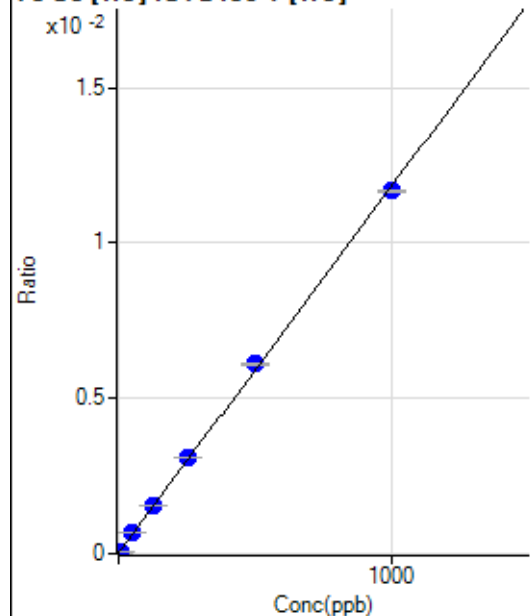
$$DL = 0$$

$$BEC = 0$$

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	52.47	0.0000	P	19.0
2	☐	0.500	0.413	63.58	0.0000	P	11.7
3	☐	5.000	4.405	196.92	0.0001	P	6.4
4	☐	50.000	54.666	1868.65	0.0007	P	2.2
5	☐	125.000	131.459	4275.98	0.0016	P	0.8
6	☐	250.000	261.905	8490.20	0.0031	P	0.6
7	☐	500.000	516.322	16876.58	0.0061	P	1.3
8	☐	1000.000	987.825	32099.06	0.0117	P	0.6
9	☐			57.41	0.0000	P	5.1

$$y = 1.1801\text{E-}005 * x + 1.8187\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.8773$$

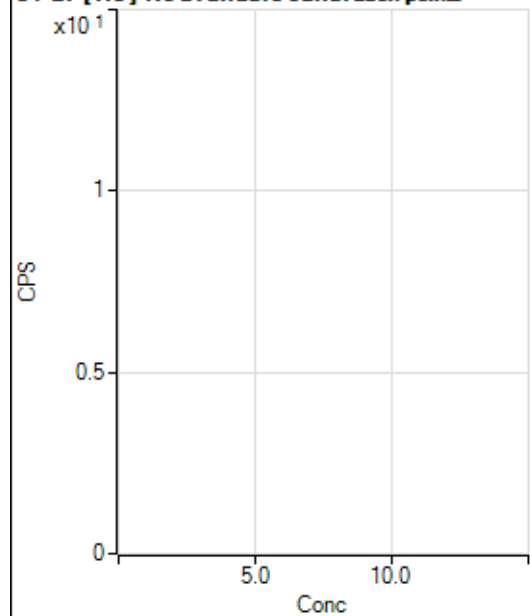
$$BEC = 1.541$$

Weight: <None>

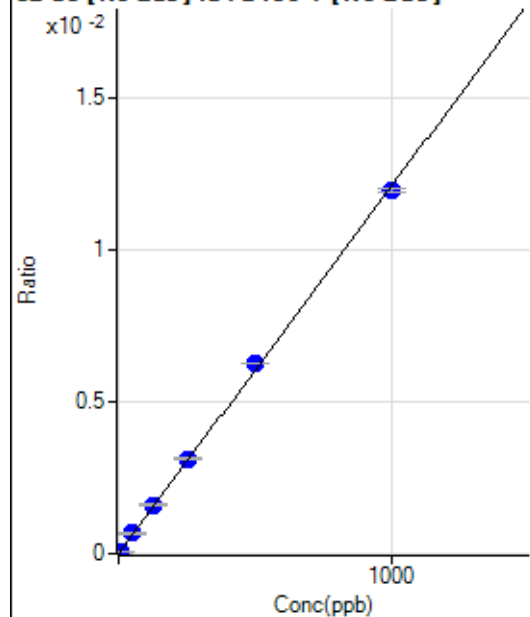
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			49264.92		P	0.8
2	☐			49727.01		P	0.4
3	☐			48912.89		P	1.3
4	☐			47737.60		P	1.6
5	☐			47159.03		P	0.5
6	☐			46834.51		P	2.5
7	☐			45100.09		P	0.2
8	☐			45873.44		P	2.1
9	☐			43801.64		P	0.2

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			76.75		P	41.9
2	☐			96.77		P	48.9
3	☐			26.69		P	21.7
4	☐			66.73		P	37.7
5	☐			63.40		P	39.7
6	☐			63.40		P	63.8
7	☐			33.37		P	34.6
8	☐			53.39		P	43.3
9	☐			66.73		P	31.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.24	0.0000	P	95.5
2	☐	0.500	0.411	162.35	0.0000	P	27.9
3	☐	5.000	4.557	1521.31	0.0001	P	3.4
4	☐	50.000	54.936	17322.24	0.0007	P	0.5
5	☐	125.000	132.918	41113.11	0.0016	P	1.3
6	☐	250.000	258.664	81255.69	0.0031	P	2.8
7	☐	500.000	518.060	159294.72	0.0063	P	0.9
8	☐	1000.000	987.570	306709.49	0.0119	P	0.9
9	☐			287.37	0.0000	P	28.1

$$y = 1.2096E-005 * x + 1.0233E-006$$

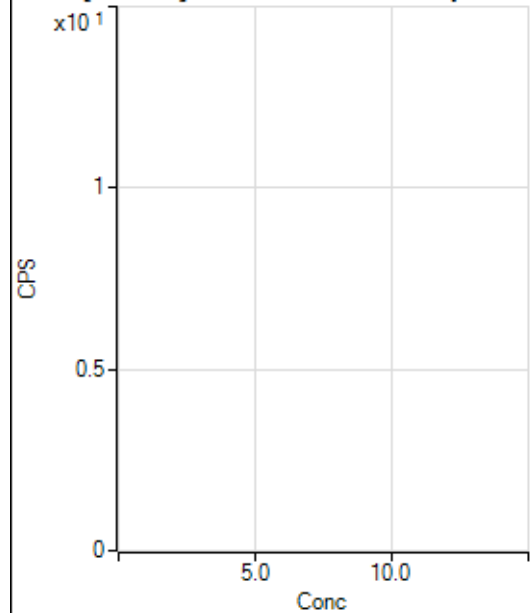
$$R = 0.9997$$

$$DL = 0.2425$$

$$BEC = 0.0846$$

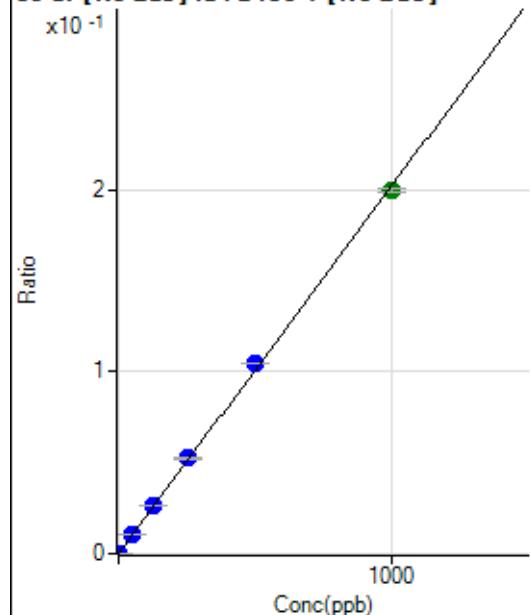
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			371.13		P	10.5
2	☐			416.68		P	4.8
3	☐			361.12		P	6.1
4	☐			387.79		P	2.2
5	☐			371.12		P	1.9
6	☐			437.79		P	1.2
7	☐			401.13		P	2.7
8	☐			406.68		P	8.1
9	☐			423.35		P	14.4

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	688.93	0.0000	P	6.8
2	☐	0.100	0.097	1236.21	0.0000	P	10.6
3	☐	1.000	0.928	5779.20	0.0002	P	2.4
4	☐	50.000	54.478	286758.20	0.0110	P	1.2
5	☐	125.000	131.715	679768.79	0.0266	P	1.2
6	☐	250.000	261.004	1367968.27	0.0527	P	1.9
7	☐	500.000	517.959	2656781.74	0.1045	P	0.4
8	☐	1000.000	987.207	5114394.13	0.1992	A	0.9
9	☐			25812.88	0.0011	P	1.8

$$y = 2.0175E-004 * x + 2.6037E-005$$

$$R = 0.9997$$

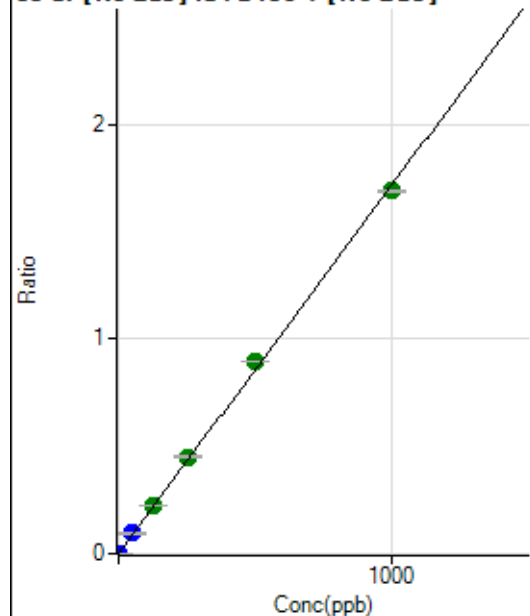
$$DL = 0.02622$$

$$BEC = 0.1291$$

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	336.13	0.0000	P	13.3
2	☐	0.100	0.108	5345.66	0.0002	P	3.2
3	☐	1.000	0.971	45431.33	0.0017	P	2.5
4	☐	50.000	54.963	2452312.90	0.0942	P	0.7
5	☐	125.000	131.325	5752721.27	0.2251	A	0.4
6	☐	250.000	262.009	11660165.62	0.4491	A	2.4
7	☐	500.000	520.911	22694045.47	0.8928	A	0.4
8	☐	1000.000	985.503	43367979.44	1.6891	A	0.7
9	☐			217222.57	0.0097	P	0.6

$$y = 0.0017 * x + 1.2699E-005$$

$$R = 0.9996$$

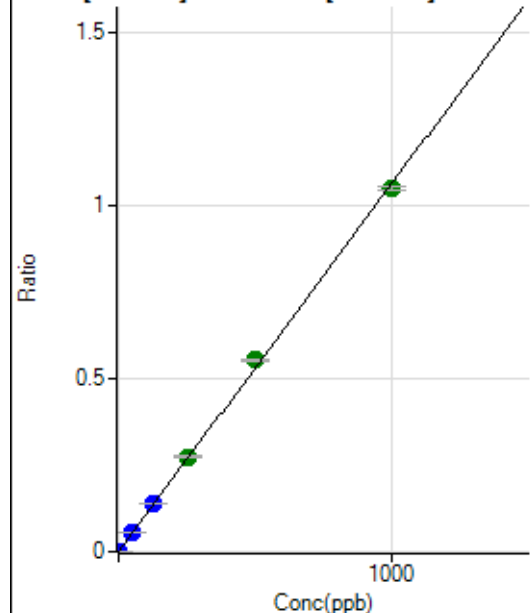
$$DL = 0.00295$$

$$BEC = 0.007409$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1672.39	0.0001	P	13.9
2	☐	0.100	0.121	5178.96	0.0002	P	2.2
3	☐	1.000	0.845	25988.32	0.0010	P	5.4
4	☐	50.000	53.539	1480081.50	0.0569	P	0.6
5	☐	125.000	129.732	3518850.08	0.1377	P	1.0
6	☐	250.000	258.167	7112789.22	0.2740	A	2.6
7	☐	500.000	521.014	14050917.68	0.5528	A	0.3
8	☐	1000.000	986.683	26876020.22	1.0468	A	1.0
9	☐			10070.61	0.0004	P	9.4

$$y = 0.0011 * x + 6.3211E-005$$

$$R = 0.9996$$

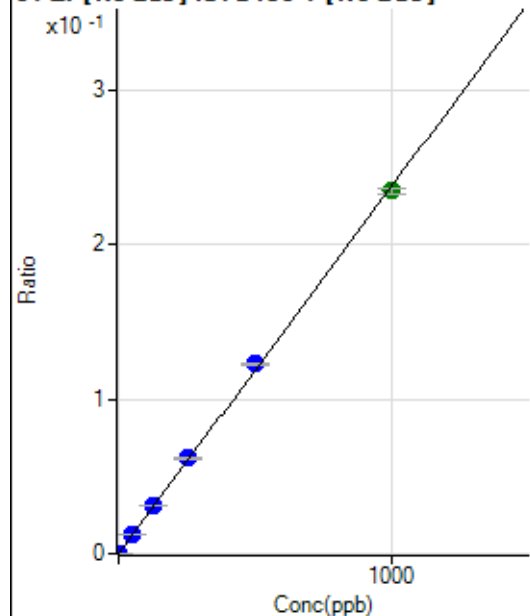
$$DL = 0.02493$$

$$BEC = 0.05958$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0000	P	15.0
2	☐	0.100	0.111	1033.42	0.0000	P	10.1
3	☐	1.000	0.866	5893.11	0.0002	P	3.2
4	☐	50.000	53.984	333979.89	0.0128	P	0.8
5	☐	125.000	131.990	801309.33	0.0314	P	0.8
6	☐	250.000	259.693	1601488.34	0.0617	P	2.5
7	☐	500.000	516.510	3117865.09	0.1227	P	0.5
8	☐	1000.000	988.249	6025357.51	0.2347	A	1.2
9	☐			2219.72	0.0001	P	14.0

$$y = 2.3747E-004 * x + 1.1769E-005$$

$$R = 0.9997$$

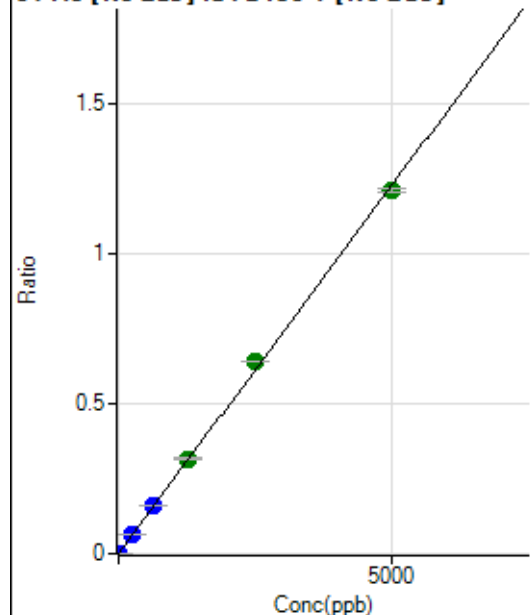
$$DL = 0.02237$$

$$BEC = 0.04956$$

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	675.04	0.0000	P	4.9
2	☐	0.500	0.505	4047.97	0.0001	P	4.6
3	☐	5.000	4.461	30363.89	0.0011	P	3.1
4	☐	250.000	270.952	1731667.07	0.0665	P	0.1
5	☐	625.000	651.310	4085843.32	0.1599	P	0.9
6	☐	1250.000	1288.322	8210230.74	0.3162	A	2.8
7	☐	2500.000	2610.750	16287555.75	0.6408	A	0.4
8	☐	5000.000	4930.709	31070958.68	1.2102	A	1.0
9	☐			12177.89	0.0005	P	1.9

$$y = 2.4544\text{E-}004 * x + 2.5517\text{E-}005$$

$$R = 0.9996$$

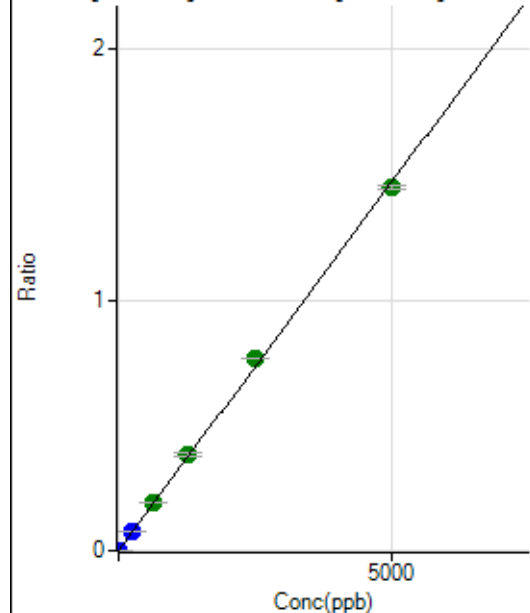
$$DL = 0.01513$$

$$BEC = 0.104$$

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	116.67	0.0000	P	30.9
2	☐	0.500	0.505	4131.32	0.0002	P	0.7
3	☐	5.000	4.763	38037.88	0.0014	P	3.4
4	☐	250.000	272.918	2087387.51	0.0802	P	0.3
5	☐	625.000	657.304	4935693.43	0.1931	A	0.9
6	☐	1250.000	1302.534	9936503.35	0.3827	A	2.8
7	☐	2500.000	2611.505	19503335.33	0.7673	A	0.7
8	☐	5000.000	4925.930	37159474.44	1.4474	A	1.0
9	☐			14524.59	0.0006	P	1.3

$$y = 2.9383\text{E-}004 * x + 4.4087\text{E-}006$$

$$R = 0.9996$$

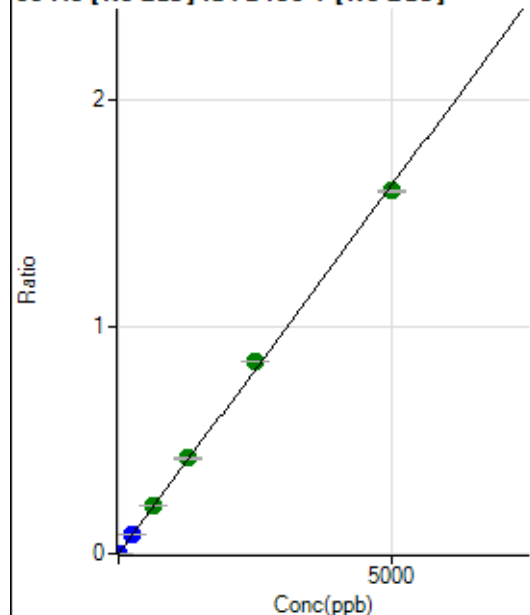
$$DL = 0.01389$$

$$BEC = 0.015$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	308.35	0.0000	P	16.1
2	☐	0.500	0.488	4609.27	0.0002	P	2.4
3	☐	5.000	4.819	42723.38	0.0016	P	4.4
4	☐	250.000	271.664	2297453.16	0.0883	P	0.1
5	☐	625.000	655.928	5445637.10	0.2131	A	1.3
6	☐	1250.000	1298.605	10953926.29	0.4219	A	2.1
7	☐	2500.000	2608.633	21539828.95	0.8475	A	0.5
8	☐	5000.000	4928.583	41107534.25	1.6011	A	0.2
9	☐			33663.12	0.0015	P	1.9

$$y = 3.2486\text{E-}004 * x + 1.1647\text{E-}005$$

$$R = 0.9996$$

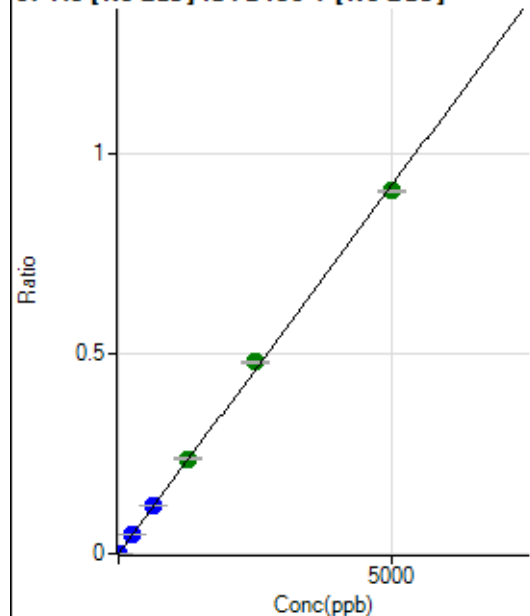
$$DL = 0.01727$$

$$BEC = 0.03585$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0000	P	37.0
2	☐	0.500	0.482	2472.55	0.0001	P	2.0
3	☐	5.000	4.667	23325.40	0.0009	P	4.2
4	☐	250.000	271.715	1301051.71	0.0500	P	0.9
5	☐	625.000	653.109	3070279.02	0.1201	P	1.4
6	☐	1250.000	1289.092	6156991.02	0.2371	A	2.4
7	☐	2500.000	2608.540	12196508.87	0.4799	A	0.6
8	☐	5000.000	4931.358	23290333.85	0.9071	A	0.5
9	☐			8967.09	0.0004	P	3.6

$$y = 1.8395\text{E-}004 * x + 2.6299\text{E-}006$$

$$R = 0.9996$$

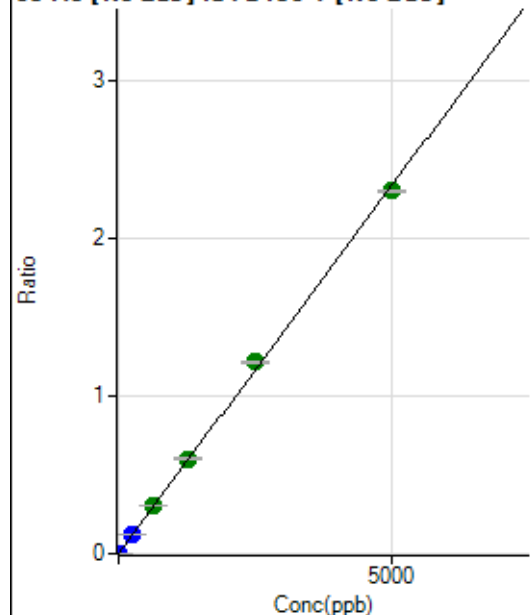
$$DL = 0.01586$$

$$BEC = 0.0143$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.12	0.0000	P	18.4
2	☐	0.500	0.483	6262.72	0.0002	P	1.4
3	☐	5.000	4.766	60351.17	0.0022	P	2.4
4	☐	250.000	271.479	3293140.74	0.1265	P	1.0
5	☐	625.000	649.504	7735522.22	0.3027	A	1.1
6	☐	1250.000	1291.228	15623343.75	0.6018	A	2.9
7	☐	2500.000	2603.756	30842016.66	1.2135	A	1.2
8	☐	5000.000	4933.678	59032232.57	2.2993	A	0.4
9	☐			21689.48	0.0010	P	1.9

$$y = 4.6604\text{E-}004 * x + 6.0946\text{E-}006$$

$$R = 0.9997$$

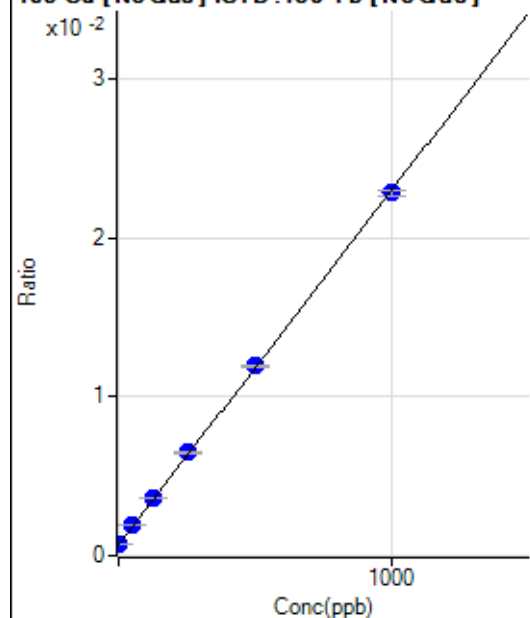
$$DL = 0.007217$$

$$BEC = 0.01308$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14488.62	0.0007	P	1.3
2	☐	0.100	0.945	15559.12	0.0007	P	2.6
3	☐	1.000	2.197	16226.58	0.0007	P	1.2
4	☐	50.000	54.372	41397.77	0.0019	P	0.2
5	☐	125.000	133.834	79221.76	0.0037	P	1.7
6	☐	250.000	260.625	143635.26	0.0065	P	1.5
7	☐	500.000	505.713	259726.46	0.0120	P	1.0
8	☐	1000.000	993.163	492944.80	0.0229	P	1.5
9	☐			13039.88	0.0007	P	2.0

$$y = 2.2332\text{E-}005 * x + 6.7333\text{E-}004$$

$$R = 0.9999$$

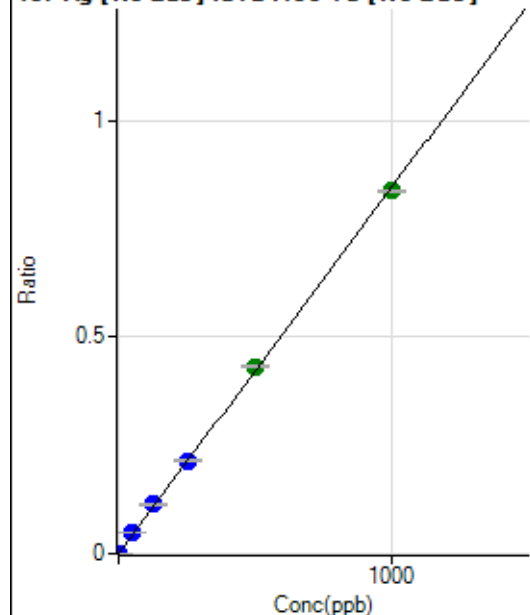
$$DL = 1.17$$

$$BEC = 30.15$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.25	0.0000	P	5.6
2	☐	0.100	0.098	2355.85	0.0001	P	6.1
3	☐	1.000	0.970	18899.40	0.0008	P	2.9
4	☐	50.000	56.573	1049156.47	0.0478	P	0.3
5	☐	125.000	134.458	2459062.69	0.1137	P	1.5
6	☐	250.000	254.495	4758400.28	0.2151	P	1.6
7	☐	500.000	511.949	9391966.61	0.4327	A	0.5
8	☐	1000.000	991.391	18074945.37	0.8379	A	0.9
9	☐			4614.82	0.0002	P	2.7

$$y = 8.4520\text{E-}004 * x + 2.1948\text{E-}005$$

$$R = 0.9998$$

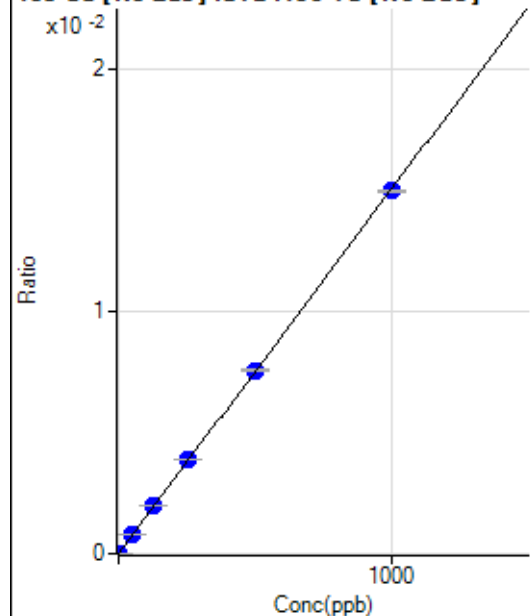
$$DL = 0.004395$$

$$BEC = 0.02597$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	9.9
2	☐	0.100	0.057	62.50	0.0000	P	22.8
3	☐	1.000	0.836	325.01	0.0000	P	17.7
4	☐	50.000	54.540	18008.98	0.0008	P	0.5
5	☐	125.000	130.634	42490.25	0.0020	P	1.7
6	☐	250.000	257.653	85648.45	0.0039	P	0.8
7	☐	500.000	503.522	164186.70	0.0076	P	1.1
8	☐	1000.000	995.395	322548.34	0.0150	P	0.5
9	☐			387.51	0.0000	P	12.1

$$y = 1.5020\text{E-}005 * x + 1.9363\text{E-}006$$

$$R = 0.9999$$

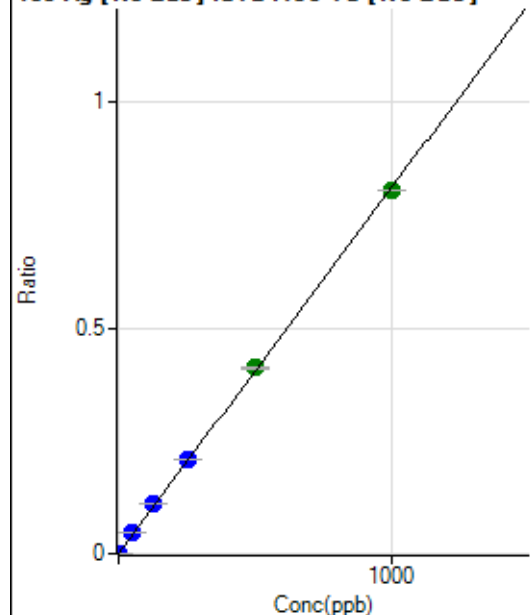
$$DL = 0.03832$$

$$BEC = 0.1289$$

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	263.91	0.0000	P	7.1
2	☐	0.100	0.099	2066.91	0.0001	P	4.5
3	☐	1.000	0.984	18198.45	0.0008	P	2.4
4	☐	50.000	56.828	1011278.39	0.0461	P	0.2
5	☐	125.000	134.999	2369444.33	0.1095	P	0.9
6	☐	250.000	258.415	4637123.50	0.2096	P	0.5
7	☐	500.000	509.545	8971169.99	0.4133	A	1.1
8	☐	1000.000	991.532	17350005.60	0.8043	A	0.1
9	☐			4509.25	0.0002	P	2.8

$$y = 8.1118\text{E-}004 * x + 1.2268\text{E-}005$$

$$R = 0.9999$$

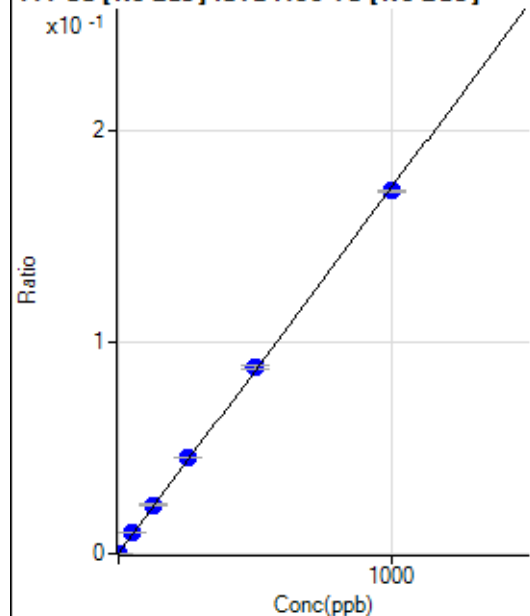
$$DL = 0.003206$$

$$BEC = 0.01512$$

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	2883.83	0.0001	P	1.2
2	☐	0.100	0.126	3491.70	0.0002	P	3.3
3	☐	1.000	0.973	6794.78	0.0003	P	1.5
4	☐	50.000	55.622	214282.67	0.0098	P	0.6
5	☐	125.000	132.863	500829.42	0.0232	P	2.0
6	☐	250.000	261.549	1005290.19	0.0454	P	0.6
7	☐	500.000	509.376	1918116.64	0.0884	P	1.9
8	☐	1000.000	991.161	3706929.85	0.1719	P	0.7
9	☐			3674.31	0.0002	P	1.7

$$y = 1.7325\text{E-}004 * x + 1.3402\text{E-}004$$

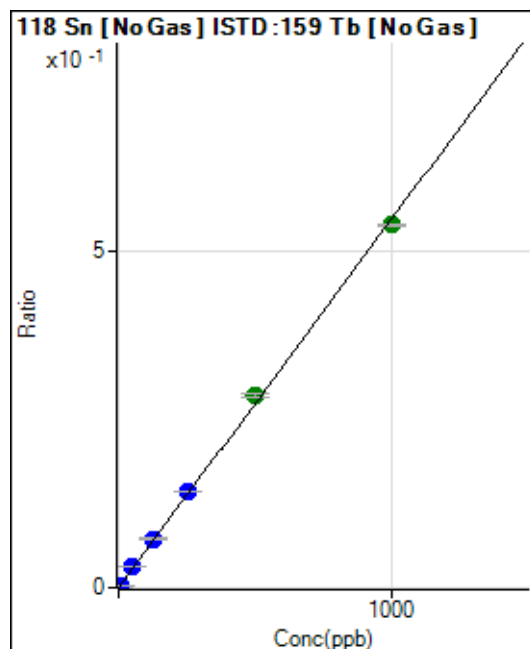
$$R = 0.9998$$

$$DL = 0.02805$$

$$BEC = 0.7736$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1183.44	0.0001	P	7.8
2	☐	0.500	0.477	7093.76	0.0003	P	4.2
3	☐	5.000	4.759	59820.06	0.0027	P	3.8
4	☐	50.000	55.519	668737.88	0.0305	P	0.3
5	☐	125.000	132.940	1577925.94	0.0729	P	0.9
6	☐	250.000	261.063	3167087.20	0.1432	P	0.3
7	☐	500.000	522.493	6217932.73	0.2865	A	1.5
8	☐	1000.000	984.721	11646009.03	0.5399	A	0.3
9	☐			5398.51	0.0003	P	3.3

$$y = 5.4822\text{E-}004 * x + 5.4995\text{E-}005$$

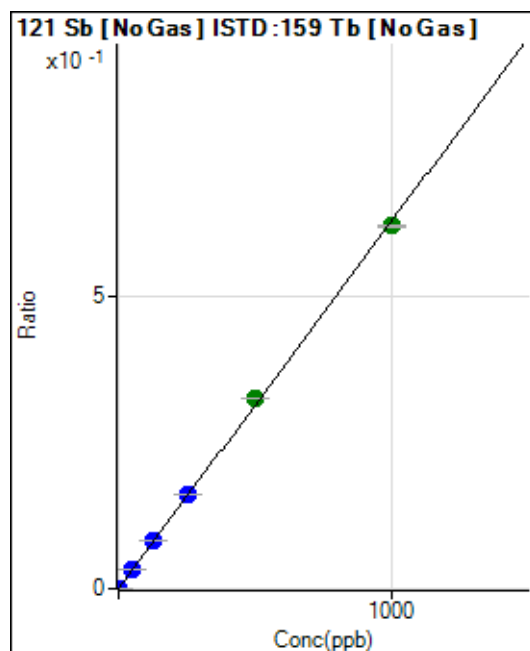
$$R = 0.9996$$

$$DL = 0.02344$$

$$BEC = 0.1003$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	62.4
2	☐	0.200	0.169	2536.45	0.0001	P	3.7
3	☐	2.000	1.846	26169.73	0.0012	P	2.0
4	☐	50.000	54.253	746479.07	0.0340	P	0.6
5	☐	125.000	131.163	1779874.89	0.0823	P	1.8
6	☐	250.000	256.805	3563224.17	0.1611	P	0.6
7	☐	500.000	519.146	7067746.34	0.3256	A	0.5
8	☐	1000.000	987.743	13364492.74	0.6196	A	0.8
9	☐			13609.91	0.0007	P	8.5

$$y = 6.2724\text{E-}004 * x + 7.1089\text{E-}006$$

$$R = 0.9997$$

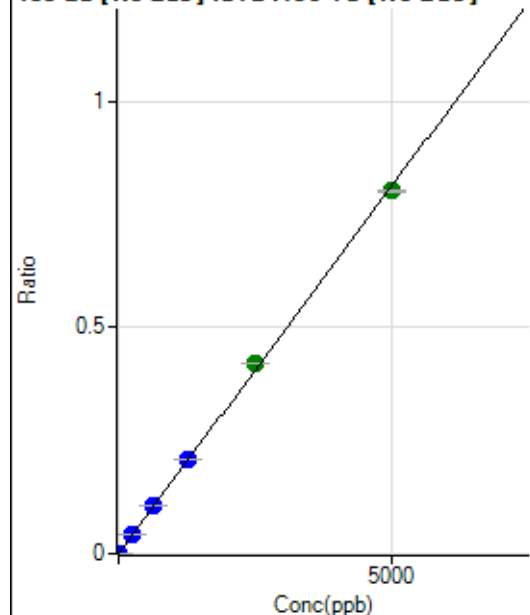
$$DL = 0.02123$$

$$BEC = 0.01133$$

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	100.00	0.0000	P	25.5
2	☐	1.000	0.943	3536.70	0.0002	P	3.0
3	☐	10.000	9.428	34485.38	0.0015	P	4.4
4	☐	250.000	273.098	972904.61	0.0444	P	0.4
5	☐	625.000	661.040	2322832.47	0.1074	P	1.2
6	☐	1250.000	1282.957	4609342.25	0.2084	P	1.0
7	☐	2500.000	2592.811	9140411.14	0.4211	A	0.1
8	☐	5000.000	4939.697	17306456.98	0.8023	A	0.3
9	☐			27789.63	0.0015	P	1.4

$$y = 1.6242\text{E-}004 * x + 4.6520\text{E-}006$$

$$R = 0.9997$$

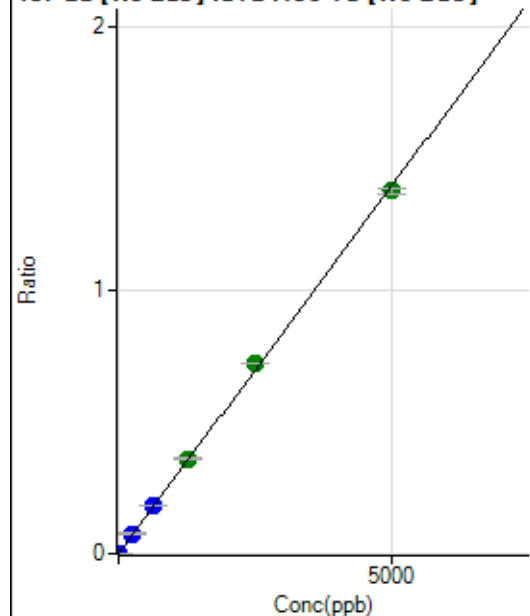
$$DL = 0.02192$$

$$BEC = 0.02864$$

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	175.01	0.0000	P	4.7
2	☐	1.000	0.933	6012.68	0.0003	P	0.7
3	☐	10.000	9.470	59528.87	0.0027	P	3.0
4	☐	250.000	274.582	1680693.59	0.0766	P	0.8
5	☐	625.000	657.543	3969783.20	0.1835	P	1.4
6	☐	1250.000	1294.236	7989348.70	0.3612	A	0.2
7	☐	2500.000	2594.027	15711478.47	0.7239	A	0.7
8	☐	5000.000	4936.632	29718262.82	1.3776	A	1.5
9	☐			47657.61	0.0025	P	0.7

$$y = 2.7906\text{E-}004 * x + 8.1334\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.004085$$

$$BEC = 0.02915$$

Weight: <None>

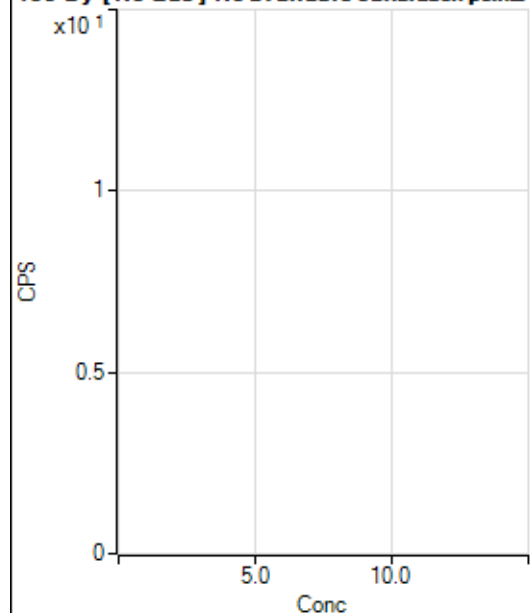
Min Conc: 0

150 Nd [No Gas] No available calibration points

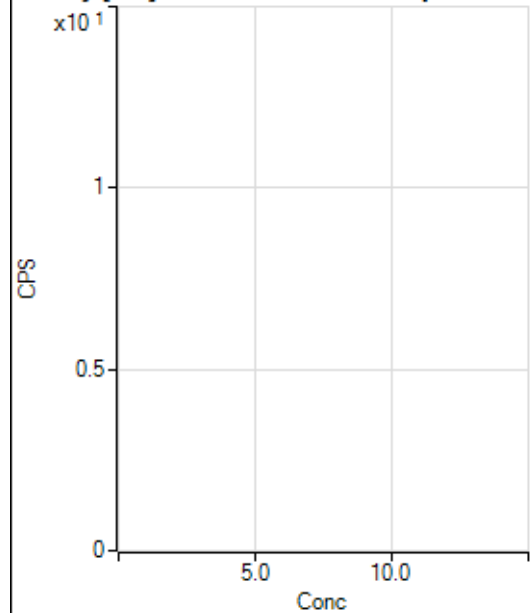
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	173.
2	☐			11.11		P	91.7
3	☐			6.67		P	0.0
4	☐			140.01		P	17.2
5	☐			313.34		P	15.3
6	☐			686.71		P	5.8
7	☐			1322.33		P	6.9
8	☐			2293.62		P	4.4
9	☐			68.89		P	24.4

150 Nd [He] No available calibration points

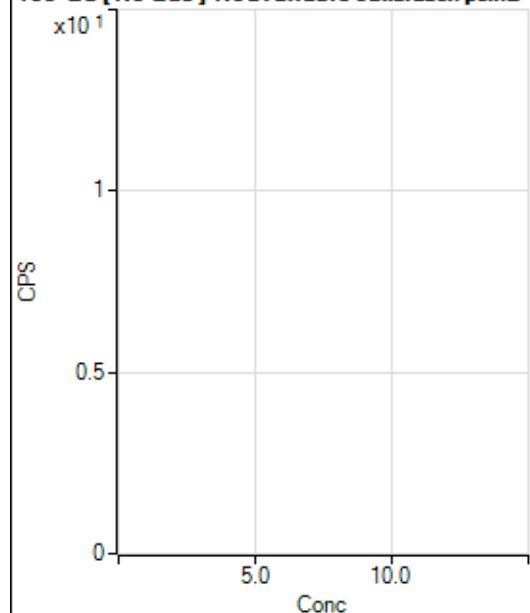
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			1.11		P	173.
3	☐			0.00		P	
4	☐			8.89		P	57.3
5	☐			30.00		P	29.4
6	☐			35.56		P	14.3
7	☐			74.44		P	25.9
8	☐			148.89		P	5.6
9	☐			24.45		P	43.8

156 Dy [No Gas] No available calibration points

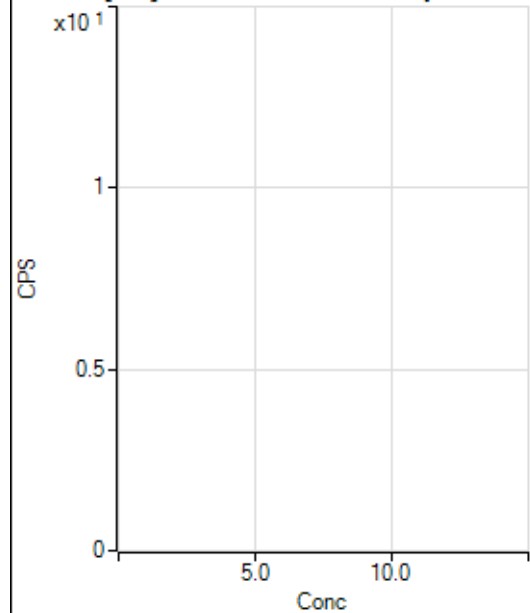
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.55		P	68.6
2	☐			30.55		P	15.7
3	☐			44.45		P	10.8
4	☐			97.23		P	27.6
5	☐			144.45		P	17.6
6	☐			177.79		P	16.5
7	☐			327.80		P	14.0
8	☐			652.82		P	3.2
9	☐			977.87		P	8.7

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	66.7
2	☐			6.67		P	50.0
3	☐			7.78		P	49.5
4	☐			30.00		P	33.3
5	☐			71.11		P	17.7
6	☐			107.78		P	11.7
7	☐			242.23		P	15.2
8	☐			436.68		P	11.3
9	☐			447.79		P	6.9

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

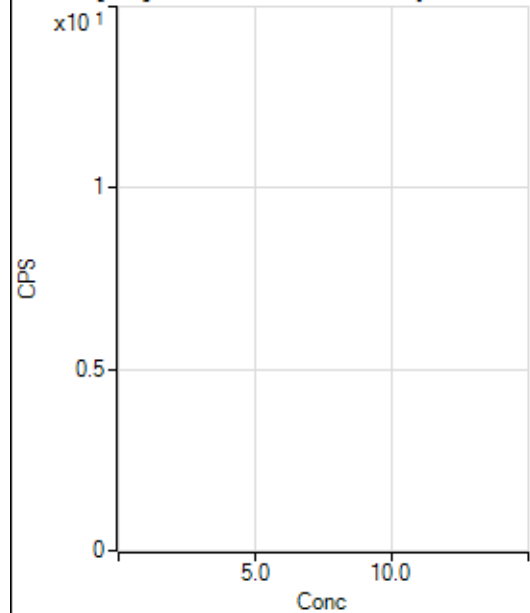
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			141.67		P	NaN
2	☐			175.01		P	25.2
3	☐			200.01		P	33.1
4	☐			194.45		P	8.9
5	☐			161.12		P	26.0
6	☐			252.79		P	12.5
7	☐			305.58		P	11.0
8	☐			425.02		P	3.9
9	☐			1094.55		P	13.5

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			344.45		P	9.7
2	☐			374.46		P	11.5
3	☐			364.46		P	10.3
4	☐			358.90		P	9.0
5	☐			383.34		P	4.0
6	☐			375.57		P	5.1
7	☐			423.35		P	2.4
8	☐			483.35		P	11.6
9	☐			830.04		P	2.1

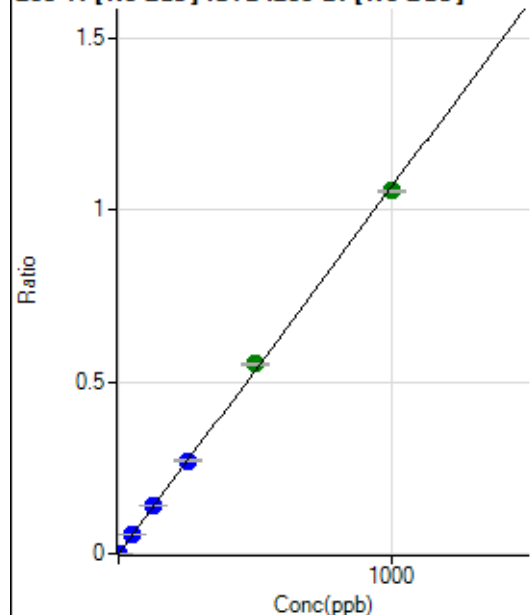
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80.56		P	52.1
2	☐			102.79		P	37.4
3	☐			108.34		P	7.7
4	☐			133.34		P	27.2
5	☐			113.89		P	11.2
6	☐			130.56		P	26.6
7	☐			127.78		P	13.6
8	☐			225.01		P	9.8
9	☐			197.23		P	31.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.67		P	56.7
2	☐			35.56		P	5.4
3	☐			46.67		P	50.0
4	☐			45.56		P	36.1
5	☐			54.45		P	12.7
6	☐			54.45		P	12.7
7	☐			72.22		P	32.4
8	☐			56.67		P	57.9
9	☐			101.11		P	21.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	111.12	0.0000	P	14.8
2	☐	0.100	0.096	1414.03	0.0001	P	5.3
3	☐	1.000	0.877	11947.53	0.0009	P	1.0
4	☐	50.000	53.511	699662.46	0.0572	P	1.3
5	☐	125.000	129.468	1670000.61	0.1383	P	0.5
6	☐	250.000	254.055	3312440.74	0.2713	P	1.7
7	☐	500.000	517.195	6521679.27	0.5524	A	0.6
8	☐	1000.000	989.655	12032043.85	1.0569	A	0.7
9	☐			1733.52	0.0002	P	16.7

$$y = 0.0011 * x + 9.1911E-006$$

$$R = 0.9998$$

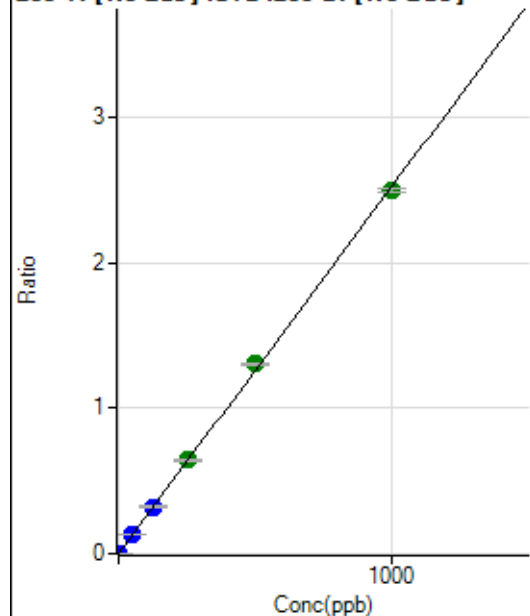
$$DL = 0.003819$$

$$BEC = 0.008606$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	372.24	0.0000	P	6.4
2	☐	0.100	0.090	3272.79	0.0003	P	11.0
3	☐	1.000	0.909	29313.73	0.0023	P	2.1
4	☐	50.000	53.729	1656323.00	0.1353	P	1.6
5	☐	125.000	128.231	3899638.98	0.3229	P	0.7
6	☐	250.000	255.345	7849653.30	0.6429	A	1.1
7	☐	500.000	517.157	15374812.50	1.3021	A	1.0
8	☐	1000.000	989.495	28362017.65	2.4914	A	1.0
9	☐			4170.29	0.0005	P	8.9

$$y = 0.0025 * x + 3.0829E-005$$

$$R = 0.9998$$

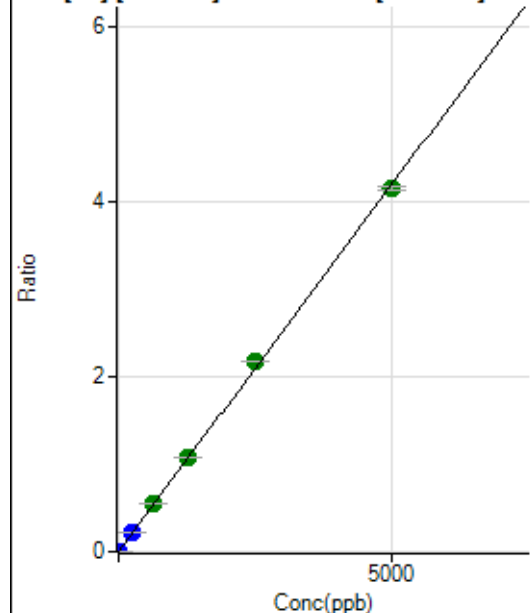
$$DL = 0.002365$$

$$BEC = 0.01224$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	485.21	0.0000	P	4.4
2	☐	0.100	0.097	1533.47	0.0001	P	1.9
3	☐	1.000	0.981	10880.66	0.0009	P	2.6
4	☐	250.000	268.775	2754947.34	0.2251	P	1.2
5	☐	625.000	644.735	6519308.48	0.5398	A	0.6
6	☐	1250.000	1285.934	13144244.39	1.0766	A	0.8
7	☐	2500.000	2586.893	25570949.88	2.1658	A	0.4
8	☐	5000.000	4944.164	47121283.92	4.1392	A	1.0
9	☐			11047.41	0.0012	P	3.1

$$y = 8.3719\text{E-}004 * x + 4.0162\text{E-}005$$

$$R = 0.9998$$

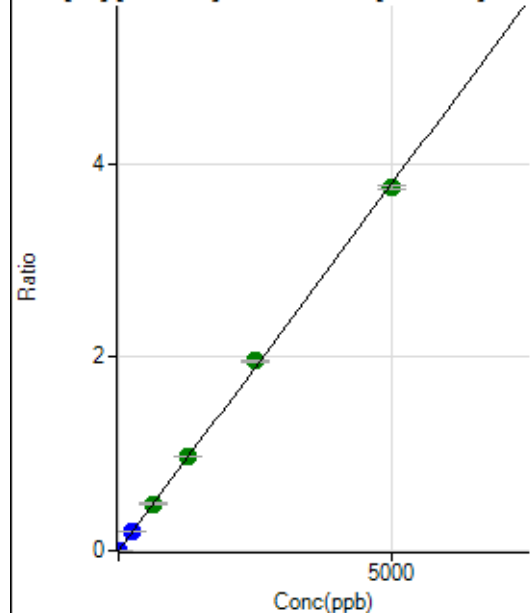
$$DL = 0.006374$$

$$BEC = 0.04797$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	425.95	0.0000	P	4.1
2	☐	0.100	0.095	1355.67	0.0001	P	0.9
3	☐	1.000	0.936	9409.15	0.0007	P	4.8
4	☐	250.000	268.970	2498886.74	0.2041	P	1.5
5	☐	625.000	641.207	5876603.72	0.4866	A	1.4
6	☐	1250.000	1278.848	11848315.31	0.9705	A	0.7
7	☐	2500.000	2585.260	23162352.14	1.9618	A	1.1
8	☐	5000.000	4947.183	42736139.38	3.7541	A	1.2
9	☐			9590.73	0.0011	P	3.3

$$y = 7.5883\text{E-}004 * x + 3.5272\text{E-}005$$

$$R = 0.9998$$

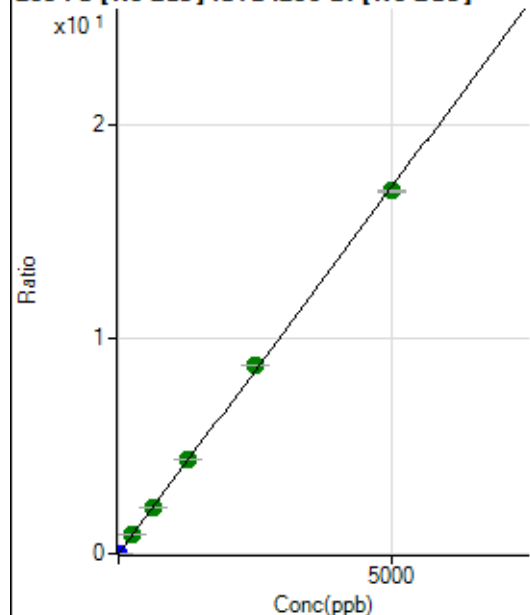
$$DL = 0.005715$$

$$BEC = 0.04648$$

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	1990.86	0.0002	P	8.0
2	☐	0.100	0.098	6300.79	0.0005	P	1.2
3	☐	1.000	0.950	43039.32	0.0034	P	4.2
4	☐	250.000	266.641	11140730.28	0.9101	A	0.9
5	☐	625.000	637.882	26290964.02	2.1770	A	1.1
6	☐	1250.000	1277.972	53246931.40	4.3613	A	0.8
7	☐	2500.000	2578.421	103891525.9	8.7991	A	0.4
8	☐	5000.000	4951.354	192349884.8	16.8968	A	0.9
9	☐			43788.43	0.0049	P	2.2

$$y = 0.0034 * x + 1.6491E-004$$

$$R = 0.9998$$

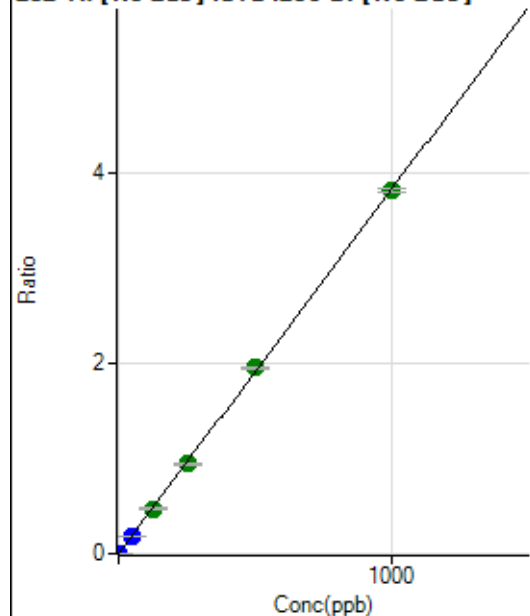
$$DL = 0.01153$$

$$BEC = 0.04832$$

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	2466.98	0.0002	P	3.5
2	☐	0.100	-0.019	1681.64	0.0001	P	6.0
3	☐	1.000	-0.030	1122.31	0.0001	P	11.2
4	☐	50.000	48.373	2262852.74	0.1848	P	0.3
5	☐	125.000	122.983	5671485.77	0.4696	A	2.3
6	☐	250.000	246.976	11511239.73	0.9429	A	1.6
7	☐	500.000	509.683	22972585.24	1.9457	A	0.1
8	☐	1000.000	996.249	43290722.27	3.8029	A	1.0
9	☐			11716.69	0.0013	P	3.3

$$y = 0.0038 * x + 2.0423E-004$$

$$R = 0.9999$$

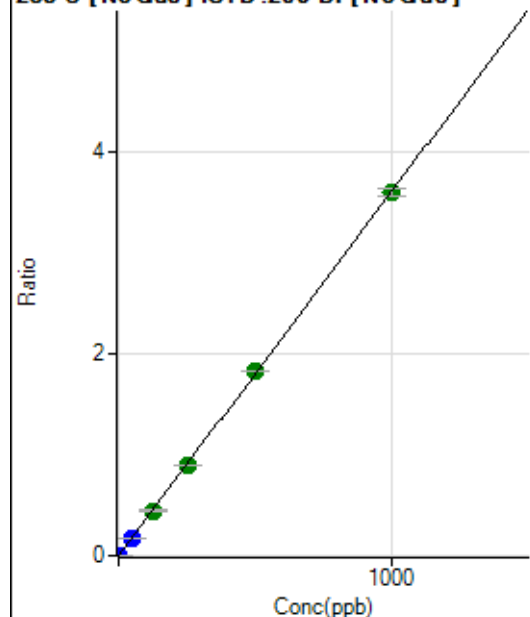
$$DL = 0.005667$$

$$BEC = 0.0535$$

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	52.78	0.0000	P	23.8
2	☐	0.100	0.087	4003.59	0.0003	P	6.7
3	☐	1.000	0.815	37157.86	0.0029	P	4.1
4	☐	50.000	48.249	2128083.40	0.1738	P	1.3
5	☐	125.000	123.322	5365968.26	0.4443	A	2.0
6	☐	250.000	248.521	10931538.79	0.8954	A	1.5
7	☐	500.000	507.438	21586093.19	1.8283	A	0.4
8	☐	1000.000	996.948	40887554.73	3.5919	A	2.0
9	☐			5821.03	0.0007	P	7.2

$$y = 0.0036 * x + 4.3685E-006$$

$$R = 1.0000$$

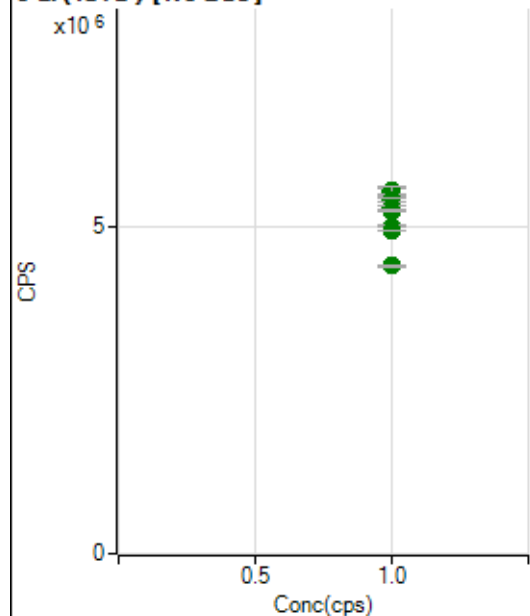
$$DL = 0.0008664$$

$$BEC = 0.001212$$

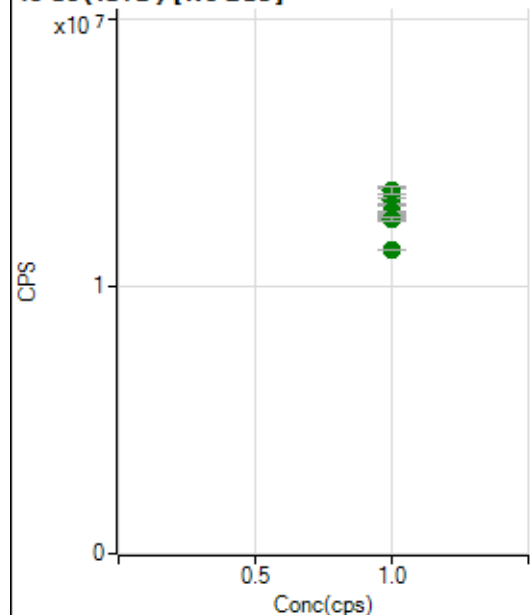
Weight: <None>

Min Conc: 0

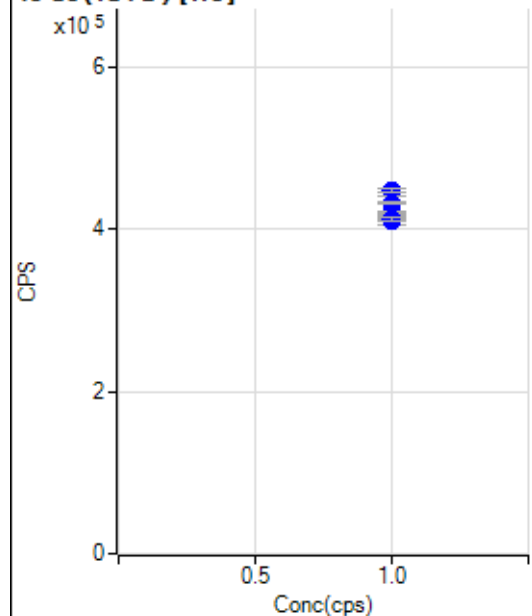
6 Li (ISTD) [No Gas]



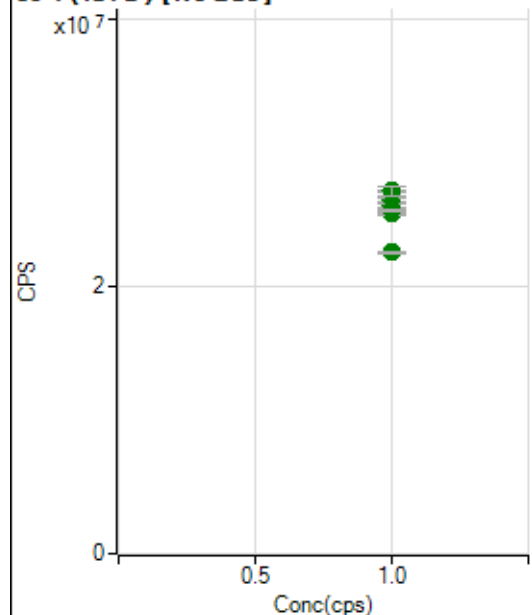
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5474240.02		A	0.9
2	☐	1.000		5545417.77		A	1.8
3	☐	1.000		5565100.26		A	2.1
4	☐	1.000		5415165.03		A	1.1
5	☐	1.000		5301464.50		A	0.9
6	☐	1.000		5261022.00		A	0.5
7	☐	1.000		5022506.07		A	0.5
8	☐	1.000		4954352.39		A	0.4
9	☐	1.000		4419519.73		A	0.6

45 Sc (ISTD) [No Gas]

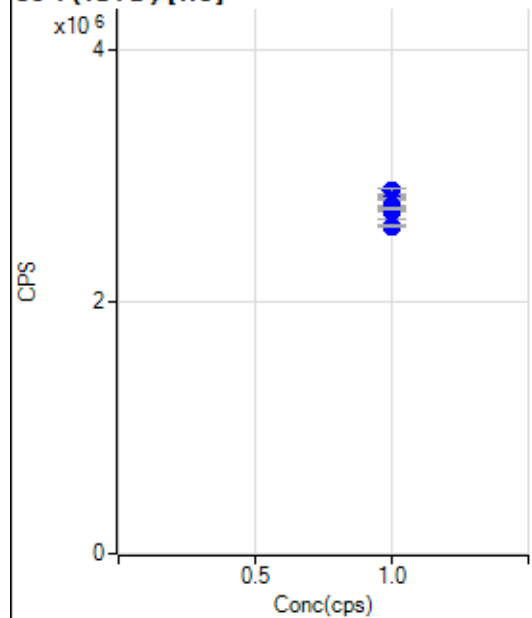
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13194891.47		A	1.7
2	☐	1.000		13555894.80		A	1.7
3	☐	1.000		13555442.44		A	2.0
4	☐	1.000		13023721.05		A	0.6
5	☐	1.000		12630403.70		A	0.8
6	☐	1.000		12778178.01		A	0.5
7	☐	1.000		12508965.09		A	0.4
8	☐	1.000		12504474.26		A	0.8
9	☐	1.000		11362763.72		A	0.4

45 Sc (ISTD) [He]

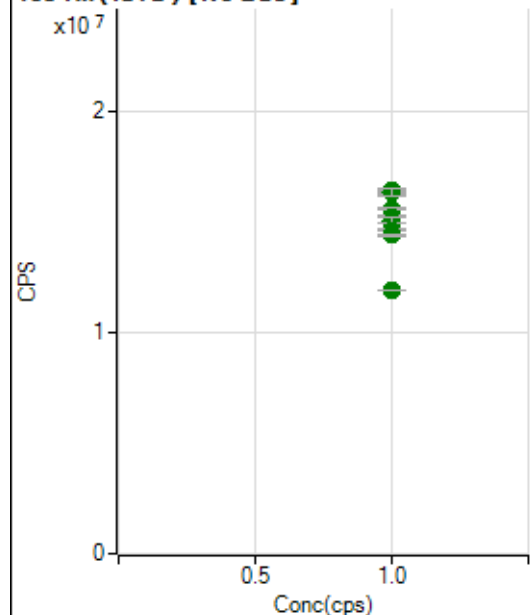
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		447231.19		P	1.0
2	☐	1.000		423063.21		P	8.6
3	☐	1.000		430450.54		P	5.4
4	☐	1.000		431849.60		P	0.4
5	☐	1.000		413913.66		P	0.6
6	☐	1.000		410775.91		P	0.7
7	☐	1.000		419079.88		P	1.0
8	☐	1.000		420154.02		P	0.6
9	☐	1.000		412133.29		P	1.0

89 Y (ISTD) [No Gas]

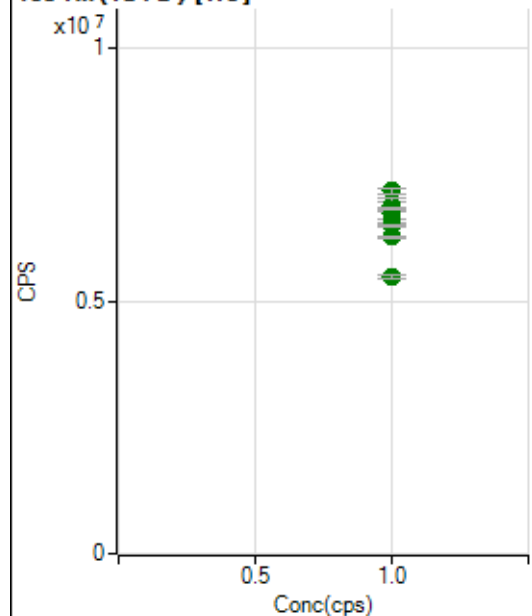
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26448379.33		A	1.2
2	☐	1.000		27063932.38		A	0.3
3	☐	1.000		27106943.48		A	2.6
4	☐	1.000		26029386.28		A	1.1
5	☐	1.000		25556392.95		A	0.8
6	☐	1.000		25971036.56		A	1.7
7	☐	1.000		25417652.12		A	0.6
8	☐	1.000		25674630.17		A	0.8
9	☐	1.000		22492035.78		A	0.9

89 Y (ISTD) [He]

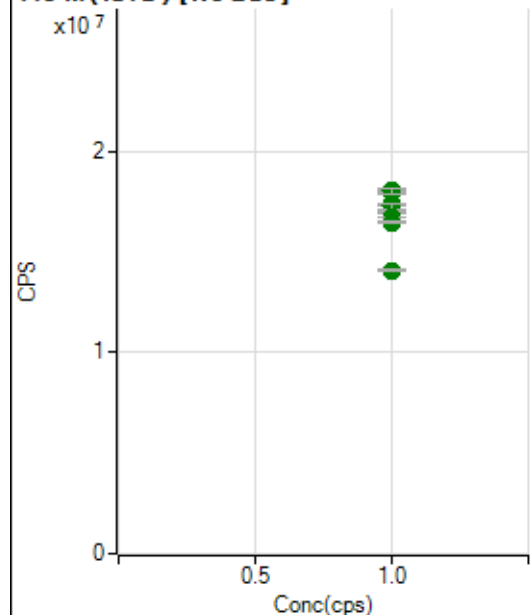
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2883692.42		P	1.3
2	☐	1.000		2752721.95		P	6.6
3	☐	1.000		2805004.16		P	3.9
4	☐	1.000		2817384.51		P	0.6
5	☐	1.000		2724287.11		P	0.8
6	☐	1.000		2730801.66		P	0.6
7	☐	1.000		2761354.30		P	0.6
8	☐	1.000		2749177.98		P	0.5
9	☐	1.000		2603918.09		P	0.5

103 Rh (ISTD) [No Gas]

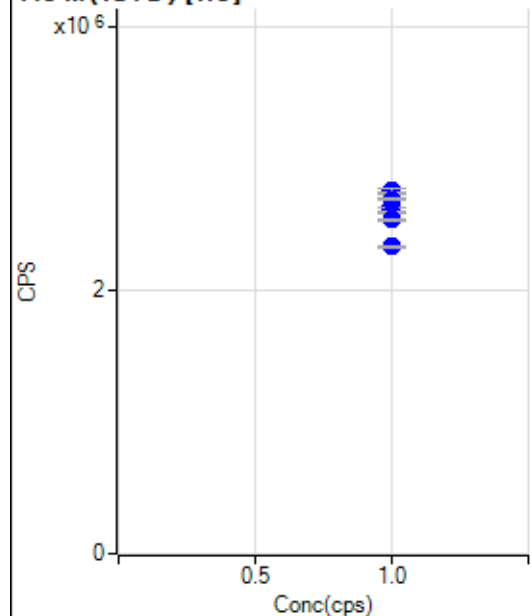
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16424739.06		A	1.8
2	☐	1.000		16407717.12		A	1.0
3	☐	1.000		16341391.42		A	2.2
4	☐	1.000		15609447.40		A	0.3
5	☐	1.000		15265138.11		A	0.7
6	☐	1.000		15096917.83		A	1.6
7	☐	1.000		14661058.12		A	0.6
8	☐	1.000		14417379.92		A	0.7
9	☐	1.000		11911363.99		A	0.4

103 Rh (ISTD) [He]

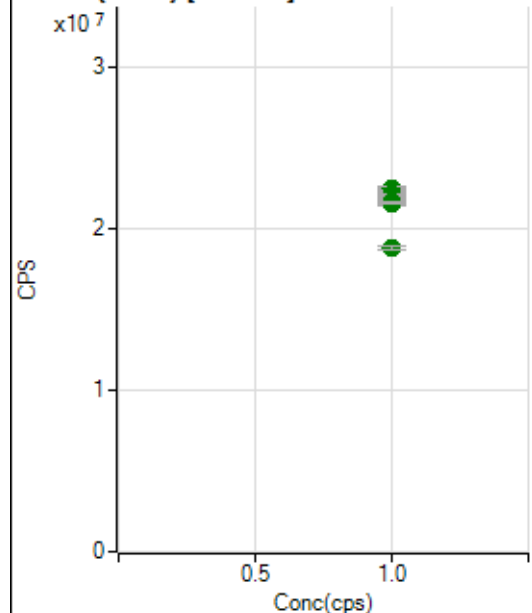
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7181537.95		A	1.5
2	☐	1.000		6726748.72		A	7.4
3	☐	1.000		6905270.52		A	3.7
4	☐	1.000		6829912.95		A	0.1
5	☐	1.000		6619508.37		A	0.5
6	☐	1.000		6540687.75		A	0.8
7	☐	1.000		6494143.45		A	0.4
8	☐	1.000		6271420.95		A	0.3
9	☐	1.000		5488673.39		A	1.0

115 In (ISTD) [No Gas]

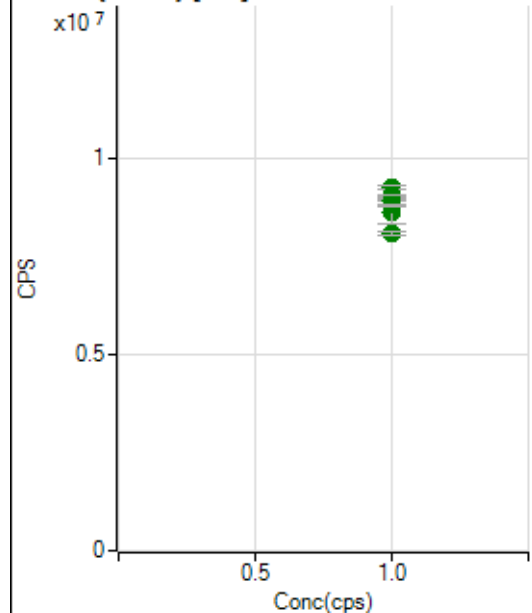
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17353981.79		A	0.4
2	☐	1.000		18005234.41		A	0.9
3	☐	1.000		18024229.53		A	1.8
4	☐	1.000		17374860.53		A	0.2
5	☐	1.000		16952333.13		A	0.5
6	☐	1.000		17253128.13		A	1.5
7	☐	1.000		16705888.16		A	0.3
8	☐	1.000		16468195.41		A	0.6
9	☐	1.000		14076611.46		A	1.0

115 In (ISTD) [He]

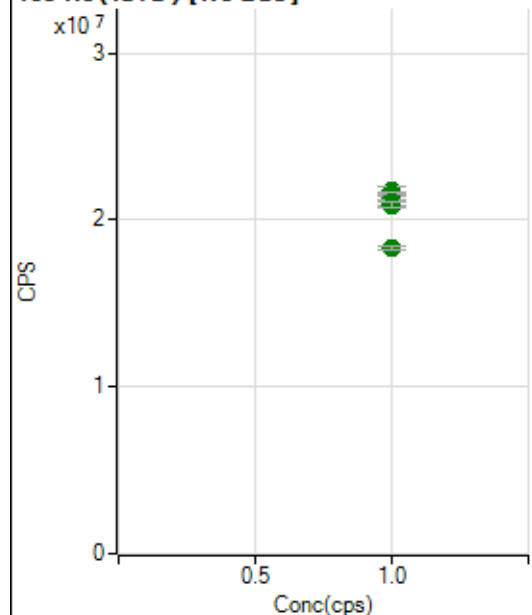
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2756900.45		P	1.5
2	☐	1.000		2638662.54		P	7.0
3	☐	1.000		2689701.53		P	4.1
4	☐	1.000		2691230.83		P	0.4
5	☐	1.000		2611819.60		P	0.9
6	☐	1.000		2589269.13		P	0.7
7	☐	1.000		2592920.05		P	0.6
8	☐	1.000		2538961.98		P	0.3
9	☐	1.000		2331495.80		P	0.9

159 Tb (ISTD) [No Gas]

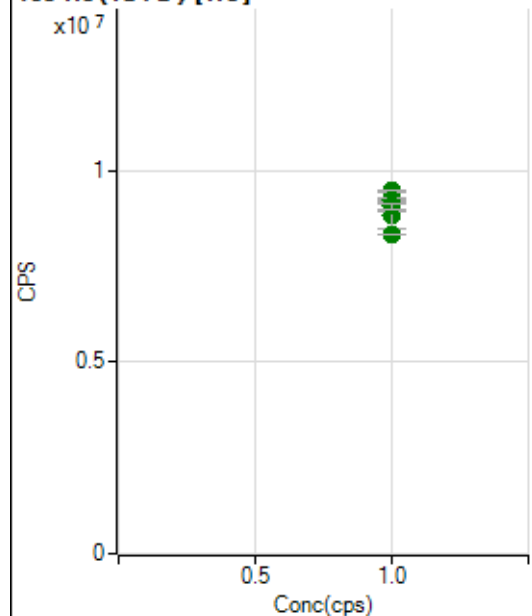
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21516905.23		A	0.6
2	☐	1.000		22405030.22		A	0.4
3	☐	1.000		22460499.94		A	1.3
4	☐	1.000		21931920.64		A	0.3
5	☐	1.000		21636606.76		A	1.6
6	☐	1.000		22120471.89		A	0.5
7	☐	1.000		21705083.84		A	0.9
8	☐	1.000		21570932.04		A	0.6
9	☐	1.000		18784028.33		A	1.0

159 Tb (ISTD) [He]

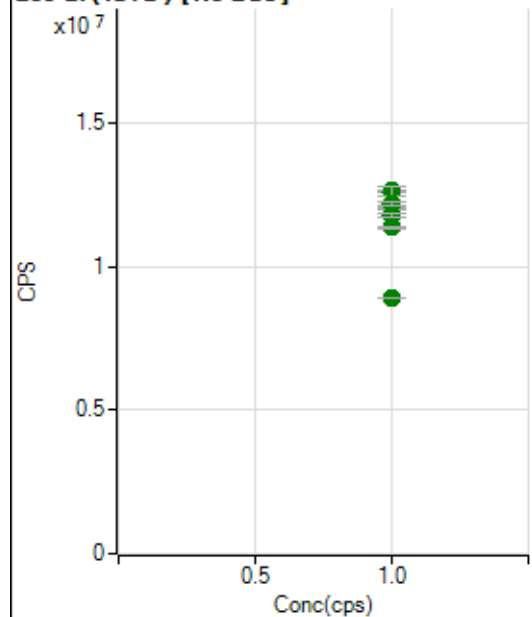
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9269588.33		A	1.0
2	☐	1.000		8665085.63		A	6.9
3	☐	1.000		8931425.21		A	3.3
4	☐	1.000		9054643.20		A	0.5
5	☐	1.000		9011597.23		A	0.8
6	☐	1.000		9009035.98		A	0.4
7	☐	1.000		9086733.41		A	0.4
8	☐	1.000		8839926.54		A	0.5
9	☐	1.000		8109378.84		A	1.0

165 Ho (ISTD) [No Gas]

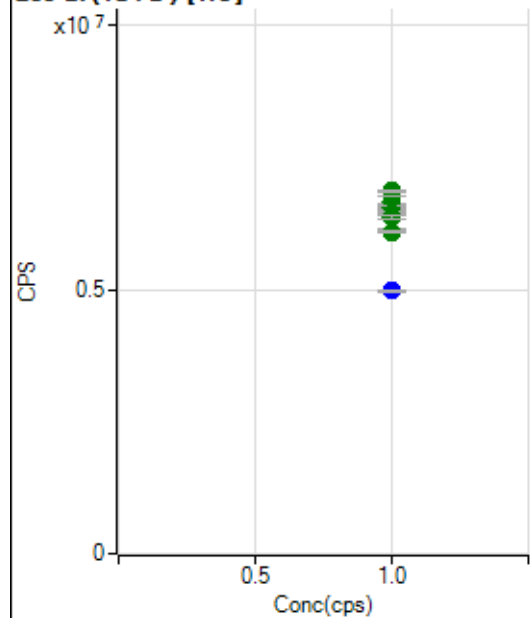
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20977478.44		A	1.6
2	☐	1.000		21590204.68		A	1.1
3	☐	1.000		21728296.90		A	2.0
4	☐	1.000		21187610.52		A	0.4
5	☐	1.000		21248815.38		A	1.3
6	☐	1.000		21584269.54		A	0.3
7	☐	1.000		21104364.27		A	0.4
8	☐	1.000		20902093.44		A	1.3
9	☐	1.000		18328457.50		A	1.1

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9458707.36		A	0.6
2	☐	1.000		8799349.87		A	7.5
3	☐	1.000		9119137.64		A	3.8
4	☐	1.000		9226448.20		A	0.4
5	☐	1.000		9188497.15		A	0.9
6	☐	1.000		9197886.67		A	0.9
7	☐	1.000		9214778.68		A	1.4
8	☐	1.000		9063032.02		A	1.5
9	☐	1.000		8319428.62		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12078770.38		A	0.9
2	☐	1.000		12660888.98		A	0.3
3	☐	1.000		12636132.03		A	2.4
4	☐	1.000		12242263.01		A	1.1
5	☐	1.000		12077440.10		A	0.5
6	☐	1.000		12209641.48		A	1.1
7	☐	1.000		11807065.38		A	0.6
8	☐	1.000		11384080.80		A	0.7
9	☐	1.000		8927078.76		A	0.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6871856.70		A	0.8
2	☐	1.000		6397490.46		A	7.4
3	☐	1.000		6674126.15		A	3.4
4	☐	1.000		6603959.90		A	0.9
5	☐	1.000		6558960.60		A	0.9
6	☐	1.000		6462499.21		A	0.3
7	☐	1.000		6389098.79		A	1.2
8	☐	1.000		6098558.45		A	0.9
9	☐	1.000		4972425.86		P	0.3

US EPA Tune Check Sample Report

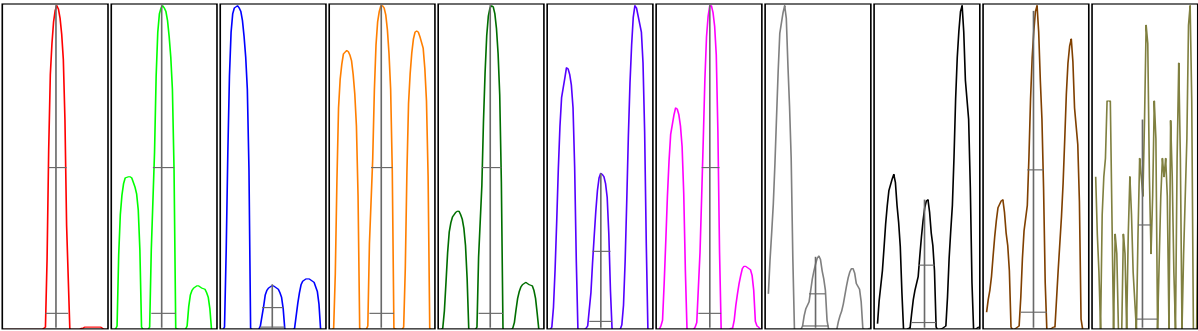
Batch Folder D:\ICP-MS Data\1\DATA\P7071320-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	12387	0.75	5.00	
24	173493	0.42	5.00	
25	23011	0.29	5.00	
26	26930	0.26	5.00	
59	90866	0.56	5.00	
113	14742	0.93	5.00	
115	44606	3.40	5.00	
206	16548	0.55	5.00	
207	13909	0.42	5.00	
208	34146	0.49	5.00	
220	0	44.19		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	12358	12467	12239	12432	12440
24	172935	174655	173704	172935	173234
25	22986	23087	22911	23021	23048
26	26874	27038	26892	26964	26884
59	90314	91619	90993	90936	90471
113	14777	14952	14584	14724	14674
115	46831	45412	44143	43525	43120
206	16408	16590	16568	16527	16650
207	13843	13885	13901	13916	14002
208	33927	34047	34176	34220	34362
220	1	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	24423	9.05	8.9 - 9.1		0.682	0.900	
24	299718	23.95	23.9 - 24.1		0.736	0.900	
25	40040	25.00	24.9 - 25.1		0.717	0.900	
26	46683	26.00	25.9 - 26.1		0.738	0.900	
59	163777	59.00	58.9 - 59.1		0.735	0.900	
113	30559	113.05	112.9 - 113.1		0.683	0.900	
115	92691	115.05	114.9 - 115.1		0.683	0.900	
206	35514	205.95	205.9 - 206.1		0.727	0.900	
207	30248	206.95	206.9 - 207.1		0.727	0.900	
208	74876	207.95	207.9 - 208.1		0.757	0.900	
220	1	219.95	-		0.642		

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	7.8	V	Deflect	13.4	V
Extract 2	-145.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	18611	3.54	
89	51618	3.35	
205	37502	3.10	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	19243	18911	19022	18231	17647
89	53203	52326	52886	50539	49137
205	38683	37851	37999	37377	35600

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	8.2	V	Deflect	2.6	V
Extract 2	-165.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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			