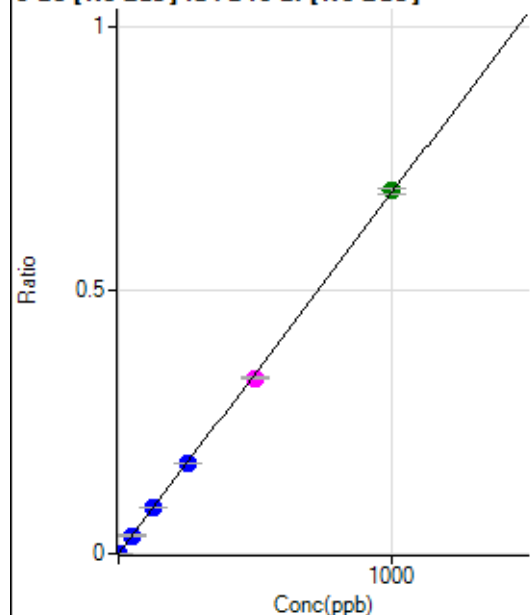


Calibration for 007CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8021323-MS.b\
 Analysis File: P8021323-MS.batch.bin
 DA Date-Time: 2023-02-13 19:13:19
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-02-13 12:42:19
2	006CALS.d	S02	2023-02-13 12:48:41
3	007CALS.d	S03	2023-02-13 12:51:51
4	008CALS.d	S04	2023-02-13 12:55:00
5	009CALS.d	S05	2023-02-13 12:58:06
6	010CALS.d	S06	2023-02-13 13:01:15
7	011CALS.d	S07	2023-02-13 13:04:21
8	012CALS.d	S08	2023-02-13 13:07:31

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	64.99	0.0000	P	11.1
2	☐	1.000	0.994	2191.15	0.0007	P	3.9
3	☐	50.000	50.428	107621.15	0.0345	P	1.5
4	☐	125.000	127.607	267982.64	0.0872	P	2.0
5	☐	250.000	251.014	521206.82	0.1716	P	0.4
6	☐	500.000	487.063	1011262.27	0.3329	M	0.4
7	☐	1000.000	1005.868	2023867.20	0.6876	A	1.7
8	☐			781.59	0.0003	P	12.5

$$y = 6.8353\text{E-}004 * x + 2.1234\text{E-}005$$

$$R = 0.9999$$

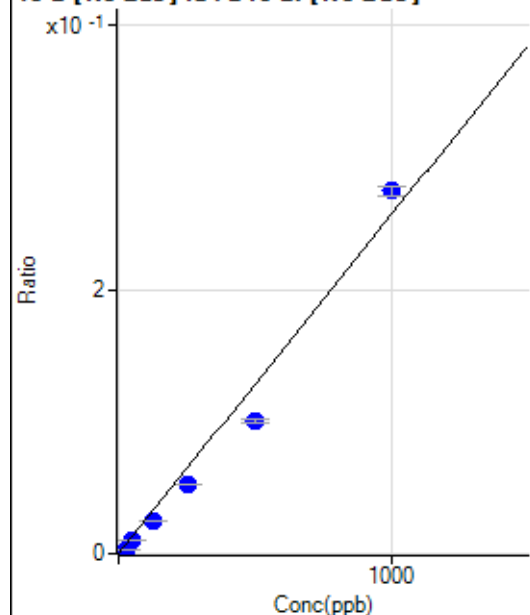
$$DL = 0.01036$$

$$BEC = 0.03107$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	576.57	0.0002	P	15.6
2	☐	25.000	8.790	7649.16	0.0024	P	3.0
3	☐	50.000	37.816	30872.15	0.0099	P	2.4
4	☐	125.000	95.715	76019.94	0.0247	P	3.2
5	☐	250.000	203.889	159491.43	0.0525	P	2.3
6	☐	500.000	392.673	306556.86	0.1009	P	2.9
7	☐	1000.000	1069.866	808544.58	0.2747	P	2.7
8	☐			33536.98	0.0117	P	10.2

$$y = 2.5658\text{E-}004 * x + 1.8976\text{E-}004$$

$$R = 0.9915$$

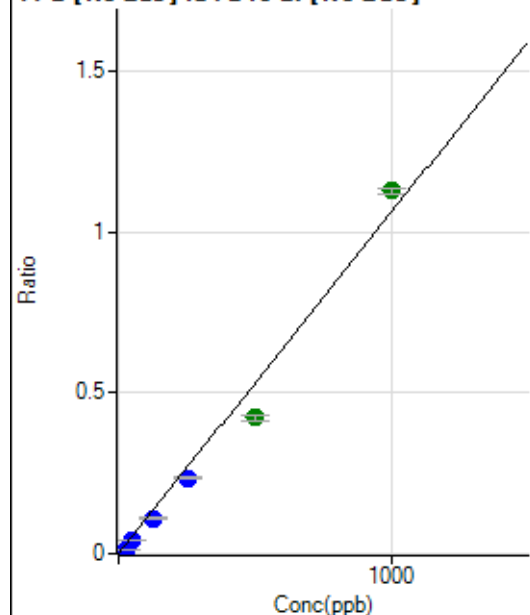
$$DL = 0.3464$$

$$BEC = 0.7396$$

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	2491.06	0.0008	P	7.5
2	☐	25.000	9.558	34334.42	0.0110	P	2.3
3	☐	50.000	40.399	136556.31	0.0438	P	1.9
4	☐	125.000	102.695	337822.41	0.1100	P	1.7
5	☐	250.000	220.734	715181.04	0.2354	P	1.4
6	☐	500.000	398.357	1288520.79	0.4242	A	4.3
7	☐	1000.000	1061.792	3325114.08	1.1294	A	1.9
8	☐			149271.18	0.0522	P	8.5

$$y = 0.0011 * x + 8.1669E-004$$

$$R = 0.9927$$

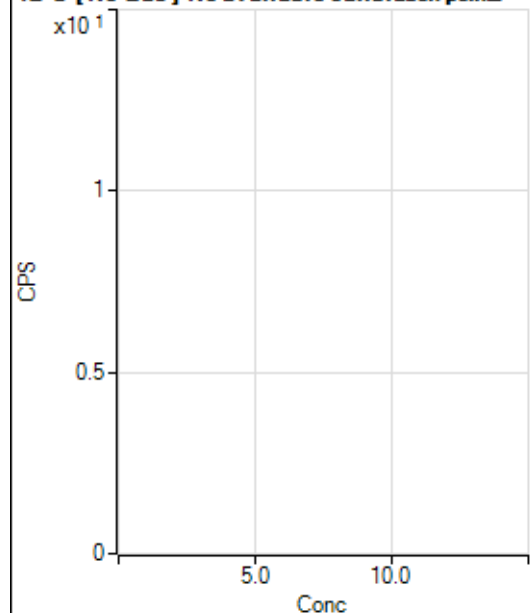
$$DL = 0.1732$$

$$BEC = 0.7683$$

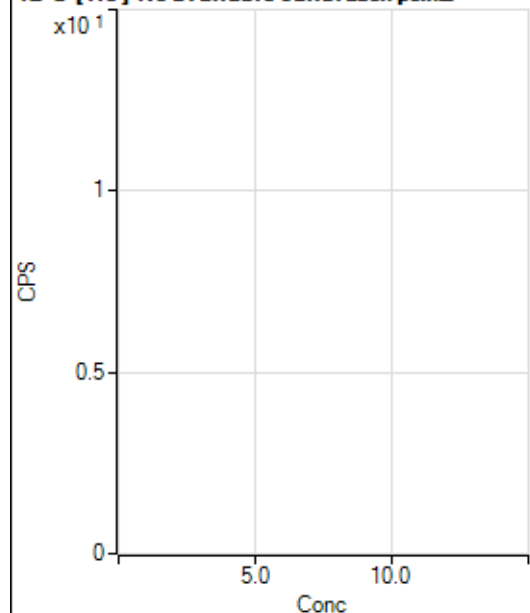
Weight: <None>

Min Conc: 0

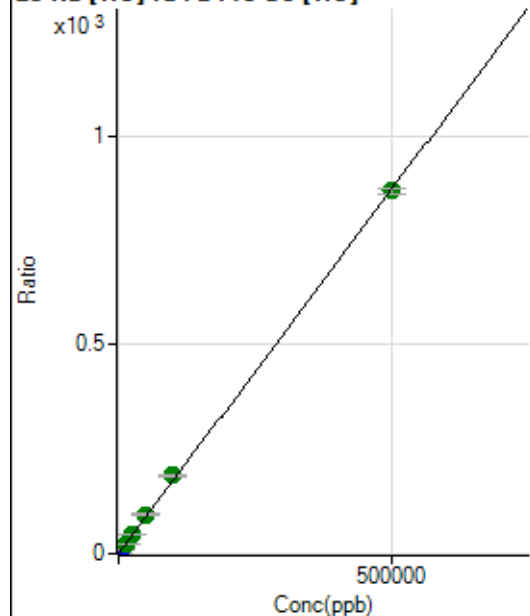
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4477700.84		A	0.7
2	☐			4373817.89		A	1.0
3	☐			4607483.18		A	2.9
4	☐			4770548.28		A	3.0
5	☐			4746573.89		A	2.3
6	☐			5074279.59		A	3.6
7	☐			5050660.31		A	2.3
8	☐			4512119.68		A	1.0

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45075.35		P	1.6
2	☐			44813.32		P	0.8
3	☐			48514.01		P	0.6
4	☐			49383.81		P	0.5
5	☐			50782.66		P	0.4
6	☐			53929.87		P	1.0
7	☐			55510.97		P	1.3
8	☐			50437.04		P	2.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	9564.52	0.0914	P	4.2
2	☐	500.000	458.925	93907.89	0.8912	P	2.4
3	☐	5000.000	5210.618	974145.07	9.1719	P	2.0
4	☐	12500.000	13452.173	2453497.86	23.5344	A	2.4
5	☐	25000.000	26749.518	4808152.02	46.7075	A	3.0
6	☐	50000.000	53638.476	9563191.10	93.5667	A	1.6
7	☐	100000.00	106970.15	19101442.79	186.5072	A	2.8
8	☐	500000.00	498128.77	86616985.27	868.1753	A	1.7

$$y = 0.0017 * x + 0.0914$$

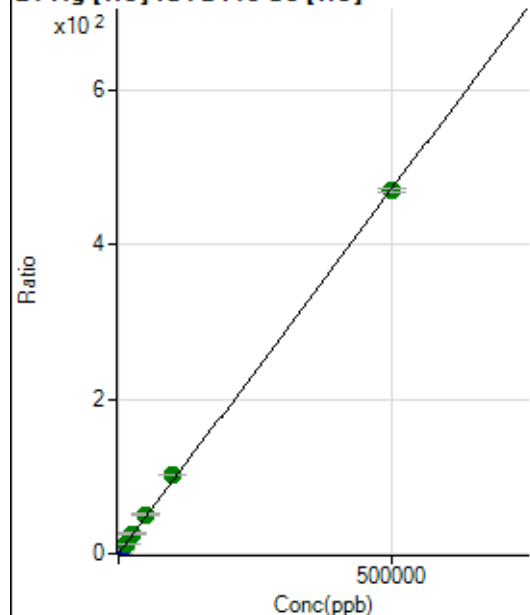
$$R = 0.9999$$

$$DL = 6.61$$

$$BEC = 52.47$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	313.90	0.0030	P	22.0
2	☐	500.000	472.939	47249.59	0.4484	P	0.5
3	☐	5000.000	5373.601	537806.86	5.0636	P	1.7
4	☐	12500.000	14023.592	1377066.38	13.2098	A	3.5
5	☐	25000.000	27690.575	2684925.69	26.0808	A	1.8
6	☐	50000.000	53932.167	5191543.04	50.7940	A	1.8
7	☐	100000.00	107855.74	10404180.79	101.5770	A	1.3
8	☐	500000.00	497859.30	46777798.96	468.8658	A	0.9

$$y = 9.4176\text{E-}004 * x + 0.0030$$

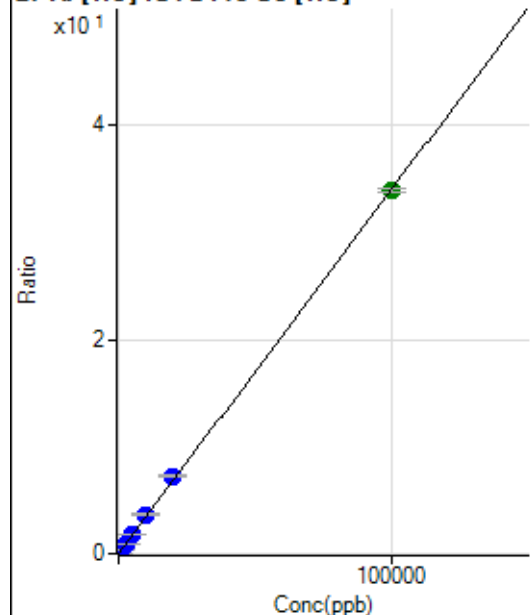
$$R = 0.9999$$

$$DL = 2.107$$

$$BEC = 3.195$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	62.07	0.0006	P	7.7
2	☐	20.000	19.474	759.93	0.0072	P	2.9
3	☐	1000.000	1049.819	37955.33	0.3574	P	2.4
4	☐	2500.000	2696.585	95601.15	0.9170	P	2.7
5	☐	5000.000	5298.453	185431.78	1.8013	P	2.9
6	☐	10000.000	10738.173	373060.60	3.6500	P	2.1
7	☐	20000.000	21300.584	741536.58	7.2398	P	1.9
8	☐	100000.00	99645.731	3378488.66	33.8659	A	1.2

$$y = 3.3986\text{E-}004 * x + 5.9302\text{E-}004$$

$$R = 0.9999$$

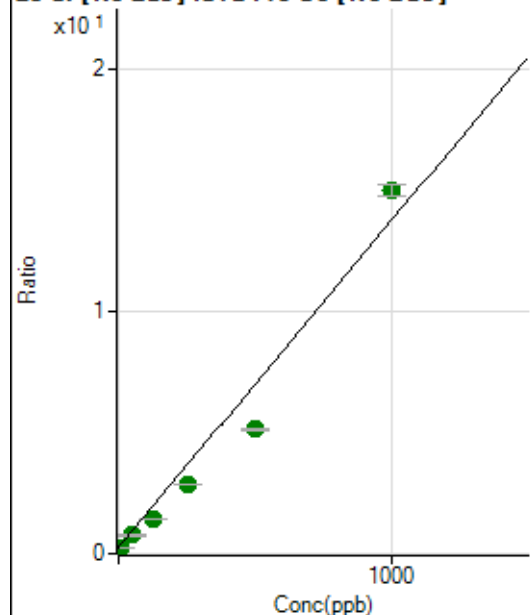
$$DL = 0.4018$$

$$BEC = 1.745$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	960064.44	0.2615	A	8.3
2	☐	10.000	-0.392	998674.17	0.2562	A	2.4
3	☐	50.000	36.556	2914642.45	0.7542	A	2.6
4	☐	125.000	86.549	5449716.79	1.4280	A	2.9
5	☐	250.000	190.949	10941754.06	2.8352	A	0.7
6	☐	500.000	360.613	19082160.67	5.1220	A	2.3
7	☐	1000.000	1090.038	56877115.16	14.9534	A	3.2
8	☐			1183952.49	0.3257	A	2.6

$$y = 0.0135 * x + 0.2615$$

$$R = 0.9858$$

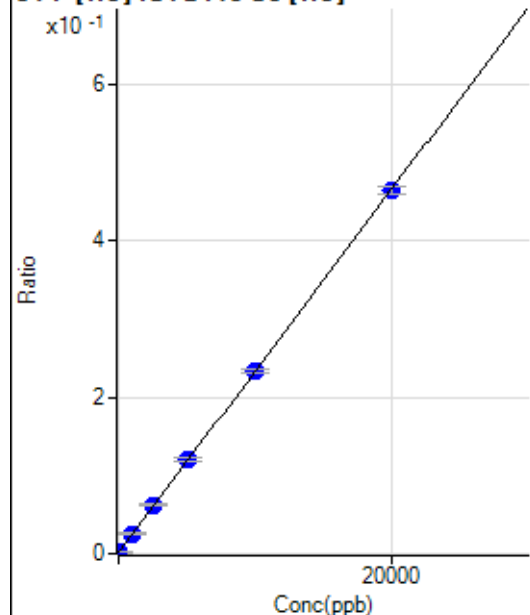
$$DL = 4.857$$

$$BEC = 19.4$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-16.944	88.89	0.0008	P	26.5
2	☐	0.000	16.944	172.23	0.0016	P	18.2
3	☐	1000.000	1031.869	2678.09	0.0252	P	5.3
4	☐	2500.000	2629.033	6501.62	0.0624	P	5.4
5	☐	5000.000	5164.656	12486.27	0.1213	P	3.4
6	☐	10000.000	10045.230	23992.54	0.2347	P	2.0
7	☐	20000.000	19918.498	47550.72	0.4643	P	2.1
8	☐			83.34	0.0008	P	49.6

$$y = 2.3245E-005 * x + 0.0012$$

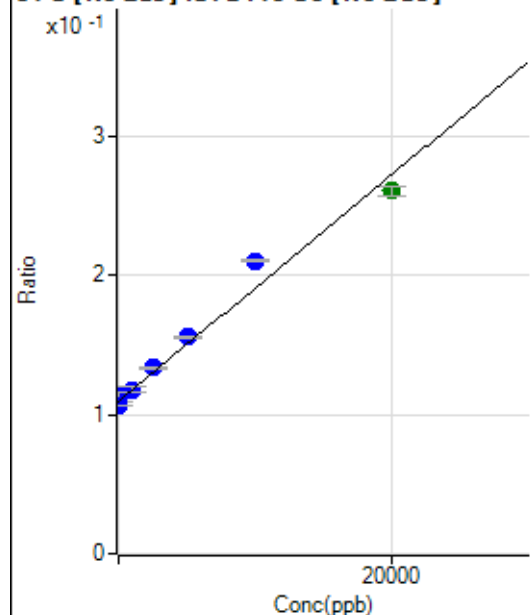
$$R = 0.9999$$

$$DL = 33.66$$

$$BEC = 53.36$$

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	403.199	414860.80	0.1129	P	6.5
2	☐	0.000	-403.199	414616.91	0.1064	P	1.1
3	☐	1000.000	1004.446	455176.65	0.1178	P	2.9
4	☐	2500.000	2923.036	509025.46	0.1334	P	1.4
5	☐	5000.000	5659.667	600470.72	0.1556	P	1.4
6	☐	10000.000	12422.247	784359.75	0.2105	P	0.8
7	☐	20000.000	18570.858	990785.41	0.2605	A	2.4
8	☐			372427.73	0.1024	P	1.8

$$y = 8.1218\text{E-}006 * x + 0.1096$$

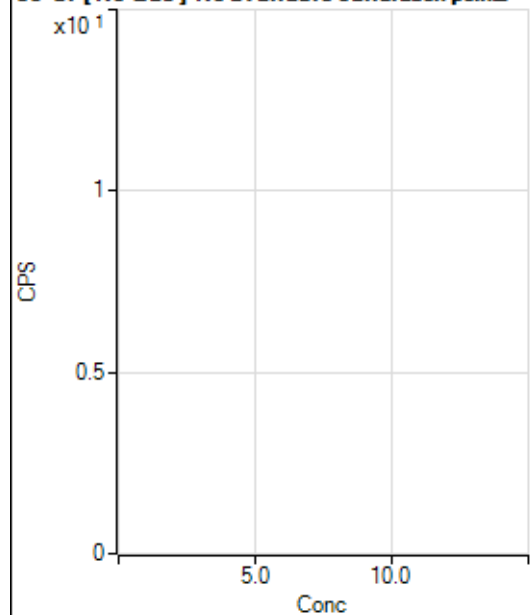
$$R = 0.9871$$

$$DL = 1575$$

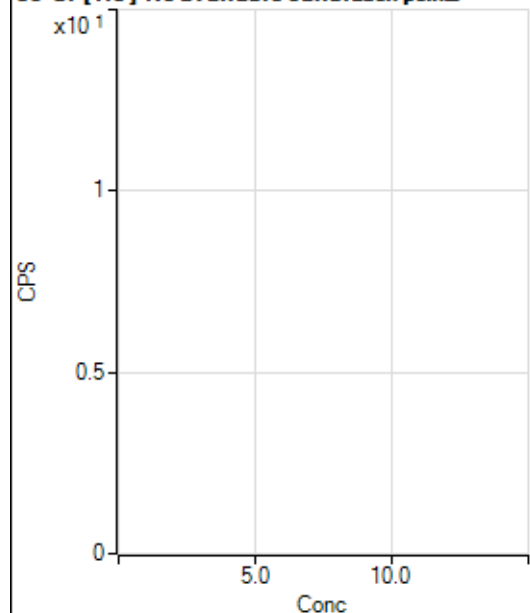
$$BEC = 1.35\text{E}+04$$

Weight: <None>

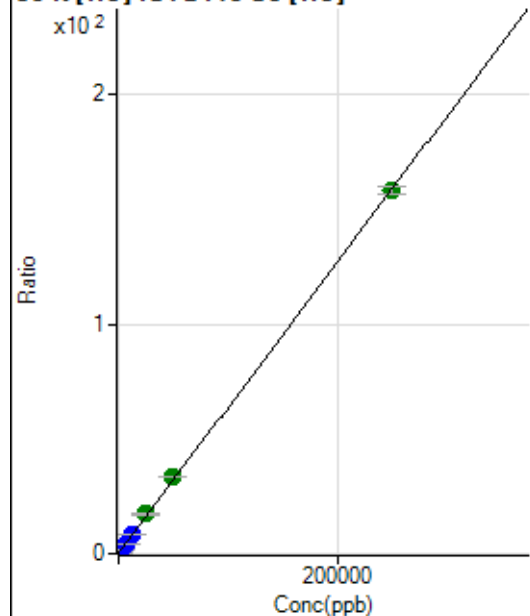
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			148048.65		P	0.7
2	☐			145728.74		P	0.6
3	☐			185370.12		P	1.3
4	☐			184128.98		P	0.2
5	☐			180329.88		P	0.0
6	☐			180846.82		P	1.5
7	☐			181193.39		P	0.4
8	☐			164495.75		P	0.6

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			836.16		P	9.8
2	☐			913.95		P	9.8
3	☐			1041.73		P	9.0
4	☐			1030.62		P	14.1
5	☐			980.61		P	9.4
6	☐			1005.62		P	12.7
7	☐			977.84		P	7.3
8	☐			991.73		P	3.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	20795.87	0.1987	P	1.5
2	☐	500.000	457.851	51509.23	0.4888	P	1.2
3	☐	2500.000	2604.455	196380.65	1.8490	P	1.7
4	☐	6250.000	6487.132	449239.78	4.3093	P	2.7
5	☐	12500.000	12884.710	860985.25	8.3632	P	1.1
6	☐	25000.000	27029.042	1770899.71	17.3258	A	1.8
7	☐	50000.000	52780.462	3445975.51	33.6433	A	1.0
8	☐	250000.00	249214.87	15772385.25	158.1148	A	2.2

$$y = 6.3365E-004 * x + 0.1987$$

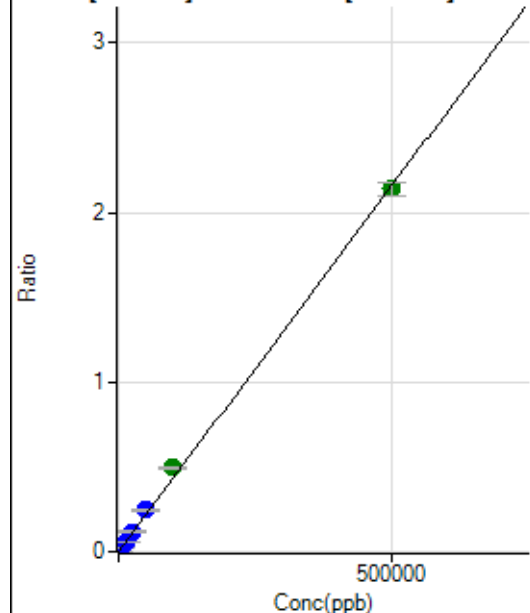
$$R = 0.9999$$

$$DL = 14.09$$

$$BEC = 313.6$$

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	116.66	0.0000	P	5.5
2	☐	500.000	457.923	7817.41	0.0020	P	1.9
3	☐	5000.000	5587.203	93167.34	0.0241	P	3.3
4	☐	12500.000	14299.545	235337.68	0.0617	P	1.4
5	☐	25000.000	27475.020	457074.46	0.1184	P	1.8
6	☐	50000.000	56945.100	914430.85	0.2455	P	1.8
7	☐	100000.00	115121.46	1887801.37	0.4962	A	2.0
8	☐	500000.00	496106.62	7771461.34	2.1381	A	3.5

$$y = 4.3098\text{E-}006 * x + 3.1706\text{E-}005$$

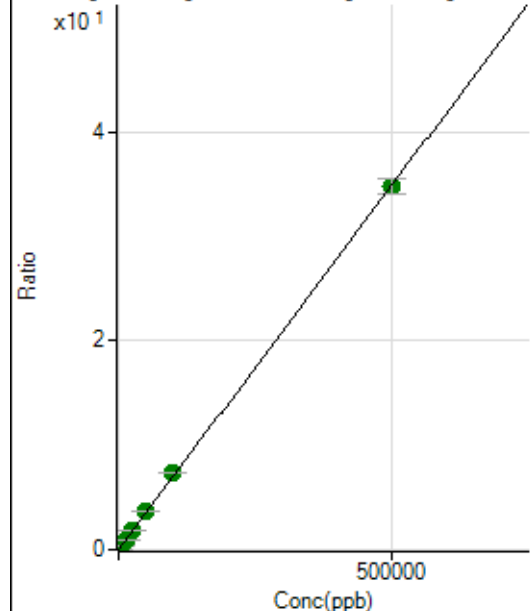
$$R = 0.9995$$

$$DL = 1.213$$

$$BEC = 7.357$$

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	7960.88	0.0022	P	4.0
2	☐	500.000	464.920	134857.36	0.0346	P	2.2
3	☐	5000.000	5459.598	1480593.04	0.3830	A	1.4
4	☐	12500.000	13767.179	3673764.93	0.9624	A	0.1
5	☐	25000.000	26785.079	7217389.04	1.8705	A	3.2
6	☐	50000.000	53700.212	13963855.79	3.7478	A	0.5
7	☐	100000.00	105824.38	28092167.69	7.3836	A	1.0
8	☐	500000.00	498339.60	126338023.7	34.7622	A	4.1

$$y = 6.9752\text{E-}005 * x + 0.0022$$

$$R = 0.9999$$

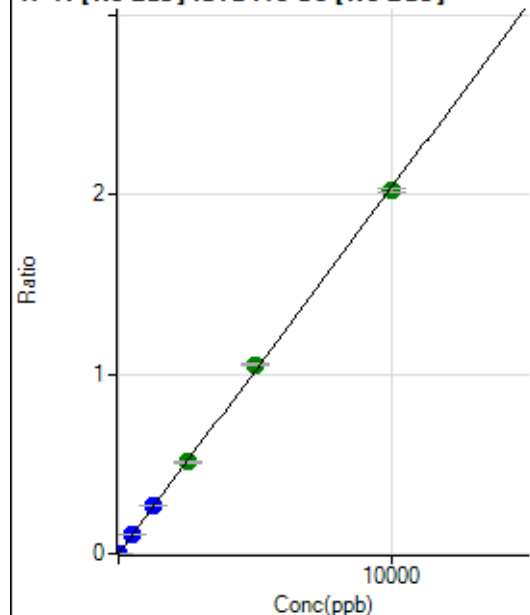
$$DL = 3.739$$

$$BEC = 31.03$$

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	177.78	0.0000	P	13.5
2	☐	5.000	4.802	4006.21	0.0010	P	5.6
3	☐	500.000	508.084	400447.02	0.1036	P	3.6
4	☐	1250.000	1307.026	1017236.19	0.2665	P	1.6
5	☐	2500.000	2503.993	1970232.21	0.5106	A	2.5
6	☐	5000.000	5169.101	3926441.06	1.0539	A	1.4
7	☐	10000.000	9906.919	7685613.71	2.0199	A	1.0
8	☐			2817.02	0.0008	P	7.0

$$y = 2.0388\text{E-}004 * x + 4.8519\text{E-}005$$

$$R = 0.9998$$

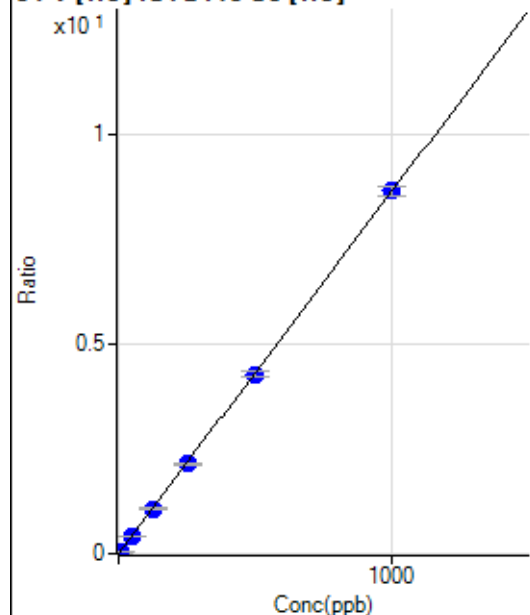
$$DL = 0.09664$$

$$BEC = 0.238$$

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	1.11	0.0000	P	173.2
2	☐	5.000	4.685	4258.45	0.0404	P	0.3
3	☐	50.000	49.865	45672.75	0.4300	P	1.2
4	☐	125.000	124.074	111550.52	1.0700	P	2.7
5	☐	250.000	247.269	219506.12	2.1324	P	3.5
6	☐	500.000	496.445	437570.75	4.2813	P	2.5
7	☐	1000.000	1002.585	885549.23	8.6461	P	2.3
8	☐			292.23	0.0029	P	11.7

$$y = 0.0086 * x + 1.0346\text{E-}005$$

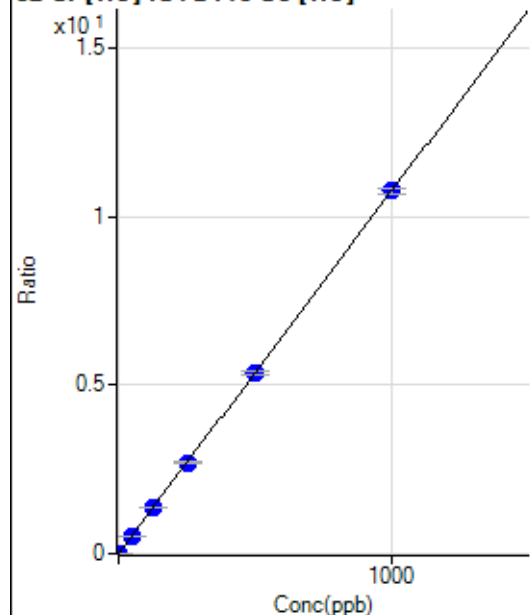
$$R = 1.0000$$

$$DL = 0.006234$$

$$BEC = 0.0012$$

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	374.45	0.0036	P	7.5
2	☐	2.000	1.776	2388.00	0.0227	P	0.5
3	☐	50.000	49.082	56396.51	0.5309	P	1.9
4	☐	125.000	126.234	141765.12	1.3598	P	2.4
5	☐	250.000	250.425	277345.02	2.6942	P	2.6
6	☐	500.000	497.956	547191.22	5.3537	P	2.2
7	☐	1000.000	1000.808	1101683.42	10.7564	P	1.3
8	☐			9693.36	0.0972	P	1.7

$$y = 0.0107 * x + 0.0036$$

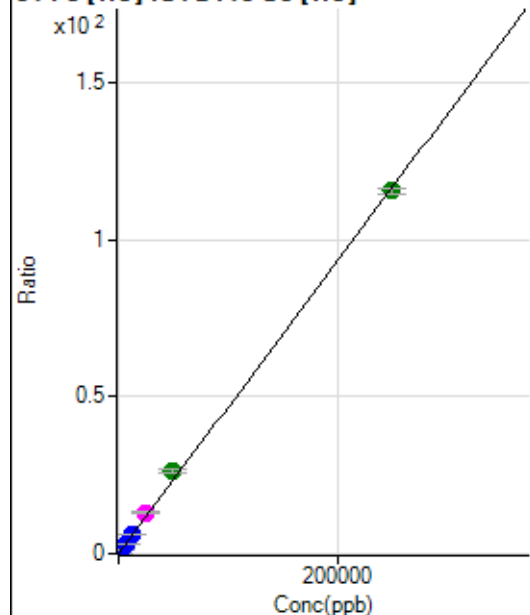
$$R = 1.0000$$

$$DL = 0.07499$$

$$BEC = 0.3328$$

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	501.87	0.0048	P	8.2
2	☐	50.000	48.104	2861.44	0.0272	P	3.1
3	☐	2500.000	2706.237	134147.42	1.2631	P	1.9
4	☐	6250.000	6801.389	330191.58	3.1671	P	2.1
5	☐	12500.000	13532.507	648194.70	6.2968	P	3.0
6	☐	25000.000	28018.757	1332045.46	13.0322	M	4.0
7	☐	50000.000	56569.041	2694300.78	26.3068	A	4.0
8	☐	250000.00	248316.84	11518526.53	115.4608	A	1.8

$$y = 4.6495E-004 * x + 0.0048$$

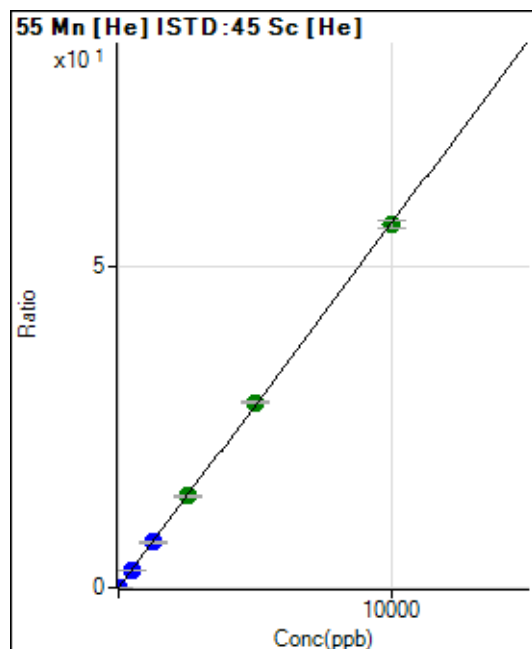
$$R = 0.9996$$

$$DL = 2.534$$

$$BEC = 10.3$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	40.00	0.0004	P	2.2
2	☐	1.000	0.876	563.35	0.0053	P	8.3
3	☐	500.000	495.278	298034.77	2.8059	P	1.6
4	☐	1250.000	1245.429	735501.38	7.0551	P	2.5
5	☐	2500.000	2524.124	1471956.16	14.2982	A	1.8
6	☐	5000.000	5088.507	2946394.82	28.8240	A	0.8
7	☐	10000.000	9950.523	5773308.80	56.3647	A	2.1
8	☐			5767.90	0.0578	P	3.1

$$y = 0.0057 * x + 3.8231E-004$$

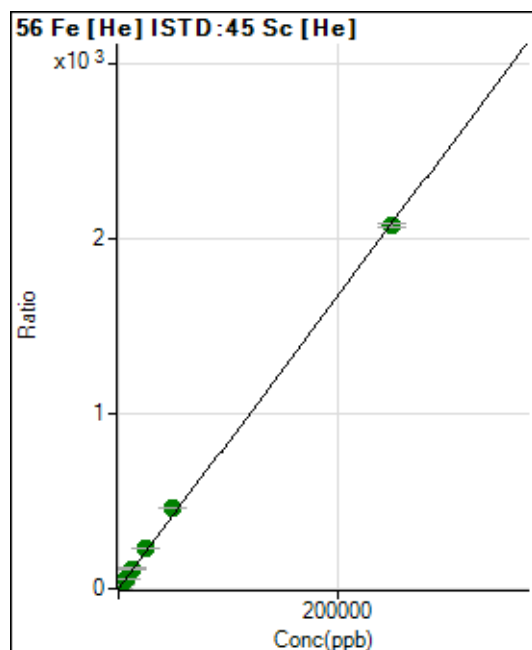
$$R = 0.9999$$

$$DL = 0.0044$$

$$BEC = 0.06749$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2470.62	0.0236	P	5.1
2	☐	50.000	48.696	45205.04	0.4290	P	2.2
3	☐	2500.000	2830.755	2505571.62	23.5892	A	0.6
4	☐	6250.000	7035.862	6108621.95	58.5961	A	2.9
5	☐	12500.000	13826.892	11851183.48	115.1303	A	3.8
6	☐	25000.000	27547.763	23443084.55	229.3544	A	2.3
7	☐	50000.000	55154.768	47029854.29	459.1784	A	0.6
8	☐	250000.00	248624.97	206490291.6	2,069.787	A	1.1

$$y = 0.0083 * x + 0.0236$$

$$R = 0.9998$$

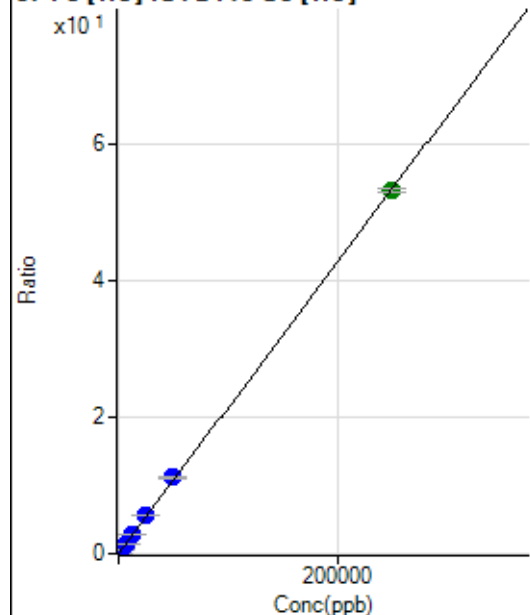
$$DL = 0.4339$$

$$BEC = 2.837$$

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	200.01	0.0019	P	3.3
2	☐	50.000	49.864	1322.31	0.0125	P	1.9
3	☐	2500.000	2644.401	60117.39	0.5660	P	0.6
4	☐	6250.000	6743.070	150163.26	1.4404	P	2.3
5	☐	12500.000	13206.685	290218.28	2.8192	P	2.6
6	☐	25000.000	26454.104	577024.91	5.6452	P	1.0
7	☐	50000.000	52539.262	1148141.01	11.2099	P	1.5
8	☐	250000.00	249297.63	5305830.33	53.1834	A	1.1

$$y = 2.1333\text{E-}004 * x + 0.0019$$

$$R = 0.9999$$

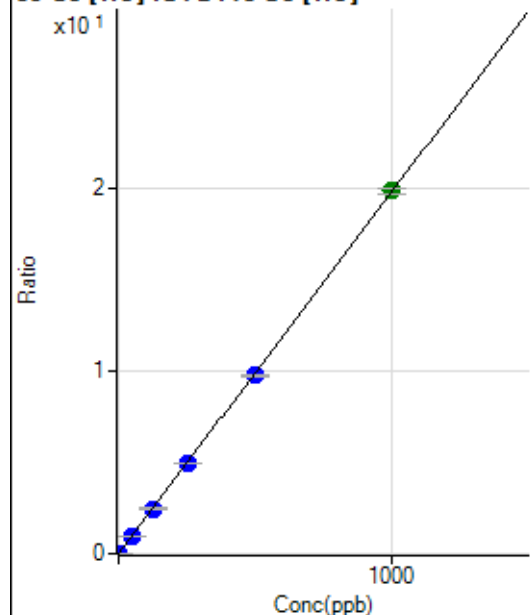
$$DL = 0.8845$$

$$BEC = 8.96$$

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	47.78	0.0005	P	33.2
2	☐	1.000	0.935	1997.94	0.0190	P	4.6
3	☐	50.000	49.701	104535.50	0.9842	P	0.6
4	☐	125.000	124.078	256082.52	2.4564	P	2.9
5	☐	250.000	250.179	509835.63	4.9524	P	1.8
6	☐	500.000	493.069	997632.07	9.7601	P	0.9
7	☐	1000.000	1003.551	2034578.70	19.8644	A	1.5
8	☐			1742.35	0.0175	P	10.8

$$y = 0.0198 * x + 4.5852\text{E-}004$$

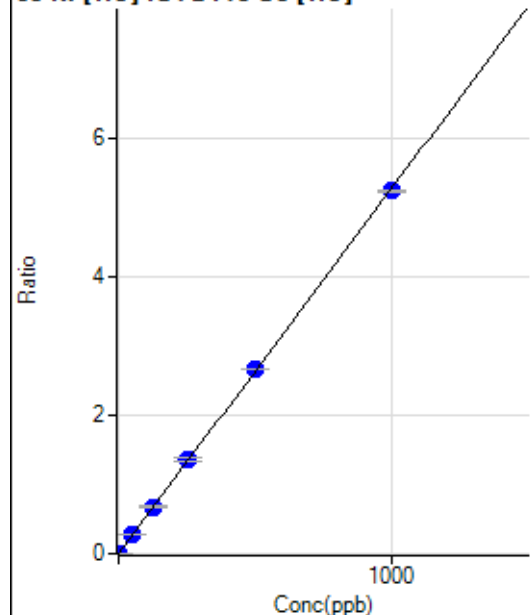
$$R = 1.0000$$

$$DL = 0.02307$$

$$BEC = 0.02316$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6.67	0.0001	P	50.4
2	☐	1.000	1.004	564.46	0.0054	P	4.0
3	☐	50.000	51.782	28999.66	0.2731	P	3.4
4	☐	125.000	128.691	70749.61	0.6787	P	2.6
5	☐	250.000	258.741	140456.40	1.3644	P	2.6
6	☐	500.000	506.812	273172.30	2.6725	P	0.5
7	☐	1000.000	993.858	536797.76	5.2407	P	0.4
8	☐			1834.58	0.0184	P	2.9

$$y = 0.0053 * x + 6.3651E-005$$

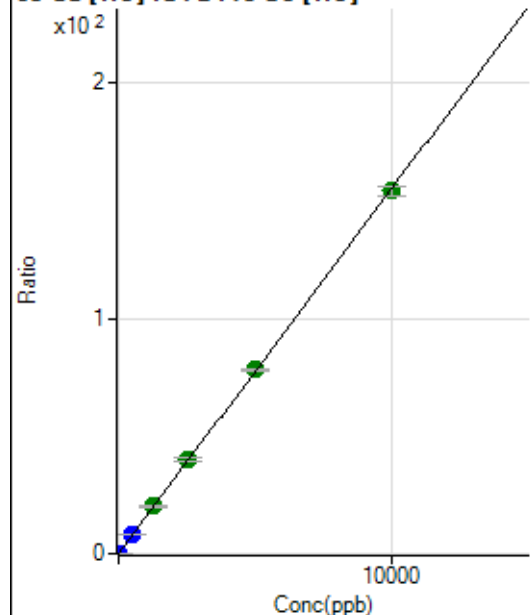
$$R = 0.9999$$

$$DL = 0.01826$$

$$BEC = 0.01207$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	370.01	0.0035	P	7.1
2	☐	2.000	1.902	3477.13	0.0330	P	6.1
3	☐	500.000	504.999	831195.33	7.8266	P	1.2
4	☐	1250.000	1291.661	2086381.77	20.0131	A	2.4
5	☐	2500.000	2594.554	4137691.22	40.1967	A	4.2
6	☐	5000.000	5050.275	7997199.54	78.2391	A	1.4
7	☐	10000.000	9945.766	15782249.07	154.0769	A	2.4
8	☐			6295.91	0.0631	P	3.9

$$y = 0.0155 * x + 0.0035$$

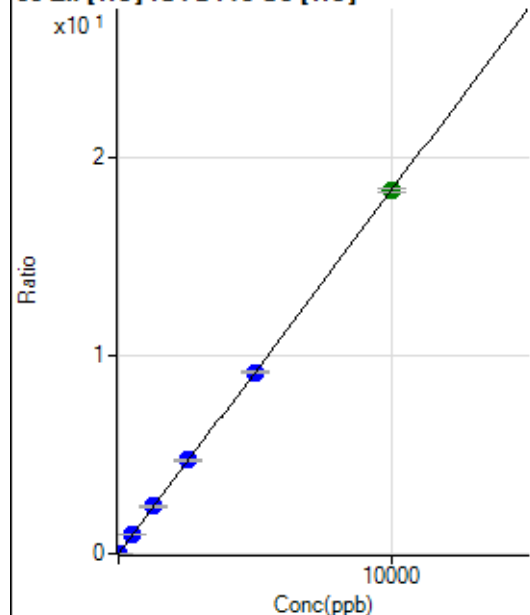
$$R = 0.9999$$

$$DL = 0.04829$$

$$BEC = 0.2281$$

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	144.45	0.0014	P	12.0
2	☐	2.000	2.387	606.69	0.0058	P	10.2
3	☐	500.000	523.428	102126.39	0.9616	P	1.4
4	☐	1250.000	1302.535	249265.55	2.3910	P	2.2
5	☐	2500.000	2566.204	484788.07	4.7092	P	2.5
6	☐	5000.000	4988.737	935589.84	9.1535	P	1.1
7	☐	10000.000	9981.342	1875681.76	18.3128	A	1.2
8	☐			1980.16	0.0198	P	4.6

$$y = 0.0018 * x + 0.0014$$

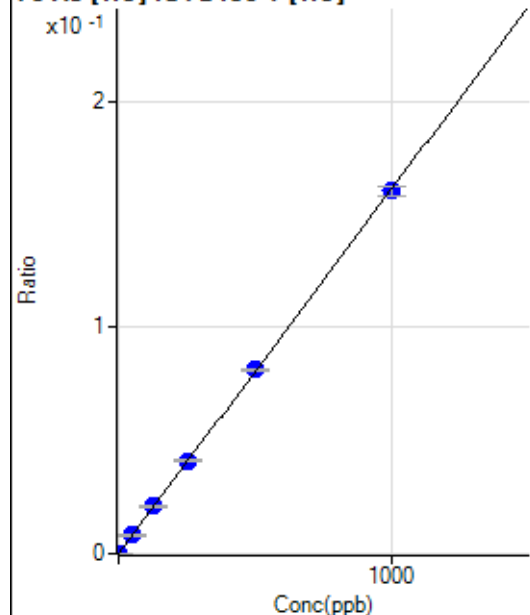
$$R = 1.0000$$

$$DL = 0.2696$$

$$BEC = 0.7519$$

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	2.00	0.0000	P	0.8
2	☐	1.000	0.937	117.01	0.0002	P	6.4
3	☐	50.000	50.871	6244.68	0.0082	P	3.6
4	☐	125.000	129.584	15619.86	0.0209	P	0.7
5	☐	250.000	255.571	30347.47	0.0412	P	0.9
6	☐	500.000	505.320	59983.04	0.0815	P	1.2
7	☐	1000.000	995.331	118047.43	0.1605	P	2.7
8	☐			43.00	0.0001	P	19.3

$$y = 1.6122E-004 * x + 2.7113E-006$$

$$R = 1.0000$$

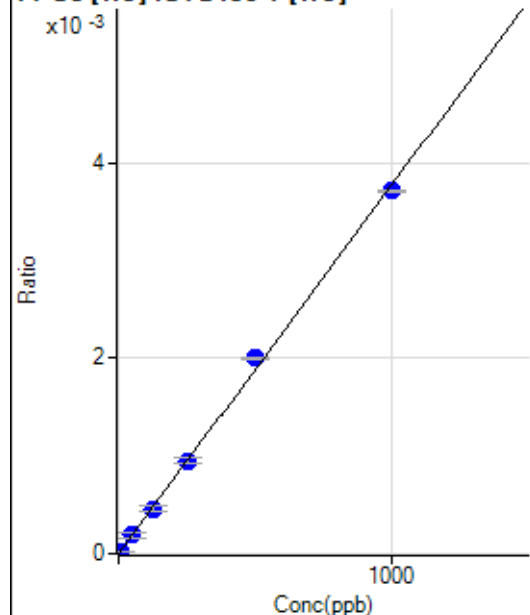
$$DL = 0.0004266$$

$$BEC = 0.01682$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.407	15.55	0.0000	P	43.8
3	☐	50.000	49.839	143.34	0.0002	P	23.4
4	☐	125.000	122.601	345.56	0.0005	P	13.9
5	☐	250.000	251.646	698.91	0.0009	P	6.8
6	☐	500.000	529.912	1471.20	0.0020	P	0.6
7	☐	1000.000	984.938	2732.51	0.0037	P	0.8
8	☐			4.44	0.0000	P	114.6

$$y = 3.7710\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9993$$

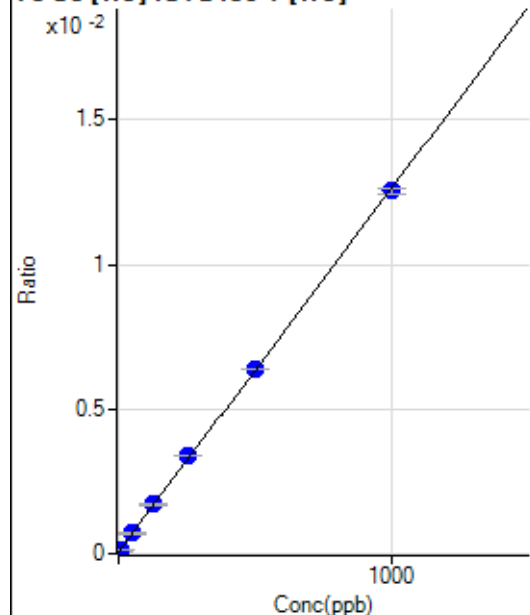
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	51.34	0.0001	P	2.2
2	☐	5.000	3.494	86.34	0.0001	P	9.9
3	☐	50.000	50.643	537.06	0.0007	P	5.5
4	☐	125.000	131.270	1284.53	0.0017	P	2.9
5	☐	250.000	264.636	2499.14	0.0034	P	0.5
6	☐	500.000	504.232	4713.94	0.0064	P	0.4
7	☐	1000.000	993.416	9230.62	0.0125	P	1.5
8	☐			59.01	0.0001	P	5.2

$$y = 1.2560\text{E-}005 * x + 6.9594\text{E-}005$$

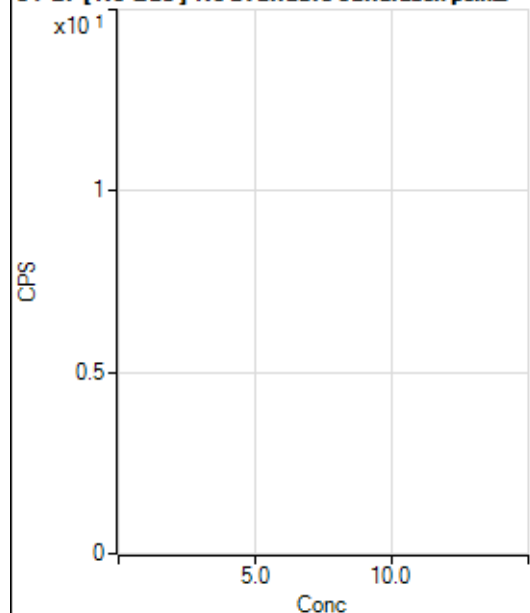
$$R = 0.9998$$

$$DL = 0.3698$$

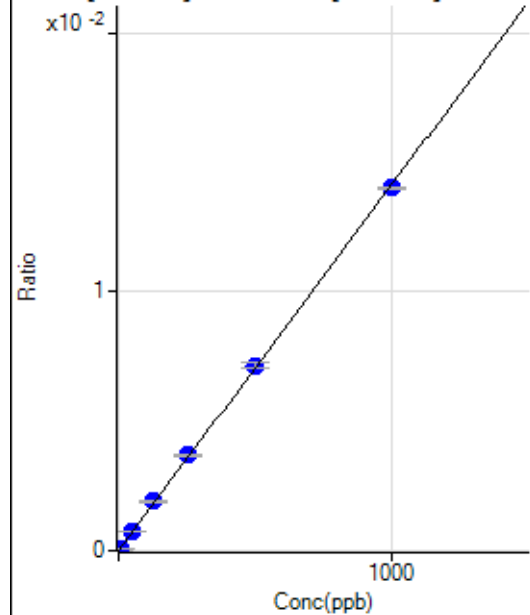
$$BEC = 5.541$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43519.79		P	2.8
2	☐			43499.33		P	3.3
3	☐			43569.89		P	2.1
4	☐			43395.18		P	2.8
5	☐			42468.32		P	3.0
6	☐			41340.60		P	0.6
7	☐			40493.93		P	0.9
8	☐			40664.37		P	3.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-8.75	0.0000	P	-284.
2	☐	5.000	4.852	504.54	0.0001	P	7.0
3	☐	50.000	51.747	5593.08	0.0007	P	2.0
4	☐	125.000	134.676	14368.85	0.0019	P	2.2
5	☐	250.000	261.813	27479.47	0.0037	P	2.4
6	☐	500.000	507.327	53305.60	0.0072	P	2.5
7	☐	1000.000	992.087	104717.08	0.0140	P	0.9
8	☐			185.40	0.0000	P	11.9

$$y = 1.4137E-005 * x - 1.2304E-006$$

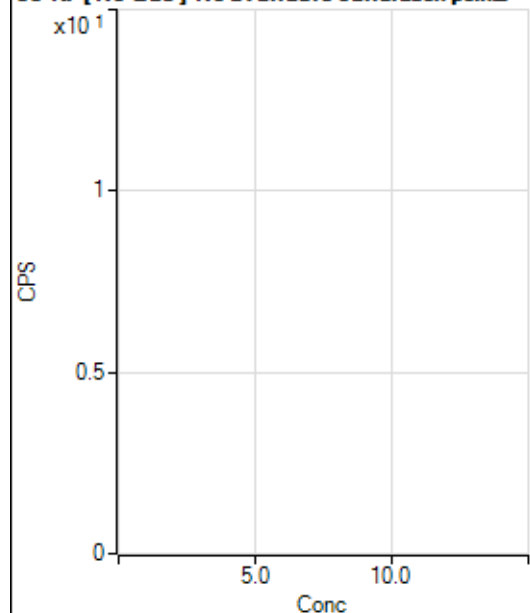
$$R = 0.9999$$

$$DL = 0.7437$$

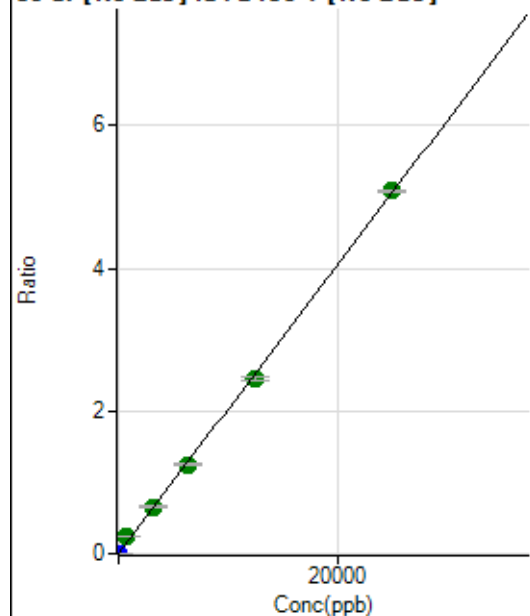
$$BEC = -0.08704$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			377.46		P	4.6
2	☐			375.38		P	0.5
3	☐			377.88		P	11.7
4	☐			372.04		P	10.4
5	☐			369.54		P	2.7
6	☐			372.88		P	1.5
7	☐			396.21		P	5.6
8	☐			395.79		P	3.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	627.81	0.0001	P	23.3
2	☐	1.000	0.830	1919.63	0.0003	P	9.8
3	☐	625.000	1210.197	1871143.60	0.2444	A	2.3
4	☐	3125.000	3213.902	4899364.69	0.6489	A	3.8
5	☐	6250.000	6185.855	9276338.05	1.2488	A	1.9
6	☐	12500.000	12126.810	18199188.77	2.4481	A	2.3
7	☐	25000.000	25176.889	37955143.56	5.0825	A	0.4
8	☐			14980.72	0.0021	P	7.6

$$y = 2.0187E-004 * x + 8.8707E-005$$

$$R = 0.9995$$

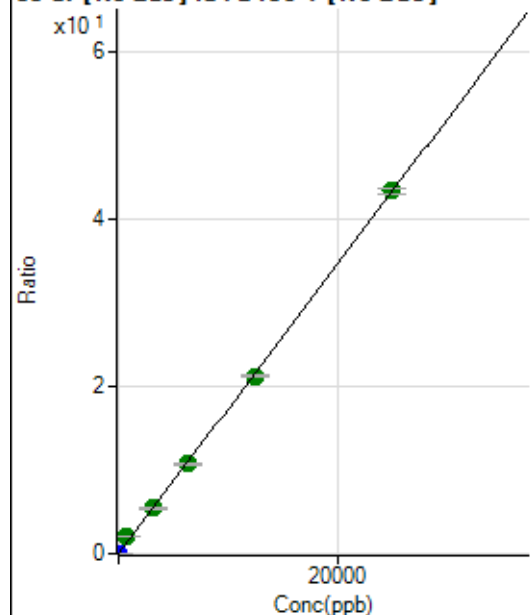
$$DL = 0.3069$$

$$BEC = 0.4394$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	211.12	0.0000	P	7.5
2	☐	1.000	0.909	11991.64	0.0016	P	2.2
3	☐	625.000	1223.936	16199207.83	2.1153	A	2.0
4	☐	3125.000	3159.140	41232950.23	5.4598	A	2.1
5	☐	6250.000	6234.081	80024035.82	10.7740	A	1.9
6	☐	12500.000	12275.381	157727895.1	21.2149	A	1.5
7	☐	25000.000	25097.048	323863443.3	43.3739	A	1.9
8	☐			125835.00	0.0172	P	7.8

$$y = 0.0017 * x + 2.9828E-005$$

$$R = 0.9996$$

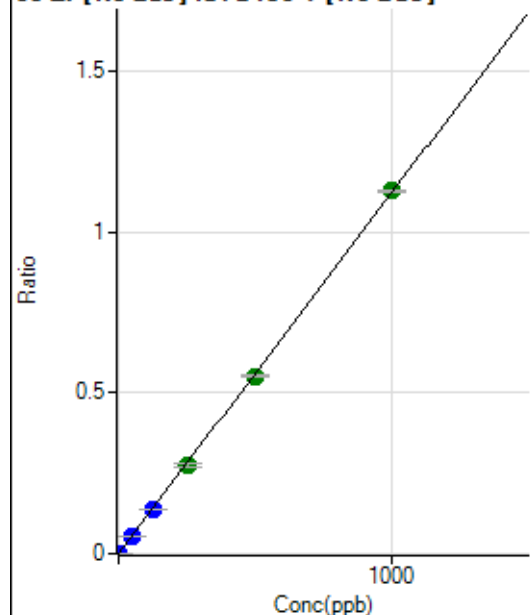
$$DL = 0.003875$$

$$BEC = 0.01726$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	230.56	0.0000	P	5.9
2	☐	1.000	0.906	7860.78	0.0010	P	2.2
3	☐	50.000	48.600	417799.47	0.0546	P	0.9
4	☐	125.000	123.007	1042518.96	0.1380	P	2.0
5	☐	250.000	245.817	2048120.08	0.2758	A	3.6
6	☐	500.000	491.650	4101456.08	0.5516	A	1.3
7	☐	1000.000	1005.540	8424372.93	1.1282	A	0.8
8	☐			3297.70	0.0005	P	11.1

$$y = 0.0011 * x + 3.2639E-005$$

$$R = 0.9999$$

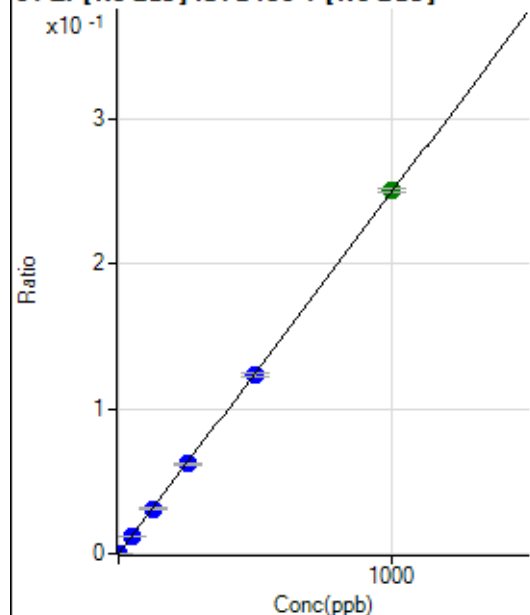
$$DL = 0.005121$$

$$BEC = 0.02909$$

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	52.78	0.0000	P	80.8
2	☐	1.000	0.857	1655.71	0.0002	P	5.5
3	☐	50.000	47.676	91115.61	0.0119	P	0.7
4	☐	125.000	123.030	231768.25	0.0307	P	3.4
5	☐	250.000	247.590	458643.02	0.0618	P	2.9
6	☐	500.000	494.029	916093.87	0.1232	P	2.0
7	☐	1000.000	1003.951	1869750.80	0.2504	A	1.1
8	☐			736.15	0.0001	P	6.6

$$y = 2.4941\text{E-}004 * x + 7.3970\text{E-}006$$

$$R = 1.0000$$

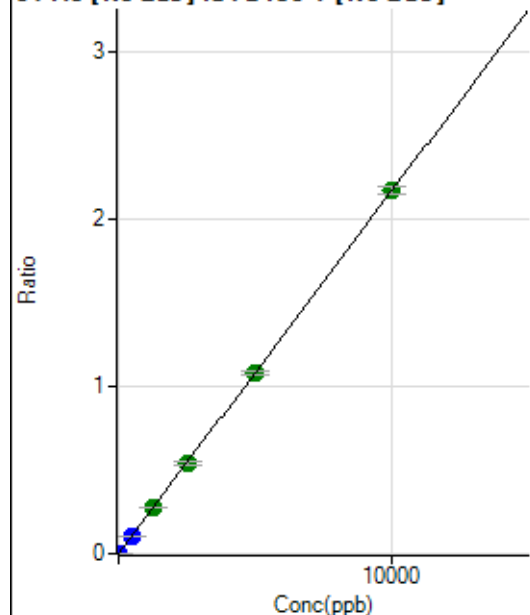
$$DL = 0.07187$$

$$BEC = 0.02966$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	14.7
2	☐	5.000	5.591	9175.51	0.0012	P	3.7
3	☐	500.000	497.335	825142.63	0.1078	P	0.2
4	☐	1250.000	1269.367	2076485.59	0.2750	A	3.5
5	☐	2500.000	2492.912	4009800.26	0.5401	A	4.3
6	☐	5000.000	4976.183	8013860.25	1.0780	A	2.5
7	☐	10000.000	10011.393	16192764.08	2.1688	A	2.3
8	☐			6926.92	0.0009	P	9.7

$$y = 2.1664\text{E-}004 * x + 1.3399\text{E-}005$$

$$R = 1.0000$$

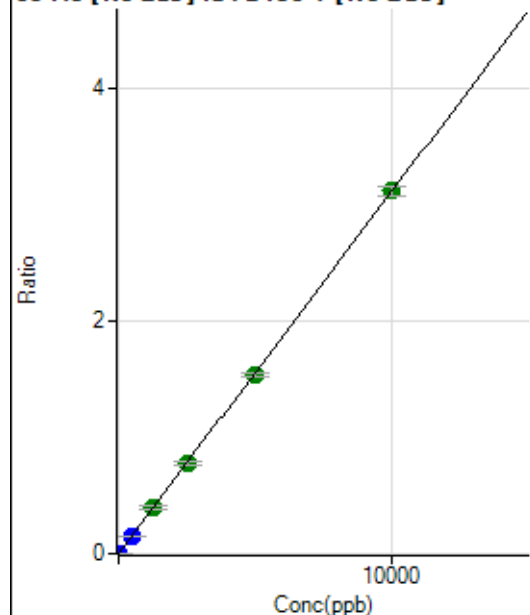
$$DL = 0.02723$$

$$BEC = 0.06185$$

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	36.11	0.0000	P	69.9
2	☐	5.000	4.783	11179.76	0.0015	P	1.7
3	☐	500.000	498.169	1186424.93	0.1549	P	1.1
4	☐	1250.000	1278.952	3002817.93	0.3978	A	5.0
5	☐	2500.000	2498.668	5770619.75	0.7771	A	3.3
6	☐	5000.000	4941.115	11422955.38	1.5367	A	2.9
7	☐	10000.000	10026.248	23279629.86	3.1182	A	2.6
8	☐			9764.77	0.0013	P	9.5

$$y = 3.1100\text{E-}004 * x + 5.0312\text{E-}006$$

$$R = 1.0000$$

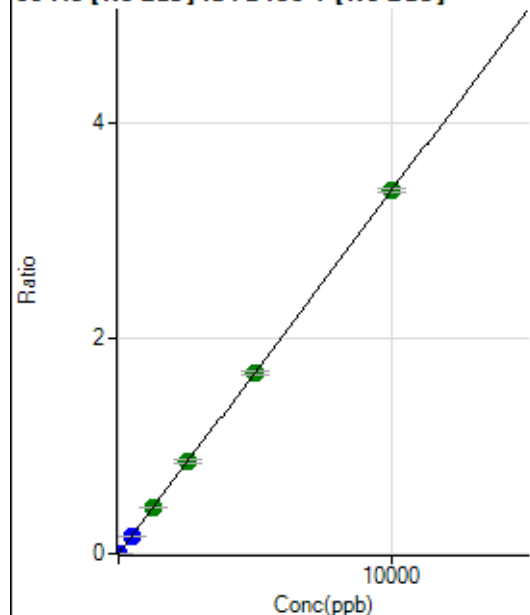
$$DL = 0.03394$$

$$BEC = 0.01618$$

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	94.45	0.0000	P	41.6
2	☐	5.000	4.803	12241.85	0.0016	P	0.9
3	☐	500.000	498.587	1288597.89	0.1683	P	0.5
4	☐	1250.000	1270.973	3238942.76	0.4289	A	3.6
5	☐	2500.000	2533.269	6347495.11	0.8549	A	4.4
6	☐	5000.000	4985.188	12506894.55	1.6824	A	2.3
7	☐	10000.000	9996.538	25190052.82	3.3736	A	1.1
8	☐			18359.90	0.0025	P	5.6

$$y = 3.3747\text{E-}004 * x + 1.3544\text{E-}005$$

$$R = 1.0000$$

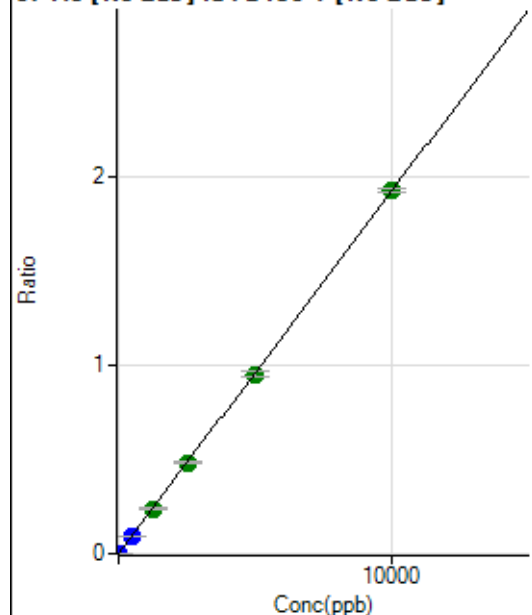
$$DL = 0.05013$$

$$BEC = 0.04013$$

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	16.67	0.0000	P	4.7
2	☐	5.000	4.660	6724.03	0.0009	P	6.5
3	☐	500.000	493.207	725251.93	0.0947	P	1.4
4	☐	1250.000	1239.818	1797679.20	0.2381	A	3.2
5	☐	2500.000	2516.247	3588408.15	0.4831	A	2.1
6	☐	5000.000	4962.473	7082787.83	0.9528	A	2.9
7	☐	10000.000	10016.314	14360360.22	1.9232	A	1.1
8	☐			5995.93	0.0008	P	10.0

$$y = 1.9201\text{E-}004 * x + 2.3632\text{E-}006$$

$$R = 1.0000$$

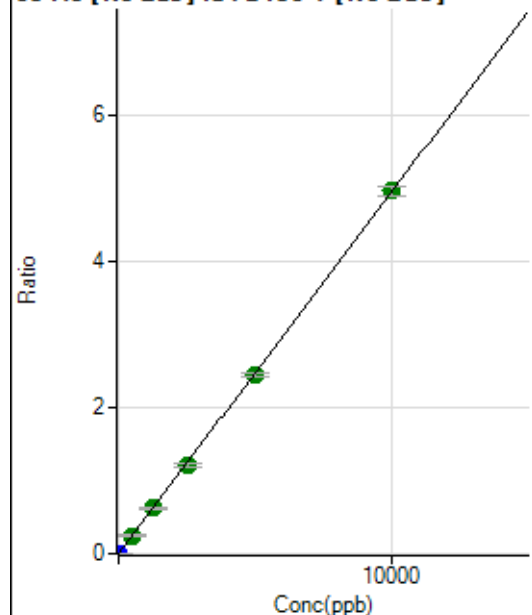
$$DL = 0.001753$$

$$BEC = 0.01231$$

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	44.44	0.0000	P	39.2
2	☐	5.000	4.764	17681.28	0.0024	P	8.2
3	☐	500.000	502.344	1901279.82	0.2483	A	2.0
4	☐	1250.000	1252.123	4671234.65	0.6188	A	5.9
5	☐	2500.000	2463.046	9037865.31	1.2172	A	4.0
6	☐	5000.000	4948.609	18180266.90	2.4456	A	2.5
7	☐	10000.000	10034.552	37022182.77	4.9590	A	2.9
8	☐			14755.52	0.0020	P	8.2

$$y = 4.9419\text{E-}004 * x + 6.2338\text{E-}006$$

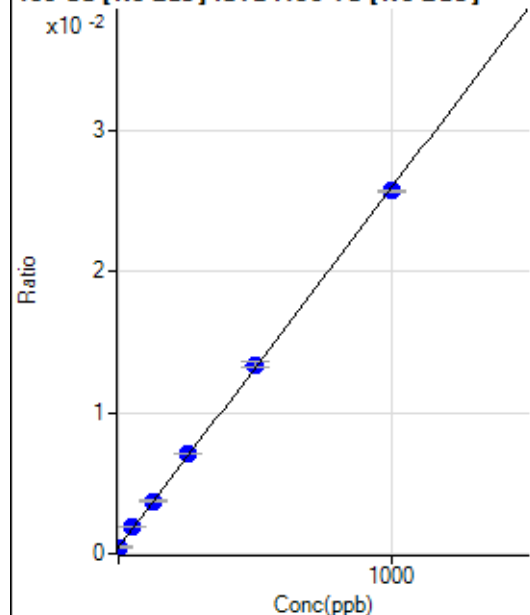
$$R = 1.0000$$

$$DL = 0.01484$$

$$BEC = 0.01261$$

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	2239.14	0.0004	P	9.1
2	☐	1.000	1.191	2503.07	0.0005	P	5.7
3	☐	50.000	57.259	10053.95	0.0019	P	2.7
4	☐	125.000	129.649	20482.43	0.0037	P	1.0
5	☐	250.000	262.013	37298.54	0.0071	P	0.5
6	☐	500.000	509.304	71108.78	0.0134	P	3.0
7	☐	1000.000	991.400	139198.41	0.0258	P	0.8
8	☐			2403.06	0.0005	P	11.4

$$y = 2.5537\text{E-}005 * x + 4.3833\text{E-}004$$

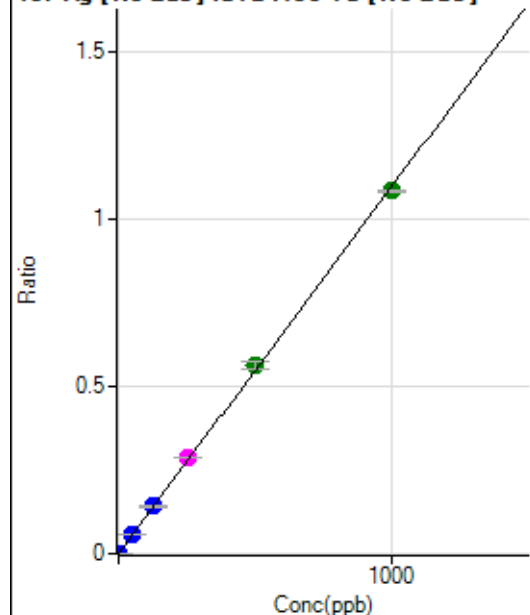
$$R = 0.9999$$

$$DL = 4.7$$

$$BEC = 17.16$$

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	311.12	0.0001	P	28.5
2	☐	1.000	1.030	6354.43	0.0012	P	9.1
3	☐	50.000	53.403	309921.78	0.0586	P	1.4
4	☐	125.000	129.402	774909.86	0.1419	P	2.9
5	☐	250.000	262.437	1504572.95	0.2876	M	1.7
6	☐	500.000	514.111	2979559.25	0.5634	A	4.2
7	☐	1000.000	989.115	5858102.82	1.0840	A	0.3
8	☐			3689.48	0.0007	P	6.8

$$y = 0.0011 * x + 6.0955\text{E-}005$$

$$R = 0.9998$$

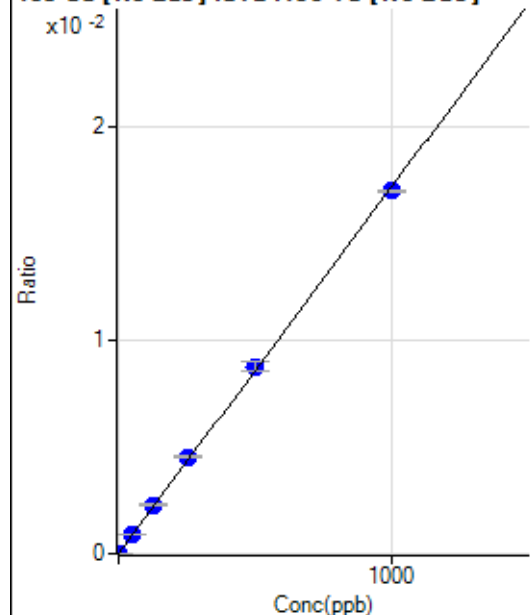
$$DL = 0.04761$$

$$BEC = 0.05562$$

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	19.44	0.0000	P	14.9
2	☐	1.000	0.825	95.84	0.0000	P	15.8
3	☐	50.000	53.790	4898.15	0.0009	P	3.4
4	☐	125.000	132.180	12400.14	0.0023	P	2.3
5	☐	250.000	264.736	23758.07	0.0045	P	2.3
6	☐	500.000	510.939	46336.04	0.0088	P	4.6
7	☐	1000.000	989.760	91728.19	0.0170	P	0.9
8	☐			75.00	0.0000	P	1.6

$$y = 1.7145\text{E-}005 * x + 3.8033\text{E-}006$$

$$R = 0.9998$$

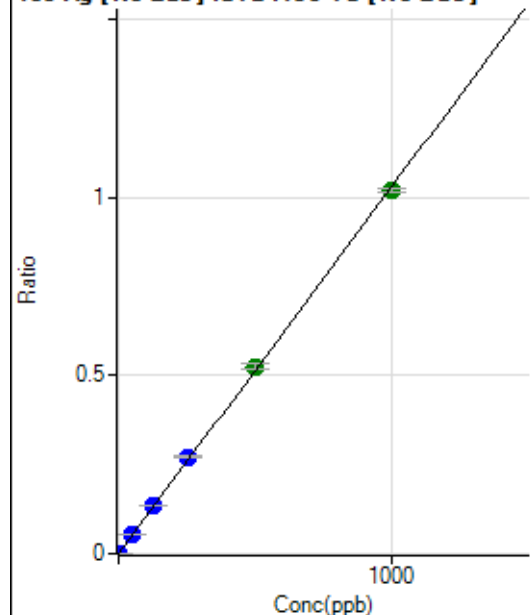
$$DL = 0.09889$$

$$BEC = 0.2218$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	269.46	0.0001	P	11.6
2	☐	1.000	1.089	6271.08	0.0012	P	7.6
3	☐	50.000	53.702	292966.02	0.0554	P	2.0
4	☐	125.000	132.785	747681.47	0.1369	P	1.1
5	☐	250.000	264.576	1425813.39	0.2726	P	2.8
6	☐	500.000	511.258	2785870.55	0.5268	A	3.7
7	☐	1000.000	989.569	5510051.68	1.0196	A	1.0
8	☐			3517.23	0.0007	P	3.7

$$y = 0.0010 * x + 5.2760\text{E-}005$$

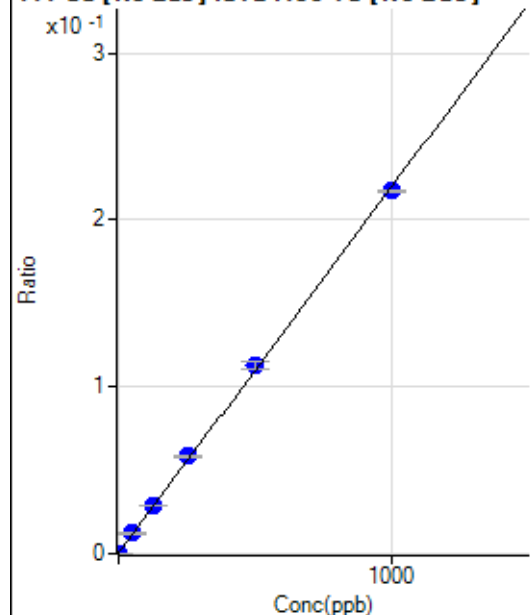
$$R = 0.9998$$

$$DL = 0.01784$$

$$BEC = 0.05121$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1573.23	0.0003	P	8.4
2	☐	1.000	1.022	2840.69	0.0005	P	6.1
3	☐	50.000	53.774	64044.12	0.0121	P	2.0
4	☐	125.000	130.206	157740.10	0.0289	P	2.4
5	☐	250.000	264.762	305392.70	0.0584	P	2.9
6	☐	500.000	512.167	595876.36	0.1127	P	3.7
7	☐	1000.000	989.387	1174811.16	0.2174	P	0.3
8	☐			2167.16	0.0004	P	7.3

$$y = 2.1940\text{E-}004 * x + 3.0786\text{E-}004$$

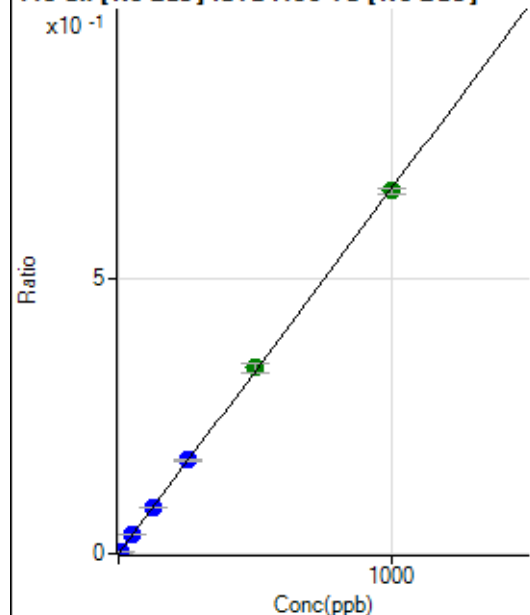
$$R = 0.9998$$

$$DL = 0.3553$$

$$BEC = 1.403$$

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	350.02	0.0001	P	9.7
2	☐	5.000	4.617	16668.96	0.0031	P	2.7
3	☐	50.000	50.911	178483.61	0.0337	P	1.5
4	☐	125.000	124.691	450882.03	0.0825	P	1.0
5	☐	250.000	256.983	889218.40	0.1700	P	2.3
6	☐	500.000	508.400	1777920.85	0.3363	A	5.1
7	☐	1000.000	994.049	3553194.91	0.6575	A	1.5
8	☐			4525.87	0.0009	P	2.8

$$y = 6.6134\text{E-}004 * x + 6.8162\text{E-}005$$

$$R = 0.9999$$

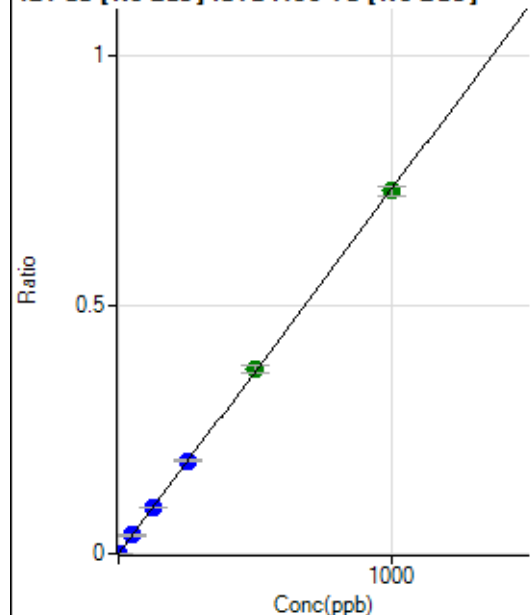
$$DL = 0.02989$$

$$BEC = 0.1031$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	36.11	0.0000	P	29.1
2	☐	2.000	1.831	7193.80	0.0013	P	2.5
3	☐	50.000	50.694	196296.91	0.0371	P	2.5
4	☐	125.000	125.929	503529.71	0.0922	P	1.2
5	☐	250.000	255.069	976292.12	0.1867	P	3.2
6	☐	500.000	505.584	1956516.71	0.3700	A	4.4
7	☐	1000.000	995.790	3938433.29	0.7288	A	2.8
8	☐			3361.63	0.0006	P	6.1

$$y = 7.3186\text{E-}004 * x + 6.9733\text{E-}006$$

$$R = 1.0000$$

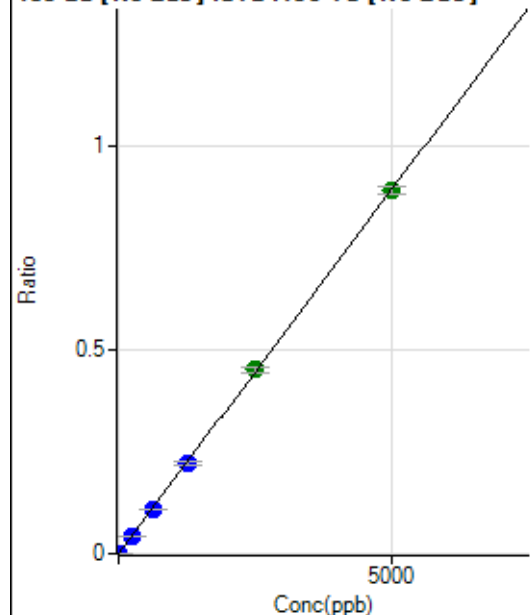
$$DL = 0.00833$$

$$BEC = 0.009528$$

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	13.89	0.0000	P	76.5
2	☐	10.000	8.898	8511.26	0.0016	P	1.9
3	☐	250.000	248.754	235350.08	0.0445	P	1.3
4	☐	625.000	613.224	599078.33	0.1097	P	1.5
5	☐	1250.000	1247.153	1166189.31	0.2230	P	4.0
6	☐	2500.000	2531.526	2394232.93	0.4527	A	3.2
7	☐	5000.000	4986.485	4819181.44	0.8917	A	2.0
8	☐			3347.72	0.0006	P	10.9

$$y = 1.7882\text{E-}004 * x + 2.8032\text{E-}006$$

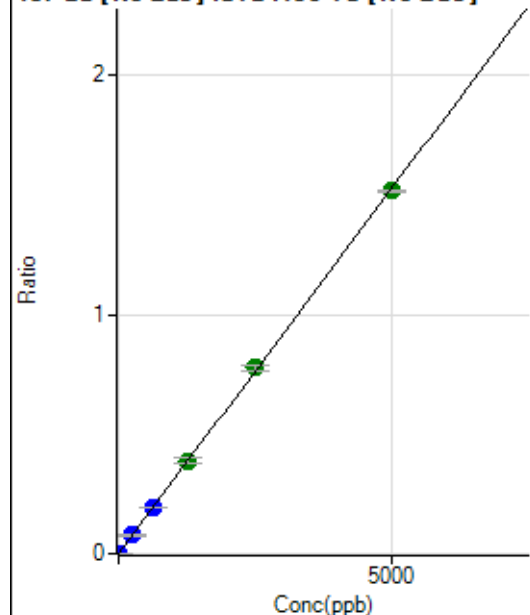
$$R = 1.0000$$

$$DL = 0.03599$$

$$BEC = 0.01568$$

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	13.89	0.0000	P	88.5
2	☐	10.000	8.979	14644.50	0.0027	P	3.4
3	☐	250.000	250.387	404212.53	0.0764	P	1.7
4	☐	625.000	636.225	1060580.49	0.1941	P	1.0
5	☐	1250.000	1276.278	2036548.55	0.3894	A	4.6
6	☐	2500.000	2543.466	4104466.54	0.7761	A	3.4
7	☐	5000.000	4970.277	8196431.09	1.5166	A	0.8
8	☐			5351.19	0.0010	P	5.9

$$y = 3.0513E-004 * x + 2.6687E-006$$

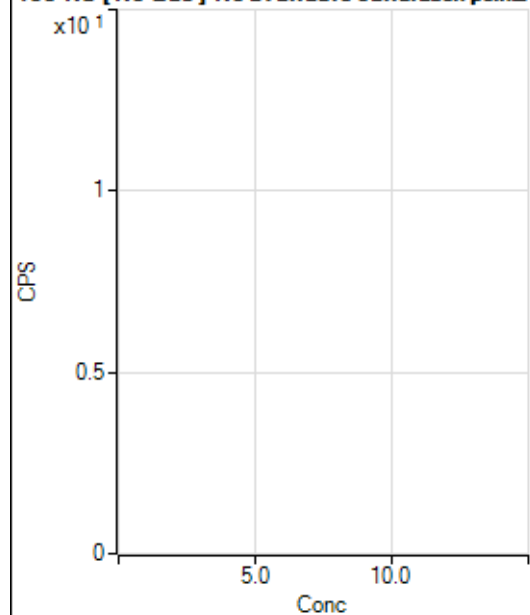
$$R = 0.9999$$

$$DL = 0.02321$$

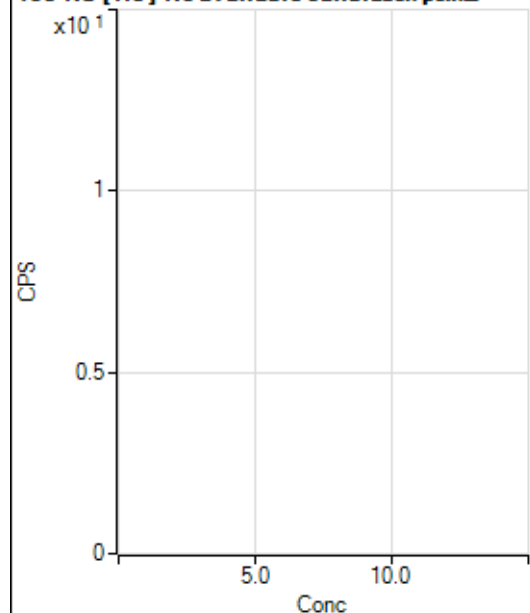
$$BEC = 0.008746$$

Weight: <None>

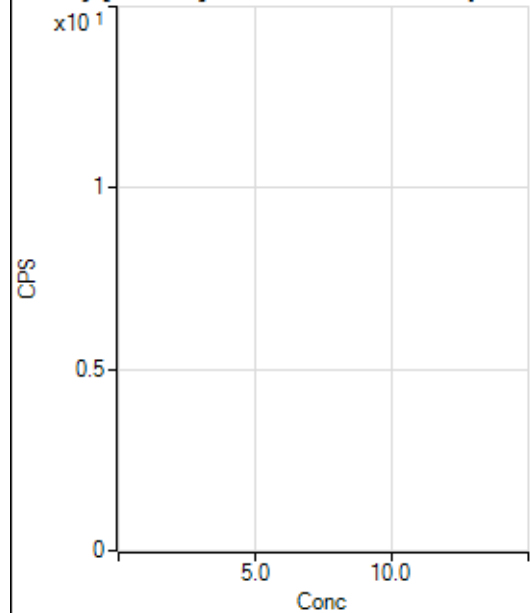
Min Conc: 0

150 Nd [No Gas] No available calibration points

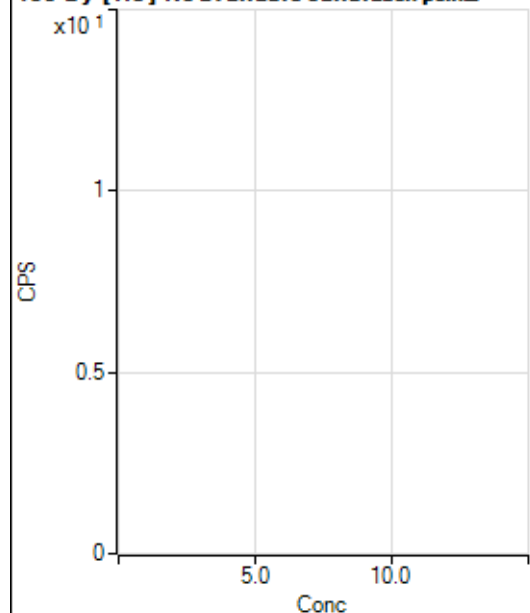
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	114.5
2	☐			4.44		P	173.2
3	☐			46.67		P	51.5
4	☐			77.78		P	26.2
5	☐			171.11		P	15.7
6	☐			304.46		P	3.3
7	☐			582.25		P	14.5
8	☐			35.55		P	10.8

150 Nd [He] No available calibration points

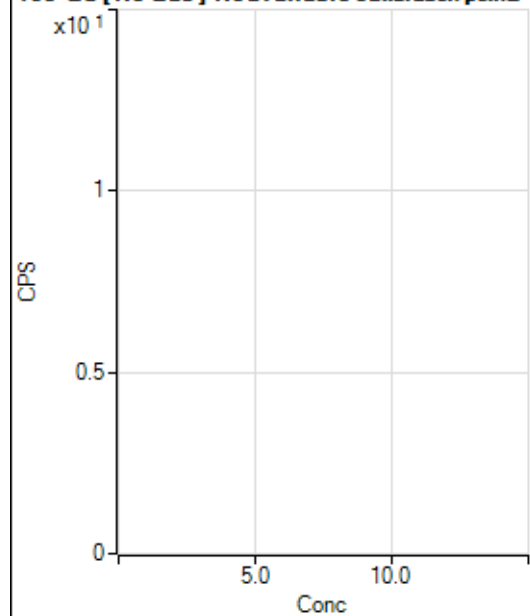
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			0.00		P	
3	☐			6.67		P	132.3
4	☐			6.67		P	100.0
5	☐			8.89		P	86.6
6	☐			24.44		P	20.8
7	☐			42.22		P	79.1
8	☐			11.11		P	45.8

156 Dy [No Gas] No available calibration points

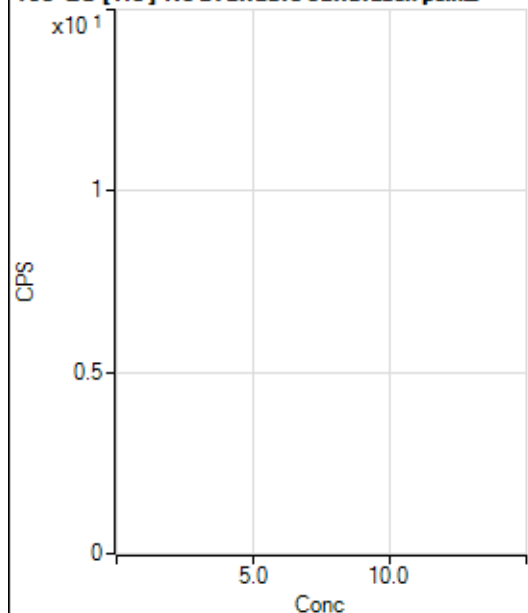
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	114.6
2	☐			11.11		P	114.6
3	☐			19.44		P	65.5
4	☐			52.78		P	32.9
5	☐			100.00		P	72.6
6	☐			111.12		P	26.3
7	☐			291.68		P	0.0
8	☐			763.93		P	5.4

156 Dy [He] No available calibration points

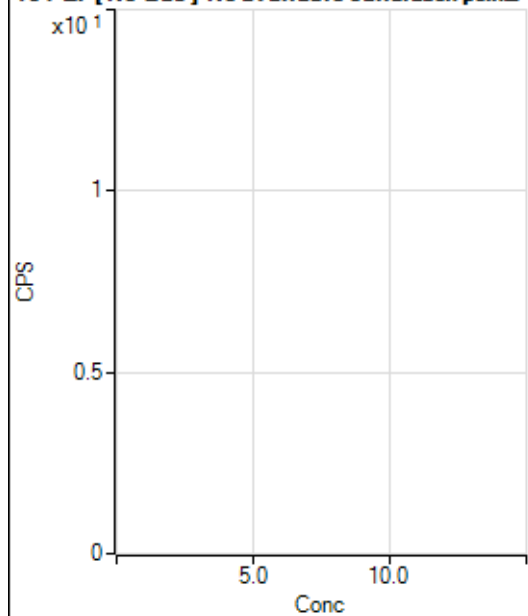
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.6
2	☐			3.33		P	100.1
3	☐			5.55		P	69.3
4	☐			16.67		P	20.0
5	☐			28.89		P	46.6
6	☐			62.22		P	18.8
7	☐			122.23		P	19.3
8	☐			351.12		P	15.8

160 Gd [No Gas] Noavailable calibration poin_

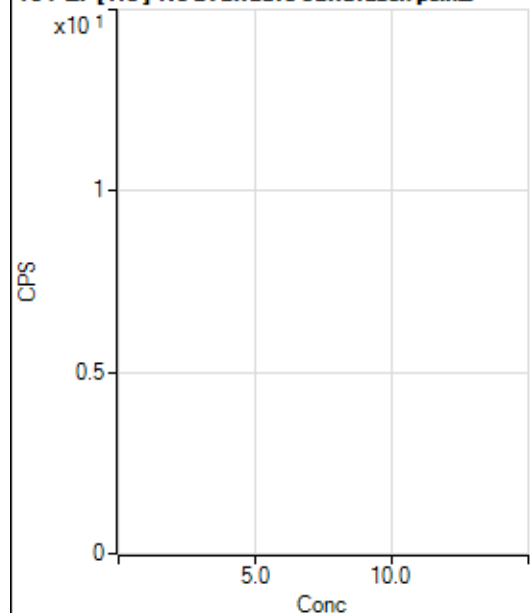
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	88.2
2	☐			25.00		P	88.2
3	☐			25.00		P	33.3
4	☐			61.11		P	39.4
5	☐			69.44		P	38.6
6	☐			163.90		P	29.8
7	☐			302.79		P	14.1
8	☐			905.61		P	14.4

160 Gd [He] No available calibration points

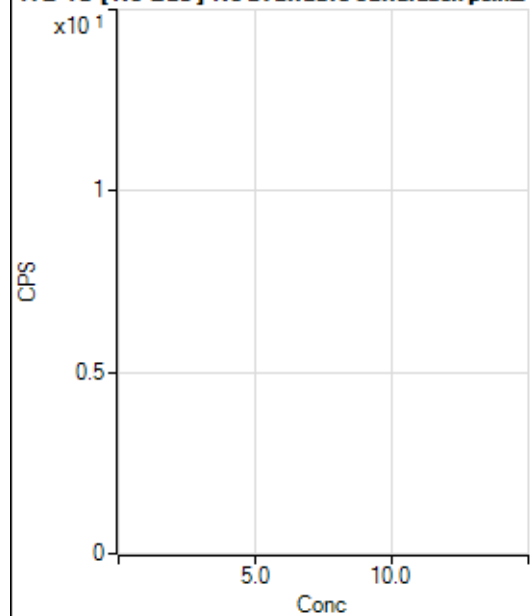
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			67.78		P	36.3
2	☐			58.89		P	34.1
3	☐			77.78		P	21.1
4	☐			77.78		P	8.9
5	☐			80.00		P	18.2
6	☐			114.45		P	14.7
7	☐			181.11		P	22.3
8	☐			425.57		P	13.4

164 Er [No Gas] No available calibration points

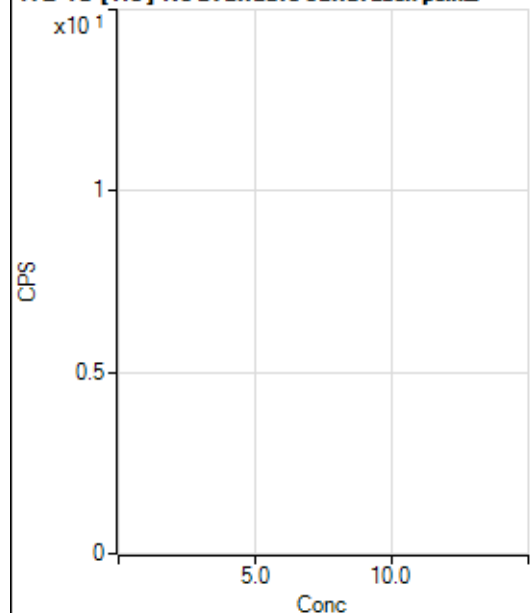
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	56.8
2	☐			44.45		P	47.2
3	☐			50.00		P	0.0
4	☐			63.89		P	39.8
5	☐			36.11		P	35.3
6	☐			55.56		P	8.7
7	☐			86.11		P	29.6
8	☐			72.23		P	24.0

164 Er [He] No available calibration points

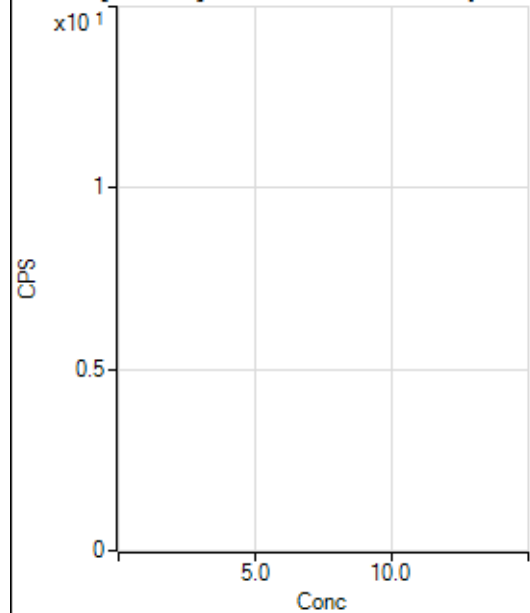
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	108.3
2	☐			20.00		P	60.1
3	☐			11.11		P	17.3
4	☐			13.33		P	66.2
5	☐			22.22		P	52.7
6	☐			25.55		P	15.1
7	☐			44.45		P	8.7
8	☐			21.11		P	32.9

172 Yb [No Gas] No available calibration points

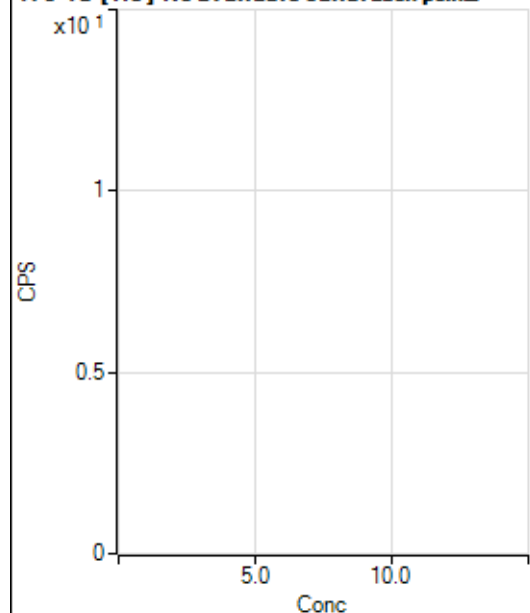
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	43.3
2	☐			61.11		P	64.4
3	☐			47.22		P	27.0
4	☐			38.89		P	24.7
5	☐			55.56		P	43.3
6	☐			80.56		P	31.6
7	☐			150.01		P	22.2
8	☐			313.90		P	9.3

172 Yb [He] No available calibration points

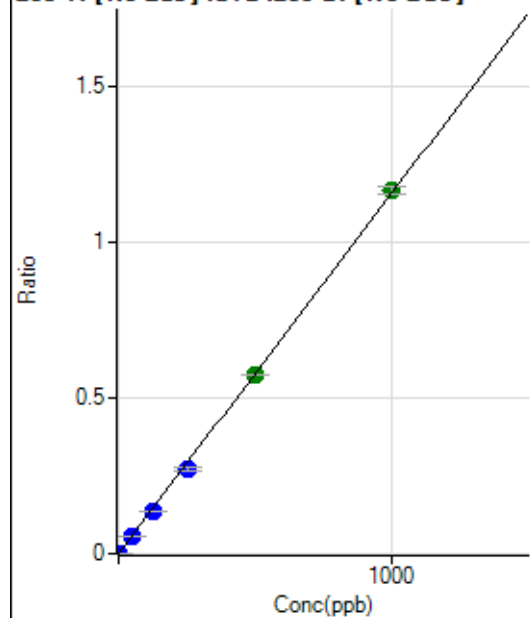
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.07		P	66.6
2	☐			20.37		P	56.8
3	☐			18.52		P	17.3
4	☐			14.81		P	43.3
5	☐			48.15		P	43.7
6	☐			35.19		P	18.2
7	☐			70.37		P	12.1
8	☐			148.15		P	41.8

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			713.93		P	8.8
2	☐			777.82		P	9.6
3	☐			1455.67		P	5.4
4	☐			2661.45		P	7.4
5	☐			4664.86		P	1.1
6	☐			8300.07		P	3.9
7	☐			16146.41		P	2.4
8	☐			877.83		P	11.9

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4597.18		P	1.8
2	☐			4584.21		P	2.1
3	☐			4993.62		P	5.1
4	☐			5369.72		P	0.9
5	☐			6144.13		P	3.0
6	☐			7908.08		P	1.6
7	☐			11360.60		P	2.7
8	☐			4436.00		P	0.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	150.01	0.0001	P	38.0
2	☐	1.000	0.824	3094.91	0.0010	P	5.4
3	☐	50.000	47.612	163066.75	0.0552	P	0.6
4	☐	125.000	118.407	418966.60	0.1371	P	1.5
5	☐	250.000	233.682	817767.82	0.2705	P	3.3
6	☐	500.000	495.807	1684765.43	0.5739	A	0.3
7	☐	1000.000	1007.120	3402552.66	1.1657	A	2.3
8	☐			1236.21	0.0005	P	9.0

$$y = 0.0012 * x + 5.2036E-005$$

$$R = 0.9998$$

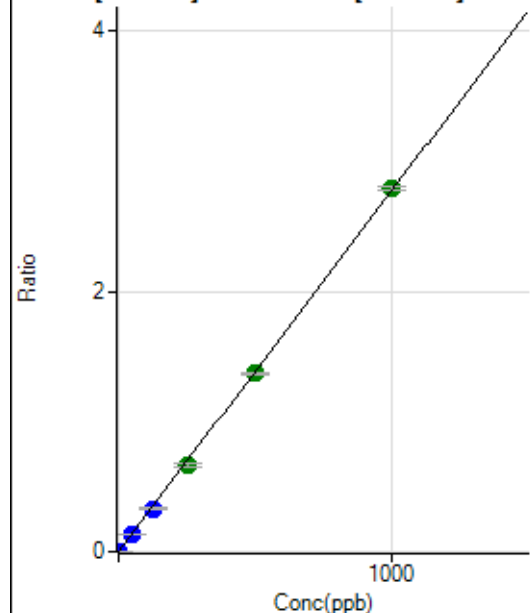
$$DL = 0.0513$$

$$BEC = 0.04496$$

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	275.01	0.0001	P	14.3
2	☐	1.000	0.847	7505.19	0.0024	P	4.6
3	☐	50.000	48.376	396178.56	0.1340	P	1.5
4	☐	125.000	119.474	1010864.23	0.3308	P	2.3
5	☐	250.000	239.817	2007358.62	0.6639	A	2.6
6	☐	500.000	494.541	4018607.60	1.3691	A	0.9
7	☐	1000.000	1006.047	8130788.38	2.7850	A	1.0
8	☐			3083.79	0.0012	P	15.0

$$y = 0.0028 * x + 9.4005E-005$$

$$R = 0.9999$$

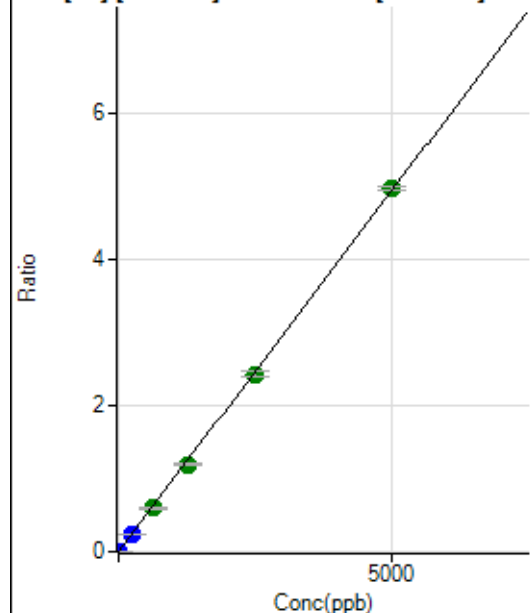
$$DL = 0.01462$$

$$BEC = 0.03396$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	357.42	0.0001	P	2.7
2	☐	1.000	0.776	2729.97	0.0009	P	7.4
3	☐	250.000	236.379	690008.81	0.2334	P	2.2
4	☐	625.000	606.593	1829401.10	0.5988	A	3.2
5	☐	1250.000	1208.495	3606279.91	1.1928	A	3.0
6	☐	2500.000	2465.792	7142652.01	2.4337	A	2.3
7	☐	5000.000	5030.462	14493888.29	4.9649	A	1.1
8	☐			5173.35	0.0019	P	7.5

$$y = 9.8694E-004 * x + 1.2186E-004$$

$$R = 0.9999$$

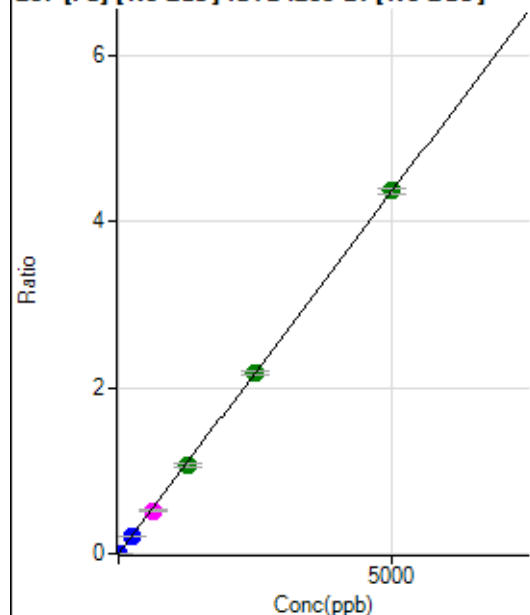
$$DL = 0.01012$$

$$BEC = 0.1235$$

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	277.79	0.0001	P	6.2
2	☐	1.000	0.825	2503.99	0.0008	P	2.7
3	☐	250.000	237.995	613278.15	0.2075	P	2.2
4	☐	625.000	592.092	1576656.07	0.5160	M	3.2
5	☐	1250.000	1219.358	3212181.55	1.0626	A	3.5
6	☐	2500.000	2493.337	6376939.09	2.1726	A	1.5
7	☐	5000.000	5015.706	12759143.92	4.3704	A	1.3
8	☐			4750.98	0.0018	P	10.2

$$y = 8.7133\text{E-}004 * x + 9.4612\text{E-}005$$

$$R = 1.0000$$

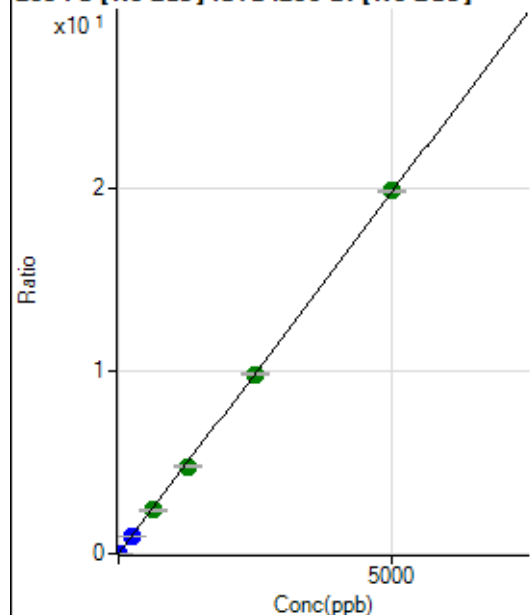
$$DL = 0.02012$$

$$BEC = 0.1086$$

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	1403.76	0.0005	P	3.6
2	☐	1.000	0.804	11253.99	0.0037	P	3.4
3	☐	250.000	236.768	2769249.08	0.9368	P	1.2
4	☐	625.000	604.094	7300124.44	2.3893	A	2.7
5	☐	1250.000	1204.567	14402627.90	4.7639	A	2.8
6	☐	2500.000	2478.716	28772852.55	9.8024	A	0.9
7	☐	5000.000	5025.275	58015389.38	19.8726	A	0.9
8	☐			21270.25	0.0079	P	7.8

$$y = 0.0040 * x + 4.7916\text{E-}004$$

$$R = 0.9999$$

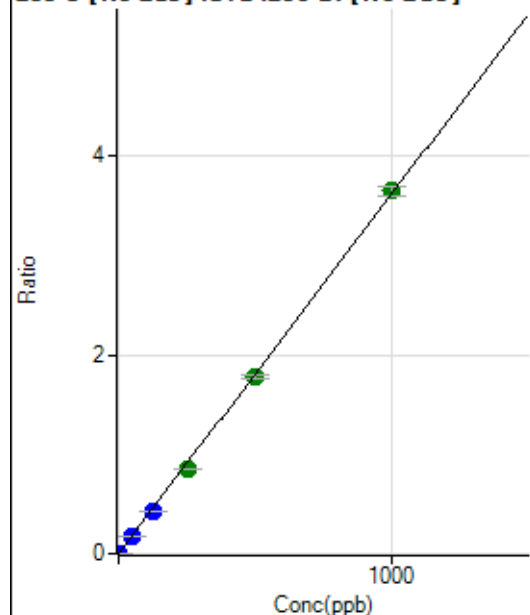
$$DL = 0.01314$$

$$BEC = 0.1212$$

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	52.6
2	☐	1.000	0.819	9170.20	0.0030	P	1.5
3	☐	50.000	46.673	499234.35	0.1689	P	1.5
4	☐	125.000	117.161	1295464.18	0.4239	P	2.3
5	☐	250.000	235.860	2580779.24	0.8534	A	1.7
6	☐	500.000	491.423	5218552.72	1.7780	A	1.9
7	☐	1000.000	1008.970	10657574.63	3.6505	A	2.9
8	☐			1958.54	0.0007	P	15.4

$$y = 0.0036 * x + 1.8237E-005$$

$$R = 0.9998$$

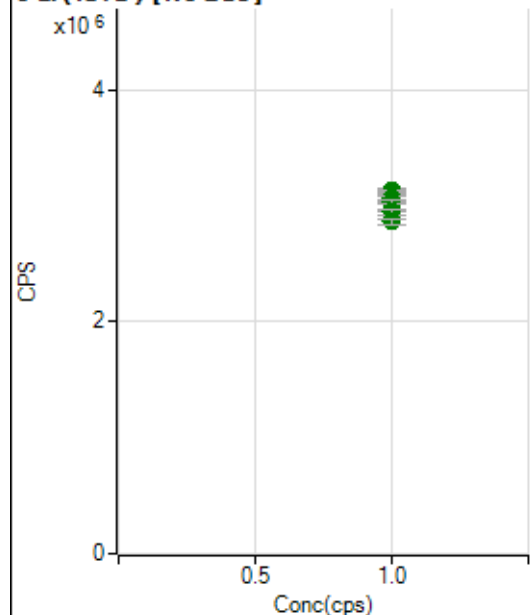
$$DL = 0.007947$$

$$BEC = 0.005041$$

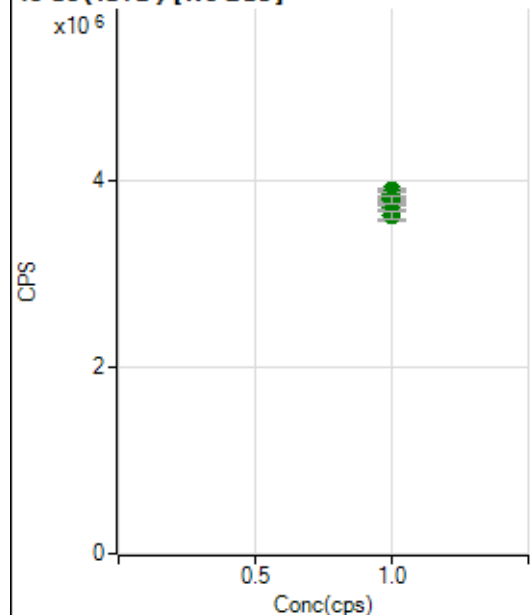
Weight: <None>

Min Conc: 0

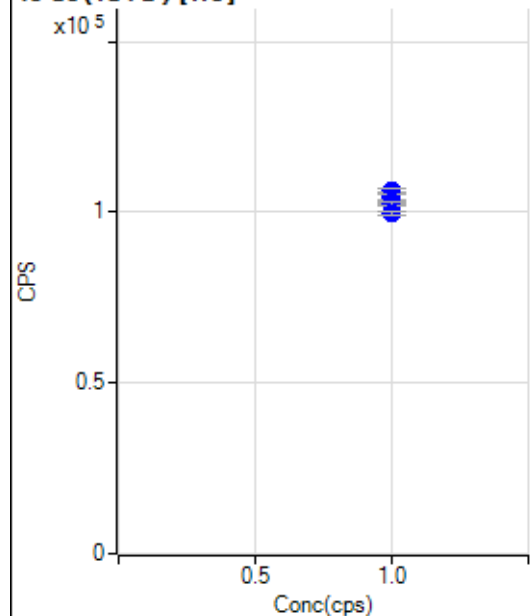
6 Li (ISTD) [No Gas]



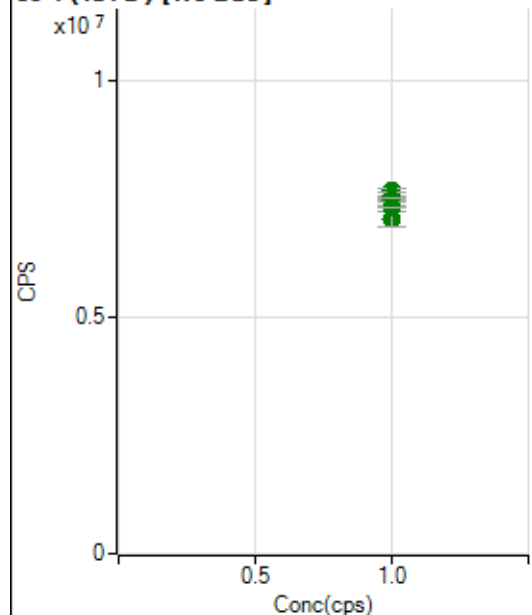
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3058981.15		A	6.5
2	☐	1.000		3128641.81		A	1.7
3	☐	1.000		3120528.09		A	0.6
4	☐	1.000		3071963.82		A	0.8
5	☐	1.000		3037408.22		A	0.7
6	☐	1.000		3037436.05		A	1.3
7	☐	1.000		2944098.37		A	1.9
8	☐	1.000		2861131.56		A	1.9

45 Sc (ISTD) [No Gas]

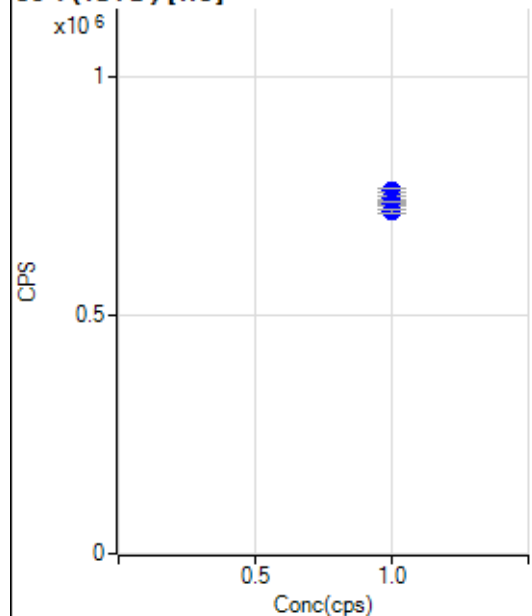
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3684673.04		A	6.4
2	☐	1.000		3898735.08		A	1.2
3	☐	1.000		3866109.07		A	2.4
4	☐	1.000		3817067.10		A	1.3
5	☐	1.000		3859503.34		A	1.2
6	☐	1.000		3725911.61		A	1.3
7	☐	1.000		3805165.64		A	2.0
8	☐	1.000		3636683.66		A	2.4

45 Sc (ISTD) [He]

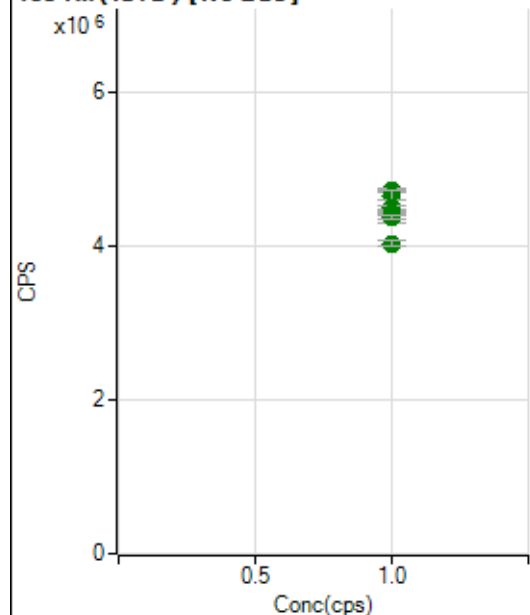
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		104660.95		P	2.2
2	☐	1.000		105373.38		P	0.2
3	☐	1.000		106212.82		P	1.4
4	☐	1.000		104274.41		P	1.4
5	☐	1.000		102954.95		P	0.7
6	☐	1.000		102217.00		P	0.9
7	☐	1.000		102425.71		P	0.9
8	☐	1.000		99769.50		P	1.1

89 Y (ISTD) [No Gas]

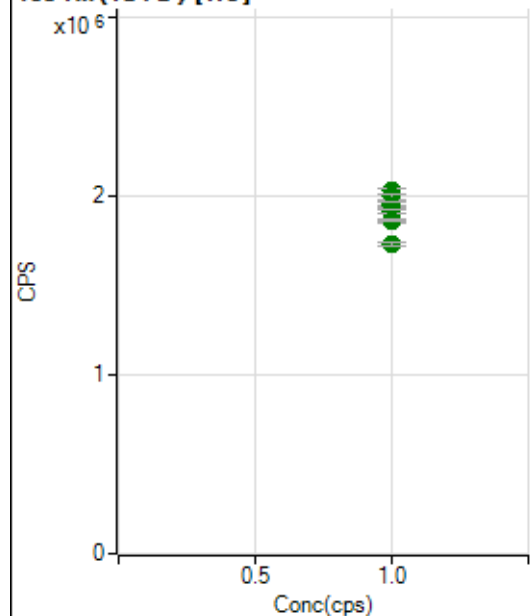
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7064410.10		A	4.7
2	☐	1.000		7491023.71		A	1.6
3	☐	1.000		7657747.04		A	1.1
4	☐	1.000		7554163.85		A	1.9
5	☐	1.000		7429407.74		A	2.2
6	☐	1.000		7436112.67		A	1.9
7	☐	1.000		7467636.07		A	1.5
8	☐	1.000		7297299.75		A	0.3

89 Y (ISTD) [He]

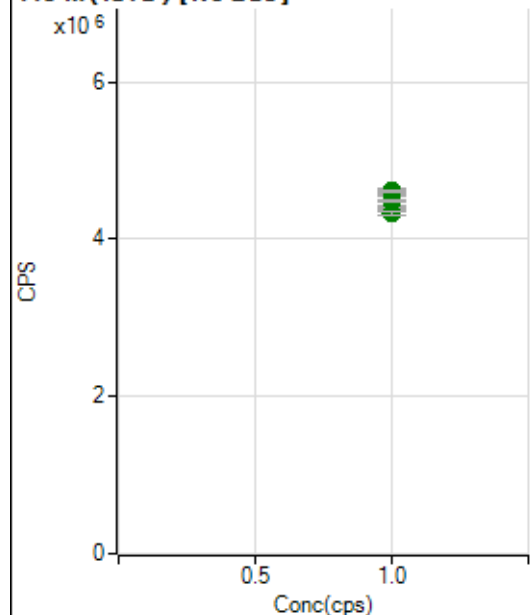
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		737679.90		P	0.8
2	☐	1.000		761484.76		P	1.2
3	☐	1.000		761343.42		P	1.1
4	☐	1.000		747563.31		P	0.8
5	☐	1.000		736453.19		P	0.7
6	☐	1.000		736238.55		P	0.1
7	☐	1.000		735697.46		P	1.0
8	☐	1.000		718102.43		P	0.7

103 Rh (ISTD) [No Gas]

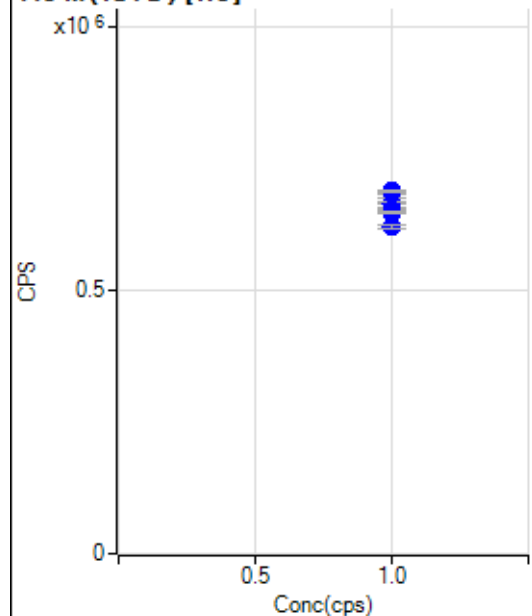
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4423089.29		A	5.0
2	☐	1.000		4723276.54		A	1.2
3	☐	1.000		4666788.90		A	2.9
4	☐	1.000		4500891.72		A	1.7
5	☐	1.000		4497839.51		A	1.2
6	☐	1.000		4424789.42		A	0.8
7	☐	1.000		4373025.71		A	1.0
8	☐	1.000		4041961.68		A	1.9

103 Rh (ISTD) [He]

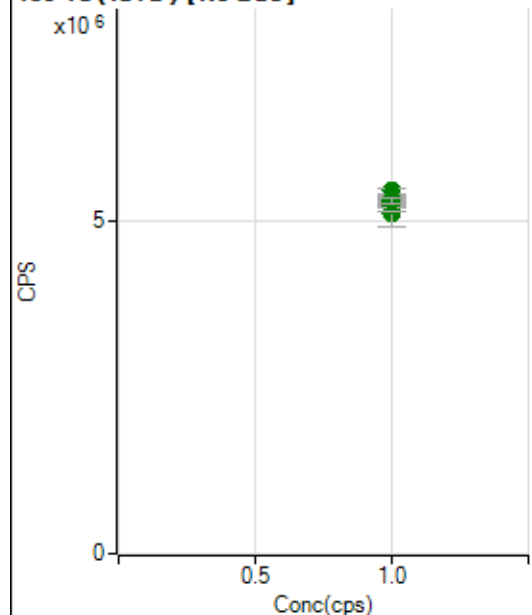
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1951396.39		A	1.2
2	☐	1.000		2026754.81		A	1.7
3	☐	1.000		1993510.82		A	1.3
4	☐	1.000		1945636.01		A	1.5
5	☐	1.000		1911635.67		A	1.4
6	☐	1.000		1872327.35		A	3.0
7	☐	1.000		1863782.84		A	0.8
8	☐	1.000		1728585.84		A	1.6

115 In (ISTD) [No Gas]

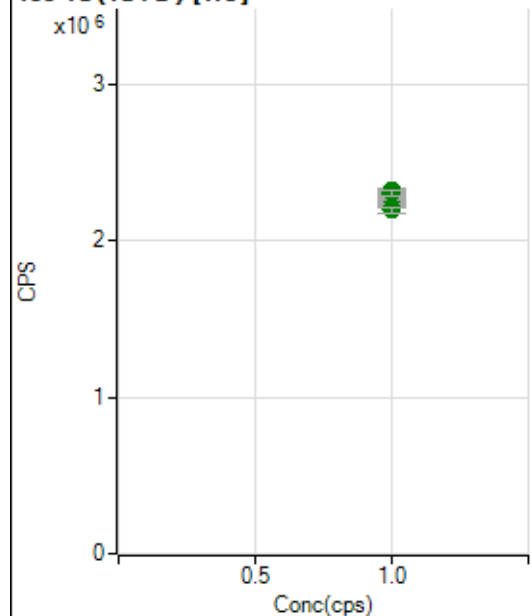
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4497061.83		A	5.2
2	☐	1.000		4609160.07		A	2.1
3	☐	1.000		4598715.66		A	2.1
4	☐	1.000		4606648.21		A	0.5
5	☐	1.000		4611611.22		A	0.5
6	☐	1.000		4403966.08		A	0.6
7	☐	1.000		4481819.53		A	0.4
8	☐	1.000		4330162.54		A	1.0

115 In (ISTD) [He]

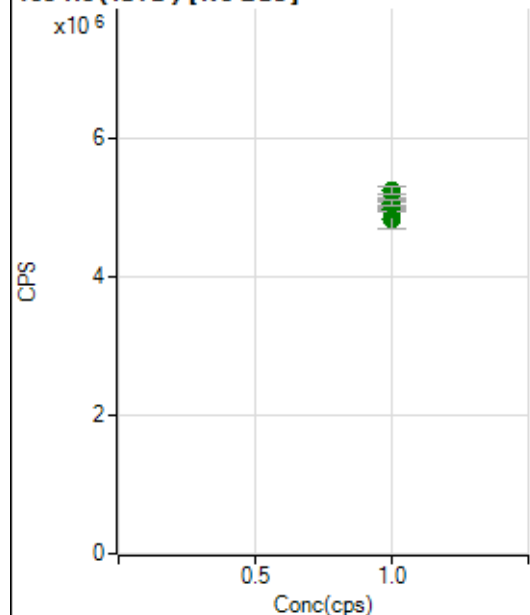
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		666280.18		P	0.7
2	☐	1.000		684001.38		P	0.5
3	☐	1.000		688174.55		P	0.6
4	☐	1.000		669000.80		P	1.4
5	☐	1.000		662677.61		P	1.5
6	☐	1.000		652063.87		P	0.7
7	☐	1.000		647357.40		P	0.4
8	☐	1.000		621475.88		P	1.2

159 Tb (ISTD) [No Gas]

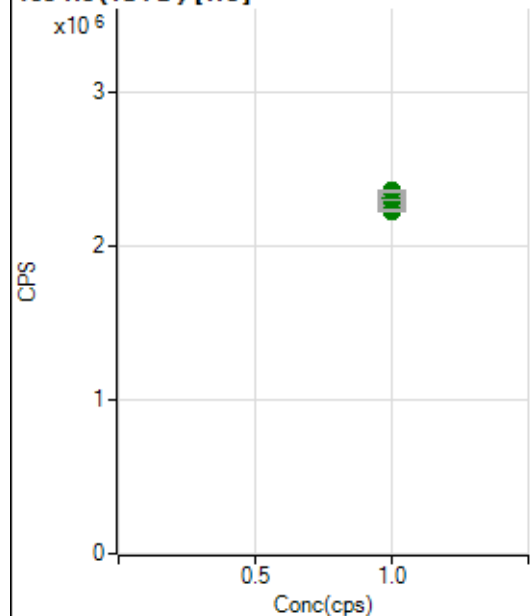
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5133494.75		A	8.2
2	☐	1.000		5339745.54		A	0.4
3	☐	1.000		5291029.64		A	1.3
4	☐	1.000		5463644.64		A	1.3
5	☐	1.000		5232074.92		A	2.5
6	☐	1.000		5292643.32		A	3.4
7	☐	1.000		5404424.09		A	0.6
8	☐	1.000		5315907.32		A	1.6

159 Tb (ISTD) [He]

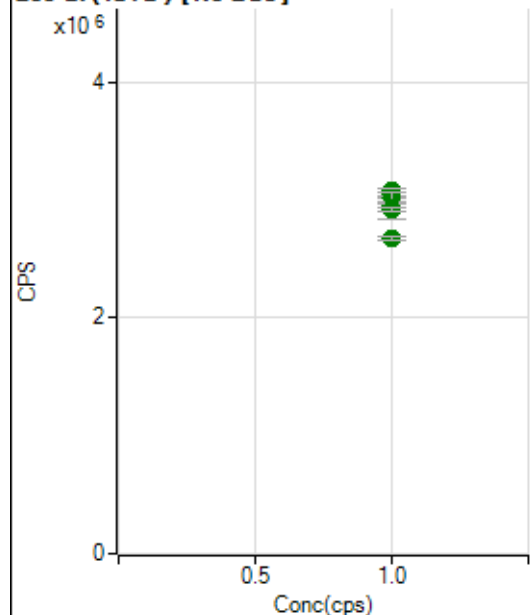
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2229241.13		A	0.7
2	☐	1.000		2273248.16		A	1.6
3	☐	1.000		2320756.02		A	1.5
4	☐	1.000		2300600.56		A	0.7
5	☐	1.000		2229547.30		A	0.7
6	☐	1.000		2270026.08		A	0.9
7	☐	1.000		2307727.26		A	1.4
8	☐	1.000		2198831.32		A	1.4

165 Ho (ISTD) [No Gas]

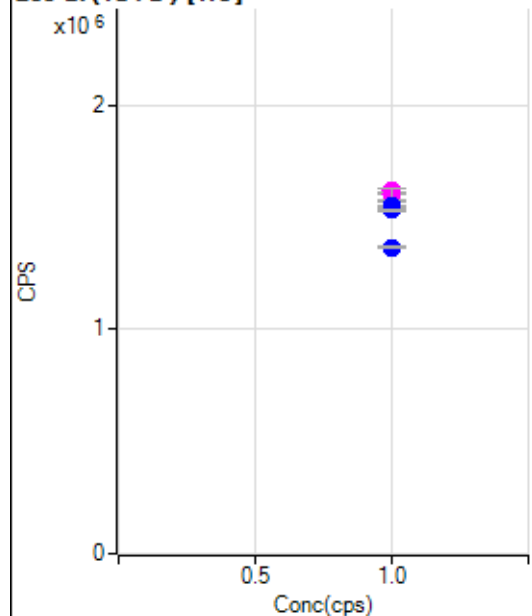
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4827040.13		A	5.4
2	☐	1.000		5089132.49		A	0.6
3	☐	1.000		5107141.91		A	0.5
4	☐	1.000		5073492.56		A	1.8
5	☐	1.000		5032378.89		A	1.9
6	☐	1.000		4971236.14		A	1.2
7	☐	1.000		5234594.69		A	2.1
8	☐	1.000		5061138.61		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2257421.48		A	1.1
2	☐	1.000		2309931.75		A	2.4
3	☐	1.000		2325853.33		A	1.1
4	☐	1.000		2305302.10		A	3.4
5	☐	1.000		2322139.81		A	2.1
6	☐	1.000		2311924.25		A	0.7
7	☐	1.000		2357720.23		A	0.5
8	☐	1.000		2230092.97		A	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2934466.90		A	7.0
2	☐	1.000		3077090.44		A	0.9
3	☐	1.000		2956552.28		A	1.6
4	☐	1.000		3056633.74		A	2.4
5	☐	1.000		3024561.03		A	2.3
6	☐	1.000		2935587.42		A	1.7
7	☐	1.000		2919357.28		A	1.0
8	☐	1.000		2676933.55		A	1.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1573276.47		M	0.9
2	☐	1.000		1609091.78		P	0.6
3	☐	1.000		1617190.39		M	1.4
4	☐	1.000		1600914.46		M	3.6
5	☐	1.000		1551873.41		P	0.4
6	☐	1.000		1538202.30		P	1.0
7	☐	1.000		1530517.72		P	0.6
8	☐	1.000		1365025.19		P	0.5

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8021323-MS.b

Acq. Date-Time 2023-02-13 12:10:25

Report Comment ---

Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		8145	81445.33			1.465	5.000
24		54348	543478.88			2.829	5.000
25		7605	76048.83			3.269	5.000
26		8617	86165.98			2.738	5.000
59		37893	378931.95			1.515	5.000
113		3798	37980.26			1.130	5.000
115		47852	478516.11			1.243	5.000
206		8927	89265.64			0.534	5.000
207		8080	80800.62			0.669	5.000
208		19563	195625.17			0.504	5.000
220		1	6.20			45.833	

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

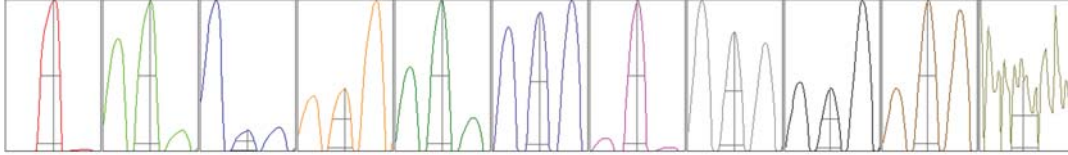
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	8054	8166	8137	8333	8033
24	56847	54021	53373	54597	52901
25	8042	7499	7532	7531	7420
26	8987	8619	8501	8626	8349
59	38165	37886	37983	38483	36950
113	3803	3780	3807	3859	3741
115	48667	47696	47656	48158	47081
206	8992	8874	8917	8956	8893
207	8056	8026	8054	8165	8100
208	19609	19406	19671	19572	19554

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	13974.69	9.05	8.90 - 9.10	
24	99343.39	24.00	23.90 - 24.10	
25	13375.23	25.00	24.90 - 25.10	
26	15260.13	26.00	25.90 - 26.10	
59	71356.42	59.00	58.90 - 59.10	
113	7459.54	113.00	112.90 - 113.10	
115	95509.88	115.00	114.90 - 115.10	
206	17479.12	206.00	205.90 - 206.10	
207	15853.60	206.95	206.90 - 207.10	
208	37891.70	207.95	207.90 - 208.10	
220	0.65	219.90	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.781	0.900	
24	0.57	0.780	0.900	
25	0.59	0.786	0.900	
26	0.60	0.789	0.900	
59	0.56	0.777	0.900	
113	0.53	0.721	0.900	
115	0.52	0.724	0.900	
206	0.52	0.772	0.900	
207	0.52	0.776	0.900	
208	0.53	0.782	0.900	
220	0.80	0.845		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	8.9 V	Deflect	16.2 V
Extract 2	-145.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	160 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.8 mm	Torch V	-1.0 mm
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EM

Discriminator	4.3 mV	Analog HV	2316 V	Pulse HV	1687 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		7580	75796.12			0.698	
89		8323	83227.78			0.991	
205		6168	61679.05			0.800	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	7617	7538	7619	7616	7507
89	8428	8377	8222	8266	8321
205	6209	6100	6135	6182	6214

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	8.9 V	Deflect	5.2 V
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US EPA Tune Check Report

Extract 2	-145.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-75 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.8 mm	Torch V	-1.0 mm
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EM

Discriminator	4.3 mV	Analog HV	2316 V	Pulse HV	1687 V
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